

PORTSMOUTH 20258

NHDES STANDARD DREDGE & FILL APPLICATION



PREPARED BY: McFARLAND JOHNSON

Peverly Hill Road Reconstruction

CITY OF PORTSMOUTH

PEVERLY HILL ROAD RECONSTRUCTION PROJECT

NHDES STANDARD DREDGE AND FILL WETLANDS PERMIT APPLICATION

NOVEMBER 2024

City of Portmouth Department of Public Works 680 Peverly Hill Road Portsmouth, NH 03801



53 Regional Drive Concord, NH 03301

Table of Contents

NHDES STANDARD DREDGE AND FILL WETLANDS PERMIT APPLICATION FORM

SUPPLEMENTAL PROJECT DESCRIPTION

FIGURE 1 – USGS LOCATION MAP

ATTACHMENT A: MINOR AND MAJOR PROJECTS

NHDES AVOIDANCE AND MINIMIZATION CHECKLIST AND NARRATIVE

NHDOT NATURAL RESOURCE AGENCY COORDINATION MEETING MINUTES

NHDES PRIME WETLAND WAIVER

NHDES WETLANDS RULE WAIVER

WETLAND FUNCTIONS AND VALUES EVALUATION FORMS

TAX PARCELS AND ABUTTERS

NHB DATACHECK RESULTS LETTER

NHFG WILDLIFE CORRESPONDENCE

USFWS OFFICIAL SPECIES LIST

USFWS NORTHERN LONG-EARED BAT AND TRICOLORED BAT CONSISTENCY LETTER

SECTION 106 EFFECT MEMO

NH GP APPENDIX B - USACE SECTION 404 CHECKLIST

PHOTOGRAPHS

WETLAND IMPACT AND EROSION CONTROL PLAN SET

CONSTRUCTION SEQUENCE

WETLAND DATA FORMS

NHDES Standard Dredge and Fill Wetlands Permit Application Form



STANDARD DREDGE AND FILL WETLANDS PERMIT APPLICATION Water Division / Land Resources Management Check the Status of your Application



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

APPLICANT'S NAME: City of Portsmouth

TOWN NAME: Portsmouth

			File No.:
Administrative	Administrative	Administrative	Check No.:
Only	Only	Only	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 <u>Waiver Request Form</u>.

SECTION 1 - REQUIRED PLANNING FOR ALL PROJECTS (Env-Wt 306.05; RSA 482-A:3, I(d)(2))					
Please use the <u>Wetland Permit Planning Tool (WPPT</u>), the Natural Heritage Bureau (NHB) <u>DataCheck Tool</u> , the <u>Aquatic</u> <u>Restoration Mapper</u> , or other sources to assist in identifying key features such as: <u>Priority Resource Areas (PRAs</u>), <u>protected species or habitats</u> , coastal areas, designated rivers, or designated prime wetlands.					
Has	Has the required planning been completed?				
Doe	es the property contain a PRA? If yes, provide the following information:	Yes No			
 Does the project qualify for an Impact Classification Adjustment (e.g. NH Fish and Game Department (NHFG) 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? If yes, species or habitat name(s): NHB Project ID #:	•Yes No			
•	Bog?	Yes No			
•	Floodplain wetland contiguous to a tier 3 or higher watercourse?	OYes No			
Designated prime wetland or duly-established 100-foot buffer? OYes					
Sand dune, tidal wetland, tidal water, or undeveloped tidal buffer zone?					
ls tl	Is the property within a Designated River corridor? If yes, provide the following information:				
•	Name of Local River Management Advisory Committee (LAC): n/a				
•	A copy of the application was sent to the LAC on Month: Day: Year:				

For dredging projects, is the subject property contaminated?

If yes, list contaminant: N/A

Is there potential to impact impaired waters, class A waters, or outstanding resource waters?

For stream crossing projects, provide watershed size (see WPPT or Stream Stats):

N/A

Yesl 🔴

'es(🌰)No

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

Provide a description of the project and the purpose of the project, the need for the proposed impacts to jurisdictional areas, an outline-of the scope of work to be performed, and whether impacts are temporary or permanent.

The Peverly Hill Road Reconstruction Project in the City of Portsmouth includes reconstruction improvements of the roadbed, construction of an improved stormwater system, and narrowing of the roadway to provide two 11-foot travel lanes and 2-foot shoulders, a shared-use path on the south side of the roadway, and a pedestrian sidewalk on the north side of the roadway. The purpose of the project is to improve stormwater management as well as roadway safety, and to increase bicycle and pedestrian access. The project limits extend from NH Route 33 (Middle Road) to the intersection with West Road to tie into improvements completed as part of the Yoken's Plaza Development near US Route 1. The total project length is approximately 5,100 feet. See attached project description for additional details.

The proposed road reconstruction will require impacts to wetlands and prime wetland buffers for erosion control measures and stormwater storage. The following wetland impacts are anticipated: 4.230 square feet (SF) of permanent wetland impacts (310 SF are Prime Wetland), 2,443 SF of temporary wetland impacts (180 SF are Prime Wetland), 10,152 SF of permanent undeveloped tidal buffer zone (TBZ) impacts and 2.190 SF of temporary undeveloped TBZ impacts.

SECTION 3 - PROJECT LOCATION

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

ADDRESS: Peverly Hill Road between US Route 1 and NH Route 33

TOWN/CITY: Portsmouth

TAX MAP/BLOCK/LOT/UNIT: ROW

US GEOLOGICAL SURVEY (USGS) TOPO MAP WATERBODY NAME: Sagamore Creek

(Optional) LATITUDE/LONGITUDE in decimal degrees (to five decimal places): 43.05197, -70.77883

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: City of Portsmouth Department of Public Works, Attn: Peter Rice						
MAILING ADDRESS: 680 Peverly Hill Road						
TOWN/CITY: Portsmouth STATE: NH ZIP CODE: 03						
EMAIL ADDRESS: phrice@cityofportsmouth.com						
FAX:	PHONE: (603) 427-1530)				
ELECTRONIC COMMUNICATION: By initialing here, I here this application electronically.	eby authorize NHDES to cor	nmunicate all ma	atters relative to			
SECTION 5 - AUTHORIZED AGENT INFORMATION (Env-	Wt 311.04(c))					
LAST NAME, FIRST NAME, M.I.: Perron, Christine						
COMPANY NAME: McFarland-Johnson, Inc.						
MAILING ADDRESS: 53 Regional Drive						
TOWN/CITY: Concord STATE: NH ZIP CODE: 033						
EMAIL ADDRESS: cperron@mjinc.com						
FAX: PHONE: 603-225-2978						
ELECTRONIC COMMUNICATION: By initialing here, I hereby authorize NHDES to communicate all matters relative to this application electronically. CJP						
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. Same as applicant						
NAME:						
MAILING ADDRESS:						
TOWN/CITY:	STATE:	ZIP CODE:				
EMAIL ADDRESS:						
FAX: PHONE:						
ELECTRONIC COMMUNICATION: By initialing here, 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):

Env-Wt 400: Wetland boundaries and the ordinary high water/top-of-bank of water courses located within the project corridor were delineated in September and November 2017 and confirmed in March and April 2024. Wetlands and surface waters have been classified using the USFWS (Cowardin et al.) Wetland Classification System. There are Priority Resource Areas within the project area, including Prime Wetlands with 100-foot buffer, as well as Tidal Buffer Zone. Based on the resource classifications and proposed permanent and temporary impacts to wetlands, the proposed project is classified as a Major impact project.

Env-Wt 500: The proposed project falls under Env-Wt 527 Public Highways. The proposed project has been designed in accordance with the criteria specified in Env-Wt 527.04 and is consistent with RSA 482-A:1, 483, 483-B, 485-A, and 212-A. The purpose of the proposed project is to improve the road condition, stormwater management, and bicycle and pedestrian facilities along Peverly Hill Road between US Route 1 and NH Route 33. The project includes reconstruction of the roadbed, construction of an improved stormwater system, and narrowing of the roadway to provide two 11-foot travel lanes and 2-foot shoulders, a 10-foot wide shared-use path on the south side of the roadway, and a 5-foot-wide pedestrian sidewalk on the north side of the roadway. Five stormwater treatment areas will be constructed.

Env-Wt 600: A portion of the project falls within an undeveloped TBZ and impacts within the TBZ will be 10,152 SF. Impacts will be limited to the construction of a proposed gravel wetland. This stormwater treatment area will provide treatment for roadway runoff, which will ensure that water quality within Sagamore Creek is not impacted by roadway infrastructure. The primary functions and values of the TBZ are to help protect water quality of the adjacent tidal wetlands. The proposed gravel wetland will serve the same purpose as the prime wetland buffer. Additionally, the buffer will remain vegetated following construction. The area of disturbance will be seeded and plantings will be provided around the gravel wetland. For these reasons, a request to waive the requirement for mitigation of impacts to TBZ is included in this application.

Env-Wt 700: There are Designated Prime Wetlands within the proposed project; a portion of the project takes place within the prime wetland as well as the 100-foot buffer. A waiver for buffer impact is included in this application. The project will not result in the significant net loss of any of the values set forth in RSA 482-A:1.

Env-Wt 900: N/A - The project does not involve 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 <u>Wetlands Best Management</u> <u>Practice Techniques For Avoidance and Minimization</u> and the <u>Wetlands Permitting: Avoidance, Minimization and</u> <u>Mitigation fact sheet</u>. 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 <u>Avoidance and Minimization Checklist</u>, the <u>Avoidance and Minimization Narrative</u>, 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 <u>pre-application meeting</u> 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: Day: Year:

(
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).

NHDES-W-06-012

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/rivers, the linear footage of impact is calculated by summing the lengths of disturbances to the channel and banks.

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

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

JURISDICTIONAL AREA		PERM.	PERM.	PERM.	TEMP.	TEMP.	TEMP.
		SF	LF	ATF	SF	LF	ATF
Wetlands	Forested Wetland	3685			2085		
	Scrub-shrub Wetland	196			119		
	Emergent Wetland	39			59		
	Wet Meadow						
	Vernal Pool						
	Designated Prime Wetland	310			180		
	Duly-established 100-foot Prime Wetland						
	Buffer						
	Intermittent / Ephemeral Stream						
e	Perennial Stream or River						
Irfa	Lake / Pond						
Su	Docking - Lake / Pond						
	Docking - River						
s	Bank - Intermittent Stream						
ank	Bank - Perennial Stream / River						
ä	Bank / Shoreline - Lake / Pond						
	Tidal Waters						
	Tidal Marsh						
lal	Sand Dune						
Tic	Undeveloped Tidal Buffer Zone (TBZ)	10152			2190		
	Previously-developed TBZ						
	Docking - Tidal Water						
TOTAL 14,382 4,633							
SEC	TION 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 usin	ig the table I	pelow:				
Permanent and temporary (non-docking): 19015 SF × \$0.40 = \$7						\$ 7606	
Seasonal docking structure: SF × \$2.00 =						\$	
Permanent docking structure: SF × \$4.00 =						\$	
Projects proposing shoreline structures (including docks) add \$400 = \$						\$	
Total = S					\$ 7606		
7	The application fee for minor or major impact is	s the above a	calculated	total or \$40	0, whicheve	r is greater =	\$ 7606

NHDES-W-06-012

SECTION 13 - PROJECT CLASSIFICATION (Indicate the project classification.	Env-Wt 306.05)					
Minimum Impact Project	Minor Project	r Project 🔲 Major Project				
SECTION 14 - REQUIRED CERTIFICATIONS	(Env-Wt 311.11)					
Initial each box below to certify:						
Initials: To the best of the signer's know	To the best of the signer's knowledge and belief, all required notifications have been provided.					
Initials: The information submitted on a signer's knowledge and belief.	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: MAR The signer understands that: • The submission of false, 1. Deny the application 2. Revoke any approve 3. If the signer is a cerr practice in New Harr established by RSA	 The signer understands that: The submission of false, incomplete, or misleading information constitutes grounds for NHDES to: Deny the application. Revoke any approval that is granted based on the information. 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. 					
Initials: If the applicant is not the owner the signer that he or she is awar	r of the property, each re of the application b	h prop Deing f	erty owner signature shall constitu led and does not object to the filir	te certification by g.		
SECTION 15 - REQUIRED SIGNATURES (EN	/-Wt 311.04(d); Env-	Wt 31	1.11)			
SIGNATURE (OWNER):	PRINT NAM	PRINT NAME LEGIBLY: Peter Rice				
SIGNATURE (APPLICANT, IF DIFFERENT FROM C	OWNER): PRINT NAM	PRINT NAME LEGIBLY:		DATE:		
signature (agent, if applicable): Christine Perron	PRINT NAM	PRINT NAME LEGIBLY: Christine Perron		DATE: 11/8/24		
SECTION 16 - TOWN / CITY CLERK SIGNAT	URE (Env-Wt 311.04	l(f))				
As required by RSA 482-A:3, I(a)(1), I herek plans, and four USGS location maps with t	by certify that the ap he town/city indicate	plican ed bel	t has filed four application forms,	four detailed		
TOWN/CITY CLERK SIGNATURE:			PRINT NAME LEGIBLY:			
TOWN/CITY:			DATE:			

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".

Supplemental Project Description

Supplemental Project Description

The proposed project consists of reconstructing an approximately 1-mile section of Peverly Hill Road between West Road and Middle Road (NH Route 33) in Portsmouth, New Hampshire. Peverly Hill Road is a primary route for vehicles, bicyclists and pedestrians traveling to and from NH Route 33 and Interstate 95 to the west and Lafayette Road (US Route 1), Mirona Road, and Banfield Road to the east. The project area is characterized by a mix of land uses, including residential, business, commercial, industrial, and recreational and conservation lands. Peverly Hill Road also serves as a connector route to numerous recreation sites in this section of the City of Portsmouth.

The purpose of the project is to enhance safety for all modes of travel (vehicles, bicyclists, and pedestrians) in conformance with the City of Portsmouth's Complete Street Policy adopted in 2013. The need for the project is demonstrated by a lack of bicycle and pedestrian accommodations within the project area, through which motor vehicles travel at high rates of speed. There are also several locations with sight distance restrictions and drainage problems along the roadway that contribute to safety issues.

The existing roadway is a two-lane road connecting NH Route 33 and Interstate 95 to US Route 1. According to the latest traffic data, the average annual daily traffic (AADT) volume on Peverly Hill Road through the project area is 8,800 vehicles per day. The road does not currently have adequate drainage infrastructure, which results in areas of ponding on the travel lanes and erosion. The width of the existing paved roadway varies between 26 feet and 30 feet with a variable width gravel shoulder in many places. Auxiliary turn lanes are present at the intersection of Banfield Road and Mirona Road and at the intersection of Middle Road (NH Route 33). The majority of the roadway is uncurbed with small sections of sloped granite curb approaching Middle Road and another section from the intersection of Banfield and Mirona Roads east to the driveway of the Portsmouth Department of Public Works (DPW) located at 680 Peverly Hill Road. The existing condition of the roadway pavement is in poor condition with some signs of cracking rutting, and delamination.

There is approximately 1,200 feet of existing concrete sidewalk on the north side of the roadway that starts at the YMCA building (550 Peverly Hill Road) and continues east through the signalized intersection of Banfield and Mirona Roads to a point approximately 100 feet east of the DPW driveway. There is also sidewalk from the intersection of Peverly Hill Road and Middle Road to Sage Lane on the south side of the roadway. Two crosswalks are located within the project limits at the signalized intersections at Banfield and Mirona Roads and Middle Road.

Proposed Action

The proposed action would involve installing granite curb along both sides of Peverly Hill Road to provide a narrowed roadway cross section with a defined pavement edge. The roadway would be narrowed to two 11-foot travel lanes with 2-foot shoulders. A 10-foot shared use path with a 4-foot wide landscaped strip is proposed on the south side of Peverly Hill Road, and a 5.5-foot wide concrete sidewalk is proposed on the north side. The sidewalk on the north side of Peverly Hill Road would allow pedestrians to avoid crossing the roadway directly from their homes or business to access a safe pedestrian accommodation. The proposed shared use path and sidewalk would be constructed to meet ADA standards. Any existing sidewalks or ramps that are to remain that do not meet ADA Standards would be upgraded.



The existing auxiliary lanes would be maintained. In addition, the work would include reconstruction of the existing pavement surface and installation of a closed drainage system and water quality treatment.

The project will result in an increase in impervious of approximately 55,600 SF. There are five proposed BMPs for stormwater treatment, which will treat runoff from approximately 95% of new pavement. The project is proposing two sediment basins, two gravel wetlands, and an infiltration basin. Deep sump catch basins will also be used for pretreatment in off-line catch basins. The project as proposed meets Alteration of Terrain standards.

Proposed work will be primarily located within existing roadway right-of-way. However, strip right-of-way acquisitions and temporary construction easements will be necessary from privately-owned and publicly owned lands adjacent to the corridor. Easements will be secured over the next year and will be in place prior to construction.



Figure 1 – USGS Location Map



Attachment A: Minor and Major Projects



STANDARD DREDGE AND FILL WETLANDS PERMIT APPLICATION ATTACHMENT A: MINOR AND MAJOR PROJECTS Water Division/Land Resources Management Wetlands Bureau



Check the Status of your Application

RSA/ Rule: RSA 482-A/ Env-Wt 311.10; Env-Wt 313.01(a)(1); Env-Wt 313.03

APPLICANT'S NAME: Peter Rice

TOWN NAME: Portsmouth

Attachment A is required for *all minor and major projects*, and must be completed *in addition* to the <u>Avoidance and</u> <u>Minimization Narrative</u> or <u>Checklist</u> that is required by Env-Wt 307.11.

For projects involving construction or modification of non-tidal shoreline structures over areas of surface waters having an absence of wetland vegetation, only Sections I.X through I.XV are required to be completed.

PART I: AVOIDANCE AND MINIMIZATION

In accordance with Env-Wt 313.03(a), the Department shall not approve any alteration of any jurisdictional area unless the applicant demonstrates that the potential impacts to jurisdictional areas have been avoided to the maximum extent practicable and that any unavoidable impacts have been minimized, as described in the <u>Wetlands Best</u> <u>Management Practice Techniques For Avoidance and Minimization</u>.

SECTION I.I - ALTERNATIVES (Env-Wt 313.03(b)(1))

Describe how there is no practicable alternative that would have a less adverse impact on the area and environments under the Department's jurisdiction.

DUE TO THE LOCATION OF PEVERLY HILL ROAD AND ASSOCIATED INFRASTRUCTURE, THERE ARE LIMITED ALTERNATIVES FOR THE PROPOSED PROJECT. IMPACTS TO JURISDICTIONAL RESOURCE AREAS INCLUDING WETLANDS, STREAMS AND BANKS HAVE BEEN AVOIDED AND MINIMIZED TO THE MAXIMUM EXTENT PRACTICABLE. THERE IS NO PRACTICABLE ALTERNATIVE THAT WOULD HAVE LESS ADVERSE IMPACT ON THE WETLANDS. THE WORK AS PROPOSED WILL REQUIRE TEMPORARY AND PERMANENT IMPACT ON WETLANDS, PRIME WETLANDS, AND PRIME WETLAND BUFFER. AT THE NORTHERN END OF THE PROJECT, IMPACTS WILL BE TO FORESTED FRESHWATER WETLANDS RESULTING FROM SLOPE AND DRAINAGE WORK. IMPACTS TO PRIME WETLANDS TO THE SOUTH OF THE PROJECT IN THE VICINITY OF BANFIELD ROAD AND SAGAMORE CREEK WILL ALSO RESULT FROM SLOPE AND DRAINAGE WORK.

SECTION I.II - MARSHES (Env-Wt 313.03(b)(2))

Describe how the project avoids and minimizes impacts to tidal marshes and non-tidal marshes where documented to provide sources of nutrients for finfish, crustacean, shellfish, and wildlife of significant value.

N/A - The proposed project does not involve any impacts to tidal or non-tidal marshes

SECTION I.III - HYDROLOGIC CONNECTION (Env-Wt 313.03(b)(3))

Describe how the project maintains hydrologic connections between adjacent wetland or stream systems.

The project will maintain hydrologic connections between adjacent wetlands and streams. Impacts are limited to the perimeter of wetland systems and will not result in fragmentation of wetlands.

SECTION I.IV - JURISDICTIONAL IMPACTS (Env-Wt 313.03(b)(4))

Describe how the project avoids and minimizes impacts to wetlands and other areas of jurisdiction under RSA 482-A, especially those in which there are exemplary natural communities, vernal pools, protected species and habitat, documented fisheries, and habitat and reproduction areas for species of concern, or any combination thereof.

Wetland impacts have been avoided and minimized to the maximum extent practicable. The proposed project is not anticipated to impact any exemplary natural communities, vernal pools, protected species and habitat, documented fisheries, and/or habitat and reproduction areas for species of special concern. Coordination with the NH Natural Heritage Bureau, NH Fish and Game, and the US Fish and Wildlife Service has occurred. Measures will be implemented to avoid or minimize impacts to species of concern. Appropriate sediment and erosion controls will be implemented throughout construction to avoid detrimental water quality impacts. Avoidance and minimization measures include refining and steepening roadway slopes to specifically avoid and minimize wetland and stream impacts. Stormwater treatment BMPs have also been incorporated into the design in order to treat runoff from additional pavement surfaces, thereby ensuring water quality of surface waters in the vicinity is maintained.

SECTION I.V - PUBLIC COMMERCE, NAVIGATION, OR RECREATION (Env-Wt 313.03(b)(5))

Describe how the project avoids and minimizes impacts that eliminate, depreciate or obstruct public commerce, navigation, or recreation.

The project will improve pedestrian and bicycle access and safety. There will be no impacts to public commerce or navigation.

SECTION I.VI - FLOODPLAIN WETLANDS (Env-Wt 313.03(b)(6))

Describe how the project avoids and minimizes impacts to floodplain wetlands that provide flood storage.

NA - The project will not impact floodplain wetlands.

SECTION I.VII - RIVERINE FORESTED WETLAND SYSTEMS AND SCRUB-SHRUB – MARSH COMPLEXES (Env-Wt 313.03(b)(7))

Describe how the project avoids and minimizes impacts to natural riverine forested wetland systems and scrub-shrub – marsh complexes of high ecological integrity.

The project will not impact riverine forested wetland systems. There are two locations of impacts to scrub-shrub wetlands and impacts have been minimized to the maximum extent possible. One location is at a small pocket of a PSS wetland located in the Prime Wetland buffer in a small island created by the Banfield Road intersection with Peverly Hill Road. There will be 196 SF of permanent impact along the edge of the wetland and 119 SF of temporary impact. The second location of impacts to a scrub-shrub marsh is within the Prime Wetland complex north of Banfield Road on the west side of Peverly Hill Road. This wetland is adjacent to Sagamore Creek and is associated with wetland number 6 in the City's prime wetland inventory. The project will result in 310 SF of permanent impact and 180 SF of temporary impact to this PSS wetland along its border with Peverly Hill Road.

SECTION I.VIII - DRINKING WATER SUPPLY AND GROUNDWATER AQUIFER LEVELS (Env-Wt 313.03(b)(8))

Describe how the project avoids and minimizes impacts to wetlands that would be detrimental to adjacent drinking water supply and groundwater aquifer levels.

The proposed wetland impacts are limited to the perimeter of wetlands adjacent to the existing roadway. The project will not result in impacts that would be detrimental to drinking water supplies or aquifer levels. Appropriate sediment and erosion controls will be implemented throughout construction to avoid detrimental water quality impacts.

SECTION I.IX - STREAM CHANNELS (Env-Wt 313.03(b)(9))

Describe how the project avoids and minimizes adverse impacts to stream channels and the ability of such channels to handle runoff of waters.

The proposed wetland impacts are limited to the perimeter of wetlands adjacent to the existing roadway. The project will not result in impacts to stream channels. Appropriate sediment and erosion controls will be implemented throughout construction. Avoidance and minimization measures include refining and steepening roadway slopes to specifically avoid and minimize wetland and stream impacts. Stormwater treatment BMPs have also been incorporated into the design in order to treat runoff from additional pavement surfaces, thereby ensuring water quality of surface waters in the vicinity is maintained.

SECTION I.X - SHORELINE STRUCTURES - CONSTRUCTION SURFACE AREA (Env-Wt 313.03(c)(1))

Describe how the project has been designed to use the minimum construction surface area over surface waters necessary to meet the stated purpose of the structures.

NA - The project will not require shoreline structures or result in any impact to surface waters.

SECTION I.XI - SHORELINE STRUCTURES - LEAST INTRUSIVE UPON PUBLIC TRUST (Env-Wt 313.03(c)(2))

Describe how the type of construction proposed is the least intrusive upon the public trust that will ensure safe docking on the frontage.

NA - The project will not require docking or result in any impact to surface waters

SECTION I.XII - SHORELINE STRUCTURES - ABUTTING PROPERTIES (Env-Wt 313.03(c)(3))

Describe how the structures have been designed to avoid and minimize impacts on ability of abutting owners to use and enjoy their properties.

NA - The project will not require shoreline structures or result in any impact to surface waters

SECTION I.XIII - SHORELINE STRUCTURES – COMMERCE AND RECREATION (Env-Wt 313.03(c)(4))

Describe how the structures have been designed to avoid and minimize impacts to the public's right to navigation, passage, and use of the resource for commerce and recreation.

NA - The project will not require shoreline structures or result in any impact to surface waters

SECTION I.XIV - SHORELINE STRUCTURES – WATER QUALITY, AQUATIC VEGETATION, WILDLIFE AND FINFISH HABITAT (Env-Wt 313.03(c)(5))

Describe how the structures have been designed, located, and configured to avoid impacts to water quality, aquatic vegetation, and wildlife and finfish habitat.

NA - The project will not require shoreline structures or result in any impact to surface waters

SECTION I.XV - SHORELINE STRUCTURES – VEGETATION REMOVAL, ACCESS POINTS, AND SHORELINE STABILITY (Env-Wt 313.03(c)(6))

Describe how the structures have 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.

NA - The project will not require shoreline structures or result in any impact to surface waters or banks.

PART II: FUNCTIONAL ASSESSMENT

REQUIREMENTS

Ensure that project meets the requirements of Env-Wt 311.10 regarding functional assessment (Env-Wt 311.04(j); Env-Wt 311.10).

FUNCTIONAL ASSESSMENT METHOD USED:

US Army Corps of Engineers New England District Highway Methodology Workbook Supplement, 1999 Edition

NAME OF CERTIFIED WETLAND SCIENTIST (FOR NON-TIDAL PROJECTS) OR QUALIFIED COASTAL PROFESSIONAL (FOR TIDAL PROJECTS) WHO COMPLETED THE ASSESSMENT: CHRISTINE J. PERRON, CWS

DATE OF ASSESSMENT: 9/6/2024

Check this box to confirm that the application includes a NARRATIVE ON FUNCTIONAL ASSESSMENT:

For minor or major projects requiring a standard permit without mitigation, the applicant shall submit a wetland evaluation report that includes completed checklists and information demonstrating the RELATIVE FUNCTIONS AND VALUES OF EACH WETLAND EVALUATED. Check this box to confirm that the application includes this information, if applicable:

Note: The Wetlands Functional Assessment worksheet can be used to compile the information needed to meet functional assessment requirements.

NHDES Avoidance and Minimization Checklist and Narrative



AVOIDANCE AND MINIMIZATION WRITTEN NARRATIVE Water Division/Land Resources Management Wetlands Bureau <u>Check the Status of your Application</u>



RSA/ Rule: RSA 482-A/ Env-Wt 311.04(j); Env-Wt 311.07; Env-Wt 313.01(a)(1)b; Env-Wt 313.01(c)

APPLICANT'S NAME: Peter Rice

TOWN NAME: Portsmouth

An applicant for a standard permit shall submit with the permit application a written narrative that explains how all impacts to functions and values of all jurisdictional areas have been avoided and minimized to the maximum extent practicable. This attachment can be used to guide the narrative (attach additional pages if needed). Alternatively, the applicant may attach a completed <u>Avoidance and Minimization Checklist (NHDES-W-06-050)</u> to the permit application.

SECTION 1 - WATER ACCESS STRUCTURES (Env-Wt 311.07(b)(1))

Is the primary purpose of the proposed project to construct a water access structure?

No, the purpose of the project is to improve road conditions, improve stormwater management, and enhance safety for all modes of travel.

SECTION 2 - BUILDABLE LOT (Env-Wt 311.07(b)(1))

Does the proposed project require access through wetlands to reach a buildable lot or portion thereof?

No, access will be along Peverly Hill Road and Greenleaf Ave.

SECTION 3 - AVAILABLE PROPERTY (Env-Wt 311.07(b)(2))*

For any project that proposes permanent impacts of more than one acre, or that proposes permanent impacts to a PRA, or both, are any other properties reasonably available to the applicant, whether already owned or controlled by the applicant or not, that 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?

*Except as provided in any project-specific criteria and except for NH Department of Transportation projects that qualify for a categorical exclusion under the National Environmental Policy Act.

No, the purpose of the project is to improve the 1-mile stretch of the existing Peverly Hill Road between West Road and Middle Road.

SECTION 4 - ALTERNATIVES (Env-Wt 311.07(b)(3))

Could alternative designs or techniques, such as different layouts, different construction sequencing, or alternative technologies be used to avoid impacts to jurisdictional areas or their functions and values as described in the <u>Wetlands</u> <u>Best Management Practice Techniques For Avoidance and Minimization</u>?

Due to the location of Peverly Hill Road and associated infrastructure, there are limited alternatives for the proposed project. Impacts to jurisdictional resource areas including wetlands, streams and banks have been avoided and minimized to the maximum extent practicable. There is no practicable alternative that would have less adverse impact on the wetlands. The work as proposed will require temporary and permanent impact on wetlands and prime wetland buffer. At the northern end of the project, impacts will be to forested freshwater wetlands resulting from slope and drainage work. Impacts to prime wetlands to the south of the project in the vicinity of Banfield Road and Sagamore Creek will also result from slope and drainage work.

SECTION 5 - CONFORMANCE WITH Env-Wt 311.10(c) (Env-Wt 311.07(b)(4))** How does the project conform to Env-Wt 311.10(c)?

**Except for projects solely limited to construction or modification of non-tidal shoreline structures only need to complete relevant sections of Attachment A.

Functional assessment method used:

US Army Corps of Engineers New England District Highway Methodology Workbook Supplement, 1999 Edition

NHDOT Natural Resource Agency Coordination Meeting Minutes

BUREAU OF ENVIRONMENT CONFERENCE REPORT

SUBJECT: NHDOT Monthly Natural Resource Agency Coordination Meeting **DATE OF CONFERENCE:** August 21, 2024 **LOCATION OF CONFERENCE:** Virtual meeting held via Zoom

ATTENDED BY:

NHDOT Andrew O'Sullivan Jon Evans Mark Hemmerlein Leah Savage

ACOE Mike Hicks

USCG Absent

EPA Jean Brochi NHDES Karl Benedict Mary Ann Tilton Eben Lewis Chris Williams

NHB Madeline Severance

NH Fish & Game Mike Dionne Jennifer Buchanan

Federal Highway Jamie Sikora US Fish & Wildlife Absent

NH Transportation & Wildlife Workgroup Absent

Consultants/ Public Participants Christine Perron Brian Colburn Dave Defosses

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

Table of Contents

Finalize Meeting Minutes	.2
$\mathbf{D}_{\text{output}}$	2
Portsmouth, 20238 (A-A002(001)):	. 2

Finalize Meeting Minutes

Finalized and approved the July 17, 2024 meeting minutes.

Portsmouth, 20258 (X-A002(061)):

Christine Perron introduced the project, which will address an approximately 1-mile section of Peverly Hill Road between West Road and Middle Road (NH Route 33) in Portsmouth. The project was first discussed in November 2021. The purpose of today's meeting is to discuss proposed wetland impacts prior to submitting the permit application.

The project is a municipally managed project through the Local Public Agency (LPA) Program. The purpose of the project is to improve road conditions, improve stormwater management and enhance safety for all modes of travel (vehicles, bicyclists, pedestrians). The roadway will be narrowed to provide two 11-foot travel lanes, 2-foot shoulders, a shared-use path on the south side, and a pedestrian sidewalk on the north side.

The project is adjacent to a number of wetlands and crosses the freshwater stretch of Sagamore Creek near Banfield Road, which is a tributary to a large estuary and exemplary natural community. There will also be some work along Greenleaf Avenue, which is adjacent to this estuary. The entire Sagamore Creek wetland complex is a Prime Wetland with a 100 foot buffer. The exemplary natural communities associated with Sagamore Creek are all within the estuary, along with the associated plant species documented by the Natural Heritage Bureau. Blanding's turtle has been documented in the vicinity of the project and there will be continued coordination with NHFG to incorporate minimization measures. The lead federal agency for the project is FHWA and consultation on northern long-eared bat and likely tricolored bat will be carried out through FHWA.

The project will result in an increase in impervious of approximately 55,600 SF. There are five proposed BMPs for stormwater treatment, which will treat runoff from approximately 95% of new pavement.

As a municipal project, an Alteration of Terrain Permit will be required. A pre-application meeting was held for AOT and it was confirmed that the proposed treatment will meet AOT standards.

The project will result in approximately 4,300 SF of permanent wetland impacts and 2,500 SF of temporary wetland impacts. Impacts to the prime wetland buffer adjacent to Greenleaf Avenue will be approximately 10,000 SF. There are three locations of proposed impacts. The only impacts at Greenleaf Avenue are to the prime wetland buffer, which is also a tidal buffer zone. There will be no impacts to tidal wetlands.

At the northern end of the project, impacts will be to forested freshwater wetlands resulting from slope and drainage work. Impacts in the vicinity of Banfield Road and Sagamore Creek will occur in two freshwater scrub-shrub wetlands. One wetland is part of the prime wetland complex just to the north of Banfield Road. The second wetland is located in the island between Banfield and Peverly Hill Roads. This wetland is not part of the prime wetland complex, but is within the prime wetland buffer. Work within the upland 100' prime wetland buffer will consist of slope work along the roadway footprint and drainage work. Non-wetland impacts within this buffer have not been

quantified. Since the buffer in this area is developed and associated with the roadway footprint, a waiver for buffer impacts in this area is proposed.

The third location of proposed impacts is located along Greenleaf Avenue. There are no wetland impacts in this area and the project will not impact tidal wetlands. The only impacts along Greenleaf Avenue will be to the upland 100' prime wetland buffer. This area is also an undeveloped tidal buffer zone. The impacts here are associated with this proposed stormwater treatment BMP. While the BMP does represent an impact, the area will still remain undeveloped.

Of the total proposed permanent impacts to freshwater wetlands (4,314 SF), approximately 8 SF will be within a prime wetland. Permanent impacts within the undeveloped tidal buffer zone/prime wetland buffer will be 10,152 SF. Input on the need for mitigation for all wetland impacts and tidal buffer zone was requested.

Construction of the project is currently anticipated to start in late 2025. The wetland permit application will be submitted in September.

Karl Benedict noted that mitigation would be required for permanent impacts but said he would defer to MaryAnn Tilton and Eben Lewis. He also noted that a waiver for impacts to the developed upland prime wetland buffer would need to identify the wetland functions that were noted in the prime wetland designation. It wasn't clear to him if ARM Fund payments were allowed for prime wetland impacts. Andy O'Sullivan stated that he thought there was a recent legislative change that allowed for the use of ARM Fund payments, and a recent NHDOT project utilized an in-lieu fee payment for prime wetland impacts.

Mary Ann Tilton noted that the recent NHDOT project was allowed to make an ARM payment for impacts to sand dunes. NHDES has received legal guidance on the use of ARM payments for prime wetlands. The applicant needs to explain why the wetland was designated as prime and a finding of no significant net loss of functions and values needs to be made.

Eben Lewis reiterated that prime wetland impacts do require mitigation and an in lieu fee is allowable. He said that the application would need to parse out impacts in undeveloped tidal buffer zone vs developed vs prime wetland buffer that's already developed.

Chris Williams asked if the project would require an Individual Permit from the Corps. C. Perron answered that impacts would be below the threshold for an Individual Permit. C. Williams noted that a federal consistency review would be required since the project is federally funded. C. Perron said that a consistency review was completed during the NEPA phase.

Mike Dionne noted that, with the potential presence of Blanding's turtle, Fish & Game would prefer construction in winter and would prefer winter tree clearing for minimizing impacts to bats.

Madeline Severance noted that some of the plants listed in the NHB review could occur along the high water line and she asked for confirmation that there would be no impacts at the high water line. C. Perron confirmed this. M. Severance responded that suitable habitat for the species of concern would not be impacted and that standard erosion control measures should be utilized to protect the estuary during construction.

Mike Hicks asked if the tidal buffer zone is all upland. C. Perron confirmed that it is all upland. M. Hicks noted that, in that case, wetland impacts would be below the 5,000 SF mitigation threshold and the Corps would not be requiring mitigation.

Jean Brochi had no comments.

Jamie Sikora asked if the project was a Programmatic Categorical Exclusion or an individual Categorical Exclusion. Jon Evans responded that is was Programmatic, and he also confirmed that the coastal zone consistency review was completed in February 2022.

NHDES Prime Wetland Waiver



PRIME WETLAND WAIVER FORESTRY AND OTHER ACTIVITIES Water Division/Land Resources Management Wetlands Bureau



RSA/Rule: RSA 482-A:11/ Env-Wt 706

APPLICANT LAST NAME, FIRST NAME, M.I.:

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

As provided in RSA 482-A:11, IV(b)(1), to be eligible for the <u>Forestry Statutory Permit-by-Notification (Forestry SPN)</u>, a property owner must obtain a waiver to perform any forest management work and related activities in the forested portion of a designated **prime wetland*** or **duly-established 100-foot buffer†** from the department. *For a waiver request for Forestry Activities within a designated prime wetland or duly-established 100-foot buffer*, please complete Part I of this form.

As provided in RSA 482-A:11, IV(c), a property owner may request a waiver from the department to perform work not addressed above within a portion of any **duly-established 100-foot buffer†** of a prime wetland on his or her property. Please note that waivers for such activities may only be requested for work within a duly-established 100-foot buffer, not for work within prime wetlands. *For a waiver request for Activities Other than Forest Management within a duly-established 100-foot buffer, please complete Part II of this form.*

A waiver request for work in a prime wetland or duly-established 100-foot buffer must be submitted to the department at the same time as a notification for an SPN or other application, as applicable.

*Prime Wetlands: Any contiguous areas falling within the jurisdictional definitions of RSA 482-A:2, X and RSA 482-A:4 that, because of their size, unspoiled character, fragile condition, or other relevant factors, make them of substantial significance (482-A:15, I-a).

[†]Duly-Established 100-foot Buffer: The buffer recognized in RSA 482-A:11, IV for prime wetlands designated on or after September 11, 2009 but before August 17, 2012 (Env-Wt 102.63).
PART I: WAIVER REQUEST FOR FORESTRY ACTIVITIES

SECTION 1 - REQUESTED WAIVER AND FILING FEE (Env-Wt 706.02(b)(3))

Check or money order for the applicable filing fee payable to "Treasurer – State of NH" (RSA 482-A:3, I(c)).

\$200 for a project that would otherwise qualify for a Forestry SPN if it was not located in or near a designated prime wetland or duly-established 100-foot buffer.

5500 for a minor impact project that does not otherwise qualify as minimum or major impact project.

\$1,250 for a major impact project classified regardless of prime wetlands designation.

SECTION 2 - PROPOSED WORK (Env-Wt 706.02(b); RSA 482-A:11, IV(b)(1))

Provide a brief written description of the work to be performed.

SECTION 3 - PRIME WETLANDS VALUES (Env-Wt 706.02(b); RSA 482-A:11, IV(b)(1))

Provide a list of the prime wetlands values as identified by the municipality when the prime wetland or dulyestablished 100-foot buffer was designated. Demonstrate that the project will not create a significant net loss of these wetland values.

SECTION 4 - REQUIRED ATTACHMENTS (Env-Wt 706.02; RSA 482-A:11, IV(b)(1))

A sketch of the property depicting the best approximate location of each prime wetlands/buffer in which work is proposed and the location of proposed work, including access roads.

A copy of the notice of intent to cut, if applicable.

Other information to demonstrate that there will be no significant net loss of wetland values identified by the municipality when the prime wetland/buffer was designated.

SECTION 5 - ADDITIONAL INSTRUCTIONS (Env-Wt 706.02; RSA 482-A:11, IV(b)(3))

At the time the applicant submits the waiver request to the department, the applicant also shall submit, *via certified mail*, a copy of the waiver request and all supporting documentation to the local governing body, the planning board, if any, and the conservation commission, if any, of the municipalities in which any prime wetlands/buffers associated with the application are located.

If a prime wetland/buffer associated with the application extends into an abutting property, the property owner requesting the waiver shall provide a copy of the waiver request and all supporting documentation to the owner of that abutting property. The applicant shall send the notice required **by certified mail**.

Please note:

- As provided in RSA 482-A:11, IV(b)(3), the department shall not issue a waiver for forestry activities prior to 14 days after receipt of the waiver request, provided however that a municipal conservation commission may request an extension on such waiver issuance, not to exceed 14 days, which the department shall grant if requested.
- As provided by RSA 482-A:11, IV(b)(2), the department shall not issue a waiver unless the department determines that there will be no significant net loss of wetland values as identified by the local conservation commission/local governing authority or in RSA 482-A:1.
- If the department determines that the criteria for issuing a waiver are met, the waiver shall be issued as part of the Forestry SPN or permit, as applicable.
- If the department is unable to determine, based on the information submitted, that the proposed work will not cause a significant net loss of wetland values, the department shall notify the applicant of what additional information is needed and establish a deadline in consultation with the applicant for the submission of the additional information.
- If the department determines that the project would not cause a significant net loss of wetland values if certain conditions were met, the department shall place such conditions on the waiver as are necessary to protect the prime wetland resource.
- Any waiver issued shall be valid for the term of the permit or SPN with which it is associated, but may be extended.

PART II: WAIVER REQUEST FOR ACTIVITIES OTHER THAN FOREST MANAGEMENT

SECTION 1 - REQUESTED WAIVER AND FILING FEE (Env-Wt 706.04(b)(5))

Check or money order for the applicable filing fee payable to "Treasurer – State of NH" (RSA 482-A:3, I(c)).

\$200 for projects that would otherwise qualify as a minimum impact project if it was not located in a designated prime wetlands buffer.

5500 for a minor impact project that does not otherwise qualify as minimum or major impact project.

\$1,250 for a major impact projects.

SECTION 2 - PROPOSED WORK (Env-Wt 706.04(b)(2))

Provide a written description of the work to be performed.

SECTION 3 - PRIME WETLANDS VALUES (Env-Wt 706.04(b))

Provide a list of the prime wetlands values identified by the municipality when the prime wetlands associated with the buffer was designated. Demonstrate that the project will not create a significant net loss of these wetland values.

SECTION 4 - REQUIRED ATTACHMENTS (Env-Wt 706.04)

A sketch of the property depicting the best approximate location of the duly-established 100-foot buffer in which work is proposed and the location of proposed work, including access roads.

Other information to demonstrate that there will be no significant net loss of wetland values identified by the municipality when the prime wetlands associated with the buffer was designated.

SECTION 5 - ADDITIONAL INSTRUCTIONS (Env-Wt 706.04; RSA 482-A:11, IV(c))

At the time the applicant submits the waiver request to the department, the applicant also shall notify, **by certified mail**, the local governing body, the planning board, if any, and the conservation commission, if any, of the municipalities in which the waiver is being sought that the waiver is being requested.

If the buffer associated with the application extends onto an abutting property, the property owner requesting the waiver shall provide notice that the waiver is being requested to the owner of that abutting property.

Please note:

- As provided in Env-Wt 706.05, the department shall not issue a waiver under Env-Wt 706.01(b) prior to 14 days after receipt of the waiver request, provided however that a municipal conservation commission may request an extension on such waiver issuance, not to exceed 14 days, which the department shall grant if and as requested.
- The department shall not issue a waiver unless the department determines that there will be no significant net loss of wetland values as identified by the local conservation commission/local governing authority and in RSA 482-A:1.
- If the department determines that the criteria for issuing a waiver are met, the waiver shall be issued as part of the SPN or permit, as applicable.
- If the department is unable to determine, based on the information submitted, that the proposed work will not cause a significant net loss of wetland values, the department shall notify the applicant of what additional information is needed and establish a deadline in consultation with the applicant for the submission of the additional information.
- If the department determines that the project would not cause a significant net loss of wetland values if certain conditions were met, the department shall place such conditions on the waiver as are necessary to protect the prime wetlands resource.
- Any waiver issued shall be valid for the term of the permit or SPN with which it is associated, but may be extended.

NHDES Wetlands Rule Waiver



WETLANDS RULE WAIVER OR DWELLING OVER WATER WAIVER REQUEST FORM WATER DIVISION / LAND RESOURCES MANAGEMENT WETLANDS BUREAU



RSA/Rule: RSA 482-A/ Env-Wt 204

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

A person may request a waiver to requirements in Rules Env-Wt 100-900 to accommodate situations where strict adherence to the requirements would not be in the best interests of the public or the environment. A person may also request a waiver of standard for existing dwellings over water pursuant to RSA 482-A:26, III (b).

SECTION 1 - PROJECT LOCATION INFORMATION (Env-Wt 204.03(c))							
ADDRESS: Peverly Hill Road	TOWN/CITY: Portsmou	th	STATE: NH	ZIP CODE:03801			
TAX MAP/LOT NUMBER: ROW	TAX MAP/LOT NUMBER: ROW						
SECTION 2 - WAIVER REQUESTOR INFORI	MATION (Env-Wt 204.03	B(a))					
LAST NAME, FIRST NAME, M.I.: City of Ports	smouth Department of	Public Work	s, Attn: Pet	er Rice			
MAILING ADDRESS: 680 Peverly Hill Road	d						
TOWN/CITY: Portsmouth		STATE: NH	ZIP CODE: 03801				
EMAIL ADDRESS (if available): or if not FAX NUMBER: phrice@cityofportsmouth.com DAYTIME PH				603-427-1530			
SECTION 3 - APPLICANT INFORMATION (Env-Wt 204.03(b)) If request is being made on behalf of someone else, include the following information regarding the person being represented. If requestor is the applicant, check the following box and proceed to Section 4.							
LAST NAME, FIRST NAME, M.I.:							
MAILING ADDRESS:							
TOWN/CITY:		STATE:	ZIP CODE:				
EMAIL ADDRESS (if available): or if not FAX NUMBER:							

SECTION 4 - WAIVER INFORMATION

SECTION 4A - WAIVER TO RULE Env-Wt 100-900

N/A - If you are not requesting a rule waiver, check this box and proceed to Section 4b

Provide the number of the specific section of each rule for which a waiver is sought (Env-Wt 204.03(d)):

Env-Wt 605.03

Provide a complete explanation of why a waiver is being requested, including an explanation of the operational and economic consequences of complying with the requirement and, if the requested waiver would extend the duration of a permit, the reason(s) why the permit holder was not able to complete the project within the specified time (Env-Wt 204.03(f)(1)):

Env-Wt 605.03 requires compensatory mitigation for all impacts to tidal surface waters, tidal wetlands, the tidal buffer zone, or sand dunes, or any combination thereof, that are intended to remain when the proposed project is completed. The proposed project will result in 10,152 SF of permanent impact to an undeveloped upland tidal buffer zone (TBZ) adjacent to Sagamore Creek for the construction of a gravel wetland. This stormwater treatment area will provide treatment for roadway runoff, which will ensure that water quality within Sagamore Creek is not impacted by roadway infrastructure. The treatment area is also required for compliance with Alteration of Terrain requirements. There are no alternative locations for treatment. Mitigation in the form of an in-lieu fee would be approximately \$80,000, a significant added cost to this public infrastructure project. Given this high cost, and because the only reason the TBZ will be impacted is for compliance with another state regulation (Alteration of Terrain), a waiver to the mitigation requirement is being requested.

If applicable, provide a complete explanation of the alternative that is proposed to be substituted for the requirement in Env-Wt, including written documentation or data, or both, to support the alternative (Env-Wt 204.03(g)):

One of the primary functions of the TBZ is to help protect water quality of the adjacent tidal wetlands. The proposed gravel wetland will serve the same purpose as the undeveloped TBZ. Additionally, the TBZ will remain vegetated following construction. The area of disturbance will be seeded and plantings will be provided around the gravel wetland.

SECTION 4B – DWELLING OVER WATERS WAIVER UNDER RSA 482-A:26, III(b).

N/A - If you are not requesting a standard waiver, check this box and proceed to Section 5)

Identify the specific standard to which a waiver is being requested (Env-Wt 204.03(e)): RSA 482-A:

Provide a complete explanation of why a waiver is being requested, including a complete explanation of how the statutory criteria of RSA 482-A:26, III(b) will be met (Env-Wt 204.03(f)(2)):

SECTION 5 - (applicable to	ADDITIONAL WAIVER Waivers of Rules and Sta	INFORMATION (Env-Wt 204.03(h); Env-Wt 204 andards under RSA 482-A:26, III(b))	4.03(i))	
Indicate when be needed (E	ther the waiver is needed nv-Wt 204.03(h)):	for a limited duration and, if so, an estimate of	when the waiver will no longer	
The duratio	n of the waiver would	be for the duration of the permit.		
Ducuida				
Provide a com Env-Wt 204.0	plete explanation of why 5 or 204.06, as applicable	<pre>n the applicant believes that having the waiver gr (Env-Wt 204.03(i)):</pre>	ranted will meet the criteria in	
he waiver waiver waroposed in unoff. The p	vould reduce the cost the TBZ is for the pur purposes and intent o	burden to a publicly funded infrastructure burden to a publicly funded infrastructure pose of protecting the environment throu f RSA 482-A will be met if the waiver is g	r the environment. Granting e project. The work ugh treatment of stormwater granted.	
SECTION 6 -	REQUIRED CERTIFICATI	ONS (Env-Wt 204.04)		
nitial each bo	ox and sign below to certi	ífy:		
Initials:	The information provid signer.	ed is true, complete, and not misleading to the l	knowledge and belief of the	
Initials:	The signer understands shall be subject to revo	that any waiver granted based on false, incomp cation; and	lete, or misleading information	
SECTION 7 - I	REQUESTOR SIGNATUR	E (Env-Wt 204.04)		
SIGNATURE (A	PPLICANT): *	PRINT NAME LEGIBLY: Peter Rice	DATE: 2/4/20	
SIGNATURE (REQUESTOR): PRINT NAME LEGIBLY: DATE:				

*In lieu of an applicant signature, you may include a separate signed and dated authorization for the requestor to act on the person's behalf in connection with the request.

Wetland Functions and Values Evaluation Forms

	wei	land Function-Va	lue	Evaluation Form	
Total area of wetland Unknown Human made? no	Is wetla	and part of a wildlife corridor? \underline{Y}	es	or a "habitat island"?_No	Wetland I.D. Stream A/ Wetlands B/C
Adjacent land use Commercial, residential, for	orested	Distance to nearest road	way o	r other development 5'	Prepared by: CH Date 9/6/2024
Dominant wetland systems present PUB/PEM1E	/PFO1E	Contiguous undevelope	d buf	fer zone present no	Wetland Impact: Type_PEM/PFO Area_unknown
Is the wetland a separate hydraulic system? <u>no</u>	If n	ot, where does the wetland lie in	the dr	rainage basin? mid	Evaluation based on:
How many tributaries contribute to the wetland?		Wildlife & vegetation diversity/	abund	ance (see attached list)	Office X Field Corps manual wetland delineation
Function/Value	Suitabilit Y / N	y Rationale P (Reference #)* F	rinci unct	pal ion(s)/Value(s) C	completed? Y × N omments
Groundwater Recharge/Discharge	N	2, 4, 7, 9		Wetlands are associated with	n/fringe wetlands of Sagamore Creek
Floodflow Alteration	Y	4, 5, 6, 8, 9, 10, 11, 13, 14, 15, 17, 18	X	Wetland is associated with Sagamore Cree	ek; commercial and residential use adjacent to wetland
Fish and Shellfish Habitat	Y	2, 3, 4, 8, 10, 11, 14, 15, 16, 17	X	Sagamore Creek is contiguous	with Piscataqua River and Atlantic Ocean
Sediment/Toxicant Retention	Y	1, 2, 3, 4, 7, 10, 16	6	Sediment/toxicant from nearby roadway	s and commercial areas may be trapped in wetland
Nutrient Removal	Y	2, 3, 4, 7, 8, 9, 10		Excess nutrients from surroun	ding lawns may be trapped by wetland
Production Export	N	1, 7, 12		No evidence of use	e by wildlife
Sediment/Shoreline Stabilization	Y	1, 2, 3, 4, 6, 7, 9, 12, 13, 14	X	Wetland borders Sagamore	Creek; has potential to trap sediment
🖢 Wildlife Habitat	N	6, 8, 13			
A Recreation	N	12		Limited potential for	or recreation
Educational/Scientific Value	N	11, 13		Limited potential for	or educational value
★ Uniqueness/Heritage	N	7, 10, 11, 12, 22		Limited potential for	or heritage value
Visual Quality/Aesthetics	N			Limited potential for	or aesthetic value
ES Endangered Species Habitat	Y		Х	NHB identified dwarf glasswort, marsh elder, saltmars	h agalinis, tundra alkali grass, and Blanding's turtle within the vicinity
Other					

			uv		
Total area of wetland Unknown Human made? no	Is wetla	and part of a wildlife corridor? yes	S	or a "habitat island"?	Wetland I.D. D Latitude 43.049478 Longitude -70.779129
Adjacent land use Commercial, residential, for	prested	Distance to nearest roadw	vay oi	r other development 5'	Prepared by: CH Date 9/6/2024
Dominant wetland systems present_PSS1E		Contiguous undeveloped	l buff	er zone present no	Wetland Impact: Type PSS Area Unknown
Is the wetland a separate hydraulic system? no	If n	ot, where does the wetland lie in t	he dr	ainage basin? mid	Evaluation based on:
How many tributaries contribute to the wetland?		_Wildlife & vegetation diversity/al	ounda	ance (see attached list)	Office \times Field X Corps manual wetland delineation completed? Y \times N
Function/Value	Suitabilit Y / N	y Rationale Pr (Reference #)* Fu	inci incti	pal lon(s)/Value(s) C	omments
Groundwater Recharge/Discharge	N	2, 7, 9		Wetlands are associated with	n/fringe wetlands of Sagamore Creek
Floodflow Alteration	Y	4, 5, 6, 8, 9, 10, 11, 13, 14, 15, 17, 18	Х	Wetland is associated with Sagamore Cree	ek; commercial and residential use adjacent to wetland
-Fish and Shellfish Habitat	Y	2, 3, 4, 8, 10, 11, 14, 15, 16, 17	Х	Sagamore Creek is contiguous	vith Piscataqua River and Atlantic Ocean
Sediment/Toxicant Retention	Y	1, 2, 3, 4, 7, 10, 16		Sediment/toxicant from nearby roadway	s and commercial areas may be trapped in wetland
Nutrient Removal	Y	2, 3, 4, 7, 8, 9, 10, 11, 13	Х	Excess nutrients from surroun	ding lawns may be trapped by wetland
Production Export	N	1, 7, 12		No evidence of use	e by wildlife
Sediment/Shoreline Stabilization	Y	1, 2, 3, 4, 7, 9, 12, 13, 14	Х	Wetland borders Sagamore	Creek; has potential to trap sediment
← Wildlife Habitat	N	6, 8, 13			
A Recreation	N			Limited potential for	or recreation
Educational/Scientific Value	N			Limited potential for	or educational value
★ Uniqueness/Heritage	N			Limited potential for	or heritage value
Visual Quality/Aesthetics	N			Limited potential for	or aesthetic value
ES Endangered Species Habitat	Y			NHB identified dwarf glasswort, marsh elder, saltmars	h agalinis, tundra alkali grass, and Blanding's turtle within the vicinity
Other					

			iuc		
Total area of wetland unknown Human made? no	Is wetla	and part of a wildlife corridor?	es	or a "habitat island"?_ NO	Wetland I.D. E Latitude 43.055898 Longitude -70.781134
Adjacent land use Commercial, residential, for	orested	Distance to nearest road	way o	r other development 5'	Prepared by: CH Date
Dominant wetland systems present PF01E		Contiguous undevelope	d buff	er zone present <u>no</u>	Wetland Impact: Type_PF01EArea_unknown
Is the wetland a separate hydraulic system? no	If n	ot, where does the wetland lie in	the dr	ainage basin? mid	Evaluation based on:
How many tributaries contribute to the wetland?		Wildlife & vegetation diversity/a	ıbunda	ance (see attached list)	Office X Field X Corps manual wetland delineation completed? $Y X$ N
Function/Value	Suitabilit Y / N	y Rationale P (Reference #)* F	rinci unct	pal ion(s)/Value(s) C	omments
Groundwater Recharge/Discharge	N	2		Limited groundwat	er recharge potential
Floodflow Alteration	Y	1, 5, 6, 7, 8, 9		Some potential for flood rur	noff storage; ponded water present
Fish and Shellfish Habitat	N			Limited fish habitat	
Sediment/Toxicant Retention	Y	1, 2, 4, 7		Sediment/toxicant from nearby roadways	s and commercial areas may be trapped in wetland
Nutrient Removal	Y	1, 3, 4, 5, 7, 8, 9, 10	Х	Excess nutrients from surroun	ding lawns may be trapped by wetland
Production Export	Y	1, 2, 7, 12		Some potential for use by	higher trophic level consumers
Sediment/Shoreline Stabilization	N	3, 4		Potential for sediment from ne	arby roadway; no watercourse present
🖢 Wildlife Habitat	Y	7, 8, 14, 15, 19, 20, 21	Х	Wetland has potential to contain a hi	gh population of insects, amphibians and birds
A Recreation	N	12		Limited potential for	or recreation
Educational/Scientific Value	N	13		Limited potential for	or educational value
★ Uniqueness/Heritage	N	10		Limited potential for	or heritage value
Visual Quality/Aesthetics	N	7		Limited potential for	or aesthetic value
ES Endangered Species Habitat	Y		Х	NHB identified dwarf glasswort, marsh elder, saltmars	n agalinis, tundra alkali grass, and Blanding's turtle within the vicinity
Other					

* Refer to backup list of numbered considerations.

Notes:

	vv Cti	and Function- v a	iuc		
Total area of wetland Unknown Human made? no	Is wetla	nd part of a wildlife corridor?)	or a "habitat island"?_no	Wetland I.D. F Latitude 43.055451 Longitude -70.780126
Adjacent land use Residential, forested		Distance to nearest road	way o	r other development 5'	Prepared by: CH Date 9/6/2024
Dominant wetland systems present_PF01E		Contiguous undevelope	d buff	er zone present_no	Wetland Impact: Type_PFOArea_Unknown
Is the wetland a separate hydraulic system?	If no	ot, where does the wetland lie in	the dr	ainage basin? mid	Evaluation based on:
How many tributaries contribute to the wetland?		Wildlife & vegetation diversity/a	abunda	ance (see attached list)	Office X Field X Corps manual wetland delineation
Function/Value	Suitability Y / N	y Rationale P (Reference #)* F	rinci uncti	pal ion(s)/Value(s) C	omments
Groundwater Recharge/Discharge	N	2, 15		Limited groundwat	er recharge potential
	Y	5, 6, 7, 8, 9, 15		Some potential for flood rur	noff storage; ponded water present
-Fish and Shellfish Habitat	N	1, 2		Limited fish habitat	
Sediment/Toxicant Retention	Y	1, 2, 4, 7		Sediment/toxicants from nearby roadway	ys and residential areas may be trapped in wetland
Nutrient Removal	Y	2, 3, 4, 5, 7, 8, 9, 10	Х	Excess nutrients from surroun	ding lawns may be trapped by wetland
Production Export	Y	1, 2, 7, 12		Some potential for use by	higher trophic level consumers
Sediment/Shoreline Stabilization	N	3, 4		Potential for sediment from ne	arby roadway; no watercourse present
🖢 Wildlife Habitat	Y	7, 8, 14, 15, 19, 20, 21	Х	Wetland has potential to contain a hi	gh population of insects, amphibians and birds
A Recreation	N	12		Limited potential for	or recreation
Educational/Scientific Value	N	13		Limited potential for	or educational value
★ Uniqueness/Heritage	N	10		Limited potential for	or heritage value
Visual Quality/Aesthetics	N	7, 9		Limited potential for	or aesthetic value
ES Endangered Species Habitat	Y		Х	NHB identified dwarf glasswort, marsh elder, saltmars	n agalinis, tundra alkali grass, and Blanding's turtle within the vicinity
Other					

			iiuu		
Total area of wetland 3168 sq. ft Human made? no	Is wetla	and part of a wildlife corridor?	0	or a "habitat island"?	Wetland I.D. G Latitude 43.055899 Longitude -70.780762
Adjacent land use Residential, Forested		Distance to nearest road	lway o	r other development 5'	Prepared by: CH Date 9/6/2024
Dominant wetland systems present PFO1E		Contiguous undevelope	ed buff	er zone present	Wetland Impact: Type_PFOArea
Is the wetland a separate hydraulic system? ho	If n	ot, where does the wetland lie in	the dr	ainage basin? mid	Evaluation based on:
How many tributaries contribute to the wetland?		Wildlife & vegetation diversity/	abunda	ance (see attached list)	Office \times Field \times Corps manual wetland delineation completed? Y \times N
Function/Value	Suitabilit Y / N	y Rationale F (Reference #)* F	Princi Functi	pal on(s)/Value(s) C	omments
Groundwater Recharge/Discharge	N	2, 10		Limited groundwat	er recharge potential
Floodflow Alteration	Y	5, 7, 8, 9, 15		Some potential for flood rur	noff storage; ponded water present
-Fish and Shellfish Habitat	N			No fish habitat	
Sediment/Toxicant Retention	Y	1, 2, 4		Sediment/toxicant from nearby roadways	s and commercial areas may be trapped in wetland
Nutrient Removal	Y	3, 4, 7, 8, 9, 11		Excess nutrients from surroun	ding lawns may be trapped by wetland
Production Export	N	1, 7		Limited potential for use b	y higher trophic level consumers
Sediment/Shoreline Stabilization	N	3, 4		Potential for sediment from ne	arby roadway; no watercourse present
🖢 Wildlife Habitat	N	8		Limited potential fo	or wildlife habitat
A Recreation	N	12		Limited potential for	or recreation
Educational/Scientific Value	N	16		Limited potential for	or educational value
★ Uniqueness/Heritage	N	10		Limited potential fo	or heritage value
Visual Quality/Aesthetics	N	9		Limited potential for	or aesthetic value
ES Endangered Species Habitat	Y		Х	NHB identified dwarf glasswort, marsh elder, saltmars	n agalinis, tundra alkali grass, and Blanding's turtle within the vicinity
Other					

Tax Parcels and Abutters



PORTSMOUTH 20258 LIST OF PROJECT ABUTTERS (PROPERTIES ABUTTING WETLAND IMPACTS ARE SHOWN IN BOLD)

Mapping number	Abutter Name	Abutter address	Parcel ID
(Figure 2)			
1	MCCANN FAMILY REVOCABLE TRUST MCCANN M A & J M D TRUSTEES	921 MIDDLE RD	0232-0117-0001
2	PAFFORD, SCOTT R	969 MIDDLE RD	0232-0116-0000
3	CITY OF PORTSMOUTH DPW	1 PLAINS AVE	0242-0002-0000
4	CITY OF PORTSMOUTH DPW	1 PLAINS AVE	0242-0002-0000
5	CITY OF PORTSMOUTH DPW	1 PLAINS AVE	0242-0002-0000
6	CITY OF PORTSMOUTH DPW	1 PLAINS AVE	0242-0002-0000
7	ROMAN CATHOLIC BISHOP OF MANCHESTER CHURCH OF IMMAC CONCEPTION	MIDDLE RD	0242-0005-0000
8	See Attachment "Peverly Hill Road 0242-0004-0000 through 0242-0004-0056"	PEVERLY HILL RD	0242-0004-0000 through 0242-0004-0056
9	B&B PROPERTIES LLC	968 MIDDLE RD	0232-0090-0000
10	FRITZ IAN P; NEWCOMER SUSAN M	942 MIDDLE RD	0232-0089-0000
11	MOSCA MICHAEL J	46 PEVERLY HILL RD	0232-0091-0000
12	INNES DYANNA L	78 PEVERLY HILL RD	0232-0092-0000
13	TARLETON NATHAN M; TARLETON SHERRI M	74 LEAVITT AVE	0232-0088-0000
14	BLACK KENNETH T	82 PEVERLY HILL RD	0232-0093-0000
15	DIXON SUSAN L	106 LEAVITT AVE	0232-0087-0000
16	CITY OF PORTSMOUTH DPW	PEVERLY HILL RD	0232-0095-0000
17	ASRT LLC	138 LEAVITT AVE	0243-0050-0000
18	AJEI REAL ESTATE LLC	100 PEVERLY HILL RD	0243-0051-0000
19	CITY OF PORTSMOUTH DPW	PEVERLY HILL RD	0243-0052-0000
20	CITY OF PORTSMOUTH DPW	PEVERLY HILL RD	0243-0053-0000

21	NEW HOPE BAPTIST CHURCH	263 PEVERLY HILL RD	0242-0003-0000/
			0242-0003-000A-0000
22	BOSA JOHN W;	248 PEVERLY HILL RD;	0243-0054-0000;
	LOOR JOAN V;	248 PEVERLY HILL RD #1;	0243-0054-0001;
	BEEBE MYCHAL	248 PEVERLY HILL RD #2	0243-0054-0002
23	MURRAY CURT F; MCGANN ERIN E	260 PEVERLY HILL RD	0243-0055-0000
24	CHILDRENS GARDEN PROPERTY LLC	290 PEVERLY HILL RD	0243-0056-0000
25	COLBURN DEAN A	287 PEVERLY HILL RD	0255-0009-0000
26	Peverly Hill Road 0255-0008-0000 through	288 PEVERLY HILL RD	0255-0008-0000 through
	0255-0008-0009		0255-0008-0009
27	KELLEHER MARIE E REV TRUST	297 PEVERLY HILL RD	0255-0007-0000
	KELLEHER MARIE E TRUSTEE		
28	JONES FAMILY REVOCABLE TRUST	296 PEVERLY HILL RD	0243-0057-0000
	JONES DONALD E & MONA M TTEE		
29	SCHWARTZ JACOB H; DAVIS KRISTEN N	300 PEVERLY HILL RD	0243-0058-0000
30	TAPIA ZEIGLER ELIZABETH B; ZEIGLER BRYAN C	384 PEVERLY HILL RD	0243-0059-0000
31	STEVENS BOYD J STEVENS RHONDA H	303 PEVERLY HILL RD	0255-0006-0000
32	REIS THOMAS E & MARYBETH B REIS JAMES B & MEEGAN C	305 PEVERLY HILL RD	0255-0005-0000
33	FLEMING DONNA FLEMING SAROJ A	433 GREENLEAF AVE	0243-0008-0000
34	CROSBY LORIA A CROSBY CARL W JR	419 GREENLEAF AVE	0243-0007-0001
35	BLOUT MICHAEL J	404 GREENLEAF AVE	0243-0060-0000
36	SARGENT ADAM L LANTZ GRETCHEN M	394 GREENLEAF AVE	0243-0061-0000
37	CHAMBERLIN SUSAN W SCHERR ALBERT E IV	390 GREENLEAF AVE	0243-0062-0000
38	D'ANTONIO BENJAMIN	380 GREENLEAF AVE	0243-0063-0000
39	YAUN CHRISTOPHER D	360 GREENLEAF AVE	0243-0064-0000
40	KENICK JEAN	350 GREENLEAF AVE	0243-0065-0000
41	Greenleaf Ave 0243-0006-0000 through 0243-0006-S302	260 GREENLEAF AVE	0243-0006-0000 through
			0243-0006-\$302

42	KRUPP JUSTIN KRUPP ELIZABETH M	375 GREENLEAF AVE	0243-0007-0000
43	MORAN FAMILY REV TRUST MORAN THOMAS J & JANINE E TT	401 GREENLEAF AVE	0243-0007-000A
44	WESTGATE MARK E WESTGATE MARIA L	407 GREENLEAF AVE	0243-0007-0002
45	LIEN HSIU Y CHOE HYON S	423 PEVERLY HILL RD	0243-0009-0000
46	GALARNEAU THOMAS M GALARNEAU JESSICA A	437 PEVERLY HILL RD	0243-0010-0000
47	LEONARD STEVEN P	451 PEVERLY HILL RD	0243-0011-0000
48	SHORTILL KUMIKO ANEE	465 PEVERLY HILL RD	0243-0012-0000
49	535 PEVERLY HILL LLC	535 PEVERLY HILL RD	0244-0009-0000
50	HETT WALTER D TRUST HETT WALTER D TRUSTEE	PEVERLY HILL RD	0255-0003-0000
51	RUSSELL JULIA A REVO TRUST RUSSELL JULIA A TRUSTEE	515 PEVERLY HILL RD	0255-0004-0000
52	FRAZER LAURA	539 PEVERLY HILL RD	0244-0011-0000
53	ZAKHAROV EVGENIY V	541 PEVERLY HILL RD	0244-0012-0000
54	DOAN TONY ISHII JENNY G	575 PEVERLY HILL RD	0255-0003-0001
55	MACEACHERN CHARLES & SHERRY	545 PEVERLY HILL RD	0244-0010-000C
56	YOUNG MENS CHRISTIAN ASSOC	550 PEVERLY HILL RD	0244-0010-000A
57	HETT WALTER D TRUST HETT WALTER D TRUSTEE	BANFIELD RD	0255-0002-0000
58	SEACOAST FAMILY Y	PEVERLY HILL RD	0244-0010-000B
59	GSG REALTY PORTSMOUTH LLC	1 MIRONA RD	0253-0007-0000
60	BANFIELD ROAD LLC	15 BANFIELD RD	0254-0005-0000
61	MMCT REALTY LLC	2 MIRONA RD	0253-0006-0000
62	ALEXANDER NANCY H REVOC TRUST ALEXANDER NANCY H TRUSTEE	620 PEVERLY HILL RD	0254-0006-0000
63	PIKE INDUSTRIES INC	650 PEVERLY HILL RD	0254-0007-0000
64	BOURAS GROUP LLC	10 MIRONA RD	0253-0005-0001

65	20 MIRONA ROAD EXT LLC	20 MIRONA RD EXT	0253-0005-0000
66	CITY OF PORTSMOUTH;	680 PEVERLY HILL RD	0254-0008-0000;
	MCM ACQUISITION 2017 LLC		0254-0008-0001
67	DPH REALTY LLC	30 MIRONA RD EXT	0253-0004-0000
68	LIGHTHOUSE MANUFACTURING LLC	35 MIRONA RD	0252-0003-0000
69	JMK REALTY LLC	700 PEVERLY HILL RD	0252-0002-0010
70	YOKENS TOWNHOMES LLC	951 PEVERLY HILL RD	0252-0005-0000
71	DSM MB II LLC	1500 LAFAYETTE RD	0252-0002-0000
72	SELIGMAN ASSET TRUST RICE NORMAN TRUSTEE	18 MOFFAT ST	0243-0068-0000
73	HONEYMAN J BRADLEY HONEYMAN SARAH	26 MOFFAT ST	0243-0069-0000

0242-0004-0000 through 0242-0004-0056 Peverly Hill Road

Property ID	Site Address	Account	Owner Name	Owner Name 2	Owner Address	City	State	Zip
0242-0004-0000	83 PEVERLY HI	30759	PARSON WOODS INVESTMENTS LLC		11 LAFAYETTE RD	NORTH HAMPTO	NH	03862
0242-0004-0001	18 SAGE LN	54584	BARNES DANIEL J & NANCY D		18 SAGE LN	PORTSMOUTH	NH	03801
0242-0004-0002	24 SAGE LN	54585	DELUKE CAMILA & LOUIS JAMES		24 SAGE LN	PORTSMOUTH	NH	03801
0242-0004-0003	32 SAGE LN	54586	MARCELYNAS JOSEPH A & ANGELA J		32 SAGE LN	PORTSMOUTH	NH	03801
0242-0004-0004	40 SAGE LN	54587	134 PLEASANT ST LLC		PO BOX 853	NEW CASTLE	NH	03854
0242-0004-0005	46 SAGE LN	54588	PLOVANICH MOLLY E	TSUN ZHI YANG	46 SAGE LN	PORTSMOUTH	NH	03801
0242-0004-0006	54 SAGE LN	54589	RACZ JOSEPH J FAM REV TR	RACZ JOSEPH J TRUSTEE	54 SAGE LN	PORTSMOUTH	NH	03801
0242-0004-0007	58 SAGE LN	54590	DUBOIS GARY E & DIANE A		58 SAGE LN	PORTSMOUTH	NH	03801
0242-0004-0008	68 SAGE LN	54591	ROSEN ANDREW B	EVANS SHERRY	68 SAGE LN	PORTSMOUTH	NH	03801
0242-0004-0009	74 SAGE LN	54592	HART JUDY LIVING TRUST	HART JUDY TRUSTEE	74 SAGE LN	PORTSMOUTH	NH	03801
0242-0004-0010	84 SAGE LN	54593	MOHEDANO CASCADO DOMINGO	SANZ GALVEZ ISABEL	84 SAGE LN	PORTSMOUTH	NH	03801
0242-0004-0011	88 SAGE LN	54594	ROTZ ANDREW R RV TR (1/2 INT)	HOLZHAUER M F RV TR (1/2 INT)	88 SAGE LN	PORTSMOUTH	NH	03801
0242-0004-0012	98 SAGE LN	54595	BRITT AUSTIN PATRICK & SHAUŃA		98 SAGE LN	PORTSMOUTH	NH	03801
0242-0004-0013	102 SAGE LN	54596	FERGUSON W & V LIVING TRUST	FERGUSON W D JR & V W TRUSTEES	102 SAGE LN	PORTSMOUTH	NH	03801
0242-0004-0014	112 SAGE LN	54597	MCDANIEL JAMES A III	MCDANIEL KATHLEEN	112 SAGE LN	PORTSMOUTH	NH	03801
0242-0004-0015	118 SAGE LN	54598	LEONARDI JOHN	DURAKOVIC MUBERA	118 SAGE LN UNIT	PORTSMOUTH	NH	03801
0242-0004-0016	126 SAGE LN	54599	BROWN FAMILY TRUST	BROWN THOMAS C & BONNIE L TT	126 SAGE LN	PORTSMOUTH	NH	03801
0242-0004-0017	130 SAGE I N	54600	BASILIERE ROBERT JAMES	BASILIERE JUDITH PEIRCE	130 SAGE I N	PORTSMOUTH	NH	03801
0242-0004-0018	140 SAGE I N	54601	TEBBENHOEF PETER H & KAREN I		140 SAGE I N	PORTSMOUTH	NH	03801
0242-0004-0019	144 SAGE LN	54602	VIVINETTO ANTHONY J& LISA A		144 SAGE LN	PORTSMOUTH	NH	03801
0242-0004-0020	150 SAGE LN	54603	KOBLINSKI REVOCABLE TRUST	KOBI INSKI PETER & DENISE TT	150 SAGE LN	PORTSMOUTH	NH	03801
0242-0004-0021	154 SAGE LN	54604			154 SAGE LN	PORTSMOUTH	NH	03801
0242-0004-0022	180 SAGE LN	54605	TWIN PINES REV TRUST OF 2023	GRENADER DENIS M & JOANIE TT	180 SAGE LN	PORTSMOUTH	NH	03801
0242-0004-0022	188 SAGE LN	54606			188 SAGE I N	PORTSMOUTH	NH	03801
0242-0004-0020	190 SAGE LN	54607	LEEEMANS WREN FAM TR	LEEEMANS ERIC & WREN LYNN TT	190 SAGE LN	PORTSMOUTH	NH	03801
0242-0004-0024	198 SAGE LN	54608	STANEIELD BRIAN A & SARAH RUTH		198 SAGE LN	PORTSMOUTH	NH	03801
0242-0004-0026	202 SAGE LN	54609			202 SAGE LN LINIT		NH	03801
0242-0004-0020	210 SAGE LN	54610	DUNBAR STUART		210 SAGE IN	PORTSMOUTH	NH	03801
0242-0004-0028	216 SAGE LN	54611	IELINEK WARREN FAM TRUST	IELINEK EDWARD R & MARY W TT	216 SAGE LN	PORTSMOUTH	NH	03801
0242-0004-0020	226 SAGE I N	54612			2501 M ST NW #200	WASHINGTON	DC	20037
0242-0004-0020	230 SAGE LN	54613	LUCAS FAMILY TRUST OF 2018	LUCAS THOMAS E & KRISTINA I TT	230 SAGE I N	PORTSMOLITH	NH	03801
0242-0004-0030	240 SAGE LN	54614	BROWN CHARLES H IR	EBASER BROWN CYNTHIA	240 SAGE IN	PORTSMOUTH	NH	03801
0242-0004-0031	240 GAGE LN	54615		LITWAK JAMES & CAROL TT	240 GAGE LN 244 SAGE LN	PORTSMOUTH	NH	03801
0242-0004-0032	270 SAGE LN	54616					NH	03862
0242-0004-0033	274 SAGE LN	5/617					NH	03862
0242-0004-0034	81 SAGE IN	5/618		WHITNEY DANA MARIE			NH	03002
0242-0004-0035	80 SAGE IN	5/610			80 SAGE IN	PORTSMOUTH	NH	03801
0242-0004-0030	09 SAGE LN	54620				PORTSMOUTH	NH	03801
0242-0004-0037		54621	HARI EV ADAM CHRISTIAN			PORTSMOUTH	NH	03801
0242-0004-0030	113 SAGE LN	54622				PORTSMOUTH	NH	03801
0242-0004-0039	110 SAGE LN	54622	MARSHALL JAMES & CHRISTINIA		13 CRAND MIRAMA		NIV/	80011
0242-0004-0040	127 SAGE LN	54624	COATE THOMAS	STARLING COATE MARCY		PORTSMOUTH	NH	03011
0242-0004-0041	131 SAGE LN	54625	CLEMENS I W 2024 TR (50% INT)	CLEMENS K E 2024 TR (50% INT)	131 SAGE LN	PORTSMOUTH	NH	03801
0242-0004-0042	141 SAGE LN	54626		CEEMEINS R E 2024 TR (50 % INT)				03001
0242-0004-0043	152 SAGE LN	54627						03001
0242-0004-0044	171 SAGE LN	54027			171 SAGE LN			03001
0242-0004-0040		54620			185 SAGE IN			03001
0242-0004-0040	105 SAGE LIN	54620			105 SAGE LIN			03001
0242 0004-0047	207 SAGE LIN	54621			207 SAGE LN			03001
0242 0004-0040		54622						03001
0242-0004-0049	211 SAGE LIN	54032		ULANN HEATHER IKUƏTEE				01700
0242-0004-0050	221 SAGE LIN	04033	DIZIER RIGHARD J & RUBERT A			ACTON	IVIE	01/20

0242-0004-0051	231 SAGE LN	54634	PARSON WOODS INVESTMENTS LLC	11 LAFAYETTE RD	NORTH HAMPT(NH	03862
0242-0004-0052	235 SAGE LN	54635	PARSON WOODS INVESTMENTS LLC	11 LAFAYETTE RD	NORTH HAMPT(NH	03862
0242-0004-0053	245 SAGE LN	54636	PARSON WOODS INVESTMENTS LLC	11 LAFAYETTE RD	NORTH HAMPT(NH	03862
0242-0004-0054	251 SAGE LN	54637	HOEFLE SAMUEL & KELLY VILA	251 SAGE LN	PORTSMOUTH NH	03801
0242-0004-0055	259 SAGE LN	54638	PARSON WOODS INVESTMENTS LLC	11 LAFAYETTE RD	NORTH HAMPT(NH	03862
0242-0004-0056	265 SAGE LN	54639	PARSON WOODS INVESTMENTS LLC	11 LAFAYETTE RD	NORTH HAMPT(NH	03862

NHB DataCheck Results Letter



- To: Claire Hilsinger 125 Nagog Park Acton, MA 01720 chilsinger@mjinc.com
- From: NHB Review NH Natural Heritage Bureau Main Contact: Ashley Litwinenko - <u>nhbreview@dncr.nh.gov</u>
- cc: NHFG Review

Date: 05/02/2024 (valid until 05/02/2025)

Re: DataCheck Review by NH Natural Heritage Bureau and NH Fish & Game Permits: NHDES - Standard Dredge & Fill - Major, USACE - General Permit, USEPA - Stormwater Pollution Prevention

NHB ID: NHB24-1272

Town:PortsmouthLocation:Peverly Hill Rd.

Project Description: The Peverly Hill Road Reconstruction Project in the City of Portsmouth includes reconstruction improvements (depending on results of the geotechnical evaluation) of the roadbed, construction of an improved stormwater system, and narrowing the roadway to provide two 11-foot travel lanes and 2-foot shoulders, a shared-use path on the south side of the roadway, and a pedestrian sidewalk on the north side of the roadway. The project limits extend from NH Route 33 (Middle Road) to the intersection with West Road to tie into improvements completed as part of the Yoken's Plaza Development near US Route 1. The total project length is approximately 5,100 feet.

Next Steps for Applicant:

NHB's database has been searched for records of rare species and exemplary natural communities. Please carefully read the comments and consultation requirements below.

NHB Comments: Please contact NHB and indicate what erosion and sediment controls are proposed in order to protect the nearby exemplary saltmarsh and its associated rare plants. Please also indicate if the work along Greenleaf Ave will impact the edge of the salt marsh.

NHFG Comments: Please refer to NHFG consultation requirements below.

NHB Consultation



NHB DataCheck Results Letter NH Natural Heritage Bureau Please note: maps and NHB record pages are **confidential** and shall be redacted from public documents.

If this NHB DataCheck letter includes records of rare plants and/or natural communities/systems, please contact NHB and provide any requested supplementary materials by emailing nhbreview@dncr.nh.gov.

If this NHB DataCheck letter DOES NOT include any records of rare plants and/or natural communities/systems, no further consultation with NHB is required.

NH Fish and Game Department Consultation

If this NHB DataCheck letter DOES NOT include ANY wildlife species records, then, based on the information submitted, no further consultation with the NH Fish and Game Department pursuant to Fis 1004 is required.

If this NHB DataCheck letter includes a record for a threatened (T) or endangered (E) wildlife species, consultation with the New Hampshire Fish and Game Department under Fis 1004 may be required. To review the Fis 1000 rules (effective February 3, 2022), please go to https://www.wildlife.nh.gov/wildlife-and-habitat/nongame-andendangered-species/environmental-review. All requests for consultation and submittals should be sent via email to NHFGreview@wildlife.nh.gov or can be sent by mail, and must include the NHB DataCheck results letter number and "Fis 1004 consultation request" in the subject line.

If the NHB DataCheck response letter does not include a threatened or endangered wildlife species but includes other wildlife species (e.g., Species of Special Concern), consultation under Fis 1004 is not required; however, some species are protected under other state laws or rules, so coordination with NH Fish & Game is highly recommended or may be required for certain permits. While some permitting processes are exempt from required consultation under Fis 1004 (e.g., statutory permit by notification, permit by rule, permit by notification, routine roadway registration, docking structure registration, or conditional authorization by rule), coordination with NH Fish & Game may still be required under the rules governing those specific permitting processes, and it is recommended you contact the applicable permitting agency. For projects not requiring consultation under Fis 1004, but where additional coordination with NH Fish and Game is requested, please email NHFGreview@wildlife.nh.gov, and include the NHB DataCheck results letter number and "review request" in the email subject line.

Contact NH Fish & Game at (603) 271-0467 with questions.



NHB DataCheck Results Letter NH Natural Heritage Bureau Please note: maps and NHB record pages are confidential and shall be redacted from public documents.

NHB Database Records:

The following record(s) have been documented in the vicinity of the proposed project. Please see the map and detailed information about the record(s) on the following pages.

Natural Community	State ¹	Federal	Notes
High salt marsh			
Intertidal flat			
Low salt marsh			
Salt marsh system			Inreats are primarily changes to the hydrology of the system, introduction of invasive species, and increased input of nutrients and pollutants.
Plant species	State ¹	Federal	Notes
dwarf glasswort (<i>Salicornia</i> <i>bigelovii</i>)	E		Threats are primarily alterations to the hydrology of the wetland, such as ditching or tidal restrictions that might affect the sheet flow of tidal waters across the intertidal flat, activities that eliminate plants, and increased input of nutrients and pollutants in storm runoff.
marsh elder (<i>Iva frutescens</i>)	т		Threats are primarily alterations to the hydrology of the wetland, such as ditching or tidal restrictions that might affect the sheet flow of tidal waters across the intertidal flat, activities that eliminate plants, and increased input of nutrients and pollutants in storm runoff.
saltmarsh agalinis (Agalinis maritima ssp. maritima)	Т		A wildflower that grows in very shallow, briefly flooded forb pannes in the high salt marsh. Threats are primarily alterations to the hydrology of the wetland (such as ditching or tidal restrictions that might affect the sheet flow of tidal waters across the intertidal flat), activities that eliminate plants, and increased input of nutrients and pollutants in storm runoff.
tundra alkali grass (<i>Puccinellia pumila</i>)*	E		Primarily vulnerable to changes to the hydrology of its habitat, especially alterations that change water levels. It may also be susceptible to increased pollutants and nutrients carried in stormwater runoff.
Vertebrate species	State ¹	Federal	Notes
Blanding's Turtle (<i>Emydoidea</i> <i>blandingii</i>)	E		Contact the NH Fish & Game Dept (see below).



NHB DataCheck Results Letter

NH Natural Heritage Bureau

Please note: maps and NHB record pages are confidential and shall be redacted from public documents.

¹Codes: "E" = Endangered, "T" = Threatened, "SC" = Special Concern, "--" = an exemplary natural community, or a rare species tracked by NH Natural Heritage that has not yet been added to the official state list.

An asterisk (*) indicates that the most recent report for that occurrence was 20 or more years ago.

For all animal reviews, refer to 'IMPORTANT: NHFG Consultation' section above.

<u>Disclaimer</u>: NHB's database can only tell you of <u>known</u> occurrences that have been reported to NHFG/NHB. Known occurrences are based on information gathered by qualified biologists or members of the public, reported to our offices, and verified by NHB/NHFG.

However, many areas have never been surveyed, or have only been surveyed for certain species. NHB recommends surveys to determine what species/natural communities are present onsite.

NHFG Wildlife Correspondence

Christine J. Perron

From:	FGC: NHFG review <nhfgreview@wildlife.nh.gov></nhfgreview@wildlife.nh.gov>
Sent:	Wednesday, August 21, 2024 11:45 AM
To:	Christine J. Perron
Cc:	FGC: NHFG review; Lewis, Eben
Subject:	NHB24-1272 Peverly Hill Road Portsmouth
Attachments:	Spotted_Blandings Flyer_2024.pdf
Follow Up Flag:	Follow up
Flag Status:	Completed

Good morning Christine,

New Hampshire Fish and Game has completed review of materials submitted for consultation for NHB24-1272 on 8/21/2024 (site plans dated 03/01/2024) prepared by Claire Hilsinger and Mcfarland Johnson. The project involves reconstruction improvements of the roadbed, construction of an improved storm water system, and narrowing the roadway to provide two 11-foot travel lanes and 2-foot shoulders, a shared[1]use path on the south side of the roadway, and a pedestrian sidewalk on the north side of the roadway. The project limits extend from NH Route 33 (Middle Road) to the intersection with West Road in Portsmouth, NH.

Permit applications associated with this project:

(note if you apply for other permits not listed below, you must notify NHFG and request a response to see if recommendations provided below can be applied to other permit applications. All anticipated permits that may be required or will be applied for MUST be identified on the NHB datacheck results letter or the NHB letter is not considered valid and cannot be applied to a consultation/permit application review).

NHDES- Wetland Standard Dredge & Fill-Minor (Not yet filed)

Based on the NHB DataCheck results letter and the information provided in the submission as well as in communications and materials provided during our consultation review, we request the following recommended permit conditions. THESE RECOMMENDED PERMIT CONDITIONS ARE APPLICABLE TO ALL STATE PERMITS LISTED ABOVE.

- For consideration in the AoT permit review process, please incorporate recommendations along with associated materials as detailed, into the final sheet plans as written below (update highlighted text as applicable) and provide to NHDES for final review and copy NHFG.
- For all other permits, please include recommended permit conditions in final plan sheets plans as written below (update highlighted text as applicable) and provide to NHDES for final review and copy NHFG. Permit reviewers will adopt/include NHFG permit conditions in the permit if approved.

NHB24-1272 New Hampshire Fish and Game Recommended Permit Conditions:

1. Blanding's Turtle (State Endangered) occur within the vicinity of the project area. All operators and personnel working on or entering the site shall be made aware of the potential presence of these species and shall be

provided flyers that help to identify these species, along with NHFG contact information. See Plan Sheet xxxxxx Include attached flyers to plan sheet set.

- 2. Rare species information (e.g. identification, observation and reporting of observations, when to contact NHFG immediately and NHFG contact information) shall be communicated during morning tailgate meetings prior to work commencement during while the project is under active construction.
- 3. All manufactured erosion and sediment control products, with the exception of turf reinforcement mats, utilized for, but not limited to, slope protection, runoff diversion, slope interruption, perimeter control, inlet protection, check dams, and sediment traps shall not contain plastic, or multifilament or monofilament polypropylene netting or mesh with an opening size of greater than 1/8 inches. See Plan Sheet xxxxxx
- 4. Turtles may be attracted to disturbed ground during nesting season. Turtle nesting season occurs approximately May 15th – June 30th. All turtle species nests and northern black racer nests are protected by NH laws. If a nest is observed or suspected, operators shall contact NHFG immediately for further consultation. The nest or suspected nest shall be marked (surrounding roped off or cone buffer deployed) and avoided; this shall be communicated to all personnel onsite. Site activities shall not occur in the area surrounding the nest or suspected nest until further guidance is provided by NHFG.
- 5. All observations of threatened or endangered species on the project site shall be reported immediately to the NHFG nongame and endangered wildlife environmental review program by phone at 603-271-2461 and by email at NHFGreview@wildlife.nh.gov, with the email subject line containing the NHB DataCheck tool results letter assigned number, the project name, and the term Wildlife Species Observation.
 - a. Photographs of the observed species and nearby elements of habitat or areas of land disturbance shall be provided to NHFG in digital format at the above email address for verification, as feasible.
- 6. In the event a threatened or endangered species is observed on the project site during the term of the permit, the species shall not be disturbed, handled, or harmed in any way prior to consultation with NHFG and implementation of corrective actions recommended by NHFG.
 - a. Site operators shall be allowed to relocate wildlife encountered if discovered within the active work zone if in direct harm from project activities. Wildlife shall be relocated in close proximity to the capture location but outside of the work zone and in the direction the individual was heading. NHFG shall be contacted immediately if this action occurs.
- 7. The NHFG, including its employees and authorized agents, shall have access to the property during the term of the permit. , along with NHFG contact information. *Include attached flyer to plan sheet set*.

NHFG has completed our review of materials submitted for consultation under FIS 1004. No further coordination with NHFG is requested at this time. Please note that additional or a new consultation may be required in accordance with Fis 1004.08(b)4 if there are changes in project design that is referenced above which might result in potential impacts to threatened and endangered species, whether suggested to avoid harm to the species, or which could serve to increase the potential of adverse impacts to species.

These recommendations have been transmitted to the applicable permitting agency. <u>Questions or concerns on NHFG</u> recommendations provided in this communication **must** follow FIS 1004.12 that requires a written request for further consultation provided within 10 days of receipt of this communication. Note that NHFG recommendations may be withdrawn pursuant to FIS 1004.13.

Patrick Fitzgibbons Wildlife Biologist NH Fish and Game Department Wildlife Division Concord, NH 03301 603-271-3017 New Hampshire Fish and Game requirements for environmental review consultation can be found at: <u>https://gencourt.state.nh.us/rules/state_agencies/fis1000.html</u>. ALL requests for consultation and submittals should be sent via email to <u>NHFGreview@wildlife.nh.gov</u> or can be sent hardcopy by mail. The NHB datacheck results letter number needs to be included in the email subject line to read as "NHBxx-xxxx_Project Name_FIS 1004 Consultation Submittal".

The requirements for consultation (Fis 1004) shall not apply to the following: statutory permit by notification, permit by rule, permit by notification, routine roadway registration, docking structure registration, or conditional authorization by rule. Review requests for these projects or other project types should be submitted to <u>NHFGreview@wildlife.nh.gov</u> or can be sent hardcopy by mail – email or mail subject line for these review requests should read **"NHBxx-xxxx_Project Name_ Env. Review Request"**.

Please provide shapefiles/KMZ/KMLs of the project site (and relevant features if applicable) with your submittal. Review statements provided in the NHB Datacheck Results letter for additional guidance.

From: Christine J. Perron <CPerron@mjinc.com>
Sent: Monday, August 12, 2024 5:30 PM
To: FGC: NHFG review <NHFGreview@wildlife.nh.gov>
Subject: Fis 1004 consultation request - NHB24-1272

EXTERNAL: Do not open attachments or click on links unless you recognize and trust the sender.

Good afternoon,

Consultation materials are attached for a City of Portsmouth roadway improvement project.

Thanks, Christine



CHRISTINE J. PERRON, CWS REGIONAL ENVIRONMENTAL MANAGER

603-225-2978

CPERRON@MJINC.COM

WWW.MJINC.COM





NHFG Wildlife Biologist Contacts:

Melissa Winters 603-479-1129 and Josh Megyesy 978-578-0802

- Turtles may be attracted to disturbed ground during nesting season (May 15th June 30th).
- Turtles are most active from April 15th October 15th.



Blanding's turtle (State Endangered)

Large, dark/black domed shell with lighter speckles.

Distinct yellow throat/chin.

Semi-aquatic- uses both wetland and terrestrial habitats.



Spotted turtle (State Threatened)

Small, mostly aquatic with black or dark brown with yellow spots.

Fairly flat shell compared to Blanding's turtle.

Spots vary in color and number.

Semi-aquatic - uses both wetland and terrestrial habitats.

Blanding's and spotted turtles are protected by state laws. It is illegal to capture, harass or harm these species, including their nests. Handle ONLY if necessary to move out of harms way. Move to the nearest location in the direction they were moving and contact NHFG. Do not disturb nests.

Report sightings in accordance with NHFG permit conditions. Contact NHFG Wildlife Biologist Melissa Winters 603-479-1129 (cell) and Josh Megyesy 978-578-0802 (group text preferred) if a turtle is observed nesting or a nest site is suspected within the project area. Please report promptly, noting specific location, project site and date – Photographs strongly encouraged to be included with report.

USFWS Official Species List



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: Project Code: 2022-0003545 Project Name: Peverly Hill Road-Portsmouth NH

10/31/2024 12:15:52 UTC

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 <u>do not</u> 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 <u>newengland@fws.gov</u> 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:2022-0003545Project Name:Peverly Hill Road-Portsmouth NHProject Type:Road/Hwy - Maintenance/ModificationProject Description:The proposed project consists of reconstructing an approximately 1-mile
section of Peverly Hill Road between West Street and Middle Road (NH
Route 33) in Portsmouth, New Hampshire. The proposed project includes
the reconstruction of existing pavement surface and installation of a
closed drainage system that will eliminate the ponding conditions and
provide water quality treatment.

Project Location:

The approximate location of the project can be viewed in Google Maps: <u>https://www.google.com/maps/@43.05204176816707,-70.77874149950426,14z</u>



Counties: Rockingham County, New Hampshire

ENDANGERED SPECIES ACT SPECIES

There is a total of 3 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. <u>NOAA Fisheries</u>, 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: <u>https://ecos.fws.gov/ecp/species/9045</u>	Endangered
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/10515</u>	Proposed Endangered
INSECTS NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i>	Candidate

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

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:McFarland JohnsonName:Christine PerronAddress:53 Regional DriveCity:ConcordState:NHZip:03301Emailcperron@mjinc.comPhone:6032252978

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Highway Administration

USFWS Northern Long-Eared Bat and Tricolored Bat Consistency Letter



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: Project code: 2022-0003545 Project Name: Peverly Hill Road-Portsmouth NH 10/31/2024 12:28:30 UTC

Federal Nexus: yes Federal Action Agency (if applicable): Federal Highway Administration

Subject: Technical assistance for 'Peverly Hill Road-Portsmouth NH'

Dear Christine Perron:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on October 31, 2024, for 'Peverly Hill Road-Portsmouth NH' (here forward, Project). This project has been assigned Project Code 2022-0003545 and all future correspondence should clearly reference this number. **Please carefully review this letter. Your Endangered Species Act (Act) requirements are not complete.**

Ensuring Accurate Determinations When Using IPaC

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into IPaC must accurately represent the full scope and details of the Project. **Failure to accurately represent or implement the Project as detailed in IPaC or the Northern Long-eared Bat and Tricolored Bat Range-wide Determination Key (Dkey), invalidates this letter.**

Determination for the Northern Long-Eared Bat and Tricolored Bat

Based on your IPaC submission and a standing analysis completed by the Service, you determined the proposed Project will have the following effect determinations:

Species	Listing Status	Determination
Northern Long-eared Bat (<i>Myotis septentrionalis</i>)	Endangered	May affect
Tricolored Bat (Perimyotis subflavus)	Proposed	May affect
	Endangered	

Other Species and Critical Habitat that May be Present in the Action Area

The IPaC-assisted determination key for the northern long-eared bat and tricolored bat does not apply to the following ESA-protected species and/or critical habitat that also may occur in your Action area:

Monarch Butterfly Danaus plexippus Candidate

You may coordinate with our Office to determine whether the Action may cause prohibited take of the species listed above.

Conclusion

Consultation with the Service is not complete. Further consultation or coordination with the Service is necessary for those species or designated critical habitats with a determination of "May Affect." A "May Affect" determination in this key indicates that the project, as entered, is not consistent with the questions in the key. Not all projects that reach a "May Affect" determination are anticipated to result in adverse impacts to listed species. These projects may result in a "No Effect", "May Affect, Not Likely to Adversely Affect", or "May Affect, Likely to Adversely Affect" determination depending on the details of the project. Please contact our New England Ecological Services Field Office to discuss methods to avoid or minimize potential adverse effects to those species or designated critical habitats

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

Peverly Hill Road-Portsmouth NH

2. Description

The following description was provided for the project 'Peverly Hill Road-Portsmouth NH':

The proposed project consists of reconstructing an approximately 1-mile section of Peverly Hill Road between West Street and Middle Road (NH Route 33) in Portsmouth, New Hampshire. The proposed project includes the reconstruction of existing pavement surface and installation of a closed drainage system that will eliminate the ponding conditions and provide water quality treatment.

The approximate location of the project can be viewed in Google Maps: <u>https://www.google.com/maps/@43.05204176816707,-70.77874149950426,14z</u>



DETERMINATION KEY RESULT

Based on the answers provided, the proposed Action is consistent with a determination of "may affect" for a least one species covered by this determination key.

QUALIFICATION INTERVIEW

1. Does the proposed project include, or is it reasonably certain to cause, intentional take of listed bats or any other listed species?

Note: Intentional take is defined as take that is the intended result of a project. Intentional take could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered or proposed species?

No

2. Is the action area wholly within Zone 2 of the year-round active area for northern longeared bat and/or tricolored bat?

Automatically answered No

3. Does the action area intersect Zone 1 of the year-round active area for northern long-eared bat and/or tricolored bat?

Automatically answered
No

4. Does any component of the action involve leasing, construction or operation of wind turbines? Answer 'yes' if the activities considered are conducted with the intention of gathering survey information to inform the leasing, construction, or operation of wind turbines.

Note: For federal actions, answer 'yes' if the construction or operation of wind power facilities is either (1) part of the federal action or (2) would not occur but for a federal agency action (federal permit, funding, etc.).

No

5. Is the proposed action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

Yes

6. Is the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), or Federal Transit Administration (FTA) funding or authorizing the proposed action, in whole or in part?

No

7. Are you an employee of the federal action agency or have you been officially designated in writing by the agency as its designated non-federal representative for the purposes of Endangered Species Act Section 7 informal consultation per 50 CFR § 402.08?

Note: This key may be used for federal actions and for non-federal actions to facilitate section 7 consultation and to help determine whether an incidental take permit may be needed, respectively. This question is for information purposes only.

No

8. Is the lead federal action agency the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC)? Is the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC) funding or authorizing the proposed action, in whole or in part?

No

- 9. Is the lead federal action agency the Federal Energy Regulatory Commission (FERC)? *No*
- 10. [Semantic] Is the action area located within 0.5 miles of a known bat hibernaculum?

Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

Automatically answered

No

11. Does the action area contain any winter roosts or caves (or associated sinkholes, fissures, or other karst features), mines, rocky outcroppings, or tunnels that could provide habitat for hibernating bats?

No

12. Does the action area contain (1) talus or (2) anthropogenic or naturally formed rock shelters or crevices in rocky outcrops, rock faces or cliffs?

No

13. Will the action cause effects to a covered bridge?

No

14. Are trees present within 1000 feet of the action area?

Note: If there are trees within the action area that are of a sufficient size to be potential roosts for bats answer "Yes". If unsure, additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <u>https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines.</u>

Yes

15. Does the action include the intentional exclusion of bats from a building or structure?

Note: Exclusion is conducted to deny bats' entry or reentry into a building. To be effective and to avoid harming bats, it should be done according to established standards. If your action includes bat exclusion and you are unsure whether northern long-eared bats or tricolored bats are present, answer "Yes." Answer "No" if there are no signs of bat use in the building/structure. If unsure, contact your local Ecological Services Field Office to help assess whether northern long-eared bats or tricolored bats may be present. Contact a Nuisance Wildlife Control Operator (NWCO) for help in how to exclude bats from a structure safely without causing harm to the bats (to find a NWCO certified in bat standards, search the Internet using the search term "National Wildlife Control Operators Association bats"). Also see the White-Nose Syndrome Response Team's guide for bat control in structures.

No

- 16. Does the action involve removal, modification, or maintenance of a human-made structure (barn, house, or other building) known or suspected to contain roosting bats?No
- 17. Will the action cause construction of one or more new roads open to the public?

For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

No

18. Will the action include or cause any construction or other activity that is reasonably certain to increase average daily traffic permanently or temporarily on one or more existing roads?

Note: For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

No

19. Will the action include or cause any construction or other activity that is reasonably certain to increase the number of travel lanes on an existing thoroughfare?

For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

No

20. Will the proposed Action involve the creation of a new water-borne contaminant source (e.g., leachate pond, pits containing chemicals that are not NSF/ANSI 60 compliant)?

Note: For information regarding NSF/ANSI 60 please visit <u>https://www.nsf.org/knowledge-library/nsf-ansi-standard-60-drinking-water-treatment-chemicals-health-effects</u>

No

21. Will the proposed action involve the creation of a new point source discharge from a facility other than a water treatment plant or storm water system?

No

22. Will the action include drilling or blasting?

No

- 23. Will the action involve military training (e.g., smoke operations, obscurant operations, exploding munitions, artillery fire, range use, helicopter or fixed wing aircraft use)? *No*
- 24. Will the proposed action involve the use of herbicides or other pesticides other than herbicides (e.g., fungicides, insecticides, or rodenticides)?

No

25. Will the action include or cause activities that are reasonably certain to cause chronic or intense nighttime noise (above current levels of ambient noise in the area) in suitable summer habitat for the northern long-eared bat or tricolored bat during the active season?

Chronic noise is noise that is continuous or occurs repeatedly again and again for a long time. Sources of chronic or intense noise that could cause adverse effects to bats may include, but are not limited to: road traffic; trains; aircraft; industrial activities; gas compressor stations; loud music; crowds; oil and gas extraction; construction; and mining.

Note: Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <u>https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines.</u>

No

26. Does the action include, or is it reasonably certain to cause, the use of permanent or temporary artificial lighting within 1000 feet of suitable northern long-eared bat or tricolored bat roosting habitat?

Note: Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <u>https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines.</u>

No

27. Will the action include tree cutting or other means of knocking down or bringing down trees, tree topping, or tree trimming?

Yes

28. Will the proposed action occur exclusively in an already established and currently maintained utility right-of-way?

No

29. Does the action include emergency cutting or trimming of hazard trees in order to remove an imminent threat to human safety or property? See hazard tree note at the bottom of the key for text that will be added to response letters

Note: A "hazard tree" is a tree that is an immediate threat to lives, public health and safety, or improved property. *No*

- 30. Does the project intersect with the 0- 9.9% forest density category?Automatically answeredNo
- 31. Does the project intersect with the 10.0- 19.9% forest density category map? Automatically answered

No

- 32. Does the project intersect with the 20.0- 29.9% forest density category map? **Automatically answered** *No*
- 33. Does the project intersect with the 30.0- 100% forest density category map?
 Automatically answered
 Yes
- 34. Will the action cause trees to be cut, knocked down, or otherwise brought down across an area greater than 100 acres in total extent?

No

35. Will the proposed action result in the use of prescribed fire?

Note: If the prescribed fire action includes other activities than application of fire (e.g., tree cutting, fire line preparation) please consider impacts from those activities within the previous representative questions in the key. This set of questions only considers impacts from flame and smoke.

No

36. Does the action area intersect the northern long-eared bat species list area?

Automatically answered Yes

37. [Semantic] Is the action area located within 0.25 miles of a culvert that is known to be occupied by northern long-eared or tricolored bats?

Automatically answered No

38. [Semantic] Is the action area located within 150 feet of a documented northern long-eared bat roost site?

Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

Automatically answered No

39. Is suitable summer habitat for the northern long-eared bat present within 1000 feet of project activities?If unsure, answer "Yes."

Note: Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <u>https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines.</u>

Yes

40. Are any of the trees proposed for cutting or other means of knocking down, bringing down, topping, or trimming suitable for northern long-eared bat roosting (i.e., live trees and/or snags \geq 3 inches dbh that have exfoliating bark, cracks, crevices, and/or cavities)?

Note: Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <u>https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines.</u>

Yes

41. Will any tree cutting/trimming or other knocking or bringing down of trees occur during the **Fall Swarming season** for northern long-eared bats in the action area?

Note: Bat activity periods for your state can be found in Appendix L of the Service's Range-wide Indiana Bat and Northern long-eared Bat Survey Guidelines at: <u>https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines</u>

Yes

42. Does the action area intersect the tricolored bat species list area?

Automatically answered

Yes

43. [Semantic] Is the action area located within 0.25 miles of a culvert that is known to be occupied by northern long-eared or tricolored bats?

Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

Automatically answered No

44. Has a presence/probable absence bat survey targeting the <u>tricolored bat and following the</u> <u>Service's Range-wide Indiana Bat and Northern Long-Eared Bat Survey Guidelines</u> been conducted within the project area?

No

45. Is suitable summer habitat for the tricolored bat present within 1000 feet of project activities?

(If unsure, answer ""Yes."")

Note: If there are trees within the action area that may provide potential roosts for tricolored bats (e.g., clusters of leaves in live and dead deciduous trees, Spanish moss (Tillandsia usneoides), clusters of dead pine needles of large live pines) answer ""Yes."" For a complete definition of suitable summer habitat for the tricolored bat, please see Appendix A in the <u>Service's Range-wide Indiana Bat and Northern long-eared Bat Survey Guidelines</u>. *Yes*

46. Do any of the trees proposed for cutting or other means of knocking down, bringing down, topping, or trimming provide potential roosts for tricolored bats (e.g., clusters of leaves in live and dead deciduous trees, Spanish moss (*Tillandsia usneoides*), clusters of dead pine needles of large live pine trees)?

Note: Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <u>https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines.</u>

Yes

- 47. Will any tree cutting/trimming or other knocking or bringing down of trees be conducted during the Pup Season for tricolored bat?
 Note: Bat activity periods for your state can be found in Appendix L of the <u>Service's Range-wide Indiana Bat and</u> Northern long-eared Bat Survey Guidelines. *Yes*
- 48. Do you have any documents that you want to include with this submission? *No*

PROJECT QUESTIONNAIRE

Enter the extent of the action area (in acres) from which trees will be removed - round up to the nearest tenth of an acre. For this question, include the entire area where tree removal will take place, even if some live or dead trees will be left standing.

0.3

IPAC USER CONTACT INFORMATION

Agency: McFarland Johnson Name: Christine Perron Address: 53 Regional Drive Concord City: State: NH 03301 Zip: Email cperron@mjinc.com Phone: 6032252978

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Highway Administration

Section 106 Effect Memo



Victoria F. Sheehan Commissioner THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION



William Cass, P.E. Assistant Commissioner

PORTSMOUTH Peverly Hill Road Sidewalk Improvement/Complete Street Project X-A002(061) 20258 RPR 8013

No Adverse Effect Memo

In order to assist the Federal Highway Administration (FHWA) in complying with Section 106 of the National Historic Preservation Act of 1966 and its amendments, the New Hampshire Depart of Transportation (NHDOT), in consultation with the New Hampshire Division of Historical Resources (SHPO), has reviewed this undertaking according to the standards and procedures detailed in the 2018 Programmatic Agreement regarding the Federal-Aid Highway Program in New Hampshire.

Project Description

The City of Portsmouth proposes to rehabilitate Peverly Hill Road from the intersection of West Road west to the intersection of NH Route 33 (Middle Road). The project will consist of the reconstruction of Peverly Hill Road to provide both pedestrian and bicycle accommodations in compliance with the City's Complete Streets Policy. In addition, the portion of Greenleaf Avenue closest to Peverly Hill Road is included in the overall project area for a water quality treatment area.

The project will entail full roadway reconstruction with drainage improvement, utility relocation, sidewalk construction, construction of a multi-use path and landscaping features.

Identification

Above-Ground

A project area form was completed in 2018, with the recommendations for inventory following in 2020. The following was determined:

Gardner-Hett Farm, 305 Peverly Hill Road, Portsmouth (POR1042) is eligible under Criterion A for its association with agricultural history of the town of Portsmouth and the Southern New Hampshire Seacoast region and its continued agricultural use into the early twenty-first century.

The following resource were found not eligible:

- POR-IFHA Iofalla Historic Area
- POR-PPHA Prospect Park Historic Area
- POR-PHRA Peverly Hill Road Ranch Area
- POR-0025 Calvary Cemetery

- POR1041 303 Peverly Hill Road
- POR10-43 384 Peverly Hill Road
- POR1044 George Wiggin House
- POR1045 Willey-Sides-Wiggin House
- POR1048 Champagne House

Archaeology

Survey investigation during a Phase IA/IB determined that no further archaeological survey will be required. Slope work within 25 feet of the unmarked cemetery known as the Willey-Lightford family burial ground will require monitoring during construction by a qualified archaeologist.

Public Consultation

Public meetings were held on 2/3/16, 7/27/16, 3/27/19, 2/17/21, 4/19/21, 6/28/21, 7/12/21, and 10/14.21. No interested property owner with the project areas reached out to FHWA regarding Consulting Party status.

NHDHR was contacted via Request for Project Review in October 2017.

Determination of Effect

Gardner-Hett Farm, 303 Peverly Hill Road (POR1042): The proposed project will require the removal of some vegetation and the taking of an edge of land location along Peverly Hill Road that abut the property. The edge of land will be used to accommodate the construction of a new shared-use path. The amount of property taken for the widening of the road right-of-way is minimal in relation to the acreage of fields, and the stone walls along the road in Parcel 255-2 will not be affected. The removal of trees and brush will not adversely affect the overall setting of the resource, as the fields will remain intact; the vegetation that will be removed is not part of an intentional landscape, and the trees in front of this parcel, though mature, are random and not part of a designed landscape. The wood fence, likely dating to the 1980s-1990s, will be retained, even if relocated away from the roadway. Further evaluation is available in the Effect Evaluation table completed in July 2020.

Stonewalls throughout the project area will not be impacted.

Based upon a review pursuant to 36 CFR 800.4, NHDOT has determined that no historic or archaeological resources are affected in the project area and no further survey work is needed. The result of identification and evaluation for the proposed contract is a finding of **No Adverse Effect**.

In accordance with the Advisory Council's regulations, we will continue to consult, as appropriate, as this project proceeds.

Jul LEdeln-

Jill Edelmann Cultural Resources Manager

12/22/2021

Date

Concurred with by the NH State Historic Preservation Officer:

hule SSHAD 12/23/21 Date ti Nadine Miller

Deputy State Historic Preservation Officer NH Division of Historical Resources

c.c. Marika Labash, NHDHR Jamie Sikora, FHWA Jon Evans, DOT Christine Perron, MJ

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NH GP Appendix B – USACE Section 404 Checklist



US Army Corps of Engineers ®

of Engineers ® Appendix B New England District New Hampshire General Permits Required Information and USACE Section 404Checklist

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 <u>https://www4.des.state.nh.us/NHB-DataCheck/</u> .	x	
2.3 If wetland crossings are proposed, are they adequately designed to maintain hydrology, sediment transport & wildlife passage?	NA	
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.)	x	
2.5 The overall project site is more than 40 acres?		Х
2.6 What is the area of the previously filled wetlands?	unkr	nown
2.7 What is the area of the proposed fill in wetlands?	4230) SF
2.8 What % of the overall project sire will be previously and proposed filled wetlands?	unkr	nown
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: <u>https://www4.des.state.nh.us/NHB-DataCheck/</u> . 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:		
PDF: <u>https://wildlife.state.nh.us/wildlife/wap-high-rank.html</u> .		v
• Data Mapper: <u>www.granit.unh.edu</u> .		^
• GIS: <u>www.granit.unh.edu/data/downloadfreedata/category/databycategory.html.</u>		
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?	NA	
4. Flooding/Floodplain Values	Yes	No
4.1 Is the proposed project within the 100-year floodplain of an adjacent river or stream?		Х
4.2 If 4.1 is yes, will compensatory flood storage be provided if the project results in a loss of	NA	
flood storage?		
5. Historic/Archaeological Resources		
For a minimum, minor or major impact project - a copy of the RPR Form		
(www.ph.gov/phdhr/review) with your DES file number shall be sent to the NH Division of	N/	
With the Decomposition of the section of the sectio	X	
Historical Resources as required on Page 37 GC 14(d) of the GP document**	X	
Historical Resources as required on Page 37 GC 14(d) of the GP document** 6. Minimal Impact Determination (for projects that exceed 1 acre of permanent impact)	X Yes	No
 Historical Resources as required on Page 37 GC 14(d) of the GP document** 6. Minimal Impact Determination (for projects that exceed 1 acre of permanent impact) Projects with greater than 1 acre of permanent impact must include the following: 	X Yes	No
 Historical Resources as required on Page 37 GC 14(d) of the GP document** 6. Minimal Impact Determination (for projects that exceed 1 acre of permanent impact) Projects with greater than 1 acre of permanent impact must include the following: Functional assessment for aquatic resources in the project area. 	X Yes	No
 Historical Resources as required on Page 37 GC 14(d) of the GP document** 6. Minimal Impact Determination (for projects that exceed 1 acre of permanent impact) Projects with greater than 1 acre of permanent impact must include the following: Functional assessment for aquatic resources in the project area. On and off-site alternative analysis. 	X Yes N	No
 Historical Resources as required on Page 37 GC 14(d) of the GP document** 6. Minimal Impact Determination (for projects that exceed 1 acre of permanent impact) Projects with greater than 1 acre of permanent impact must include the following: 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. 	X Yes N/	No
 Historical Resources as required on Page 37 GC 14(d) of the GP document** 6. Minimal Impact Determination (for projects that exceed 1 acre of permanent impact) Projects with greater than 1 acre of permanent impact must include the following: 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. 6.1 Will there be complete loss of aquatic resources on site? 	X Yes N/	No A
 Historical Resources as required on Page 37 GC 14(d) of the GP document** 6. Minimal Impact Determination (for projects that exceed 1 acre of permanent impact) Projects with greater than 1 acre of permanent impact must include the following: 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. 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? 	X Yes N/	No A
 Historical Resources as required on Page 37 GC 14(d) of the GP document** 6. Minimal Impact Determination (for projects that exceed 1 acre of permanent impact) Projects with greater than 1 acre of permanent impact must include the following: 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. 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? 	X Yes N/	A
 Historical Resources as required on Page 37 GC 14(d) of the GP document** 6. Minimal Impact Determination (for projects that exceed 1 acre of permanent impact) Projects with greater than 1 acre of permanent impact must include the following: 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. 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)? 	X Yes N/	No A
 Historical Resources as required on Page 37 GC 14(d) of the GP document** 6. Minimal Impact Determination (for projects that exceed 1 acre of permanent impact) Projects with greater than 1 acre of permanent impact must include the following: 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. 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? 	X Yes N/	No A
 Historical Resources as required on Page 37 GC 14(d) of the GP document** 6. Minimal Impact Determination (for projects that exceed 1 acre of permanent impact) Projects with greater than 1 acre of permanent impact must include the following: 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. 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? 	X Yes N/	No A
 Historical Resources as required on Page 37 GC 14(d) of the GP document** 6. Minimal Impact Determination (for projects that exceed 1 acre of permanent impact) Projects with greater than 1 acre of permanent impact must include the following: 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. 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? 	X Yes N/	<u>No</u>
 Historical Resources as required on Page 37 GC 14(d) of the GP document** 6. Minimal Impact Determination (for projects that exceed 1 acre of permanent impact) Projects with greater than 1 acre of permanent impact must include the following: 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. 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? 	X Yes N/	No A
 Historical Resources as required on Page 37 GC 14(d) of the GP document** 6. Minimal Impact Determination (for projects that exceed 1 acre of permanent impact) Projects with greater than 1 acre of permanent impact must include the following: 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. 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 (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? 	X Yes N/	No A

*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.

City of Portsmouth Peverly Hill Road Reconstruction Project

ACOE Appendix B Supplemental Narrative

1.1 Will any work occur within 1 mile upstream in the watershed of an impaired water?

Section 303(d) of the Clean Water Act requires each state to submit a list of impaired waters to the US EPA every two years to identify surface waters that are impaired by pollutants, not expected to meet water quality standards within a reasonable time and require the development of a Total Maximum Daily Load (TMDL) study. This list is prepared by NHDES as outlined in the Draft Section 305(b) and 303(d) Consolidated Assessment and Listing Methodology. According to the NHDES 303(d) list (most recent available), there is chloride, *E. coli* and dissolved oxygen impairment in the Sagamore Creek watershed (NHRIV600031001-03). Additionally, there is aluminum, chlorophyll-a, copper, *Enterococcus*, estuarine bioassessments, lead, total nitrogen and dissolved oxygen impairment in Sagamore Creek/estuary (NHEST600031001-03).

The project is expected to result in an increase in impervious surface of 55,600 SF (1.3 acres) and there are five proposed BMPs for stormwater treatment, which will treat runoff from approximately 95% of new pavement.

The proposed project is not expected to result in an adverse impact on water quality and will not cause or contribute to surface water impairments.

2.1 Are there streams, brooks, rivers, ponds, or lakes within 200 feet of any proposed work?

Sagamore Creek is a tidally influenced waterbody that flows through the project area under Peverly Hill Road just north of the intersections with Banfield Road and Mirona Road. No impacts are proposed to Sagamore Creek, and appropriate erosion and sediment controls will be in place during construction to protect nearby resources.

2.2 Are there proposed impacts to tidal SAS, prime wetlands, or priority resource areas?

Permanent impacts to Prime Wetland are expected to total 310 SF, and temporary impacts to Prime Wetland are expected to total 180 SF.

2.4 Would the project remove part or all of a riparian buffer?

Part of the Sagamore Creek riparian buffer within the island between Banfield Road and Peverly Hill Road falls within the permanent and temporary impact area. This wetland is not part of the prime wetland complex, but is within the prime wetland buffer. Work within the upland 100' prime wetland buffer will consist of slope work along the roadway footprint and drainage work.

2.7 What is the area of the proposed fill in wetlands?

The area of proposed fill in wetlands is 4,230 square feet (0.1 acre). This is the proposed area of permanent impact to wetlands, due to slope and drainage work as well as stormwater treatment BMPs.

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?

City of Portsmouth Peverly Hill Road Reconstruction Project

ACOE Appendix B Supplemental Narrative

The proposed project was submitted to and reviewed by the New Hampshire Natural Heritage Bureau (NHB) via the online NHB DataCheck Tool. According to the NHB DataCheck Results Letter (NHB24-1272) dated May 2, 2024, dwarf glasswort (*Salicornia* bigelovii), marsh elder (*Iva frutescens*), saltmarsh agalinis (*Agalinis maritima ssp. maritima*), tundra alkali grass (*Puccinellia pumila*), and Blanding's turtle (*Emydoidea blandingii*) have historically been documented in the vicinity of the project area. Additionally, the high salt marsh, intertidal flat, low salt marsh, and salt marsh system natural communities are present in the vicinity of the project area.

The United States Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (IPaC) planning tool was accessed on October 31, 2024 to determine if federally listed species have the potential to occur in the project area. An Official Species List was generated for the proposed project area (see attached USFWS Official Species List). According USFWS Official Species List, the proposed project is located within the range of the federally endangered Northern long-eared bat (*Myotis septentrionalis*), proposed endangered tricolored bat (*Perimyotis subflavus*), and the monarch butterfly (*Danaus plexippus*), a candidate species currently undergoing review for potential listing. Total tree clearing is anticipated to be approximately 0.44 acres. Consultation was carried out with the USFWS, and it was determined that the project may affect Northern long-eared bat and tricolored bat. The proposed project area includes some potential monarch habitat, but the project would not permanently change that habitat, and no monarch conservation measures are included in the project at this time. Following construction, roadside areas would continue to provide potential habitat for the monarch butterfly.

5. Historic/Archaeological Resources

The Request for Project Review (RPR) was sent to NH DHR and Section 106 consultation was carried out. It was determined that the project would result in No Adverse Effect to historic resources.

6. Minimal Impact Determination

This project will not have greater than one acre of permanent impact to wetlands.

Photographs



Photo 1: Stream A, Sagamore Creek, facing east upstream, from Peverly Hill Road (03/13/2024)



Photo 2: Wetland B (T.I.A. 9; P.I.A. 10), facing north along Peverly Hill Road (03/13/2024)





Photo 3: Wetland C/Stream A (T.I.A. 8; P.I.A. 9) facing east towards Peverly Hill Road (03/13/2024)



Photo 4: Wetland D (T.I.A. 7; P.I.A 8) facing north from Banfield Road/Peverly Hill Road intersection (03/13/2024)





Photo 5: Wetland E (T.I.A. 1 & 3; P.I.A. 2, 3 & 5) facing southeast along Peverly Hill Road (03/13/2024)



Photo 6: Wetland F (T.I.A. 4; P.I.A. 6) facing northeast along Moffat Street (03/13/2024)





Photo 7: Wetland F (T.I.A. 4; P.I.A. 6) facing southeast along Peverly Hill Road (03/13/2024)



Photo 8: Wetland G (T.I.A. 2; P.I.A. 4) facing southeast along Peverly Hill Road (03/13/2024)





Photo 9: Tidal buffer zone, Wetland I (T.I.A. 6; P.I.A. 7) east of Greenleaf Ave, facing northeast (03/13/2024)



Wetland Impact and Erosion Control Plan Set

CITY OF PORTSMOUTH PEVERLY HILL ROAD LOCATION MAP WETLAND IMPACT AND EROSION CONTROL PLANS

Sheet Index				
SHEET NUMBER	SHEET TITLE			
CV-01	COVER			
WP-01	Wetland Impact and Erosion Control Plan 01			
WP-02	Wetland Impact and Erosion Control Plan 02			
WP-03	Wetland Impact and Erosion Control Plan 03			
WP-04	WETLAND IMPACT AND EROSION CONTROL PLAN 04			
WP-05	WETLAND IMPACT AND EROSION CONTROL PLAN 05			
WP-06	WETLAND IMPACT AND EROSION CONTROL PLAN 06			
WP-07	WETLAND IMPACT AND EROSION CONTROL PLAN 07			
WP-08	WETLAND IMPACT AND EROSION CONTROL PLAN 08			
WP-09	WETLAND IMPACT AND EROSION CONTROL PLAN 09			
WP-10	WETLAND IMPACT AND EROSION CONTROL PLAN 10			
EPSC-1	EROSION CONTROL NOTES			
EPSC-2	EROSION CONTROL DETAILS			

PEVERLY HILL RD. -

PORTSMOUTH, NH

PREPARED FOR:

PREPARED BY:

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

OCTOBER 2024

CITY OF PORTSMOUTH ROCKINGHAM COUNTY NEW HAMPSHIRE

PORTSMOUTH # 20258 CMAQ PROGRAM # X-A002(061)



CITY OF PORTSMOUTH 680 PEVERLY HILL ROAD PORTSMOUTH, NH 03801 (603) 427-1530 WWW.CITYOFPORTSMOUTH.COM



MCFARLAND JOHNSON PROJECT NUMBER: 18082.01



	W	/etland Impact	Summary Tab	le	
Location	Wetland Classification	Permanent Wetland (sf)	Temporary Wetland (sf)	Permanent Tidal Buffer Zone (sf)	Temporary Tidal Buffer Zone (sf)
I.A 1	PFO1E	2			
I.A 1	PFO1E		724		
I.A 2	PFO1E	172			
I.A 3	PFO1E	73			
I.A 2	PFO1E		114		
I.A 4	PFO1E	647			
I.A 3	PFO1E		889		
I.A 5	PFO1E	2318			
I.A 4	PFO1E		351		
.A 6	PFO1E	473			
I.A 5	PFO1E		7		
.A 6	PWET 100/TBZ				2190
.A 7	PWET 100/TBZ			10152	
.A 7	PSS1E (Prime Wetland)		180		
.A 8	PSS1E (Prime Wetland)*	310			
.A 8	PSS1E		119		
.A 9	PSS1E	196			
.A 9	PEM1E/PFO1E		59		
A 10	PEM1E/PFO1E	39			
	Total	4230	2443	10152	2190

*Impacts within prime wetland buffer at this location will be limited to roadway footprint/r

<u>LEGEND</u>

TEMPORARY IMPACTS

PERMANENT IMPACTS

DELINEATED WETLAND (DW)

PWET

PRIME WETLAND (PWET) <u>PWFT 100/TBZ</u> 100 FT PRIME WETLAND BUFFER (PWET100)/TIDAL BUFFER ZONE (TBZ) ______ 50 FT WATERFRONT BUFFER (WB) ______ PS 250 _____ 250' PROTECTED SHORELAND BUFFER (PS)








	CITY OF PORTSMOUTH NEW HAMPSHIRE			
	PEVERLY HILL	ROAD RECONST	FRUCTION	
BY	Wetland Impact and			
	Erosio	n Control Plan 03	3	
	SCALE: AS SHOWN	DESIGN: SJS		
53 REGIONAL DRIVE CONCORD, NH 03301		PROJECT: 18082.01	WP-03	
		DATE: OCTOBER 2024	4 OF 13	
	BY	CITY PEVERLY HILL BY Wetl Erosio SCALE: AS SHOWN DRAWN: SJS CHECKED: CJP	CITY OF PORTSMOUTH NEW HAMPSHIRE PEVERLY HILL ROAD RECONST BY Wetland Impact and Erosion Control Plan 03 SCALE: AS SHOWN DESIGN: SJS DRAWN: SJS PROJECT: 18082.01 CHECKED: CJP DATE: OCTOBER 2024	









D IMPACT AND CONTROL PLANS		IT IS A VIOLATION OF LAW FO DIRECT DIRECTION OF A LICE ARCHITECT, OR LAND SURVEYO THE STAMP OF A LICENSED ARCHITECT, LANDSCAPE ARCHI AND INCLUDE THE NOTATION ' OF SUCH ALTERATION, AND A	OR ANY PERSON, UNLESS THEY ARE ENSED PROFESSIONAL ENGINEER, ARC DR, TO ALTER AN ITEM IN ANY WAY. I PROFESSIONAL IS ALTERED, THE A TECT, OR LAND SURVEYOR SHALL STA "ALTERED BY" FOLLOWED BY THEIR SIM SPECIFIC DESCRIPTION OF THE ALTERA	ACTING UNDER THE HITECT, LANDSCAPE F AN ITEM BEARING LTERING ENGINEER, MP THE DOCUMENT GNATURE, THE DATE LTION.
		CITY	OF PORTSMOUTH	
		PEVERLY HILL	ROAD RECONST	RUCTION
PTION	BY	Wetl	and Impact and	
and Johnson		Erosio	n Control Plan 07	
		SCALE: AS SHOWN	DESIGN: SJS	
53 REGIONAL DRIVE		DRAWN: SJS	PROJECT: 18082.01	_WP-07
CUNCURD, NH USSO1		CHECKED: CJP	DATE: OCTOBER 2024	8 OF 13







I. SOIL EROSIO NEW HAMP DURING COI	SHIRE STORMWAT SHIRE STORMWAT STRUCTION" 2003	ER MANUAL, VOLUME 3 – 8. THE CONTRACTOR SHAI	EROSION AND SEDIMENT CONTROL L HAVE REFERENCE TO THIS BOOK.	
2. RECOGNIZIN IMPROVES S QUALITY. TI INSTALLATIO MEASURES. TO THE CO	G THAT IMMEDIAT SOIL AND MOISTUF HE CONTRACTOR S ON OF BOTH TEMF IMMEDIATE INSTA NTRACTOR AND P	E ATTENTION TO EROSION RE CONSERVATION AND RE SHALL GIVE HIGH PRIORITY PORARY AND PERMANENT LLATION OF PRACTICES US ROVIDES BENEFITS TO THE	CONTROL PRACTICES DRAMATICALLY EDUCES NEGATIVE IMPACTS ON WATER (TO THE DAILY AND TIMELY EROSION AND SEDIMENT CONTROL SUALLY REDUCES LONG TERM COSTS E DEVELOPER AND THE PUBLIC GOOD.	<u>USE</u> STEEP CUTS AN BORROW AND AREAS
3. EROSION CO DETERMINED IMPROVE EF	ONTROL PRACTICE FROM EXISTING ROSION AND SEDIM	S ARE SHOWN ON THE PL TOPOGRAPHY. CHANGES /IENT CONTROL.	ANS WITH RESPECT TO LOCATION AS MAY BE INDICATED IN THE FIELD TO	WATERWAYS EM
4. CONSTRUCT CONTROL M SOON AS F THE SMALL	ION SHALL PROCE EASURES AND TH OSSIBLE WITHIN A EST PRACTICAL LA	ED UNIT BY UNIT TO FAC E COMPLETION OF GRADIN UNIT. THIS PROCEDURE AND AREA AT ANY ONE T	CILITATE INSTALLATION OF EROSION IG, SEEDING, AND LANDSCAPING AS SHOULD RESULT IN THE EXPOSURE OF IME.	SPILLWAYS, AND CHANNEL WITH WATER
5. AREAS ADJ INTERCEPTIO EARTHWORK	ACENT TO STREAM DN. INSTALL SILT COMMENCES. AD	MS CALL FOR PARTICULAR FENCES AS SHOWN ON PI DITIONAL FENCING MAY BI	ATTENTION WITH REGARD TO SILT LAN AND IN DETAIL BEFORE E REQUIRED AS WORK CONTINUES.	LIGHTLY USED F LOTS, ODD ARE UNUSABLE LANE LOW INTENSITY
(4" MINIMUI (1 RISE ON OTHER APP SHALL BE I AS REQUIRE DAYS OF IN SEPTEMBER INSTALLED CAN BE INS	A) AND BE LIMED 3 RUN) AND STE ROVED BIODEGRAI IMED, FERTILIZED, D) WITHIN 3 DAY ITIAL DISTURBANC 15, TEMPORARY IMMEDIATELY AND STALLED IN THE F	FERTILIZED, TILLED, SEED EPER SHALL HAVE MULCH DABLE MATTING MATERIAL PREPARED, SEEDED AND S OF FINAL GRADING OR CE. WHEN PERMANENT SEE SEEDING AND MULCHING OF MAINTAINED IN THAT CON OLLOWING PLANTING SEAS	DED AND MULCHED. ALL SLOPES 3:1 H HELD IN PLACE WITH NETTING (OR), STAPLED AND STAKED. EACH AREA MULCHED (WITH ANCHORED NETTING TEMPORARILY STABILIZED WITHIN 21 EDING CANNOT BE INSTALLED BY DF ALL DISTURBED AREAS SHALL BE NDITION UNTIL PERMANENT PRACTICES SON.	PLAY AREAS AN ATHLETIC FIELDS (TOPSOIL IS ESS FOR GOOD TURF GRAVEL PIT – S SAND AND GRA
7. THE SMALLI CASE SHAL	EST PRACTICAL A L EXCEED 5 ACRE	REA SHALL BE DISTURBED ES AT ANY TIME BEFORE I	DURING CONSTRUCTION, BUT IN NO DISTURBED AREAS ARE STABILIZED.	1/ REFER TO S 2/ POORLY DRA ATHLETIC FIE
Q TEMPORARY	STARL DE STADIO	EIZED WITHIN 45 DATS OF	INTIAL DISTORBANCE (SEE NOTE TO).	* SFF "
SEEDE APPL	ED PREPARATION	TILL THREE INCHES DEE CRE (100#/1,000 SQ. FT.)	P MIXING IN FERTILIZER.	TECHN
FERTII SQ. F <u>SEEDI</u> SPRE <i>I</i> FEASI	LZE: UNIFORMLY T.) OF 10-20-20 <u>NG:</u> SELECT APP ND SEED UNIFORM BLE, THEN RAKE	APPLY NOT LESS THAN OR EQUIVALENT. ROPRIATE SEEDING MIXTUI LY. FIRM SOIL BY ROLLIN LIGHTLY TO COVER SEEDS	300#/ACRE (7#/1,000 RE FROM TABLE 1 BELOW. IG OR PACKING; IF NOT	11. TEMPORARY ER AREAS HAVE B FOLLOWING HAS A. BASE COURS B. A MINIMUM (C. A MINIMUM (
MULCI HAY (SLOPE WIND AND	HING: MULCH ALI DR STRAW PER AG S 3:1 OR STEEPE BLOWN. USE JUT STAPLING MAY BE	L DISTURBED AREAS WITH CRE (70–90#/1,000 SQ. F ER AND FLATTER SLOPES TE (OR OTHER BIODEGRAD REQUIRED.	1–1/2 TO 2 TONS OF T.). ANCHOR ON ALL SUBJECT TO WASH OR ABLE) NETTING. STAKING	MAINTENANCE: TERM VEGETATI A. DISTURBED
T/	ABLE 1 - PL	ANT SELECTION AN	ND SEEDING RATES	B. CATCH BASI C. DRAINAGE A
SPECIES	PER ACRE	PER 1000 SQ.FT.	REMARKS	CLEANED AS D. THE SILT FE
WINTER RYE	2 BU OR 112 LBS.	2.5 LBS.	BEST FOR FALL SEEDING. SEED AUGUST 15 TO SEPTEMBER 15	REPAIRED A CIRCUITING.

WINTER RYE	2 BU OR 112 LBS.	2.5 LBS.	BEST FOR FALL SEEDING. SEED AUGUST 15 TO SEPTEMBER 15 FOR BEST COVER. SEED TO DEPTH OF ONE INCH.
OATS	2 1/2 BU OR 80 LBS.	2 LBS.	BEST FOR SPRING SEEDINGS. LATER THAN MAY 15 FOR SUMMER PROTECTION. SEED TO DEPTH OF ONE INCH.
ANNUAL RYE	40 LBS.	1 LB.	GROWS QUICKLY. BUT IS OF SHORT GRASS DURATION USE WHERE APPEARANCES ARE IMPORTANT. COVER SEED WITH NO MORE THAN 1/4 INCH OF SOIL. WITH MULCH, SEEDING MAY BE DONE THROUGHOUT GROWING SEASON. OTHERWISE SEED EARLY SPRING OR BETWEEN AUGUST 15 & SEPTEMBER 15.

10. PERMANENT STABILIZATION OF DISTURBED AREAS:

SEED BED PREPARATION: TOPSOIL (SANDY LOAM, LOAM, OR SILT LOAM), FRIABLE, FREE OF TREE ROOTS, WEEDS, STONES MORE THAN 1-1/2 INCHES IN DIAMETER OR LENGTH SHALL BE PLACED OVER ALL DISTURBED AREAS IN A 4" (MINIMUM) THICK LAYER.

TOPSOIL: TOPSOIL SHALL BE FREE OF HERBICIDES AND TOXIC MATERIALS. TILL THREE INCHES DEEP MIXING IN THE FERTILIZER AND LIME. APPLY LIME AT RATES INDICATED IN TABLE "A".

SEEDING: SELECT APPROPRIATE SEEDING MIXTURE FROM TABLE "C". SPREAD SEED UNIFORMLY. FIRM SOIL BY ROLLING OR PACKING: IF NOT FEASIBLE, THEN RAKE LIGHTLY TO COVER SEEDS.

MULCHING: MULCH ALL DISTURBED AREAS WITH 1-1/2 TO 2 TONS OF HAY OR STRAW PER ACRE (70 - 90#/1,000 SQ. FT.). ANCHOR MULCH ON ALL SLOPES 3:1 OR STEEPER AND ON FLATTER SLOPES SUBJECT TO WASH (WATERWAYS AND/OR WINDBLOWN) USING BIODEGRADABLE NETTING (OR OTHER APPROVED BIODEGRADABLE MATTING MATERIAL), WITH STAKING AND STAPLING.

TABLE "A"-LIME APPLICATION RATES					
EXISTING SOIL DH	LIMESTONE .	TO BE ADDED			
	TONS/ACRE	POUNDS/CY			
4.0-4.4	3	12			
4.5-4.9	2	8			
5.0-5.4	1	4			
UNKNOWN	2	8			

INSPECTIONS: THE ENGINEER SHALL BE CONTACTED ON A REGULAR BASIS TO INSPECT ALL EROSION CONTROL PRACTICES AS WELL AS THE MAINTENANCE OF THE EROSION CONTROL COMPONENTS. REFER TO CONSTRUCTION SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. EROSION CONTROL PRACTICES SHALL BE IN STRICT ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS. TO DIRECTING RUNOFF TO THEM.

13. ALL TREATMENT SWALES, DITCHES, AND LEVEL LIP SPREADERS SHALL BE STABILIZED PRIOR

THE "EROSION & SEDIMENT CONTROL PLAN".

- STABILIZED.

GRADE.

TABLE "	'C" – SE	EDING GUI	DE	
	SOIL DRAIN	NAGE		
SEEDING MIXTURE 1/	<u>DROUGHTY</u>	WELL DRAINED	MODERATELY WELL <u>DRAINED</u>	POORLY <u>DRAINED</u>
A	FAIR	GOOD	GOOD	FAIR
B	POOR	GOOD	FAIR	FAIR
C	POOR	GOOD	EXCELLENT	GOOD
D	FAIR	FAIR	GOOD	EXCELLENT
E	FAIR	EXCELLENT	EXCELLENT	POOR
A	GOOD	GOOD	GOOD	FAIR
C	GOOD	EXCELLENT	EXCELLENT	FAIR
D	GOOD	EXCELLENT	EXCELLENT	FAIR
A	GOOD	GOOD	GOOD	FAIR
B	GOOD	GOOD	FAIR	POOR
C	GOOD	EXCELLENT	EXCELLENT	FAIR
D	FAIR	GOOD	GOOD	EXCELLENT
F	FAIR	EXCELLENT	EXCELLENT	<u>2/</u>
G	FAIR	EXCELLENT	EXCELLENT	2/

E PM-NH-24 RECOMMENDATIONS REGARDING RECLAMATION OF EL PITS. *

EDING MIXTURES AND RATES IN TABLE "D". NED SOILS ARE NOT DESIRABLE FOR USE AS PLAYING AREAS AND

EGETATING NEW HAMPSHIRE SAND AND GRAVEL PITS; CAL NOTE PM-NH-24, UNITED STATES DEPARTMENT OF _TURE, SOIL CONSERVATION SERVICE, REVISION APRIL, 1991.

SION CONTROL MEASURES SHALL NOT BE REMOVED UNTIL ALL DISTURBED EN STABILIZED. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE OCCURRED:

GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED; 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;

3" OF NON-EROSIVE MATERIAL SUCH STONE OR RIPRAP HAS BEEN

TROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

DURING THE CONSTRUCTION PERIOD AND UNTIL SUCH TIME AS THE LONG ON IS ESTABLISHED TO A 70% VEGETATIVE STAND. REAS WILL BE FERTILIZED AND RESEEDED.

S WILL BE CHECKED AND CLEANED AS NECESSARY.

D GRASS TREATMENT SWALES SHALL BE CHECKED FREQUENTLY AND REQUIRED.

CES AND HAYABLE DIKES WILL BE CHECKED ON A REGULAR BASIS AND NECESSARY TO CORRECT ANY DAMAGE, DETERIORATION, AND SHORT-

12. REFER TO "EROSION AND SEDIMENT CONTROL PLAN" PRIOR TO ANY SITE DISTURBANCE. CONTACT ENGINEER FOR COPIES OF PLAN.

14. FOR SPECIAL WINTER CONSTRUCTION CONSIDERATIONS, THE CONTRACTOR SHALL REFER TO

15. THIS PROJECT SHALL BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430.53 AND CHAPTER AGR 3800 RELATIVE TO INVASIVE SPECIES.

16. RUNOFF MUST BE DIRECTED TO TEMPORARY PRACTICES UNTIL STORMWATER BMPS ARE

17. CUT AND FILL SLOPES MUST BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED

TABLE "D"	' – MIXTURES & RATES	
MIXTURE	POUNDS <u>PER_ACRE</u>	POUNDS PER <u>1,000 SQ. FT.</u>
A. TALL FESCUE CREEPING RED FESCUE REDTOP TOTAL	20 20 <u>2</u> 42	0.45 0.45 <u>0.05</u> 0.95
B. TALL FESCUE CREEPING RED FESCUE CROWN VETCH OR FLATPEA TOTAL	15 10 15 <u></u>	0.35 0.25 0.35 <u>0.95</u> or 1.35
C. TALL FESCUE CREEPING RED FESCUE BIRDSFOOT TREFOIL TOTAL	20 20 <u>8</u> 48	0.45 0.45 <u>0.20</u> 1.10
D. BIRDSFOOT TREFOIL REDTOP TOTAL	20 <u>10</u> 30	0.50 <u>0.20</u> 0.70
E. TALL FESCUE FLATPEA TOTAL	20 <u>30</u> 50	0.45 <u>0.75</u> 1.20
F. CREEPING RED FESCUE <u>1/</u> KENTUCKY BLUEGRASS <u>1/</u> TOTAL	50 <u>50</u> 100	1.15 <u>1.15</u> 2.30
G. TALL FESCUE $1/$	150	3.60
1/ FOR HEAVY USE ATHLETIC HAMPSHIRE COOPERATIVE EXTENS AND SEEDING RATES.	FIELDS CONSULT THE UNIVERSITY SION TURF SPECIALIST FOR CURRE	OF NEW ENT VARIETIES

OTHER SEED MIXTURES AND SEEDING RATES AS RECOMMENDED BY THE USDA -NATURAL RESOURCES CONSERVATION SERVICE MAY BE USED WITH PRIOR WRITTEN PERMISSION FROM THE ENGINEER.

CONSTRUCTION SEQUENCE:

NOTE: THE FOLLOWING SEQUENCE IS PRELIMINARY AND THE LIKELY ORDER OF CONSTRUCTION BUT THE EXACT MEANS AND METHODS WILL ULTIMATELY BE DECIDED BY THE SELECTED CONTRACTOR.

- 1. INSTALL APPROPRIATE PERIMETER CONTROLS FOR SOIL EROSION AND SEDIMENT CONTROL
- 2. COMPLETE TREE CLEARING
- 3. CONSTRUCT STORMWATER BASINS
- 4. CONSTRUCT CROSS CULVERTS
- 5. CONSTRUCT NEW WATERMAIN
- 6. CONSTRUCT NEW EMBANKMENTS AND FILL SECTIONS
- 7. CONSTRUCT NEW CLOSED DRAINAGE SYSTEM
- 8. CONSTRUCT NEW ROADWAY SUBBASE
- 9. PAVE ROADWAY TO BINDER GRADE
- 10. CONSTRUCT CURBING
- 11. CONSTRUCT SIDEWALK AND MULTI-USE PATH
- 12. CONSTRUCT LOAM AND SEED
- 13. REMOVE PERIMETER CONTROLS

WETLAND EROSION CC



SPECIAL WINTER CONSIDERATIONS

THE MAJOR FOCUS OF WINTER EROSION AND SEDIMENT CONTROL IS THE PERIODS OF INTENSE RUNOFF ASSOCIATED WITH MID-WINTER THAWS AND RAINSTORMS, AND THE SPRING MELT.

FROZEN GROUND MAKES THE INSTALLATION AND MAINTENANCE OF EROSION CONTROL MEASURES VERY DIFFICULT. INSTALLATION SHOULD TAKE PLACE WELL BEFORE THE GROUND FREEZES. MAINTENANCE IN WINTER WILL BE MUCH MORE TIME CONSUMING AND DIFFICULT THAN IN THE SUMMER. THE OVERALL CONSTRUCTION SCHEDULE AND THE WEEKLY WORK SCHEDULE WILL BE DEVELOPED TO INCREASE TIME, EFFORT, AND MANPOWER DEVOTED TO MAINTAINING THE EROSION AND SEDIMENT CONTROL MEASURES.

INTENSE RUNOFF IN MID-WINTER THAWS AND RAINSTORMS, AND THE SPRING MELT PERIOD, CAN RESULT IN MORE SEVERE EROSION AND SEDIMENTATION PROBLEMS THAN RUNOFF FROM SUMMER STORMS. THE SOIL IS OFTEN COMPLETELY SATURATED WITH WATER, AND IS ALSO OFTEN UNDERLAIN BY A FROST LAYER. BOTH OF THESE FACTORS RESULT IN A GREATER PERCENTAGE OF THE RAIN OR MELTWATER RUNNING OVER THE GROUND SURFACE. WINTER AND SPRING RAINSTORMS ARE OFTEN HEAVIER AND MORE INTENSE THAN SUMMER SHOWERS. FOR THESE REASONS, EROSION AND SEDIMENTATION CAN BE ESPECIALLY SEVERE IN MID-WINTER THAWS AND THE SPRING MELT.

- 1. CONTROL MEASURES FOR WINTER CONSTRUCTION:
- A. ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS;
- B. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS; AND
- C. AFTER OCTOBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF GRAVEL PER NHDOT ITEM 304.2.
- D. MINIMIZE DISTURBED AREA AND TIME OF DISTURBANCE: DISTURBED AREA AND LENGTH OF DISTURBANCE SHALL BE MINIMIZED ESPECIALLY BETWEEN OCTOBER 15TH AND MAY 1ST.
- E. GRASSED OR RIP RAPPED SWALES AND DITCHES: INSTALLATION WILL OCCUR BEFORE GROUND FREEZES. CHANNELS ARE TO BE STABILIZED WITH STONE, RIPRAP, OR VEGETATION IMMEDIATELY. INSPECTIONS ARE TO BE FREQUENT WITH REMOVAL OF ANY FLOW BLOCKAGE CAUSED BY ICE OR SEDIMENT.
- F. MULCHING: MULCH ALONE SHOULD NOT BE CONSIDERED AN ADEQUATE EROSION AND SEDIMENT CONTROL TECHNIQUE FOR AREAS THAT ARE DISTURBED IN THE WINTER OR SPRING. MULCH IS EASILY WASHED AWAY BY INTENSE RUNOFF FLOWING OVER SATURATED OR FROZEN SOIL. IT IS ESSENTIAL THAT MULCH BE LAID DOWN IN SUCH A WAY THAT IT WILL NOT BLOW OR WASH AWAY.
- G. SILT FENCE: INSTALLATION IS REQUIRED BEFORE THE GROUND FREEZES. OTHERWISE STAKES WILL BE DIFFICULT TO DRIVE. INSPECT FREQUENTLY AND REMOVE ANY COLLECTED SEDIMENT PERIODS IN ORDER TO PROVIDE AS MUCH CAPACITY AS POSSIBLE.
- H. SNOW FENCE: INSTALLATION IS REQUIRED BEFORE THE GROUND FREEZES OTHERWISE STAKES WILL BE DIFFICULT TO DRIVE. FENCES MUST BE PLACED LIBERALLY AROUND THE WORK SITE TO KEEP SOIL DISTURBANCE TO AN ABSOLUTE MINIMUM.
- I. STONE CHECK DAMS: PER DETAIL THE PLACEMENT WILL OCCUR IN SWALES AND DITCHES AFTER FINAL GRADING AND IS TO BE MAINTAINED UNTIL THE SITE IS FULLY STABILIZED.
- 2. INSPECTION AND MAINTENANCE

INSPECTION OF EROSION AND SEDIMENT CONTROL MEASURES IS REQUIRED MORE FREQUENTLY IN THE WINTER AND SPRING THAN IN THE SUMMER. CAREFUL ATTENTION MUST BE GIVEN TO WEATHER PREDICTIONS. INSPECTION OF ALL CONTROL MEASURES WILL BE ONGOING TO ENSURE THAT STRUCTURES WILL MANAGE THE POTENTIALLY HEAVY AND INTENSE RUNOFF. CONSTANT MAINTENANCE OF CRITICAL CONTROL MEASURES MAY BE NECESSARY DURING THE WINTER AND EARLY SPRING TO PREVENT FAILURE OR OVERLOADING OF CONTROL MEASURES. A SECOND LINE OF CONTROL WILL BE QUICKLY INSTALLED IF PROBLEMS OCCUR. A SUBSTANTIAL AMOUNT OF TIME, EQUIPMENT, AND MANPOWER SHALL BE DEVOTED TO EROSION AND SEDIMENT CONTROL.

3. FOLLOW-UP

INSTALLATION OF PERMANENT VEGETATIVE CONTROLS WILL BE REQUIRED AS EARLY AS IS PRACTICAL AT THE BEGINNING OF THE GROWING SEASON.

	IT IS A VIOLATION OF LAW FO DIRECT DIRECTION OF A LICE ARCHITECT, OR LAND SURVEYO THE STAMP OF A LICENSED ARCHITECT, LANDSCAPE ARCHIT AND INCLUDE THE NOTATION " OF SUCH ALTERATION, AND A	OR ANY PERSON, UNLESS THEY ARE INSED PROFESSIONAL ENGINEER, AR OR, TO ALTER AN ITEM IN ANY WAY. PROFESSIONAL IS ALTERED, THE FECT, OR LAND SURVEYOR SHALL ST ALTERED BY" FOLLOWED BY THEIR S SPECIFIC DESCRIPTION OF THE ALTEF	ACTING UNDER THE CHITECT, LANDSCAPE IF AN ITEM BEARING ALTERING ENGINEER, AMP THE DOCUMENT GIGNATURE, THE DATE RATION.
		OF PORTSMOUTH MOUTH, NEW HAMPSH	
BY	Erosic	on Control Notes	RUCTION
•	SCALE: AS SHOWN DRAWN: SJS CHECKED: CJP / BRC	DESIGN: SJS PROJECT: 18082.01 DATE: OCTOBER 2024	EPSC-1
	BY	IT IS A VIOLATION OF LAW FOR DIRECT DIRECTION OF A LICE ARCHITECT, OR LAND SURVEYO THE STAMP OF A LICENSED ARCHITECT, LANDSCAPE ARCHIT AND INCLUDE THE NOTATION ' OF SUCH ALTERATION, AND A CITY O PEVERLY HILL BY Erosic SCALE: AS SHOWN DRAWN: SJS CHECKED: C.JP / BRC	IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE DIRECT DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, AR ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL ST AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR S OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTEF PORTSMOUTH, NEW HAMPSH PEVERLLY HILL ROAD RECONST BY Erosion Control Notes SCALE: AS SHOWN DESIGN: SJS DRAWN: SJS PROJECT: 18082.01 CHECKED: C.IP/BRC DATE: OCTOBER 2024



EGIONAL DRIVE	DRAWN:
DRD, NH 03301	CHECKE

D:CJP/BRC DATE: OCTOBER 2024

13 OF 13

Construction Sequence

STANDARD DREDGE AND FILL WETLANDS PERMIT APPLICATION PEVERLY HILL ROAD RECONSTRUCTION PROJECT CITY OF PORTSMOUTH, NEW HAMPSHIRE November 2024

Anticipated Construction Sequence

Notes:

- The project is anticipated to advertise near the end of 2025.
- The start of construction is anticipated to be in the winter of 2025/2026. Construction will be phased with traffic being maintained using flagger-controlled one-way alternating two-way traffic during working hours. Outside of working hours, two-way traffic would be utilized.
- The work in the wetlands and buffers is expected to start in the winter of 2025/2026 and be complete by the summer of 2026.
- The remaining portion of the project would be performed in 2026 and 2027 with construction being completed prior to the end of the 2027 construction season.
- The following sequence is preliminary and the likely order of construction but the exact means and methods will ultimately be decided by the selected contractor.

Construction Sequence:

- 1.) Install appropriate perimeter controls for soil erosion and sediment control
- 2.) Complete tree clearing
- 3.) Construct stormwater basins
- 4.) Construct cross culverts
- 5.) Construct new watermain
- 6.) Construct new embankments and fill sections
- 7.) Construct new closed drainage system
- 8.) Construct new roadway subbase
- 9.) Pave roadway to binder grade
- 10.) Construct curbing
- 11.) Construct sidewalk and multi-use path
- 12.)Construct loam and seed
- 13.) Remove perimeter controls



CONSTRUCTION SEQUENCE - 1

Wetland Data Forms

Project/Site: Peverly Hill Road	City/County: Portsmouth	ty: Portsmouth Sampling Date		
Applicant/Owner: NHDOT		State:NH	Sampling Point:	B-UPL
Investigator(s): C Hilsinger	Section, Township, Range:			
Landform (hillside, terrace, etc.): Terrace	Local relief (concave, convex, none):	none	Slope (%):	1-2
Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 43.0500	Long: -70.7786	6	Datum: NAD	083
Soil Map Unit Name: 38A - Eldridge fine sandy loam, 0 to 3 percent	slopes	NWI classification:	UPL	
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes <u>x</u> No(li	no, explain in Rema	arks.)	
Are Vegetation, Soil, or Hydrologysignification	ntly disturbed? Are "Normal Circum	stances" present?	Yes <u>x</u> N	lo
Are Vegetation, Soil, or Hydrologynaturally	/ problematic? (If needed, explain a	any answers in Rem	arks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present?	Yes Yes	No X No X	Is the Sampled Area within a Wetland?	Yes	No_X
Wetland Hydrology Present?	Yes	No <u>X</u>	If yes, optional Wetland S	ite ID:	
Remarks: (Explain alternative procedu	ures here or in a	a separate report.)			
HYDROLOGY					
Wetland Hydrology Indicators:				Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum of one is	required; chec	k all that apply)		Surface Soil	Cracks (B6)
Surface Water (A1)		Water-Stained Le	eaves (B9)	Drainage Pat	terns (B10)
High Water Table (A2)		Aquatic Fauna (E	313)	Moss Trim Li	nes (B16)
Saturation (A3)		Marl Deposits (B	15)	Dry-Season \	Nater Table (C2)
Water Marks (B1)		Hydrogen Sulfide	Odor (C1)	Crayfish Burr	rows (C8)
Sediment Deposits (B2)		Oxidized Rhizosp	oheres on Living Roots (C3)	Saturation Vi	sible on Aerial Imagery (C9)
Drift Deposits (B3)		Presence of Red	uced Iron (C4)	Stunted or St	ressed Plants (D1)
Algal Mat or Crust (B4)		Recent Iron Redu	uction in Tilled Soils (C6)	Geomorphic	Position (D2)
			(0-)		

Iron Deposits (B5)		Thin Muck Surface (C7) Shallow Aquitard (D3)					
Inundation Visible on A	erial Imager	y (B7)	Other (Explain in Remarks)	Microtopograph	nic Relief (D4)		
Sparsely Vegetated Col	ncave Surfa	ce (B8)		FAC-Neutral Te	FAC-Neutral Test (D5)		
Field Observations:							
Surface Water Present?	Yes	No	Depth (inches):				
Water Table Present?	Yes	No	Depth (inches):				
Saturation Present?	Yes	No	Depth (inches):	Wetland Hydrology Present?	Yes	<u>No X</u>	
(includes capillary fringe)							
Describe Recorded Data (st	ream gauge	, monitoring	g well, aerial photos, previous ins	pections), if available:			
Remarks:							

VEGETATION – Use scientific names of plants.

Sampling Point: B-UPL

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size:)	% Cover	Species?	Status	Dominance Test worksheet:
1				Number of Dominant Species
2				That Are OBL, FACW, or FAC: 1 (A)
3				Total Number of Dominant
4				Species Across All Strata: 4 (B)
5.				Percent of Dominant Species
6.				That Are OBL, FACW, or FAC: 25.0% (A/B)
7.				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15)				OBL species 0 $x = 0$
1. Francula alnus	5	No	FAC	FACW species $0 \times 2 = 0$
2 Liquetrum vulgare		No	FACU	EAC species 20 x 3 = 60
2. Eigustrum vulgare		Vee		$\frac{1}{20} = \frac{1}{20} $
	15	Yes		FACO species 38 $x = 152$
4. Lonicera morrowii	15	Yes	FACU	UPL species $5 \times 5 = 25$
5. <u>Malus sp</u>	5	No		Column Totals: 63 (A) 237 (B)
6				Prevalence Index = B/A =3.76
7				Hydrophytic Vegetation Indicators:
	48	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5)				2 - Dominance Test is >50%
1. Solidago rugosa	15	Yes	FAC	3 - Prevalence Index is ≤3.0 ¹
2				4 - Morphological Adaptations ¹ (Provide supporting
3.				data in Remarks or on a separate sheet)
4.				Problematic Hydrophytic Vegetation ¹ (Explain)
5				¹ Indicators of bydric soil and wetland bydrology must
6.				be present, unless disturbed or problematic.
7.				Definitions of Vegetation Strata:
8				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
9				at breast height (DBH), regardless of height.
10				Sapling/shrub – Woody plants less than 3 in. DBH
11				and greater than or equal to 3.28 ft (1 m) tall.
12				Herb – All herbaceous (non-woody) plants, regardless
	15	=Total Cover		of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size: 15)				Woody vines – All woody vines greater than 3.28 ft in
1. Celastrus orbiculatus	5	Yes	UPL	height.
2.				
3.				Hydrophytic
4.				vegetation Present? Yes No X
	5	-Total Cover		
Pomarka: (Include photo numbers here ar an anot				1
Lots of dead shrubs and sumac in vicinity	ale Sileel.)			

SO	IL
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Profile De	escription: (Describe	e to the d	epth needed to docu	ument th	e indicate	or or cont	firm the absence of indication	ators.)
Depth	Matrix		Redo	x Featur	es	2		
(inches)	Color (moist)	%	Color (moist)	%	Type'	Loc ²	Texture	Remarks
0-5	2.5Y 3/3	100					Sandy	
5-12	2.5Y 4/3	100					Sandy	
							<u> </u>	
	-Concentration D-De		M-Poducod Matrix C	-Covo		tod Sand	Grains ² Location: [PL-Pore Lining M-Matrix
Hydric Sc	oil Indicators:	pielion, r		/S=C0ve		aleu Sanu	Indicators for Proble	matic Hydric Soils ³ :
Histo	sol (A1)		Polyvalue Belov	w Surface	e (S8) (LR	RR,	2 cm Muck (A10)	(LRR K, L, MLRA 149B)
Histic	Epipedon (A2)		MLRA 149B)		. , .		Coast Prairie Red	dox (A16) (LRR K, L, R)
Black	Histic (A3)		Thin Dark Surfa	ice (S9) (LRR R, N	ILRA 149	B) 5 cm Mucky Pear	t or Peat (S3) (LRR K, L, R)
Hydro	ogen Sulfide (A4)		High Chroma Sa	ands (S1	1) (LRR Þ	K, L)	Polyvalue Below	Surface (S8) (LRR K, L)
Strati	fied Layers (A5)		Loamy Mucky M	/lineral (F	1) (LRR I	(, L)	Thin Dark Surfac	e (S9) (LRR K, L)
Deple	eted Below Dark Surfa	ce (A11)	Loamy Gleyed	Matrix (F:	2)		Iron-Manganese	Masses (F12) (LRR K, L, R)
Thick	Dark Surface (A12)		Depleted Matrix	: (F3)			Piedmont Floodp	lain Soils (F19) (MLRA 149B)
Sand	y Mucky Mineral (S1)		Redox Dark Sur	rface (F6)		Mesic Spodic (TA	A6) (MLRA 144A, 145, 149B)
Sand	y Gleyed Matrix (S4)		Depleted Dark S	Surface (F7)		Red Parent Mate	rial (F21)
Sand	y Redox (S5)		Redox Depressi	ions (F8)			Very Shallow Da	k Surface (TF12)
Stripp	bed Matrix (S6)		Marl (F10) (LRF	₹ K, L)			Other (Explain in	Remarks)
Dark	Surface (S7)							
³ Indicator	s of hydrophytic yeaet	ation and	wetland hydrology mu	ust be pro	esent. unle	ess disturk	ped or problematic.	
Restrictiv	ve Layer (if observed):		<u></u>				
Type:								
Depth (i	inches):						Hydric Soil Present?	Yes <u>No X</u>
Remarks:				-				
This data	form is revised from N	Jorthcentr	al and Northeast Regi	ional Sur	plement \	/ersion 2.	0 to reflect the NRCS Field	Indicators of Hydric Soils
version 7.	0 March 2013 Errata.	(http://ww	w.nrcs.usda.gov/Inter	net/FSE_		ENTS/nrcs	s142p2_051293.docx)	

Project/Site:	City/County:	Sampling Date:
Applicant/Owner:	Sta	te: Sampling Point:
Investigator(s):	Section, Township, Range:	
Landform (hillslope, terrace, etc.):	Local relief (concave, convex, none):	Slope (%):
Subregion (LRR or MLRA): Lat:	Long:	Datum:
Soil Map Unit Name:		NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of	of year? Yes No (If no	explain in Remarks.)
Are Vegetation, Soil, or Hydrology significa	antly disturbed? Are "Normal Circ	umstances" present? Yes No
Are Vegetation, Soil, or Hydrology natural	y problematic? (If needed, explai	n any answers in Remarks.)

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

Hydrophytic Vegetation Present? Hydric Soil Present?	Yes Yes	No No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present?	Yes	No	If yes, optional Wetland Site ID:
Remarks: (Explain alternative proceed	lures here or in	a separate report.)	

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

Tree Stratum (Plot size:	Absolute % Cover	Dominant Indicator Species? Status	Dominance Test worksheet:
1	<u></u>		Number of Dominant Species
··			That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant
3			Species Across All Strata: (B)
4			Percent of Dominant Species
5			
6			Prevalence Index worksheet:
7			Total % Cover of: Multiply by:
		= Total Cover	OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)			FACW species x 2 =
1			FAC species x 3 =
2			FACU species x 4 =
3.			UPL species x 5 =
4			Column Totals: (A) (B)
5			Prevalence Index = B/A =
5			Hydronhytic Vegetation Indicators:
6			1 - Rapid Test for Hydrophytic Vegetation
/			2 - Dominance Test is >50%
		= Total Cover	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size:)			4 - Morphological Adaptations ¹ (Provide supporting
2.			Problematic Hydrophytic Vegetation ¹ (Explain)
3.			
4			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5			Definitions of Vegetation Strata:
6.			
7.			Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
8			
9			and greater than or equal to 3.28 ft (1 m) tall.
10			
			of size, and woody plants less than 3.28 ft tall.
10		·	Woody vines $-$ All woody vines greater than 3.28 ft in
12			height.
		= Total Cover	
Woody Vine Stratum (Plot size:)			
1			
2			
3			Hydrophytic
4			Vegetation Present? Yes No
		= Total Cover	
Remarks: (Include photo numbers here or on a separate	sheet.)		

SOIL	
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Depth _ Matrix	Red	ox Features					
<u>(inches)</u> Color (moist) %	Color (moist)		Type ¹	2		Remark	S
		·					
		·					
		·					
Type: C=Concentration, D=Depletion, ydric Soil Indicators:	RM=Reduced Matrix, N	1S=Masked	Sand Gra	ains.	² Location: PL=Pc Indicators for Prol	ore Lining, M=N Diematic Hydr	Matrix. ic Soils ³ :
 Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 	Polyvalue Bela MLRA 149E Thin Dark Sur Loamy Mucky Depleted Matr Redox Dark S Depleted Dark Redox Depres 149B) d wetland hydrology mu	bw Surface (3) face (S9) (LI Mineral (F1) I Matrix (F2) ix (F3) urface (F6) Surface (F7) sions (F8) ust be preser	S8) (LRF RR R, MI) (LRR K 7)	R R, RA 149B) , L)	 2 cm Muck (A1 Coast Prairie R 5 cm Mucky Pe Dark Surface (3) Polyvalue Belo Thin Dark Surface Iron-Manganes Piedmont Floor Mesic Spodic (Red Parent Ma Very Shallow D Other (Explain 	0) (LRR K, L, ledox (A16) (Ll eat or Peat (S3 57) (LRR K, L) w Surface (S8) ace (S9) (LRR e Masses (F12 dplain Soils (F TA6) (MLRA 1 terial (F21) Park Surface (T in Remarks)	MLRA 149B) RR K, L, R)) (LRR K, L, R))) (LRR K, L) 2) (LRR K, L, R 19) (MLRA 149 44A, 145, 149I "F12)
Restrictive Layer (if observed): Type:							
Depth (inches):					Hydric Soil Present	? Yes	No

Project/Site:	City/County:	Sampling Date:
Applicant/Owner:	Sta	te: Sampling Point:
Investigator(s):	Section, Township, Range:	
Landform (hillslope, terrace, etc.):	Local relief (concave, convex, none):	Slope (%):
Subregion (LRR or MLRA): Lat:	Long:	Datum:
Soil Map Unit Name:		NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of	of year? Yes No (If no	explain in Remarks.)
Are Vegetation, Soil, or Hydrology significa	antly disturbed? Are "Normal Circ	umstances" present? Yes No
Are Vegetation, Soil, or Hydrology natural	y problematic? (If needed, explai	n any answers in Remarks.)

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

Hydrophytic Vegetation Present? Hydric Soil Present?	Yes Yes	No No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present?	Yes	No	If yes, optional Wetland Site ID:
Remarks: (Explain alternative proceed	lures here or in	a separate report.)	

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

Tree Stratum (Plot size:	Absolute % Cover	Dominant Indicator Species? Status	Dominance Test worksheet:
1	<u></u>		Number of Dominant Species
··			That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant
3			Species Across All Strata: (B)
4			Percent of Dominant Species
5			
6			Prevalence Index worksheet:
7			Total % Cover of: Multiply by:
		= Total Cover	OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)			FACW species x 2 =
1			FAC species x 3 =
2			FACU species x 4 =
3.			UPL species x 5 =
4			Column Totals: (A) (B)
5			Prevalence Index = B/A =
5			Hydronhytic Vegetation Indicators:
6			1 - Rapid Test for Hydrophytic Vegetation
/			2 - Dominance Test is >50%
		= Total Cover	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size:)			4 - Morphological Adaptations ¹ (Provide supporting
2.			Problematic Hydrophytic Vegetation ¹ (Explain)
3.			
4			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5			Definitions of Vegetation Strata:
6.			
7.			Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
8			
9			and greater than or equal to 3.28 ft (1 m) tall.
10			
			of size, and woody plants less than 3.28 ft tall.
10		·	Woody vines $-$ All woody vines greater than 3.28 ft in
12			height.
		= Total Cover	
Woody Vine Stratum (Plot size:)			
1			
2			
3			Hydrophytic
4			Vegetation Present? Yes No
		= Total Cover	
Remarks: (Include photo numbers here or on a separate	sheet.)		

SOIL	
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Depth _ Matrix	Red	ox Features					
<u>(inches)</u> Color (moist) %	Color (moist)		Type ¹	2		Remark	S
		·					
		·					
		·					
Type: C=Concentration, D=Depletion, ydric Soil Indicators:	RM=Reduced Matrix, N	1S=Masked	Sand Gra	ains.	² Location: PL=Pc Indicators for Prol	ore Lining, M=N Diematic Hydr	Matrix. ic Soils ³ :
 Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 	Polyvalue Bela MLRA 149E Thin Dark Sur Loamy Mucky Loamy Gleyed Depleted Matr Redox Dark S Depleted Dark Redox Depres 149B) d wetland hydrology mu	bw Surface (3) face (S9) (LI Mineral (F1) I Matrix (F2) ix (F3) urface (F6) Surface (F7) sions (F8) ust be preser	S8) (LRF RR R, MI) (LRR K 7)	R R, RA 149B) , L)	 2 cm Muck (A1 Coast Prairie R 5 cm Mucky Pe Dark Surface (3) Polyvalue Belo Thin Dark Surface Iron-Manganes Piedmont Floor Mesic Spodic (Red Parent Ma Very Shallow D Other (Explain 	0) (LRR K, L, ledox (A16) (Ll eat or Peat (S3 57) (LRR K, L) w Surface (S8) ace (S9) (LRR e Masses (F12 dplain Soils (F TA6) (MLRA 1 terial (F21) Park Surface (T in Remarks)	MLRA 149B) RR K, L, R)) (LRR K, L, R))) (LRR K, L) 2) (LRR K, L, R 19) (MLRA 149 44A, 145, 149I "F12)
Restrictive Layer (if observed): Type:							
Depth (inches):					Hydric Soil Present	? Yes	No

Project/Site:	City/County:	Sampling Date:
Applicant/Owner:	Sta	te: Sampling Point:
Investigator(s):	Section, Township, Range:	
Landform (hillslope, terrace, etc.):	Local relief (concave, convex, none):	Slope (%):
Subregion (LRR or MLRA): Lat:	Long:	Datum:
Soil Map Unit Name:		NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of	of year? Yes No (If no	explain in Remarks.)
Are Vegetation, Soil, or Hydrology significa	antly disturbed? Are "Normal Circ	umstances" present? Yes No
Are Vegetation, Soil, or Hydrology natural	y problematic? (If needed, explai	n any answers in Remarks.)

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

Hydrophytic Vegetation Present? Hydric Soil Present?	Yes Yes	No No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present?	Yes	No	If yes, optional Wetland Site ID:
Remarks: (Explain alternative proceed	lures here or in	a separate report.)	

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

Tree Stratum (Plot size:	Absolute % Cover	Dominant Indicator Species? Status	Dominance Test worksheet:
1	<u></u>		Number of Dominant Species
··			That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant
3			Species Across All Strata: (B)
4			Percent of Dominant Species
5			
6			Prevalence Index worksheet:
7			Total % Cover of: Multiply by:
		= Total Cover	OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)			FACW species x 2 =
1			FAC species x 3 =
2			FACU species x 4 =
3.			UPL species x 5 =
4			Column Totals: (A) (B)
5			Prevalence Index = B/A =
5			Hydronhytic Vegetation Indicators:
6			1 - Rapid Test for Hydrophytic Vegetation
/			2 - Dominance Test is >50%
		= Total Cover	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size:)			4 - Morphological Adaptations ¹ (Provide supporting
2.			Problematic Hydrophytic Vegetation ¹ (Explain)
3.			
4			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5			Definitions of Vegetation Strata:
6.			
7.			Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
8			
9			and greater than or equal to 3.28 ft (1 m) tall.
10			
			of size, and woody plants less than 3.28 ft tall.
10		·	Woody vines $-$ All woody vines greater than 3.28 ft in
12			height.
		= Total Cover	
Woody Vine Stratum (Plot size:)			
1			
2			
3			Hydrophytic
4			Vegetation Present? Yes No
		= Total Cover	
Remarks: (Include photo numbers here or on a separate	sheet.)		

SOIL	
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Depth _ Matrix	Red	ox Features					
<u>(inches)</u> Color (moist) %	Color (moist)		Type ¹			Remark	S
		·					
		·					
		·					
Type: C=Concentration, D=Depletion, ydric Soil Indicators:	RM=Reduced Matrix, N	1S=Masked	Sand Gra	ains.	² Location: PL=Pc Indicators for Prol	ore Lining, M=N Diematic Hydr	Matrix. ic Soils ³ :
 Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 	Polyvalue Bela MLRA 149E Thin Dark Sur Loamy Mucky Loamy Gleyed Depleted Matr Redox Dark S Depleted Dark Redox Depres 149B) d wetland hydrology mu	bw Surface (3) face (S9) (LI Mineral (F1) I Matrix (F2) ix (F3) urface (F6) Surface (F7) sions (F8) ust be preser	S8) (LRF RR R, MI) (LRR K 7)	R R, RA 149B) , L)	 2 cm Muck (A1 Coast Prairie R 5 cm Mucky Pe Dark Surface (3 Polyvalue Belo Thin Dark Surface Iron-Manganes Piedmont Floor Mesic Spodic (Red Parent Ma Very Shallow D Other (Explain 	0) (LRR K, L, ledox (A16) (Ll eat or Peat (S3 57) (LRR K, L) w Surface (S8) ace (S9) (LRR e Masses (F12 dplain Soils (F TA6) (MLRA 1 terial (F21) Park Surface (T in Remarks)	MLRA 149B) RR K, L, R)) (LRR K, L, R))) (LRR K, L) 2) (LRR K, L, R 19) (MLRA 149 44A, 145, 149I "F12)
Restrictive Layer (if observed): Type:							
Depth (inches):					Hydric Soil Present	? Yes	No

Project/Site:	City/County:	Sampling Date:
Applicant/Owner:	Sta	te: Sampling Point:
Investigator(s):	Section, Township, Range:	
Landform (hillslope, terrace, etc.):	Local relief (concave, convex, none):	Slope (%):
Subregion (LRR or MLRA): Lat:	Long:	Datum:
Soil Map Unit Name:		NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of	of year? Yes No (If no	explain in Remarks.)
Are Vegetation, Soil, or Hydrology significa	antly disturbed? Are "Normal Circ	umstances" present? Yes No
Are Vegetation, Soil, or Hydrology natural	y problematic? (If needed, explai	n any answers in Remarks.)

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

Hydrophytic Vegetation Present? Hydric Soil Present?	Yes Yes	No No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present?	Yes	No	If yes, optional Wetland Site ID:
Remarks: (Explain alternative proceed	lures here or in	a separate report.)	

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

Tree Stratum (Plot size:	Absolute % Cover	Dominant Indicator Species? Status	Dominance Test worksheet:
1	<u></u>		Number of Dominant Species
··			That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant
3			Species Across All Strata: (B)
4			Percent of Dominant Species
5			
6			Prevalence Index worksheet:
7			Total % Cover of: Multiply by:
		= Total Cover	OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)			FACW species x 2 =
1			FAC species x 3 =
2			FACU species x 4 =
3.			UPL species x 5 =
4			Column Totals: (A) (B)
5			Prevalence Index = B/A =
5			Hydronhytic Vegetation Indicators:
6			1 - Rapid Test for Hydrophytic Vegetation
/			2 - Dominance Test is >50%
		= Total Cover	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size:)			4 - Morphological Adaptations ¹ (Provide supporting
2.			Problematic Hydrophytic Vegetation ¹ (Explain)
3.			
4			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5			Definitions of Vegetation Strata:
6.			
7.			Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
8			
9			and greater than or equal to 3.28 ft (1 m) tall.
10			
			of size, and woody plants less than 3.28 ft tall.
10		·	Woody vines $-$ All woody vines greater than 3.28 ft in
12			height.
		= Total Cover	
Woody Vine Stratum (Plot size:)			
1			
2			
3			Hydrophytic
4			Vegetation Present? Yes No
		= Total Cover	
Remarks: (Include photo numbers here or on a separate	sheet.)		

SOIL	
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Depth _ Matrix	Red	ox Features					
<u>(inches)</u> Color (moist) %	Color (moist)		Type ¹			Remark	S
		·					
		·					
		·					
Type: C=Concentration, D=Depletion, ydric Soil Indicators:	RM=Reduced Matrix, N	1S=Masked	Sand Gra	ains.	² Location: PL=Pc Indicators for Prol	ore Lining, M=N Diematic Hydr	Matrix. ic Soils ³ :
 Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 	Polyvalue Bela MLRA 149E Thin Dark Sur Loamy Mucky Loamy Gleyed Depleted Matr Redox Dark S Depleted Dark Redox Depres 149B) d wetland hydrology mu	bw Surface (3) face (S9) (LI Mineral (F1) I Matrix (F2) ix (F3) urface (F6) Surface (F7) sions (F8) ust be preser	S8) (LRF RR R, MI) (LRR K 7)	R R, RA 149B) , L)	 2 cm Muck (A1 Coast Prairie R 5 cm Mucky Pe Dark Surface (3) Polyvalue Belo Thin Dark Surface Iron-Manganes Piedmont Floor Mesic Spodic (Red Parent Ma Very Shallow D Other (Explain 	0) (LRR K, L, ledox (A16) (Ll eat or Peat (S3 57) (LRR K, L) w Surface (S8) ace (S9) (LRR e Masses (F12 dplain Soils (F TA6) (MLRA 1 terial (F21) Park Surface (T in Remarks)	MLRA 149B) RR K, L, R)) (LRR K, L, R))) (LRR K, L) 2) (LRR K, L, R 19) (MLRA 149 44A, 145, 149I "F12)
Restrictive Layer (if observed): Type:							
Depth (inches):					Hydric Soil Present	? Yes	No

Project/Site:	City/County:	Sampling Date:			
Applicant/Owner:	S	ate: Sampling Point:			
Investigator(s):	Section, Township, Range:				
Landform (hillslope, terrace, etc.):	Local relief (concave, convex, none):	Slope (%):			
Subregion (LRR or MLRA): Lat:	Long:	Datum:			
Soil Map Unit Name:		NWI classification:			
Are climatic / hydrologic conditions on the site typical for this tim	ne of year? Yes No (If ne	o, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology signi	ficantly disturbed? Are "Normal Cire	cumstances" present? Yes No			
Are Vegetation, Soil, or Hydrology nature	rally problematic? (If needed, expla	in any answers in Remarks.)			

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

Hydrophytic Vegetation Present? Hydric Soil Present?	Yes Yes	No No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present?	Yes	No	If yes, optional Wetland Site ID:
Remarks: (Explain alternative proceed	lures here or in	a separate report.)	

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

Tree Stratum (Plot size:	Absolute % Cover	Dominant Indicator Species? Status	Dominance Test worksheet:
1	<u></u>		Number of Dominant Species
··			That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant
3			Species Across All Strata: (B)
4			Percent of Dominant Species
5			
6			Prevalence Index worksheet:
7			Total % Cover of: Multiply by:
		= Total Cover	OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)			FACW species x 2 =
1			FAC species x 3 =
2			FACU species x 4 =
3.			UPL species x 5 =
4			Column Totals: (A) (B)
5			Prevalence Index = B/A =
5			Hydronhytic Vegetation Indicators:
6			1 - Rapid Test for Hydrophytic Vegetation
/			2 - Dominance Test is >50%
		= Total Cover	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size:)			4 - Morphological Adaptations ¹ (Provide supporting
2.			Problematic Hydrophytic Vegetation ¹ (Explain)
3.			
4			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5			Definitions of Vegetation Strata:
6.			
7.			Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
8			
9			and greater than or equal to 3.28 ft (1 m) tall.
10			
			of size, and woody plants less than 3.28 ft tall.
10		·	Woody vines $-$ All woody vines greater than 3.28 ft in
12			height.
		= Total Cover	
Woody Vine Stratum (Plot size:)			
1			
2			
3			Hydrophytic
4			Vegetation Present? Yes No
		= Total Cover	
Remarks: (Include photo numbers here or on a separate	sheet.)		

SOIL	
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Depth _ Matrix	Red	ox Features					
<u>(inches)</u> Color (moist) %	Color (moist)		Type ¹			Remark	S
		·					
		·					
Type: C=Concentration, D=Depletion, ydric Soil Indicators:	RM=Reduced Matrix, N	1S=Masked	Sand Gra	ains.	² Location: PL=Pc Indicators for Prol	ore Lining, M=N Diematic Hydr	Matrix. ic Soils ³ :
 Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 	Polyvalue Bela MLRA 149E Thin Dark Sur Loamy Mucky Loamy Gleyed Depleted Matr Redox Dark S Depleted Dark Redox Depres 149B) d wetland hydrology mu	bw Surface (3) face (S9) (LI Mineral (F1) I Matrix (F2) ix (F3) urface (F6) Surface (F7) sions (F8) ust be preser	S8) (LRF RR R, MI) (LRR K 7)	R R, RA 149B) , L)	 2 cm Muck (A1 Coast Prairie R 5 cm Mucky Pe Dark Surface (3) Polyvalue Belo Thin Dark Surface Iron-Manganes Piedmont Floor Mesic Spodic (Red Parent Ma Very Shallow D Other (Explain 	0) (LRR K, L, ledox (A16) (Ll eat or Peat (S3 57) (LRR K, L) w Surface (S8) ace (S9) (LRR e Masses (F12 dplain Soils (F TA6) (MLRA 1 terial (F21) Park Surface (T in Remarks)	MLRA 149B) RR K, L, R)) (LRR K, L, R))) (LRR K, L) 2) (LRR K, L, R 19) (MLRA 149 44A, 145, 149I "F12)
Restrictive Layer (if observed): Type:							
Depth (inches):					Hydric Soil Present	? Yes	No

Project/Site: Peverly Hill Road	City/County: Portsmouth	Sampling Date: 03/13/2024		
Applicant/Owner: NHDOT	State:	NH Sampling Point: F-UPL		
Investigator(s): C Hilsinger	Section, Township, Range:			
Landform (hillside, terrace, etc.): Terrace, slope	Local relief (concave, convex, none): convex	Slope (%): 5		
Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 43.0554	Long: -70.7801	Datum: NAD83		
Soil Map Unit Name: 510B/33A - Hoosic gravelly fine sandy loam, 3 to 8 percent	slopes/ Scitico silt loam, 0 to 5 precent slopes NWI class	sification: UPL		
Are climatic / hydrologic conditions on the site typical for this time of	f year? Yes <u>x</u> No(If no, explai	n in Remarks.)		
Are Vegetation, Soil, or Hydrologysignification	antly disturbed? Are "Normal Circumstances" p	present? Yes x No		
Are Vegetation, Soil, or Hydrologynaturally	y problematic? (If needed, explain any answe	rs in Remarks.)		

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

r						
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No X No X No X	Is the Sampled Area within a Wetland? If yes, optional Wetland	Yes Site ID:	NoX	
Remarks: (Explain alternative proce	dures here or in :	a separate report.)				
HYDROLOGY						
Wetland Hydrology Indicators:				Secondary Indicate	ors (minimum of two required)	
Primary Indicators (minimum of one	is required; chec	k all that apply)		Surface Soil C	Cracks (B6)	
Surface Water (A1)		Water-Stained Le	eaves (B9)	Drainage Patterns (B10)		
High Water Table (A2)		 Aquatic Fauna (E	313)	Moss Trim Lines (B16)		
Saturation (A3)		Marl Deposits (B	15)	Dry-Season Water Table (C2)		
Water Marks (B1)		- Hydrogen Sulfide	Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)		Oxidized Rhizosp	oheres on Living Roots (C3	ts (C3) Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3)		Presence of Red	uced Iron (C4) Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)		- Recent Iron Redu	uction in Tilled Soils (C6) Geomorphic Position (D2)			
Iron Deposits (B5)		- Thin Muck Surface	e (C7) Shallow Aquitard (D3)			
Inundation Visible on Aerial Ima	gery (B7)	Other (Explain in	Remarks)	Microtopograp	phic Relief (D4)	
Sparsely Vegetated Concave St	urface (B8)		,	FAC-Neutral T	Test (D5)	
Field Observations:						
Surface Water Present? Yes	No	Depth (inches):				
Water Table Present? Yes	No	Depth (inches):				
Saturation Present? Yes	No	Depth (inches):	Wetland H	lydrology Present?	Yes No X	
(includes capillary fringe)						
Describe Recorded Data (stream ga	uge, monitoring v	well, aerial photos,	previous inspections), if av	ailable:		
, , , , , , , , , , , , , , , , , , ,	0					
Remarks:						

VEGETATION – Use scientific names of plants.

Sampling Point: F-UPL

Trop Stratum (Plot size: 20)	Absolute	Dominant Species2	Indicator	Dominanco Tost workshoot:
<u>The Stratum</u> (Flot Size. <u>50</u>)	7	No	Sidius	Dominance rest worksheet.
Rohinia pseudoacacia		Yes	FACU	Number of Dominant Species
3 Retula nonulifolia	10	Yes	FAC	
4 Rhampus cathartica	7	<u> </u>	FAC	Total Number of Dominant Species Across All Strata: 8 (B)
5 Prunus serotina	10	Vos	FACU	
	10	163	1700	Percent of Dominant Species
7				Prevalence Index worksheet:
	49	=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15)				$\frac{1}{\text{OBL species}} \qquad 0 \qquad \text{x1} = 0$
1. Rhamnus cathartica	15	Yes	FAC	FACW species $0 x 2 = 0$
2. Ligustrum vulgare	5	Yes	FACU	FAC species $32 \times 3 = 96$
3. Rosa multiflora	5	Yes	FACU	FACU species 65 x 4 = 260
4.				UPL species $5 \times 5 = 25$
5.				Column Totals: 102 (A) 381 (B)
6.				Prevalence Index = B/A = 3.74
7.				Hydrophytic Vegetation Indicators:
	25	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5)				2 - Dominance Test is >50%
1. Alliaria petiolata	30	Yes	FACU	3 - Prevalence Index is ≤3.0 ¹
2.				4 - Morphological Adaptations ¹ (Provide supporting
3.				data in Remarks or on a separate sheet)
4.				Problematic Hydrophytic Vegetation ¹ (Explain)
5.				¹ Indicators of hydric soil and wotland hydrology must
6.				be present, unless disturbed or problematic.
7			<u> </u>	Definitions of Vegetation Strata:
8			·	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
9				at breast height (DBH), regardless of height.
10				Sapling/shrub – Woody plants less than 3 in. DBH
11				and greater than or equal to 3.28 ft (1 m) tall.
12				Herb – All herbaceous (non-woody) plants, regardless
	30	=Total Cover		of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size: 15)				Woody vines – All woody vines greater than 3.28 ft in
1. Celastrus orbiculatus	5	Yes	UPL	height.
2				Hydrophytic
3				Vegetation
4.				Present? Yes No X
	5	=Total Cover		
Remarks: (Include photo numbers here or on a separ	ate sheet.)			
Lots of dead shrubs and sumac in vicinity				

SO	L
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Profile De	scription: (Describe	to the de	epth needed to doc	ument the	e indicato	or or conf	firm the absence of indic	ators.)
Depth	Matrix		Redo	ox Feature	es1	- 2	_	
(inches)	Color (moist)	%	Color (moist)	%	Туре	Loc	Texture	Remarks
0-6	10YR 2/2	100					Sandy	
6-14	10YR 3/3	100					Sandy	gravelly
¹ Type: C=	Concentration, D=Dep	oletion, RI	M=Reduced Matrix, C	CS=Cover	ed or Coa	ated Sand	Grains. ² Location:	PL=Pore Lining, M=Matrix.
Hydric So	il Indicators:						Indicators for Prob	ematic Hydric Soils ³ :
Histos	sol (A1)		Polyvalue Belov	w Surface	(S8) (LR	R R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic	Epipedon (A2)		MLRA 149B)				Coast Prairie Re	edox (A16) (LRR K, L, R)
Black	Histic (A3)		Thin Dark Surfa	ace (S9) (I		ILRA 1491	B)5 cm Mucky Pea	at or Peat (S3) (LRR K, L, R)
Hydro Stratif	igen Sulfide (A4)		High Chroma S	ands (S1	1) (LRR K 1) (I DD k	(, L)	Polyvalue Below	(Sufface (S8) (LRR K, L)
	ted Below Dark Surfac	(Δ11)		Matrix (F2	1) (LKK r 2)	、 Ε)		(39) (LKKK, L) Masses (F12) (IRKKIR)
Thick	Dark Surface (A12)		Depleted Matrix	(F3)	-)		Piedmont Flood	plain Soils (F19) (MLRA 149B)
Sandy	/ Mucky Mineral (S1)		Redox Dark Su	rface (F6)			Mesic Spodic (T	A6) (MLRA 144A, 145, 149B)
Sandy	/ Gleyed Matrix (S4)		Depleted Dark	Surface (F	7)		Red Parent Mate	erial (F21)
Sandy	/ Redox (S5)		Redox Depress	ions (F8)			Very Shallow Da	ark Surface (TF12)
Stripp	ed Matrix (S6)		Marl (F10) (LRF	R K, L)			Other (Explain in	n Remarks)
Dark S	Surface (S7)							
3								
Indicators	of hydrophytic vegeta	tion and v	wetland hydrology mu	ust be pre	sent, unle	ess disturt	bed or problematic.	
Type.	e Layer (if observed)	:						
Dopth (ii	nchoc):						Hydric Soil Procent?	Vas No V
Deptil (ii	nches).						Hydric Soll Fresent?	
Remarks:	la mar in mar in a al fuerra NI		a and Nantha ant Day	in al Cum		lanaian O l		d la diastera of Lludris Coils
version 7 (March 2013 Frrata	http://www	a and Northeast Reg	ional Sup met/ESE		Persion 2.0	s142p2 051293 docx)	a Indicators of Hydric Solis
Voloion I ite			in the second					

Project/Site:	City/County:	Sampling Date:		
Applicant/Owner:	S	ate: Sampling Point:		
Investigator(s):	Section, Township, Range:			
Landform (hillslope, terrace, etc.):	Local relief (concave, convex, none):	Slope (%):		
Subregion (LRR or MLRA): Lat:	Long:	Datum:		
Soil Map Unit Name:		NWI classification:		
Are climatic / hydrologic conditions on the site typical for this tim	ne of year? Yes No (If n	o, explain in Remarks.)		
Are Vegetation, Soil, or Hydrology signi	ficantly disturbed? Are "Normal Cir	cumstances" present? Yes No		
Are Vegetation, Soil, or Hydrology nature	rally problematic? (If needed, expla	in any answers in Remarks.)		

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

Hydrophytic Vegetation Present? Hydric Soil Present?	Yes Yes	No No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present?	Yes	No	If yes, optional Wetland Site ID:
Remarks: (Explain alternative proceed	dures here or in	a separate report.)	

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Living	Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled So	pils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Graduate apprillage (signal) Yes No Depth (inches):	Wetland Hydrology Present? Yes No
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Presented Data (stream gauge monitoring well period photos previous inspective)	Wetland Hydrology Present? Yes No
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective	Wetland Hydrology Present? Yes No tions), if available:
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective	Wetland Hydrology Present? Yes No
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	Wetland Hydrology Present? Yes No
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks: Remarks:	Wetland Hydrology Present? Yes No tions), if available:
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective Remarks: Remarks:	Wetland Hydrology Present? Yes No tions), if available:
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective Remarks: Remarks:	Wetland Hydrology Present? Yes No
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective Remarks: Remarks:	Wetland Hydrology Present? Yes No
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective Remarks: Remarks:	Wetland Hydrology Present? Yes No
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective Remarks: Remarks:	Wetland Hydrology Present? Yes No
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective Remarks: Remarks:	Wetland Hydrology Present? Yes No
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective Remarks: Remarks:	Wetland Hydrology Present? Yes No
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective Remarks: Remarks:	Wetland Hydrology Present? Yes No
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective Remarks: Remarks:	Wetland Hydrology Present? Yes No

Tree Stratum (Plot size:	Absolute % Cover	Dominant Indicator Species? Status	Dominance Test worksheet:
1	<u></u>		Number of Dominant Species
··			That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant
3			Species Across All Strata: (B)
4			Percent of Dominant Species
5			
6			Prevalence Index worksheet:
7			Total % Cover of: Multiply by:
		= Total Cover	OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)			FACW species x 2 =
1			FAC species x 3 =
2			FACU species x 4 =
3.			UPL species x 5 =
4			Column Totals: (A) (B)
5			Prevalence Index = B/A =
5			Hydronhytic Vegetation Indicators:
6			1 - Rapid Test for Hydrophytic Vegetation
/			2 - Dominance Test is >50%
		= Total Cover	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size:)			4 - Morphological Adaptations ¹ (Provide supporting
2.			Problematic Hydrophytic Vegetation ¹ (Explain)
3.			
4			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5			Definitions of Vegetation Strata:
6.			
7.			Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
8			
<u></u>			and greater than or equal to 3.28 ft (1 m) tall.
10			
			of size, and woody plants less than 3.28 ft tall.
			Woody vines All woody vines greater than 2.28 ft in
12			height.
		= Total Cover	
Woody Vine Stratum (Plot size:)			
1			
2			
3			Hydrophytic
4			Vegetation Present? Yes No
		= Total Cover	
Remarks: (Include photo numbers here or on a separate	sheet.)		
SOIL			
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Depth _ Matrix	Red	ox Features					
<u>(inches)</u> Color (moist) %	Color (moist)		Type ¹			Remark	S
		·					
		·					
		·					
Type: C=Concentration, D=Depletion, ydric Soil Indicators:	RM=Reduced Matrix, N	1S=Masked	Sand Gra	ains.	² Location: PL=Pc Indicators for Prol	ore Lining, M=N Diematic Hydr	Matrix. ic Soils ³ :
 Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 	Polyvalue Bela MLRA 149E Thin Dark Sur Loamy Mucky Loamy Gleyed Depleted Matr Redox Dark S Depleted Dark Redox Depres 149B) d wetland hydrology mu	bw Surface (3) face (S9) (LI Mineral (F1) I Matrix (F2) ix (F3) urface (F6) Surface (F7) sions (F8) ust be preser	S8) (LRF RR R, MI) (LRR K 7)	R R, RA 149B) , L)	 2 cm Muck (A1 Coast Prairie R 5 cm Mucky Pe Dark Surface (3) Polyvalue Belo Thin Dark Surface Iron-Manganes Piedmont Floor Mesic Spodic (Red Parent Ma Very Shallow D Other (Explain 	0) (LRR K, L, ledox (A16) (Ll eat or Peat (S3 57) (LRR K, L) w Surface (S8) ace (S9) (LRR e Masses (F12 dplain Soils (F TA6) (MLRA 1 terial (F21) Park Surface (T in Remarks)	MLRA 149B) RR K, L, R)) (LRR K, L, R))) (LRR K, L) 2) (LRR K, L, R 19) (MLRA 149 44A, 145, 149I "F12)
Restrictive Layer (if observed): Type:							
Depth (inches):					Hydric Soil Present	? Yes	No

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site:	City/County:	Sampling Date:
Applicant/Owner:	S	ate: Sampling Point:
Investigator(s):	Section, Township, Range:	
Landform (hillslope, terrace, etc.):	Local relief (concave, convex, none):	Slope (%):
Subregion (LRR or MLRA): Lat:	Long:	Datum:
Soil Map Unit Name:		NWI classification:
Are climatic / hydrologic conditions on the site typical for this tim	ne of year? Yes No (If ne	o, explain in Remarks.)
Are Vegetation, Soil, or Hydrology signi	ficantly disturbed? Are "Normal Cire	cumstances" present? Yes No
Are Vegetation, Soil, or Hydrology nature	rally problematic? (If needed, expla	in any answers in Remarks.)

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

Hydrophytic Vegetation Present? Hydric Soil Present?	Yes Yes	No No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present?	Yes	No	If yes, optional Wetland Site ID:
Remarks: (Explain alternative proceed	lures here or in	a separate report.)	

HYDROLOGY

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

Sampling Point: _____

Tree Stratum (Plot size:	Absolute % Cover	Dominant Indicator Species? Status	Dominance Test worksheet:
1	<u></u>		Number of Dominant Species
··			That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant
3			Species Across All Strata: (B)
4			Percent of Dominant Species
5			
6			Prevalence Index worksheet:
7			Total % Cover of: Multiply by:
		= Total Cover	OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)			FACW species x 2 =
1			FAC species x 3 =
2			FACU species x 4 =
3.			UPL species x 5 =
4			Column Totals: (A) (B)
5			Prevalence Index = B/A =
5			Hydronhytic Vegetation Indicators:
6			1 - Rapid Test for Hydrophytic Vegetation
/			2 - Dominance Test is >50%
		= Total Cover	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size:)			4 - Morphological Adaptations ¹ (Provide supporting
2.			Problematic Hydrophytic Vegetation ¹ (Explain)
3.			
4			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5			Definitions of Vegetation Strata:
6.			
7.			Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
8			
9			and greater than or equal to 3.28 ft (1 m) tall.
10			
			of size, and woody plants less than 3.28 ft tall.
10		·	Woody vines $-$ All woody vines greater than 3.28 ft in
12			height.
		= Total Cover	
Woody Vine Stratum (Plot size:)			
1			
2			
3			Hydrophytic
4			Vegetation Present? Yes No
		= Total Cover	
Remarks: (Include photo numbers here or on a separate	sheet.)		

SOIL	
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Depth _ Matrix	Red	ox Features					
<u>(inches)</u> Color (moist) %	Color (moist)		Type ¹			Remark	S
		·					
		·					
		·					
Type: C=Concentration, D=Depletion, ydric Soil Indicators:	RM=Reduced Matrix, N	1S=Masked	Sand Gra	ains.	² Location: PL=Pc Indicators for Prol	ore Lining, M=N Diematic Hydr	Matrix. ic Soils ³ :
 Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 	Polyvalue Bela MLRA 149E Thin Dark Sur Loamy Mucky Loamy Gleyed Depleted Matr Redox Dark S Depleted Dark Redox Depres 149B) d wetland hydrology mu	bw Surface (3) face (S9) (LI Mineral (F1) I Matrix (F2) ix (F3) urface (F6) Surface (F7) sions (F8) ust be preser	S8) (LRF RR R, MI) (LRR K 7)	R R, RA 149B) , L)	 2 cm Muck (A1 Coast Prairie R 5 cm Mucky Pe Dark Surface (3 Polyvalue Belo Thin Dark Surface Iron-Manganes Piedmont Floor Mesic Spodic (Red Parent Ma Very Shallow D Other (Explain 	0) (LRR K, L, ledox (A16) (Ll eat or Peat (S3 57) (LRR K, L) w Surface (S8) ace (S9) (LRR e Masses (F12 dplain Soils (F TA6) (MLRA 1 terial (F21) Park Surface (T in Remarks)	MLRA 149B) RR K, L, R)) (LRR K, L, R))) (LRR K, L) 2) (LRR K, L, R 19) (MLRA 149 44A, 145, 149I "F12)
Restrictive Layer (if observed): Type:							
Depth (inches):					Hydric Soil Present	? Yes	No

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site:	City/County:	Sampling Date:
Applicant/Owner:	S	ate: Sampling Point:
Investigator(s):	Section, Township, Range:	
Landform (hillslope, terrace, etc.):	Local relief (concave, convex, none):	Slope (%):
Subregion (LRR or MLRA): Lat:	Long:	Datum:
Soil Map Unit Name:		NWI classification:
Are climatic / hydrologic conditions on the site typical for this tim	ne of year? Yes No (If ne	o, explain in Remarks.)
Are Vegetation, Soil, or Hydrology signi	ficantly disturbed? Are "Normal Cire	cumstances" present? Yes No
Are Vegetation, Soil, or Hydrology nature	rally problematic? (If needed, expla	in any answers in Remarks.)

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

Hydrophytic Vegetation Present? Hydric Soil Present?	Yes Yes	No No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present?	Yes	No	If yes, optional Wetland Site ID:
Remarks: (Explain alternative proceed	lures here or in	a separate report.)	

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)		
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)		
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)		
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)		
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2) Oxidized Rhizospheres on Living	Roots (C3) Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3) Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Second	oils (C6) Geomorphic Position (D2)		
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)		
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)		
Field Observations:			
Surface Water Present? Yes No Depth (inches):			
Water Table Present? Yes No Depth (inches):			
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No		
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Presented Data (stream gauge monitoring well period photos previous inspective)	Wetland Hydrology Present? Yes No tions) if available:		
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective	Wetland Hydrology Present? Yes No ctions), if available:		
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Sampling Point: _____

Tree Stratum (Plot size:	Absolute % Cover	Dominant Indicator Species? Status	Dominance Test worksheet:
1	<u></u>		Number of Dominant Species
··			That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant
3			Species Across All Strata: (B)
4			Percent of Dominant Species
5			
6			Prevalence Index worksheet:
7			Total % Cover of: Multiply by:
		= Total Cover	OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)			FACW species x 2 =
1			FAC species x 3 =
2			FACU species x 4 =
3.			UPL species x 5 =
4			Column Totals: (A) (B)
5			Prevalence Index = B/A =
5			Hydronhytic Vegetation Indicators:
6			1 - Rapid Test for Hydrophytic Vegetation
/			2 - Dominance Test is >50%
		= Total Cover	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size:)			4 - Morphological Adaptations ¹ (Provide supporting
2.			Problematic Hydrophytic Vegetation ¹ (Explain)
3.			
4			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5			Definitions of Vegetation Strata:
6.			
7.			Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
8			
9			and greater than or equal to 3.28 ft (1 m) tall.
10			
			of size, and woody plants less than 3.28 ft tall.
10		·	Woody vines $-$ All woody vines greater than 3.28 ft in
12			height.
		= Total Cover	
Woody Vine Stratum (Plot size:)			
1			
2			
3			Hydrophytic
4			Vegetation Present? Yes No
		= Total Cover	
Remarks: (Include photo numbers here or on a separate	sheet.)		

SOIL	
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Depth _ Matrix	Red	ox Features						
<u>(inches)</u> Color (moist) %	Color (moist)		Type ¹	C2		Remark	S	
		·						
		·						
		·						
Type: C=Concentration, D=Depletion, ydric Soil Indicators:	RM=Reduced Matrix, N	1S=Masked	Sand Gra	ains.	² Location: PL=Pc Indicators for Prol	ore Lining, M=N Diematic Hydr	/latrix. ic Soils ³ :	
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Restrictive Layer (if observed): Type:								
Depth (inches):					Hydric Soil Present	? Yes	No	