



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: Public Service Company of NH dba Eversource Energy Date Submitted: 6/24/2026

Application # (in City's online permitting): _____

Site Address: E194 Utility Right-of-Way, Schiller Substation Map: 214 Lot: 3

☒	Required Items for Submittal	Item Location (e.g. Page or Plan Sheet/Note #)
☒	Complete application form submitted via the City's web-based permitting program	Submitted electronically
☒	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.	See included Conditional Use Permit Application Package

☒	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)
☒	Basic property and wetland resource information. (10.1017.21)	See included Conditional Use Permit Package
☒	Additional information required for projects proposing greater than 250 square feet of permanent or temporary impacts. (10.1017.22)	See included Conditional Use Permit Application Package
☒	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)	See included Conditional Use Permit Package
☒	Balance impervious surface impacts with removal and/or wetland buffer enhancement plan. (10.1017.24)	See included Conditional Use Permit Application Package

☒	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)
☒	Wetland buffer enhancement plan. (10.1017.25)	See included Conditional Use Permit Package
☐	Living shoreline strategy provided for tidal wetland and/or tidal buffer impacts. (10.1017.26)	Not Applicable
☒	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)	See included Conditional Use Permit Application Package
☐	Vegetated Buffer Strip slope of greater than or equal to 10%. (10.1018.22)	Not Applicable
☒	Removal or cutting of vegetation, use of fertilizers, pesticides and herbicides. (10.1018.23/10.1018.24/10.1018.25)	See included Conditional Use Permit Application Package
☐	All new pavement within a wetland buffer shall be porous pavement. (10.1018.31)	Not Applicable
☐	An application that proposes porous pavement in a wetland buffer shall include a pavement maintenance plan. (10.1018.32)	Not Applicable
☐	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)	To be discussed with the conservation commission
☒	Requested Items for Submittal	Item Location (e.g. Page or Plan Sheet/Note #)
☒	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.	See included Conditional Use Permit Application Package
☐	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 Wetland Permit By Notification will be submitted for this Project

Applicant's Signature:  Date: 6/24/2026



Memorandum

To: City of Portsmouth Conservation
Commission
1 Junkins Avenue
Portsmouth, NH 03801

Date: August 3, 2026

Project #: 22774.00

From: Sherrie Trefry, CSS
2 Bedford Farms Drive Suite 200
Bedford, NH 03110

Re: Eversource E194 Transmission ACR Maintenance Project
City of Portsmouth Conditional Use Permit

To whom it may concern:

On behalf of the Applicant, Public Service of New Hampshire (PSNH) d/b/a Eversource Energy (Eversource), VHB is submitting this revised application for a Conditional Use Permit (CUP) for proposed utility maintenance on the existing 115kV E194 Transmission Line in Portsmouth, New Hampshire. The information provided should replace or supplement information in the original application. Changes to the application were undertaken following the July 8, 2026 Conservation Commission meeting in response to comments. This project qualifies for a Conditional Use approval as a private utility within right-of-way (ROW) in accordance with section 10.1017.60 of the zoning ordinance and is required for the proposed work to allow impacts within the wetland buffer. Contact information for the applicant and consultants is provided in the table below:

Name	Ashley Nicoletti	Sherrie Trefry	Trent Delehanty
Role	Applicant	Permitting Lead	Certified Wetland Scientist
Telephone	603-634-2992	603-391-3951	603-391-3853
E-mail	Ashley.Nicoletti@Eversource.com	STrefry@VHB.com	TDelehanty@VHB.com
Address	13 Legends Drive, Hooksett, NH 03106	2 Bedford Farms Drive, Suite 200, Bedford, NH 03110	2 Bedford Farms Drive, Suite 200, Bedford, NH 03110

During the Conservation Commission meeting that took place on July 8, 2026, the Commission continued review of the CUP until the August 12, 2026 meeting to allow Eversource to provide additional technical documentation and details. Minutes of this meeting can be found in **Attachment F: July 8, 2026 Conservation Commission Meeting Minutes**. Upon further discussion between Eversource, project contractors and VHB the decision was made to use temporary upland matting in place of gravel to eliminate the previously proposed permanent impacts to the wetland buffers. An updated set of project plans dated July 30, 2026 can be found in **Attachment A: Project Plans**.

Summary of Changes and Supporting Documentation

The following information is being provided to outline the changes between this application package, and the package uploaded and delivered on June 24, 2026.

Discussion of Plan Changes

The major revision to the **Project Plans** was to remove the proposed gravel impacts to the wetland buffers, and to depict the temporary upland matting that will be used instead to provide safe and stable access for Eversource and

their contractors to complete the proposed work. Another plan change includes the shift of Structure 15 to be 30 feet back along the line to provide a safe setback from a newly developed roadway.

Observed Site Changes

VHB Certified Wetland Scientist, Trent Delehanty, revisited the proposed work sites on July 1, 2026 to ensure site conditions were similar to those when initial delineation efforts were completed. Most of the site was in a similar condition as it was during the delineation effort. However, a major site change was identified around Structure 15 where a new access road to a housing development under construction replaced the parking lot that previously surrounded Structure 15. Structure 15 is now within 3 feet of an active roadway which presents safety and reliability concerns. Eversource re-engineered this span to address the new condition and proposes to move Structure 15 30 feet back along the line. Upland matting will be used to create access and a 100 x 100 ft work pad around the base of the structure to minimize impact to this newly restored area. For reference, please see **Attachment B: Photographic log** which provides documentation of the new site conditions.

Additional Supporting Documentation

Construction specifications for the gravel access and timber matting used in wetlands by Eversource have been provided in **Attachment G: Construction Specifications**.

Conditional Use Permit Documentation and Adherence to the City of Portsmouth Zoning Ordinance

The changes described above have altered the responses to the following sections:

- Section 10.1017.20(4)
- Section 10.1017.20(6), including *Table 3*
- Section 10.1017.20(8), including *Table 4*
- Section 10.1017.22(3)
- Section 10.1017.24
- Section 10.1017.25(1)
- Section 10.1017.31
- Section 10.1017.32

Section 10.1017.20: Application Requirements

Section 10.1017.21 The application shall be in a form prescribed by the Planning Board, and shall include the following information:

- (1) Location and area of lot and proposed activities and uses;

Copies of the **Tax Maps** are included in **Attachment C** and a **USGS Site Location Map** is included in **Attachment D**.

Work will be conducted within Eversource property or Eversource-held easements. The Applicant does not own the underlying parcels of the 12 replacement structures that work will be conducted on but has permission to conduct

maintenance on the existing assets under the easements. Current use of the project location is Utility ROW that are underlain by commercial and industrial uses. Existing conditions, including wetlands and their buffers, are described below in the other CUP requirements. Locations of the structures to be replaced are provided directly below with their respective tax map and parcel numbers:

- Structure 15: Tax Map 239, Lot 18
- Structure 16: Tax Map 239, Lot 16
- Structure 18: Tax Map 238, Lot 20
- Structures 21-24: Tax Map 237, Lot 56
- Structure 26: Tax Map 236, Lot 34
- Structure 37: Tax Map 240, Lot 2-1
- Structure 38: Tax Map 240, Lots 2-2001 and 3
- Structures 39 and 40: Tax Map 240, Lot 3

(2) Location and area of all jurisdictional areas (vernal pool, inland wetland, tidal wetland, river or stream) on the lot and within 250 feet of the lot;

VHB Wetland Scientists surveyed for and delineated jurisdictional resource areas in August of 2025. Resources delineated within the project area included multiple wetlands and a small section of an ephemeral stream. VHB-delineated wetlands and historical wetland boundaries within the vicinity of the project are depicted on the **Project Plans** provided in **Attachment A**. A description of the methodology used is provided in **Section 10.1017.22(1)** below. A brief description of each wetland location and size is provided below in **Table 1**. No tidal wetlands, potential vernal pools, or major watercourses were identified within the proposed project area. Jurisdictional areas on abutting properties or outside of the surveyed utility ROW and Eversource owned properties were assessed using the land resource management permit planning tool (LRMPPT) and GRANITview mapper. Layers such as the National Wetlands Inventory (NWI), and Priority Resource Area (PRA) data were reviewed to assist in describing these resources. Wetlands that extend outside of the surveyed utility ROW are denoted with a "+" within **Table 1** to note that the area is larger than what is provided due to the limit of the wetland delineation to the ROW.

Table 1 Jurisdictional Wetland Summary

Wetland ID	Cowardin Classification	Plan Set Sheet	Total Size of Wetland (SF)*
W-2	PEM5/1C	2	306,642+***
W-3	PEM/PSS1C	2	18,135
W-5	PSS1C	2	11,869
W-6	PSS1C/E, PEM1C/E	2	7,134+**
W-6A	PEM1/5E	2	89,727+
W-7	PEM1C/E, PEM5E	3	71,973
W-8	PEM1C	3	54,994+
W-10	PEM1C, PEM5C/E	3	11,458
W-11	PEM5E, PEM1C, PSS1C/E	4	109,614+
W-12	PEM5E	4	121,242+
W-14	PEM1E	4	10,804+

* As stated above, the total size of the wetlands is derived from the delineations performed within the project area. Resources that extend outside of the boundary are noted with a "+" to indicate the full extent of the wetland was not quantified.

**Wetland W-6 was not fully delineated as the boundary extends outside of the ROW. It is estimated that this wetland, if fully delineated, would be greater than 10,000 SF and therefore a jurisdictional wetland.

***Wetland W-2 was not delineated in the field as no impacts were anticipated to the wetland. Observations were made to confirm the location from a previous delineation conducted in the ROW. The size of the wetland is from the shapefile provided from this previous delineation, and the SF may vary.

(3) Location and area of wetland buffers on the lot;

All delineated wetlands within the vicinity of work locations deemed jurisdictional by the City of Portsmouth include 100-foot wetland buffers. Buffers may not be included in their entirety due to limit of survey. Area of the buffers provided will be calculated for the area within the ROW. Wetland buffers are described in detail in **Section 10.1017.22(3)**, locations can be found in the **Project Plans** provided in **Attachment A**, and a summary is provided in **Table 2** below.

Table 2 Jurisdictional Wetland Buffer Summary

Wetland ID	Cowardin Classification	Plan Set Sheet	Total Size of Wetland Buffer (SF)*
W-2	PEM1/5E	2	132,193+
W-3	PEM/PSS1C	2	144,919+ **
W-5	PSS1C		
W-6	PSS1C/E, PEM1C/E		
W-6A	PEM1/5E	2	93,853+
W-7	PEM1C/E, PEM5E	3	217,120+ **
W-8	PEM1C		
W-10	PEM1C, PEM5C/E	3	80,527+
W-11	PEM5E, PEM1C, PSS1C/E	4	134,316+
W-12	PEM5E	4	135,391+ **
W-14	PEM1E		

* As stated above, the total size of the wetland buffers is derived from the delineations performed within the project area. The buffers created are only shown within the E194 Utility ROW where work is to take place. Wetland buffers that extend outside of the project ROW are noted with a "+" to indicate the full extent of the wetland was not measured.

**These buffers overlap and create one contiguous buffer comprised of multiple wetlands. The buffer area is provided for the full area depicted on the plans.

(4) Description of proposed construction, demolition, fill, excavation, or any other alteration of the wetland or wetland buffer;

Eversource is proposing to conduct routine maintenance work on the E194 115 kV Line in Portsmouth, New Hampshire. This work will include the replacement of 12 wood structures (15, 16, 18, 21, 22, 23, 24, 26, 37, 38, 39, and 40) with new weathered steel structures under the Asset Condition Replacement (ACR) program. The structures proposed for replacement will be replaced with weathering steel structures in the same configuration, in accordance with current construction methods and materials. The proposed project is part of Eversource's ongoing maintenance program conducted to ensure reliable electric service for their customers. The Eversource transmission system is an integral part of the regional power system delivering electricity to customers throughout New England. It is critical that this system remains operational without interruption from preventable outages. Contingent upon permit approvals, work is planned to commence in the fall of 2026.

The work locations of this project are located within vegetated and commercially developed areas of the E194 ROW. The line originates at the Schiller Substation in Portsmouth where it extends southeast to the Ocean Road Substation in Greenland. Access to the ROW will be from established roadways that intersect the ROW or commercial parking lots

that occur within the ROW. Please see the **Project Plans** included as **Attachment A** to view the locations of the proposed access and work areas.

Most of the replacement structures will be installed within 5 to 10 feet ahead or behind the existing structure footprint. Structure 22 will be relocated 20 feet behind the existing structure to optimize the design, and Structure 15 will be relocated 30 feet behind the existing structure to ensure a safe setback from a newly established roadway. Structures 37-39 will be replaced in-kind (cut and kick) because these structures are in or adjacent to existing parking lots. Most of the height of the new structures will increase between 5-20 feet to gain compliance with current regulatory standards, meet safety clearance requirements, accommodate the site topography, and minimize environmental impacts. Structure 16 will increase in height by 35 feet to gain clearance over an electric line that runs under the 115 kV transmission line. The proposed work will be contained within the existing cleared utility ROW, and no additional tree clearing or widening of the ROW is proposed.

All excavated spoils will be spread within an upland area of the project ROW (outside of NHDES or Portsmouth jurisdictional areas, including wetland buffers) or will be trucked off-site and properly disposed of. Prior to accessing work sites with construction equipment, crews will install wildlife friendly erosion and sediment control barriers in accordance with permitting plans and details, New Hampshire Department of Environmental Services (NHDES) conditions, and the Best Management Practices Manual for Utility Maintenance in and Adjacent to Wetlands and Waterbodies in New Hampshire (or "Utility BMP Manual," March 2019), published by the New Hampshire Department of Natural and Cultural Resources (NHDNCR). Erosion and sediment control barriers will not be removed until project work is complete, and all project areas are stabilized.

All wetland impacts proposed will be temporary to access structures, and to build work pads at structures proposed for replacement. Upland work areas proposed within wetland buffers will be temporarily impacted using upland matting and will follow previously used access paths to provide a stable location for matting to be placed. A *Swamp Mat Detail* describing wetland timber matting is provided in **Attachment G: Construction Specifications**.

After the completion of the structure replacement work, construction debris will be removed from the project ROW and properly disposed of off-site. The work pads, where applicable, will be reduced to a 30-foot by 60-foot work pad with the remainder of the work pad being restored. Refer to the **Project Plans** provided in **Attachment A** for the location of existing wetlands, utility structures, proposed access routes, and construction work pads.

(5) Setbacks of proposed alterations from property lines, jurisdictional areas and wetland buffers;

No property line changes or permanent alterations are proposed as part of this project. All structure replacements will occur in kind, and no additional buildings, structures, or dwellings are proposed as part of this project.

(6) Location and area of wetland impact, new impervious surface, previously disturbed upland;

Locations of wetland impacts are shown in the **Project Plans** provided in **Attachment A**. All wetland impacts proposed are temporary using timber matting. Access roads within the ROW will follow historically used routes for maintenance or past construction activities when possible. Proposed routes will utilize these areas of historic grading, disturbance, and legacy gravel to provide a smaller footprint on the landscape, and provide stable locations for placement of upland matting within the wetland buffers.

All work within wetland buffers will be utilized with temporary upland matting. As such, no ground disturbance or fills are anticipated within the wetland buffers depicted in the Project Plans. If unforeseen disturbance occurs within the wetland buffer, these areas will be restored following the wetland buffer enhancement plan detailed in **Section 10.1017.25** of the previously submitted CUP application package.

A summary of impacts to wetlands are displayed in **Table 3** below.

Table 3 Wetland and Wetland Buffer Impact Summary

Associated Structure(s)	Wetlands Impacted*	Type of Impact	Total Impact (SF)
16	W-3, W-5, W-6	Temporary Wetland Buffer	9,241
		Temporary Wetland	W-5: 7,422
15	W-2	Temporary Wetland Buffer	8,204
18	W-6A	Temporary Wetland Buffer	1,844
22 and 23	W-7, W-8	Temporary Wetland Buffer	21,312
		Temporary Wetland	W-7: 10,202
			W-8: 3,415
			Total: 13,617
38	W-12	Temporary Wetland Buffer	1,503
		Temporary Wetland	W:12 7,778
40	W-11	Temporary Wetland Buffer	1,427
		Temporary Wetland	W-11: 8,573
Totals		Temporary Wetland Buffer	43,531 SF
		Temporary Wetland	37,390 SF

*Temporary matting impacts are shown to wetlands W-4, W-9. These wetlands were delineated and marked as jurisdictional through RSA 482-A:2X but are less than 10,000 SF. Use of timber matting within these wetlands is not calculated as Portsmouth jurisdictional impacts. A wetland buffer does not apply to wetlands less than 10,000 SF.

(7) Location and description of existing trees to be removed, other landscaping, grade changes, fill extensions, rip rap, culverts, utilities;

As further discussed in **Section 10.1018.23** below, no trees will be removed as part of this project. Access roads to be established will be graded and stabilized with gravel to allow for safe transport of crews and equipment to work locations. Timber matting will be utilized to cross wetlands within the ROW to access the structures targeted for replacement and minimize soil disturbance by avoiding rutting by equipment. Upland matting is proposed to be used to create the work area for Structure 18 to protect the existing landscaping and established vegetation associated with the Home Depot parking lot. Work pads that will be established within the vegetated work areas will have the dimensions of 100 feet x 100 feet to provide adequate work pads for crews to replace the proposed structures. Minor grading may be required to create level and safe work pads for Eversource employees and contractors as part of this work. Locations of disturbances are shown in the **Project Plans** provided in **Attachment A**.

(8) Dimensions and uses of existing and proposed buildings and structures.

E194 Transmission structures currently are wooden H-Frame structures that will be replaced in kind with industry-standard weathered steel structures. Structure heights will be increased as necessary to achieve the required vertical clearance requirements between ground vegetation and overhead electric transmission lines. The above ground heights of existing structures, proposed structures, and the change in height is provided in **Table 4** below.

Table 4 Structure Height Summary Table

Structure Number	Existing Above Ground Height (ft)	Proposed Above Ground Height (ft)	Proposed Height Change (ft)
15	60.6	74.8	14.2
16	52	83.5	31.5
18	74.5	79	4.5
21	54.2	65.5	11.3
22	42.7	61	18.3
23	43	61	18
24	44.2	61	16.8
26	53	56.5	3.5
37	70	74.5	4.5
38	57.4	65.5	8.1
39	47.5	56.5	9
40	53.6	65.5	11.9

(9) Any other information necessary to describe the proposed construction or alteration.

VHB has consulted with New Hampshire Fish and Game, and the Natural Heritage Bureau for rare, threatened, and endangered ("RTE") species on behalf of Eversource. This RTE species information is confidential, however, state agency recommendations are being implemented to protect these species. Additional botanical surveys will be completed within the appropriate time of year to identify and demarcate occurrences of protected species, if present, for avoidance within the vicinity of work areas.

Section 10.1017.22: Where the proposed project will involve the temporary or permanent alteration of more than 250 sq. ft. of wetland and/or wetland buffer, the application shall provide information about the affected wetland and wetland buffer as follows:

- (1) Up to 1,000 sq. ft. of alteration to the wetland: a wetland characterization that describes the type of wetland (e.g., emergent, scrub-shrub, forested), the percent of invasive species, and whether the wetland is seasonally flooded.**

Wetlands and jurisdictional resources within the project work areas and ROW were delineated by VHB wetland scientists in August of 2025. Delineation of natural resources was limited to the ROW and did not include the entire parcel. Wetland delineation was performed in accordance with procedures and standards outlined in the *1987 Corps of Engineers Wetland Delineation Manual* and the *Regional Supplement to the Corps of Engineers Wetland Delineation*

Manual: Northcentral and Northeast Region, Version 2.0 (January 2012). Wetland review also relied upon the *Field Indicators for Identifying Hydric Soils in the United States*, Version 9.2, published by the Natural Resource Conservation Service and *Field Indicators for Identifying Hydric Soils in New England*, Version 5.0 published by New England Interstate Water Pollution Control Commission and New England Hydric Soils Technical Committee (2025). Dominant wetland vegetation was assessed using the 2022 National Wetland Plant List published by the U.S. Army Corps of Engineers.

Wetlands resources that were determined jurisdictional by these methods are included on the project mapping. Per **Section 10.1013.10** of the zoning ordinance any inland wetlands that are more than 10,000 square feet in area are deemed jurisdictional wetlands by the City of Portsmouth. Portsmouth jurisdictional wetlands have a 100-foot wetland buffer applied and are shown in the **Project Plans** provided in **Attachment A** and briefly described below. A **Photo Log** is included as **Attachment B** of this memorandum that shows the site conditions of jurisdictional resources, proposed work areas, and wetland buffers. It is important to note that the work will be taking place within the Eversource Utility ROW, and as such the total wetland and/or wetland buffer on the lot outside of the ROW was not evaluated. As previously noted, Wetland W-2 was not within the proposed work area and was not fully evaluated for impacts. The boundary of this wetland was provided by Eversource from a previous project, and was confirmed to match the downslope boundary in the field. As such a full description of this wetland is not provided below. Temporary matting impacts associated with work pads and access roads to these wetlands are further described within **Table 3 Wetland and Wetland Buffer Impact Summary** provided in **Section 10.1017.21(2)**.

- Wetland W-5 is a Palustrine, Scrub-shrub, Broad-Leaved Deciduous, seasonally flooded (PSS1C) wetland. Temporary matting impacts totaling 7,422 SF are proposed to create a stable work pad at Structure 16. The structure itself is within the wetland boundary. Native species noted within this wetland include: woolgrass (*Scirpus cyperinus*), rough-stemmed goldenrod (*Solidago rugosa*), swamp aster (*Symphyotrichum puniceum*), sensitive fern (*Onoclea sensibilis*), and species of sedge (*Carex* spp.). Invasive species were dominant in this wetland and include the following species: purple loosestrife (*Lythrum salicaria*), glossy buckthorn (*Frangula alnus*), oriental bittersweet (*Celastrus orbiculatus*), and multiflora rose (*Rosa multiflora*). It is estimated that invasive species comprise 75% of the foliar cover in this wetland.
- Wetland W-7 is a Palustrine, Emergent, Persistent, Seasonally Saturated/Flooded (PEM1C/E) and Palustrine, Emergent, Persistent/*Phragmites australis*, Seasonally Flooded/Saturated (PEM1/5E) wetland. This wetland was likely historically connected to wetland W-8 but is now divided by a narrow filled access path. Temporary impacts totaling 10,202 SF are proposed to Wetland 7 to provide access and a work area to replace Structure 22. Native vegetation within this wetland includes species of goldenrod (*Solidago* spp.), broadleaf cattail (*Typha latifolia*), silky dogwood (*Cornus amomum*), flat top white aster (*Doellingeria umbellata*), and an unidentified grass species. Invasive species within this wetland include common reed, and purple loosestrife. It is estimated that invasive species comprise 35% of the foliar cover of this wetland.
- Wetland W-8 is a Palustrine, Emergent, Persistent, seasonally flooded (PEM1C) wetland. Temporary matting impacts totaling 3,415 SF are proposed to this wetland to provide access and a work area to replace Structures 22 and 23. Native vegetation noted within this wetland includes: broadleaf cattail, rough-stemmed goldenrod, silky dogwood, species of sedge, *Spiraea* spp., soft rush (*Juncus effusus*), and flat top white aster. Invasive species within this wetland include glossy buckthorn, multiflora rose, and purple loosestrife. It is estimated that invasive species comprise 30% of the foliar cover of this wetland.

- Wetland W-11 has multiple Cowardin classifications due to the size of the wetland and range in plant communities within it. Cowardin classifications include Palustrine, Emergent, Persistent, Seasonally Saturated/Flooded (PEM1C/E); Palustrine, Emergent, *Phragmites australis*, Seasonally Flooded/Saturated (PEM5E); and Palustrine, Scrub-shrub, Broad-Leaved Deciduous, Seasonally Flooded/Seasonally Saturated (PSS1C/E). Native plant species noted within this wetland include broadleaf cattail. Invasive species within this wetland include common reed, glossy buckthorn and purple loosestrife. It is estimated that invasive species comprise 80% of the foliar cover of this wetland, primarily common reed. This wetland also extends outside of the ROW and is likely connected to, and a part of wetland W-12. This feature is mapped as Prime Wetland by the City of Portsmouth.
- Wetland W-12 is a Palustrine, Emergent, *Phragmites australis*, Seasonally Flooded/Saturated (PEM5E) wetland. This wetland has a near monoculture of the invasive species common reed, estimated at 90% of the foliar cover. Isolated patches of broadleaf cattail were observed outside of the proposed work area on the northern side of this wetland, and the plant community transitions into a stand with a greater amount of broadleaf cattail on the northern extent of this wetland adjacent to the Borthwick Avenue. This wetland also extends outside of the ROW and is likely connected to, and a part of wetland W-11. This feature is a PRA as it is mapped as Prime Wetland by the City of Portsmouth.

(2) More than 1,000 sq. ft. of alteration to the wetland: a functions and values assessment equivalent to the model set forth in Appendix A of The Highway Methodology Workbook Supplement – Wetland Functions and Values: A Descriptive Approach, NAEPP-360-1-30a, US Army Corps of Engineers, New England Division, September 1999, as amended.

Functions and values assessments for wetlands with 1,000 SF of proposed temporary impacts or greater were assessed using data collected in the field by VHB Environmental Scientist, Trent Delehanty (NH CWS #555), in accordance with the *U.S. Army Corps of Engineers New England District - The Highway Methodology Workbook Supplement: Wetland Functions and Values - A Descriptive Approach* (1999). Thirteen wetland functions and values are recognized under the USACE methodology and a fourteenth (Ecological Integrity) is indicated in NHDES rules as follows:

- | | |
|---|---|
| ➤ Groundwater Recharge/Discharge (GW) | ➤ Wildlife Habitat (WH) |
| ➤ Floodflow Alteration (Storage & Desynchronization) (FA) | ➤ Recreation (Consumptive & Non-Consumptive) (RE) |
| ➤ Fish and Shellfish Habitat (FS) | ➤ Educational/Scientific Value (ED) |
| ➤ Sediment/Toxicant Pathogen Retention (SR) | ➤ Uniqueness/Heritage (UH) |
| ➤ Nutrient Removal/Retention/Transformation (NR) | ➤ Visual Quality/Aesthetics (VQ) |
| ➤ Production Export (Nutrient)(PE) | ➤ Threatened or Endangered Species Habitat (ES) |
| ➤ Sediment/Shoreline Stabilization (SS) | ➤ Ecological Integrity (EI) |

The USACE Highway Methodology provides a list of considerations and qualifiers that are used to assess the occurrence of each function or value, followed by a subjective determination of Principal Functions and Values, with documentation of supporting rationale on standard forms. Ecological Integrity is a function not assessed by the USACE Highway Methodology, but is required by NHDES rule to be evaluated. This function and value assessment was determined using the NH Method created by UNH Extension. Refer to the **Wetland Function – Value Evaluation Forms** provided in **Attachment E**.

In accordance with the USACE Highway Methodology practices, functions are either assigned a P for Principal Function, or an X indicating the function or value is provided by the wetland or left blank to indicate that the function is not provided by the wetland. The results of these assessments are displayed in **Table 5** below.

Table 5 Wetland Functions and Values

Wetland ID	Cowardin Class	GW	FA	FS	SR	NR	PE	SS	WH	RE	ED	UH	VQ	ES*	EI
W-5	PSS1C	-	X	-	X	P	-	-	-	-	-	-	-	X	4.1
W-7	PEM1C/E PEM5C/E	X	P	-	-	P	-	-	-	-	-	-	-	X	5.7
W-8	PEM1C	X	P	-	-	P	-	-	-	-	-	-	-	X	5.2
W-11	PEM5E, PEM1C, PSS1C/E	P	P	-	P	P	-	-	-	-	-	X	-	X	4.4
W-12	PEM5E	P	P	-	P	P	-	-	-	-	-	X	-	X	4.4

*RTE species have been noted within the vicinity of these wetlands, and as such will be noted as functioning as endangered species habitat. Due to the sensitive nature of these species, no additional information can be given at this time.

Nutrient removal/retention/transformation is a principal function of all these wetlands. Floodflow alteration was a principal function that was present in each of these wetlands, other than W-5 where it was identified as a function or value provided by the wetland. These functions and values are common within wetlands found in utility ROW corridors in low lying areas. These areas commonly provide storage of water during flood events and can trap nutrients in runoff water from upslope areas. Temporary matting impacts will not adversely impact these functions and values. W-11 and W-12 are large and extend outside of the surveyed work area. According to the desktop screening, these wetlands are within, or likely continuous with Prime Wetlands within the City of Portsmouth. As such additional principal functions of groundwater recharge/discharge, and sediment/toxicant/pathogen retention were identified. These principal functions provide the potential for the wetlands to serve as groundwater recharge and/or discharge areas, and the potential to trap sediment, toxicants, or pathogens in runoff water from surrounding uplands or upstream eroding wetland areas. Temporary matting impacts will not adversely impact these principal functions.

- (3) **More than 250 sq. ft. of alteration to the wetland buffer (regardless of the amount of alteration to the wetland): a description of the 100-foot buffer including vegetation type, the percent of the buffer with invasive species, and the percent of the buffer that is paved or developed.**

Inland wetlands W-2, W-3, W-5, W-6, W-6A, W-7, W-8, W-10, W-11, W-12, and W-14 are greater than 10,000 square feet, and 100-foot wetland buffers were inventoried in the field. These 100-foot wetland buffers are shown in the **Project Plans** provided in **Attachment A**. Additionally, a brief description of each buffer is provided below, and a table that describes the size of the buffers is provided in **Table 2** which is included in **Part 10.1017.21(3)** above. Wetland buffers and the associated plant species composition were only described within the Eversource ROW. Proposed work disturbances within the 100-foot wetland buffers are provided in **Table 3 Wetland and Wetland Buffer Impact Summary** which is included in **Part 10.1017.21(2)** above.

- The buffer of wetland W-2 is within an urban area, and primarily consisted of a parking lot that housed Structure 15 during delineation. As previously described, this area is now a recently reclaimed roadside that had recently been hydroseeded during the July 1, 2026 site visit. This area also includes a stormwater outfall along the hillside that wetland is located on the toe of slope. Upland species noted (not including the hydroseed that has yet to germinate) include: staghorn sumac (*Rhus typhina*), species of goldenrod, common milkweed (*Asclepias syriaca*), brambles (*Rubus* spp.), and species of vetch (*Vicia* spp.). No invasive species were observed within the buffer. The impervious surface was estimated to be 25% of the buffer within the proposed work area. Temporary upland matting will be used to access to Structure 15 and proposed work area.
- The buffer of wetland W-3 contained the following native plant species: American basswood (*Tilia americana*), and pokeweed (*Phytolacca americana*). Invasive flora species within the buffer include glossy buckthorn, multiflora rose, common tansy (*Tanacetum vulgare*), and oriental bittersweet. These invasive species comprised approximately 60% of the foliar cover of the buffer. Additionally, a portion of the northern portion of the buffer includes a developed and impervious roadway. The impervious surface of the buffer is estimated to be 5%.
- The buffer of wetland W-5 contained the following native plant species: American basswood, staghorn sumac, pokeweed, bracken fern (*Pteridium aquilinum*), and rough-stemmed goldenrod. Invasive flora species within the buffer include oriental bittersweet, glossy buckthorn, common tansy, and multiflora rose. Invasive species comprise approximately 50% of the foliar cover of the buffer. Additionally, an impervious roadway to the south of Structure 16 comprises a portion of the buffer. The impervious surfaces are estimated to be 10% of the wetland buffer.
- The buffer of wetland W-6 includes the following native plant species: staghorn sumac, bracken fern, and American basswood saplings. Invasive flora species observed within this buffer include species of smartweed (*Polygonum* spp.), oriental bittersweet, common tansy, glossy buckthorn, and multiflora rose. Invasive species comprise approximately 50% of the foliar cover within the buffer. Impervious surfaces associated with this buffer include a roadway that is within the buffer to the south, and a shopping complex with impervious loading docks to the east. Impervious surfaces are estimated to be 30% of the wetland buffer.
- The buffer of wetland W-6A extends to the work area of Structure 18. Buffer vegetation includes staghorn sumac and species of goldenrod. Impervious surfaces associated with this buffer include commercial parking areas and Arthur Brady Drive which comprises approximately 65% of the wetland buffer. Access to Structure 18 is proposed on existing paved driveway. Upland matting will be used to protect the landscaped and maintained vegetation associated with Home Depot, and no ground disturbing impacts outside of the structure replacement is proposed at this location.
- The buffer of wetland W-7 includes the following native plant species: flat-top goldentop (*Euthamia graminifolia*), rough-stemmed goldenrod, black cherry (*Prunus serotina*), an unidentified species of grass, species of meadowsweet, and brambles. Invasive species found within the buffer of this wetland include glossy buckthorn, multiflora rose, oriental bittersweet, and common mullein (*Verbascum thapsus*). Invasive species comprise approximately 25% of the observed wetland buffer. No impervious surfaces were documented within the wetland buffer within the utility ROW.
- The buffer of wetland W-8 includes the following native plant species: flat-top goldentop, rough-stemmed goldenrod, common burdock (*Arctium minus*), common mullein, staghorn sumac, species of meadowsweet, and brambles. Invasive species found within the buffer of this wetland include autumn olive (*Elaeagnus umbellata*), glossy buckthorn, multiflora rose, and oriental bittersweet. Invasive species comprise approximately 40% of the

observed wetland buffer. Impervious surfaces within the wetland buffer include a paved commercial parking area south of the wetland. The estimated impervious area is approximately 5% of the wetland buffer.

- The buffer of wetland W-10 included the following native plant species: staghorn sumac, aspen (*Populus tremuloides*), rough-stemmed goldenrod, and bracken fern. Invasive species found within the buffer of this wetland include glossy buckthorn, purple loosestrife, and common reed. It is estimated that invasive species comprise 60% of the foliar cover of the wetland buffer. It is also important to note that an impervious roadway to the east and a car dealership to the west provide impervious surface within this wetland buffer and comprise approximately 30% of the wetland buffer. Impacts to this buffer have been avoided, all proposed access within the buffer is through existing access and no ground disturbance within the buffer is proposed.
- The buffer of wetland W-11 included the following native plant species: staghorn sumac, bracken fern, brambles, and American basswood. An unknown grass species was observed within the mowed roadway and could not be positively identified. Invasive species within this buffer include glossy buckthorn and purple loosestrife. It is estimated that invasive species comprise 30% of the foliar cover of the wetland buffer. This wetland buffer is largely comprised of impervious surfaces associated with the roadway to the west, and parking lots to the north, east, and south. Impervious surfaces are estimated at 90% within the project ROW.
- The wetland boundary of W-12 abuts the parking lot where proposed work will take place. Impervious parking lot and roadways comprise much of this wetland buffer. The wetland buffer adjacent to the roadway contains native vegetation including staghorn sumac, and an unidentified species of grass. Invasive species along this roadway include multiflora rose and oriental bittersweet. This wetland buffer is largely comprised of impervious surfaces associated with the roadway to the north, and parking lots to the south. Impervious surfaces are estimated at 80% within the wetland buffer in the project ROW. No wetland buffer impacts are proposed with work associated with Structure 37 as work is contained within previously developed parking facilities associated with the Portsmouth Hospital.
- The buffer of W-14 is comprised primarily of impervious surfaces associated with the parking lot of the Portsmouth Regional Hospital and Borthwick Avenue. Plant species within vegetated portions of this buffer include an unknown grass species and Japanese knotweed (*Polygonum cuspidatum*). The edges of this swale are routinely mowed which made plant identification difficult. An estimated 20% of the vegetated portion of the buffer is Japanese Knotweed. The impervious surfaces comprise approximately 95% of the wetland buffer. No wetland buffer impacts are proposed with work associated with Structure 37 as work is contained within previously developed parking facilities associated with the Portsmouth Hospital.

Section 10.1017.23: The application shall describe the impact of the proposed project with specific reference 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), and shall demonstrate that the proposed site alteration is the alternative with the least adverse impact to areas and environments under the jurisdiction of this Ordinance.

Please view the responses to **Section 10.1017.60** below.

Section 10.1017.24: Where feasible, the application shall include removal of impervious surfaces at least equal in area to the area of impervious surface impact. The intent of this provision is that the project will not result in a net loss of pervious surface within a jurisdictional wetland buffer. If it is not feasible to remove impervious surfaces from the wetland buffer at least equal in area to the area of new impervious surface impact, the application shall include a wetland buffer enhancement plan that describes how the wetland functions and values will be enhanced to offset the proposed impact.

Construction disturbance has been avoided and minimized throughout the design process and while planning the construction of this project. No permanent wetland or wetland buffer impacts are proposed as part of this project. Following installation of the new structures, the existing wood poles will be removed from the ROW and properly disposed of.

Where possible, proposed access routes occur within the footprint of historic access used for previous maintenance and construction projects within the ROW. These areas have undergone previous grading and road building, and utilizing these routes reduces the amount of temporary impact on the landscape and provides a more stable location for mats to be placed within the wetland buffers.

A wetland buffer enhancement plan has been provided in **Section 10.1017.25(1)** below. As discussed in the previous application package **Section 10.1017.22(2)** functions and values of the wetlands are not anticipated to be impacted adversely as part of this project, and restoration in accordance with the wetland buffer enhancement plan will maintain the current functions and values of the wetlands.

Section 10.1017.25: A wetland buffer enhancement plan shall be designed to enhance the functions of the jurisdictional wetland and/or wetland buffer on the lot, and to offset the impact of the proposed project

(1) The wetland buffer enhancement plan shall include a combination of new plantings, invasive species removal, habitat creation areas, improved site hydrology, or protective easements provided offsite.

As stated in **Section 10.1017.20(4)** the project proposes unavoidable temporary impacts to the wetland buffer. These proposed impacts consist of temporary upland matting to facilitate access to the structures proposed for replacement. No soil disturbance is anticipated within the wetland buffers, but if disturbance were to occur, the following best management practices will be undertaken to ensure a stable and functional wetland buffer remains on the landscape. If soil disturbance is to occur these sediments will be stabilized with a native upland plant seed mix and mulched with weed-free straw. No contractor has been selected for this project and seed mix composition can vary by contractor preference. A common seed mix used within utility ROWs is New England Erosion Control/Restoration Mix for dry sites produced by New England Wetland Plants, Inc. Species included within this mix are Canada wild rye (*Elymus canadensis*), annual ryegrass (*Lolium multiflorum*), perennial ryegrass (*Lolium perenne*), little bluestem (*Schizachyrium scoparium*), Indian grass (*Sorghastrum nutans*), switch grass (*Panicum virgatum*), and upland bentgrass (*Agrostis perennans*). Native species used within these mixes are typically quick to establish on sites providing soil stabilization and compatibility with the utility ROW use. Best management practices outlined in the *Best Management Practices Manual for Utility Maintenance in and Adjacent to Wetlands and Waterbodies in New Hampshire* (or "Utility BMP Manual," March 2019), published by the New Hampshire Department of Natural and Cultural Resources (NHDNCR), and recently issued *New Hampshire Stormwater Manual* (or "Stormwater Manual", February 2025) will be adhered to. A qualified environmental monitor will conduct inspections weekly as work progresses on the site and will monitor the site post construction to ensure disturbed soils throughout the project areas including within wetland buffers are stabilized. Per the recommendations

of the forementioned Stormwater Manuals a site is deemed to be stabilized when a minimum of 85% vegetative cover has been established.

(2) Where the vegetated buffer strip contains grass or non-native plantings, or is otherwise not intact, the first priority of the wetland buffer enhancement plan shall be to include revegetation of the vegetated buffer strip with native, low-maintenance shrubs and other woody vegetation.

Please see the wetland buffer enhancement plan described above. Quickly establishing native plant mixes are preferred within utility ROWs to control erosion and provide the disturbed areas a native seedbank. Due to the routine vegetation maintenance that occurs within Eversource utility ROWs (typically every five to seven years), aside from some low growing shrub species, woody stemmed vegetation is difficult to establish into perpetuity.

Section 10.1017.60: Public and Private Utilities within Rights-of-Way in Wetlands and Wetland Buffers

The installation of utilities (including power lines and pipelines) within a right-of-way in an inland wetland or wetland buffer shall comply with all of the following criteria instead of the criteria set forth in section 10.1017.50:

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

As described above, the project will include the replacement of thirteen wood structures (15, 16, 18, 21, 22, 23, 24, 26, 37, 38, 39, and 40) with new weathered steel structures under the ACR program. The structures proposed for replacement will be replaced in the same configuration, in accordance with current construction methods and materials. The proposed project is part of Eversource's ongoing maintenance program conducted to ensure reliable electric service for their customers. The Eversource transmission system is an integral part of the regional power system delivering electricity to customers throughout New England. It is critical that this system remains operational without interruption from preventable outages.

(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;

Avoidance and minimization of impacts to jurisdictional resources was considered when designing the access routes and work areas. The following standard best management practices will be adhered to during and post construction.

In areas which ground disturbance will occur as part of this work, crews will install wildlife friendly erosion and sediment control barriers in accordance with the *Utility BMP Manual* and *Stormwater Manual*. Selected BMPs may include straw wattles, silt fence, wood chip/compost berms/tubes, and/or other approved BMPs. No erosion control BMPs with welded plastics will be used.

Other BMPs such as stabilized construction exits, water bars, and erosion control blankets will also be used along proposed access ways and adjacent to structure locations to manage stormwater run-off, reduce erosion and stabilize soils. As requested by NHF&G, wildlife-friendly erosion controls, such as those made from woven organic materials or other biodegradable materials will be used, rather than those that use welded plastic netting or polypropylene. Erosion control BMPs will be inspected daily by the contractor crews and weekly by a qualified environmental monitor, hired by Eversource, to ensure that the controls are maintained and are properly functioning throughout the duration of the Project.

Where the proposed access or the 100-foot by 100-foot structural work pads intersect wetlands, timber mats (typically with dimensions of 16 feet wide by 4 feet long) will be installed to safely stage equipment and crews while minimizing soil disturbance and rutting within these resources. Some work pads may need to be two-tiered or off-set due to local topography or to avoid wetland impacts. Where necessary, timber matting will be placed within the construction work pads around structure replacement locations within wetland areas to accommodate necessary equipment.

As soon as possible after the completion of the structure replacement work, timber matting and construction debris will be removed from the Project ROW and properly disposed of off-site. Stabilization and restoration of disturbed areas/exposed soils will be initiated as soon as possible once timber mats are pulled and structural work is completed. Due to the use of timber mats within wetlands, it is anticipated that minimal restoration within temporarily impacted wetlands will be required, and that natural vegetative re-colonization of impacted areas is expected during summer vegetative growth periods after mat removal activities have concluded. VHB will visit the project ROW, post-construction to assess conditions, guide work crews on restoration, and determine if additional promotion of vegetation (seeding) is required. If necessary, an appropriate upland and/or wetland seed mix will be applied to any areas where cover is slow to develop. Additionally, straw or weed-free hay will be applied in conjunction with seed. In accordance with Env-Wt 307.12(f), if the temporarily impacted areas do not have at least 75% revegetation after two growing seasons, replanting, or reseeded would occur in those areas. Per the recommendations of the recently published NH Stormwater Manual a site is deemed to be stabilized when soils on the site will not experience accelerated or unnatural erosion conditions during a 10-year storm event and a minimum of 85% vegetative cover has been established.

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

As described briefly above, avoidance and minimization of impacts to jurisdictional resources were considered when designing the access routes and work areas of this project. Examples of this include the shift of the access route to avoid impacts to W-4 (not jurisdictional in the City of Portsmouth due to size restriction), removal of in-ROW access to Structure 24 eliminating buffer impacts to W-10 and matting impacts to W-9 (not jurisdictional in the City of Portsmouth due to size restriction), and removal of in-ROW access to Structure 40 requiring no additional matting impacts to W-11. Additional considerations such as existing access routes, landowner relations, and high traffic public roadway use were also taken into consideration when determining the access routes and work areas.

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

The current scope of work is limited to work areas at each structure, and an access route designed to provide safe and stable transport of crews and equipment to each work area. No tree clearing is proposed as part of this project and is discussed in detail below in **Sections 10.1018.23(2) and 10.1018.23(3)**. Mowing of vegetation may be required prior to work to allow for mobilization and access for work crews.

Section 10.1018.10: Stormwater Management

All construction activities and uses of buildings, structures, and land within wetlands and wetland buffers shall be carried out so as to minimize the volume and rate of stormwater runoff, the amount of erosion, and the export of sediment from the site. All such activities shall be conducted in accordance with Best Management Practices for stormwater management including but not limited to:

1. New Hampshire Stormwater Manual, NHDES, February 2025.

2. Best Management Practices to Control Non-point Source Pollution: A Guide for Citizens and City Officials, NHDES, January 2004.

Eversource and their contractors will install wildlife friendly erosion and sediment control barriers in accordance with the *Utility BMP Manual* and *Stormwater Manual*. Upon review of the *Best Management Practices to Control Non-point Source Pollution: A Guide for Citizens and City Officials, NHDES, January 2004*, the recommendations and guidelines provided for this project closely follow these two manuals. The *Utility BMP Manual* is a manual created by NHDNCR specifically to include the unique situations found during the routine maintenance activities within utility ROWs. Additional erosion control procedures, best management practice specifications, and construction procedures are provided within the Plan Notes included on the **Project Plans** provided in **Attachment A**.

Section 10.1018.20: Vegetation Management

Section 10.1018.22: If the vegetated buffer strip specified in Section 10.1018.21 contains an area that has a slope of 10% or more for at least 10 feet in a direction perpendicular to the edge of the jurisdictional area, the required width of the vegetated buffer strip shall be increased to 55 feet from the edge of a vernal pool and to 40 feet from the edge of any other wetland.

Screening the site locations using LiDAR data from GRANITView no slopes of 10% or greater for at least 10 or more feet were observed within the work areas. If steep slopes occur on the site and require stabilization, best management methods provided within **Section 10.1018.10** will be used, including erosion control blankets. 2-foot and 10-foot contours are shown on the **Project Plans** provided in **Attachment A** for reference. A specification for the installation of erosion control blankets can be found on the **Project Plans** provided in **Attachment A**.

Section 10.1018.23: Removal or cutting of vegetation

(1) Chemical control of vegetation is prohibited in all areas of a wetland or wetland buffer.

No chemical control of vegetation is proposed as part of this project within the uplands, wetlands, or wetland buffers.

(2) The removal or cutting of vegetation is prohibited in a wetland or vegetated buffer strip, except that non-chemical control of plants designated by the State of New Hampshire as "New Hampshire Prohibited Invasive Species" is permitted.

Routine vegetation maintenance within Eversource Utility ROWs occur on four to seven year cycles to maintain line clearance. As such trees greater than 6-inches at diameter breast height (dbh) are uncommon within the ROW, and no trees of this size are proposed to be cut. Mowing of vegetation may be required prior to work to allow for mobilization and access for work crews.

(3) The removal of more than 50% of trees greater than 6" diameter at breast height (dbh) is prohibited in the limited cut area.

As stated above, routine vegetation maintenance within Eversource Utility ROWs occurs on four to seven year cycles to maintain line clearance. As such trees greater than 6-inch dbh are uncommon within the ROW, and no trees of any size are proposed to be cut.

Section 10.1018.24: Fertilizers

- (1) The use of any fertilizer is prohibited in a wetland, vegetated buffer strip or limited cut area.**

Fertilizers are not proposed to be used during the construction or restoration of this project. Restoration of disturbed upland soils typically includes temporary stabilization with straw and application of a native plant seed mix to promote vegetative stabilization. It is important to note the hydroseed that may contain included fertilizers applied within the buffer of Wetland W-2 is an existing condition, and no hydroseeding with included fertilizers is proposed as part of this project.

- (2) The use of fertilizers other than low phosphate and slow release nitrogen fertilizers is prohibited in any part of a wetland buffer. 10.1018.25 Pesticides and herbicides: The use of pesticides or herbicides is prohibited in a wetland or wetland buffer, except that application of pesticides by a public agency for public health purposes is permitted.**

As stated above, fertilizers are not proposed to be used during the construction or restoration of this project. Restoration of disturbed upland soils typically includes temporary stabilization with straw and application of a native plant seed mix to promote vegetative stabilization. The hydroseed that may contain included fertilizers applied within the buffer of Wetland W-2 is an existing condition, and no hydroseeding with included fertilizers is proposed as part of this project.

Section 10.1018.30: Porous Pavement in Wetland Buffer

Section 10.1018.31:

All new pavement installed in a wetland buffer shall be porous pavement. The Planning Board may allow exceptions to this requirement where it can be demonstrated that the height of ground water, condition of soil, or other factors as described in the application are not appropriate for porous pavement.

No pavement is proposed as part of this project. Access routes within the upland wetland buffers will be accessed using temporary upland matting and no fills will be used within the wetland buffers.

Section 10.1018.32:

An application that proposes porous pavement in a wetland buffer shall include a pavement maintenance plan addressing erosion control, periodic removal of sediment and debris from the porous surfaces, snow management, and repairs

No pavement is proposed as part of this project. Access routes within the upland wetland buffers will be accessed using temporary upland matting and no fills will be used within the wetland buffers and are denoted on the **Project Plans** provided in **Attachment A**.

Section 10.1018.40: Wetland Boundary Markers

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



The current proposed plan is to use vinyl ribboning to indicate wetland boundaries for contractors. Permanent wetland boundary markers will be further discussed with the Conservation Commission. This work will occur within the E194 Utility ROW within easements on privately owned property.

Sincerely,

A handwritten signature in cursive script that reads "Sherrie Trefry".

Sherrie Trefry, CSS
Energy Market Lead

cc: City of Portsmouth Planning Board
Ashley Nicoletti, Eversource

Attachments

- Attachment A- Project Plans
- Attachment B- Site Photo Log
- Attachment C- Tax Maps
- Attachment D- USGS Location Map
- Attachment E- Functions and Values Assessments
- Attachment F- July 8, 2026 Conservation Commission Meeting Minutes
- Attachment G- Construction Specifications

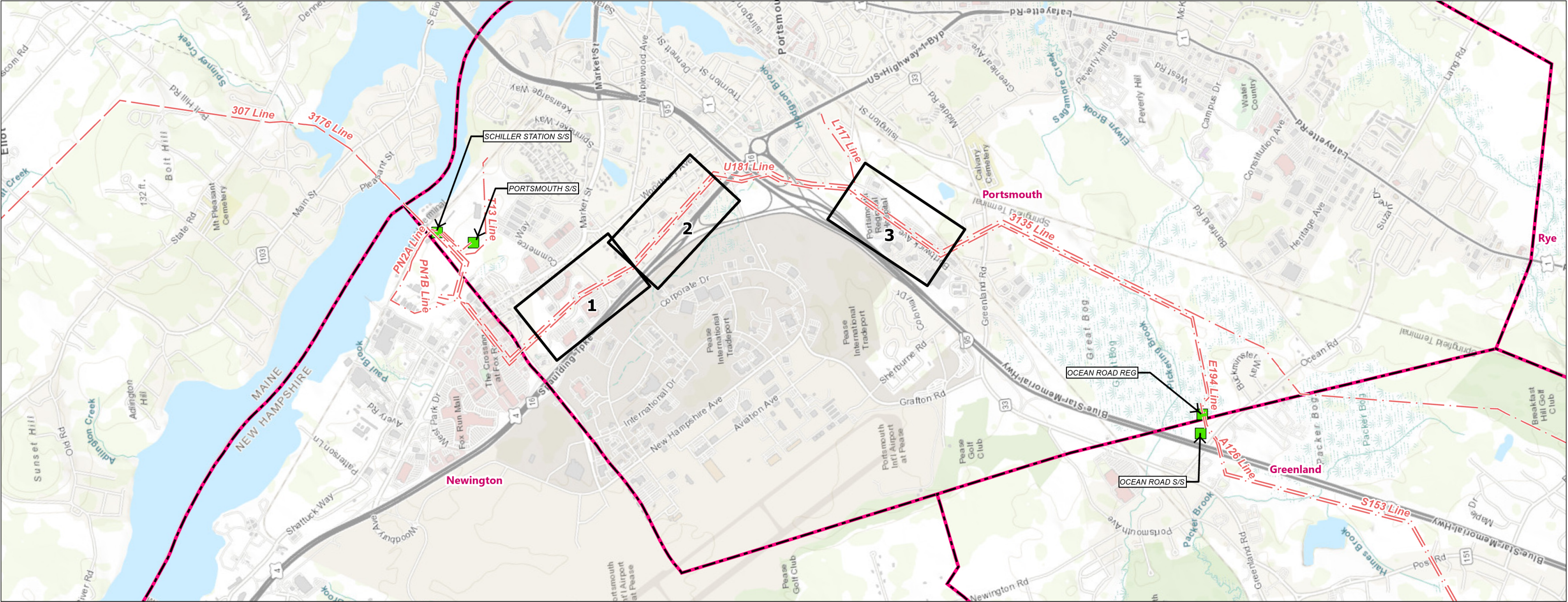
A

Project Plans

E194 Line - Structure Replacement Project

Portsmouth, NH
Environmental Resources Map

Date: August 03, 2026



Legend

- Substation
- Map Sheet
- Municipal Boundary
- Overhead Eversource Line



0 0.25 0.5 Miles

INDEX OF FIGURES

Title Sheet / Index Map
Map Sheet 1-3

Map Notes:

Coordinate System: NAD 1983 StatePlane New Hampshire
FIPS 2800 Feet

Date Source: Existing ROW Lines, Structures, and
Transmission Lines provided by Eversource Energy.
Wetlands and Watercourses delineated and certified by
VHB. Additional sources include: FEMA, and NH GRANIT.

PREPARED FOR:

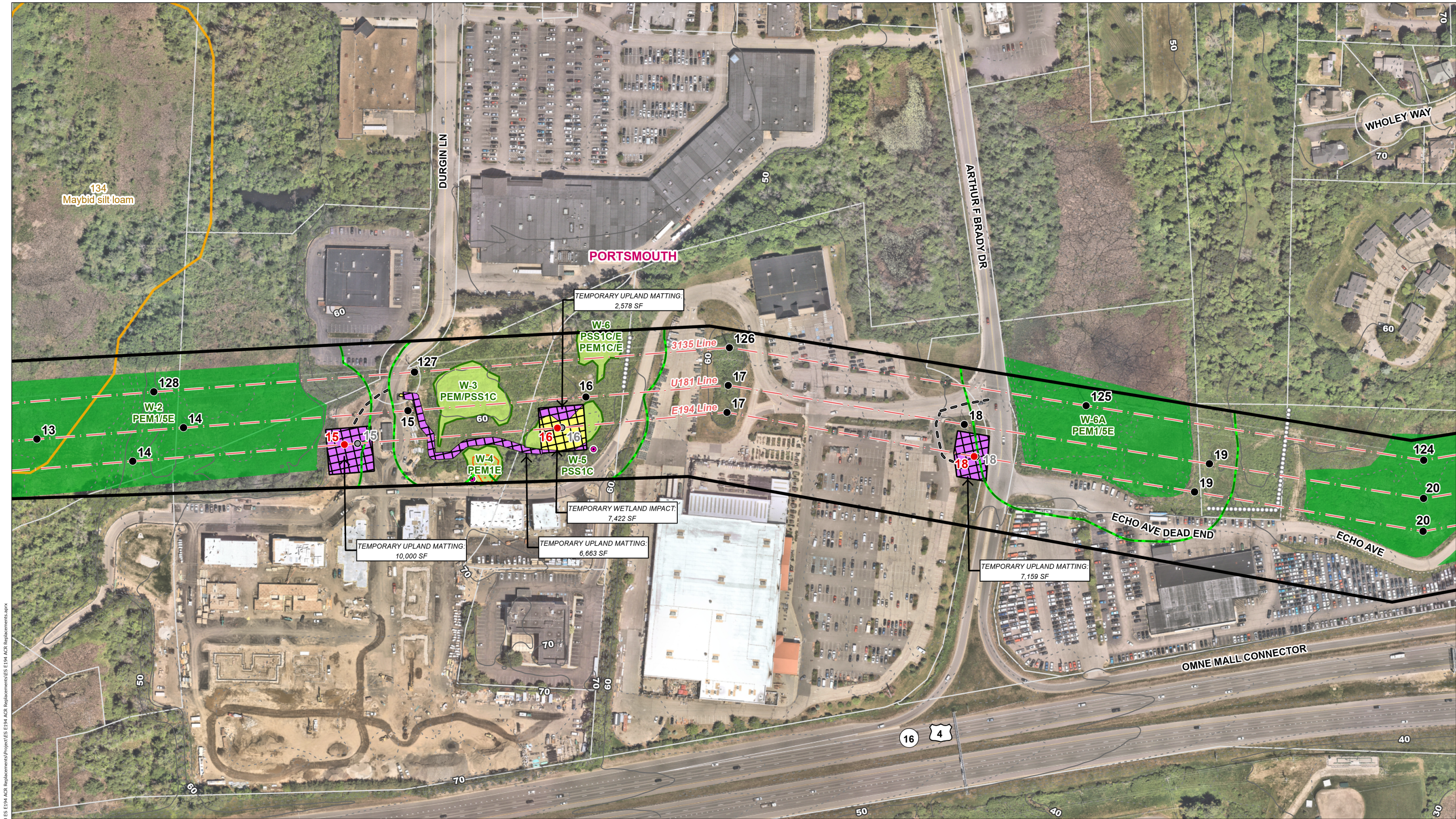


13 Legends Drive
Hookset, NH 03106

PREPARED BY:



2 Bedford Farms Drive
Suite 200
Bedford, NH 03110



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INDEX MAP

● Existing Structure

● Existing Structure to be Replaced

● Proposed

--- Overhead Eversource Line

— Existing Right-of-Way (ROW)

▭ Eversource Owned Property

▭ Work Pad

— Sediment Control Barrier

— 100' Buffer to BVW

— Delineated Stream

— Watercourse (not delineated)

— Delineated Wetland Edge

— Field Delineated Wetland

— Previous Delineated Wetland

⬮ Gate

--- Existing Access

--- Proposed Access

--- Off-ROW Access Pending Rights

▨ Temporary Construction Matting

▨ Upland Matting

▨ Tidal waters

▨ Flood plain wetlands adjacent to Tier 3 streams

▨ Prime Wetlands with 100ft buffer

▨ Prime Wetlands

▨ FEMA 100-Year Flood Zone

▨ Turtle Overwintering Area

● Culvert

○○○○ Stonewall

— Railroad

--- 2-foot Contour

— 10-foot Contour

▨ Delineated Very Poorly Drained Soils

▨ NRCS Very Poorly Drained Soils

▨ Municipal Boundary

▨ Parcel Boundary

EVERSOURCE
ENERGY

E194 Transmission Line
Structure Replacement Project

Portsmouth, NH

Date: August, 2026

MAP SHEET 1 of 3

1 Inch = 200 Feet

0 100 200 Feet

Right of Way boundaries, easements, fee property, substation, and junction locations depicted as points, lines, polygons and corresponding attribute data is to be considered approximate and not to be construed as the result of a field survey.



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INDEX MAP

● Existing Structure	— Sediment Control Barrier	Gate	• Tidal waters	• Culvert	▬ Municipal Boundary
● Existing Structure to be Replaced	— 100' Buffer to BVW	— Existing Access	▬ Flood plain wetlands adjacent to Tier 3 streams	○○○○ Stonewall	▬ Parcel Boundary
● Proposed	— Delineated Stream	— Proposed Access	▬ Prime Wetlands with 100ft buffer	— Railroad	
— Overhead Eversource Line	— Watercourse (not delineated)	— Off-ROW Access Pending Rights	▬ Prime Wetlands	— 2-foot Contour	
— Existing Right-of-Way (ROW)	— Delineated Wetland Edge	▬ Temporary Construction Matting	▬ FEMA 100-Year Flood Zone	— 10-foot Contour	
▬ Eversource Owned Property	▬ Field Delineated Wetland	▬ Upland Matting	▬ Turtle Overwintering Area	▬ Delineated Very Poorly Drained Soils	
▬ Work Pad	▬ Previous Delineated Wetland		▬ NRCS Very Poorly Drained Soils		

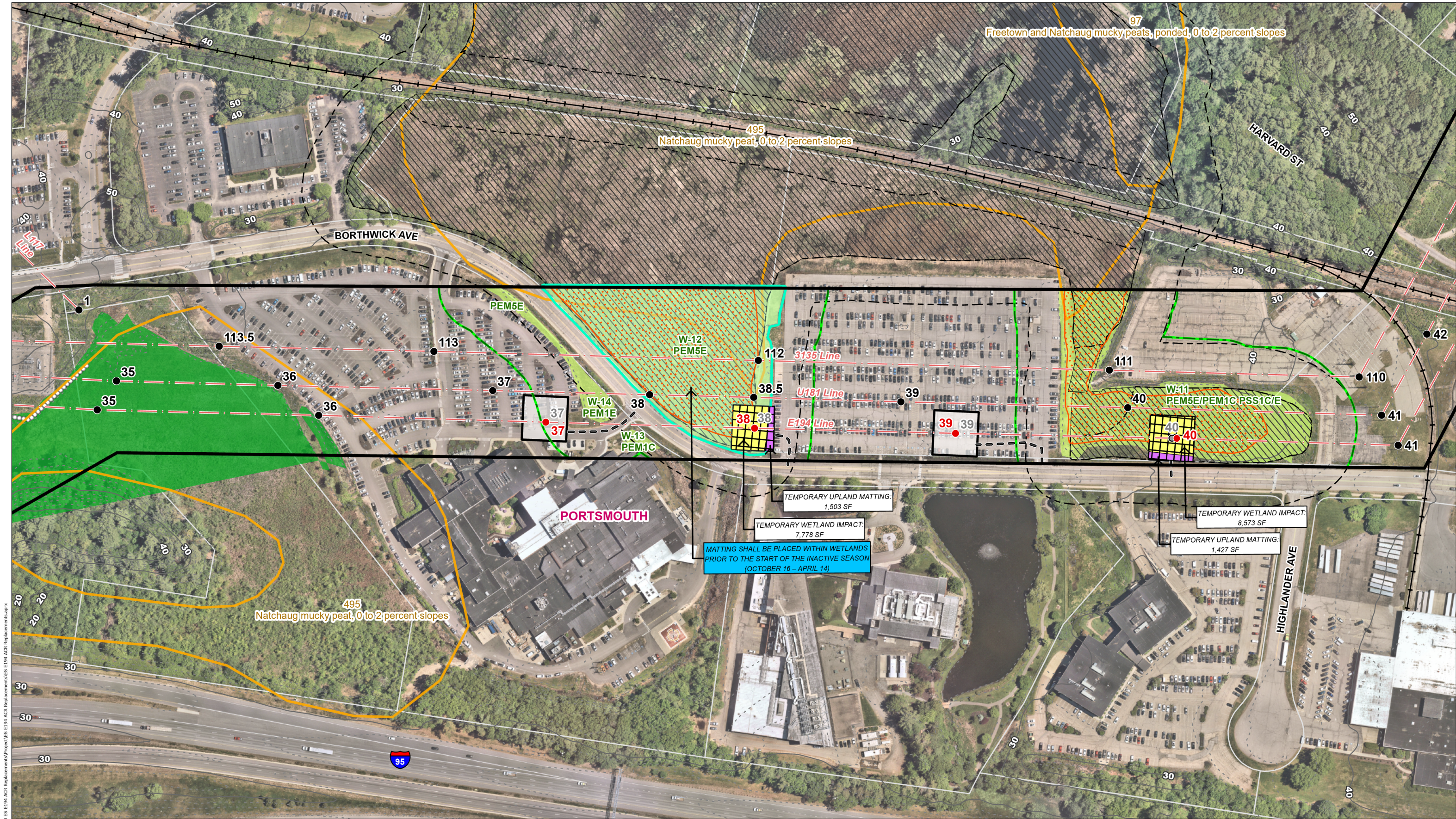
E194 Transmission Line Structure Replacement Project

Portsmouth, NH

Date: August, 2026

MAP SHEET 2 of 3

Right of Way boundaries, easements, fee property, substation, and junction locations depicted as points, lines, polygons and corresponding attribute data is to be considered approximate and not to be construed as the result of a field survey.



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INDEX MAP

● Existing Structure

● Existing Structure to be Replaced

● Proposed

--- Overhead Eversource Line

— Existing Right-of-Way (ROW)

▭ Eversource Owned Property

▭ Work Pad

— Sediment Control Barrier

— 100' Buffer to BVW

— Delineated Stream

— Watercourse (not delineated)

— Delineated Wetland Edge

— Field Delineated Wetland

— Previous Delineated Wetland

⬮ Gate

--- Existing Access

--- Proposed Access

--- Off-ROW Access Pending Rights

▨ Temporary Construction Matting

▨ Upland Matting

• Tidal waters

▨ Flood plain wetlands adjacent to Tier 3 streams

▨ Prime Wetlands with 100ft buffer

▨ Prime Wetlands

▨ FEMA 100-Year Flood Zone

▨ Turtle Overwintering Area

• Culvert

○○○○ Stonewall

— Railroad

--- 2-foot Contour

— 10-foot Contour

▨ Delineated Very Poorly Drained Soils

▨ NRCS Very Poorly Drained Soils

▭ Municipal Boundary

▭ Parcel Boundary

0 100 200

1 Inch = 200 Feet

↑

North Arrow

EVERSOURCE ENERGY

E194 Transmission Line Structure Replacement Project

Portsmouth, NH

Date: August, 2026

MAP SHEET 3 of 3

Right of Way boundaries, easements, fee property, substation, and junction locations depicted as points, lines, polygons and corresponding attribute data is to be considered approximate and not to be construed as the result of a field survey.



B

Photographic Log



Photography Log

PROJECT INFORMATION

Eversource E194 Transmission ACR Maintenance Project

22774.00

LOCATION

Portsmouth, NH

1. Wetland W-2

Observations

View of wetland W-2
(PEM1/5E).

Taken: 9/26/2025 Facing: N



2. Wetland W-2 Buffer

Observations

View of the vegetated
portion of the buffer
of Wetland W-2.

Taken: 09/26/2025 Facing: E



3. Structure 15

Observations

View of Structure 15.
Photo also shows the
impervious portion of
the buffer of Wetland
W-2.

Taken: 9/26/2025 Facing: E



4. ROW Access

Observations

View of the historic
access to the ROW
from the commercial
roadway between
Structures 15 and 16.
The vegetated and
impervious portions of
wetland W-3's buffer
are shown.

Taken: 9/26/2025 Facing: SW



5. Wetland W-3 Buffer

Taken: 9/26/2025 Facing: SE

Observations

View of the vegetated buffer within the ROW of Wetland W-3.



6. Wetland W-3

Taken: 9/26/2025 Facing: NE

Observations

View of wetland W-3 (PEM1C/PSS1C).



7. Wetland W-5

Observations

View of wetland W-5.
Photo also includes
Structure 16 to the
right.

Taken: 9/26/2025 Facing: N



8. Wetland W-5 Buffer

Observations

View of the vegetated
wetland buffer of
wetland W-5 east of
Structure 15.

Taken: 9/26/2025 Facing: S



9. Wetland W-6

Taken: 9/26/2025 Facing: S

Observations

View of wetland W-6. Dense scrub-shrub cover made general site photos of this wetland difficult.



10. Wetland W-6 Buffer

Taken: 9/26/2025 Facing: W

Observations

View of the vegetated wetland buffer of wetland W-6 east of Structure 16.



11. Structure 18

Observations

View of Structure 18 looking towards Arthur F Brady Drive.

Taken: 9/26/2025 Facing: S



12. Arthur F Brady Drive

Observations

View of the wetland southeast of Arthur F Brady Drive.

Taken: 9/26/2025 Facing: SE



13. Structure 21

Taken: 10/17/2025 Facing: W

Observations

View of Structure 21 and the associated work area.



14. Wetland W-7

Taken: 10/17/2025 Facing: SE

Observations

View of Wetland W-7 (PEM1C/E).



15. Wetland W-7

Taken: 10/17/2025 Facing: SE

Observations

View of Wetland W-7 (PEM1C/E PEM5C/E). Stand of *Phragmites australis* can be seen on the left side of the photo.



16. Wetland W-7

Taken: 10/17/2025 Facing: E

Observations

View of the upland buffer north of Wetland W-7.



17. Wetlands W-7 and W-8

Taken: 10/17/2025 Facing: NW

Observations

View of the filled upland strip that divides wetland W-7 from wetland W-8.



18. Wetland W-8

Taken: 10/17/2025 Facing: SW

Observations

View of a stand of purple loosestrife within wetland W-8.



19. Wetland W-8

Taken: 10/17/2025 Facing: NE

Observations

View of wetland W-8.



20. Buffer of Wetland W-8

Taken: 10/17/2025 Facing: NE

Observations

View of the vegetated buffer south of wetland W-8.



21. Structure 24

Taken: 10/17/2025 Facing: N

Observations

View of Structure 24 and the associated work area.



22. Wetland W-10

Taken: 10/17/2025 Facing: SE

Observations

View of wetland W-10.



23. Wetland W-10 Buffer

Observations

View of the buffer of wetland W-10.

Taken: 10/17/2025 Facing: NW



24. Wetland W-11

Observations

View of wetland W-11 and Structure 40.

Taken: 10/17/2025 Facing: W



25. Wetland W-11 Buffer

Observations

View of the buffer of wetland W-11 along Borthwick Avenue.

Taken: 10/17/2025 Facing: NE



26. Wetland W-12

Observations

View of wetland W-12 and Structure 38.

Taken: 10/17/2025 Facing: N



27. Structure 39

Observations

View of the base of Structure 39 within the commercial parking in the ROW.

Taken: 10/17/2025 Facing: E



28. Wetland W-14 and Buffer of Wetland W-14

Observations

View of wetland W-14 and the buffer of W-14.

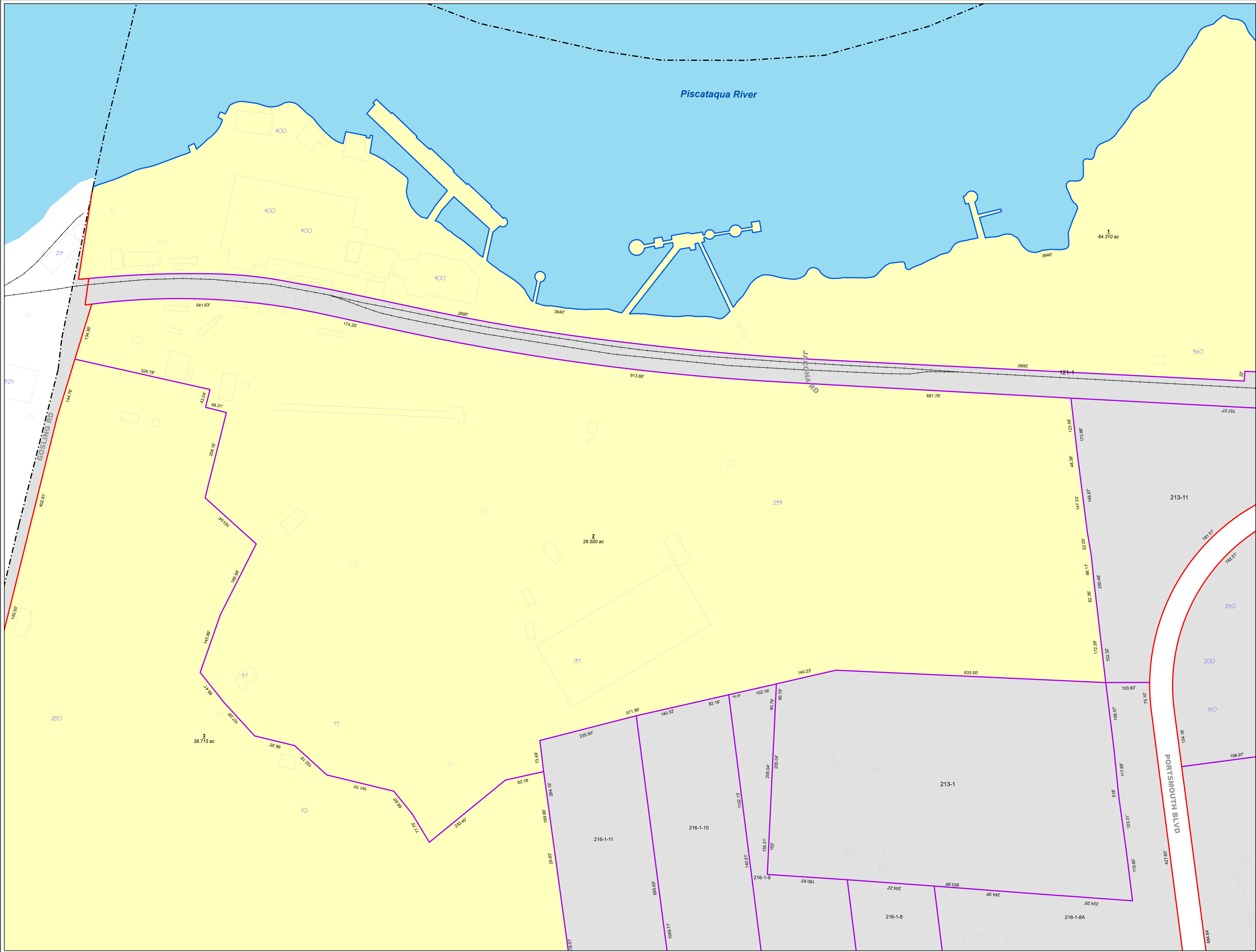
Taken: 10/17/2025 Facing: E





C

Tax Maps

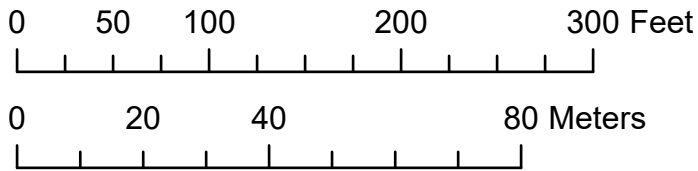


Partial Legend
See the cover sheet for the complete legend.

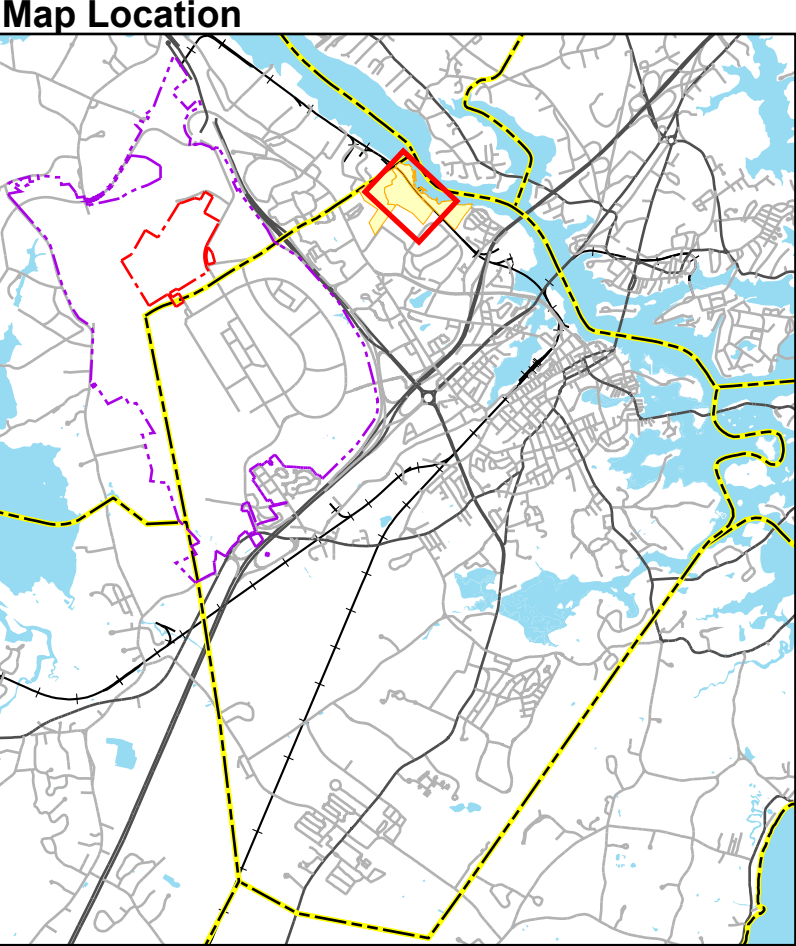
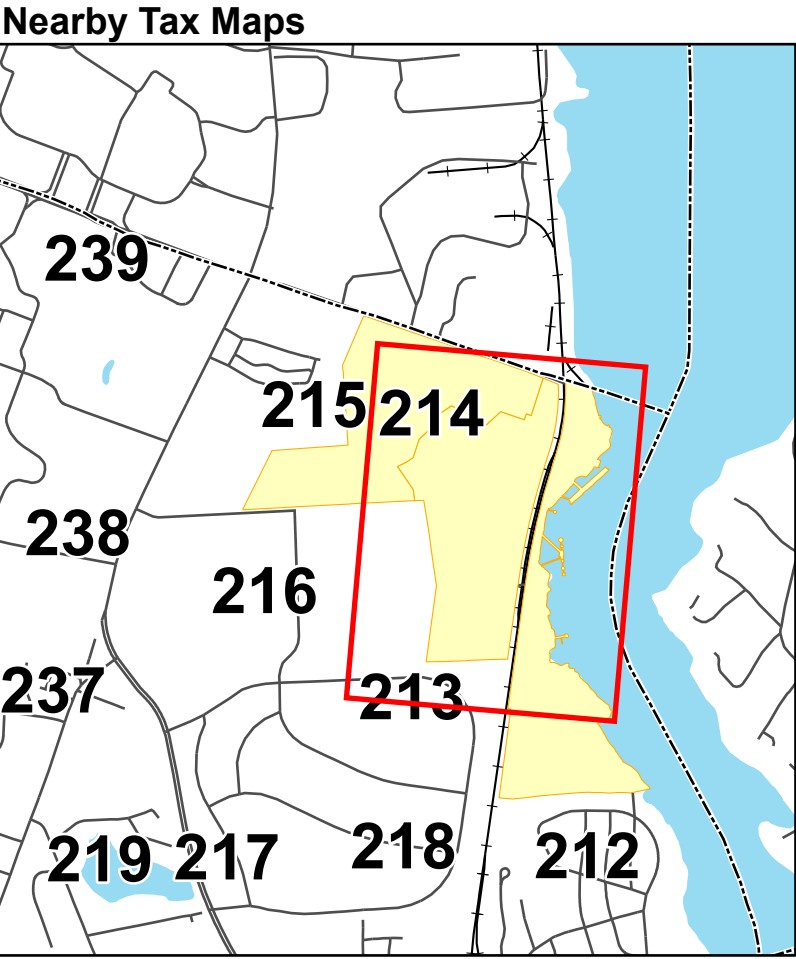
7-5A Lot or lot-unit number
2.56 ac Parcel area in acres (ac) or square feet (sf)
215 Address number
233-137 Parcel number from a neighboring map
68' Parcel line dimension
SIMS AVE Street name

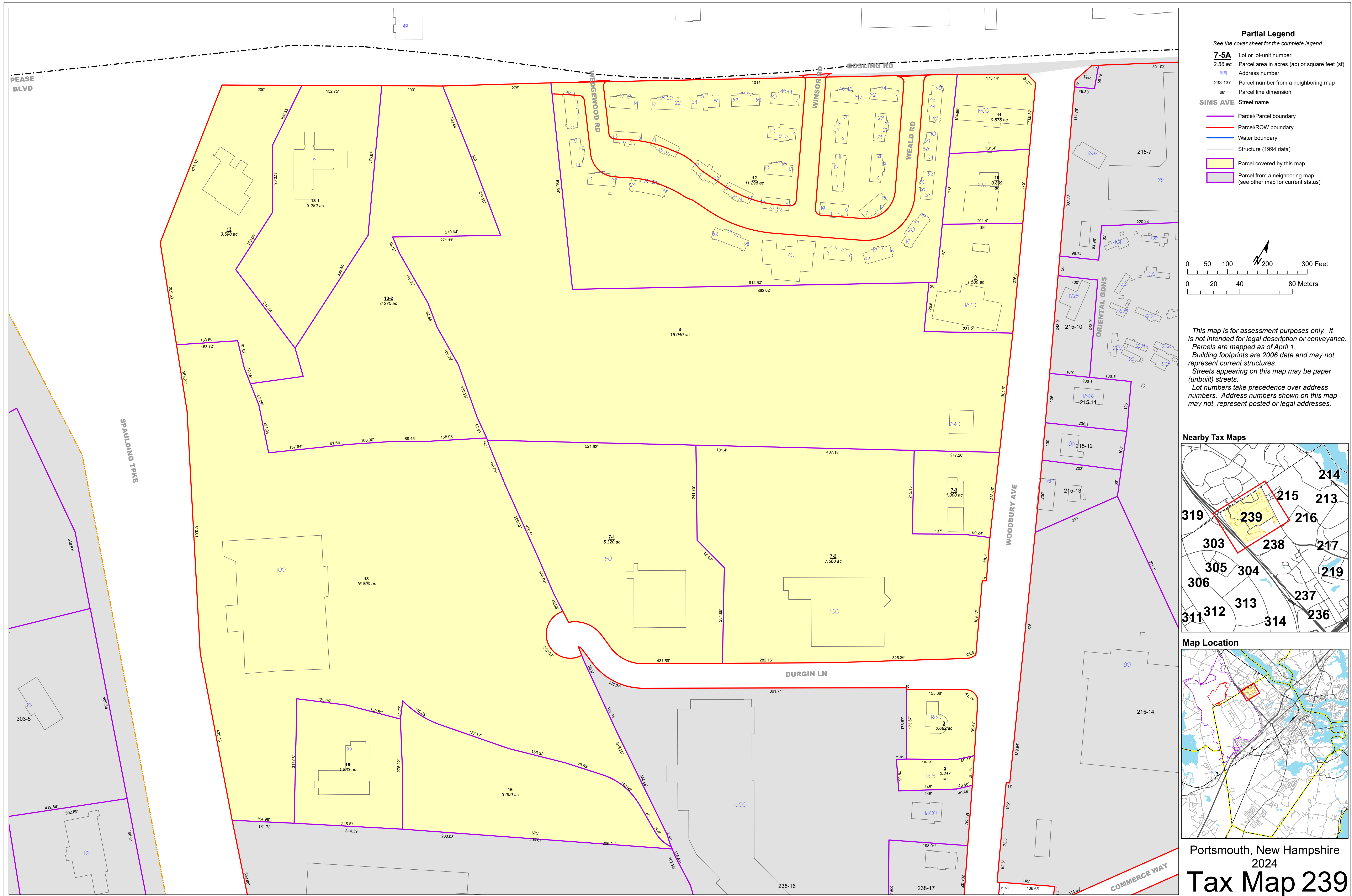
Parcel/Parcel boundary
Parcel/ROW boundary
Water boundary
Structure (1994 data)

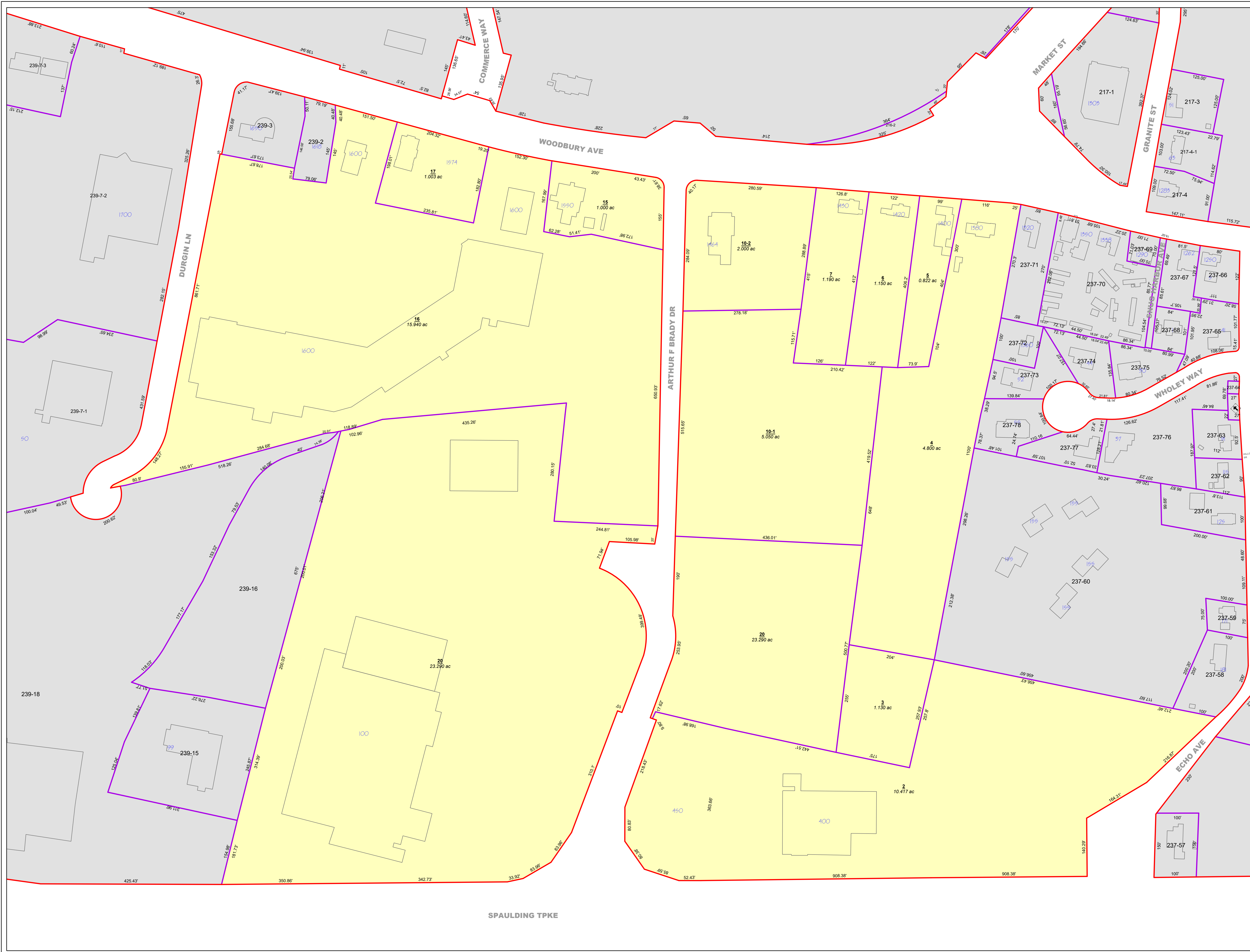
Parcel covered by this map
Parcel from a neighboring map (see other map for current status)



This map is for assessment purposes only. It is not intended for legal description or conveyance. Parcels are mapped as of April 1. Building footprints are 2006 data and may not represent current structures. Streets appearing on this map may be paper (unbuilt) streets. Lot numbers take precedence over address numbers. Address numbers shown on this map may not represent posted or legal addresses.

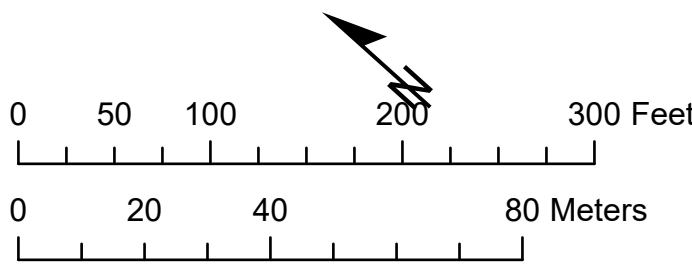




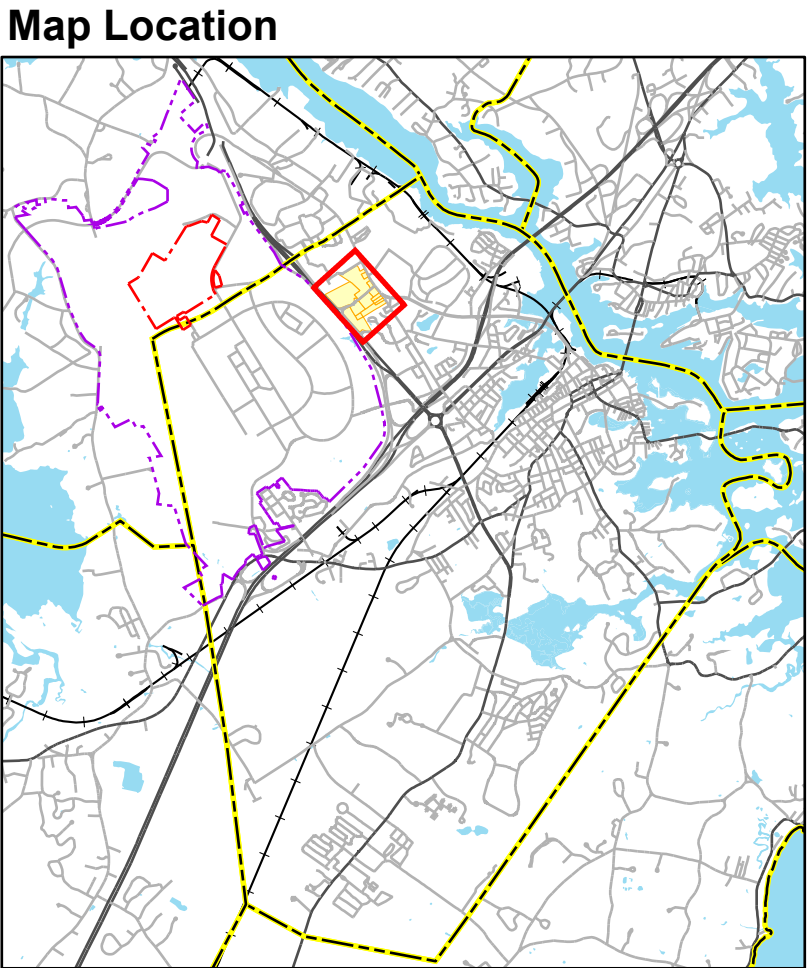
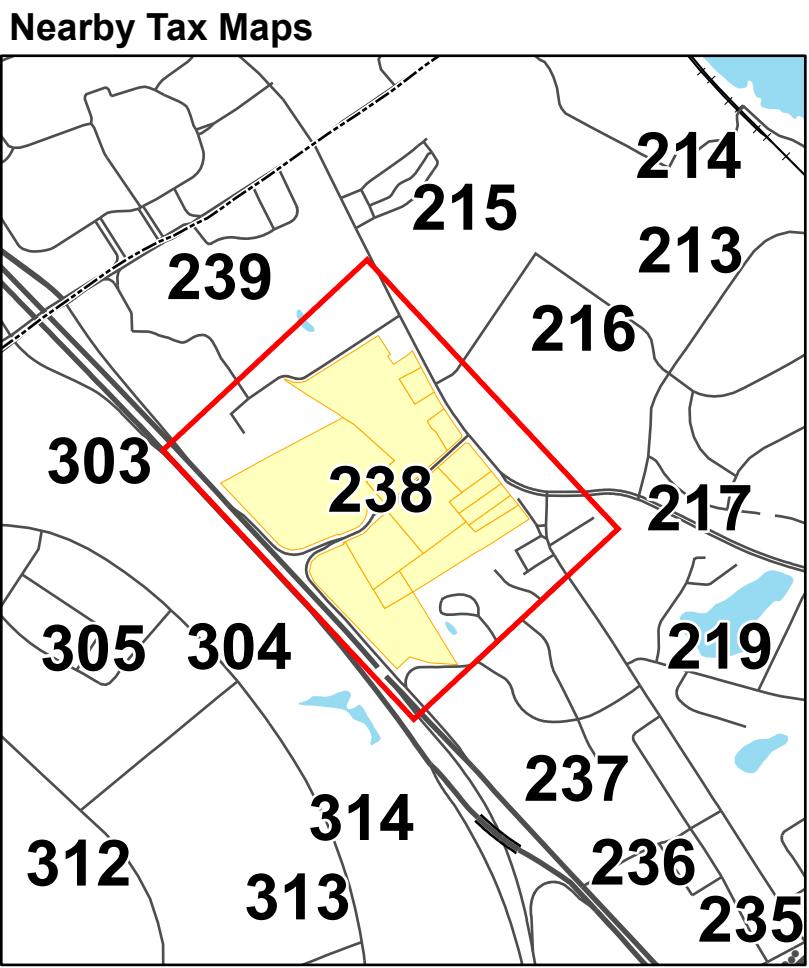


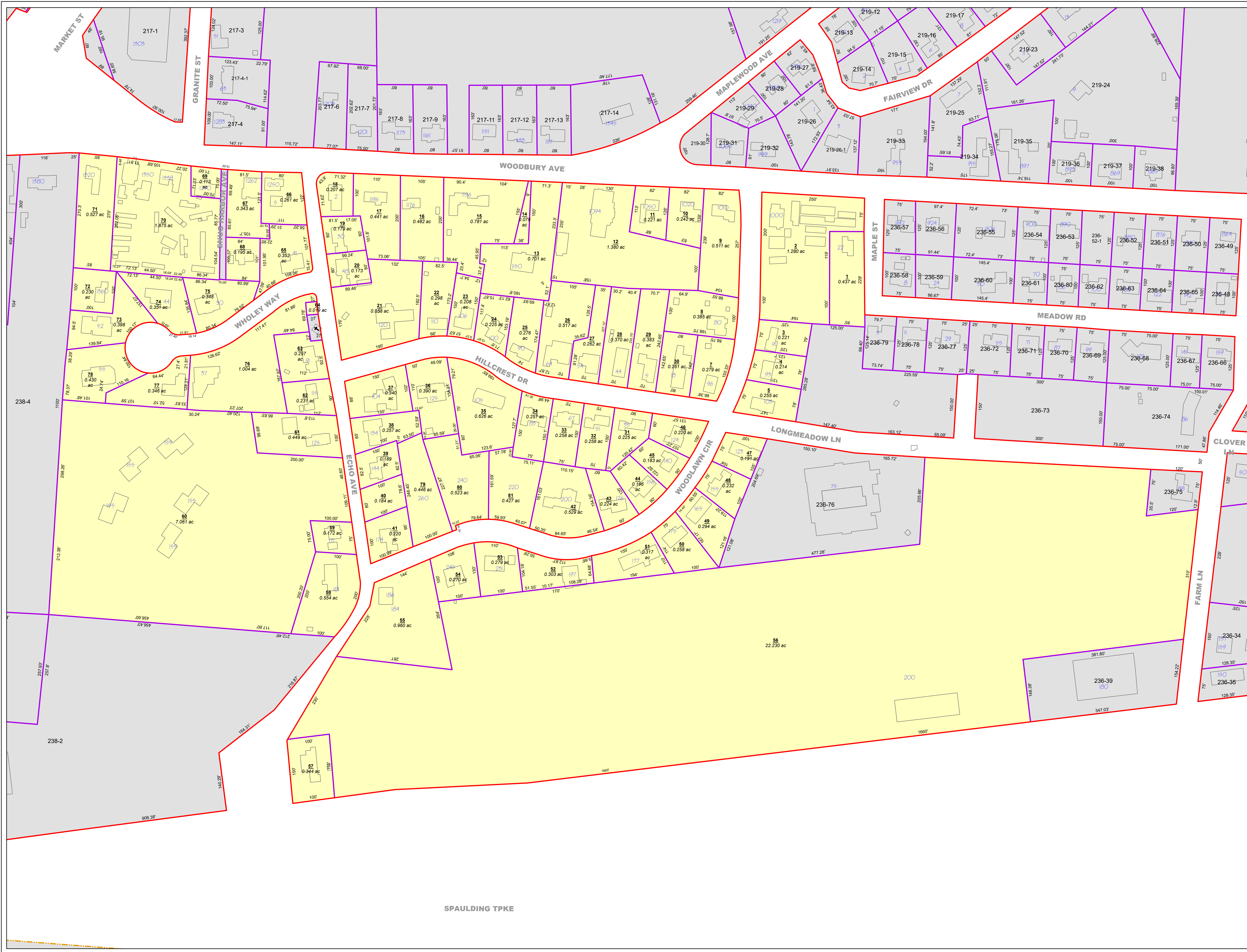
- Partial Legend**
See the cover sheet for the complete legend.
- 7-5A**
2.56 ac
233-137
68'

Lot or lot-unit number
Parcel area in acres (ac) or square feet (sf)
Address number
Parcel number from a neighboring map
Parcel line dimension
Street name
- Parcel/Parcel boundary
Parcel/ROW boundary
Water boundary
Structure (1994 data)
-
- Parcel covered by this map
Parcel from a neighboring map (see other map for current status)



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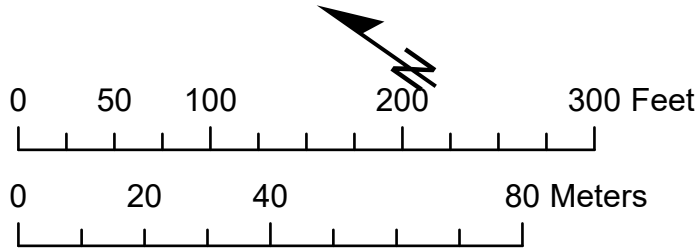


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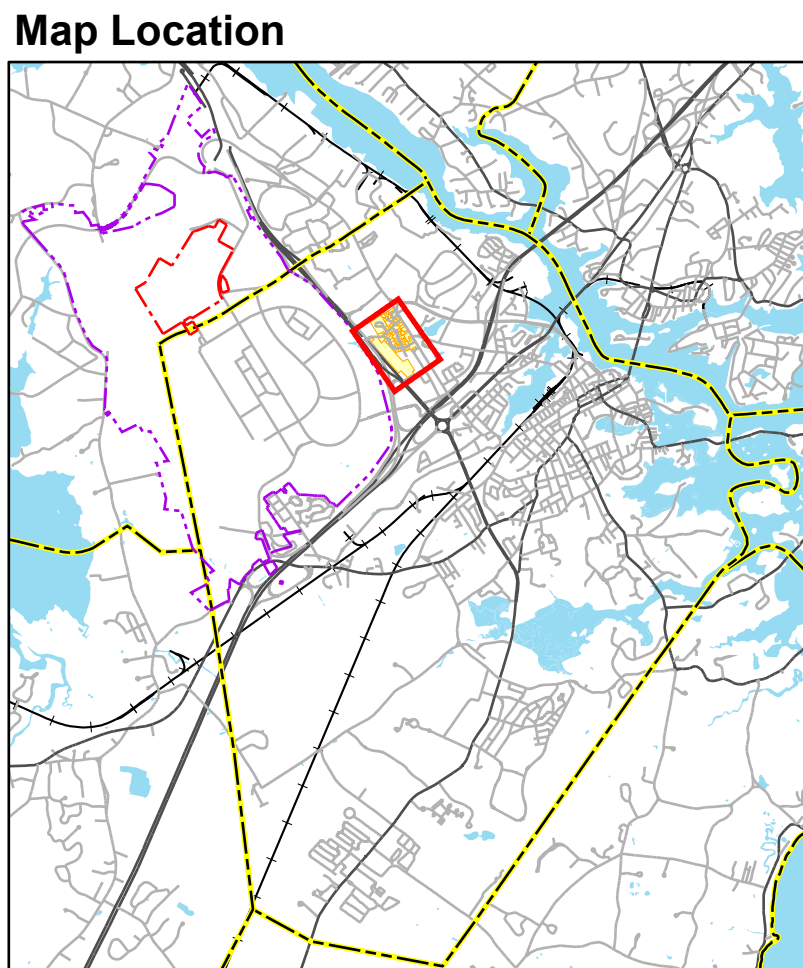
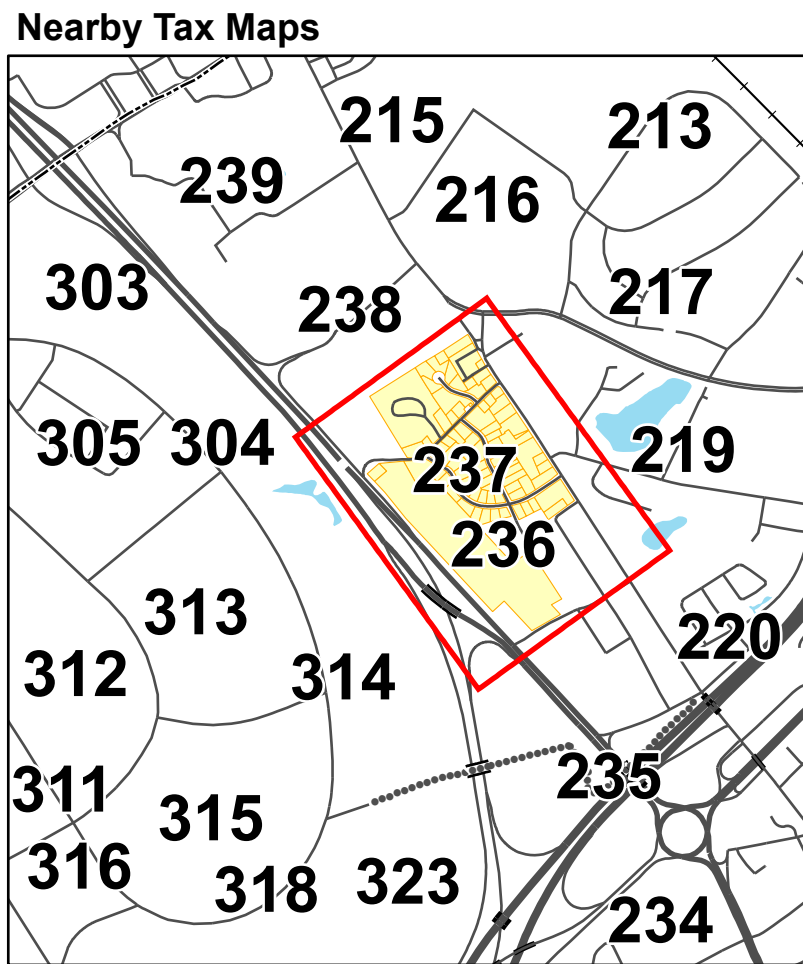
7-5A Lot or lot-unit number
2.56 ac Parcel area in acres (ac) or square feet (sf)
1509 Address number
233-137 Parcel number from a neighboring map
68' Parcel line dimension
SIMS AVE Street name

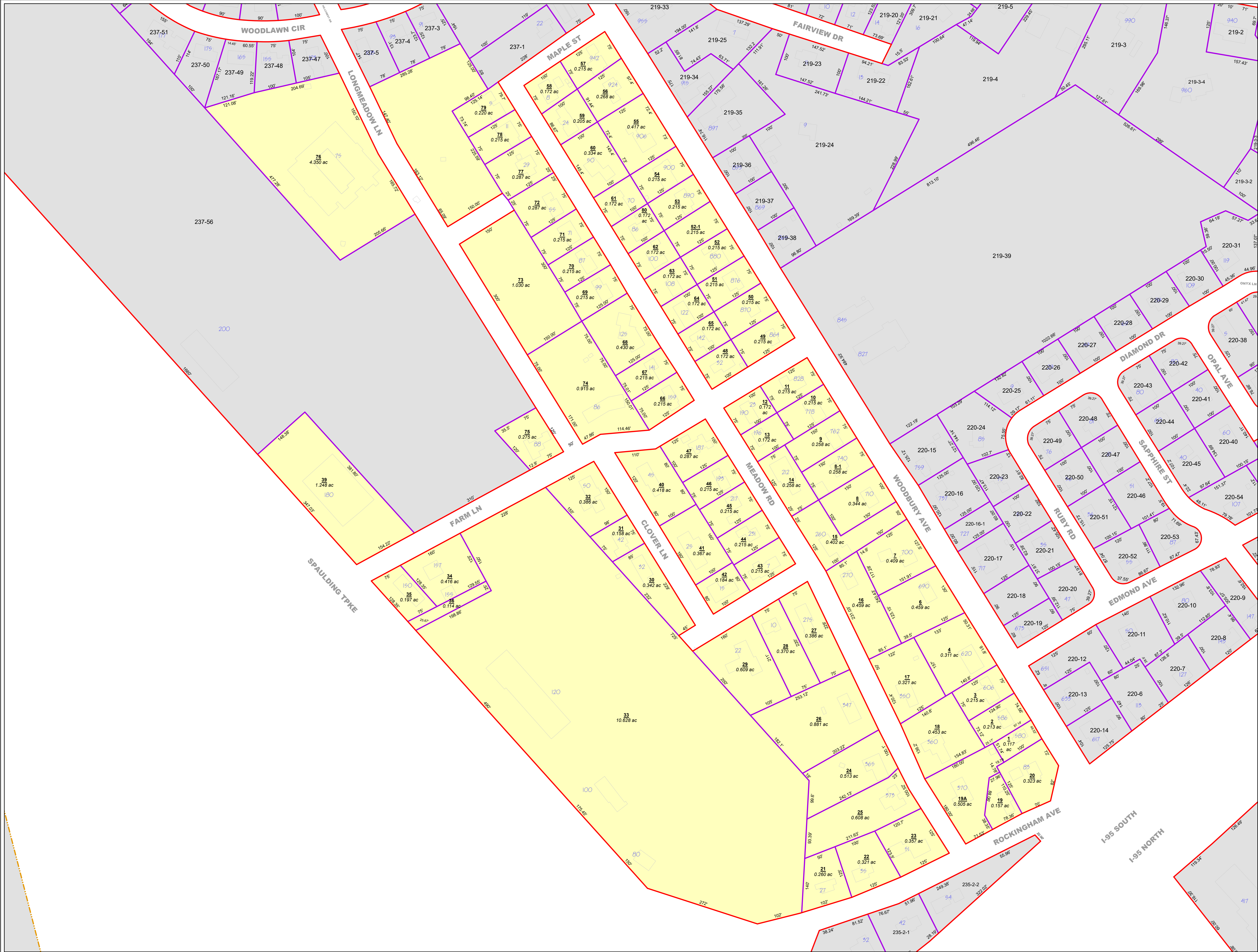
Parcel/Parcel boundary
Parcel/ROW boundary
Water boundary
Structure (1994 data)

Parcel covered by this map
Parcel from a neighboring map (see other map for current status)



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Partial Legend
See the cover sheet for the complete legend.

7-5A
2.56 ac

Parcel area in acres (ac) or square feet (sf)

Address number

Parcel number from a neighboring map

Parcel line dimension

Street name

Parcel/Parcel boundary

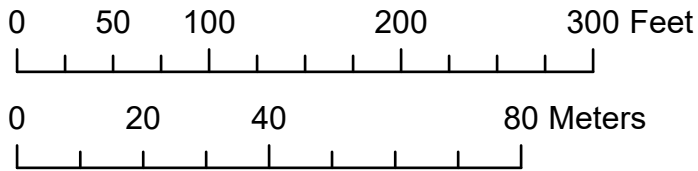
Parcel/ROW boundary

Water boundary

Structure (1994 data)

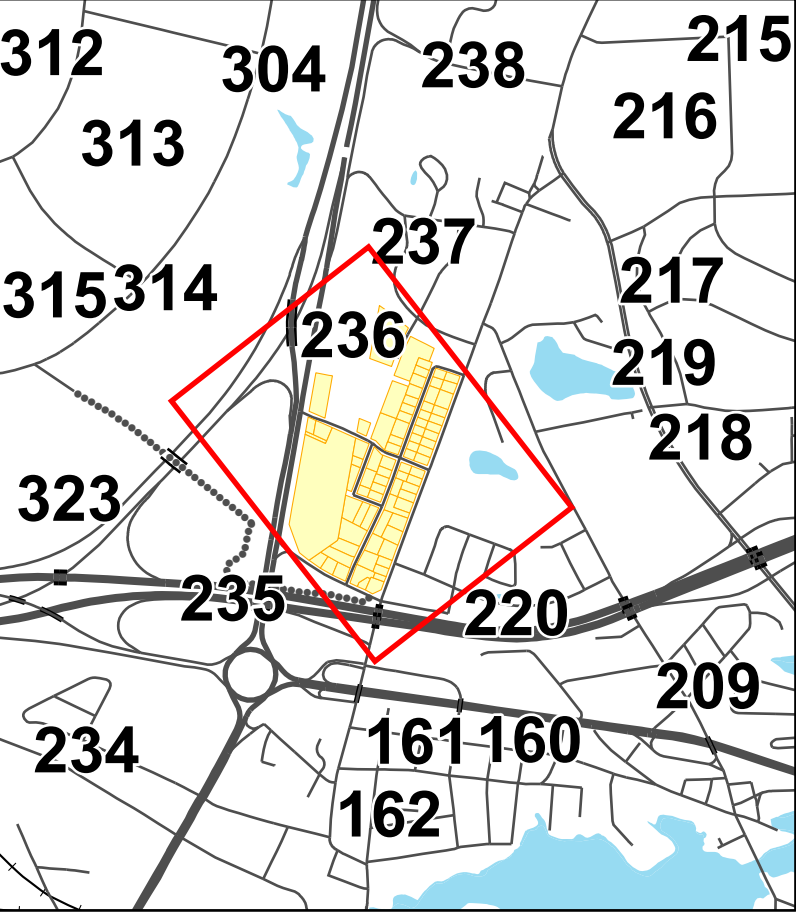
Parcel covered by this map

Parcel from a neighboring map
(see other map for current status)

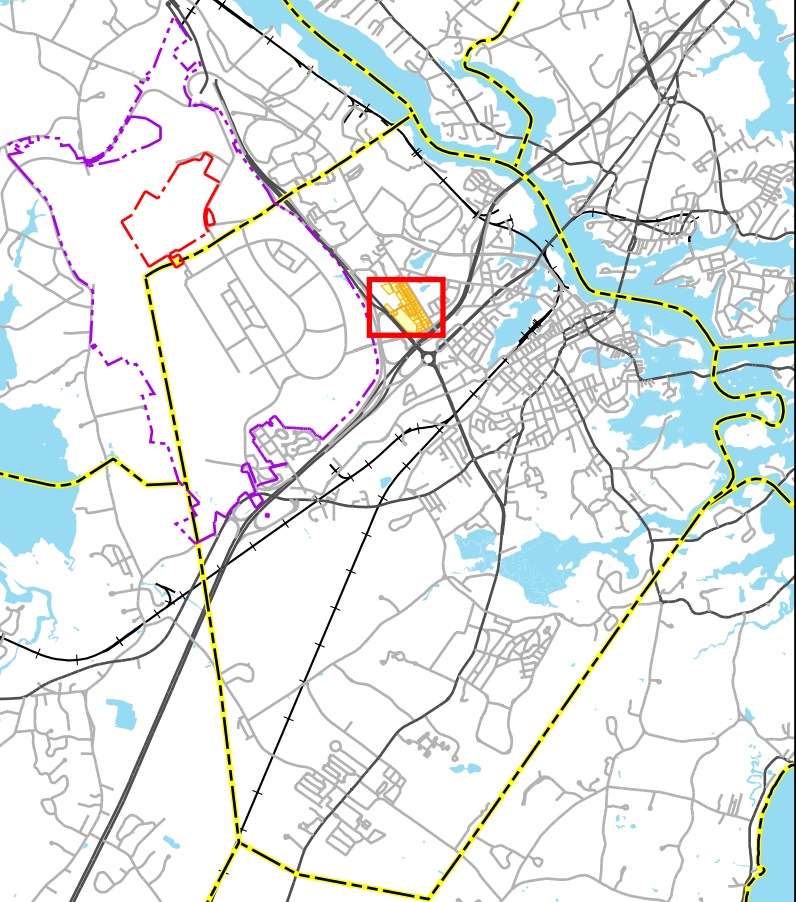


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Nearby Tax Maps

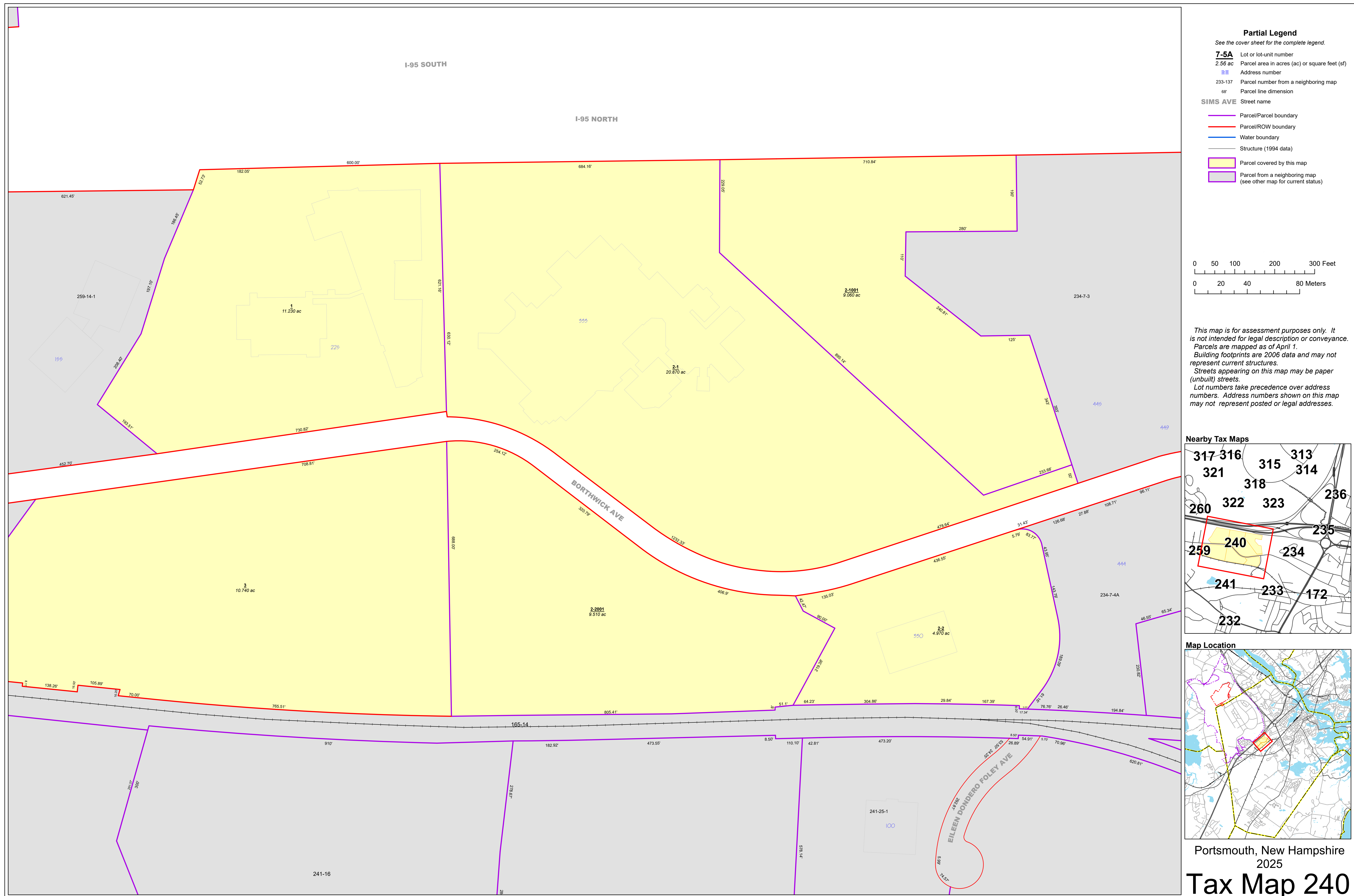


Map Location



Portsmouth, New Hampshire
2025

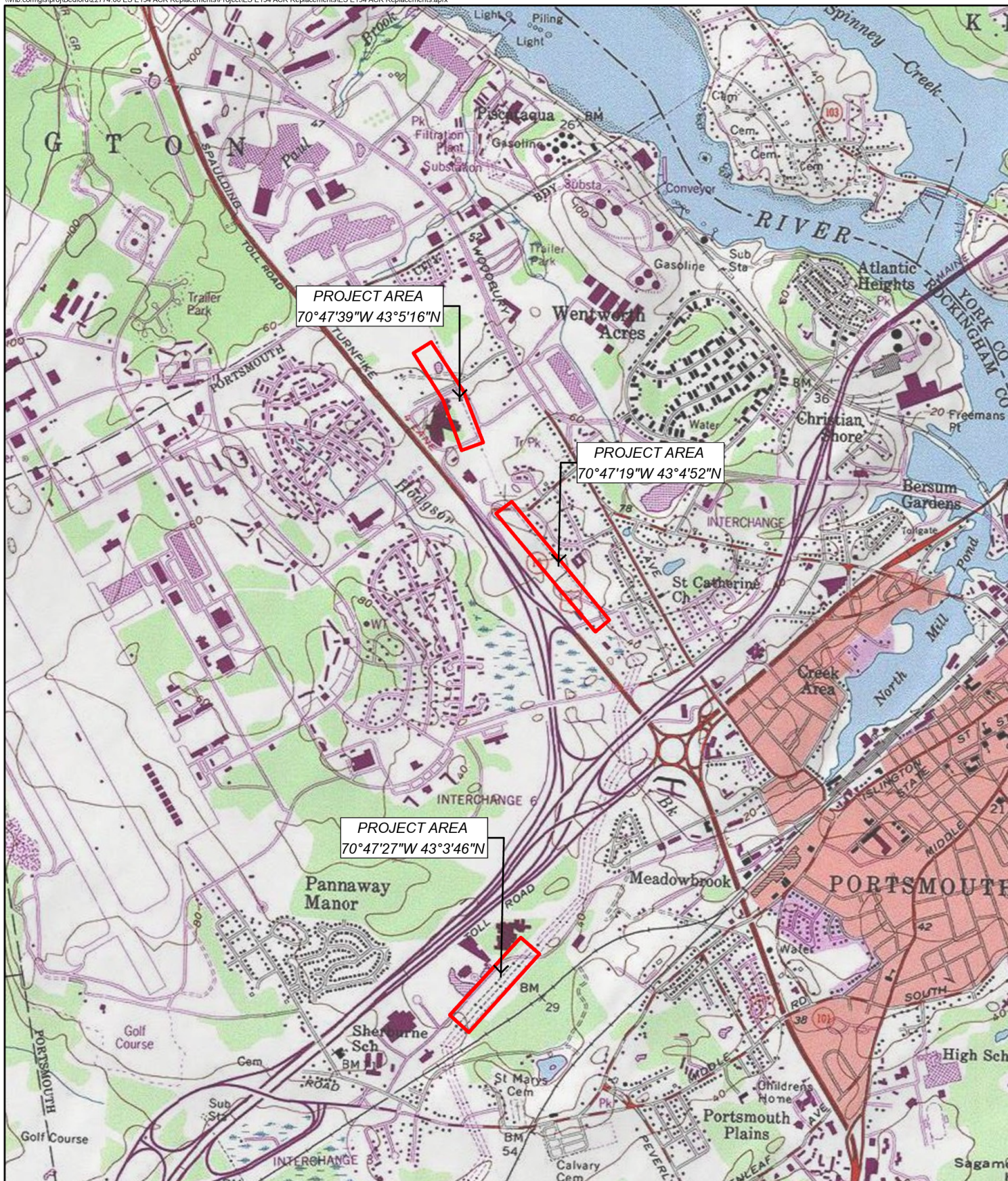
Tax Map 236





D

USGS Location Map



INDEX MAP



 Project Area

EVERSOURCE
ENERGY

USGS - Site Locus Map
E194 Line Structure Replacement Project
Portsmouth, NH

Date: May 12, 2026



1 Inch = 2,000 feet

0 1,000 2,000 Feet



E

Functions and Values Assessments

Wetland Function-Value Evaluation Form

Total area of wetland 11,869 S⁺ Human made? No Is wetland part of a wildlife corridor? No or a "habitat island"? No

Adjacent land use Commercial, utility ROW Distance to nearest roadway or other development 23 Feet

Dominant wetland systems present PSS1C Contiguous undeveloped buffer zone present No

Is the wetland a separate hydraulic system? Yes If not, where does the wetland lie in the drainage basin? N/A

How many tributaries contribute to the wetland? 0 Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. W-5

Latitude 43.0880 Longitude -70.79491

Prepared by: TD Date 1/5/2025

Wetland Impact:
Type Temporary Area 7422SF

Evaluation based on:
Office X Field X

Corps manual wetland delineation
completed? Y X N

Function/Value	Suitability Y / N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
 Groundwater Recharge/Discharge	N	4, 5, 15		No piezometer data was recorded. This low lying wetland receives discharge from adjacent uplands and roadways. +
 Floodflow Alteration	Y	3, 4, 5, 8, 9, 18		This wetland receives sheet flow from adjacent upslope impervious surfaces. The wetland can retain water during precipitation events. +
 Fish and Shellfish Habitat	N			No watercourse is associated with this wetland.
 Sediment/Toxicant Retention	Y	1, 4, 5		This wetland is acting as a stormwater swale. It is receiving stormwater from adjacent uplands and impervious surfaces that may have S/T/P in runoff. +
 Nutrient Removal	Y	3, 4, 7, 8, 9, 10, 11	X	This wetland is heavily vegetated with scrub-shrub and emergent species that can process excess nutrients discharged from adjacent uplands. +
 Production Export	N	7		This wetland is functioning as a stormwater feature from the adjacent uplands, and from an observed culvert. Limited wildlife and human production functions. +
 Sediment/Shoreline Stabilization	N	2, 3		This wetland is not associated with a watercourse.
 Wildlife Habitat	N	3, 7, 13, 19		Though this wetland provides cover and flora for fauna species, the wetland is dominated by invasive species, and not high valuable wildlife habitat. +
 Recreation	N			This wetland is located within a depressional area between multiple commercial developments. +
 Educational/Scientific Value	N	10		This wetland is located within a depressional area between multiple commercial developments. No viewing areas are present. +
 Uniqueness/Heritage	N	1, 2, 9, 17		This wetland is located within a depressional area between multiple commercial developments. No viewing areas are present. +
 Visual Quality/Aesthetics	N	9, 12		This wetland is located within a depressional area between multiple commercial developments. No viewing areas are present. +
ES Endangered Species Habitat	Y			It is unknown if RTE species utilize this habitat. No species were observed during surveys, but NHFG has identified species within the vicinity. +
Other				Ecological integrity was also assessed during FVA. This form is attached within this application package. +

Notes:

* Refer to backup list of numbered considerations.

NH METHOD FOR THE EVALUATION OF FRESHWATER WETLANDS *(revised December, 2015)*

Wetland Name/Code: W-5 Evaluation Date: 1/5/2026 Evaluator: Trent Delehanty, CWS

1 – ECOLOGICAL INTEGRITY

Evaluation Questions	Observations & Notes	Answers	Score
1. Are there land uses in the wetland's watershed that could degrade water quality in the wetland?	Adjacent wetland land use are commercial developments.	a. Less than 5% of the watershed has land uses that could degrade water quality. b. 5-10% of the watershed has land uses that could degrade water quality. c. > 10% of the watershed has land uses that could degrade water quality.	10 5 1
2. Is there evidence of fill in the wetland?	No fill was observed within the wetland.	a. Less than 1 % b. From 1-3 % c. More than 3 %	10 5 1
3. What percentage of the wetland has been altered by agricultural activities?	No agricultural activities were observed within the wetland.	a. Less than 5 % b. From 5 to 25 % c. More than 25 %	10 5 1
4. What percentage of the wetland has been adversely impacted by logging activity within the last 10 years?	This wetland contained little forested cover types, and no evidence of logging was observed.	a. Less than 1% b. From 1 to 10 % c. More than 10 %	10 5 1
5. How much human activity is taking place in the wetland (e.g. ATV use, trails, cars, dumping of brush and garbage, etc.)?	Dumping was observed within the wetland.	a. Low: Few trails in use, little or no traffic, and little or no litter. b. Moderate: Some used trails, roads, litter c. High: Many trails, roads, and/or litter	10 5 1
6. What percentage of the wetland is occupied by invasive plant species?	Wetland was noted as containing 75% invasive species.	a. None b. 1-5% of the wetland has invasive species c. > 5% of the wetland has invasive species	10 5 1
7. Are there roads, driveways and/or railroads crossing or adjacent to the wetland or come within 500 ft. of the wetland?	The wetland is developed within 500 feet in each cardinal direction.	a. No roads, driveways or railroads. within 500 ft. of, or in the wetland b. Roads, driveways, railroads are within 500 ft of the wetland c. Roads, driveways, railroads cross, or are adjacent to, the wetland	10 5 1
8. How much human activity is taking place in the upland within 500 feet of the wetland edge?	Commercial parking facilities and businesses are present throughout the wetland edge	a. Less than 5% or no activity b. Human activity evident in up to 25% of the 500 ft zone c. Human activity evident in more than 25% of the 500 ft zone	10 5 1
9. What is the percent of impervious surface within 500 feet of the wetland edge?	Impervious commercial parking facilities and businesses are present throughout the wetland edge	a. Less than 3% impervious area within 500 ft of the wetland edge b. 3-10% impervious area within 500 ft of the wetland edge c. Greater than 10% impervious area within 500 ft of the wetland edge	10 5 1
10. Is there a human-made structure that regulates the flow of water through the wetland?	A discharge culvert was documented upslope of the wetland and contributes to the hydrology of the wetland	a. No human made structures present upstream of, or in the wetland. b. One or more human made structures present upstream of, or in the wetland but hydrologic modification is slight c. One or more human made structures present upstream of, or in the wetland that severely block or alter surface water hydrology	10 5 1

AVERAGE SCORE FOR ECOLOGICAL INTEGRITY

(Add scores for each question and divide by 10)

4.1

Wetland Function-Value Evaluation Form

Total area of wetland 71,973 SF Human made? No Is wetland part of a wildlife corridor? No or a "habitat island"? No

Adjacent land use Commercial, residential, utility ROW, forested Distance to nearest roadway or other development 92 Feet

Dominant wetland systems present PEM1C/E, PEM5C/E Contiguous undeveloped buffer zone present No

Is the wetland a separate hydraulic system? Yes If not, where does the wetland lie in the drainage basin? _____

How many tributaries contribute to the wetland? 0 Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. W-7

Latitude 43.0812 Longitude -70.8891

Prepared by: TD Date 1/5/2025

Wetland Impact:
Type Temporary Area 10,202

Evaluation based on:
Office X Field X

Corps manual wetland delineation
completed? Y X N

Function/Value	Suitability Y / N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
 Groundwater Recharge/Discharge	Y	2, 6,		This low lying wetland collects sheet flow and discharge from upslope uplands. Piezometer reading were taken, but it likely serves as groundwater recharge. +
 Floodflow Alteration	Y	3, 4, 5, 6, 8, 9, 11	X	This low lying wetland has the traits of being effective for flood storage during precipitation, discharge, or snow melt. +
 Fish and Shellfish Habitat	N			No watercourse suitable for fish and shellfish is associated with this wetland.
 Sediment/Toxicant Retention	N	1, 4		This wetland is not associated with a watercourse, and only holds water seasonally. +
 Nutrient Removal	Y	3, 4, 7, 8, 9, 10, 11	X	This wetland contains a dense stand of vegetation that can process trapped nutrients. +
 Production Export	N	7		This wetland has little production value due to the abundance of invasive species, lack of wildlife value, and lack of economically or commercially viability +
 Sediment/Shoreline Stabilization	N	2, 3		This wetland lacks open water and a shoreline to stabilize.
 Wildlife Habitat	N	3, 7, 13, 19		Invasive species are present throughout, and generally low wildlife value vegetation dominates the stand. +
 Recreation	N			Wetland is within a privately owned parcel with no recreationally viable water.
 Educational/Scientific Value	N	8, 14		Wetland is dominated by invasive species and within a Utility ROW. Tripping hazards and dumping was present. +
 Uniqueness/Heritage	N	1, 17		It is unknown if RTE species utilize this area for habitat. This wetland is dominated by invasive species and does not have a unique plant community. +
 Visual Quality/Aesthetics	N	6, 12		The wetland is within a Utility ROW and has limited access, no viewing areas, and limited visual quality function. +
ES Endangered Species Habitat	Y			It is unknown if RTE species utilize this habitat. No species were observed during surveys, but NHFG has identified species within the vicinity. +
Other				Ecological integrity was also assessed during FVA. This form is attached within this application package. +

Notes: The northern extent of this wetland was not surveyed outside of the ROW.

* Refer to backup list of numbered considerations.

NH METHOD FOR THE EVALUATION OF FRESHWATER WETLANDS *(revised December, 2015)*

Wetland Name/Code: W-7 Evaluation Date: 1/5/2026 Evaluator: Trent Delehanty, CWS

1 – ECOLOGICAL INTEGRITY

Evaluation Questions	Observations & Notes	Answers	Score
1. Are there land uses in the wetland's watershed that could degrade water quality in the wetland?	Adjacent wetland uses are primarily commercial and residential with impervious surfaces abundant.	a. Less than 5% of the watershed has land uses that could degrade water quality. b. 5-10% of the watershed has land uses that could degrade water quality. c. > 10% of the watershed has land uses that could degrade water quality.	10 5 1
2. Is there evidence of fill in the wetland?	Wetland was likely historically filled and contiguous with wetland W-8.	a. Less than 1 % b. From 1-3 % c. More than 3 %	10 5 1
3. What percentage of the wetland has been altered by agricultural activities?	No agricultural activities were observed within the wetland.	a. Less than 5 % b. From 5 to 25 % c. More than 25 %	10 5 1
4. What percentage of the wetland has been adversely impacted by logging activity within the last 10 years?	This wetland contained little forested cover types, and no evidence of logging was observed.	a. Less than 1% b. From 1 to 10 % c. More than 10 %	10 5 1
5. How much human activity is taking place in the wetland (e.g. ATV use, trails, cars, dumping of brush and garbage, etc.)?	Some dumping was observed. Access way has some evidence of trail use.	a. Low: Few trails in use, little or no traffic, and little or no litter. b. Moderate: Some used trails, roads, litter c. High: Many trails, roads, and/or litter	10 5 1
6. What percentage of the wetland is occupied by invasive plant species?	Wetland was noted as containing 35% invasive species.	a. None b. 1-5% of the wetland has invasive species c. > 5% of the wetland has invasive species	10 5 1
7. Are there roads, driveways and/or railroads crossing or adjacent to the wetland or come within 500 ft. of the wetland?	Development is within the vicinity of the wetland.	a. No roads, driveways or railroads. within 500 ft. of, or in the wetland b. Roads, driveways, railroads are within 500 ft of the wetland c. Roads, driveways, railroads cross, or are adjacent to, the wetland	10 5 1
8. How much human activity is taking place in the upland within 500 feet of the wetland edge?	Commercial and residential development is within the vicinity of the wetland.	a. Less than 5% or no activity b. Human activity evident in up to 25% of the 500 ft zone c. Human activity evident in more than 25% of the 500 ft zone	10 5 1
9. What is the percent of impervious surface within 500 feet of the wetland edge?	There are multiple residential and commercial buildings within the 500 foot edge of this wetland.	a. Less than 3% impervious area within 500 ft of the wetland edge b. 3-10% impervious area within 500 ft of the wetland edge c. Greater than 10% impervious area within 500 ft of the wetland edge	10 5 1
10. Is there a human-made structure that regulates the flow of water through the wetland?	No human-made structures were observed within the wetland.	a. No human made structures present upstream of, or in the wetland. b. One or more human made structures present upstream of, or in the wetland but hydrologic modification is slight c. One or more human made structures present upstream of, or in the wetland that severely block or alter surface water hydrology	10 5 1

AVERAGE SCORE FOR ECOLOGICAL INTEGRITY

(Add scores for each question and divide by 10)

5.7

Wetland Function-Value Evaluation Form

Total area of wetland 54,994+ SF Human made? No Is wetland part of a wildlife corridor? No or a "habitat island"? No

Adjacent land use Commercial, residential, utility ROW, forested Distance to nearest roadway or other development 23 Feet

Dominant wetland systems present PEM1C Contiguous undeveloped buffer zone present No

Is the wetland a separate hydraulic system? Yes If not, where does the wetland lie in the drainage basin? _____

How many tributaries contribute to the wetland? 0 Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. W-8

Latitude 43.0805 Longitude -70.8802

Prepared by: TD Date 1/5/2025

Wetland Impact:
Type Temporary Area 2,729

Evaluation based on:
Office X Field X

Corps manual wetland delineation
completed? Y X N _____

Function/Value	Suitability Y / N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
 Groundwater Recharge/Discharge	Y	2, 6,		This low lying wetland collects sheet flow and discharge from upslope uplands. Piezometer reading were taken, but it likely serves as groundwater recharge. +
 Floodflow Alteration	Y	3, 4, 5, 6, 8, 9, 11	X	This low lying wetland has the traits of being effective for flood storage during precipitation, discharge, or snow melt. +
 Fish and Shellfish Habitat	N			No watercourse suitable for fish and shellfish is associated with this wetland.
 Sediment/Toxicant Retention	N	1, 4		This wetland is not associated with a watercourse, and only holds water seasonally. +
 Nutrient Removal	Y	3, 4, 7, 8, 9, 10, 11	X	This wetland contains a dense stand of vegetation that can process trapped nutrients. +
 Production Export	N	7		This wetland has little production value due to the abundance of invasive species, lack of wildlife value, and lack of economically or commercially viability +
 Sediment/Shoreline Stabilization	N	2, 3		This wetland lacks open water and a shoreline to stabilize.
 Wildlife Habitat	N	3, 7, 13, 19		Invasive species are present throughout, and generally low wildlife value vegetation dominates the stand. +
 Recreation	N			Wetland is within a privately owned parcel with no recreationally viable water.
 Educational/Scientific Value	N	8, 14		Wetland is dominated by invasive species and within a Utility ROW. Tripping hazards and dumping was present. +
 Uniqueness/Heritage	N	1, 17		It is unknown if RTE species utilize this area for habitat. This wetland is dominated by invasive species and does not have a unique plant community. +
 Visual Quality/Aesthetics	N	6, 12		The wetland is within a Utility ROW and has limited access, no viewing areas, and limited visual quality function. +
ES Endangered Species Habitat	Y			It is unknown if RTE species utilize this habitat. No species were observed during surveys, but NHFG has identified species within the vicinity. +
Other				Ecological integrity was also assessed during FVA. This form is attached within this application package. +

Notes: The northern extent of this wetland was not surveyed outside of the ROW.

* Refer to backup list of numbered considerations.

NH METHOD FOR THE EVALUATION OF FRESHWATER WETLANDS *(revised December, 2015)*

Wetland Name/Code: W-8 Evaluation Date: 1/5/2026 Evaluator: Trent Delehanty, CWS

1 – ECOLOGICAL INTEGRITY

Evaluation Questions	Observations & Notes	Answers	Score
1. Are there land uses in the wetland's watershed that could degrade water quality in the wetland?	Adjacent wetland uses are primarily commercial and residential with impervious surfaces abundant.	a. Less than 5% of the watershed has land uses that could degrade water quality. b. 5-10% of the watershed has land uses that could degrade water quality. c. > 10% of the watershed has land uses that could degrade water quality.	10 5 1
2. Is there evidence of fill in the wetland?	Wetland was likely historically filled and contiguous with wetland W-7.	a. Less than 1 % b. From 1-3 % c. More than 3 %	10 5 1
3. What percentage of the wetland has been altered by agricultural activities?	No agricultural activities were observed within the wetland.	a. Less than 5 % b. From 5 to 25 % c. More than 25 %	10 5 1
4. What percentage of the wetland has been adversely impacted by logging activity within the last 10 years?	This wetland contained little forested cover types, and no evidence of logging was observed.	a. Less than 1% b. From 1 to 10 % c. More than 10 %	10 5 1
5. How much human activity is taking place in the wetland (e.g. ATV use, trails, cars, dumping of brush and garbage, etc.)?	Some dumping was observed. Access way has some evidence of trail use.	a. Low: Few trails in use, little or no traffic, and little or no litter. b. Moderate: Some used trails, roads, litter c. High: Many trails, roads, and/or litter	10 5 1
6. What percentage of the wetland is occupied by invasive plant species?	Wetland was noted as containing 30% invasive species.	a. None b. 1-5% of the wetland has invasive species c. > 5% of the wetland has invasive species	10 5 1
7. Are there roads, driveways and/or railroads crossing or adjacent to the wetland or come within 500 ft. of the wetland?	Development is within the vicinity of the wetland.	a. No roads, driveways or railroads. within 500 ft. of, or in the wetland b. Roads, driveways, railroads are within 500 ft of the wetland c. Roads, driveways, railroads cross, or are adjacent to, the wetland	10 5 1
8. How much human activity is taking place in the upland within 500 feet of the wetland edge?	Commercial and residential development is within the vicinity of the wetland.	a. Less than 5% or no activity b. Human activity evident in up to 25% of the 500 ft zone c. Human activity evident in more than 25% of the 500 ft zone	10 5 1
9. What is the percent of impervious surface within 500 feet of the wetland edge?	There are multiple residential and commercial buildings within the 500 foot edge of this wetland.	a. Less than 3% impervious area within 500 ft of the wetland edge b. 3-10% impervious area within 500 ft of the wetland edge c. Greater than 10% impervious area within 500 ft of the wetland edge	10 5 1
10. Is there a human-made structure that regulates the flow of water through the wetland?	One culvert was noted on the western boundary of the site. This is likely a discharge location.	a. No human made structures present upstream of, or in the wetland. b. One or more human made structures present upstream of, or in the wetland but hydrologic modification is slight c. One or more human made structures present upstream of, or in the wetland that severely block or alter surface water hydrology	10 5 1

AVERAGE SCORE FOR ECOLOGICAL INTEGRITY

(Add scores for each question and divide by 10)

5.2

Wetland Function-Value Evaluation Form

Total area of wetland 230,856+ SF Human made? No Is wetland part of a wildlife corridor? Yes or a "habitat island"? _____

Adjacent land use Commercial, Forested Distance to nearest roadway or other development Adjacent

Dominant wetland systems present PEM1/5E, PSS1E Contiguous undeveloped buffer zone present No

Is the wetland a separate hydraulic system? No If not, where does the wetland lie in the drainage basin? Low

How many tributaries contribute to the wetland? _____ Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. W-11 and W-12

Latitude 43.0423 Longitude -70.81234

Prepared by: TD Date 1/5/2026

Wetland Impact:
Type Temporary Area 16,351 SF

Evaluation based on:
Office X Field X

Corps manual wetland delineation completed? Y X N

Function/Value	Suitability Y / N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
 Groundwater Recharge/Discharge	Y	2, 6, 7, 12, 15	X	No piezometer readings were taken in the field. Wetland is large and is a Prime Wetland. Large wetland retains floodflow, and recharges groundwater. +
 Floodflow Alteration	Y	1, 3, 4, 5, 6, 8, 9, 11, 13, 18	X	No watercourse was observed during field surveys or within the NWI mapping tool. The large wetland can retain high volumes of water. +
 Fish and Shellfish Habitat	N			No watercourse is associated with this wetland.
 Sediment/Toxicant Retention	Y	1, 3, 4, 5, 7, 8	X	This wetland is large and has potential to trap sediments, toxicants, or pathogens from upland runoff. +
 Nutrient Removal	Y	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11	X	This large wetland has a potential to trap excess nutrients and has a dense stand of primarily emergent vegetation to process excess nutrients. +
 Production Export	N	7, 12		This wetland provides limited production for wildlife as much of the wetland is dominated by invasive species. No commercially viable species were present. +
 Sediment/Shoreline Stabilization	N	2, 3		No watercourses were observed or found on the NWI mapping tool. Wetland is of adequate size and composition to stabilize shoreline if present. +
 Wildlife Habitat	N	7, 9, 11, 13, 19, 20		The size and saturation of this wetland provides habitat for wildlife species. The plant composition observed was primarily invasive species. +
 Recreation	N	1, 10, 11		This wetland can be easily access as a parking area is present on the western boundary. No recreational viable watercourse was present. +
 Educational/Scientific Value	N	6, 8, 11, 14		This wetland is large, and is protected by the City of Portsmouth as a Prime wetland. Access is available at parking areas. +
 Uniqueness/Heritage	Y	1, 2, 3, 4, 5, 9, 13, 17, 27		The wetland is defined as a prime wetland within the City of Portsmouth and provides functions for flood storage and nutrient cycling. +
 Visual Quality/Aesthetics	N	2, 6, 12		A walking bridge between the two parking areas provides a viewing area, but dominant species within the observed portion of the wetland were invasive. +
ES Endangered Species Habitat	Y			It is unknown if RTE species utilize this habitat. No species were observed during surveys, but NHFG has identified species within the vicinity. +
Other				Ecological integrity was also assessed during FVA. This form is attached within this application package. +

Notes:

*** Refer to backup list of numbered considerations.**

This wetland was mapped within the project area of the ROW. These two wetlands are part of a large wetland that extends outside of the ROW and study area. This form describes this feature as a whole.

NH METHOD FOR THE EVALUATION OF FRESHWATER WETLANDS *(revised December, 2015)*

Wetland Name/Code: W-11 and W-12 Evaluation Date: 1/5/2026 Evaluator: Trent Delehanty, CWS

1 – ECOLOGICAL INTEGRITY

Evaluation Questions	Observations & Notes	Answers	Score
1. Are there land uses in the wetland's watershed that could degrade water quality in the wetland?	The wetland is adjacent to commercial development and is bisected by a railway.	a. Less than 5% of the watershed has land uses that could degrade water quality. b. 5-10% of the watershed has land uses that could degrade water quality. c. > 10% of the watershed has land uses that could degrade water quality.	10 5 1
2. Is there evidence of fill in the wetland?	No fill was observed during surveys but fill likely exists where the railroad and development exist.	a. Less than 1 % b. From 1-3 % c. More than 3 %	10 5 1
3. What percentage of the wetland has been altered by agricultural activities?	No agricultural activities were observed within the wetland.	a. Less than 5 % b. From 5 to 25 % c. More than 25 %	10 5 1
4. What percentage of the wetland has been adversely impacted by logging activity within the last 10 years?	No logging impacts were observed within the wetland.	a. Less than 1% b. From 1 to 10 % c. More than 10 %	10 5 1
5. How much human activity is taking place in the wetland (e.g. ATV use, trails, cars, dumping of brush and garbage, etc.)?	Trash was observed within the wetland. A railroad crossing bisects the wetland.	a. Low: Few trails in use, little or no traffic, and little or no litter. b. Moderate: Some used trails, roads, litter c. High: Many trails, roads, and/or litter	10 5 1
6. What percentage of the wetland is occupied by invasive plant species?	Portions of the wetland were dominated by <i>Phragmites australis</i>	a. None b. 1-5% of the wetland has invasive species c. > 5% of the wetland has invasive species	10 5 1
7. Are there roads, driveways and/or railroads crossing or adjacent to the wetland or come within 500 ft. of the wetland?	Roadways and railways abut the wetland.	a. No roads, driveways or railroads. within 500 ft. of, or in the wetland b. Roads, driveways, railroads are within 500 ft of the wetland c. Roads, driveways, railroads cross, or are adjacent to, the wetland	10 5 1
8. How much human activity is taking place in the upland within 500 feet of the wetland edge?	Human activity is present along the western and southern boundaries of the wetland.	a. Less than 5% or no activity b. Human activity evident in up to 25% of the 500 ft zone c. Human activity evident in more than 25% of the 500 ft zone	10 5 1
9. What is the percent of impervious surface within 500 feet of the wetland edge?	Two large parking lots and a roadway abut this wetland.	a. Less than 3% impervious area within 500 ft of the wetland edge b. 3-10% impervious area within 500 ft of the wetland edge c. Greater than 10% impervious area within 500 ft of the wetland edge	10 5 1
10. Is there a human-made structure that regulates the flow of water through the wetland?	No culverts or structures were observed during surveys.	a. No human made structures present upstream of, or in the wetland. b. One or more human made structures present upstream of, or in the wetland but hydrologic modification is slight c. One or more human made structures present upstream of, or in the wetland that severely block or alter surface water hydrology	10 5 1

AVERAGE SCORE FOR ECOLOGICAL INTEGRITY

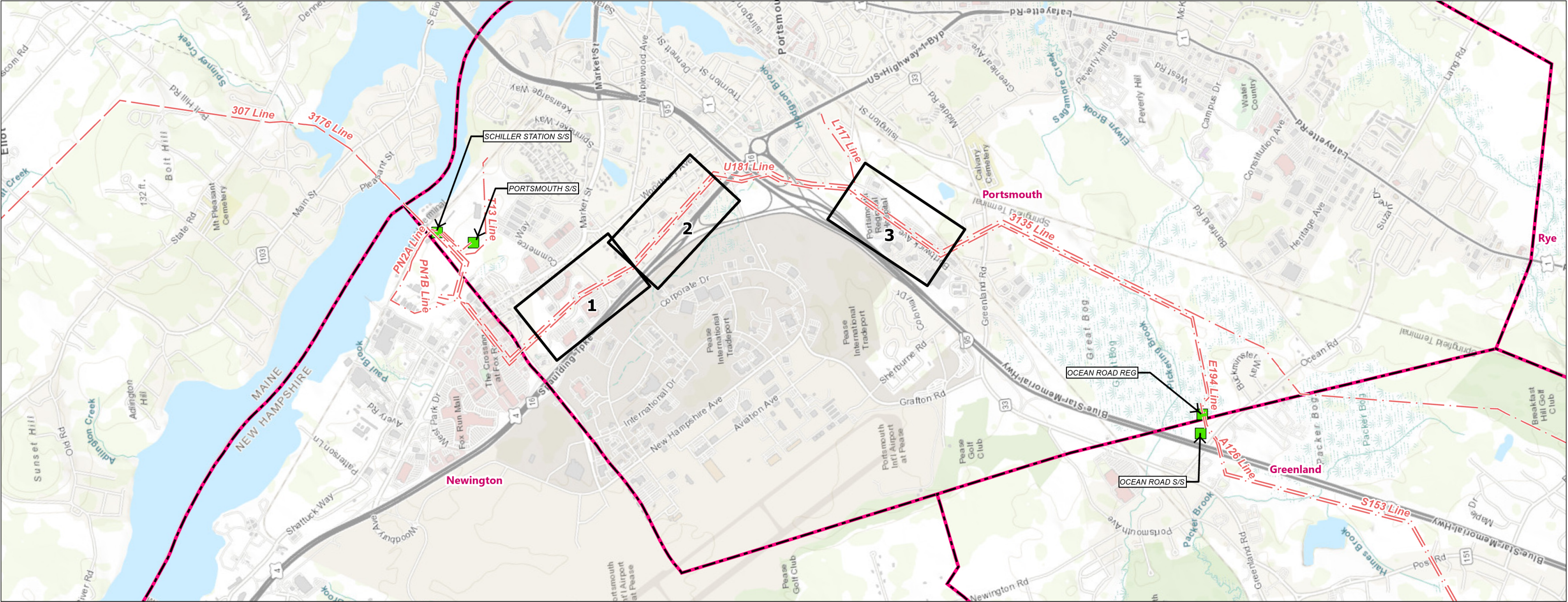
(Add scores for each question and divide by 10)

4.4

E194 Line - Structure Replacement Project

Portsmouth, NH
Environmental Resources Map

Date: August 03, 2026



Legend

- Substation
- Map Sheet
- Municipal Boundary
- Overhead Eversource Line



0 0.25 0.5 Miles

Map Notes:

Coordinate System: NAD 1983 StatePlane New Hampshire
FIPS 2800 Feet

Date Source: Existing ROW Lines, Structures, and
Transmission Lines provided by Eversource Energy.
Wetlands and Watercourses delineated and certified by
VHB. Additional sources include: FEMA, and NH GRANIT.

PREPARED FOR:



13 Legends Drive
Hookset, NH 03106

INDEX OF FIGURES

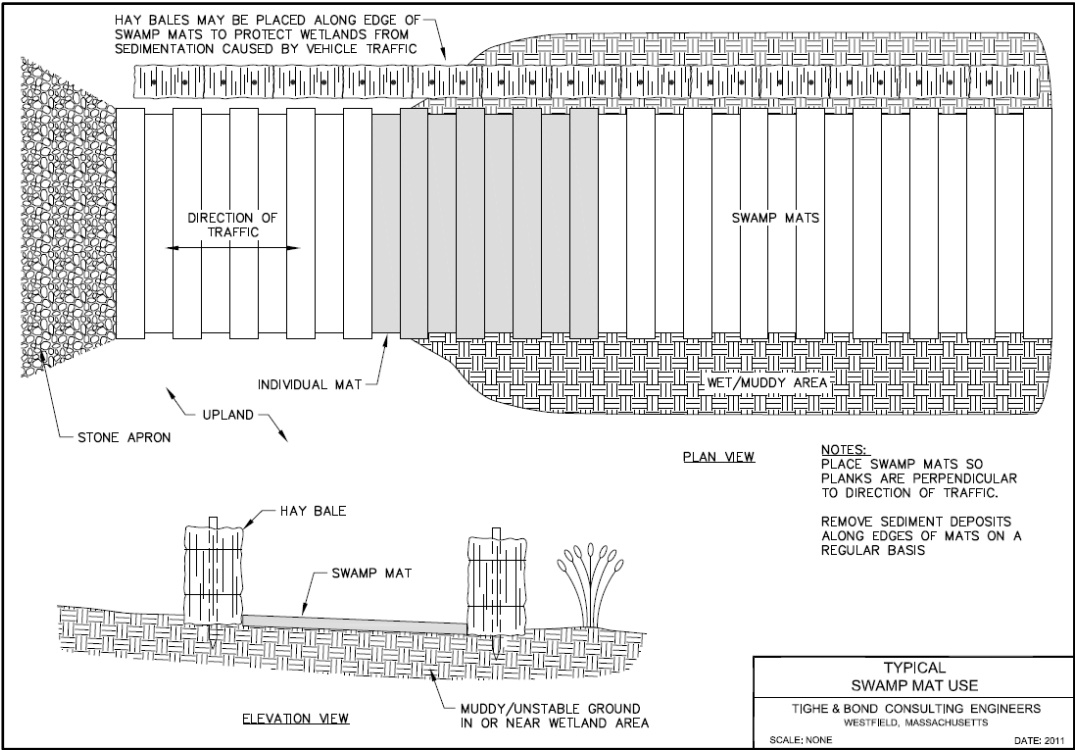
Title Sheet / Index Map
Map Sheet 1-3

PREPARED BY:



2 Bedford Farms Drive
Suite 200
Bedford, NH 03110

Swamp Mat Detail and Description



Description

Pre-fabricated mats are pads that can support the weight of equipment and prevent both rutting and disturbance of soils. These mats can be used for crossing wetlands or watercourses, or for providing a stable work platform to conduct repairs and maintenance activities. Mats are constructed of several different types of materials, including wood and plastic.

Considerations

- Minimize impact to wetland areas during installation, use and removal.
- Swamp mats should be removed as soon as possible following completion of maintenance activities to reduce compaction of the underlying soil.

Installation

- Install and remove in accordance with manufacturer's instructions, if applicable.
- Place mats in a location that will minimize the length needed for crossing.
- Mats may be used to cross small streams, provided the mat does not disturb the bed or banking.
- Where possible, place mats so that they are not overtopped with water and equipment can work in the dry.
- Place mats so that they do not restrict the natural flow of water or aquatic organism passage.
- Remove mats from wetland areas once the crossing or maintenance activity is completed.
- Do not reuse mats that have been placed in areas of invasive species until they have been cleaned and inspected.

Inspection and Maintenance

- Inspect after each use.
- Look for any defects or structural problems.
- Remove remaining plant material left on mats.

Eversource Overhead Transmission Line Standards

Access Roads and Structure Work Sites Eversource Approved by: (CT/WMA), (NH/EMA) Construction and Commissioning Standard Eversource Confidential Information OTRM 231.2 Rev. 3 09/26/2018

- 1) Access roads shall be constructed to a quality which generally allows the unobstructed passage for Eversource following construction operation. However, it is Eversource's intent to construct the minimal road consistent with the stated purpose.
- 2) Access roads shall be restricted to the travel surface no greater than 16 foot in width provided for in the clearing operations by others. This travel surface may exceed 16 feet in approved locations for the safe passage of vehicles and equipment due to location specific locations and/or for turning locations. These locations shall be clearly marked on the Project mapping. Subgrading for access roads shall not extend beyond the space required for the finished road.
- 3) The following types of access roads may be required:
 - a) Undisturbed existing grade where natural conditions and the traffic to be imposed permit.
 - b) As in (a) above with spot stripping to subgrade and/or spot bank run gravel fill.
 - c) Continuous bank run gravel fill.
 - d) Gravel topping over brush laid in access road.
 - e) Traprock base with gravel topping. Traprock of various size gradations up to 2" to 4" mix as required by site conditions.
 - f) Wood slab and gravel, in very soft and wet locations.

The Eversource Representative shall direct the type of road to be installed within the various sections on the right-of-way. The Eversource Representative shall also direct the depth and/or quantity of materials to be placed in each type of road and shall rule on the acceptability of the material provided.

- 4) The following material and compaction requirements shall be followed:
 - a) Where practical, existing road gravel material may be used to re-grade the road cross-sectional and longitudinally to provide a suitable sub-base.
 - b) If existing roadway material is unsuitable, material shall be added as required by sub-surface conditions. Supplemental material shall be added in 6-inch lifts and compacted.
 - c) Sub-base shall be a minimum of 6-inch compacted.
 - d) No less than 6 inches of new material shall be required to reconstruct roadway.
 - e) Wearing surface shall be 1-1/2 inch minus manufactured dense grade compacted to a thickness of not less than 3 inches.
 - f) Wearing surface shall be sloped in accordance with Eversource BMPs.
- 5) The construction of access roads shall not create an impediment to or siltation of natural drainage. The Contractor shall install corrugated metal culverts in size, number and location as the Eversource Representative may direct. As an alternate, the Eversource Representative may direct a traprock base to be laid in minor stream crossings. The Eversource Representative may direct the removal of such culverts and crossings upon completion of line construction operations in that area. Water control measures and specifications implemented for improvements of existing access roads or construction of new access roads must comply with the current version of the Eversource BMPs.

Existing elevated roads with established water run off controls can be improved and regraded to the existing elevated level at the discretion of Eversource construction and with Eversource approval.

- 6) Where practicable, based on topography and soil conditions, a typical new access road shall be constructed by scraping the existing top soil to a stable sub-straight and adding compaction material up to the original grade prior to road installation. A slight crown in the road is acceptable to facilitate water run off but shall be minimal. Effort

shall be made to maintain the existing grade to minimize the rerouting of storm water run-off and to not affect the travel of animal species native to the area.

- 7) Should field conditions warrant, the Eversource Representative may direct the installation and subsequent removal of traprock siltation filters or desiltation basins.
- 8) Access road surfaces shall be blade smooth in the traveled way in preparation for use by others. Side slopes and any similar new or disturbed surfaces off the traveled way shall be similarly shaped to avoid an unkempt appearance during subsequent construction operations. Wearing surface shall be sloped in accordance with Eversource BMPs.
- 9) Where a grade cut is necessary due to change in elevation, the cut edge shall slope no greater than 2:1 from adjacent land. If a 2:1 slope is not achievable, rip rap, a retaining wall or other approved slope stabilization measures shall be used to create and maintain a stable slope.
- 10) In appropriate season, hand seeding of side slopes or similar disturbed areas in new work may be required as the Eversource Representative may direct.

Where practicable, windrows shall be taken down to match the existing grade along the road edges, with excess material spread uniformly just beyond the limits of roadway in uplands. Excess roadway material shall be removed when volumes exceed the ability to spread immediately adjacent to the roadway. For environmentally sensitive areas (i.e. wetlands, locations of high cultural sensitivity, Natural Diversity Data Base areas, Natural Heritage Endangered Species Program areas, etc.). Eversource shall be consulted for specific requirements according to the conditions of the Project permits and approvals or agency agreements.

