



City of Portsmouth, New Hampshire

Wetland Conditional Use Permit Application Checklist

This wetland conditional use permit application checklist is a tool designed to assist the applicant in the planning process and for preparing the application for Conservation Commission and Planning Board review. The checklist is required to be uploaded as part of your wetland conditional use permit application to ensure a full and complete application is submitted to the Planning and Sustainability Department and to the online portal. A pre-application conference with a member of the Planning and Sustainability Department is encouraged as additional project information may be required depending on the size and scope of the project. The applicant is cautioned that this checklist is only a guide and is not intended to be a complete list of all wetland conditional use permit requirements. Please refer to Article 10 of the City of Portsmouth Zoning Ordinance for full details.

Applicant Responsibilities: Applicable fees are due upon application submittal to the Planning Board (no fees are required for Conservation Commission submission). The application will be reviewed by Planning and Sustainability Department staff to determine completeness. Incomplete applications which do not provide required information for the evaluation of the proposed site development shall not be provided review by the Conservation Commission or Planning Board.

Name of Applicant: Eversource Energy Date Submitted: 03/25/2025

Application # (in City's online permitting): LU-25-50

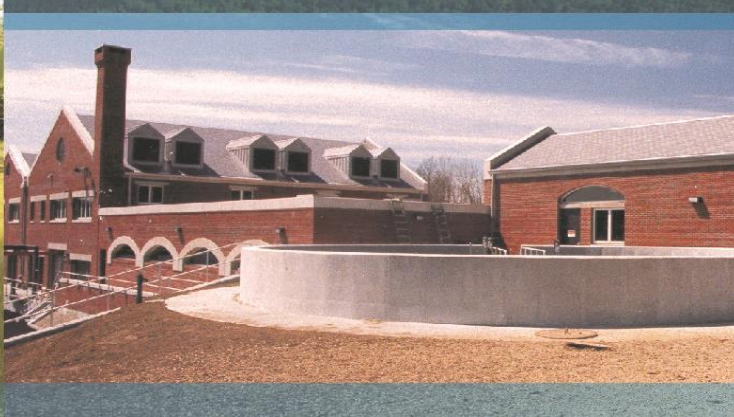
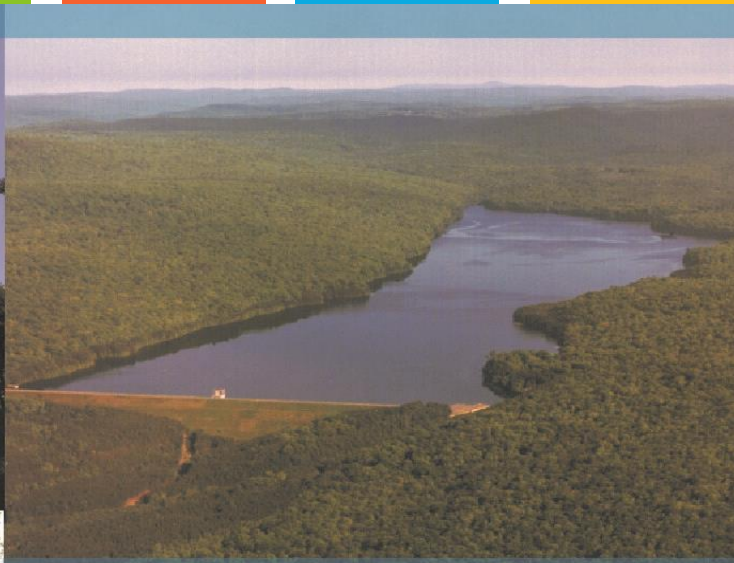
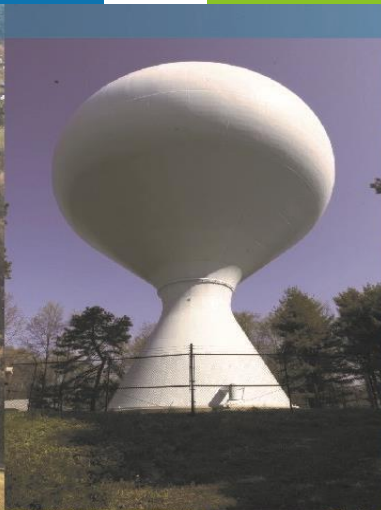
Site Address: 400 Spaulding Turnpike Map: 238 Lot: 2

<input checked="" type="checkbox"/>	Required Items for Submittal	Item Location (e.g. Page or Plan Sheet/Note #)
<input checked="" type="checkbox"/>	Complete application form submitted via the City's web-based permitting program	Section 2.1, Page 2-1
<input checked="" type="checkbox"/>	All application documents, plans, supporting documentation, this checklist and other materials uploaded to the application form in OpenGov in digital Portable Document Format (PDF) . One hard copy of all plans and materials shall be submitted to the Planning and Sustainability Department by the published deadline.	online 03/25/2025; hard copy 04/17/2025; Section 4, Page 4-1

<input checked="" type="checkbox"/>	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)
<input checked="" type="checkbox"/>	Basic property and wetland resource information. (10.1017.21)	Section 2.1, Page 2-1
<input checked="" type="checkbox"/>	Additional information required for projects proposing greater than 250 square feet of permanent or temporary impacts. (10.1017.22)	Section 2.2, Page 2-1; Section 4.1.1, Page 4-2; Appendix B
<input checked="" type="checkbox"/>	Demonstrate impacts as they relate to the criteria for approval set forth in Section 10.1017.50 (or Section 10.1017.60 in the case of utility installation in a right-of-way). (10.1017.23)	online 03/25/2025; hard copy 04/17/2025; Section 4, Page 4-1
<input checked="" type="checkbox"/>	Balance impervious surface impacts with removal and/or wetland buffer enhancement plan. (10.1017.24)	Section 4.1.2, Page 4-2

<input checked="" type="checkbox"/>	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)
<input checked="" type="checkbox"/>	Wetland buffer enhancement plan. (10.1017.25)	Section 4.1.2, Page 4-2
<input type="checkbox"/>	Living shoreline strategy provided for tidal wetland and/or tidal buffer impacts. (10.1017.26)	N/A
<input checked="" type="checkbox"/>	Stormwater management must be in accordance with Best Management Practices including but not limited to: 1. <i>New Hampshire Stormwater Manual, NHDES, current version.</i> 2. <i>Best Management Practices to Control Non-point Source Pollution: A Guide for Citizens and City Officials, NHDES, January 2004.</i> (10.1018.10)	Section 4.2.1, 4.3.2, Page 4-2; project plans, Appendix A
<input type="checkbox"/>	Vegetated Buffer Strip slope of greater than or equal to 10%. (10.1018.22)	N/A
<input type="checkbox"/>	Removal or cutting of vegetation, use of fertilizers, pesticides and herbicides. (10.1018.23/10.1018.24/10.1018.25)	N/A
<input type="checkbox"/>	All new pavement within a wetland buffer shall be porous pavement. (10.1018.31)	N/A
<input type="checkbox"/>	An application that proposes porous pavement in a wetland buffer shall include a pavement maintenance plan. (10.1018.32)	N/A
<input type="checkbox"/>	Permanent wetland boundary markers shall be shown on the plan submitted with an application for a conditional use permit and shall be installed during project construction. (10.1018.40)	N/A
<input checked="" type="checkbox"/>	Requested Items for Submittal	Item Location (e.g. Page or Plan Sheet/Note #)
<input checked="" type="checkbox"/>	A narrative/letter addressed to the Conservation Commission Chair (if recommended to Planning Board then an additional narrative addressed to the Planning Board Chair at that time) describing the project and any proposed wetland and/or wetland buffer impacts. Please visit the WCUP instruction page for further application instructions.	online 03/25/2025; hard copy 04/17/2025
<input checked="" type="checkbox"/>	If New Hampshire Department of Environmental Services (NHDES) Standard Dredge and Fill Permit is required for this work, please provide this permit application at the same time as your submission for a Wetland Conditional Use Permit.	NHDES Utility SPN 2022-03496, received 10/06/2023

Applicant's Signature: Stephan M. Titreault Date: 05/02/2025



E194 and U181 Structure Replacement Project
Echo Avenue, Portsmouth, New Hampshire

CITY OF PORTSMOUTH AFTER-THE-FACT CONDITIONAL USE PERMIT

Eversource Energy
13 Legends Drive
Hooksett, New Hampshire

March 2025

Tighe&Bond

E5034-200
March 19, 2025

Samantha Collins, Chair
City of Portsmouth Conservation Commission
1 Junkins Avenue
Portsmouth, New Hampshire 03801

Re: **Eversource E194 and U181 Structure Replacement Project
After-the-Fact Wetland Conditional Use Permit
Echo Avenue, Portsmouth, NH**

Dear Ms. Collins:

On behalf of Eversource Energy dba Public Service Company of New Hampshire (Eversource), Tighe & Bond is submitting the following after-the-fact Conditional Use Permit (CUP) for the above referenced project.

This work was completed under an existing CUP which was granted on June 22, 2023 (LU-23-60). Eversource Energy replaced forty-five (45) wooden utility structures with steel structures on the E194 and U181 Lines in Portsmouth and Newington, due to their overall age and condition. As part of the approved access to Structures 19 and 19 (E194 and U181), the CUP permitted 6,286 square feet (SF) of impacts to the adjacent wetland and 1,644 SF of impacts to the wetland buffer.

Following City approval and the issuance of the CUP, Eversource obtained landowner authorization from the Portsmouth Ford auto dealership to access the right-of-way (ROW) directly from Echo Avenue. As such, construction deviated from what was permitted by the CUP in this area, and both structures were accessed by a more direct route with no wetland impacts. This re-route eliminated direct wetland impacts; however, impacts within the wetland buffer increased from the permitted 1,644 SF to an as-built total of 3,685 SF.

Enclosed is a project description and supporting documents for a request to permit after-the-fact wetland buffer impacts associated with the constructed access to Structures 19, including project mapping, the Wetland Resource Area Description and Assessment Report that was included in the original 2023 CUP application, representative site photographs, and an application fee check in the amount of \$1,300.

We trust the enclosed information addresses the requirements for the CUP application and site plan approval. If you have any questions or require any additional information, please feel free to contact me at (603) 231-9918 or at STetreault@tighebond.com.

Respectfully,

TIGHE & BOND, INC.


Stefanie M. Tetreault
Project Manager

Enclosures

Copy: Planning Board, City of Portsmouth
Ashley Friend, Licensing and Permitting, Eversource Energy



Filing Fee Check (File Copy)

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Appendices

- A Project Mapping
- B 2023 Wetland Resource Area Description and Assessment Report
- C Site Photographs

\\Tighebond.com\data\Data\Projects\E\E5034 Eversource L&P 2019\200 - Line E194 & U181\Permitting\202409 Portsmouth Ford Violation\Archive\E194 & U181 2025 CUP Narrative - Final.docx

Tighe & Bond, Inc.
53 Southampton Road
Westfield, MA 01085

This is a Deluxe eCheck. The PAY TO THE ORDER OF line designates the Payee. For questions call Deluxe Payment Exchange customer support at 1-877-633-6964. Ref: 62A9-098D

9036

Date 01/31/2025
Void after 90 days

PAY TO THE ORDER OF City of Portsmouth

\$ 1,300.00

One thousand, three hundred and 00/100 Dollars

TD Bank, NA

Memo _____



Verify check at <https://echecks.com/verify>

FILE COPY

⑈009036⑈ □□□□□□□□□□ □□□□□□□□□□
Account numbers are concealed for your security

FILE COPY

Check Details

Check issued: 01/30/2025
Check number: 9036
From: Tighe & Bond, Inc.
Amount: \$1,300.00
Payable to: City of Portsmouth
Delivered to: jdegler@tighebond.com
Documents: Yes - see Remittance below

Message from sender: Hi, attached is your Tighe & Bond electronic check. Any questions please email AP@tighebond.com.

Notes

Activity

ACTIVITY TYPE	TIME	DATE
Tracy Houle issued check 9036	08:13 AM EST	01/31/2025
Check 9036 printed by Jeremy Degler	16:44 PM EDT	03/13/2025
Check 9036 file copy printed by Jeremy Degler	16:45 PM EDT	03/13/2025

Section 1

Project Description

From October 2023 through June 2024, Eversource Energy replaced forty-five (45) wooden utility structures with steel structures on the E194 and U181 Transmission Lines in Portsmouth and Newington, due to their overall age and condition. Forty-two (42) of these structures were located within Portsmouth. These included Structures 13-16, 19, 37-41, 43-45, 48-54, 65.5 and 66 on the U181 Line, and Structures 12-14, 19, 41-53, 65.5, and 66 on the E194 Line. Additionally, static wire work was conducted at STRs 65-67 on the U181 and STRs 65-67 on the E194. The proposed structure replacements were required to maintain the safety and reliability of the existing transmission system.

This work was completed under an existing Conditional Use Permit (CUP) which was granted on June 22, 2023 (LU-23-60). As part of the approved access to Structures 19 and 19 (E194 and U181), the CUP permitted 6,286 square feet (SF) of impacts to the adjacent wetland and 1,644 SF of impacts to the wetland buffer.

Following City approval and the issuance of the CUP, Eversource obtained landowner authorization from the Portsmouth Ford auto dealership to access the right-of-way (ROW) directly from Echo Avenue. As such, construction deviated from what was permitted by the CUP in this area, and both structures were accessed by a more direct route with no wetland impacts. This re-route resulted in a total elimination of the direct wetland impacts; however, impacts within the wetland buffer increased from the permitted 1,644 SF to an as-built total of 3,685 SF.

The following narrative describes existing conditions and the completed activities within jurisdictional areas. Project Mapping is provided in Appendix A, the Wetland Resource Area Description and Assessment Report that was in the original 2023 CUP application is included in Appendix B, and representative photographs of the project area are found in Appendix C.

Section 2

Existing Conditions

2.1 Project Site

The E194 and U181 transmission lines originate at the Newington Substation off Gosling Road in Newington and run southwest of the Piscataqua River. The lines then extend southeast, parallel with Route 4 before turning southwest again, parallel with Interstate 95. The lines continue southwest through Great Bog in Portsmouth before turning west and terminating at the Ocean Road Substation in Greenland. The topography is generally flat throughout the right-of-way (ROW) with slight depressions and hills located in the less developed reaches. The areas surrounding the ROW are mostly commercial, industrial, and residential, with some large portions of forested and wetland areas closer to the Greenland town line.

The proposed limit of work covered by this after-the-fact CUP is the constructed access route to Structures 19 and 19 (E194 and U181). This work area is located northeast of Echo Avenue, directly across from the Portsmouth Ford automotive dealership. Based on review of aerial imagery, access from Echo Avenue in this location has historically been used for routine ROW maintenance and vehicle storage from Portsmouth Ford. Representative site photographs are provided in Appendix C.

2.2 Jurisdictional Wetland Resource Areas

There are multiple wetland resource areas within this portion of the E194 and U181 ROW corridor. Jurisdictional wetland resource areas within the project area were identified and delineated on December 21, 2022, and January 4, 9, and 17, 2023 by Tighe & Bond wetland scientists, including a New Hampshire Certified Wetland Scientist. Refer to the Wetland Resource Area Description and Assessment Report that was included in the original 2023 CUP application provided in Appendix B for a detailed description of these areas.

2.2.1 Wetlands

Wetlands within the project area are characterized as a mixture of palustrine scrub-shrub (PSS) and palustrine emergent (PEM) systems. These wetlands are situated within disturbed areas in the ROW, surrounded by development. The original CUP permitted 6,286 SF of impacts to the adjacent southern wetland. The as-built conditions eliminated all direct impacts to wetlands.

2.2.2 100-foot Buffer Zone

The 100-foot Buffer Zone within the project area consists of the existing maintained ROW and impervious area (e.g., parking lots and roadways), with some upland areas in and adjacent to the ROW. The original CUP permitted 1,644 SF of impacts to the adjacent southern wetland buffer. The as-built conditions resulted in a net increase of impacts to the wetland buffer, up to 3,685 SF.

Section 3 Completed Activities

3.1 Structure Replacement and Maintenance

The structure replacements consisted of drilling holes up to four feet in diameter and the installation of a steel caisson into each hole approximately 15 to 20 feet (10% of structure height plus 2 feet) below the ground surface. The new poles were placed into the caissons and backfilled with clean, suitable materials. Spoils generated from the drilling operations were placed in appropriate upland areas at least 100 feet away from wetland areas and then stabilized.

Once the new poles were installed, old poles were then removed by cutting them below the ground surface. The old poles, cross-arms, wires, and accessory equipment were removed and disposed off-site. The pole butts associated with the existing poles were only removed if they impacted the structural integrity of the new poles.

3.2 Access

Access road improvements and development were needed to provide reliable access for the proposed work. As part of the approved access to Structures 19, the CUP permitted 6,286 SF of impacts to the adjacent southern wetland and 1,644 SF of impacts to the wetland buffer.

Following City approval and the issuance of the CUP, Eversource obtained landowner authorization from the Portsmouth Ford auto dealership to access the ROW directly from Echo Avenue. As such, Structures 19 were accessed by a more direct route. This route resulted in a total elimination of the direct wetland impacts; however, impacts within the wetland buffer increased from the permitted 1,644 SF to an as-built total of 3,685 SF.

Where permanent access through the buffer to Structures 19 is requested under this CUP, the existing boulder barricade will be replaced with a steel gate. This will prevent further encroachment within the buffer and limit use to future maintenance and emergency repairs within the ROW at Structures 19.

3.3 Work Pad Construction

The proposed project included the construction of 100-foot by 100-foot gravel work pads to provide level and stable surfaces needed to facilitate the structure installations. Work pads in upland areas were constructed using crushed stone, top-dressed with 1.5- to 3-inch diameter clean stone. 68 SF of wetland impact was permitted to construct suitable work pads at Structures 19, though during construction, wetland impacts were avoided altogether. Areas of soil disturbance around the work pads were stabilized with seed and straw mulch.

3.4 Construction Sequence

The work began in October of 2023 and was completed in June 2024. The following is a description of the general construction sequence. The actual sequence and schedule was determined by the selected contractor(s).

- Install sediment and erosion controls
- Upgrade access roads and build work pads, install construction mats where needed
- Conduct structure replacements
- Remove construction mats and stabilize/restore disturbed areas
- Stabilize exposed soils within the ROW
- Remove erosion and sedimentation controls following stabilization

Pending review and approval of the proposed activities, Eversource will replace the existing boulder barricade with a steel gate. Appropriate construction-period best management practices will be implemented to minimize potential impacts to the nearby wetland resource areas.

3.5 Protective Measures

Work was performed utilizing the latest *Best Management Practices Manual for Utility Maintenance in and Adjacent to Wetlands and Waterbodies in New Hampshire* (NH DNCR 2019) to limit impacts to the environment. Perimeter protective measures consisting of silt fence, straw wattles, and/or straw bales were installed around the structure to minimize potential impacts to the nearby wetland resource areas. Water bars were also installed in areas of road improvements and in areas with steep slopes as identified by the contractor. Areas of disturbed soil were mulched with hay or straw following the completion of work. No equipment or material was stored within wetland resource areas. Erosion controls were implemented during construction, as noted on the project plans in Appendix A, to minimize any potential impacts during construction.

Section 4

Regulatory Compliance

4.1 City of Portsmouth Zoning Ordinance – Article 10

Work was completed in compliance with the requirements set forth in the City of Portsmouth Zoning Ordinance (Article 10, Environmental Protection Standards). The work complied with the criteria set forth in Article 10, Section 1017.60, Public and Private Utilities within Rights-of-Way in Wetlands and Wetland Buffers, discussed below.

(1) The proposed construction is in the public interest;

The construction was in the public interest, as these structure replacements are necessary to continue reliable transmission of public utilities.

(2) Design, construction, and maintenance methods will utilize best management practices to minimize any detrimental impact of such use upon the wetland and will include restoration of the site as nearly as possible to its original grade, condition, and vegetated state;

Eversource utilized Best Management Practices, as described in Section 3.5, during construction to mitigate impacts to wetland resource areas. Following construction, disturbed areas were restored to previously existing conditions, where feasible. Where access was constructed to Structures 19 through the buffer, Eversource proposes to retain this impact area after-the-fact, for future maintenance and emergency repairs, as shown on the attached Site Plans in Appendix A.

(3) No alternative feasible route exists which does not cross or alter a wetland or have less detrimental impact on a wetland; and

The work was designed in consideration of environmental impacts. The replacement activities were limited to the existing maintained ROW and limits of work were established to allow only for work necessary to complete the structure replacements. Access to the structures was primarily by utilizing existing access routes in previously disturbed areas to replace the existing infrastructure. Work associated with the replacement of Structures 19 resulted in no direct wetland impacts. The after-the-fact impact proposed by this CUP application was necessary to achieve a direct route to the replacement structures once landowner authorization was obtained, and resulted in 2,041 SF of additional impact to the buffer, beyond what was originally approved. Overall, the as-built condition resulted in the least overall impact on the wetland, as shown on the attached Site Plans in Appendix A.

(4) Alterations of natural vegetation of managed woodland will occur only to the extent necessary to achieve construction goals.

There was no proposed alteration of woodland vegetation, as all work was within the maintained extent of the ROW. As noted above, the limits of work were established to allow work only necessary to complete the structure replacements;

where access was constructed to Structures 19 through the buffer, Eversource proposes to retain this impact area after-the-fact, for future maintenance and emergency repairs, as shown on the attached Site Plan in Appendix A.

4.1.1 Wetland Functions and Values Assessment

Pursuant to Article 10, Section 1017.22 of the City of Portsmouth Zoning Ordinance, a project that proposes the temporary or permanent alteration of greater than 1,000 square feet of wetland and greater than 250 square feet of wetland buffer requires a function and values assessment and wetland buffer description. A copy of the Wetland Resource Area Description and Assessment Report, including those for the Echo Avenue Wetlands, that was included in the original 2023 CUP application provided in Appendix B.

4.1.2 Wetland Buffer Impervious Surface Impacts

Impacts resulting from the construction of gravel access paths to work pads will not increase impervious surfaces within wetland buffers. A wetland buffer enhancement plan is not feasible due to the nature of the proposed work and the need to retain viable access for future maintenance within the ROW. Vegetation within the ROW is routinely maintained and access will be necessary for future utility maintenance.

4.2 State Permits

4.2.1 Alteration of Terrain

The overall project exceeded 100,000 square feet of earth moving activities and as such required an Alteration of Terrain (AoT) permit from the New Hampshire Department of Environmental Services (NHDES) AoT Bureau. This permit was obtained on July 29, 2023 (AoT-2427).

4.2.2 Utility Statutory Permit-by-Notification

This project included direct impacts to wetlands and waters of the state, and thus required authorization under NH RSA § 482-A. Utility Statutory Permit-by-Notification applications were filed in September 2023 for each municipality where work was completed (NHDES file numbers 2022-03511 and 2022-03496).

4.3 Federal Permits

4.3.1 EPA 2022 Construction General Permit

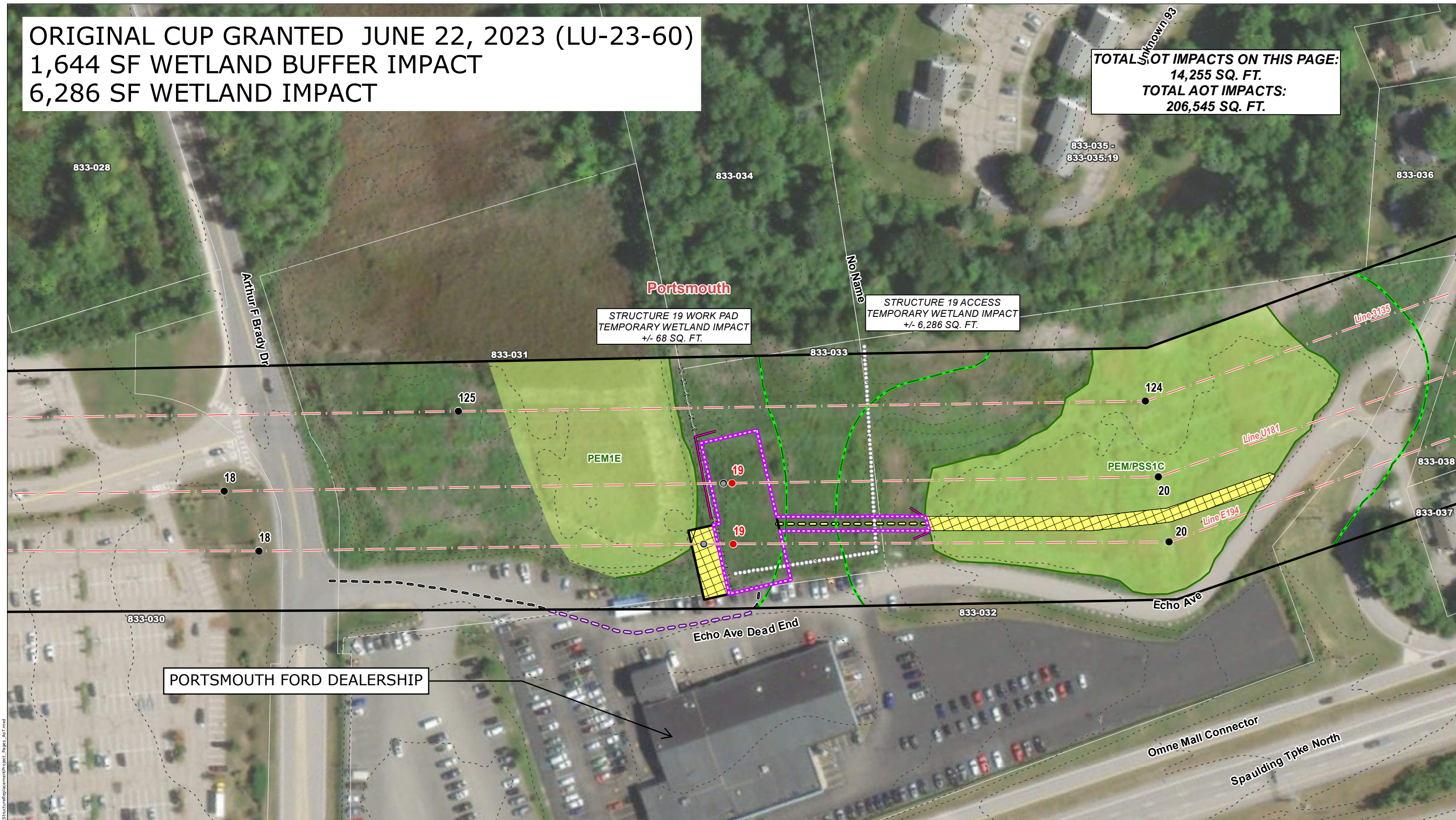
The total of work completed exceeded one acre of earth moving activities and required a Construction General Permit (CGP) from the U.S. Environmental Protection Agency (EPA). A Notice of Intent (NOI) and Stormwater Pollution Prevention Plan (SWPPP) was completed in September 2023, at least 14 days prior to the start of construction. The project was monitored by a SWPPP inspector throughout the duration of construction.

Tighe&Bond

APPENDIX A

ORIGINAL CUP GRANTED JUNE 22, 2023 (LU-23-60)
 1,644 SF WETLAND BUFFER IMPACT
 6,286 SF WETLAND IMPACT

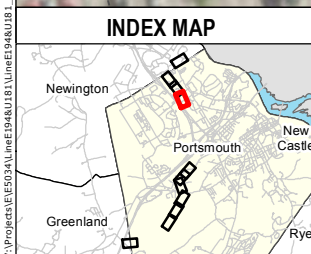
TOTAL AOT IMPACTS ON THIS PAGE:
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 206,545 SQ. FT.



PORTSMOUTH FORD DEALERSHIP

STRUCTURE 19 WORK PAD
 TEMPORARY WETLAND IMPACT
 +/- 68 SQ. FT.

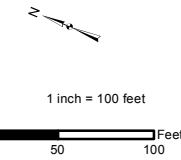
STRUCTURE 19 ACCESS
 TEMPORARY WETLAND IMPACT
 +/- 6,286 SQ. FT.



Legend

● Proposed Structure	▭ Proposed Access	○ Stonewall	▭ Delineated Wetland Boundary Outline
● Existing Structure to be Modified	▭ Off-ROW Access Pending Rights	▭ Sediment Control Barrier	▭ Field Delineated Wetland*
● Existing Structure to be Removed	▭ Railroad	▭ 25' Wetland Buffer (Newington)	▭ Parcel Boundary
● Existing Structure	▭ Contour Line (2 Ft.)	▭ 100' Buffer Zone (Portsmouth)	▭ Work Pad
▭ Gate	▭ Fence	▭ Existing Right-of-Way	▭ 100 Year Flood Zone
▭ Culvert	▭ Overhead Eversource Line	▭ Municipal Boundary	▭ Wellhead Protection Areas
▭ Existing Access	▭ Distribution Line	▭ Delineated Intermittent Watercourse	▭ Alteration of Terrain

Map Notes:
 Data valid as of March 2023.
 Data source: New Hampshire Geographically Referenced Analysis and Information Transfer System (GRANIT) and USFWS. Orthophotography courtesy of ESRI.
 Contours downloaded from New Hampshire GRANIT
 Parcels provided by New Hampshire GRANIT
 Figure intended to be printed on 11x17
 *Indicates datasets with a transparency setting of 30-70%
 This mapping product has been created to comply with submittal requirements to obtain certain regulatory approvals and, as such, there is no reliance on the information contained herein for any other purpose.



NO.	DATE	REVISIONS

EVERSOURCE

**Line E194 and U181
 Structure Replacement Project**

Portsmouth, New Hampshire

Date: March 23, 2023

Map Sheet 4 of 11

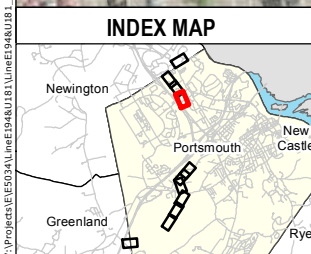
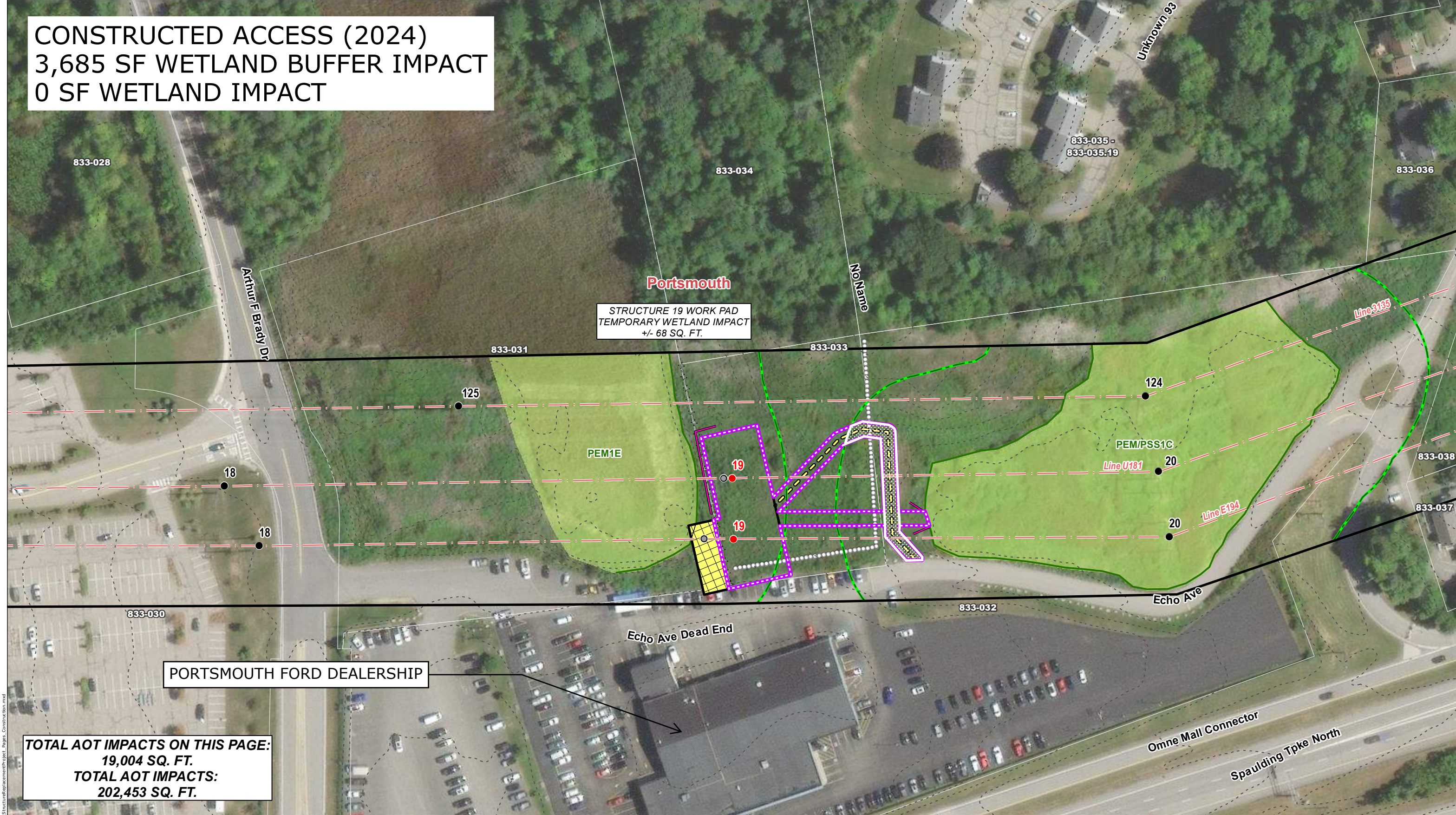
Tighe & Bond

CONSTRUCTED ACCESS (2024)
3,685 SF WETLAND BUFFER IMPACT
0 SF WETLAND IMPACT

STRUCTURE 19 WORK PAD
TEMPORARY WETLAND IMPACT
+/- 68 SQ. FT.

PORTSMOUTH FORD DEALERSHIP

TOTAL AOT IMPACTS ON THIS PAGE:
19,004 SQ. FT.
TOTAL AOT IMPACTS:
202,453 SQ. FT.



Legend

● Proposed Structure	— Proposed Access	— Sediment Control Barrier	■ Field Delineated Wetland*
● Existing Structure to be Modified	— Off-ROW Access Pending Rights	— 25' Wetland Buffer (Newington)	■ Work Pad
● Existing Structure to be Removed	— Railroad	— 100' Buffer Zone (Portsmouth)	■ 100 Year Flood Zone
● Existing Structure	— Contour Line (2 Ft.)	— Existing Right-of-Way	■ Temporary Construction Matting
● Gate	— Fence	— Municipal Boundary	■ Alteration of Terrain
● Culvert	— Overhead Eversource Line	— Delineated Intermittent Watercourse	■ Delineated Wetland Boundary Outline
● Existing Access	— Distribution Line	— Delineated Wetland Boundary Outline	■ Work Area Within in Histosols
	— Stonewall		

Map Notes:
 Data valid as of September, 2023.
 Data source: New Hampshire Geographically Referenced Analysis and Information Transfer System (GRANIT) and USFWS. Orthophotography courtesy of ESRI.
 Contours downloaded from New Hampshire GRANIT
 Parcels provided by New Hampshire GRANIT
 Soil boundary obtained from SSURGO for the state of New Hampshire.
 Figure intended to be printed on 11x17
 *Indicates datasets with a transparency setting of 30-70%
 1 inch = 100 feet
 0 50 100 Feet

NO.	DATE	REVISIONS

EVERSOURCE

**Line E194 and U181
 Structure Replacement Project**

Portsmouth, New Hampshire

Date: September 25, 2023

Map Sheet 4 of 11

Tighe & Bond

EASEMENT REFERENCES:

1. DRAINAGE EASEMENT IN FAVOR OF THE STATE OF NEW HAMPSHIRE AS DESCRIBED IN RCRD BK.#2503 PG.#1410.
2. ACCESS EASEMENT ACROSS MAP 238 LOT 20 FOR THE BENEFIT OF MAP 28 LOTS 1A & 2 AS DESCRIBED IN RCRD BK.#2503 PG.#1420 & BK.#2503 PG.#1413, AND FURTHER DESCRIBED IN "AGREEMENT & CONSENT TO JOINT USE", JUNE 1984, RCRD BK.#2498 PG.#363.
3. DRAINAGE EASEMENT ON MAP 238 LOT 1A IN FAVOR OF THE STATE OF NEW HAMPSHIRE AS DESCRIBED IN RCRD BK.#2503 PG.#1426.
4. SLOPE AND EMBANKMENT EASEMENT IN FAVOR OF THE STATE OF NEW HAMPSHIRE AS DESCRIBED IN RCRD BK.#1143 PG.#92 (NOT DEFINED AS TO LOCATION).
5. SLOPE AND EMBANKMENT EASEMENT IN FAVOR OF THE STATE OF NEW HAMPSHIRE AS DESCRIBED IN RCRD BK.#1143 PG.#92 (NOT DEFINED AS TO LOCATION).
6. 300' WIDE PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE EASEMENT, TRACT F-607-E. SEE RCRD BK.#1263 PG.#204 & BK.#1350 PG.#1864.
7. SEWER EASEMENT ACROSS MAP 238 LOT 2 TO BENEFIT MAP 238 LOT 20 AS DESCRIBED IN BK.#2503 PG.#1424.
8. SEWER EASEMENT IN FAVOR OF THE CITY OF PORTSMOUTH AS DESCRIBED IN BK.#1868 PG.#79.
9. RIGHT-OF-WAY APPURTENANT TO 238-002 AS DESCRIBED IN RCRD BK.#955 PG.#455 (EXTENDS TO WOODBURY AVENUE).
10. APPROXIMATE CENTER LINE OF RIGHT OF WAY AS SHOWN ON REF. PLAN NO.4 AND AS RESERVED IN RCRD BK.#1032 PG.#24.
11. SLOPE AND EMBANKMENT EASEMENT IN FAVOR OF THE STATE OF NEW HAMPSHIRE AS DESCRIBED IN RCRD BK.#1143 PG.#92 (NOT DEFINED AS TO LOCATION).
12. UTILITY EASEMENT IN FAVOR OF PUBLIC SERVICE CO. N.H. & N.E. TELEPHONE CO. AS DESCRIBED IN RCRD BK.#2503 PG.#1400-1403 & BK.#2503 PG.#1403.
13. WATER LINE EASEMENT IN FAVOR OF THE CITY OF PORTSMOUTH AS DESCRIBED IN BK.#2503 PG.#1402.
14. EASEMENT IN FAVOR OF THE CITY OF PORTSMOUTH FOR ROADWAY CHANGE OF DIRECTION AS DESCRIBED IN BK.#2507 PG.#1723.

PURSUANT TO NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES LAN 503.09(24): I CERTIFY THAT THIS SURVEY AND PLAN WERE PREPARED BY THOSE UNDER MY DIRECT SUPERVISION AND ARE THE RESULT OF A FIELD SURVEY CONDUCTED ON OCTOBER 2015 & NOVEMBER 2024. THIS SURVEY CONFORMS TO THE ACCURACY REQUIREMENTS OF AN URBAN SURVEY OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES OF THE BOARD OF LICENSURE FOR LAND SURVEYORS. THIS SURVEY IS CORRECT TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, AND THE FIELD TRAVERSE SURVEY EXCEEDS A PRECISION OF 1:15,000.

PURSUANT TO NEW HAMPSHIRE REVISED STATUTES ANNOTATED 676:18, II, III AND IV AND 672:14: "I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT TO THIS TITLE AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN."

A COPY OF THIS PLAT HAS BEEN FILED WITH THE LOCAL PLANNING BOARD.



LICENSED LAND SURVEYOR

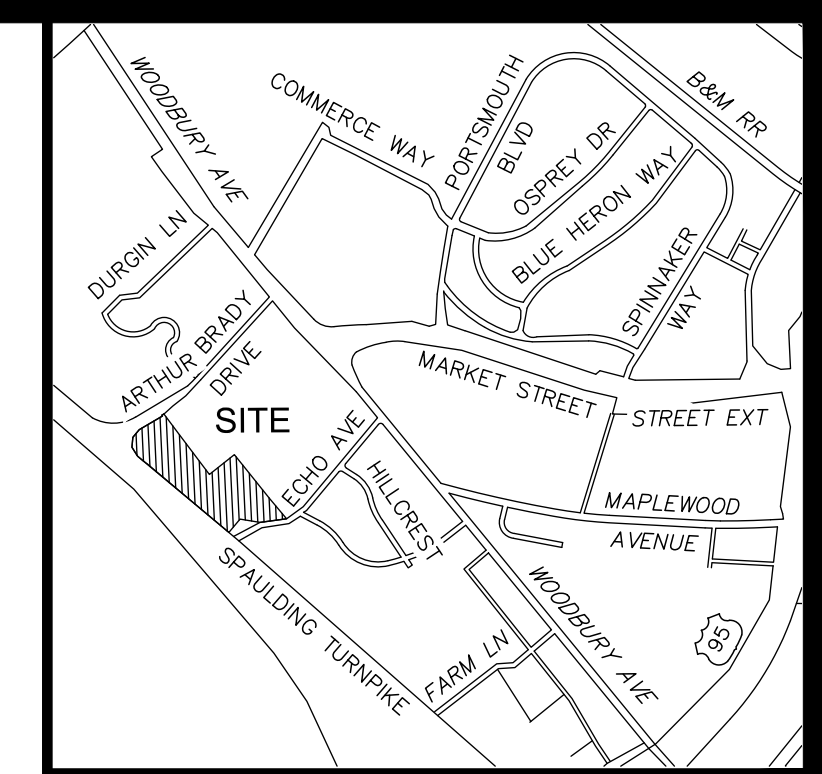
2025-02-26

DATE

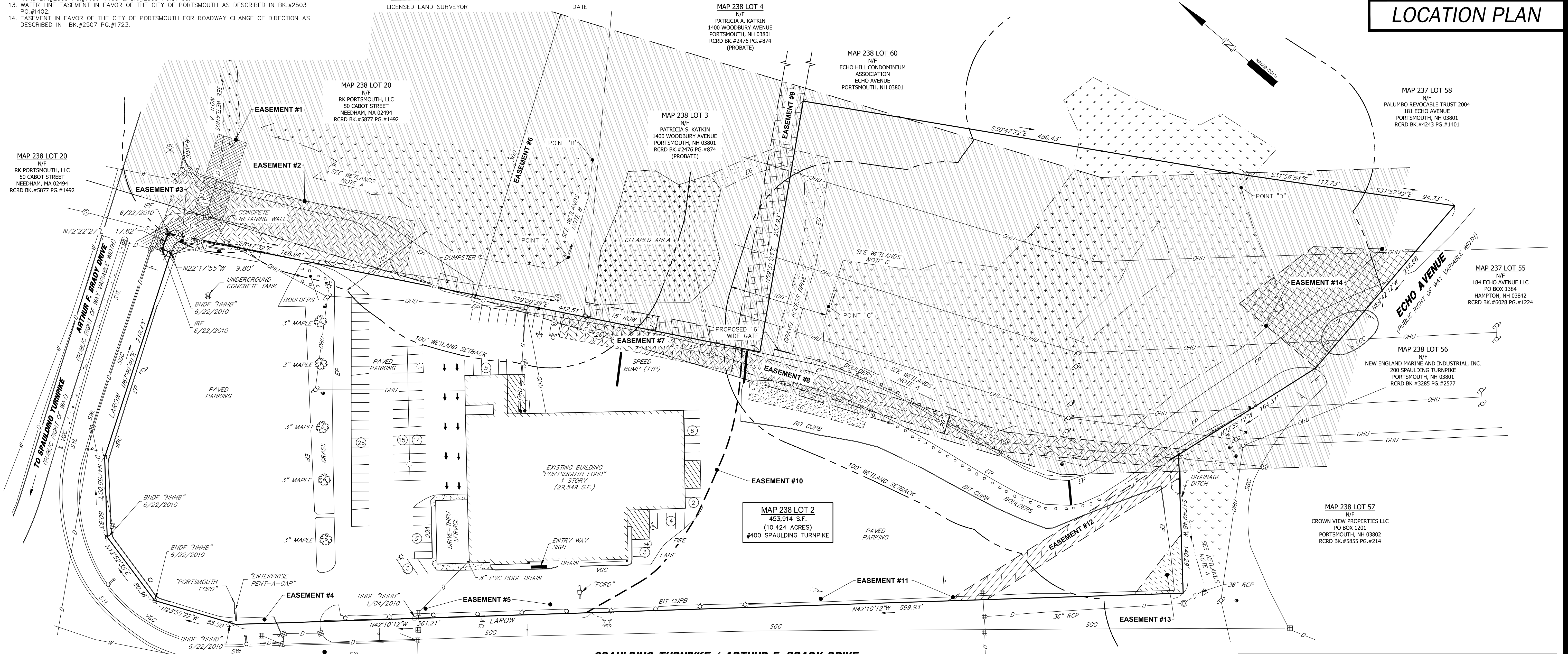
NOTES:

1. THE PARCEL IS LOCATED IN THE GATEWAY NEIGHBORHOOD MIXED USE CORRIDOR (G1) ZONING DISTRICT. SEE THE CITY OF PORTSMOUTH ZONING ORDINANCE ARTICLE 5B FOR REGULATIONS/DEVELOPMENT STANDARDS.
2. THE PARCEL IS AS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 238 AS LOT 2.
3. THE PARCEL IS LOCATED IN ZONE X, AS SHOWN ON NATIONAL FLOOD INSURANCE PROGRAM (NFIP), FLOOD INSURANCE RATE MAP (FIRM) ROCKINGHAM COUNTY, NEW HAMPSHIRE, PANEL 260 OF 681, MAP NUMBER 33015C0260F, WITH AN EFFECTIVE DATE OF JANUARY 29, 2021.
4. OWNER OF RECORD: MAP 238 LOT 2; SLF REALTY GROUP LLC, 400 SPAULDING TURNPIKE, PORTSMOUTH, NH 03801, RCRD BK.#3327 PG.#1409
5. PARCEL AREA: MAP 238 LOT 2; 453,914 S.F. (10.424 ACRES)

6. THE INTENT OF THIS PLAN IS TO SHOW THE LOCATION OF BOUNDARIES IN ACCORDANCE WITH THE CURRENT LEGAL DESCRIPTIONS. IT IS NOT AN ATTEMPT TO DEFINE THE EXTENT OF OWNERSHIP OR DEFINE THE LIMITS OF TITLE.
7. THE PURPOSE OF THIS PLAN IS TO SHOW THE BOUNDARY LINES AND CURRENT SITE FEATURES OF MAP 238 LOT 2 AND THE GRAVEL ACCESS DRIVE AND CLEARED AREA ON MAP 238 LOT 3.
8. FIELD SURVEY COMPLETED BY TCE IN OCTOBER 2015 AND NOVEMBER 2024 USING A LEICA TS-16 INSTRUMENT AND CARLSON SURVPC DATA COLLECTION SOFTWARE.
9. THE HORIZONTAL DATUM IS NAD83 (2011) PER REDUNDANT NETWORK RTK GPS OBSERVATIONS.
10. EASEMENTS, RIGHTS, AND RESTRICTIONS SHOWN OR IDENTIFIED ARE THOSE WHICH WERE FOUND DURING RESEARCH PERFORMED AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS. OTHER RIGHTS, EASEMENTS, OR RESTRICTIONS MAY EXIST WHICH A TITLE EXAMINATION OF SUBJECT PARCEL(S) WOULD DETERMINE.
11. THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. TFMORAN, INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UNDERGROUND UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR SHALL CONTACT DIG SAFE.
12. SEE SHEET S-2 FOR LEGEND.



LOCATION PLAN



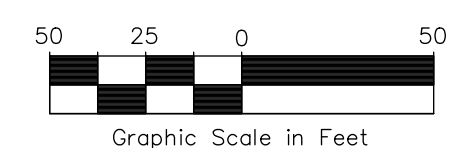
WETLANDS NOTE:

- (A) THE WETLANDS DEPICTED ON THIS PLAN WERE DELINEATED ON AUGUST 19, 2024, BY JASON R. AUBE CWS #313. THESE WETLANDS WERE DELINEATED ACCORDING TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL (JANUARY 1987) AND THE REGIONAL SUPPLEMENT TO THE U.S. CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, VERSION 2.0 (JANUARY 2012). THE PRESENCE OF DOMINANT HYDROPHYTIC VEGETATION WAS DETERMINED USING THE NORTHCENTRAL AND NORTHEAST 2016 REGIONAL WETLAND PLANT LIST, VERSION 3.5, 2016, PUBLISHED BY THE ARMY CORPS OF ENGINEERS. HYDRIC SOILS WERE DETERMINED USING THE NH HYDRIC SOILS TECHNICAL COMMITTEE'S "FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND", VERSION 4, 2017, PUBLISHED BY THE NEW ENGLAND INTERSTATE WATER POLLUTION CONTROL COMMISSION.
- (B) WETLANDS SHOWN HEREON BETWEEN POINT "A" TO POINT "B" WERE DELINEATED BY MARC JACOBS, CERTIFIED WETLAND SCIENTIST ON JULY 7, 2013 AND FIELD LOCATED BY MSC, INC. (NOW TFMORAN, INC).
- (C) WETLANDS SHOWN HEREON BETWEEN POINT "C" TO POINT "D" WERE PROVIDED BY JAMES VERRA & ASSOCIATES, INC. AND USED WITH PERMISSION AS SHOWN ON "ALTA/ACSM LAND TITLE SURVEY, 400 SPAULDING TURNPIKE, PORTSMOUTH, NH, OWNER: SLF REALTY GROUP, LLC, ASSESSOR'S PARCEL NO. 238-02" BY JAMES VERRA AND ASSOCIATES, INC, DATED 2-22-2010.

OFF RAMP FROM THE SPAULDING TURNPIKE
(PUBLIC RIGHT OF WAY)

MAP 238 LOT 6
N/F
PEASE DEVELOPMENT AUTHORITY
135 CORPORATE DRIVE
PORTSMOUTH, NH 03801

SPAULDING TURNPIKE / ARTHUR F. BRADY DRIVE
(PUBLIC RIGHT OF WAY VARIABLE WIDTH)



REV.	DATE	DESCRIPTION	DR	CK
2	2/25/2025	CLEAN UP FOR RECORDING	OMS	BMK
1	2/17/2025	ADDED PROPOSED GATE	BMK	JCC

Seacoast Division

Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

170 Commerce Way, Suite 102
Portsmouth, NH 03801
Phone (603) 431-2222
Fax (603) 431-0910
www.tfmoran.com

47111-20 DR R/B FB 606 S-1
CK BMK CADFILE SEE MARGIN

TAX MAP 238 LOT 2
AS-BUILT PLAN
400 SPAULDING TURNPIKE
PORTSMOUTH, NEW HAMPSHIRE
COUNTY OF ROCKINGHAM
OWNED BY
SLF REALTY GROUP LLC

SCALE: 1" = 50' (22x34)
1" = 100' (11x17)

JANUARY 7, 2025

Feb 26, 2025 - 10:06am
F:\MSC Projects\47111 - Spaulding Tpk - Portsmouth Ford 400 Spaulding Turnpike\Drawings\47111-11 Survey_Mylar.dwg

Feb 26, 2025 - 10:07am
F:\MSC Projects\47111 - Spaulding Turnpike - Portsmouth\47111-11 Spaulding Turnpike\Carlson Survey\Draws\47111-11 Survey_Mylar.dwg

LEGEND:

MAP 137 LOT 11	ASSESSORS MAP / LOT NUMBER
BK, PG.	BOOK/PAGE
BIT	BITUMINOUS CURB
BNDF	BOUND FOUND
EG	EDGE OF GRAVEL
EP	EDGE OF PAVEMENT
IRF	IRON ROD FOUND
LAROW	LIMITED ACCESS RIGHT OF WAY
PSNH	PUBLIC SERVICE OF NEW HAMPSHIRE
N/F	NOW OR FORMERLY
NHHB	NEW HAMPSHIRE HIGHWAY BOUND
PVC	POLYVINYL CHLORIDE
TYP.	TYPICAL
RCP	REINFORCED CONCRETE PIPE
RGRD	ROCKINGHAM COUNTY REGISTRY OF DEEDS
S.F.	SQUARE FEET
SGC	SLOPED GRANITE CURB
SWL	SINGLE WHITE LINE
SYL	SINGLE YELLOW LINE
VBC	VERTICAL BITUMINOUS CURB
VGC	VERTICAL GRANITE CURB
○	IRON PIPE/ROD FOUND
□	BOUND FOUND
●	BOLLARD
○	BOULDER
○	GUY POLE
○	LIGHT POLE
○	UTILITY POLE
□	ELECTRIC BOX
□	LIGHT POLE WITH ARM
□	DRAIN MANHOLE
□	CATCH BASIN
□	FLAG POLE
○	DECIDUOUS TREE
○	MANHOLE
○	SEWER MANHOLE
○	HANDICAP PARKING
○	GAS VALVE
○	HYDRANT
○	WATER SHUT OFF
○	WATER GATE VALVE
○	SIGN
—	OVERHEAD UTILITIES
—	CHAINLINK FENCE
—	BOUNDARY LINE
—	DRAIN LINE
—	SEWER LINE
—	GAS LINE
—	WATER LINE
—	EDGE OF WETLAND
—	WETLAND SETBACK
[Pattern]	CONCRETE
[Pattern]	GRAVEL
[Pattern]	CLEARED AREA
[Pattern]	WETLANDS
[Pattern]	EASEMENT #1
[Pattern]	EASEMENT #2
[Pattern]	EASEMENT #3
[Pattern]	EASEMENT #6
[Pattern]	EASEMENT #7
[Pattern]	EASEMENT #8
[Pattern]	EASEMENT #9
[Pattern]	EASEMENT #12
[Pattern]	EASEMENT #13
[Pattern]	EASEMENT #14

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2025-02-26
DATE

REV.	DATE	DESCRIPTION	DR	CK
2	2/25/2025	CLEAN UP FOR RECORDING	OMS	BMK
1	2/17/2025	NO REVISIONS THIS SHEET	BMK	JCC

		Civil Engineers		170 Commerce Way, Suite 102	
		Structural Engineers		Portsmouth, NH 03801	
		Traffic Engineers		Phone (603) 431-2222	
		Land Surveyors		Fax (603) 431-0910	
		Landscape Architects		www.tfmoran.com	
		Scientists			
FILE	47111-20	DR	RUB	FB	606
		CK	BMK	CADFILE	SEE MARGIN
					S-2

NOTE:

- SEE SHEET S-1 FOR AS-BUILT PLAN, NOTES AND LOCATION PLAN.

TAX MAP 238 LOT 2
AS-BUILT PLAN - LEGEND
400 SPAULDING TURNIKE
PORTSMOUTH, NEW HAMPSHIRE
COUNTY OF ROCKINGHAM
OWNED BY
SLF REALTY GROUP LLC

SCALE: 1" = 50' (22x34)
1" = 100' (11x17)

JANUARY 7, 2025

Tighe&Bond

APPENDIX B

E194 & U181 Structure Replacement Project

Wetland Resource Area Description and Assessment

TO: Katy Wilkins, Project Manager, Tighe & Bond, Inc.

FROM: Julia Novotny, Environmental Scientist, Tighe & Bond, Inc.
Jeremy Degler, Project Environmental Scientist, CWS, PWS, CWB,
Tighe & Bond, Inc.

DATE: March 22, 2023

On December 21, 2022 and January 4, 9, and 17, 2023, Tighe & Bond wetland scientists conducted a wetland resource area investigation within and adjacent to the location of the E194 and U181 transmission line right-of-way (ROW) in support of a structure replacement project proposed by Eversource Energy (Eversource). This memorandum presents a summary of the wetland resource areas investigated at the Project Site and a functions and values assessment for these resource areas.

Project Location

The project area consists of the existing maintained transmission line ROW that contains the E194 and U181 Lines. This ROW is comprised of a mixture of impervious area, maintained upland, and wetland. The surrounding landscape areas are comprised of impervious surfaces (e.g., roadways and parking lots), industrial, commercial, and residential areas, in addition to forest and wetlands. The ROW runs from the Newington Substation off Gosling Road to the Ocean Road Substation on the Greenland/Portsmouth border.

Methodology of Wetland Resource Investigations

The wetland delineation was conducted in accordance with the procedures outlined in the *U.S. Army Corps of Engineers Wetlands Delineation Manual*, Technical Report Y-87-1 (January 1987), the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* (January 2012). Locations of wetland boundaries were surveyed using a global positioning system (GPS) unit with sub-meter accuracy.

Summary of Jurisdictional Wetland Resource Areas

The following sections discuss the wetland resource areas identified in the project area and summarize their characteristics.

Vegetated Wetlands

Multiple wetlands were identified within the E194 and U181 ROW, adjacent to the limits of work. Wetlands identified within the ROW were classified as having the characteristics of both palustrine emergent system with persistent vegetation, and a palustrine scrub-shrub system with broad-leaved deciduous vegetation (PEM1/PSS1).

Common vegetation observed included common reed (*Phragmites australis*; FACW), cattail (*Typha sp.*; OBL), purple loosestrife (*Lythrum salicaria*; OBL), sensitive fern (*Onoclea sensibilis*; FACW), curly dock (*Rumex crispus*; FAC), winterberry (*Ilex verticillata*; FACW), willow (*Salix spp.*), glossy buckthorn (*Frangula alnus*; FAC), red maple (*Acer rubrum*; FAC), common rush (*Juncus effusus*; OBL), reed canary grass (*Phalaris arundinacea*; FACW), white meadowsweet (*Spiraea alba*; FACW), red osier dogwood (*Cornus sericea*; FACW), speckled

alder (*Alnus incana*; FACW), tussock sedge (*Carex stricta*; OBL), brambles (*Rubus spp.*), and goldenrod (*Solidago spp.*)

Two streams were identified in association with the delineated wetlands: an unnamed tributary to the Piscataqua River (Newington) and an unnamed tributary to Pickering Brook in Great Bog (Portsmouth). Many of the wetlands within the project area are disturbed from previous ROW work and surrounding development including from commercial, industrial, and residential areas.

100-foot Buffer Zone (Locally Regulated)

The 100-foot Buffer Zone associated with the wetlands identified in the project area consists of a mixture of impervious area (e.g., paved parking lots, roadways), residential, industrial, and commercial areas, as well as forested areas, and maintained ROW. The percentage of Buffer Zone that is developed, including impervious paved areas, is approximately 40 percent. Non-impervious 100-foot Buffer Zone is mainly comprised of maintained shrubby vegetation within the existing ROW and mixed deciduous and coniferous forest on the ROW boundaries.

Functions and Values Assessment

Gosling Road and Durgin Lane Wetlands

Wetlands off Gosling Road and Durgin Lane are surrounded by residential and commercial development. They are classified as palustrine emergent and scrub-shrub systems, mostly dominated by common reed, purple loosestrife, and cattail. These wetlands are situated in depressions and flat, low lying areas and are densely vegetated with pockets of standing water. Flood storage, sediment and toxicant retention, and nutrient retention/removal are likely functions of these wetlands. Due to the location of these wetlands in highly developed areas and the dominance of invasive species, they do not provide good aesthetic qualities and are unlikely to provide good wildlife habitat.

Echo Avenue Wetlands

Echo Avenue wetlands are characterized as palustrine emergent and palustrine scrub-shrub systems. These wetlands are located directly adjacent to commercial and residential development. They are also located approximately 330 feet northeast of Route 4. These wetlands are densely vegetated and some portions are situated in depressions. Functions associated with these areas include flood storage and sediment and toxicant retention. Due to the location of these wetlands in a developed area and the dominance of invasive species, they do not provide good aesthetic qualities and are unlikely to provide good wildlife habitat.

Borthwick Avenue Wetlands

The wetlands adjacent to Borthwick Avenue are situated in highly disturbed areas. These wetlands are mainly palustrine emergent systems dominated by common reed and cattail. These wetlands are designated as Prime Wetlands pursuant to NH RSA § 482-A:15.

Dense emergent vegetation and organic soils in these wetlands allow for sediment and toxicant retention. Given the proximity of these wetlands to surrounding development and impervious surfaces and their position on the landscape they are likely important in providing flood storage. These wetlands provide little aesthetic qualities as they are dominated by invasive species that obstruct clear views and are surrounded by impervious area and commercial development.

Great Bog Wetlands

The wetlands associated with Great Bog are predominantly palustrine emergent and palustrine scrub-shrub systems. These wetlands are associated with Pickering Brook, which flows northeast to southwest through Great Bog. These wetlands are designated as Prime Wetlands.

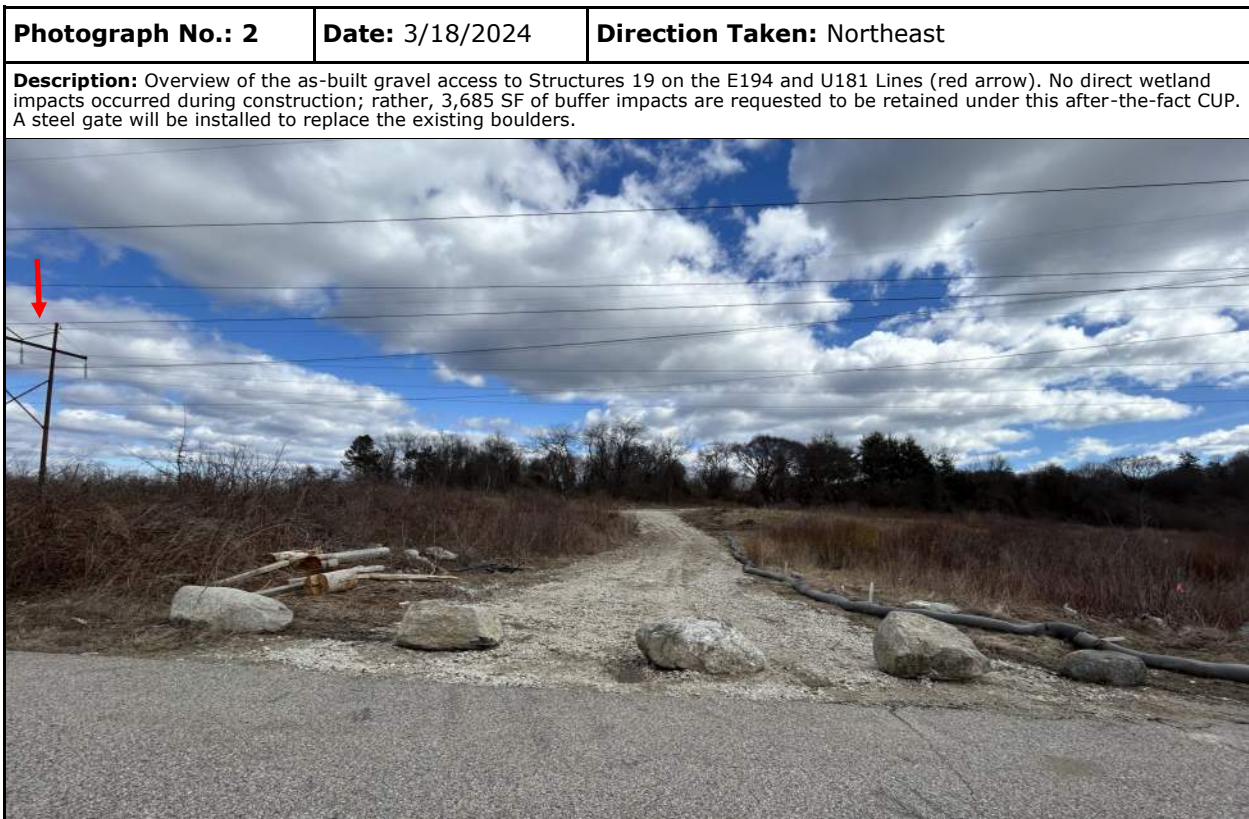
Due to the dense vegetation in this wetland and the presence of deep water and organic soils, it likely provides sediment and toxicant retention, as well as nutrient retention and transformation. Additionally, the large size of this wetland complex and its position on the landscape allows for flood storage. Great Bog has historic known occurrences of rare, threatened, and endangered plant species, and has aesthetic qualities and recreational opportunities via adjacent trails. This area likely provides good wildlife habitat as Great Bog is large and relatively unfragmented. The aesthetic quality is partially compromised by the dominance of invasive common reed and purple loosestrife, and the proximity of Great Bog to major roads and highways.

Tighe&Bond


APPENDIX C

Photographic Log

Client: Eversource Energy **Job Number:** 14-5034-200
E194 & U181 Structure Replacement Project
Site: Portsmouth and Newington, NH





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