

**Deborah Denfeld**  
Team Lead– Transmission Siting  
Tel: (860) 728-4654

February 19, 2024

Melanie Bachman, Esq.  
Executive Director  
Connecticut Siting Council  
Ten Franklin Square  
New Britain, CT 06051

Re: Christian Street Junction to Stevenson Substation Rebuild Project

Dear Attorney Bachman:

The Connecticut Light and Power Company doing business as Eversource Energy (“Eversource”) is requesting a Declaratory Ruling from the Connecticut Siting Council (“Council”) that no Certificate of Environmental Compatibility and Public Need is required for the Christian Street Junction to Stevenson Substation Rebuild Project (“Project”), which proposes modifications to the existing 1580 and 1808 lines, in the towns of Oxford and Monroe, Connecticut (“Petition”).

Prior to submitting this Petition, Eversource representatives briefed municipal officials about the Project and provided written notice to all abutters of the proposed work, and also of the filing of this Petition with the Council. Maps and line lists identifying the notified property owners are provided in the Petition in Attachment A - Christian Street Junction to Stevenson Substation Rebuild Project – Map Sheets.

Eversource is submitting this filing electronically and will deliver an original and 15 copies along with a check in the amount of \$625 for the required filing fee.

Sincerely,



Deborah Denfeld  
Team Lead – Transmission Siting  
[deborah.denfeld@eversource.com](mailto:deborah.denfeld@eversource.com)

Attachments

cc: George R. Temple, First Selectman, Town of Oxford  
Kenneth M. Kellogg, First Selectman, Town of Monroe

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**THE CONNECTICUT LIGHT AND POWER COMPANY****doing business as****EVERSOURCE ENERGY**

PETITION TO THE CONNECTICUT SITING COUNCIL  
FOR A DECLARATORY RULING OF  
NO SUBSTANTIAL ADVERSE ENVIRONMENTAL EFFECT  
FOR THE PROPOSED MODIFICATIONS TO THE EXISTING  
1580 AND 1808 LINES IN THE TOWN OF OXFORD  
AND TOWN OF MONROE, CONNECTICUT

**1. Introduction**

The Connecticut Light and Power Company doing business as Eversource Energy (“Eversource” or the “Company”) hereby petitions the Connecticut Siting Council (“Council”) for a Declaratory Ruling that no Certificate of Environmental Compatibility and Public Need (“Certificate”) is required pursuant to Section 16-50g et seq. of the Connecticut General Statutes for proposed modifications to the 1580 and 1808 115-kilovolt (“kV”) transmission lines, that occupy approximately 5.5 miles of an Eversource transmission line right-of-way (“ROW”) that extends from (south of) Christian Street Junction in the Town of Oxford to (south of) Stevenson Substation, 1 Roosevelt Drive in the Town of Monroe, Connecticut, as described herein (the “Project”). Eversource submits that a Certificate is not required because the proposed modifications would not have a substantial adverse environmental effect.

**2. Purpose of the Project**

The purpose of the Project is to rebuild approximately 5.5 miles of the 1580/1808 115-kV transmission lines within the existing ROW, beginning at a structure approximately 1200 feet south of Christian Street Junction in Oxford, to structures approximately 750 feet south of Eversource’s Stevenson Substation in Monroe (“Project area”). The Project is part of the continuing Eversource effort to address aging transmission line facilities in the Devon-Towantic-South Naugatuck corridor.<sup>1</sup>

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<sup>1</sup> This Project is similar in scope to work presented in Petitions 1527 and 1582, which are also in the Devon-Towantic-South Naugatuck corridor.

The proposed Project will replace the existing copperweld shield wire with optical ground wire (“OPGW”) to provide improved communication ability and increased reliability as part of the Eversource fiber optic network build out. The copperweld shield wire has been identified by Eversource as susceptible to failure and in need of replacement. The existing aluminum conductor, steel reinforced (“ACSR”) conductor wires are approaching their planned service life and are at greater risk of failure due to degradation and will also be replaced.

The 1580/1808 lines are supported on 29 double-circuit (painted steel) lattice tower (“DCLT”) structures and 20 single-circuit (galvanized) steel monopoles (“SCSP”), located in a shared ROW with the 1619 (115-kV) Line.<sup>2</sup>

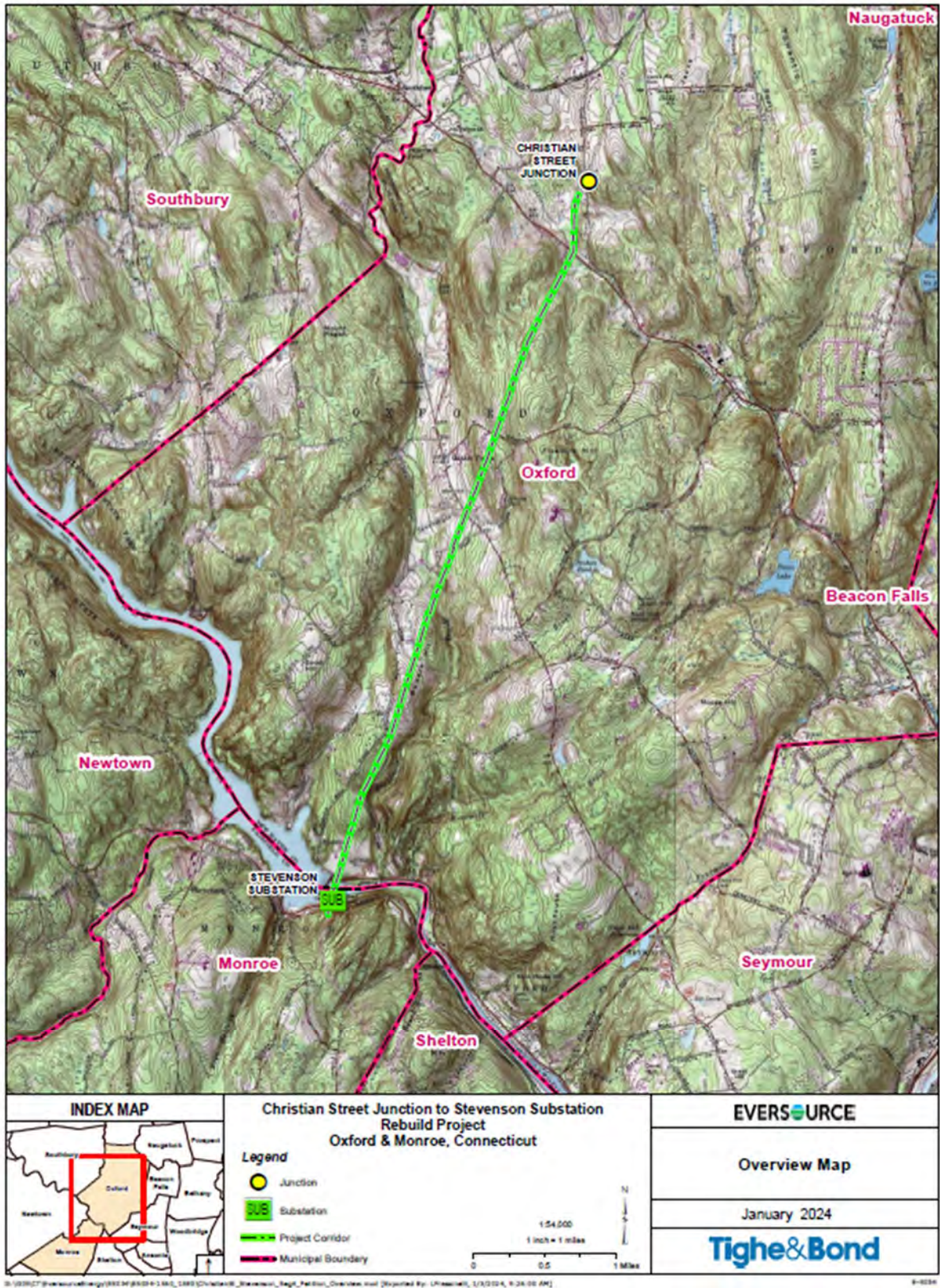
The proposed Project’s modifications include replacements of six of the double-circuit monopoles with paired (12 total) single-circuit monopoles and replacements of 16 paired single-circuit monopoles with eight double-circuit monopoles on the 1580/1808 lines, as well as the addition of four new double-circuit monopole structures. All replaced and new structures will be galvanized steel monopole structures, matching the structure type and material of the 1619 Line.

Figure 1 illustrates the general location of the proposed Project.

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<sup>2</sup> The 1580/1808 lines are in a shared ROW with the 1560 (115-kV) Line, south of the Stevenson Substation.

Figure 1: Project Overview Map



### 3. Existing Project Area Description

The ROW was established in 1918. The 1580 Line was constructed in 1923, between Devon Substation (Milford) and South Naugatuck Substation (Naugatuck), with upgrades (structure replacements or line reconfigurations) in the Project ROW in 1962, 1969, and 2014. The 1808 Line was constructed in 1962, between The United Illuminating Company's Pootatuck Substation (Shelton) and Beacon Falls Substation (Beacon Falls), with some prior upgrades in the Project ROW (structure replacements or line reconfigurations).

The Project area<sup>3</sup> extends approximately 5.5 miles, from approximately 1,200 feet south of Christian Street Junction in the Town of Oxford, to approximately 750 feet south of Eversource's Stevenson Substation in the Town of Monroe, as shown on *Attachment A - Map Sheets*. Approximately 5.3 miles of the ROW is within the Town of Oxford, while approximately 0.2 mile is within the Town of Monroe, south of the Housatonic River crossing.

Along the ROW, the 1580 and 1808 lines are located on both Eversource-owned property and on private property subject to Eversource easements.

Christian Street Junction is the confluence of multiple transmission lines that extend in three directions. The Stevenson Substation also serves as an interconnection for the First Light hydroelectric power plant at the Stevenson Dam on the Housatonic River. The 1580 Line and the 1808 Line bypass (do not enter) the Stevenson Substation, whereas the 1619 Line and the 1560 Line terminate at Stevenson Substation.

The 1580/1808 transmission lines are supported on a combination of 29 DCLT structures, installed in 1962, and on 20 SCSP structures.

The conductor on the 1580 and 1808 lines is 795 kcmil ACSR, installed in approximately 1962. The shield wire on the 1580 Line is 11/32-inch copperweld. The 1808 Line has 3/8-inch copperweld shield wire. Both shield wires were installed in approximately 1962.

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<sup>3</sup> As referenced in the Petition, the "Project area" is synonymous with the existing facility "Site" described in RCSA §16-50j-2a (29); "site" is typically used to refer to a portion of the Project area, such as "work pads at structure and wire pulling sites", "Project work sites", and the Project construction staging area.

From south of Christian Street Junction along most of its length, the ROW is approximately 110 feet wide. Continuing south from a location approximately 1700 feet north of Eversource-owned property at Roosevelt Drive to Roosevelt Drive in Oxford, the ROW is approximately 150 feet wide. The ROW is not maintained edge to edge and the width of the maintained corridor varies along the ROW.

The 1580/1808 lines span the Housatonic River, a distance of approximately 1650 feet between the crossing structures.<sup>4</sup>

The ROW traverses through residential properties (including landscaped and driveway surfaces), undeveloped forest, and open space (Aggie Park). The ROW also crosses Connecticut Department of Transportation (“CTDOT”) Route 67 (Oxford Road), Route 188 (Quakers Farm Road), Route 34 (Roosevelt Drive), local town roads and the Housatonic Railroad. The railroad is located on the south side of the Housatonic River, in the Town of Monroe, and is operated intermittently as a freight line. The Waterbury-Oxford Airport is located approximately 1-mile south of the ROW in Oxford.

#### **4. Proposed Project Modifications**

The Project scope consists of structure, conductor, and static wire replacements on the 1580 and 1808 lines for approximately 5.5 miles between just south of Christian Street Junction to just south of Stevenson Substation.

Beginning at Structure 1436 and continuing south to Structure 1398, all subsequent structures supporting the 1580 and 1808 lines, , will be replaced (49 structures).

To accommodate the new conductor and OPGW installations, a total of 35 double-circuit steel monopole (“DCSP”) structures and 16 SCSP structures will be installed to support the 1580 and 1808 lines. Four additional DCSP structures will be installed on the 1580/1808 lines to remove the staggered alignment with the 1619 Line structures in the shared ROW to maintain electrical clearances during maintenance operations and high wind events. The 1580 and 1808 structures will be renumbered after the rebuild.

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<sup>4</sup> The 1580/1808 lines continue to two single line structures within a 200 feet wide ROW on the south of the Housatonic River, in Monroe.

Structures to be removed, replaced, and added include the following:

- Replace 23 DCLT structures with 23 DCSP structures.
- Replace six DCLT structures with 12 SCSP structures because these locations have a significant line angle and are needed for pulling conductor and OPGW.
- Replace 16 SCSP structures with eight DCSP structures, as tangent DCSPs are adequate to meet the clearance requirements of the ROW at these locations.
- Replace four SCSP structures with four SCSP structures.
- Install four additional DCSP structures.

With the proposed installation of 51 structures, the modified span lengths result in meeting current National Electrical Safety Code (“NESC”) blowout clearance requirements in the Project area.

Galvanized steel poles will be used on this Project, instead of weathering steel, to provide visual consistency with the existing structures on the neighboring 1619 Line, which are galvanized steel structures.

Conductor work includes replacement of 5.5 circuit miles of 795 ACSR conductor on the 1580 and 1808 lines with "Falcon" 1590-kcmil aluminum conductor steel-supported (“ACSS”) conductor.

Shield wire work includes replacement of 5.5 miles of 11/32-inch and 3/8-inch copperweld shield wire with OPGW on both lines.

In addition to the work described above, existing lightning arrestors would be transferred, and others installed as needed, such that arrestors would be present on approximately every fifth replacement structure at the completion of the Project. New hardware and insulators will be installed on all replacement and new structures, along with counterpoise.

The double-circuit steel lattice structures proposed to be replaced with two single-circuit monopoles are considered “dead-end” or “angle” structures. Typically, dead-end structures are located at right-of-way angle points and at reasonable distances to facilitate the rebuild



of the line. Eversource's current standard practice is to replace a double-circuit dead-end structure with single-circuit dead-end structures, one structure for each circuit.

Details of the proposed Project modifications are included in attached reference documents, as follows:

- *Attachment A: Map Sheets* – Aerial view base maps which depict the locations of existing and proposed structures, as well as the approximate location and configuration of work pads and pull pads, access roads, and other Project elements to be used for the Project.
- *Attachment B: Structure Table* – A list of specific structure information on the types and the heights of the existing and proposed structures.
- *Attachment C: Typical Cross Sections* - Drawings which depict typical views along the ROW of the existing and proposed structures.

#### 4.1 Structure Heights

The height of the existing structures to be replaced ranges from 80 feet to 113 feet. The proposed replacement structures would range in height from 72 feet to 121.5 feet.

- Sixteen replacement structures would have reduced heights (or decreases between 1.5 feet and 34 feet), as compared with the corresponding existing structures.
- Twenty-five replacement structures would have height increases, from 1 foot to 40.5 feet, above the corresponding existing structures.
- Six single circuit replacement structures would be of the same height as their corresponding existing single-circuit structure.
- The four additional structures will range in height from 96.5 feet to 117 feet.

The average replacement structure height change (accounting for height increases and decreases) is 5.0 feet.

Typical good engineering practice is to gradually ascend and descend steep terrain to minimize suspension insulator swing and uplift during extreme weather. Several proposed

structures with greater height increases are located at the bottoms of hills, resulting in taller structures relative to the corresponding structure it is replacing.

Seven structures will have height increases between 20 feet and 31 feet, and one structure will have a height increase of 40.5 feet. The replacement structure with a height increase of 40.5 feet (19338) is being shifted approximately 180 feet from the existing structure (1432) location to an approximately 40-foot lower elevation. Three structures will have height decreases between 28 feet and 34 feet for similar reasons, where the replacement structure is located at a higher elevation than the location of the structure it is replacing.

#### 4.2 Structure Access

Access to the ROW will be from public road crossings and/or off-ROW access routes located between the ROW and nearby public roads. Where off-ROW access routes are pending easement approval, in-ROW access is depicted as an alternative for Project access needs.

### **5. Environmental Effects and Mitigation**

The Project would be constructed entirely within Eversource's ROW or on Eversource fee owned property. No expansion of the existing ROW is proposed for the Project. The Project would not have a substantial adverse environmental effect for the reasons explained more fully below.

#### 5.1 Land Use

Land uses within and adjacent to the Project area include residential properties, transportation corridors (state and local roadways), municipal open space (Aggie Park), and undeveloped forest. Though the Project would traverse through these areas, the work will not impact adjacent land uses.

#### 5.2 Vegetation Removal

No tree clearing is proposed as part the Project, though selective tree removal may be necessary. Proposed vegetation removal within the ROW will include removal of incompatible vegetation outside the maintained corridor, including select tree removal, mowing of access roads, work pads and pull pad areas, removal of non-compatible tree species within the ROW and pruning of side vegetation. Eversource anticipates that any off-

ROW vegetation removal such as mowing, pruning and removal of hazard trees<sup>5</sup>, would be limited to overgrown access roads.

The majority of pruning and selective tree removal will be completed on foot by ground and climbing crews with chainsaws as needed. However, in some locations the use of mechanical equipment may be required to complete the work safely. As detailed on Project maps, temporary matting will be placed in wetlands for equipment access where needed.

### 5.3 Scenic, Recreational and Cultural Resources

The Project is not anticipated to have a substantial adverse impact to scenic, recreational, or cultural resources.

The Project will not cross or impact any designated scenic roadways<sup>6</sup>. Designated open space parcels, recreational use areas, and hiking trails within the Project area were identified through a desktop review of GIS (“Geographic Information System”) data available from the Connecticut Department of Energy and Environmental Protection (“CT DEEP”)<sup>7</sup>, Connecticut Forest and Park Association (“CFPA”)<sup>8</sup>, the Town of Oxford’s Parks website<sup>9</sup>, the Town of Monroe’s Parks website<sup>10</sup>, and verified through field reconnaissance.

Adjacent public use recreational areas are limited to Aggie Park in the Town of Oxford, Town of Monroe Boat Launch on Lake Zoar, public access to the Housatonic River from south of the Stevenson Substation and the First Light operated hydroelectric dam (though no formal boat launch is present), and a CFPA trail (Paugussett Trail) located south of Stevenson Substation. Recreational use of these public areas would not be adversely affected by the Project activities. Eversource would notify CFPA of project activities and implement

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<sup>5</sup> Prior to the removal of any such trees located off-ROW, Eversource would obtain approval from the affected landowner.

<sup>6</sup> Connecticut Department of Transportation, December 31, 2020 Connecticut State Scenic Roads. Available URL: <https://portal.ct.gov/DOT/Programs/Connecticut-Scenic-Roads>.

<sup>7</sup> Connecticut Department of Energy and Environmental Protection, GIS Data URL: <https://portal.ct.gov/DEEP/GIS-and-Maps/Data/GIS-DATA>

<sup>8</sup> Connecticut Forest & Park Association URL: <https://www.ctwoodlands.org/>

<sup>9</sup> Town of Oxford, Parks and Recreation URL: <https://oxfordct.myrec.com/info/facilities/default.aspx>

<sup>10</sup> Town of Monroe, Parks and Recreation URL: <https://monroect.myrec.com/info/default.aspx>

requested protection measures during the time that Eversource uses the overlapping access road / public hiking trail.

A Phase 1A Cultural (archaeological and historical) Resource Assessment of the proposed Project area was conducted by Heritage Consultants, LLC (“Heritage”) in 2021. The review consisted of an initial desktop resource review and pedestrian survey (“Phase 1A Cultural Resource Assessment” or “Phase 1A”). The desktop review of recorded cultural resources was refreshed in February of 2023. Updated Project details (e.g., proposed work activities) were provided to Heritage in November 2023. Final Phase 1A assessment results are detailed in its revised report dated December 5, 2023.

The Phase 1A desktop evaluation determined that there is one listed structure documented in the National Register of Historic Places and five listed structures documented in the State Register of Historic Places within 500 feet of the Project area. No previously identified archaeological sites were identified within 500 feet of the Project area. Due to topography, intervening vegetation, and the positions of the proposed structures relative to the documented historic places, Heritage concluded that there would not be an adverse impact to the viewshed of the documented National and State Historic Places.

Based upon the presence of qualifying criteria (i.e., identification of areas that are likely to contain and/or retain archaeological deposits), the Phase 1A identified various locations within the ROW as having a moderate to high potential for archaeological sensitivity, thus prompting further investigation via the execution of a Phase 1B survey.

The Phase 1B survey consisted of shovel testing in select locations, which was completed in August 2021. The Phase 1B investigation resulted in reclassification of all moderate/high sensitivity areas as having no/low sensitivity where no further archaeological investigation was recommended. Results of the Phase 1B survey are detailed in Heritage’s revised reported dated November 2023. The results were provided to the State Historic Preservation Office (“SHPO”) and the Tribal Historic Preservation Offices (“THPO”) of the Connecticut Tribe of Mohegan Indians, the Mashantucket Pequot Tribal Nation, and the Wampanoag Tribe of Gay Head for their review. Eversource received a ‘no affect’ concurrence letter for the Project from SHPO on February 2, 2024. Any written responses from the THPOs will be provided to the Council by Eversource upon receipt.

## 5.4 Water Resource Areas

Water resources within the Project area include inland wetlands, watercourses (perennial and intermittent streams), ponds, and Federal Emergency Management Agency (“FEMA”) Flood Zones. Eversource conducted field delineations of wetlands and water resources in the Project area in September of 2020 and March of 2021. Wetland boundaries were reinspected and modified on Project mapping as needed in 2023 (*Attachment D: Wetland and Watercourse Delineations – Technical Memorandum*).

Project work activities will result in both permanent and temporary impacts to water resource areas. All Project work in or near these water resource areas would be conducted in accordance with Eversource’s April 2022 *Construction & Maintenance Environmental Requirements - Best Management Practices Manual for Massachusetts and Connecticut* (“BMPs”) and the Project specific ‘Stormwater Pollution Control Plan’ (“SWPCP”) that Eversource would develop for the Project under the CT DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities (“General Permit”). The Project is eligible for the Self Verification through the U.S. Army Corps of Engineering (“USACE”). Required forms and materials will be submitted to the USACE and the CT DEEP prior to start of construction. Work activities will meet all applicable terms and special conditions of the Department of the Army Regional General Permits for the State of Connecticut and State of Connecticut 401 Water Quality Certification. Additional details on each of these water resource areas are provided below.

### *5.4.1 Wetlands*

Wetlands located within the Project area were identified and delineated in accordance with industry standard methodology. A total of 24 wetlands are located within or proximate to the Project area.

Permanent impacts will result from the installation of a hard bottom (stone ford) wetland crossing (W9), (*Attachment A - Map Sheet 4*), which would impact approximately 640 square feet (0.015 acre) of the wetland.

Temporary impacts (1.62 acres) will result from the use of construction mats for access roads, pull pads and work pads and for access to remove vegetation. All construction mats will be promptly removed upon completion and wetland areas will be restored in accordance

with Eversource's BMPs. Table 1 below provides a summary of Project effects to wetlands and watercourses.

#### *5.4.2 Watercourses and Waterbodies*

A total of 13 watercourses have been identified and delineated within or proximate to the Project area. Named perennial watercourses include Little River, Sevenmile Brook, Eightmile Brook, and the Housatonic River. No permanent or temporary impacts to these watercourses are proposed. A new in-ROW access road will be located off of Hogs Back Road in Oxford. It will include a permanent culvert crossing of an intermittent stream (S4) which will impact approximately 20 square feet (0.001 acre) of the stream. Other watercourses within the Project area would be spanned with temporary matting where needed.

Existing stormwater culverts and drainage swales will be crossed along access roads at various locations throughout the Project area. They would be protected and/or stabilized in accordance with the Project's Stormwater Pollution Control Plan and Eversource's BMPs.

<b>Table 1</b>			
<b>Summary of Project Effects to Wetlands and Watercourses</b>			
<b>Wetland / Watercourse ID</b>	<b>Attachment A - Map Sheet</b>	<b>Wetland/Watercourse Effects (square feet / acres)</b>	
		<b>Temporary</b>	<b>Permanent</b>
W2	1	715 / 0.01	
W3	1	8,704 / 0.19	
W4	1,2	8,183 / 0.18	
W5	2	7,625 / 0.17	
W6	2	457 / 0.01	
W9	4	6,671 / 0.15	640 / 0.015
S4	4		20 / 0.001
W11	4	2,461 / 0.05	
W12	5	11,672 / 0.26	
W13	5	3,715 / 0.08	
W16	5	907 / 0.02	
W17	6	1,149 / 0.02	
W18	6	5,871 / 0.13	
W19	7	750 / 0.01	
W20	8	2,867 / 0.06	
W22	9,10	9,543 / 0.21	
<b>Total</b>		<b>70,575 / 1.62</b>	<b>680 / 0.016</b>

#### 5.4.3 Vernal Pools

The Project area was surveyed for potential vernal pools in late 2020 and spring 2023. Potential vernal pools were identified based on the presence of suitable hydrology (i.e., evidence of seasonally to permanently flooded wetlands) and the presence of other indicators such as concave and unvegetated surfaces. The Project also assessed potential vernal pool habitat during the spring of 2023. The spring assessment methods included visual surveys to identify adults, larvae and egg masses, auditory surveys of amphibian chorusing, and dip-net surveys to identify vernal pool species larvae.

One decoy vernal pool was identified within wetland W22. The decoy vernal pool habitat has developed because of heavy usage of all-terrain vehicles (“ATVs”) within this portion of the

ROW and is characterized as a large, shallow, basin-shaped depression that is largely devoid of vegetation. While wood frog and American toad tadpoles were observed within shallow ponded areas, it was determined that it did not support characteristics necessary for successful vernal pool species breeding.

#### *5.4.4 FEMA Flood Zones*

The Project crosses FEMA-designated flood zones associated with the Little River and Eightmile Brook in Oxford as well as the Housatonic River along the municipal boundaries of Oxford and Monroe. Existing angle structure 1434 will be replaced within the floodplain of Little River. Due to the structure location, the replacement structures cannot be moved out of the floodplain. No other transmission structures are proposed within FEMA flood zones. Proposed temporary fill would be limited to placement of a matted access road within the 100-year flood zone of Eightmile Brook and matted access roads and work pads within the floodway and 100–500-year flood zones of Little River. Temporary mats, construction materials and equipment would be properly secured where placed within the flood zone and will be removed from the flood zone immediately upon completion of construction. Proposed activities would not adversely affect the flood storage capacity or hydraulic characteristics of the FEMA flood zones and are eligible for self-verification under the General Permit.

#### *5.4.5 Water Supply*

Based on Aquifer Protection Area (“APA”) mapping maintained by the CT DEEP, no APAs extend into the Project area or off-ROW access roads for the Project. The Project area is not within a public water supply watershed and does not cross any public water supply reservoirs or public water supply wells.

### 5.5 Habitat and Wildlife

The Project area extends through a variety of habitats that support vegetation and wildlife that is common to maintained transmission line corridors. Habitats include upland and wetland shrubland and meadow, riparian corridors, active and fallow agricultural land, and unvegetated or sparsely vegetated ledge outcroppings.



CT DEEP Natural Diversity Database (“NDDB”) mapping depicts known or potential occurrences of state-listed endangered, threatened, or special concern species in the vicinity of the Project area. Eversource submitted a NDDB State-listed Species Review Request to the CT DEEP for the Project on April 26, 2023. Eversource received a preliminary determination from CT DEEP on July 3, 2023, which requested biological surveys for additional listed species. Eversource completed the required surveys and submitted assessment results to CT DEEP as of December 18, 2023. A final NDDB Determination for the Project has not yet been received. Eversource will adhere to the recommendations for protection of listed species as provided by CT DEEP.

In addition to coordinating with the NDDB for the protection of state-listed species, Eversource consulted with the U.S. Fish & Wildlife Service’s (“USFWS”) Information, Planning, and Consultation (“IPaC”) service regarding federal-listed species that may be present within the Project area. The IPaC report indicated one federally listed threatened species, Northern Long-eared Bat (“NLEB”), and one candidate species, monarch butterfly, may potentially be found in proximity to the Project area.

NLEB roosts in certain trees in the warmer months of the year and at other times hibernates in caves and mines (bat “hibernacula”). However, according to the NLEB Areas of Concern in Connecticut map (dated March 6, 2019), there are currently no known NLEB maternity roost trees in Connecticut and no known NLEB hibernacula in the Towns of Oxford or Monroe. Further, there have been no observations of NLEB in Oxford or Monroe as detailed on the Connecticut Northern Long-eared bat Observations by Town map, dated July 24, 2023. Therefore, no impacts to this species are anticipated and the USFWS has determined the Project would have no effect on NLEB.

Utility corridors provide linear habitat for monarch butterflies and other pollinators. While the monarch butterfly is identified as a candidate species, it is not yet federally listed or proposed for listing. As detailed in the USFWS Environmental Conservation Online System<sup>11</sup>, consultation with USFWS under section 7 of the Endangered Species Act is not required for candidate species. Further, gravel work pad restoration in sensitive areas (e.g., NDDB areas,

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<sup>11</sup> USFWS, Environmental Conservation Online System URL: <https://ecos.fws.gov/ecp/species/9743>

etc.) will be seeded with a CT DEEP approved seed mix that includes pollinator-friendly native vegetation, such as milkweed. As such, no impact to this species is anticipated.

Portions of the ROW are within known habitat for the New England Cottontail (“NEC”). During Project restoration, Eversource would incorporate additional habitat enhancements within sensitive areas (e.g., NEC Focus Areas, etc.). These enhancements would include reducing the size of gravel work pads where feasible and restoring gravel work pads (partially or entirely) with either stockpiled native topsoil or fine processed stone and seeding with a mix of native grasses and forbs to minimize potential effects in accordance with Eversource’s 2021 New England Cottontail BMPs.

### 5.6 Invasive Plant Species

Invasive plant species exist within the Project area. The Project would adhere to Eversource’s BMPs to minimize the disturbance and spread of soil and/or plant matter, including the following to control the potential spread of invasive species:

- Clean vehicles, equipment, materials (including matting), gear, footwear or clothing of all visible soil and plant material on site in the infested area, or as near as practical to the infested area, prior to leaving the Project site.
- Cleaning may be accomplished using a brush, broom, or hand tools, by shaking or dropping mats in a controlled manner to dislodge attached soil and debris or using compressed air.

### 5.7 Visual Effects

Though the Project would result in some change to the visual character of the transmission lines, Eversource believes that the replacement of the lattice structures with a monopole design and proposed structure alignments across the ROW<sup>12</sup>, including the four additional monopole structures, would result in a more streamlined appearance in the ROW.

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<sup>12</sup> Structure alignment across the ROW between the 1619 Line structures and the proposed 1580/1808 line structures may vary somewhat due to terrain conditions or the presence of wetlands.

All replacement structures are proposed to have a galvanized finish, to match the finish of the existing 1619 Line structures. Additionally, the proposed structure heights on the 1580/1808 lines are similar to the structure heights of the corresponding 1619 Line structures.<sup>13</sup>

### 5.8 Air Quality

Short-term, localized effects on air quality may result from the Project work, primarily from fugitive dust and equipment emissions. To minimize the amount of dust generated by construction activities, the extent of exposed/disturbed areas at any one time would be minimized. Vehicle emissions will be limited by requiring contractors to properly maintain construction equipment and vehicles, and by minimizing the idling time of equipment and vehicles, including diesel construction equipment, in accordance with Connecticut regulatory requirements.<sup>14</sup> Temporary gravel tracking pads would be installed at points of construction vehicle ingress/egress to minimize the potential for equipment to track dirt onto local roads. To further minimize dust, water may be used to wet down disturbed soils or work areas with heavy tracking, as needed.

### 5.9 Noise

Project work would result in short-term and localized noise from construction activities. The temporary increase in noise would likely raise localized ambient sound levels immediately surrounding the work areas due to the operation of standard types of construction equipment (e.g., backhoe, bulldozer, drill rig, excavator mounted rock hammer, crane, trucks, etc.).<sup>15</sup> Upon completion of construction and during operation of the transmission lines, the proposed Project would not impact ambient noise levels.

### 5.10 Radio and Television Interference

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<sup>13</sup> The 1619 Line structures within the Project ROW range in height from 75 feet to 103 feet.

<sup>14</sup> Regulations of Connecticut State Agencies (RCSA) Section 22a-174-18(b)(3)(C) prohibits the idling of motor vehicles for more than three consecutive minutes when not in motion.

<sup>15</sup> Construction noise is exempted under the Connecticut regulations for the control of noise, RCSA §22a-69-1.8(g).

The project would not increase radio or television interference from the operation of the modified transmission facilities.

### 5.11 Electric and Magnetic Fields

Eversource prepared calculations of the existing and post-Project electric and magnetic fields (“EMF”). The calculations were based on average annual loading conditions, as these are most representative of typical operating conditions. The calculations are made relative to the centerline of the proposed, modified transmission lines.

Table 2 and Table 3 summarize the modeled electric and magnetic fields at the ROW edges before and after the proposed Project modifications within the narrowest part of the ROW which is 110-feet wide. Due to attenuation of the fields, the readings at the edge of the 150-foot wide and 200-foot wide sections of the ROW are expected to be even lower.

<b>Table 2</b>				
<b>Summary of Calculated Magnetic Fields (mG)</b>				
(based on Average Annual Loads)				
Section:		Left Edge of ROW	Max in ROW	Right Edge of ROW
Christian Street Junction – Stevenson Substation	Existing	8.8	26.7	18.2
	Proposed	6.7	25.2	17.1

<b>Table 3</b>				
<b>Summary of Calculated Electric Fields (kV/m)</b>				
(based on Average Annual Loads)				
Section:		Left Edge of ROW	Max in ROW	Right Edge of ROW
Christian Street Junction – Stevenson Substation	Existing	0.46	0.77	0.27
	Proposed	0.37	0.84	0.25

The results of the calculations provided in *Attachment E: EMF Graphs* show that the proposed modifications would decrease EMF at the edge of the ROW.

The anticipated field strength for both electric and magnetic fields from the proposed modifications are well below the internationally established exposure limits for 60-Hz electric and magnetic fields, specifically, the limits identified by the International Council on Electromagnetic Safety (“ICES”) and the International Council on Non-Ionizing Radiation Protection (“ICNIRP”). These thresholds are summarized in Table 4 below.

Table 4 International Guidelines for EMF Exposure		
	Electric Field (kV/m)	Magnetic Field (mG)
ICES	5	9,040
ICNIRP	4.2	2,000

#### 5.12 Federal Aviation Administration

Eversource filed a Notice of Proposed Construction or Alteration with the Federal Aviation Administration (“FAA”) in accordance with the recommendations of the FAA’s online Notice Criteria Tool for all 51 proposed structures, and the line span over the Housatonic River. The FAA’s response to Eversource is pending.<sup>16</sup>

### **6. Construction Traffic Management**

Construction-related vehicles would utilize public roads in the Project area to access the ROW. However, Project-related traffic will be temporary and is generally expected to be more localized in the vicinity of the ROW access points and at the staging area described in the following section.

To safely move construction vehicles and equipment onto and off the ROW while minimizing disruptions to vehicular traffic along public roads, Eversource or its Project contractor would work with the affected towns and CTDOT to develop and implement traffic management

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<sup>16</sup> FAA may require the installation of marker balls on the conductors across the span of the Housatonic River.

procedures, as needed.<sup>17</sup> The construction contractor typically would be responsible for posting and maintaining construction warning signs along public roads near work sites and for coordinating the use of flaggers or police personnel to direct traffic, as required.

Due to the phasing of construction work, these Project-related traffic movements are not expected to significantly affect transportation patterns or levels of service on public roads.

Construction vehicles and equipment associated with the work would include, but would not be limited to, pickup trucks, bucket trucks, flat-bed trucks, excavator, concrete trucks, drill rigs, front loaders, reel trailers, bulldozers, woodchippers, brush hogs/mower, forklifts, side booms, dump trucks and cranes. Pullers and tensioners would be used for the line work.

## **7. Construction Activities and Sequence**

Project construction would include the following activities:

### 7.1 Establishing Staging Area/Laydown Yards

Eversource proposes to use two previously established staging area/laydown yards for the Project. The Division Street, Derby yard is approximately 3.45 acres and would be used to store construction equipment and materials, (including tools, and supplies) conductor, insulators, hardware, poles, and construction mats for the Project. The Bic Drive, Milford staging area/laydown yard is approximately 1.7 acres and would be used for office trailers and may also be used to store construction equipment and materials. Transmission line components removed during the work (structure steel, conductor, hardware, and insulators) also may be temporarily stored prior to removal off-site for salvage and/or disposal. The staging area/laydown yards may also be used by construction crew members for parking personal vehicles as well as for construction vehicles, and for performing minor maintenance, when needed, on construction equipment. Erosion and sedimentation (“E&S”) controls would be installed and maintained until completion of the work in accordance with Project permits and Eversource’s BMP’s. (Refer to Figures 2 and 3 below.)

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<sup>17</sup> Eversource is coordinating with CTDOT for overhead line pull crossings of state routes; at Route 67 (Oxford Road), Route 188 (Quakers Farm Road), and Route 34 (Roosevelt Drive).

Figure 2: Staging Area/Laydown Yard - Division Street, Derby



Figure 3: Staging Area/Laydown Yard – Bic Drive, Milford





## 7.2 Vegetation Removal

No tree clearing would be required for the Project. Vegetation removal work would be accomplished using mechanical methods or by hand. Mechanical methods would typically require use of flat-bed trucks, mowers, brush hogs, or other types of mowing equipment, skidders, forwarders, bucket trucks for canopy trimming, and chippers. In resource sensitive areas, Eversource would require the contractor to use low-impact methods to remove brush vegetation to protect wetlands, watercourses and state-listed species and their habitats. Low-impact methods incorporate a variety of approaches, techniques, and equipment to minimize site disturbance. Eversource would require the contractor to use some or all of the following low impact methods, depending on specific considerations of the work area:

- Consider soil and weather conditions when scheduling vegetation removal activities such as during periods of heavy rainfall;
- Maximize the use of uplands for clearing access routes;
- Utilize hand clearing methods for vegetation removal work within sensitive wetland and vernal pool areas;
- Use appropriately sized equipment for site conditions, where possible, to minimize impacts; and
- Where practical, cut brush close to the ground, leaving root systems and stumps, to retain soil stability.

Temporary construction mats would be used to provide a stable base for low-impact equipment to cross watercourses or wetlands. Such temporary mats would minimize disturbances to wetland soils, and the mats would be removed after the vegetation removal was completed.

## 7.3 Soil Erosion and Sediment Control Installation

Project construction activities would conform to Eversource BMPs for E&S control, including those provided in the *2002 Connecticut Guidelines for Soil Erosion and Sediment Control* (“Connecticut Guidelines”) and the Project specific SWPCP.

Typical E&S control measures include, but are not limited to, straw blankets, straw bales, silt fencing, rock construction entrances, soil and slope protection, water bars, check dams, berms, swales, and plunge pools (avoiding plastic netted controls). Silt fence would be installed as needed to intercept and retain sediment and/or construction materials from disturbed areas and minimize the potential for sedimentation outside of the Project and staging areas.

Temporary E&S control measures will be installed prior to any site work and would be maintained and inspected for the duration of the Project to ensure their integrity and effectiveness and for compliance with the General Permit. SWPCP inspections would be performed in accordance with the General Permit requirements. Protection measures include but are not limited to contractor training and education, time of year best management practices, monitoring, and installation of exclusionary features as directed by qualified individuals. Following construction, seeding and/or mulching or hydroseeding would be completed to permanently stabilize the areas disturbed by construction activities. Temporary E&S control measures would remain in place until the Project work is complete, and all disturbed areas are stabilized.

#### 7.4 Access Roads and Work Pads

The Project will use existing access roads to the extent possible. A permanent hard bottom ford is proposed through a portion of a wetland (W9) to establish a continuous access road. Additionally, the Project would include installation of a 20-foot-long culvert within an intermittent stream for improved in-ROW access from Hogs Back Road. The proposed hard bottom ford and culvert installation are depicted on Attachment A – Map Sheet 4.

Temporary construction matting would be used in wetlands as well as in other sensitive areas, such as NDDDB areas and residential lawns, to the greatest extent practicable.

Existing access roads may need to be improved (graded, widened, and/or reinforced) with additional material (gravel or matting if in an NEC area) to accommodate the safe passage of construction vehicles and equipment. New permanent access roads within the Eversource ROW would be limited to upland areas. Typically, the maximum travel surface of an access road is approximately 16 feet wide (additional width may be needed at turning or passing

locations). E&S controls would be installed as necessary before the commencement of any improvements to or development of access roads.

Existing gates, pole barriers and signage are currently used to discourage ATVs from accessing the ROW. It is Eversource's standard work practice for work crews to close and lock all gates at the end of the workday. If new access points do not have gates or pole barriers, Eversource will install one of these accessories upon request by the property owner during and/or after construction.

At each transmission line structure location, a work pad is required to create a safe, level work base for construction and to stage material and equipment for final on-site structure assembly and/or removal. The approximate locations and configuration of the work pads are shown on Attachment A.

The proposed work pads have been minimized to the extent practical but vary in size to accommodate activities needed for both installation of new structures and removal of existing structures. Pull pads would have dimensions of approximately 80 feet wide by 120 feet long but may vary due to terrain. Work pads would be graveled, though temporary matting would be utilized to protect sensitive areas (e.g., wetlands and watercourses, lawn areas, etc.).

To facilitate future transmission line maintenance, gravel access roads, work pads and pull pads would be left in place. Gravel work pads within NDDB and NEC areas would be revegetated with a CT DEEP approved native seed mixture. If an individual property owner requests restoration measures, the Project representatives will work with the property owner on options.

Stone walls located in property owner-maintained areas that are within proposed access roads and work pads will be dismantled, stones placed in-ROW outside of active work zones, and restored to original condition following construction, unless otherwise directed by the property owner.

Rubble stone walls located outside of property owner-maintained areas that are within proposed access roads and work pads will be dismantled and stones will either be utilized for partial wall restoration, left in the ROW, or removed and disposed of offsite, to provide unobstructed access, unless otherwise directed by the property owner.

### 7.5 Foundation Installation

Structures would have either direct-embed or drilled caisson foundations.

The foundation installation work would require the use of equipment such as mechanical excavators (drill rigs), pneumatic hammers, augers, drill rigs, dump trucks, concrete trucks, grapple trucks, cranes, and light duty trucks. If groundwater is encountered, pumping (vacuum) trucks or other suitable equipment would be used to pump water from the excavated areas. The water would then be discharged in accordance with applicable local, state, and federal requirements, the General Permit and Eversource's BMPs.

Excavated soils that are generated during construction activities would not be temporarily stored or stockpiled in wetlands, floodways, or watercourses. Temporarily stored or stockpiled soils will be managed during restoration activities (Section 7.9).

### 7.6 Structure Installation

Structure sections, structure components and hardware would be delivered to the individual structure locations using flat-bed trucks and assembled on-site using a crane, bucket trucks and excavator.

Depending on site-specific soil conductivity, supplemental grounding (counterpoise, in uplands only) would be installed. A quad "ditch-witch" plow-cable trencher, or equivalent/similar type of equipment, would be used to install the counterpoise after the proposed structures are constructed.

### 7.7 Conductor / OPGW Installation and Removal

The installation of the new conductors and OPGW would occur after the new structures have been erected. The equipment required for these activities would include wire reels, compressors, conductor pulling and tensioning rigs, guard trucks or structures and bucket trucks. The removal of the conductor and shield wire would take place during the active installation of the new conductor and OPGW as the existing conductor and static wire would be used as pulling lines, if possible.

Helicopters may also be used for the work. In the event helicopters are used, advanced notification to affected municipalities and property owners would be provided. Bat wing trucks and guard trucks would be used for protection of roads during the line work.

#### *Line Work over the Housatonic River*

Prior to wire pulling activities over the Housatonic River, Eversource will coordinate with the Towns of Oxford and Monroe, and the CT DEEP to notify the public, specifically recreational boaters of the wire pulling activity across the river. The closest public boat launch site, managed by the Town of Monroe, is west of the transmission line ROW, in the Lake Zoar upstream dam area, and therefore would not be affected by the construction zone during any wire pulling activities on the downstream side of the dam. In addition, Eversource proposes to post “CAUTION: ACTIVE CONSTRUCTION ZONE OVER RIVER” signs along the Housatonic River in the vicinity of the overhead wire crossing. Eversource also plans to provide advance notice to the abutting property owners.

Precautions will be taken when installing the conductor and OPGW at the river crossing to avoid contact with water (and adjacent ground surfaces) throughout the pulling activity. These include the use of “traveler blocks” (a series of pulleys) and hardline or rope. The typical conductor and OPGW installation process is as follows:

1. The existing shield wire and existing conductor will be unclipped from the existing structures and transferred to the new structures and placed in blocks.
2. “Traveler blocks” will be installed at each replacement structure and to the existing structures that are not going to be replaced so that the wire can be pulled.
3. The existing shield wire will be connected to a rope and pulled out while pulling in a hardline or rope at the same time. The new OPGW will be connected to the hardline or rope and pulled into position with the use of a Tensioner to keep the OPGW from sagging while pulling.
4. The existing conductor will be connected to a rope and pulled out while pulling in a hardline or rope at the same time. The new conductor will be connected to the hardline and then pulled into position with the use of a Tensioner to keep the conductor from sagging while pulling.
5. After the OPGW and new conductor are pulled into position, the traveler blocks will be removed and the OPGW will be clipped in.

### 7.8 Structure Removal

The existing structures would be removed after the installation of the new structures, the new conductor, and the OPGW is complete. The existing poles/lattice steel and hardware would be removed from the ROW and reused, recycled, or otherwise disposed of properly.

### 7.9 Restoration

After construction is completed, Eversource would perform ROW restoration in accordance with the protocols specified in the Project permits, BMPs and in consultation with property owners affected by the Project construction.

Post-construction restoration of the ROW would include the removal of construction debris, signage, flagging, and temporary fencing, and temporary construction mats. Disturbed areas would be restored as practical and stabilized with vegetation or other measures before removing temporary E&S controls. Surface restoration of the overlapping CFP A Paugussett Trail and project access road in Monroe would be implemented.

Excavated soils from the Project that cannot be used as backfill in the vicinity of where they were excavated would be used for the restoration of gravel work pads in the same area, as necessary to fulfill any commitments to landowners, or regraded into adjacent uplands within the ROW and stabilized in accordance with Eversource BMPs. Any excavated soils that cannot be reused in such a manner would be properly managed off-Site in accordance with Eversource BMPs and applicable law.

For work within environmentally sensitive areas, such as NEC focus areas and NDDB areas, work pad restoration measures will be implemented to mitigate impacts, which includes the amendment of the work pad surface with stockpiled topsoil or fine processed gravel (whichever is applicable), application of a native seed mix, and installation of temporary erosion and sediment controls (e.g., straw mulch, and environmental controls with no plastic netting to limit wildlife entanglement, compost filters, biodegradable erosion control blankets, etc.), which will be regularly inspected and maintained until final stabilization has been achieved.

### 7.10 Waste Management

Waste materials, such as structure components (i.e., steel from the removed structures, conductor, shield wire, associated hardware, etc.) and any other construction debris would be reclaimed through the Eversource Investment Recovery System and/or disposed of in accordance with Eversource's BMPs, applicable regulations or recycled consistent with applicable rules and regulations and Eversource policies.

## **8. Construction Schedule and Work Hours**

Construction work hours would typically be between 7:00 AM and 7:00 PM, six days per week (Monday through Saturday). Construction workers may arrive at and leave the staging/laydown area outside of these times. In addition, during winter, snow plowing and de-icing activities will typically commence, when necessary, prior to 7:00 AM to ensure a safe environment for construction personnel prior to the start of the workday. On occasion, Sunday work hours are anticipated to be required. If Sunday work hours are required, Eversource will provide advance notice to the Siting Council, the affected Town, and abutters.

## **9. Municipal and Property Owner Outreach**

Eversource consulted with the towns of Oxford and Monroe in October 2023 to provide an initial briefing of the proposed Project. An in-person presentation was later provided to the Town of Oxford in November 2023 and an in-person meeting with the Town of Monroe was held in December 2023 to review Project details and proposed structure locations. Town officials expressed no concerns with the Project. In addition to providing a written notice of the Petition filing, Eversource will continue to communicate with municipal officials throughout the Project.

Eversource initiated outreach to property owners in Fall 2023. Beginning in October 2023, Eversource conducted door-to-door outreach to property owners located along the ROW. In conjunction with the submission of this Petition, all abutting property owners were notified of the filing and provided details on how to obtain additional information on the Project, as well as how to submit comments to the Council. Eversource continues to meet and work with affected property owners to address concerns and provide reasonable mitigation options when feasible.

Eversource representatives will provide advance notification of the start of construction activities to abutting property owners and will update property owners throughout the phases of construction and restoration.

## 10. Conclusion

Based on the foregoing, Eversource respectfully submits that the proposed modifications would not result in a substantial adverse effect on the environment, nor would they damage existing scenic, historical, or recreational values. Accordingly, Eversource requests that the Council issue a declaratory ruling that the proposed modifications would have no substantial adverse environmental effect.

Communications regarding this Petition for a Declaratory Ruling should be directed to:

Deborah Denfeld  
Team Lead – Transmission Siting  
Eversource Energy  
PO Box 270  
Hartford, CT 06141-0270  
Telephone: (860) 728-4654

By:



Deborah Denfeld  
Team Lead – Transmission Siting  
deborah.denfeld@eversource.com

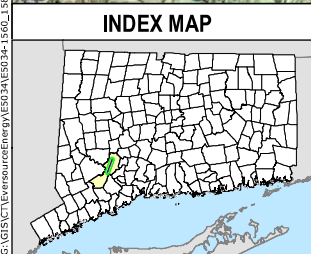
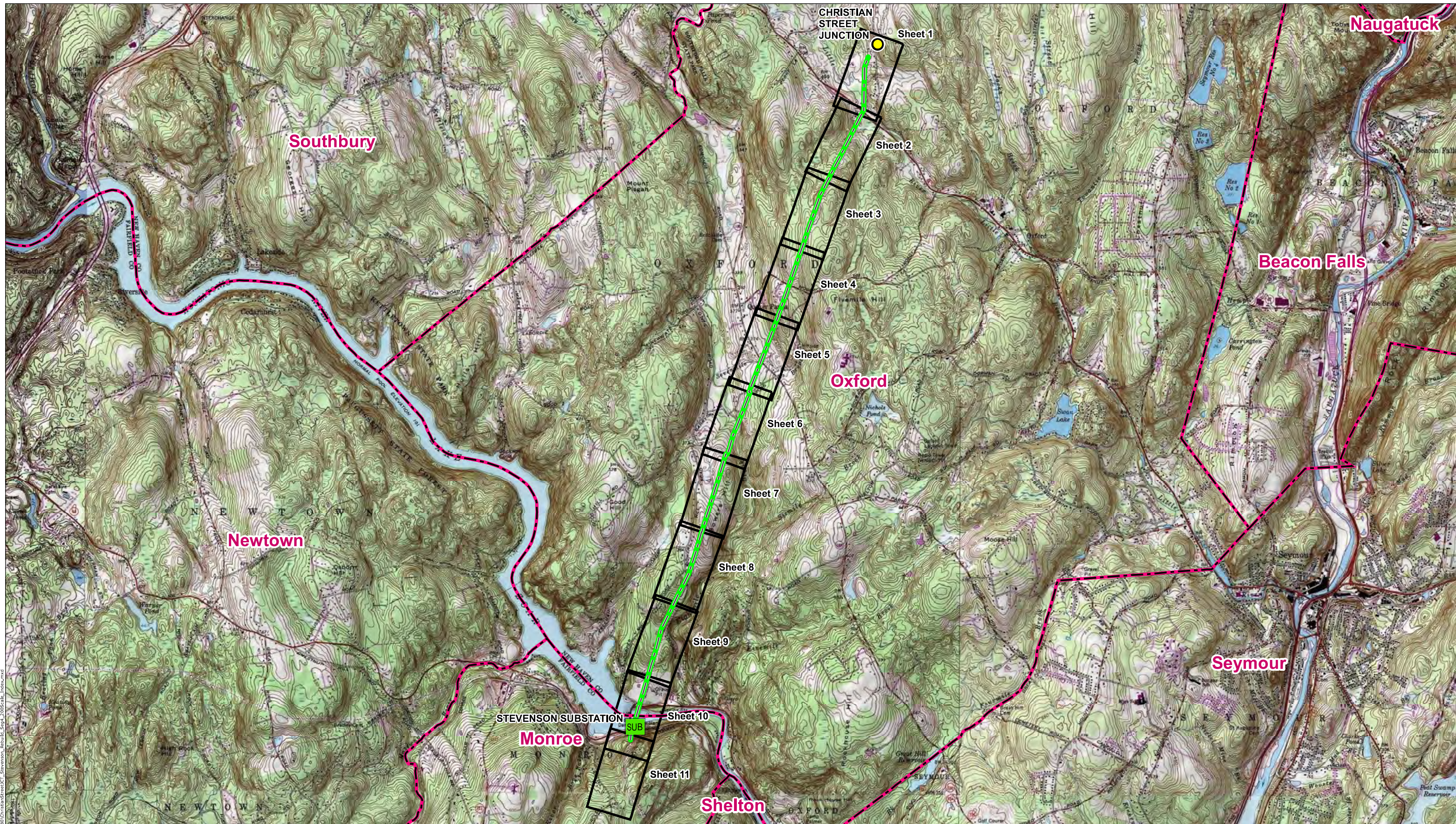
## List of Attachments

Attachment A: Map Sheets  
Attachment B: Structure Table  
Attachment C: Typical Cross Sections  
Attachment D: Wetland and Watercourse Delineations – Technical Memorandum  
Attachment E: EMF Graphs  
Attachment F: Letter to Abutters and Affidavit

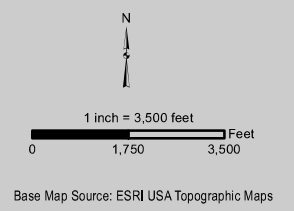


Attachment A  
Map Sheets





- Legend**
- Junction
  - Substation
  - Project Corridor
  - Map Sheet
  - Municipal Boundary



NO.	DATE	REVISIONS	BY	CHK	APP	APP

**EVERSOURCE**

**Christian Street Junction to Stevenson Substation Rebuild Project**

Oxford & Monroe, Connecticut

Date: February 15, 2024

**Tighe & Bond**

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Mapsheet 1 of 11  
 Christian Street Junction to Stevenson Substation Rebuild Project  
 Town of Oxford, Connecticut

**AREA DESCRIPTION**

*Existing Land Use & Resource Areas*

- NEC Focus Area
- Residential
- Undeveloped, forest
- Floodway
- 100-Year Flood Zone
- 500-Year Flood Zone
- Little River (S2)

**RIGHT-OF-WAY DESCRIPTION**

- ± 110 Feet
- Gravel Access Roads
- Maintained

*Water Resources*

- Wetland – W1, W2, W3, W4
- Wetland Cover Types – Scrub-Shrub, Emergent
- Watercourses – S1, S2 (Little River)

*Wetland and Watercourse Crossings*

- W2, W3
- S1, S2 (Little River)

*Right-of-Way Vegetation*

- Scrub-Shrub wetland
- Scrub-Shrub upland
- Emergent wetland
- Residential landscaping
- Pasture

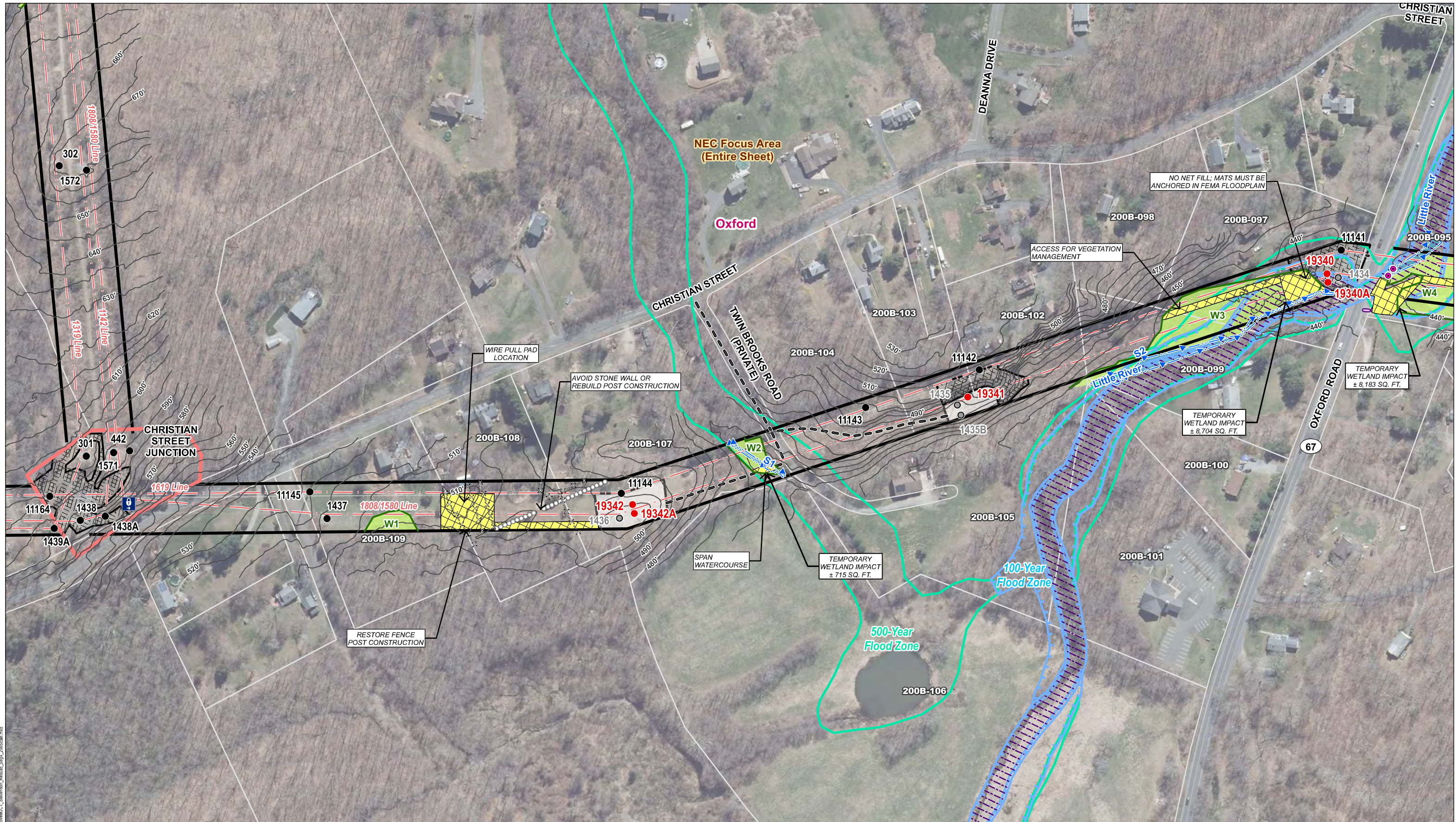
*Access to Existing Structures*

- Structures 1436, 1435, 1435B: from Twin Brooks Road
- Structures 1434: from Oxford Road or Cortland Place

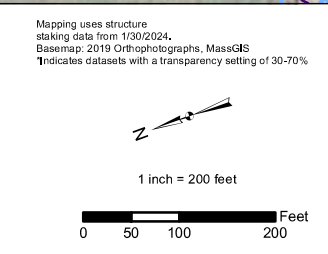
*Road Crossings*

- Twin Brooks Road (Private)
- Oxford Road (Route 67)

Line List	Parcel Address	City	State	Owner Name
200B-095	OXFORD RD	OXFORD	CT	CROSS HOLLOW ASSOCIATES
200B-097	632 OXFORD RD	OXFORD	CT	CARSON BRIAN K
200B-098	23 CHRISTIAN ST	OXFORD	CT	CAIRL RENATA
200B-099	642 OXFORD RD	OXFORD	CT	CONTI ERNEST D & CYNTHIA M
200B-100	652 OXFORD RD	OXFORD	CT	KEDENBURG PATRICIA & PETRONIS PATRICIA
200B-101	656 OXFORD RD	OXFORD	CT	CORNERSTONE ASSEMBLY OF GOD INC
200B-102	27 CHRISTIAN ST	OXFORD	CT	MARKHAM ROBERT H & CINDY
200B-103	45 CHRISTIAN ST	OXFORD	CT	SLATER LUKE
200B-104	47 CHRISTIAN ST	OXFORD	CT	FANOTTO ZACHARY R
200B-105	51 CHRISTIAN ST	OXFORD	CT	FORSTER SARAH
200B-106	OXFORD RD	OXFORD	CT	CORNERSTONE ASSEMBLY OF GOD INC
200B-107	67 CHRISTIAN ST	OXFORD	CT	BACHMAN JOHN J
200B-108	69 CHRISTIAN ST	OXFORD	CT	PEREZ TOMAS R & CABRERA MILAGROS D
200B-109	73 CHRISTIAN ST	OXFORD	CT	BONAVENTURA CODY & SAMANTHA



Legend	
● Proposed Structure	— 5' Contours
● Existing Structure to Remain	— Existing Right-of-Way (ROW)
● Existing Structure to be Removed	— Railroad
● Culvert	— Existing Access
Ⓜ Gate	— Proposed Access
ⓧ Fence	— Off-ROW Access Pending Rights
Ⓞ Stonewall	— Delineated Watercourse
— Overhead Eversource Line	— Field Delineated Wetland Boundary Outline
	— Field Delineated Wetland*
— Open Water*	— Proposed Stone Work Pad*
— Existing Gravel	— Existing Gravel
— Stone Ford	— Temporary Construction Matting
— Natural Diversity Database Area (June 2023)	— Natural Diversity Database Area (June 2023)
— Critical Habitat	— NE Cottontail Focus Area
— FEMA Floodway	— FEMA Floodway
— FEMA 100-Year Flood Zone	— FEMA 100-Year Flood Zone
— FEMA 500-Year Flood Zone	— FEMA 500-Year Flood Zone
— Aquifer Protection Area	— Aquifer Protection Area
— Eversource Owned Property	— Eversource Owned Property
— Parcel Boundary	— Parcel Boundary
— Municipal Boundary	— Municipal Boundary
— Open Space Parcel	— Open Space Parcel



NO.	DATE	REVISIONS	BY	CHK	APP	APP

**EVERSOURCE**

**Christian Street Junction to Stevenson Substation Rebuild Project**

Oxford, CT      Map Sheet 1 of 11

Date: February 15, 2024

**Tighe & Bond**

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**AREA DESCRIPTION**

*Existing Land Use & Resource Areas*

- NEC Focus Area
- NDDDB Area (June 2023)
- Residential
- Undeveloped, forest
- Eversource Owned Property
- Little River (S2)
- Floodway
- 100-Year Flood Zone
- 500-Year Flood Zone

**RIGHT-OF-WAY DESCRIPTION**

- ± 110 Feet
- Gravel Access Roads
- Maintained

*Water Resources*

- Wetland – W4, W5, W6, W7, W8
- Wetland Cover Types – Scrub-Shrub, Emergent
- Watercourses – S2 (Little River), S3

*Wetland and Watercourse Crossings*

- W4, W5, W6, S3

*Right-of-Way Vegetation*

- Scrub-Shrub wetland
- Scrub-Shrub upland
- Emergent wetland

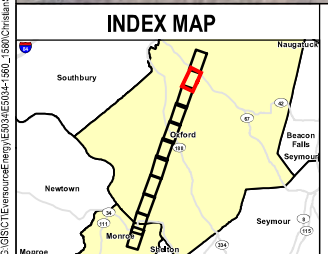
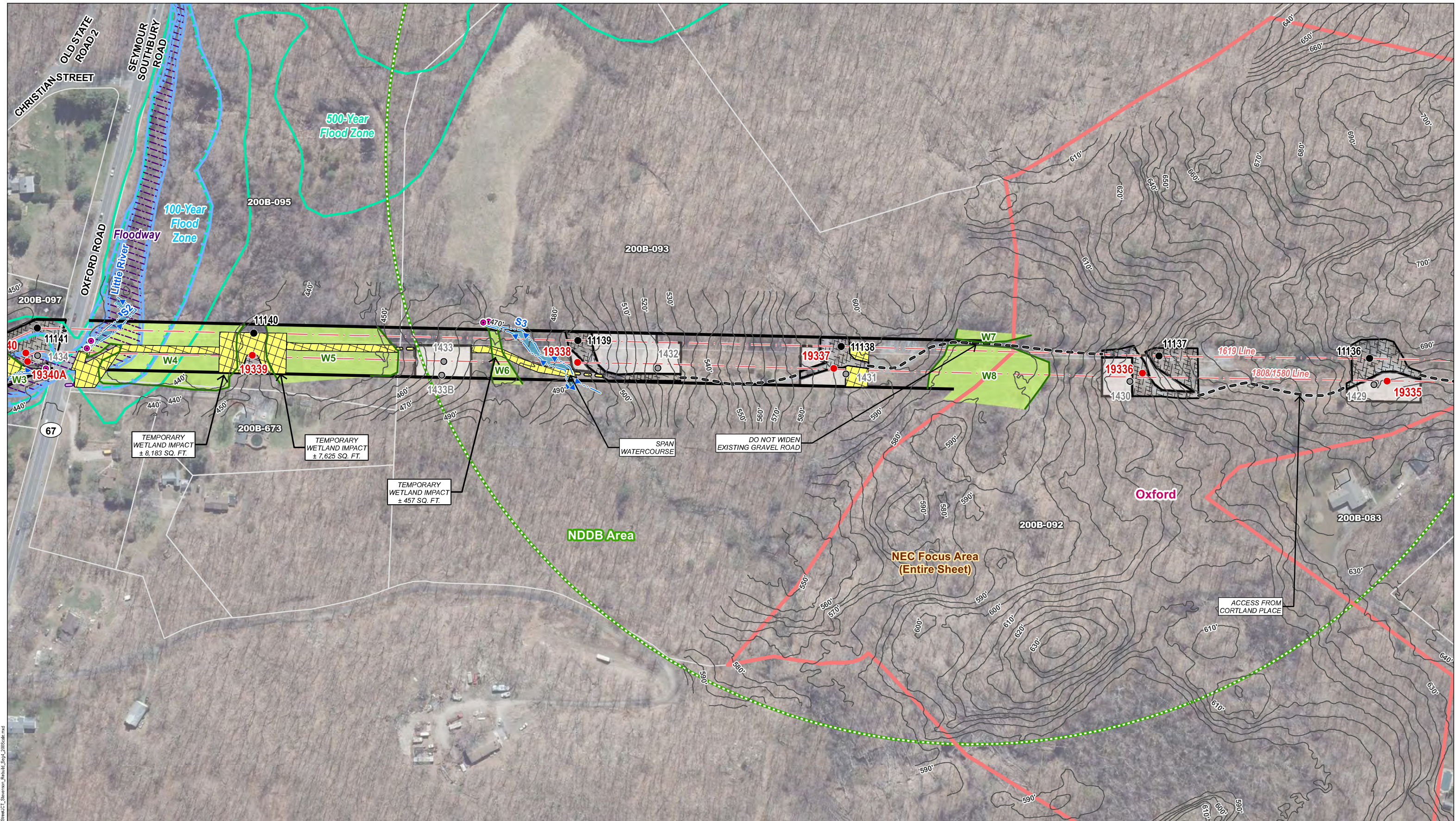
*Access to Existing Structures*

- Structures 1434: from Oxford Road
- Structures 1433, 1433B, 1432, 1431, 1430, 1429: from Oxford Road and Cortland Place

*Road Crossings*

- Oxford Road (Route 67)

Line List	Parcel Address	City	State	Owner Name
200B-083	24 CORTLAND PL	OXFORD	CT	GUERTIN CHRISTOPHER L & THERESA A
200B-092	OXFORD RD	OXFORD	CT	CONNECTICUT LIGHT AND POWER COMPANY
200B-093	OXFORD RD	OXFORD	CT	PEREIRA ANTONIO JR & LIN JULIE
200B-095	OXFORD RD	OXFORD	CT	CROSS HOLLOW ASSOCIATES
200B-097	632 OXFORD RD	OXFORD	CT	CARSON BRIAN K
200B-673	637 OXFORD RD	OXFORD	CT	DERBABIAN JAMES D & MARGARET D



Legend	
● Proposed Structure	— 5' Contours
● Existing Structure to Remain	— Existing Right-of-Way (ROW)
● Existing Structure to be Removed	— Railroad
● Culvert	— Existing Access
□ Gate	— Proposed Access
✕✕ Fence	— Off-ROW Access Pending Rights
○ Stonewall	— Delineated Watercourse
— Overhead Eversource Line	— Field Delineated Wetland Boundary Outline
	— Field Delineated Wetland*
— Open Water*	— Proposed Stone Work Pad*
— Existing Gravel	— Existing Gravel
— Stone Ford	— Temporary Construction Matting
— Natural Diversity Database Area (June 2023)	— Critical Habitat
— NE Cottontail Focus Area	— FEMA Floodway
— Parcel Boundary	— Municipal Boundary
— Open Space Parcel	

Mapping uses structure staking data from 1/30/2024. Base map: 2019 Orthophotographs, MassGIS. \*Indicates datasets with a transparency setting of 30-70%.

1 inch = 200 feet

0 50 100 200 Feet

NO.	DATE	REVISIONS	BY	CHK	APP	APP

**EVERSOURCE**

**Christian Street Junction to Stevenson Substation Rebuild Project**

Oxford, CT      Map Sheet 2 of 11

Date: February 15, 2024

**Tighe & Bond**

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Mapsheets 3 of 11  
 Christian Street Junction to Stevenson Substation Rebuild Project  
 Town of Oxford, Connecticut

**AREA DESCRIPTION**

*Existing Land Use & Resource Areas*

- NEC Focus Area
- NDDB Area (June 2023)
- Residential
- Undeveloped, forest
- Eversource Owned Property

**RIGHT-OF-WAY DESCRIPTION**

- ± 110 Feet
- Gravel Access Roads
- Maintained

*Water Resources*

- Wetland – None
- Wetland Cover Types – N/A
- Watercourses - None

*Wetland and Watercourse Crossings*

- None

*Right-of-Way Vegetation*

- Residential landscaping
- Scrub-Shrub upland

*Access to Existing Structures*

- Structures 1429, 1428, 1427: from Cortland Place or Oxford Road
- Structures 1426, 1425: from Cortland Place or Hogs Back Road

*Road Crossings*

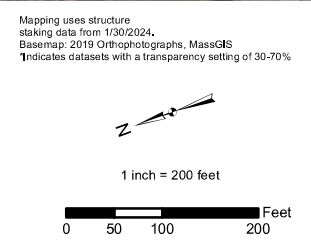
- Cortland Place

Line List	Parcel Address	City	State	Owner Name
200B-070	212 HOGS BACK RD	OXFORD	CT	KIRMANI SYED H
200B-071	214 HOGS BACK RD	OXFORD	CT	ROYAL COURTYARD LLC
200B-072	34 MAC INTOSH DR	OXFORD	CT	MCKINNON DOUGLAS S
200B-073	5 CORTLAND PL	OXFORD	CT	TIRITA KIMBERLY & KATHARINA
200B-074	7 CORTLAND PL	OXFORD	CT	PEDERSON GARY A & GAIL M
200B-075	9 CORTLAND PL	OXFORD	CT	MICA ADAM & KATHRYN
200B-080	12 CORTLAND PL	OXFORD	CT	MAVRICZ WAYNE & MAUREEN
200B-081	14 CORTLAND PL	OXFORD	CT	STEDNER VALERIE & BRUNNER CHRISTOPHER
200B-082	18 CORTLAND PL	OXFORD	CT	PINHO NELSON & FULCO CHRISTINA
200B-083	24 CORTLAND PL	OXFORD	CT	GUERTIN CHRISTOPHER L & THERESA A
200B-092	OXFORD RD	OXFORD	CT	CONNECTICUT LIGHT AND POWER COMPANY





Legend	
● Proposed Structure	— 5' Contours
● Existing Structure to Remain	— Existing Right-of-Way (ROW)
● Existing Structure to be Removed	— Railroad
● Culvert	— Existing Access
Ⓜ Gate	— Proposed Access
ⓧ Fence	— Off-ROW Access Pending Rights
Ⓞ Stonewall	— Delineated Watercourse
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— Railroad	— Existing Access
— Proposed Access	— Off-ROW Access Pending Rights
— Delineated Watercourse	— Field Delineated Wetland Boundary Outline
— Field Delineated Wetland*	
— Open Water*	— Proposed Stone Work Pad*
— Existing Gravel	— Stone Ford
— Temporary Construction Matting	— Natural Diversity Database Area (June 2023)
— Critical Habitat	— NE Cottontail Focus Area
— FEMA Floodway	— FEMA Floodway
— FEMA 100-Year Flood Zone	— FEMA 500-Year Flood Zone
— Aquifer Protection Area	— Eversource Owned Property
— Parcel Boundary	— Municipal Boundary
— Open Space Parcel	



NO.	DATE	REVISIONS	BY	CHK	APP	APP

**EVERSOURCE**

**Christian Street Junction to Stevenson Substation Rebuild Project**

Oxford, CT      Map Sheet 3 of 11

Date: February 15, 2024

**Tighe & Bond**

Mapsheets 4 of 11  
 Christian Street Junction to Stevenson Substation Rebuild Project  
 Town of Oxford, Connecticut

**AREA DESCRIPTION**

*Existing Land Use & Resource Areas*

- NEC Focus Area
- Residential
- Undeveloped, forest

**RIGHT-OF-WAY DESCRIPTION**

- ± 110 Feet
- Gravel Access Roads
- Maintained

*Water Resources*

- Wetland – W9, W10, W11
- Wetland Cover Types - Emergent, Scrub-Shrub
- Watercourses – S4

*Wetland and Watercourse Crossings*

- W9, W11, S4

*Right-of-Way Vegetation*

- Emergent wetland
- Scrub-Shrub wetland
- Scrub-Shrub upland
- Residential landscaping

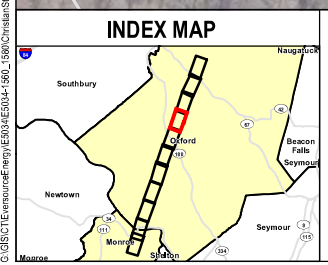
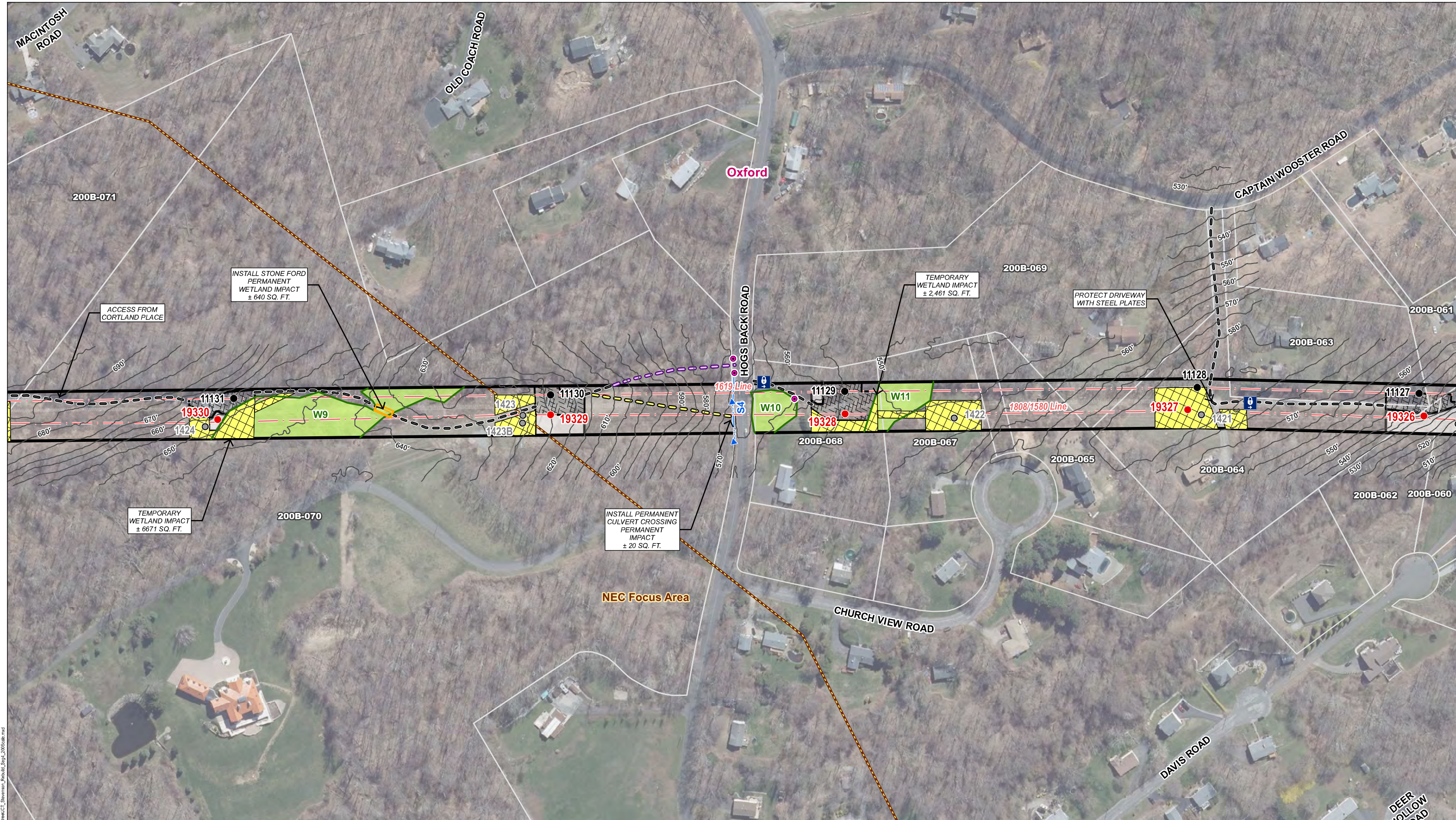
*Access to Existing Structures*

- Structures 1424, 1423, 1423B: from Cortland Place or Hogs Back Road
- Structures 1422: from Hogs Back Road
- Structure 1421: from Captain Wooster Road

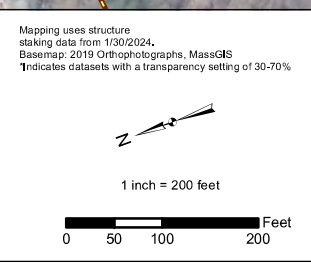
*Road Crossings*

- Hogs Back Road

Line List	Parcel Address	City	State	Owner Name
200B-060	15 DAVIS RD	OXFORD	CT	BUCKLEY JEANNINE JAMESON
200B-061	69 CAPT WOOSTER RD	OXFORD	CT	ANGELICOLA MICHAEL DAVID & (PARKER)PEGGY
200B-062	13 DAVIS RD	OXFORD	CT	HOGAN BRENDA
200B-063	73 CAPT WOOSTER RD	OXFORD	CT	FRANCO ASSENTA
200B-064	75 CAPT WOOSTER RD	OXFORD	CT	SMITH BARBARA LEE
200B-065	12 CHURCH VIEW RD	OXFORD	CT	CONLAN THOMAS & ASHLEY
200B-067	9 CHURCH VIEW RD	OXFORD	CT	ROBISON ROY S III & THERESA
200B-068	197 HOGS BACK RD	OXFORD	CT	CONKLIN WILLIAM S & CHRISTY TRICIA
200B-069	77 CAPT WOOSTER RD	OXFORD	CT	WLASUK JAMES & SUSAN
200B-070	212 HOGS BACK RD	OXFORD	CT	KIRMANI SYED H
200B-071	214 HOGS BACK RD	OXFORD	CT	ROYAL COURTYARD LLC



Legend	
● Proposed Structure	— 5' Contours
● Existing Structure to Remain	— Existing Right-of-Way (ROW)
● Existing Structure to be Removed	— Railroad
● Culvert	— Existing Access
⊕ Gate	— Proposed Access
⊗ Fence	— Off-ROW Access Pending Rights
⊙ Stonewall	— Delineated Watercourse
— Overhead Eversource Line	— Field Delineated Wetland Boundary Outline
	— Field Delineated Wetland*
	— Existing Gravel
	— Stone Ford
	— Temporary Construction Matting
	— Natural Diversity Database Area (June 2023)
	— Critical Habitat
	— NE Cottontail Focus Area
	— FEMA Floodway
	— Open Water*
	— Proposed Stone Work Pad*
	— FEMA 100-Year Flood Zone
	— FEMA 500-Year Flood Zone
	— Aquifer Protection Area
	— Eversource Owned Property
	— Parcel Boundary
	— Municipal Boundary
	— Open Space Parcel



NO.	DATE	REVISIONS	BY	CHK	APP	APP

**EVERSOURCE**

**Christian Street Junction to Stevenson Substation Rebuild Project**

Oxford, CT      Map Sheet 4 of 11

Date: February 15, 2024

**Tighe & Bond**

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**AREA DESCRIPTION**

*Existing Land Use & Resource Areas*

- Residential
- Undeveloped, forest

**RIGHT-OF-WAY DESCRIPTION**

- ± 110 Feet
- Gravel Access Roads
- Maintained

*Water Resources*

- Wetland – W12, W13, W14, W15, W16
- Wetland Cover Types – Emergent, Scrub-Shrub
- Watercourses – S5, S6, (Sevenmile Brook), S7

*Wetland and Watercourse Crossings*

- W12, W13, W16, S5 (Sevenmile Brook)

*Right-of-Way Vegetation*

- Emergent wetland
- Scrub-Shrub wetland
- Scrub-Shrub upland
- Residential landscaping
- Pasture

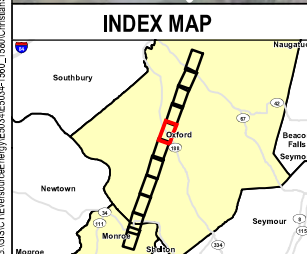
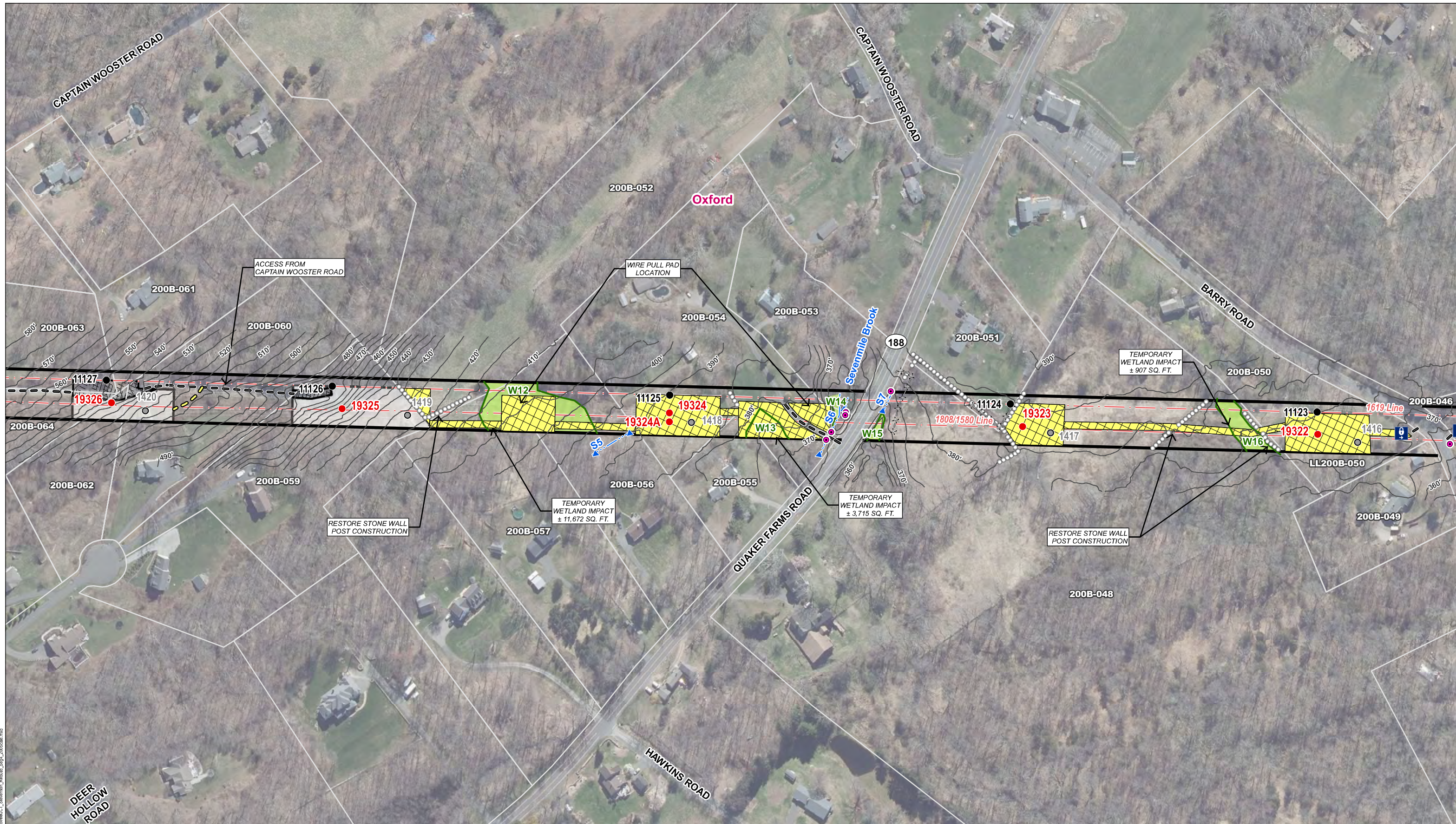
*Access to Existing Structures*

- Structures 1420, 1419, 1418: from Captain Wooster Road or Quaker Farms Road
- Structures 1417, 1416: from Barry Road

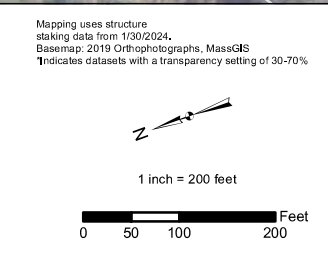
*Road Crossings*

- Quaker Farms Road (Route 188)
- Barry Road

Line List	Parcel Address	City	State	Owner Name
200B-046	45 BARRY RD	OXFORD	CT	MCDONNELL MATTHEW C & JACQUELINE A
200B-048	429 QUAKER FARMS RD	OXFORD	CT	FERNANDES JOHN
200B-049	20 BARRY RD	OXFORD	CT	COHEN CATHLEEN M
200B-050	16 BARRY RD	OXFORD	CT	FARNUM ROBERTS & NANCY W
200B-051	415 QUAKER FARMS RD	OXFORD	CT	CHERNOVETZ JOSEPH A & ANGELA
200B-052	7 CAPT WOOSTER RD	OXFORD	CT	STANTON AUSTIN W & BASILE MELISSA
200B-053	420 QUAKER FARMS RD	OXFORD	CT	KROLL ALICE & KENNETH D
200B-054	424 QUAKER FARMS RD	OXFORD	CT	KROLL PETER
200B-055	428 QUAKER FARMS RD	OXFORD	CT	CT HOUSES LLC & EQUITY TRUST COMPANY
200B-056	430 QUAKER FARMS RD	OXFORD	CT	JONES DIANA INTHAPANHYA &
200B-057	432 QUAKER FARMS RD	OXFORD	CT	BLAKE PETER & CAROL J
200B-059	14 DAVIS RD	OXFORD	CT	GIANSANTI PAUL J & CRISTINA M
200B-060	15 DAVIS RD	OXFORD	CT	BUCKLEY JEANNINE JAMESON
200B-061	69 CAPT WOOSTER RD	OXFORD	CT	ANGELICOLA MICHAEL DAVID & (PARKER)PEGGY
200B-062	13 DAVIS RD	OXFORD	CT	HOGAN BRENDA
200B-063	73 CAPT WOOSTER RD	OXFORD	CT	FRANCO ASSENTA
200B-064	75 CAPT WOOSTER RD	OXFORD	CT	SMITH BARBARA LEE



Legend	
● Proposed Structure	— 5' Contours
● Existing Structure to Remain	— Existing Right-of-Way (ROW)
● Existing Structure to be Removed	— Railroad
● Culvert	— Existing Access
⊕ Gate	— Proposed Access
⊗ Fence	— Off-ROW Access Pending Rights
⊘ Stonewall	— Delineated Watercourse
— Overhead Eversource Line	— Field Delineated Wetland Boundary Outline
	— Field Delineated Wetland*
— Open Water*	— Proposed Stone Work Pad*
— Existing Gravel	— Existing Gravel
— Stone Ford	— Stone Ford
— Temporary Construction Matting	— Temporary Construction Matting
— Natural Diversity Database Area (June 2023)	— Natural Diversity Database Area (June 2023)
— Critical Habitat	— Critical Habitat
— NE Cottontail Focus Area	— NE Cottontail Focus Area
— FEMA Floodway	— FEMA Floodway
— FEMA 100-Year Flood Zone	— FEMA 100-Year Flood Zone
— FEMA 500-Year Flood Zone	— FEMA 500-Year Flood Zone
— Aquifer Protection Area	— Aquifer Protection Area
— Eversource Owned Property	— Eversource Owned Property
— Parcel Boundary	— Parcel Boundary
— Municipal Boundary	— Municipal Boundary
— Open Space Parcel	— Open Space Parcel



NO.	DATE	REVISIONS	BY	CHK	APP	APP

**EVERSOURCE**

**Christian Street Junction to Stevenson Substation Rebuild Project**

Oxford, CT      Map Sheet 5 of 11

Date: February 15, 2024

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**AREA DESCRIPTION**

*Existing Land Use & Resource Areas*

- Residential
- Undeveloped, forest
- 100-Year Flood Zone
- 500-Year Flood Zone
- Eightmile Brook (S8)

**RIGHT-OF-WAY DESCRIPTION**

- ± 110 Feet
- Gravel Access Roads
- Maintained

*Water Resources*

- Wetland – W17, W18
- Wetland Cover Types – Emergent, Scrub-Shrub
- Watercourses – S8 (Eightmile Brook)

*Wetland and Watercourse Crossings*

- W17, W18

*Right-of-Way Vegetation*

- Emergent wetland
- Scrub-Shrub wetland
- Scrub-Shrub upland
- Residential landscaping

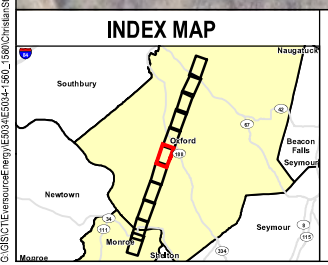
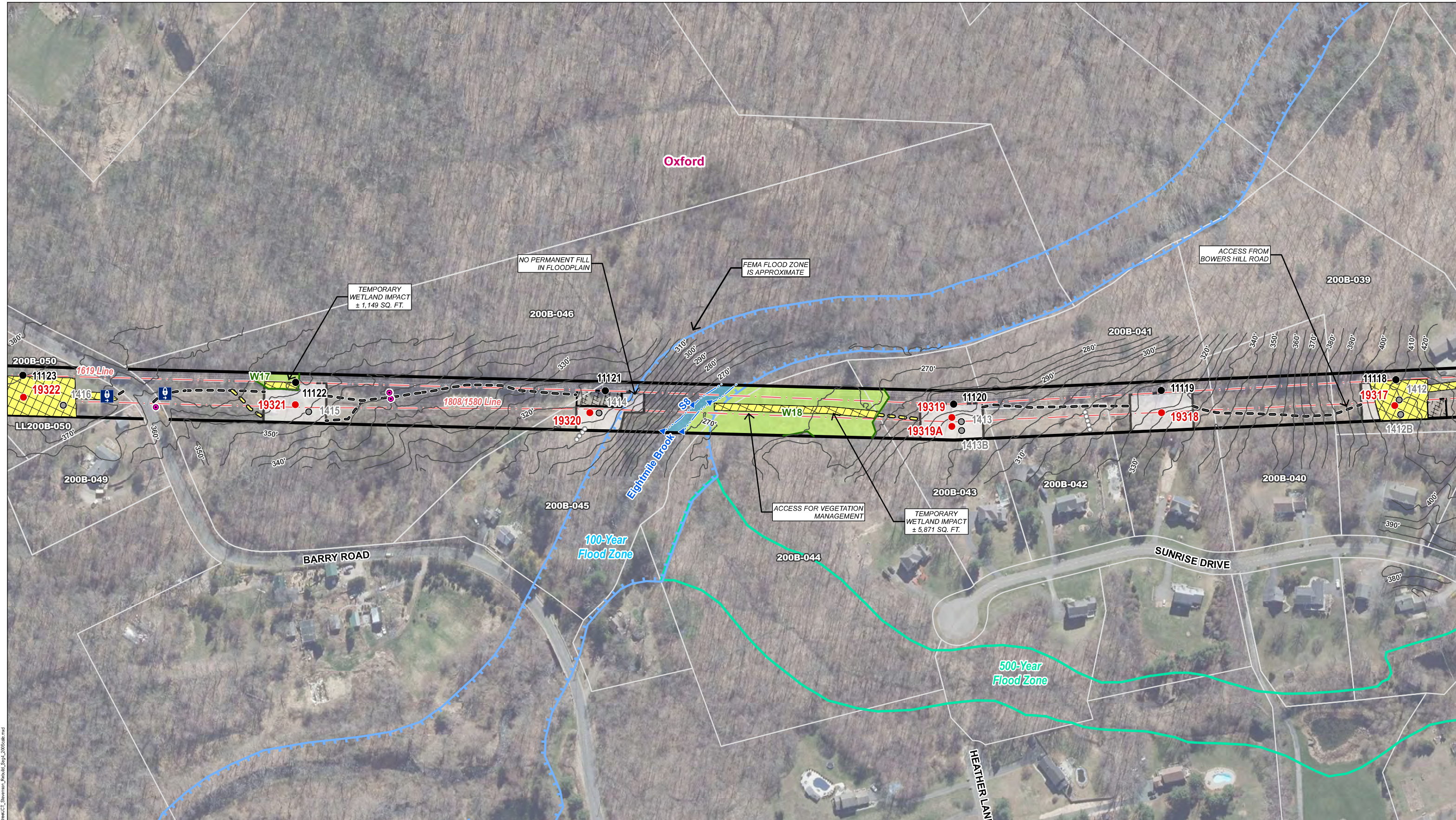
*Access to Existing Structures*

- Structures 1416, 1415, 1414: from Barry Road
- Structures 1413, 1413B, 1412, 1412B: from Bowers Hill Road

*Road Crossings*

- Barry Road

Line List	Parcel Address	City	State	Owner Name
200B-039	14 SUNRISE DR	OXFORD	CT	D'AMATO ROSEMARIE
200B-040	16 SUNRISE DR	OXFORD	CT	FATTIBENE ANTHONY & KATIE
200B-041	18 SUNRISE DR	OXFORD	CT	CZARNEKE KAREN NIELSINE &
200B-042	20 SUNRISE DR	OXFORD	CT	GRECO BRIAN P & LAURA J TRUSTEES
200B-043	22 SUNRISE DR	OXFORD	CT	MEDINA BRIAN & EMILY
200B-044	24 SUNRISE DR	OXFORD	CT	KOCHERA GEORGE III & RENEE
200B-045	55 BARRY RD	OXFORD	CT	MOSS III WILLIAM DEAN & WINSKILL ANNA
200B-046	45 BARRY RD	OXFORD	CT	MCDONNELL MATTHEW C & JACQUELINE A
200B-049	20 BARRY RD	OXFORD	CT	COHEN CATHLEEN M
200B-050	16 BARRY RD	OXFORD	CT	FARNUM ROBERTS & NANCY W



Legend	
● Proposed Structure	— 5' Contours
● Existing Structure to Remain	— Existing Right-of-Way (ROW)
● Existing Structure to be Removed	— Railroad
● Culvert	— Existing Access
⊕ Gate	— Proposed Access
⊗ Fence	— Off-ROW Access Pending Rights
⊙ Stonewall	— Delineated Watercourse
— Overhead Eversource Line	— Field Delineated Wetland Boundary Outline
	— Field Delineated Wetland*
— Open Water*	— Proposed Stone Work Pad*
— Existing Gravel	— Stone Ford
— Temporary Construction Matting	— Natural Diversity Database Area (June 2023)
— Critical Habitat	— NE Cottontail Focus Area
— FEMA Floodway	— FEMA 100-Year Flood Zone
	— FEMA 500-Year Flood Zone
	— Aquifer Protection Area
	— Eversource Owned Property
	— Parcel Boundary
	— Municipal Boundary
	— Open Space Parcel

Mapping uses structure staking data from 1/30/2024.  
 Basemap: 2019 Orthophotographs, MassGIS  
 \*Indicates datasets with a transparency setting of 30-70%

1 inch = 200 feet

0 50 100 200 Feet

NO.	DATE	REVISIONS	BY	CHK	APP	APP

**EVERSOURCE**

**Christian Street Junction to Stevenson Substation Rebuild Project**

Oxford, CT      Map Sheet 6 of 11

Date: February 15, 2024

**Tighe & Bond**

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**AREA DESCRIPTION**

*Existing Land Use & Resource Areas*

- Residential
- Undeveloped, forest
- 500-Year Flood Zone
- Aggie Park Open Space

**RIGHT-OF-WAY DESCRIPTION**

- ± 110 Feet
- Gravel Access Roads
- Maintained

*Water Resources*

- Wetland – W19
- Wetland Cover Types – Scrub-Shrub
- Watercourses – S9

*Wetland and Watercourse Crossings*

- W19, S9

*Right-of-Way Vegetation*

- Residential landscaping
- Recreational open space
- Scrub-Shrub wetland
- Scrub-Shrub upland

*Access to Existing Structures*

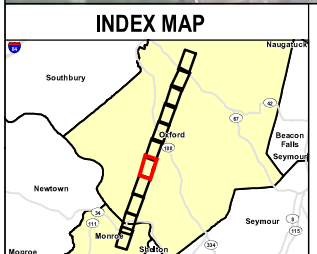
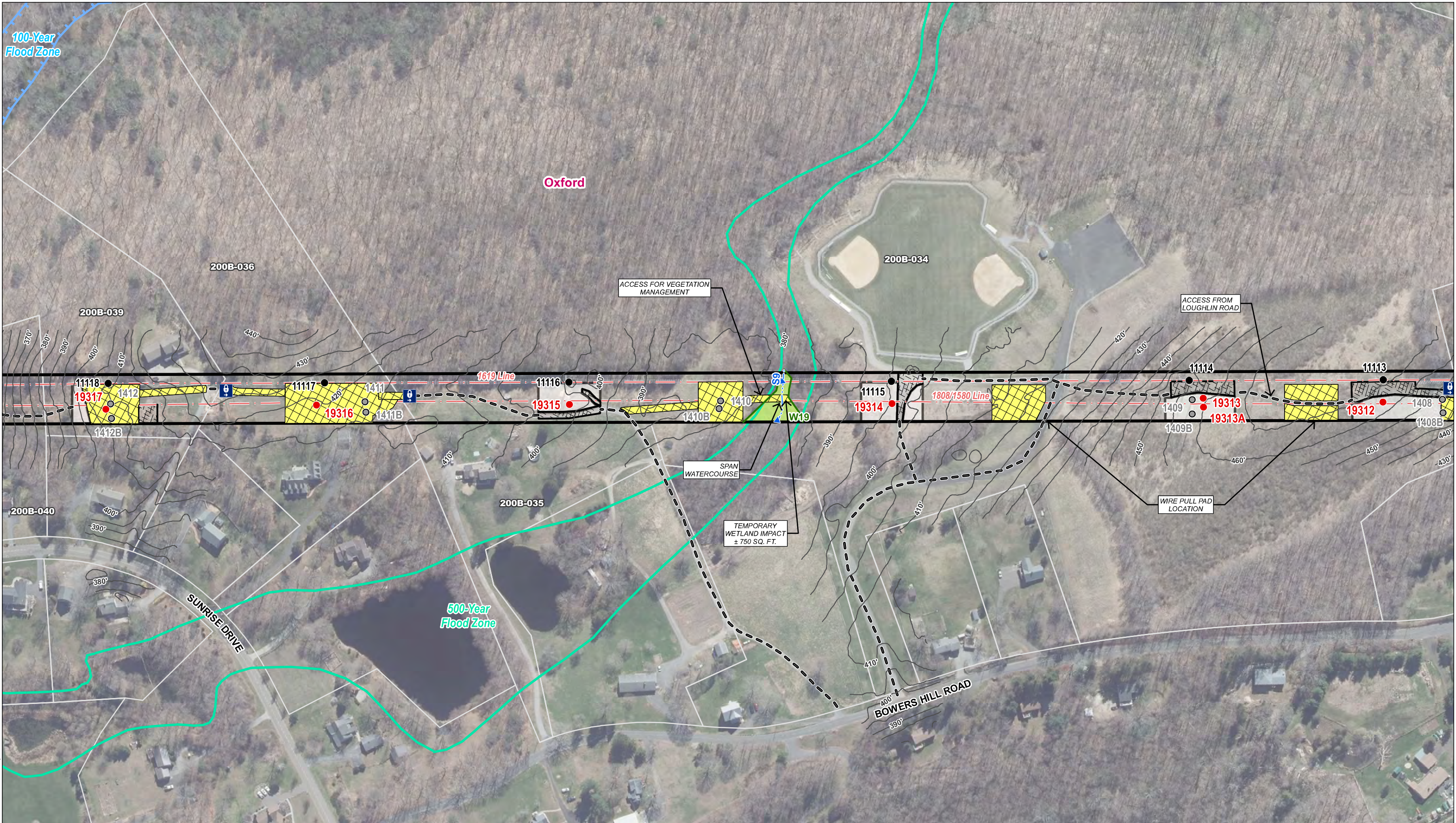
- Structures 1412, 1412B, 1411, 1411B, 1410, 1410B, 1409, 1409B, 1408, 1408B: from Bowers Hill Road

*Road Crossings*

- None

Line List	Parcel Address	City	State	Owner Name
200B-034	BOWERS HILL RD	OXFORD	CT	TOWN OF OXFORD
200B-035	83 BOWERS HILL RD	OXFORD	CT	GRAILICH LINDSEY H & TYLER
200B-036	6 SUNRISE DR	OXFORD	CT	FEDEROWICZ THOMAS & CATHY
200B-039	14 SUNRISE DR	OXFORD	CT	D'AMATO ROSEMARIE
200B-040	16 SUNRISE DR	OXFORD	CT	FATTIBENE ANTHONY & KATIE





Legend	
● Proposed Structure	— 5' Contours
● Existing Structure to Remain	— Existing Right-of-Way (ROW)
● Existing Structure to be Removed	— Railroad
● Culvert	— Existing Access
Ⓜ Gate	— Proposed Access
✕✕ Fence	— Off-ROW Access Pending Rights
⊘ Stonewall	— Delineated Watercourse
— Overhead Eversource Line	— Field Delineated Wetland Boundary Outline
	— Field Delineated Wetland*
— Open Water*	— Proposed Stone Work Pad*
— Existing Gravel	— Stone Ford
— Temporary Construction Matting	— Natural Diversity Database Area (June 2023)
— Critical Habitat	— NE Cottontail Focus Area
— FEMA Floodway	— FEMA 100-Year Flood Zone
	— FEMA 500-Year Flood Zone
	— Aquifer Protection Area
	— Eversource Owned Property
	— Parcel Boundary
	— Municipal Boundary
	— Open Space Parcel

Mapping uses structure staking data from 1/30/2024. Basemap: 2019 Orthophotographs, MassGIS. \*Indicates datasets with a transparency setting of 30-70%.

1 inch = 200 feet

0 50 100 200 Feet

NO.	DATE	REVISIONS	BY	CHK	APP	APP

**EVERSOURCE**

**Christian Street Junction to Stevenson Substation Rebuild Project**

Oxford, CT

Date: February 15, 2024

Map Sheet 7 of 11

**Tighe & Bond**

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**AREA DESCRIPTION**

*Existing Land Use & Resource Areas*

- Residential
- Undeveloped, forest
- 100-Year Flood Zone
- Aggie Park Open Space

**RIGHT-OF-WAY DESCRIPTION**

- ± 110 Feet
- Gravel Access Roads
- Maintained

*Water Resources*

- Wetland – W20
- Wetland Cover Types - Emergent, Open Water
- Watercourses – None

*Wetland and Watercourse Crossings*

- W20

*Right-of-Way Vegetation*

- Emergent wetland
- Residential landscaping

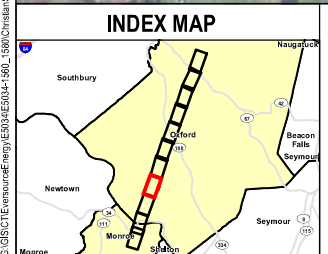
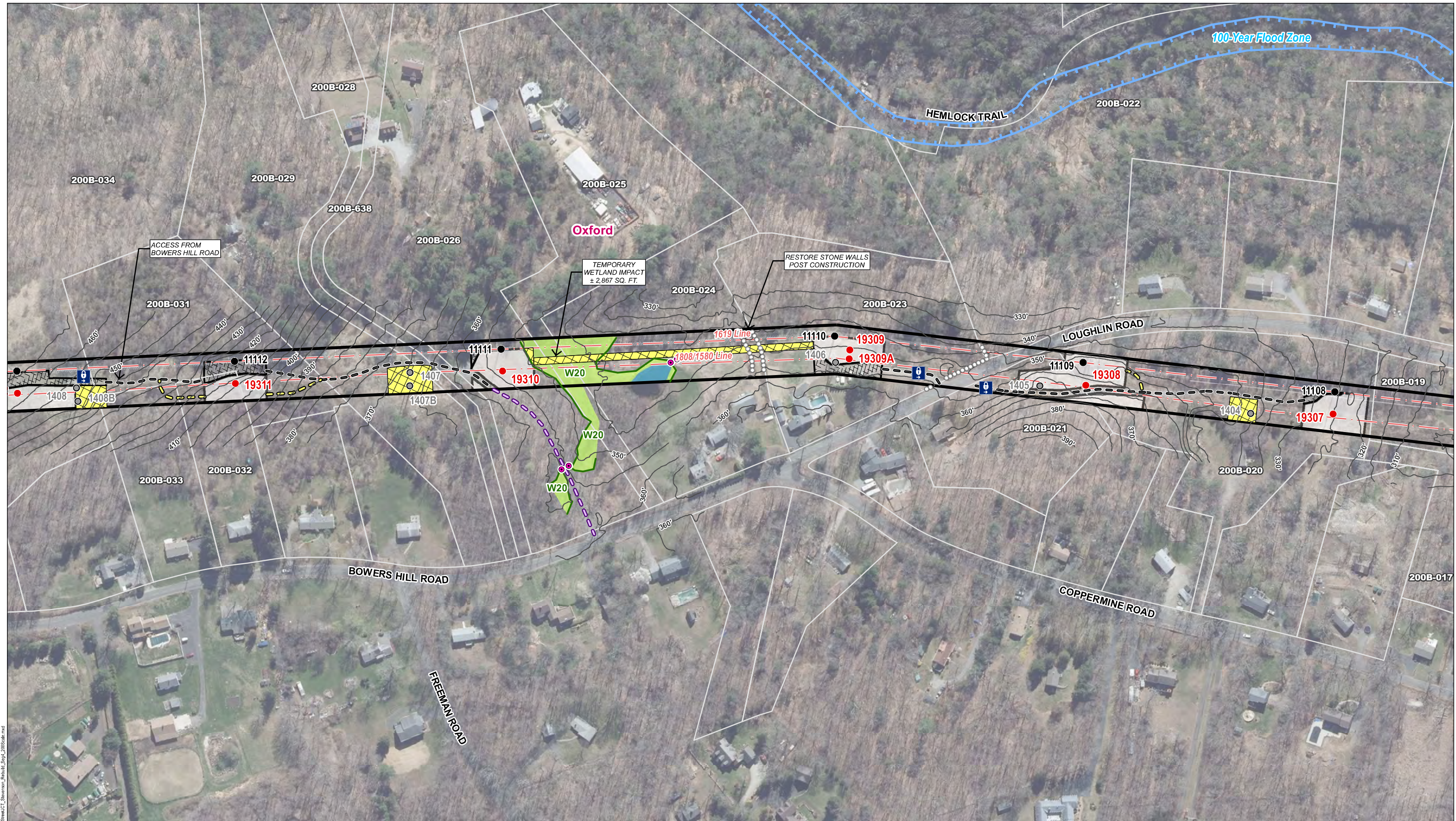
*Access to Existing Structures*

- Structures 1408, 1408B, 1407, 1407B, 1406: from Bowers Hill Road or Loughlin Road
- Structures 1405, 1404: from Loughlin Road

*Road Crossings*

- Loughlin Road

Line List	Parcel Address	City	State	Owner Name
200B-017	LOUGHLIN RD	OXFORD	CT	DOWNS JOHN & WILLIAM D JR TRUSTEE
200B-019	210 LOUGHLIN RD	OXFORD	CT	PRAJER RONALD TRUSTEE OF
200B-020	31 COPPERMINE RD	OXFORD	CT	DILLER CLAUDETTE
200B-021	174 LOUGHLIN RD	OXFORD	CT	TROESTER WILLIAM H
200B-022	HEMLOCK TRAIL	OXFORD	CT	FITCH LYNDA G
200B-023	171 BOWERS HILL RD	OXFORD	CT	LJUNGQUIST ALLEN R & ANNE
200B-024	165 BOWERS HILL RD	OXFORD	CT	WOJNAGI DENIS JR & MELISSA
200B-025	163 BOWERS HILL RD	OXFORD	CT	FISHER KAREN A TRUSTEE
200B-026	161 BOWERS HILL RD	OXFORD	CT	HARMONY RANCH LTD
200B-028	155 BOWERS HILL RD	OXFORD	CT	TUCKER JR LEWIS I
200B-029	153 BOWERS HILL RD	OXFORD	CT	TUCKER JR LEWIS I
200B-031	BOWERS HILL RD	OXFORD	CT	THE TOWN OF OXFORD
200B-032	135 BOWERS HILL RD	OXFORD	CT	DEGENNARO JENNIFER L
200B-033	133 BOWERS HILL RD	OXFORD	CT	EGAN JAMES JOSEPH & VICTORIA LEIGH
200B-034	BOWERS HILL RD	OXFORD	CT	TOWN OF OXFORD
200B-638	159 BOWERS HILL RD	OXFORD	CT	RAYMOND GARRETT AS TRUSTEE



Legend	
● Proposed Structure	— 5' Contours
● Existing Structure to Remain	— Existing Right-of-Way (ROW)
● Existing Structure to be Removed	— Railroad
● Culvert	— Existing Access
Ⓜ Gate	— Proposed Access
ⓧ Fence	— Off-ROW Access Pending Rights
Ⓞ Stonewall	— Delineated Watercourse
— Overhead Eversource Line	— Field Delineated Wetland Boundary Outline
	— Field Delineated Wetland*
— Open Water*	— Proposed Stone Work Pad*
— Existing Gravel	— Stone Ford
— Temporary Construction Matting	— Natural Diversity Database Area (June 2023)
— Critical Habitat	— NE Cottontail Focus Area
— FEMA Floodway	— FEMA 100-Year Flood Zone
	— FEMA 500-Year Flood Zone
	— Aquifer Protection Area
	— Eversource Owned Property
	— Parcel Boundary
	— Municipal Boundary
	— Open Space Parcel

Mapping uses structure staking data from 1/30/2024. Basemap: 2019 Orthophotographs, MassGIS. \*Indicates datasets with a transparency setting of 30-70%.

1 inch = 200 feet

0 50 100 200 Feet

NO.	DATE	REVISIONS	BY	CHK	APP	APP

**EVERSOURCE**

**Christian Street Junction to Stevenson Substation Rebuild Project**

Oxford, CT

Map Sheet 8 of 11

Date: February 15, 2024

**Tighe & Bond**

Mapsheet 9 of 11  
Christian Street Junction to Stevenson Substation Rebuild Project  
Town of Oxford, Connecticut

**AREA DESCRIPTION**

*Existing Land Use & Resource Areas*

- NDDB Area (June 2023)
- Residential
- Undeveloped, forest
- Floodway
- 100-Year Flood Zone
- 500-Year Flood Zone

**RIGHT-OF-WAY DESCRIPTION**

- ± 110 Feet
- Gravel Access Roads
- Maintained

*Water Resources*

- Wetland – W21, W22
- Wetland Cover Types - Emergent, Scrub-Shrub
- Watercourses – S10

*Wetland and Watercourse Crossings*

- none

*Right-of-Way Vegetation*

- Emergent wetland
- Scrub-Shrub wetland
- Scrub-Shrub upland
- Residential landscaping

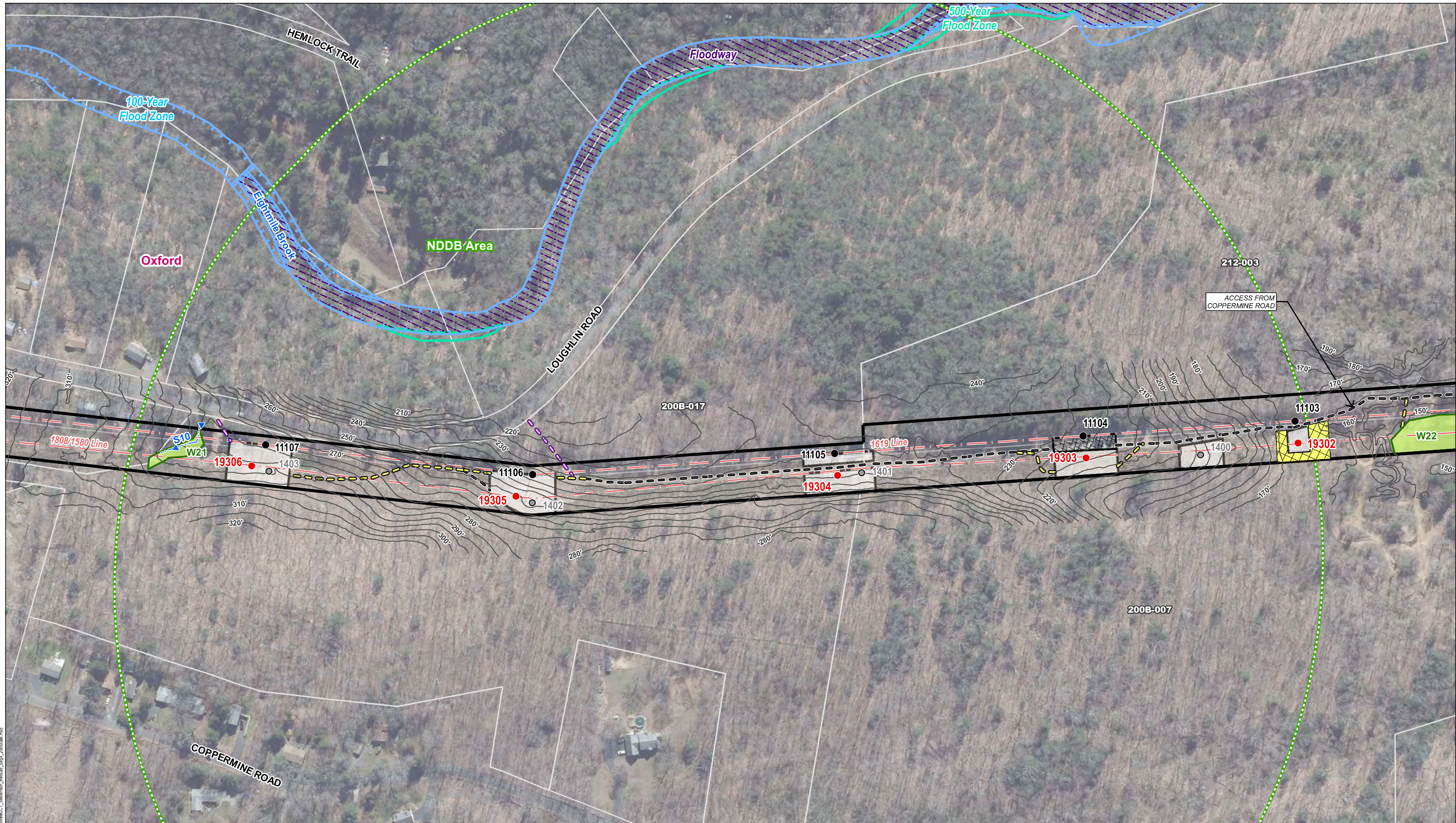
*Access to Existing Structures*

- Structure 1403, 1402, 1401, 1400: from Coppermine Road

*Road Crossings*

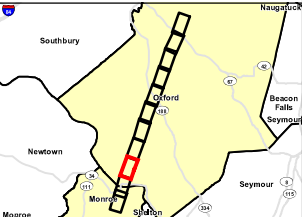
- None

Line List	Parcel Address	City	State	Owner Name
200B-007	COPPERMINE RD	OXFORD	CT	DESIGN LAND DEVELOPERS OF OXFORD INC
200B-017	LOUGHLIN RD	OXFORD	CT	DOWNS JOHN & WILLIAM D JR TRUSTEE
200B-019	210 LOUGHLIN RD	OXFORD	CT	PRAJER RONALD TRUSTEE OF
212-003	708 ROOSEVELT DR	OXFORD	CT	ROBERT MASTRONI EXCAVATING LLC



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**INDEX MAP**



**Legend**

- Proposed Structure
- Existing Structure to Remain
- Existing Structure to be Removed
- Culvert
- Gate
- X-X Fence
- Stonewall
- Overhead Eversource Line
- 5' Contours
- Existing Right-of-Way (ROW)
- Railroad
- Existing Access
- Proposed Access
- Off-ROW Access Pending Rights
- Delineated Watercourse
- Field Delineated Wetland Boundary Outline
- Field Delineated Wetland\*
- Open Water\*
- Proposed Stone Work Pad\*
- Existing Gravel
- Stone Ford
- Temporary Construction Matting
- Natural Diversity Database Area (June 2023)
- Off-ROW Access Pending Rights
- Delineated Watercourse
- Field Delineated Wetland Boundary Outline
- Field Delineated Wetland\*
- FEMA 100-Year Flood Zone
- FEMA 500-Year Flood Zone
- Aquifer Protection Area
- Eversource Owned Property
- Parcel Boundary
- Municipal Boundary
- Open Space Parcel

Mapping uses structure staking data from 1/30/2024.  
 Basemap: 2019 Orthophotographs, MassGIS  
 \*Indicates datasets with a transparency setting of 30-70%

1 inch = 200 feet

0 50 100 200 Feet

NO.	DATE	REVISIONS	BY	CHK	APP	APP

**EVERSOURCE**

**Christian Street Junction to Stevenson Substation Rebuild Project**

Oxford & Monroe, CT      Map Sheet 9 of 11

Date: February 15, 2024

**Tighe & Bond**

**AREA DESCRIPTION**

*Existing Land Use & Resource Areas*

- NDDDB Area (June 2023)
- NEC Focus Area
- Undeveloped, forest
- Floodway
- 100-Year Flood Zone
- 500-Year Flood Zone
- Housatonic River
- Lake Zoar
- Housatonic Railroad
- Eversource owned property

**RIGHT-OF-WAY DESCRIPTION**

- ± 110 Feet
- Gravel Access Roads
- Maintained

*Water Resources*

- Wetland – W22
- Wetland Cover Types - Emergent
- Watercourses – S11 (Housatonic River)

*Wetland and Watercourse Crossings*

- W22

*Right-of-Way Vegetation*

- Emergent

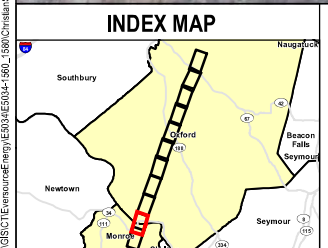
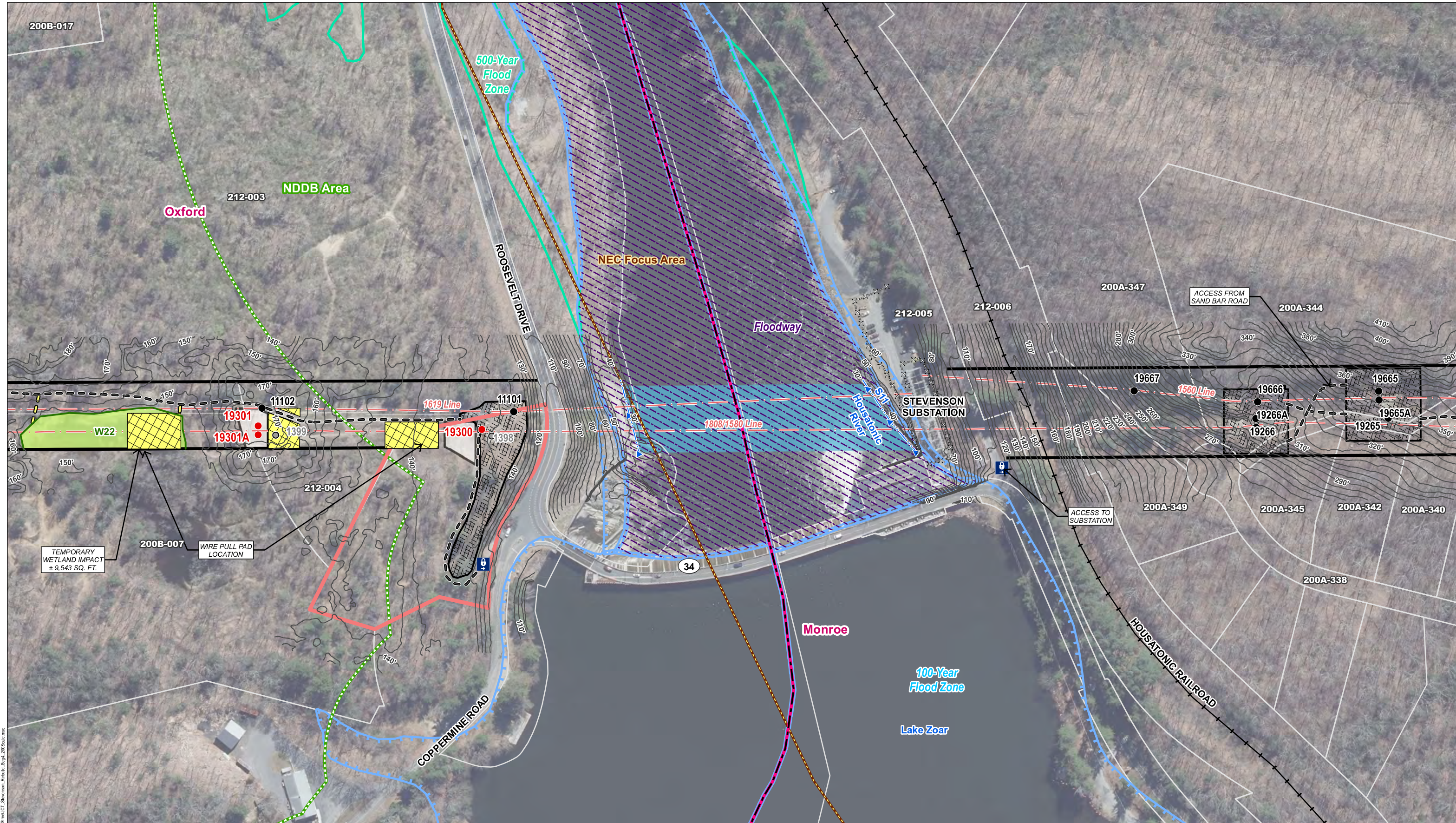
*Access to Existing Structures and Pull Pads*

- Structures 1399, 1398: from Coppermine Road
- Pull Pads from Sand Bar Road

*Road Crossings*

- Roosevelt Drive (Route 34)

Line List	Parcel Address	City	State	Owner Name
200A-338	84 COTTAGE ST	MONROE	CT	COTTAGE STREET LLC
200A-340	20 MOUNTAIN LAUREL DR	MONROE	CT	COTTAGE STREET LLC
200A-342	26 MOUNTAIN LAUREL DR	MONROE	CT	COTTAGE STREET LLC
200A-344	50 MOUNTAIN LAUREL DR	MONROE	CT	COTTAGE STREET LLC
200A-345	32 MOUNTAIN LAUREL DR	MONROE	CT	COTTAGE STREET LLC
200A-347	49 MOUNTAIN LAUREL DR	MONROE	CT	COTTAGE STREET LLC
200A-349	41 MOUNTAIN LAUREL DR	MONROE	CT	COTTAGE STREET LLC
200B-007	COPPERMINE RD	OXFORD	CT	DESIGN LAND DEVELOPERS OF OXFORD INC
200B-017	LOUGHLIN RD	OXFORD	CT	DOWNS JOHN & WILLIAM D JR TRUSTEE
212-003	708 ROOSEVELT DR	OXFORD	CT	ROBERT MASTRONI EXCAVATING LLC
212-004	COPPERMINE RD	OXFORD	CT	STATE OF CT-DOT
212-005	1 ROOSEVELT DR	MONROE	CT	FIRSTLIGHT CT HOUSATONIC LLC
212-006	00 SHELTON TO NEWTOWN T/L	MONROE	CT	MAYBROOK RAILROAD CO INC



Legend	
● Proposed Structure	— 5' Contours
● Existing Structure to Remain	— Existing Right-of-Way (ROW)
● Existing Structure to be Removed	— Railroad
● Culvert	— Existing Access
🚪 Gate	— Proposed Access
⊗ Fence	— Off-ROW Access Pending Rights
⊗ Stonewall	— Delineated Watercourse
— Overhead Eversource Line	— Field Delineated Wetland Boundary Outline
	— Field Delineated Wetland*
	— Existing Gravel
	— Stone Ford
	— Temporary Construction Matting
	— Natural Diversity Database Area (June 2023)
	— Critical Habitat
	— NE Cottontail Focus Area
	— FEMA Floodway
	— Open Water*
	— Proposed Stone Work Pad*
	— FEMA 100-Year Flood Zone
	— FEMA 500-Year Flood Zone
	— Aquifer Protection Area
	— Eversource Owned Property
	— Parcel Boundary
	— Municipal Boundary
	— Open Space Parcel

Mapping uses structure staking data from 1/30/2024.  
 Basemap: 2019 Orthophotographs, MassGIS  
 \*Indicates datasets with a transparency setting of 30-70%

1 inch = 200 feet

0 50 100 200 Feet

NO.	DATE	REVISIONS	BY	CHK	APP	APP

**EVERSOURCE**

**Christian Street Junction to Stevenson Substation Rebuild Project**

Oxford & Monroe, CT      Map Sheet 10 of 11

Date: February 15, 2024

**Tighe & Bond**

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**AREA DESCRIPTION**

*Existing Land Use & Resource Areas*

- NDDDB Area (June 2023)
- NEC Focus Area
- Undeveloped, forest
- Residential
- Paugussett Trail
- 100-Year Flood Zone
- Housatonic Railroad
- Eversource owned property

**RIGHT-OF-WAY DESCRIPTION**

- ± 110 Feet
- Gravel Access Roads
- Maintained

*Water Resources*

- Wetland – W23, W24
- Wetland Cover Types - Forested
- Watercourses – S12, S13

*Wetland and Watercourse Crossings*

- None

*Right-of-Way Vegetation*

- Scrub-Shrub upland

*Access to Pull Pads*

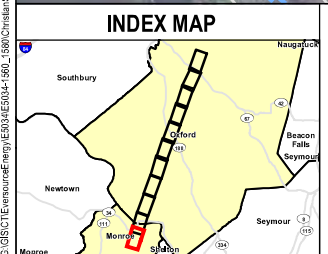
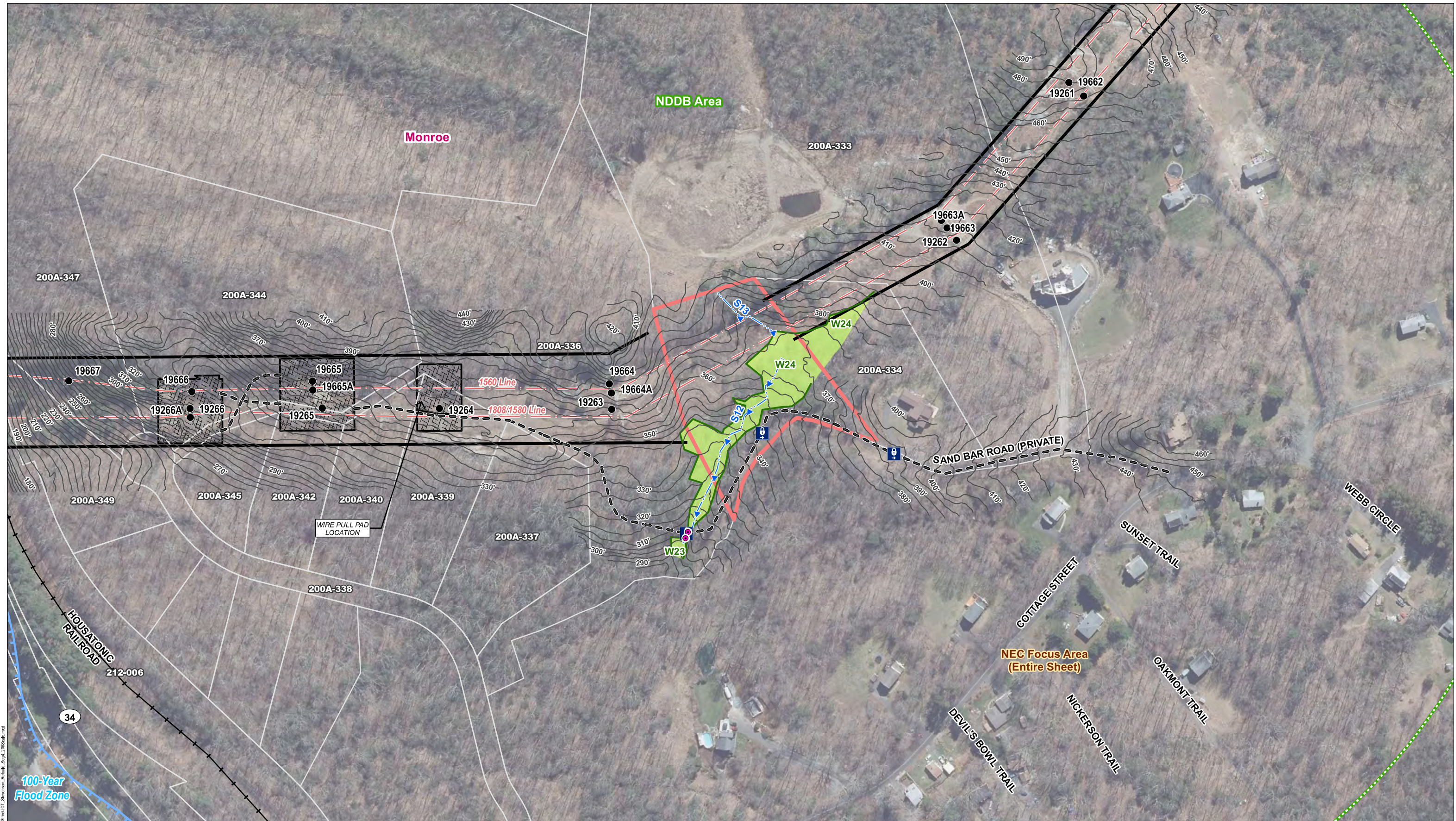
- Pull Pads from Sand Bar Road

*Road Crossings*

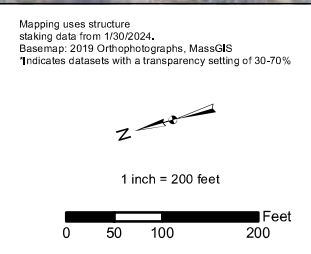
- None

Line List	Parcel Address	City	State	Owner Name
200A-333	16 SAND BAR RD	MONROE	CT	HUNDRED ACRE WOOD LLC
200A-334	22 SAND BAR RD	MONROE	CT	LYONS MICHAEL
200A-336	40 MOUNTAIN LAUREL DR	MONROE	CT	COTTAGE STREET LLC
300A-337	8 MOUNTAIN LAUREL DR	MONROE	CT	COTTAGE STREET LLC
200A-338	84 COTTAGE ST	MONROE	CT	COTTAGE STREET LLC
200A-339	14 MOUNTAIN LAUREL DR	MONROE	CT	COTTAGE STREET LLC
200A-340	20 MOUNTAIN LAUREL DR	MONROE	CT	COTTAGE STREET LLC
200A-342	26 MOUNTAIN LAUREL DR	MONROE	CT	COTTAGE STREET LLC
200A-344	50 MOUNTAIN LAUREL DR	MONROE	CT	COTTAGE STREET LLC
200A-345	32 MOUNTAIN LAUREL DR	MONROE	CT	COTTAGE STREET LLC
200A-347	49 MOUNTAIN LAUREL DR	MONROE	CT	COTTAGE STREET LLC
200A-349	41 MOUNTAIN LAUREL DR	MONROE	CT	COTTAGE STREET LLC
212-006	00 SHELTON TO NEWTOWN T/L	MONROE	CT	MAYBROOK RAILROAD CO INC





Legend	
● Proposed Structure	— 5' Contours
● Existing Structure to Remain	— Existing Right-of-Way (ROW)
● Existing Structure to be Removed	— Railroad
● Culvert	— Existing Access
Ⓜ Gate	— Proposed Access
ⓧ Fence	— Off-ROW Access Pending Rights
Ⓞ Stonewall	— Delineated Watercourse
— Overhead Eversource Line	— Field Delineated Wetland Boundary Outline
	— Field Delineated Wetland*
	— Existing Gravel
	— Stone Ford
	— Temporary Construction Matting
	— Natural Diversity Database Area (June 2023)
	— Critical Habitat
	— NE Cottontail Focus Area
	— FEMA Floodway
	— Open Water*
	— Proposed Stone Work Pad*
	— FEMA 100-Year Flood Zone
	— FEMA 500-Year Flood Zone
	— Aquifer Protection Area
	— Eversource Owned Property
	— Parcel Boundary
	— Municipal Boundary
	— Open Space Parcel



NO.	DATE	REVISIONS	BY	CHK	APP	APP

**EVERSOURCE**

**Christian Street Junction to Stevenson Substation Rebuild Project**

Monroe, CT      Map Sheet 11 of 11

Date: February 15, 2024

**Tighe & Bond**

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 2/15/2024 10:00 AM



**Attachment B**  
**Structure Table**



**Structure Table**  
**Christian Street Junction to Stevenson Substation Rebuild Project**  
**1580/1808 Lines**

Existing Structures Circuits	Existing Structure No.	Existing Structure Type	Existing Structure Height (feet)	Proposed Structures Circuits	Proposed Structure No.	Proposed Structure Type	Proposed Structure Height (feet)	Change in Structure Height (feet)
1580 & 1808	1436	DCLT	81	1580	19342	SCSP	92	11
				1808	19342A	SCSP	92	
1580	1435	SCSP	108	1580 & 1808	19341	DCSP	97	-11
1808	1435B	SCSP	108					
1580 & 1808	1434	DCLT	80	1580	19340	SCSP	102	22
				1808	19340A	SCSP	102	
1580	1433	SCSP	108	1580 & 1808	19339	DCSP	97	-11
1808	1433B	SCSP	108					
1580 & 1808	1432	DCLT	81	1580 & 1808	19338	DCSP	121.5	40.5
1580 & 1808	1431	DCLT	81	1580 & 1808	19337	DCSP	75	-6
1580 & 1808	1430	DCLT	81	1580 & 1808	19336	DCSP	93.5	12.5
1580 & 1808	1429	DCLT	81	1580 & 1808	19335	DCSP	88.5	7.5
1580 & 1808	1428	DCLT	81	1580	19334	SCSP	86.5	5.5
				1808	19334A	SCSP	86.5	
1580 & 1808	1427	DCLT	91	1580 & 1808	19333	DCSP	121.5	30.5
1580 & 1808	1426	DCLT	81	1580 & 1808	19332	DCSP	93.5	12.5
1580 & 1808	1425	DCLT	81	1580 & 1808	19331	DCSP	93.5	12.5
1580 & 1808	1424	DCLT	81	1580 & 1808	19330	DCSP	102	21
1580	1423	SCSP	108	1580 & 1808	19329	DCSP	79	-29
1808	1423B	SCSP	108					
1580 & 1808	1422	DCLT	81	1580 & 1808	19328	DCSP	112	31
1580 & 1808	1421	DCLT	81	1580 & 1808	19327	DCSP	79	-2
1580 & 1808	1420	DCLT	93	1580 & 1808	19326	DCSP	96.5	3.5
1580 & 1808	1419	DCLT	81	1580 & 1808	19325	DCSP	101.5	20.5
1580 & 1808	1418	DCLT	80	1580	19324	SCSP	107	27
				1808	19324A	SCSP	107	
1580 & 1808	1417	DCLT	80	1580 & 1808	19323	DCSP	98	18
1580 & 1808	1416	DCLT	81	1580 & 1808	19322	DCSP	107.5	26.5
1580 & 1808	1415	DCLT	81	1580 & 1808	19321	DCSP	98	17
1580 & 1808	1414	DCLT	81	1580 & 1808	19320	DCSP	82	1
1580	1413	SCSP	103	1580	19319	SCSP	87	-16
1808	1413B	SCSP	103	1808	19319A	SCSP	87	-16
				1580 & 1808	<b>19318</b>	DCSP	96.5	
1580	1412	SCSP	98	1580 & 1808	19317	DCSP	88.5	-9.5
1808	1412B	SCSP	98					
1580	1411	SCSP	98	1580 & 1808	19316	DCSP	88.5	-9.5
1808	1411B	SCSP	98					
1580	1410	SCSP	113	1580 & 1808	19315	DCSP	79	-34
1808	1410B	SCSP	113					
				1580 & 1808	<b>19314</b>	DCSP	97	
1580	1409	SCSP	98	1580	19313	SCSP	96.5	-1.5
1808	1409B	SCSP	98	1808	19313A	SCSP	96.5	-1.5
1580	1408	SCSP	103	1580 & 1808	19312	DCSP	75	-28
1808	1408B	SCSP	103					
1580	1407	SCSP	108	1580 & 1808	19311	DCSP	91.5	-16.5
1808	1407B	SCSP	108					
				1580 & 1808	<b>19310</b>	DCSP	102	
1580 & 1808	1406	DCLT	81	1580	19309	SCSP	97	16
				1808	19309A	SCSP	97	
1580 & 1808	1405	DCLT	81	1580 & 1808	19308	DCSP	96.5	15.5
1580 & 1808	1404	DCLT	82	1580 & 1808	19307	DCSP	97	15
1580 & 1808	1403	DCLT	84	1580 & 1808	19306	DCSP	102	18
1580 & 1808	1402	DCLT	82	1580 & 1808	19305	DCSP	96.5	14.5
1580 & 1808	1401	DCLT	83	1580 & 1808	19304	DCSP	88.5	5.5
1580 & 1808	1400	DCLT	94	1580 & 1808	19303	DCSP	79	-15
				1580 & 1808	<b>19302</b>	DCSP	117	
1580 & 1808	1399	DCLT	86	1580	19301	SCSP	72	-14
				1808	19301A	SCSP	72	
1580 & 1808	1398	DCLT	81	1580 & 1808	19300	DCSP	101.5	20.5

BOLD indicates an added structure

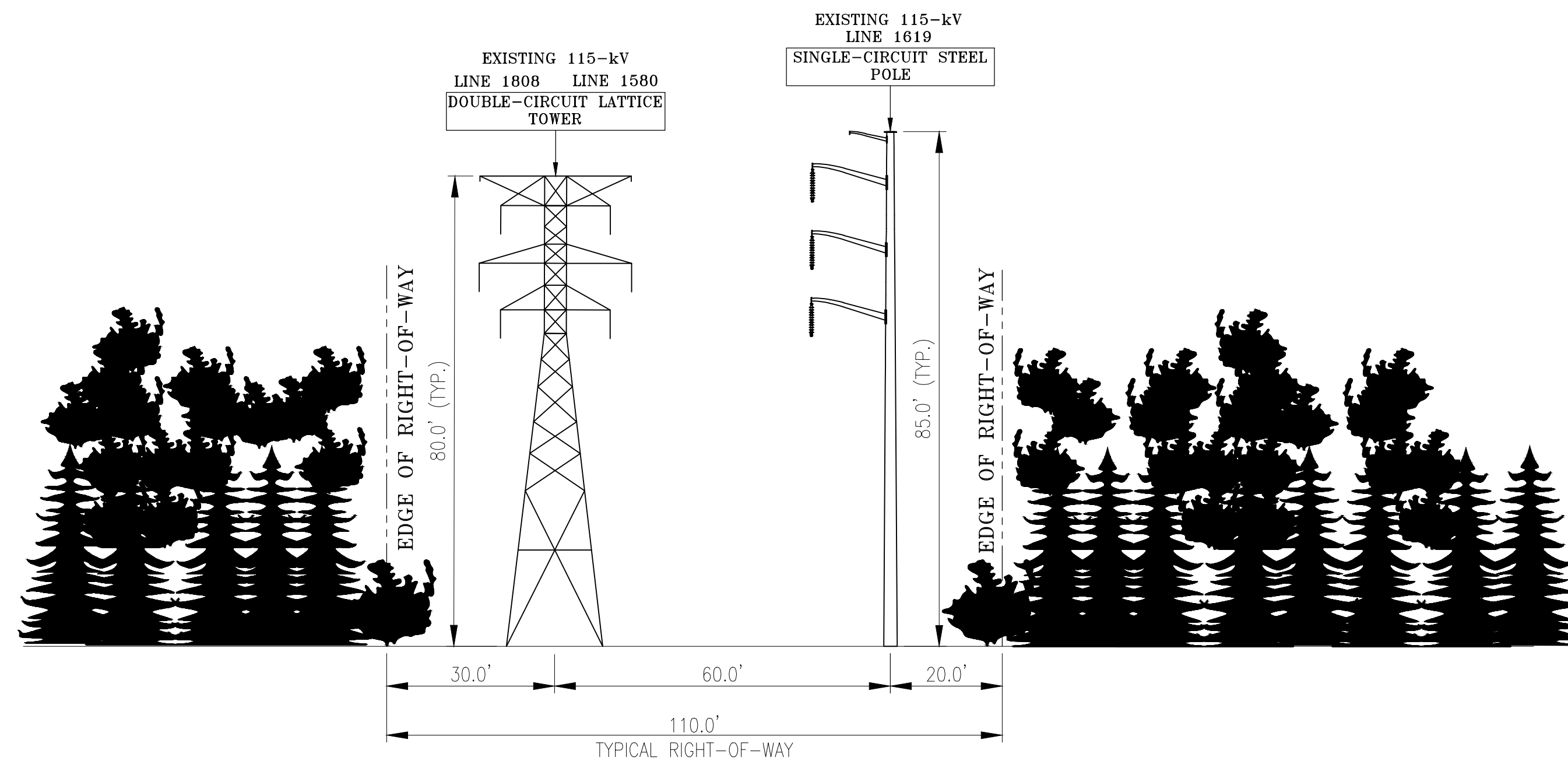
**Average Height Change (feet): 5.0**



Attachment C  
Typical Cross Sections

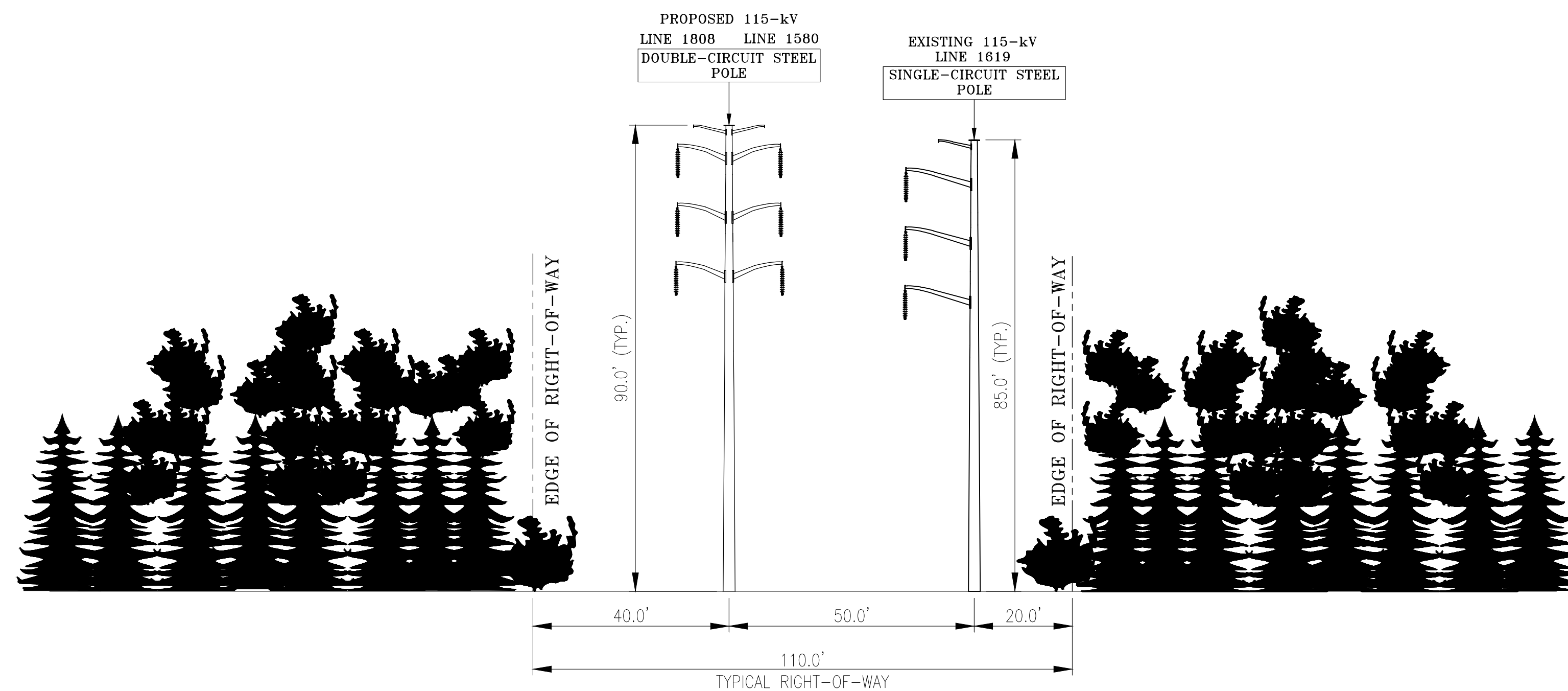






**EXISTING R.O.W. CONFIGURATION  
(TYPICAL)**

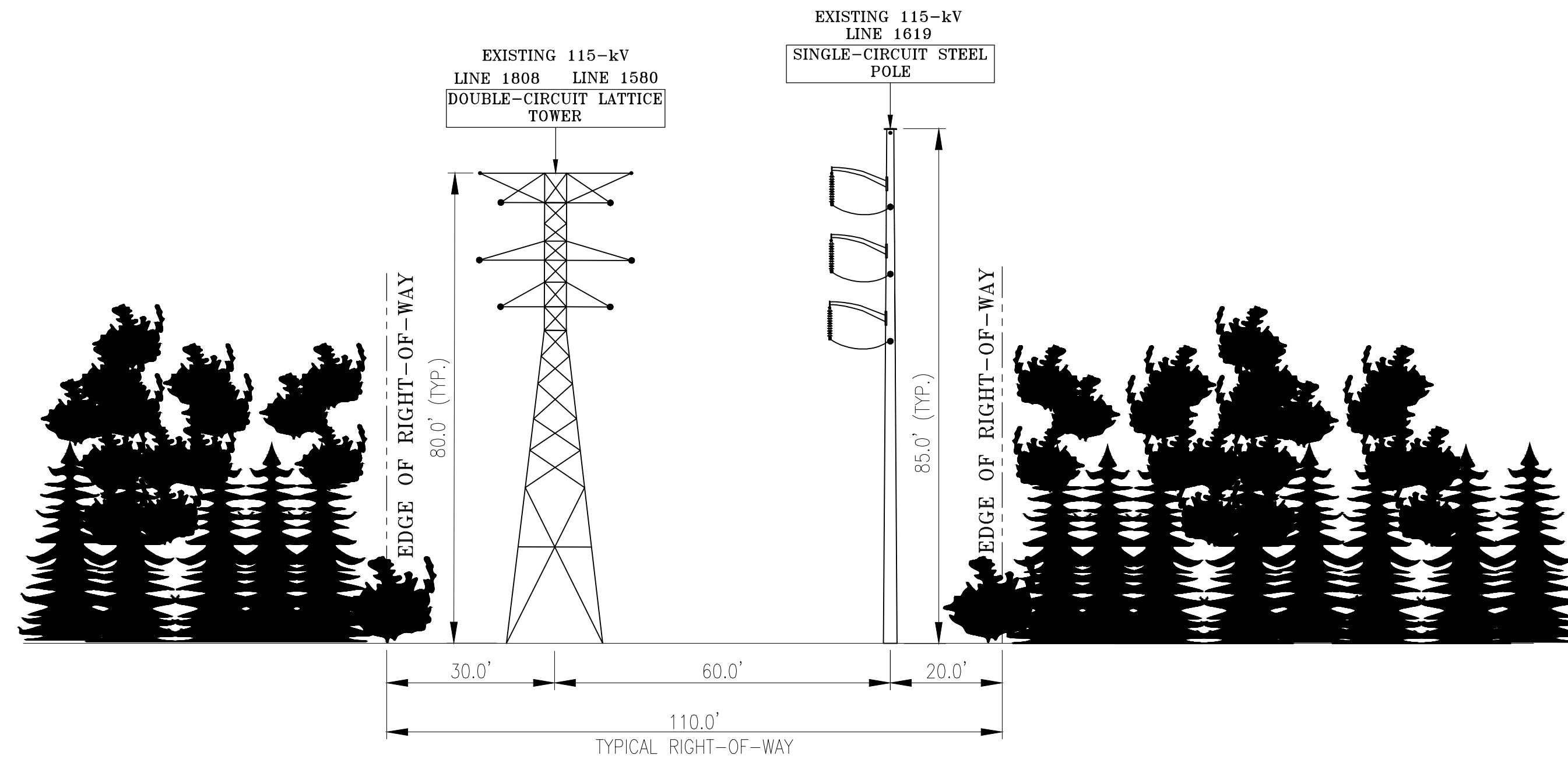
**DOUBLE-CIRCUIT STEEL LATTICE/SINGLE-CIRCUIT STEEL  
MONOPOLE VERTICAL DESIGN  
LOOKING FROM STEVENSON S/S TO CHRISTIAN ST. JCT.  
IN THE TOWN OF OXFORD, CT**



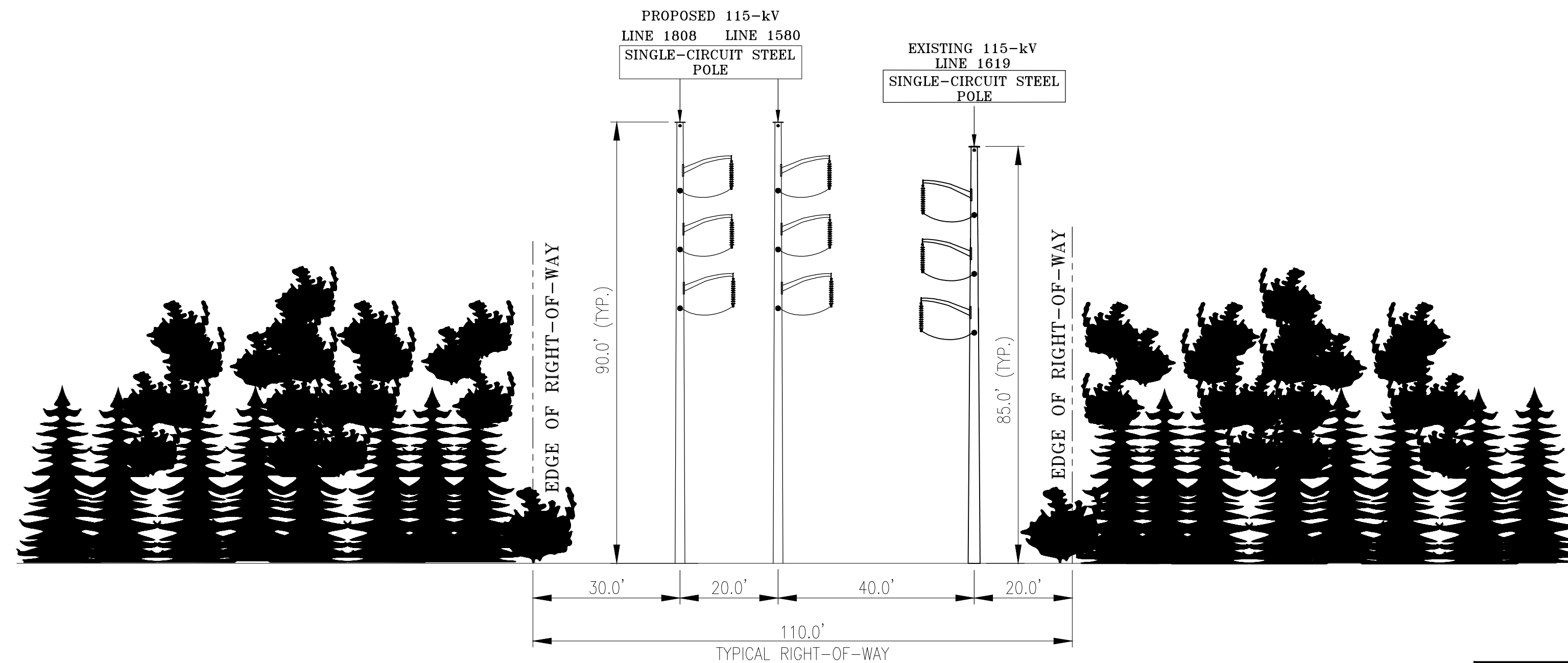
**PROPOSED R.O.W. CONFIGURATION  
(TYPICAL)**

**NO ADDITIONAL RIGHT-OF-WAY REQUIRED  
DOUBLE-CIRCUIT/SINGLE-CIRCUIT STEEL MONOPOLE VERTICAL DESIGN  
LOOKING FROM STEVENSON S/S TO CHRISTIAN ST. JCT.  
IN THE TOWN OF OXFORD, CT**

										<b>EVERSOURCE ENERGY</b>			
										TITLE: STEVENSON S/S TO CHRISTIAN ST. JCT. 115-kV TRANSMISSION LINE R.O.W. CROSS SECTION (TYPICAL) OXFORD, CT			
BY: WKM/NVS		DWD		DDM/NVS		APP		DDM/NVS		APP		-	
DATE: 01/17/24		DATE: 01/17/24		DATE: 01/17/24		DATE: 01/17/24		DATE: 01/17/24		DATE: -		-	
1 01/31/24 ISSUED FOR SITING REV. 1				JNR		HKG		HKG					
0 01/17/24 ISSUED FOR SITING				WKM		DDM		DDM					
NO. DATE AS BUILT REVISIONS				BY		CHK		APP		APP			
R.E. PROJ. NUMBER										131736		DWG NO. 01252-85000p001	

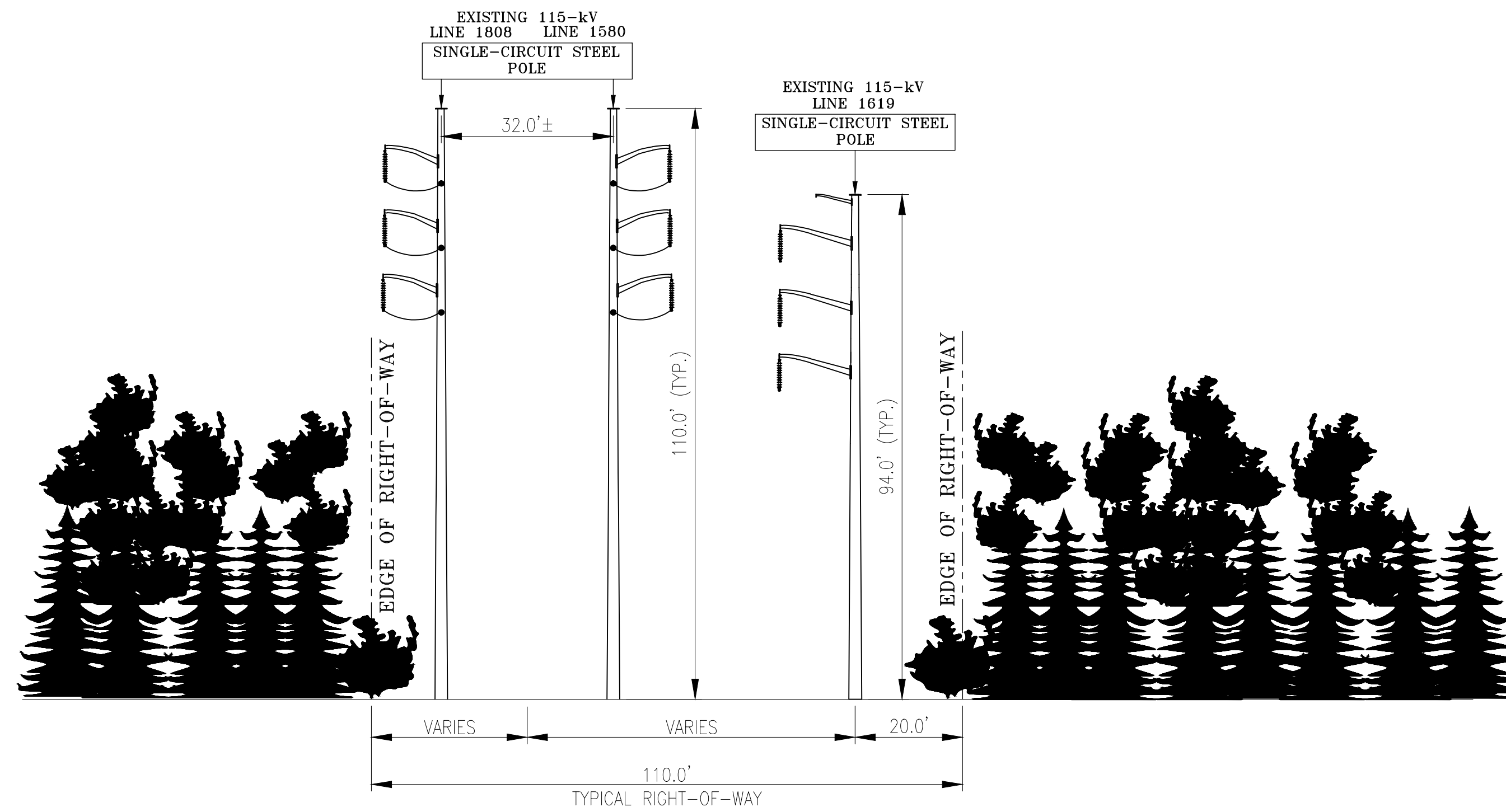


**EXISTING R.O.W. CONFIGURATION  
(TYPICAL)**  
**DOUBLE-CIRCUIT STEEL LATTICE/SINGLE-CIRCUIT STEEL  
 MONOPOLE VERTICAL DESIGN**  
**LOOKING FROM STEVENSON S/S TO CHRISTIAN ST. JCT.  
 IN THE TOWN OF OXFORD, CT**



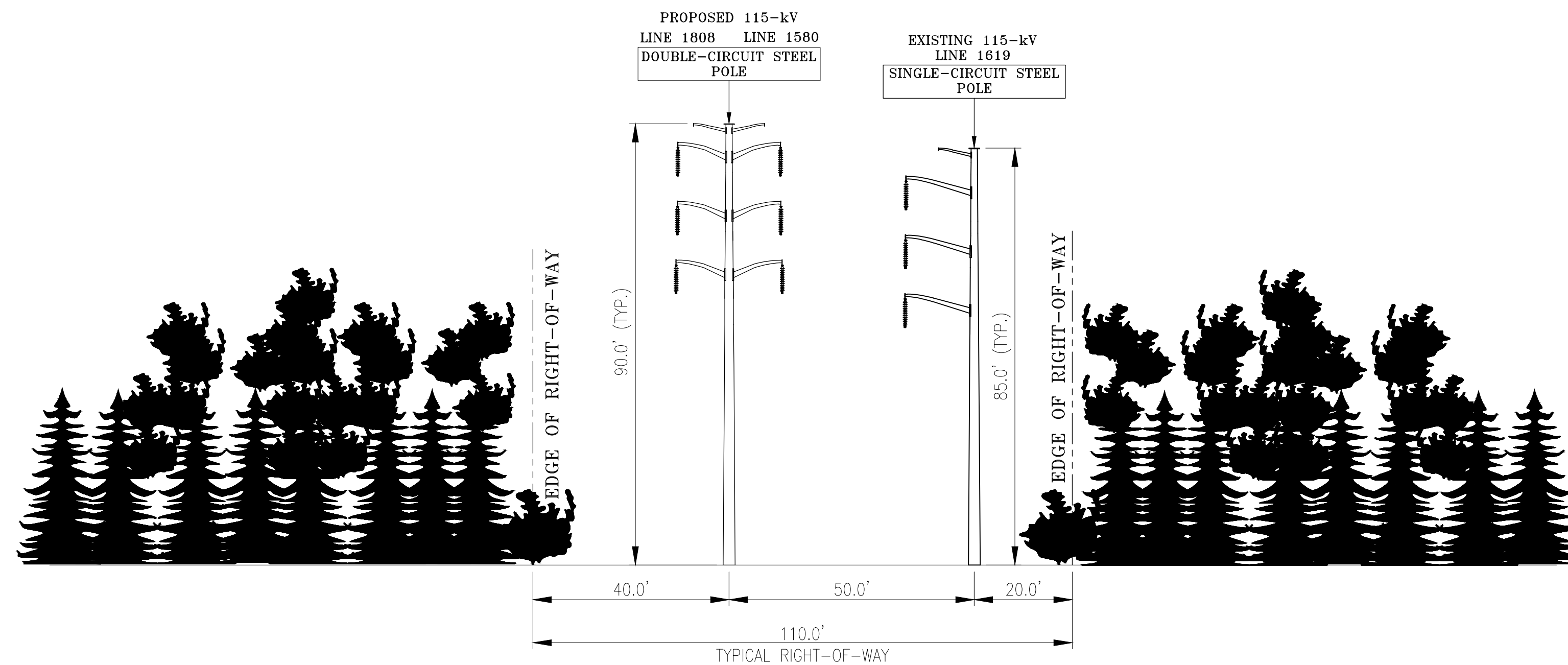
**PROPOSED R.O.W. CONFIGURATION  
(TYPICAL)**  
**NO ADDITIONAL RIGHT-OF-WAY REQUIRED**  
**SINGLE-CIRCUIT STEEL MONOPOLE VERTICAL DESIGN**  
**LOOKING FROM STEVENSON S/S TO CHRISTIAN ST. JCT.  
 IN THE TOWN OF OXFORD, CT**

										<b>EVERSOURCE ENERGY</b>			
										TITLE: STEVENSON S/S TO CHRISTIAN ST. JCT. 115-kV TRANSMISSION LINE R.O.W. CROSS SECTION (TYPICAL) OXFORD, CT			
BY	WKM/NVS	DWG	DDM/NVS	APP	DDM/NVS	APP	-						
DATE	01/17/24	DATE	01/17/24	DATE	01/17/24	DATE	-						
H-SCALE	NTS	SIZE	D	FIELD BOOK & PAGES									
V-SCALE	NTS	V.S.		R.E. DWG									
R.E. PROJ. NUMBER							131736	DWG NO. 01252-85000p002					
NO.	DATE	AS-BUILT REVISIONS	BY	CHK	APP	APP							



**EXISTING R.O.W. CONFIGURATION  
(TYPICAL)**

**SINGLE-CIRCUIT STEEL MONOPOLE VERTICAL DESIGN  
LOOKING FROM STEVENSON S/S TO CHRISTIAN ST. JCT.  
IN THE TOWN OF OXFORD, CT**



**PROPOSED R.O.W. CONFIGURATION  
(TYPICAL)**

**NO ADDITIONAL RIGHT-OF-WAY REQUIRED  
DOUBLE-CIRCUIT/SINGLE-CIRCUIT STEEL MONOPOLE VERTICAL DESIGN  
LOOKING FROM STEVENSON S/S TO CHRISTIAN ST. JCT.  
IN THE TOWN OF OXFORD, CT**

										<b>EVERSOURCE ENERGY</b>			
										TITLE: STEVENSON S/S TO CHRISTIAN ST. JCT. 115-kV TRANSMISSION LINE R.O.W. CROSS SECTION (TYPICAL) OXFORD, CT			
BY	WKM/NVS	DWG	DDM/NVS	APP	DDM/NVS	APP	-						
DATE	01/17/24	DATE	01/17/24	DATE	01/17/24	DATE	-						
H-SCALE	NTS	SIZE	D	FIELD BOOK & PAGES									
V-SCALE	NTS	V.S.		R.E. DWG									
R.E. PROJ. NUMBER	131736							DWG NO.	01252-85000p003				
NO.	DATE	AS BUILT REVISIONS			BY	CHK	APP	APP					



## Attachment D

# Wetland and Watercourse Delineations Technical Memorandum



## Wetland Report:

### Christian Street Junction to Stevenson Rebuild Project

To: Sara Fusco, PSS, CPESC; Eversource Energy

FROM: Richard Canavan, PhD, PSS, PWS and Jeremy Degler CWS, PWS, CWB; Tighe & Bond

DATE: January 2, 2024

---

Tighe & Bond performed wetland and watercourse delineations in support of the Christian Street Junction to Stevenson Rebuild Project in September 2020 and March 2021. The wetlands limits were reviewed in 2023 during the development of the plans for this project.

#### Wetland and Watercourse Delineation Methodology

Wetlands and watercourses were delineated in accordance with the requirements of the Connecticut Inland Wetlands and Watercourses Act (§22a-38 CGS), and the U. S. Army Corps of Engineers Wetlands Delineation Manual (1987) *Regional Supplement to the Corps of Engineers Wetland Delineation Manual Northcentral and Northeast Region* (Version 2.0) (January 2012). The limits of the wetlands and watercourses were identified in the field by **consecutively numbered flags. Pink "Wetland Delineation" flagging was used for** delineating wetlands and blue flagging was used for delineating watercourses. Flag locations were surveyed at the time of the investigation using Global Positioning System (GPS) units capable of submeter accuracy. Wetlands were classified using the Cowardin System.

Delineated wetlands and watercourses within the Project Area are summarized in Table 1, and Army Corps of Engineers Wetland Determination Data Forms are attached.

#### Vernal Pool Summary

Tighe & Bond conducted a vernal pool survey within the Project Area and determined that there are no vernal pools present in the Christian Street Junction to Stevenson Substation Rebuild project area. One potential vernal pool was identified in Wetland W20; however, following a May 2023 survey, it was determined that this potential vernal pool is a decoy pool due to the lack of suitable attachment points for egg masses and shallow water depth. Decoy pools are bodies of water, often occurring in road ruts or man-made basins where the development and metamorphosis of larvae is unsuccessful. Decoy pools often lack vegetation for egg mass attachment and dry more rapidly than classic vernal pools. The decoy pool in Wetland W20 appears to have formed from repeated use of the space for off-road vehicle riding. Limited vegetation was observed in the pool, which was largely barren and disturbed. While wood frog and American toad tadpoles were observed in the pool, it **was determined that the pool's** conditions were not suitable for sustaining the tadpoles and allowing them to mature and leave the pool.

A larger wetland system extended outside of the right-of-way boundary, which appeared to be more suitable as a classic vernal pool with a variety of egg mass attachment points. It is possible that the wood frog and American toad tadpoles had migrated into the decoy pool from this location through the off-road vehicle ruts along the edge of the right-of-way.

TABLE 1

Delineated Wetlands and Watercourses within the Christian Street Junction to Stevenson Rebuild Project

Map Sheet No.	Wetland No. <sup>1</sup>	Determination Data Sheet Wetland No. <sup>2</sup>	Dominant NWI Class <sup>3</sup>	Other NWI Classes	Dominant Water Regime	Associated Watercourse <sup>4</sup>
1	W1	1436 1A	PSS	PEM	Seasonally Saturated	
1	W2	1435 1A 1	PSS	PEM	Seasonally Flooded/Saturated	S1
1	W3	1434 1A	PEM	PSS	Seasonally Flooded/Saturated	S2
1-2	W4	1434 1C	PEM	PSS	Seasonally Flooded	S2
2	W5	1580 Segment 4 W5	PSS	PEM	Seasonally Flooded	
2	W6	1580 Segment 4 W6	PSS	PEM	Seasonally Saturated	S3
2	W7	1430 2A JSC	PEM	PSS	Seasonally Flooded/Saturated	
2	W8	1430 1A	PEM	PSS	Seasonally Flooded/Saturated	
4	W9	1423 1A 3	PEM	PSS	Seasonally Flooded/Saturated	
4	-	-	R4SB4		Intermittent	S4
4	W10	1580 Segment 4 W10	PSS	PEM	Seasonally Flooded/Saturated	
4	W11	1580 Segment 4 W11	PEM		Seasonally Saturated	
5	W12	1580 Segment 4 W12	PEM	PSS	Seasonally Saturated	S5
5	W13	1418 W19	PSS		Seasonally Saturated	
5	W14	1418 W20	PSS	PEM	Seasonally Flooded/Saturated	S6
5	W15	1580 Segment 4 W15	PEM		Seasonally Flooded/Saturated	S7
5	W16	1580 Segment 4 W16	PEM		Seasonally Saturated	
6	W17	1415 W21	PEM	PSS	Seasonally Saturated	
6	W18	1413 1c 3	PEM	PSS	Seasonally Flooded	S8
7	W19	1409 1B 1 JSC	PSS		Seasonally Flooded	S9
8	W20	1406 1B 4 JSC	PSS	LUB	Seasonally Flooded/Saturated	unnamed waterbody
9	W21	1403 1B JSC	PEM		Seasonally Saturated	S10
9-10	W22	1399 1A JSC	PEM		Intermittently Flooded	
10	-	-	R3RB1		Perennial	S11
11	W23/24	204 W40	PFO	PEM	Seasonally Flooded/Saturated	S12, S13

<sup>1</sup> Wetland No. refers to the number on the Map Set for the Christian Street Junction to Stevenson Rebuild Project

<sup>2</sup> Data Sheet Wetland No. refers to the code assigned during delineation and referenced on the delineation data form

<sup>3</sup> Wetlands classified according to Cowardin et al 1979; PEM= Palustrine Emergent Wetland; PSS= Palustrine Scrub-Shrub Wetland; PFO= Palustrine Forested Wetland; POW= Palustrine Open Water

<sup>4</sup> Associated Watercourse refers to the identification number in the project map set



**WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region**

Project/Site: Line 1580: 2020 City/County: New Haven County Sampling Date: 2020-09-22  
 Applicant/Owner: Eversource State: Connecticut Sampling Point: 1436 1A  
 Investigator(s): SME, JSC Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0-5  
 Subregion (LRR or MLRA): R 144A Lat: 41.4544983 Long: -73.1379016 Datum: NAD 83  
 Soil Map Unit Name: 45B - Woodbridge fine sandy loam, 3 to 8 percent slopes NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No  (If no, explain in Remarks.)  
 Are Vegetation , Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No _____ If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.)  <b>Drought</b> <b>Adjacent to mowed lawn</b>	

**HYDROLOGY**

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

**VEGETATION – Use scientific names of plants.**

Sampling Point: 1436 1A

	Absolute % Cover	Dominant Species?	Indicator Status															
<b>Tree Stratum</b> (Plot size: <u>30 ft r</u> )																		
1. <u>Acer rubrum</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A)  Total Number of Dominant Species Across All Strata: <u>5</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
	<u>20</u>	= Total Cover																
<b>Sapling/Shrub Stratum</b> (Plot size: <u>15 ft r</u> )																		
1. <u>Cornus amomum</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FACW</u>	<b>Prevalence Index worksheet:</b> <table style="width:100%; border:none;"> <tr> <td style="width:50%; text-align:right;">Total % Cover of:</td> <td style="width:50%; text-align:left;">Multiply by:</td> </tr> <tr> <td>OBL species <u>40</u></td> <td>x 1 = <u>40</u></td> </tr> <tr> <td>FACW species <u>70</u></td> <td>x 2 = <u>140</u></td> </tr> <tr> <td>FAC species <u>20</u></td> <td>x 3 = <u>60</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>130</u> (A)</td> <td><u>240</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>1.85</u>	Total % Cover of:	Multiply by:	OBL species <u>40</u>	x 1 = <u>40</u>	FACW species <u>70</u>	x 2 = <u>140</u>	FAC species <u>20</u>	x 3 = <u>60</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>130</u> (A)	<u>240</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>40</u>	x 1 = <u>40</u>																	
FACW species <u>70</u>	x 2 = <u>140</u>																	
FAC species <u>20</u>	x 3 = <u>60</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>130</u> (A)	<u>240</u> (B)																	
2. <u>Lindera benzoin</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
	<u>40</u>	= Total Cover																
<b>Herb Stratum</b> (Plot size: <u>5 ft r</u> )																		
1. <u>Persicaria sagittata</u>	<u>40</u>	<input checked="" type="checkbox"/>	<u>OBL</u>	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)														
2. <u>Symphotrichum novae-angliae</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
3. <u>Eupatorium perfoliatum</u>	<u>10</u>	_____	<u>FACW</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
	<u>70</u>	= Total Cover																
<b>Woody Vine Stratum</b> (Plot size: <u>30 ft r</u> )																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
	<u>0</u>	= Total Cover																
<b>Hydrophytic Vegetation Present?</b>				Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>														
Remarks: (Include photo numbers here or on a separate sheet.)																		

**SOIL**

Sampling Point: 1436 1A

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 2	10YR 2/2	95	7.5YR 5/8	5	C	PL	Sandy Loam	
2 - 10	10YR 6/2	75	7.5YR 4/6	25	C	M	Loamy Sand	
10 - 16	10YR 2/1	90	5YR 4/6	10	C	M	Silt Loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR R, MLRA 149B)
- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 149B)
- Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: Rock  
 Depth (inches): 16

Hydric Soil Present? Yes  No

Remarks:

**WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region**

Project/Site: Line 1580: 2020 City/County: Oxford Sampling Date: 2020-09-22  
 Applicant/Owner: Eversource State: Connecticut Sampling Point: 1435-1A-1  
 Investigator(s): SME, JSC Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): \_\_\_\_\_  
 Subregion (LRR or MLRA): R 144A Lat: 41.4523315 Long: -73.1381157 Datum: NAD 83  
 Soil Map Unit Name: 13 Walpole sandy loam NWI classification: PFO1E

Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No  (If no, explain in Remarks.)  
 Are Vegetation , Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_\_ No   
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No _____ If yes, optional Wetland Site ID: <u>1435 1A</u>
Remarks: (Explain alternative procedures here or in a separate report.)  <h2 style="margin: 0;">Drought</h2>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>2</u> Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0</u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  Remarks:	

**VEGETATION – Use scientific names of plants.**

Sampling Point: 1435-1A-1

	Absolute % Cover	Dominant Species?	Indicator Status															
<b>Tree Stratum</b> (Plot size: <u>30 ft r</u> )																		
1. <u>Acer rubrum</u>	<u>40</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A)  Total Number of Dominant Species Across All Strata: <u>5</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. <u>Betula populifolia</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FAC</u>															
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
	<u>60</u>	= Total Cover																
<b>Sapling/Shrub Stratum</b> (Plot size: <u>15 ft r</u> )																		
1. <u>Sambucus nigra ssp. canadensis</u>	<u>20</u>	<input checked="" type="checkbox"/>		<b>Prevalence Index worksheet:</b> <table style="width:100%; border:none;"> <tr> <td style="width:50%; text-align:center;">Total % Cover of:</td> <td style="width:50%; text-align:center;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>40</u></td> <td>x 2 = <u>80</u></td> </tr> <tr> <td>FAC species <u>60</u></td> <td>x 3 = <u>180</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>260</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.60</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>40</u>	x 2 = <u>80</u>	FAC species <u>60</u>	x 3 = <u>180</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>260</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>40</u>	x 2 = <u>80</u>																	
FAC species <u>60</u>	x 3 = <u>180</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>100</u> (A)	<u>260</u> (B)																	
2. <u>Lindera benzoin</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
3. <u>Sambucus nigra ssp. canadensis</u>																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
	<u>30</u>	= Total Cover																
<b>Herb Stratum</b> (Plot size: <u>5 ft r</u> )																		
1. <u>Osmundastrum cinnamomeum</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FACW</u>	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)														
2. <u>Symphotrichum novae-angliae</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
9. _____																		
10. _____																		
11. _____																		
12. _____																		
	<u>30</u>	= Total Cover																
<b>Woody Vine Stratum</b> (Plot size: <u>30 ft r</u> )																		
1. _____				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.														
2. _____																		
3. _____																		
4. _____																		
	<u>0</u>	= Total Cover																
<table style="width:100%; border:none;"> <tr> <td style="width:60%;"><b>Hydrophytic Vegetation Present?</b></td> <td style="width:20%; text-align:center;">Yes <input checked="" type="checkbox"/></td> <td style="width:20%; text-align:center;">No <input type="checkbox"/></td> </tr> </table>					<b>Hydrophytic Vegetation Present?</b>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>											
<b>Hydrophytic Vegetation Present?</b>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>																
Remarks: (Include photo numbers here or on a separate sheet.)																		

**SOIL**

Sampling Point: 1435-1A-1

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 10	10YR 2/1	100					Mucky Peat	
10 - 12	10YR 2/2	65	2.5Y 5/3	35	D	M	Silt Loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR R, MLRA 149B)
- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 149B)
- Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Line 1580: 2020 City/County: Oxford Sampling Date: 2020-09-22
Applicant/Owner: Eversource State: Connecticut Sampling Point: 1434-1A
Investigator(s): SME, JSC Section, Township, Range:
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 10-20
Subregion (LRR or MLRA): R 144A Lat: 41.4500427 Long: -73.1385626 Datum: NAD 83
Soil Map Unit Name: 13 Walpole sandy loam NWI classification: PFO/EM1E

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No [checked] (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No [checked]
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes [checked] No
Hydric Soil Present? Yes [checked] No
Wetland Hydrology Present? Yes [checked] No
Is the Sampled Area within a Wetland? Yes [checked] No
If yes, optional Wetland Site ID: 1434 1A

Remarks: (Explain alternative procedures here or in a separate report.)

Drought

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)
Secondary Indicators (minimum of two required)
Surface Water (A1) Water-Stained Leaves (B9) Surface Soil Cracks (B6)
High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10)
Saturation (A3) Marl Deposits (B15) Moss Trim Lines (B16)
Water Marks (B1) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2)
Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Crayfish Burrows (C8)
Drift Deposits (B3) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stressed Plants (D1)
Iron Deposits (B5) Thin Muck Surface (C7) Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Shallow Aquitard (D3)
Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No [checked] Depth (inches):
Water Table Present? Yes No [checked] Depth (inches):
Saturation Present? Yes No [checked] Depth (inches):
Wetland Hydrology Present? Yes [checked] No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**VEGETATION – Use scientific names of plants.**

Sampling Point: 1434-1A

	Absolute % Cover	Dominant Species?	Indicator Status															
<b>Tree Stratum</b> (Plot size: <u>30 ft r</u> )				<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)  Total Number of Dominant Species Across All Strata: <u>4</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)														
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				<b>Prevalence Index worksheet:</b> <table style="width:100%; border:none;"> <tr> <td style="width:50%; text-align: center;">Total % Cover of:</td> <td style="width:50%; text-align: center;">Multiply by:</td> </tr> <tr> <td>OBL species <u>20</u></td> <td>x 1 = <u>20</u></td> </tr> <tr> <td>FACW species <u>30</u></td> <td>x 2 = <u>60</u></td> </tr> <tr> <td>FAC species <u>20</u></td> <td>x 3 = <u>60</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>70</u> (A)</td> <td><u>140</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.0</u>	Total % Cover of:	Multiply by:	OBL species <u>20</u>	x 1 = <u>20</u>	FACW species <u>30</u>	x 2 = <u>60</u>	FAC species <u>20</u>	x 3 = <u>60</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>70</u> (A)	<u>140</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>20</u>	x 1 = <u>20</u>																	
FACW species <u>30</u>	x 2 = <u>60</u>																	
FAC species <u>20</u>	x 3 = <u>60</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>70</u> (A)	<u>140</u> (B)																	
<b>Sapling/Shrub Stratum</b> (Plot size: <u>15 ft r</u> )																		
1. <u>Viburnum dentatum</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FAC</u>															
2. <u>Cornus amomum</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover																		
<b>Herb Stratum</b> (Plot size: <u>5 ft r</u> )																		
1. <u>Osmundastrum cinnamomeum</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
2. <u>Symphotrichum puniceum</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>OBL</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
_____ = Total Cover																		
<b>Woody Vine Stratum</b> (Plot size: <u>30 ft r</u> )																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
_____ = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.)				<b>Hydrophytic Vegetation Present?</b>														
				Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>														



**SOIL**

Sampling Point: 1434-1A

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 5	10YR 3/1	95	7.5YR 4/6	5	C	PL	Sandy loam	Floodplain
5 - 15	10YR 5/2	90	7.5YR 4/3	10	D	M	Sandy loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR R, MLRA 149B)
- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 149B)
- Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Line 1580: 2020 City/County: Oxford Sampling Date: 2020-09-24
Applicant/Owner: Eversource State: Connecticut Sampling Point: 1434 1C
Investigator(s): SME,JSC Section, Township, Range:
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): None Slope (%): 3-5
Subregion (LRR or MLRA): R 144A Lat: 41.4469299 Long: -73.1397814 Datum: NAD 83
Soil Map Unit Name: 13 Walpole sandy loam NWI classification: PSS1E

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No [checked] (If no, explain in Remarks.)
Are Vegetation [checked], Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No [checked]
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes [checked] No
Hydic Soil Present? Yes [checked] No
Wetland Hydrology Present? Yes [checked] No
Is the Sampled Area within a Wetland? Yes [checked] No
If yes, optional Wetland Site ID: 1434 1C

Remarks: (Explain alternative procedures here or in a separate report.)

Recent trimming
Drought

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)
Secondary Indicators (minimum of two required)
Surface Water (A1) [checked] Water-Stained Leaves (B9)
High Water Table (A2) Aquatic Fauna (B13)
Saturation (A3) Marl Deposits (B15)
Water Marks (B1) Hydrogen Sulfide Odor (C1)
Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) [checked] Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iron (C4)
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) [checked] Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7)
[checked] Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) [checked] Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8) [checked] FAC-Neutral Test (D5)

Field Observations:
Surface Water Present? Yes No [checked] Depth (inches):
Water Table Present? Yes No [checked] Depth (inches):
Saturation Present? Yes No [checked] Depth (inches):
Wetland Hydrology Present? Yes [checked] No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**VEGETATION – Use scientific names of plants.**

Sampling Point: 1434 1C

	Absolute % Cover	Dominant Species?	Indicator Status																
<b>Tree Stratum</b> (Plot size: <u>30 ft r</u> )																			
1. <u>Acer rubrum</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A)  Total Number of Dominant Species Across All Strata: <u>5</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)															
2. _____																			
3. _____																			
4. _____																			
5. _____																			
6. _____																			
7. _____																			
	<u>20</u>																		
<b>Sapling/Shrub Stratum</b> (Plot size: <u>15 ft r</u> )																			
1. <u>Ilex verticillata</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FACW</u>	<b>Prevalence Index worksheet:</b> <table style="width:100%; border:none;"> <tr> <td style="width:50%; text-align:center;">Total % Cover of:</td> <td style="width:50%; text-align:center;">Multiply by:</td> </tr> <tr> <td>OBL species <u>20</u></td> <td>x 1 = <u>20</u></td> </tr> <tr> <td>FACW species <u>100</u></td> <td>x 2 = <u>200</u></td> </tr> <tr> <td>FAC species <u>20</u></td> <td>x 3 = <u>60</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>140</u></td> <td>(A) <u>280</u></td> <td>(B)</td> </tr> </table> Prevalence Index = B/A = <u>2.00</u>	Total % Cover of:	Multiply by:	OBL species <u>20</u>	x 1 = <u>20</u>	FACW species <u>100</u>	x 2 = <u>200</u>	FAC species <u>20</u>	x 3 = <u>60</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>140</u>	(A) <u>280</u>	(B)
Total % Cover of:	Multiply by:																		
OBL species <u>20</u>	x 1 = <u>20</u>																		
FACW species <u>100</u>	x 2 = <u>200</u>																		
FAC species <u>20</u>	x 3 = <u>60</u>																		
FACU species <u>0</u>	x 4 = <u>0</u>																		
UPL species <u>0</u>	x 5 = <u>0</u>																		
Column Totals: <u>140</u>	(A) <u>280</u>	(B)																	
2. <u>Lindera benzoin</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FACW</u>																
3. <u>Symphotrichum puniceum</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>OBL</u>																
4. _____																			
5. _____																			
6. _____																			
7. _____																			
	<u>50</u>																		
<b>Herb Stratum</b> (Plot size: <u>5 ft r</u> )																			
1. <u>Impatiens capensis</u>	<u>60</u>	<input checked="" type="checkbox"/>	<u>FACW</u>	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)															
2. <u>Symphotrichum puniceum</u>	<u>10</u>		<u>OBL</u>																
3. _____																			
4. _____																			
5. _____																			
6. _____																			
7. _____																			
8. _____																			
9. _____																			
10. _____																			
11. _____																			
12. _____																			
	<u>70</u>																		
<b>Woody Vine Stratum</b> (Plot size: <u>30 ft r</u> )																			
1. _____																			
2. _____																			
3. _____																			
4. _____																			
	<u>0</u>																		
Remarks: (Include photo numbers here or on a separate sheet.)				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>															

**SOIL**

Sampling Point: 1434 1C

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 12	10YR 2/1	100					Muck	
12 - 16	10YR 6/2	75	7.5YR 4/6	25	C	M	Sandy Loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR R, MLRA 149B)

- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 149B)
- Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 1580 Segment 4 City/County: New Haven County Sampling Date: 2023-12-15
Applicant/Owner: Eversource State: Connecticut Sampling Point: 1580 Segment 4 W5
Investigator(s): Matt Regan Section, Township, Range:
Landform (hillslope, terrace, etc.): Marsh Local relief (concave, convex, none): Concave Slope (%): 0-1
Subregion (LRR or MLRA): R 144A Lat: 41.447139 Long: -73.139397 Datum: WGS 84
Soil Map Unit Name: 60B - Canton and Charlton fine sandy loams, 3 to 8 percent slopes NWI classification: PEM1E

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No [checked] (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes [checked] No
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Table with 2 columns: Hydrophytic Vegetation Present?, Hydric Soil Present?, Wetland Hydrology Present? and Is the Sampled Area within a Wetland? with checkboxes and a field for Wetland Site ID: W5.

Remarks: (Explain alternative procedures here or in a separate report.)

Recent climate is wetter than normal

HYDROLOGY

Table with 2 columns: Wetland Hydrology Indicators (Primary and Secondary) and Field Observations. Includes checkboxes for various indicators like Surface Water, High Water Table, Saturation, etc.

Field Observations: Surface Water Present? Yes [checked] No Depth (inches): 2
Water Table Present? Yes [checked] No Depth (inches): 0
Saturation Present? Yes [checked] No Depth (inches): 8
Wetland Hydrology Present? Yes [checked] No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**VEGETATION – Use scientific names of plants.**

Sampling Point: 1580 Segment 4 W5

	Absolute % Cover	Dominant Species?	Indicator Status															
<b>Tree Stratum</b> (Plot size: <u>30 ft r</u> )				<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)  Total Number of Dominant Species Across All Strata: <u>4</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75.00</u> (A/B)														
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover				<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%; text-align: right;">Total % Cover of:</td> <td style="width:50%; text-align: left;">Multiply by:</td> </tr> <tr> <td>OBL species <u>5</u></td> <td>x 1 = <u>5</u></td> </tr> <tr> <td>FACW species <u>50</u></td> <td>x 2 = <u>100</u></td> </tr> <tr> <td>FAC species <u>20</u></td> <td>x 3 = <u>60</u></td> </tr> <tr> <td>FACU species <u>30</u></td> <td>x 4 = <u>120</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>105</u> (A)</td> <td><u>285</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.71</u>	Total % Cover of:	Multiply by:	OBL species <u>5</u>	x 1 = <u>5</u>	FACW species <u>50</u>	x 2 = <u>100</u>	FAC species <u>20</u>	x 3 = <u>60</u>	FACU species <u>30</u>	x 4 = <u>120</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>105</u> (A)	<u>285</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>5</u>	x 1 = <u>5</u>																	
FACW species <u>50</u>	x 2 = <u>100</u>																	
FAC species <u>20</u>	x 3 = <u>60</u>																	
FACU species <u>30</u>	x 4 = <u>120</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>105</u> (A)	<u>285</u> (B)																	
<b>Sapling/Shrub Stratum</b> (Plot size: <u>15 ft r</u> )																		
1. <u>Alnus incana</u>	<u>50</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
2. <u>Rosa multiflora</u>	<u>30</u>	<input checked="" type="checkbox"/>	<u>FACU</u>															
3. <u>Acer rubrum</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FAC</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>100</u> = Total Cover																		
<b>Herb Stratum</b> (Plot size: <u>5 ft r</u> )																		
1. <u>Symplocarpus foetidus</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>OBL</u>															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>5</u> = Total Cover																		
<b>Woody Vine Stratum</b> (Plot size: <u>30 ft r</u> )																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.)				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)														
				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.														
				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____														

**SOIL**

Sampling Point: 1580 Segment 4 W5

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 10	10YR 2/1	100					Muck	
10 - 20	10YR 4/1	95	10YR 4/4	5	C	M	Silty Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR R, MLRA 149B)

- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 149B)
- Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

**WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region**

Project/Site: 1580 Segment 4 City/County: New Haven County Sampling Date: 2023-12-15  
 Applicant/Owner: Eversource State: Connecticut Sampling Point: 1580 Segment 4 W6  
 Investigator(s): Matt Regan Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Marsh Local relief (concave, convex, none): Concave Slope (%): 0-1  
 Subregion (LRR or MLRA): R 144A Lat: 41.445982 Long: -73.140125 Datum: WGS 84  
 Soil Map Unit Name: 38C - Hinckley loamy sand, 3 to 15 percent slopes NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No  (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_\_ No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No _____ If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) <b>Recent climate conditions are wetter than normal.</b>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) _____ <input checked="" type="checkbox"/> High Water Table (A2) _____ <input checked="" type="checkbox"/> Saturation (A3) _____ _____ Water Marks (B1) _____ _____ Sediment Deposits (B2) _____ _____ Drift Deposits (B3) _____ _____ Algal Mat or Crust (B4) _____ _____ Iron Deposits (B5) _____ _____ Inundation Visible on Aerial Imagery (B7) _____ _____ Sparsely Vegetated Concave Surface (B8) _____ _____ Water-Stained Leaves (B9) _____ _____ Aquatic Fauna (B13) _____ _____ Marl Deposits (B15) _____ _____ Hydrogen Sulfide Odor (C1) _____ _____ Oxidized Rhizospheres on Living Roots (C3) _____ _____ Presence of Reduced Iron (C4) _____ _____ Recent Iron Reduction in Tilled Soils (C6) _____ _____ Thin Muck Surface (C7) _____ _____ Other (Explain in Remarks) _____	<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ <input checked="" type="checkbox"/> Drainage Patterns (B10) _____ _____ Moss Trim Lines (B16) _____ _____ Dry-Season Water Table (C2) _____ _____ Crayfish Burrows (C8) _____ _____ Saturation Visible on Aerial Imagery (C9) _____ _____ Stunted or Stressed Plants (D1) _____ <input checked="" type="checkbox"/> Geomorphic Position (D2) _____ _____ Shallow Aquitard (D3) _____ _____ Microtopographic Relief (D4) _____ _____ FAC-Neutral Test (D5) _____
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<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>4</u> Water Table Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>8</u> Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0</u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



**VEGETATION – Use scientific names of plants.**

Sampling Point: 1580 Segment 4 W6

Tree Stratum (Plot size: <u>30 ft r</u> )	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>3</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.67</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover				<b>Prevalence Index worksheet:</b> <table style="width:100%; border: none;"> <tr> <td style="width:50%; text-align: right;">Total % Cover of:</td> <td style="width:50%; text-align: left;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>10</u></td> <td>x 2 = <u>20</u></td> </tr> <tr> <td>FAC species <u>30</u></td> <td>x 3 = <u>90</u></td> </tr> <tr> <td>FACU species <u>50</u></td> <td>x 4 = <u>200</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>90</u> (A)</td> <td><u>310</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.44</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>10</u>	x 2 = <u>20</u>	FAC species <u>30</u>	x 3 = <u>90</u>	FACU species <u>50</u>	x 4 = <u>200</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>90</u> (A)	<u>310</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>10</u>	x 2 = <u>20</u>																	
FAC species <u>30</u>	x 3 = <u>90</u>																	
FACU species <u>50</u>	x 4 = <u>200</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>90</u> (A)	<u>310</u> (B)																	
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u> )				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)														
1. <u>Rosa multiflora</u>	<u>50</u>	<input checked="" type="checkbox"/>	<u>FACU</u>															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>50</u> = Total Cover				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.   <b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____														
Herb Stratum (Plot size: <u>5 ft r</u> )																		
1. <u>Solidago rugosa</u>	<u>30</u>	<input checked="" type="checkbox"/>	<u>FAC</u>															
2. <u>Onoclea sensibilis</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>40</u> = Total Cover																		
Woody Vine Stratum (Plot size: <u>30 ft r</u> )																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.)																		

**SOIL**

Sampling Point: 1580 Segment 4 W6

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 10	10YR 3/1	100					Silt Loam	
10 - 20	10YR 4/1	95	10YR 4/4	5	C	M	Silty Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR R, MLRA 149B)

- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 149B)
- Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Line 1580: 2020 City/County: Oxford Sampling Date: 2020-09-24
Applicant/Owner: Eversource State: Connecticut Sampling Point: 1430 2A JSC
Investigator(s): SME, JSC Section, Township, Range:
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 3-5
Subregion (LRR or MLRA): R 144A Lat: 41.4433899 Long: -73.1416098 Datum: NAD 83
Soil Map Unit Name: 3 Ridgebury, Leicester, and Whitman soils NWI classification: PSS1E

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No [checked] (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No [checked]
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes [checked] No
Hydric Soil Present? Yes [checked] No
Wetland Hydrology Present? Yes [checked] No
Is the Sampled Area within a Wetland? Yes [checked] No
If yes, optional Wetland Site ID: 1430 2A

Remarks: (Explain alternative procedures here or in a separate report.)

Drought

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)
Secondary Indicators (minimum of two required)
Surface Water (A1) [checked] Water-Stained Leaves (B9) [checked] Surface Soil Cracks (B6)
High Water Table (A2) [checked] Aquatic Fauna (B13) [checked] Drainage Patterns (B10)
Saturation (A3) [checked] Marl Deposits (B15) [checked] Moss Trim Lines (B16)
Water Marks (B1) [checked] Hydrogen Sulfide Odor (C1) [checked] Dry-Season Water Table (C2)
Sediment Deposits (B2) [checked] Oxidized Rhizospheres on Living Roots (C3) [checked] Crayfish Burrows (C8)
Drift Deposits (B3) [checked] Presence of Reduced Iron (C4) [checked] Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) [checked] Recent Iron Reduction in Tilled Soils (C6) [checked] Stunted or Stressed Plants (D1)
Iron Deposits (B5) [checked] Thin Muck Surface (C7) [checked] Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7) [checked] Other (Explain in Remarks) [checked] Shallow Aquitard (D3)
Sparsely Vegetated Concave Surface (B8) [checked] FAC-Neutral Test (D5) [checked]

Field Observations:
Surface Water Present? Yes No [checked] Depth (inches):
Water Table Present? Yes No [checked] Depth (inches):
Saturation Present? Yes No [checked] Depth (inches):
Wetland Hydrology Present? Yes [checked] No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**VEGETATION – Use scientific names of plants.**

Sampling Point: 1430 2A JSC

	Absolute % Cover	Dominant Species?	Indicator Status															
<b>Tree Stratum</b> (Plot size: <u>30 ft r</u> )																		
1. <u>Acer rubrum</u>	<u>40</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A)  Total Number of Dominant Species Across All Strata: <u>6</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>83.33</u> (A/B)														
2. <u>Fagus grandifolia</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACU</u>															
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
	<u>50</u>			<b>Prevalence Index worksheet:</b> <table style="width:100%; border:none;"> <tr> <td style="width:50%; text-align:right;">Total % Cover of:</td> <td style="width:50%; text-align:left;">Multiply by:</td> </tr> <tr> <td>OBL species <u>100</u></td> <td>x 1 = <u>100</u></td> </tr> <tr> <td>FACW species <u>25</u></td> <td>x 2 = <u>50</u></td> </tr> <tr> <td>FAC species <u>50</u></td> <td>x 3 = <u>150</u></td> </tr> <tr> <td>FACU species <u>10</u></td> <td>x 4 = <u>40</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>185</u> (A)</td> <td><u>340</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>1.84</u>	Total % Cover of:	Multiply by:	OBL species <u>100</u>	x 1 = <u>100</u>	FACW species <u>25</u>	x 2 = <u>50</u>	FAC species <u>50</u>	x 3 = <u>150</u>	FACU species <u>10</u>	x 4 = <u>40</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>185</u> (A)	<u>340</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>100</u>	x 1 = <u>100</u>																	
FACW species <u>25</u>	x 2 = <u>50</u>																	
FAC species <u>50</u>	x 3 = <u>150</u>																	
FACU species <u>10</u>	x 4 = <u>40</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>185</u> (A)	<u>340</u> (B)																	
<b>Sapling/Shrub Stratum</b> (Plot size: <u>15 ft r</u> )																		
1. <u>Salix nigra</u>	<u>40</u>	<input checked="" type="checkbox"/>	<u>OBL</u>															
2. <u>Ilex verticillata</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
3. _____			<u>OBL</u>															
4. _____																		
5. _____																		
6. _____																		
7. _____																		
	<u>60</u>																	
<b>Herb Stratum</b> (Plot size: <u>5 ft r</u> )																		
1. <u>Typha latifolia</u>	<u>40</u>	<input checked="" type="checkbox"/>	<u>OBL</u>	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)														
2. <u>Scirpus expansus</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>OBL</u>															
3. <u>Hypericum ascyron</u>	<u>10</u>		<u>FAC</u>															
4. <u>Bidens heterodoxa</u>	<u>5</u>		<u>FACW</u>															
5. _____																		
6. _____																		
7. _____																		
8. _____																		
9. _____																		
10. _____																		
11. _____																		
12. _____																		
	<u>75</u>																	
<b>Woody Vine Stratum</b> (Plot size: <u>30 ft r</u> )																		
1. _____				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.														
2. _____																		
3. _____																		
4. _____																		
	<u>0</u>																	
<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																		
Remarks: (Include photo numbers here or on a separate sheet.)																		

**SOIL**

Sampling Point: 1430 2A JSC

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
5 - 0	10YR 3/1	100					Peat	
0 - 11	10YR 2/1	100					Mucky Peat	
11 - 16	10YR 5/1	80	7.5YR 5/8	20	C	M	Sandy Loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR R, MLRA 149B)
- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 149B)
- Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

**WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region**

Project/Site: Line 1580: 2020 City/County: Oxford Sampling Date: 2020-09-24  
 Applicant/Owner: Eversource State: Connecticut Sampling Point: 1430 1A  
 Investigator(s): SME, JSC Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 3-5  
 Subregion (LRR or MLRA): R 144A Lat: 41.4430542 Long: -73.1419876 Datum: NAD 83  
 Soil Map Unit Name: 3 Ridgebury, Leicester, and Whitman soils NWI classification: PSS

Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No  (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_\_ No   
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No _____ If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.)  <h2 style="margin: 0;">Drought</h2>	

**HYDROLOGY**

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

**VEGETATION – Use scientific names of plants.**

Sampling Point: 1430 1A

	Absolute % Cover	Dominant Species?	Indicator Status															
<b>Tree Stratum</b> (Plot size: <u>30 ft r</u> )				<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)  Total Number of Dominant Species Across All Strata: <u>4</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
1. _____	_____	_____	_____															
2. _____	_____	_____	FAC															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	FAC															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	<b>Prevalence Index worksheet:</b> <table style="width:100%; border:none;"> <tr> <td style="width:50%; text-align:center;">Total % Cover of:</td> <td style="width:50%; text-align:center;">Multiply by:</td> </tr> <tr> <td>OBL species <u>100</u></td> <td>x 1 = <u>100</u></td> </tr> <tr> <td>FACW species <u>65</u></td> <td>x 2 = <u>130</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>175</u> (A)</td> <td><u>260</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>1.49</u>	Total % Cover of:	Multiply by:	OBL species <u>100</u>	x 1 = <u>100</u>	FACW species <u>65</u>	x 2 = <u>130</u>	FAC species <u>10</u>	x 3 = <u>30</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>175</u> (A)	<u>260</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>100</u>	x 1 = <u>100</u>																	
FACW species <u>65</u>	x 2 = <u>130</u>																	
FAC species <u>10</u>	x 3 = <u>30</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>175</u> (A)	<u>260</u> (B)																	
<b>Sapling/Shrub Stratum</b> (Plot size: <u>15 ft r</u> )																		
1. <u>Alnus incana</u>	<u>40</u>	<input checked="" type="checkbox"/>	FACW															
2. <u>Ilex verticillata</u>	<u>20</u>	<input checked="" type="checkbox"/>	FACW															
3. <u>Clethra alnifolia</u>	<u>10</u>	_____	FAC															
4. <u>Salix nigra</u>	<u>10</u>	_____	OBL															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>80</u> = Total Cover																		
<b>Herb Stratum</b> (Plot size: <u>5 ft r</u> )																		
1. <u>Panicum sagittata</u>	<u>40</u>	<input checked="" type="checkbox"/>	OBL															
2. <u>Typha latifolia</u>	<u>40</u>	<input checked="" type="checkbox"/>	OBL															
3. <u>Scirpus expansus</u>	<u>10</u>	_____	OBL															
4. <u>Bidens heterodoxa</u>	<u>5</u>	_____	FACW															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>95</u> = Total Cover																		
<b>Woody Vine Stratum</b> (Plot size: <u>30 ft r</u> )																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.)				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____														
				<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> ___ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)														
				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.														
				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____														

**SOIL**

Sampling Point: 1430 1A

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
6 - 0	10YR 3/1	100					Peat	
0 - 10	2.5Y 5/1	100					Silty Clay Loam	
10 - 24	10Y 6/1	70	5YR 4/6	30	C	M	Silty Clay	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR R, MLRA 149B)
- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 149B)
- Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:



WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Line 1580: 2020 City/County: Oxford Sampling Date: 2020-09-24
Applicant/Owner: Eversource State: Connecticut Sampling Point: 1423-1A-3
Investigator(s): SME, JSC Section, Township, Range:
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0-3
Subregion (LRR or MLRA): R 144A Lat: 41.4319153 Long: -73.1479657 Datum: NAD 83
Soil Map Unit Name: 47C Woodbridge fine sandy loam NWI classification: PSS

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No [checked] (If no, explain in Remarks.)
Are Vegetation [checked], Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No [checked]
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Table with 2 columns: Hydrophytic Vegetation Present?, Hydric Soil Present?, Wetland Hydrology Present? and Is the Sampled Area within a Wetland?. Includes checkboxes and a field for optional Wetland Site ID: 1423 1A.

Remarks: (Explain alternative procedures here or in a separate report.)

Drought

HYDROLOGY

Table with 2 columns: Wetland Hydrology Indicators (Primary and Secondary) and Field Observations. Includes checkboxes for various indicators like Surface Water, High Water Table, Saturation, etc.

Field Observations:
Surface Water Present? Yes No [checked] Depth (inches):
Water Table Present? Yes No [checked] Depth (inches):
Saturation Present? Yes No [checked] Depth (inches):
(includes capillary fringe)

Wetland Hydrology Present? Yes [checked] No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**VEGETATION – Use scientific names of plants.**

Sampling Point: 1423-1A-3

	Absolute % Cover	Dominant Species?	Indicator Status															
<b>Tree Stratum</b> (Plot size: <u>30 ft r</u> )				<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)  Total Number of Dominant Species Across All Strata: <u>3</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)														
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				<b>Prevalence Index worksheet:</b> <table style="width:100%; border:none;"> <tr> <td style="width:50%; text-align: right;">Total % Cover of:</td> <td style="width:50%; text-align: left;">Multiply by:</td> </tr> <tr> <td>OBL species <u>90</u></td> <td>x 1 = <u>90</u></td> </tr> <tr> <td>FACW species <u>10</u></td> <td>x 2 = <u>20</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>110</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>1.1</u>	Total % Cover of:	Multiply by:	OBL species <u>90</u>	x 1 = <u>90</u>	FACW species <u>10</u>	x 2 = <u>20</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>110</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>90</u>	x 1 = <u>90</u>																	
FACW species <u>10</u>	x 2 = <u>20</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>100</u> (A)	<u>110</u> (B)																	
<b>Sapling/Shrub Stratum</b> (Plot size: <u>15 ft r</u> )																		
1. <u>Ilex verticillata</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
2. <u>Ludwigia alternifolia</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>OBL</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>20%</u> = Total Cover																		
<b>Herb Stratum</b> (Plot size: <u>5 ft r</u> )				<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> ___ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)														
1. <u>Panicum sagittata</u>	<u>60</u>	<input checked="" type="checkbox"/>	<u>OBL</u>															
2. <u>Carex crinita</u>	<u>10</u>	_____	<u>OBL</u>															
3. <u>Symphotrichum puniceum</u>	<u>10</u>	_____	<u>OBL</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>80%</u> = Total Cover																		
<b>Woody Vine Stratum</b> (Plot size: <u>30 ft r</u> )																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
_____ = Total Cover																		
<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____																		
Remarks: (Include photo numbers here or on a separate sheet.)																		

**SOIL**

Sampling Point: 1423-1A-3

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 7	10YR 3/1	90	5YR 6/8	10	C	PL	Silt Loam	
7 - 14	2.5Y 3/1	80	7.5YR 4/6	20	C	PL	Sandy loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR R, MLRA 149B)
- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 149B)
- Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

**WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region**

Project/Site: 1580 Segment 4 City/County: New Haven County Sampling Date: 2023-10-18  
 Applicant/Owner: Eversource State: Connecticut Sampling Point: 1580 segment 4 W10  
 Investigator(s): Matt Regan and Claire Esterman Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Marsh Local relief (concave, convex, none): Concave Slope (%): 0  
 Subregion (LRR or MLRA): R 144A Lat: 41.4295648 Long: -73.1488982 Datum: WGS 84  
 Soil Map Unit Name: 3 - Ridgebury, Leicester, and Whitman soils, 0 to 8 percent slopes, extremely stony NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No  (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No _____ If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) <b>Climate conditions were wetter than normal.</b>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply) <input checked="" type="checkbox"/> Surface Water (A1) _____ <input checked="" type="checkbox"/> High Water Table (A2) _____ <input checked="" type="checkbox"/> Saturation (A3) _____ _____ Water Marks (B1) _____ _____ Sediment Deposits (B2) _____ _____ Drift Deposits (B3) _____ _____ Algal Mat or Crust (B4) _____ _____ Iron Deposits (B5) _____ _____ Inundation Visible on Aerial Imagery (B7) _____ _____ Sparsely Vegetated Concave Surface (B8) _____ _____ Water-Stained Leaves (B9) _____ _____ Aquatic Fauna (B13) _____ _____ Marl Deposits (B15) _____ <input checked="" type="checkbox"/> Hydrogen Sulfide Odor (C1) _____ _____ Oxidized Rhizospheres on Living Roots (C3) _____ _____ Presence of Reduced Iron (C4) _____ _____ Recent Iron Reduction in Tilled Soils (C6) _____ _____ Thin Muck Surface (C7) _____ _____ Other (Explain in Remarks) _____	<b>Secondary Indicators (minimum of two required)</b> _____ Surface Soil Cracks (B6) _____ _____ Drainage Patterns (B10) _____ _____ Moss Trim Lines (B16) _____ <input checked="" type="checkbox"/> Dry-Season Water Table (C2) _____ _____ Crayfish Burrows (C8) _____ _____ Saturation Visible on Aerial Imagery (C9) _____ _____ Stunted or Stressed Plants (D1) _____ _____ Geomorphic Position (D2) _____ _____ Shallow Aquitard (D3) _____ _____ Microtopographic Relief (D4) _____ <input checked="" type="checkbox"/> FAC-Neutral Test (D5) _____
<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0.5</u> Water Table Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>18</u> Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>10</u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

**VEGETATION – Use scientific names of plants.**

Sampling Point: 1580 segment 4 W10

Tree Stratum (Plot size: <u>30 ft r</u> )	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A)  Total Number of Dominant Species Across All Strata: <u>6</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover				<b>Prevalence Index worksheet:</b> <table style="width:100%; border:none;"> <tr> <td style="width:50%;">Total % Cover of:</td> <td style="width:50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>30</u></td> <td>x 1 = <u>30</u></td> </tr> <tr> <td>FACW species <u>60</u></td> <td>x 2 = <u>120</u></td> </tr> <tr> <td>FAC species <u>5</u></td> <td>x 3 = <u>15</u></td> </tr> <tr> <td>FACU species <u>5</u></td> <td>x 4 = <u>20</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>185</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>1.85</u>	Total % Cover of:	Multiply by:	OBL species <u>30</u>	x 1 = <u>30</u>	FACW species <u>60</u>	x 2 = <u>120</u>	FAC species <u>5</u>	x 3 = <u>15</u>	FACU species <u>5</u>	x 4 = <u>20</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>185</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>30</u>	x 1 = <u>30</u>																	
FACW species <u>60</u>	x 2 = <u>120</u>																	
FAC species <u>5</u>	x 3 = <u>15</u>																	
FACU species <u>5</u>	x 4 = <u>20</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>100</u> (A)	<u>185</u> (B)																	
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u> )	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Alnus incana</u>	<u>50</u>	<input checked="" type="checkbox"/>	<u>FACW</u>	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)														
2. <u>Rosa palustris</u>	<u>10</u>	_____	<u>OBL</u>															
3. <u>Hamamelis virginiana</u>	<u>5</u>	_____	<u>FACU</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>65</u> = Total Cover				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
Herb Stratum (Plot size: <u>5 ft r</u> )	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Chelone glabra</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>OBL</u>		<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.													
2. <u>Impatiens capensis</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
3. <u>Osmundastrum cinnamomeum</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
4. <u>Solidago rugosa</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>FAC</u>															
5. <u>Symplocarpus foetidus</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>OBL</u>															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>35</u> = Total Cover																		
Woody Vine Stratum (Plot size: <u>30 ft r</u> )	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
<u>0</u> = Total Cover				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____														
Remarks: (Include photo numbers here or on a separate sheet.)																		

**SOIL**

Sampling Point: 1580 segment 4 W10

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 18	10YR 3/1	100					Silty Clay Loam	
18 - 24	10YR 5/1	95	10YR 5/4	5	C	M	Loamy Sand	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR R, MLRA 149B)

- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 149B)
- Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

**WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region**

Project/Site: 1580 Segment 4 City/County: New Haven County Sampling Date: 2023-10-18  
 Applicant/Owner: Eversource State: Connecticut Sampling Point: 1580 segment 4 W11  
 Investigator(s): Matt Regan and Claire Esterman Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Marsh Local relief (concave, convex, none): Concave Slope (%): 2  
 Subregion (LRR or MLRA): R 144A Lat: 41.4289444 Long: -73.1492649 Datum: WGS 84  
 Soil Map Unit Name: 3 - Ridgebury, Leicester, and Whitman soils, 0 to 8 percent slopes, extremely stony NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No  (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No _____ If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) <b>Climate conditions are wetter than normal.</b>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> ___ Surface Water (A1)      ___ Water-Stained Leaves (B9) <input checked="" type="checkbox"/> High Water Table (A2)      ___ Aquatic Fauna (B13) <input checked="" type="checkbox"/> Saturation (A3)      ___ Marl Deposits (B15) ___ Water Marks (B1)      ___ Hydrogen Sulfide Odor (C1) ___ Sediment Deposits (B2)      ___ Oxidized Rhizospheres on Living Roots (C3) ___ Drift Deposits (B3)      ___ Presence of Reduced Iron (C4) ___ Algal Mat or Crust (B4)      ___ Recent Iron Reduction in Tilled Soils (C6) ___ Iron Deposits (B5)      ___ Thin Muck Surface (C7) ___ Inundation Visible on Aerial Imagery (B7)      ___ Other (Explain in Remarks) ___ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> ___ Surface Soil Cracks (B6) ___ Drainage Patterns (B10) ___ Moss Trim Lines (B16) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) ___ Saturation Visible on Aerial Imagery (C9) ___ Stunted or Stressed Plants (D1) ___ Geomorphic Position (D2) ___ Shallow Aquitard (D3) ___ Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>12</u> Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0</u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  Remarks:	

**VEGETATION – Use scientific names of plants.**

Sampling Point: 1580 segment 4 W11

Tree Stratum (Plot size: <u>30 ft r</u> )	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)  Total Number of Dominant Species Across All Strata: <u>4</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover				<b>Prevalence Index worksheet:</b> <table style="width:100%; border:none;"> <tr> <td style="width:50%;">Total % Cover of:</td> <td style="width:50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>35</u></td> <td>x 1 = <u>35</u></td> </tr> <tr> <td>FACW species <u>25</u></td> <td>x 2 = <u>50</u></td> </tr> <tr> <td>FAC species <u>45</u></td> <td>x 3 = <u>135</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>105</u> (A)</td> <td><u>220</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.10</u>	Total % Cover of:	Multiply by:	OBL species <u>35</u>	x 1 = <u>35</u>	FACW species <u>25</u>	x 2 = <u>50</u>	FAC species <u>45</u>	x 3 = <u>135</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>105</u> (A)	<u>220</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>35</u>	x 1 = <u>35</u>																	
FACW species <u>25</u>	x 2 = <u>50</u>																	
FAC species <u>45</u>	x 3 = <u>135</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>105</u> (A)	<u>220</u> (B)																	
<u>15</u> = Total Cover																		
<b>Sapling/Shrub Stratum (Plot size: <u>15 ft r</u> )</b>																		
1. <u>Cornus alba</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
2. <u>Ilex verticillata</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>15</u> = Total Cover																		
<b>Herb Stratum (Plot size: <u>5 ft r</u> )</b>																		
1. <u>Solidago rugosa</u>	<u>40</u>	<input checked="" type="checkbox"/>	<u>FAC</u>															
2. <u>Lythrum salicaria</u>	<u>35</u>	<input checked="" type="checkbox"/>	<u>OBL</u>															
3. <u>Symphotrichum lanceolatum</u>	<u>10</u>	_____	<u>FACW</u>															
4. <u>Euthamia graminifolia</u>	<u>5</u>	_____	<u>FAC</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>90</u> = Total Cover																		
<b>Woody Vine Stratum (Plot size: <u>30 ft r</u> )</b>																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)																		
<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																		
<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																		
<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____																		
Remarks: (Include photo numbers here or on a separate sheet.)																		



**SOIL**

Sampling Point: 1580 segment 4 W11

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 12	2.5Y 3/1	100					Silty Clay Loam	
12 - 16	2.5Y 4/1	95	2.5Y 5/4	5	C	M	Sandy Clay Loam	
16 - 24	2.5Y 5/1	90	2.5Y 5/6	10	C	M	Sandy Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR R, MLRA 149B)
- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 149B)
- Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

**WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region**

Project/Site: 1580 Segment 4 City/County: New Haven County Sampling Date: 2023-10-18  
 Applicant/Owner: Eversource State: Connecticut Sampling Point: 1580 segment 4 W12  
 Investigator(s): Matt Regan and Claire Esterman Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): \_\_\_\_\_ Local relief (concave, convex, none): Concave Slope (%): 1  
 Subregion (LRR or MLRA): R 144A Lat: 41.4235948 Long: -73.1518599 Datum: WGS 84  
 Soil Map Unit Name: 45B - Woodbridge fine sandy loam, 3 to 8 percent slopes NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No  (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No _____ If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) <b>Climate conditions are wetter than normal.</b>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> ___ Surface Water (A1)      ___ Water-Stained Leaves (B9) <input checked="" type="checkbox"/> High Water Table (A2)      ___ Aquatic Fauna (B13) <input checked="" type="checkbox"/> Saturation (A3)      ___ Marl Deposits (B15) ___ Water Marks (B1)      ___ Hydrogen Sulfide Odor (C1) ___ Sediment Deposits (B2)      ___ Oxidized Rhizospheres on Living Roots (C3) ___ Drift Deposits (B3)      ___ Presence of Reduced Iron (C4) ___ Algal Mat or Crust (B4)      ___ Recent Iron Reduction in Tilled Soils (C6) ___ Iron Deposits (B5)      ___ Thin Muck Surface (C7) ___ Inundation Visible on Aerial Imagery (B7)      ___ Other (Explain in Remarks) ___ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> ___ Surface Soil Cracks (B6) ___ Drainage Patterns (B10) ___ Moss Trim Lines (B16) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) ___ Saturation Visible on Aerial Imagery (C9) ___ Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) ___ Shallow Aquitard (D3) ___ Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>12</u> Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>10</u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  Remarks:	

**VEGETATION – Use scientific names of plants.**

Sampling Point: 1580 segment 4 W12

Tree Stratum (Plot size: <u>30 ft r</u> )	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A)  Total Number of Dominant Species Across All Strata: <u>6</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>83.33</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
	<u>0</u>	= Total Cover		<b>Prevalence Index worksheet:</b> <table style="width:100%; border: none;"> <tr> <td style="width:50%;">Total % Cover of:</td> <td style="width:50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>5</u></td> <td>x 1 = <u>5</u></td> </tr> <tr> <td>FACW species <u>30</u></td> <td>x 2 = <u>60</u></td> </tr> <tr> <td>FAC species <u>95</u></td> <td>x 3 = <u>285</u></td> </tr> <tr> <td>FACU species <u>10</u></td> <td>x 4 = <u>40</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>140</u> (A)</td> <td><u>390</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.79</u>	Total % Cover of:	Multiply by:	OBL species <u>5</u>	x 1 = <u>5</u>	FACW species <u>30</u>	x 2 = <u>60</u>	FAC species <u>95</u>	x 3 = <u>285</u>	FACU species <u>10</u>	x 4 = <u>40</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>140</u> (A)	<u>390</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>5</u>	x 1 = <u>5</u>																	
FACW species <u>30</u>	x 2 = <u>60</u>																	
FAC species <u>95</u>	x 3 = <u>285</u>																	
FACU species <u>10</u>	x 4 = <u>40</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>140</u> (A)	<u>390</u> (B)																	
<b>Sapling/Shrub Stratum (Plot size: <u>15 ft r</u> )</b>																		
1. <u>Salix bebbiana</u>	<u>25</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
2. <u>Viburnum dentatum</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FAC</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
	<u>35</u>	= Total Cover																
<b>Herb Stratum (Plot size: <u>5 ft r</u> )</b>																		
1. <u>Solidago rugosa</u>	<u>50</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)														
2. <u>Euthamia graminifolia</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FAC</u>															
3. <u>Microstegium vimineum</u>	<u>10</u>	_____	<u>FAC</u>															
4. <u>Juncus effusus</u>	<u>5</u>	_____	<u>OBL</u>															
5. <u>Symphotrichum lanceolatum</u>	<u>5</u>	_____	<u>FACW</u>															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
	<u>90</u>	= Total Cover																
<b>Woody Vine Stratum (Plot size: <u>30 ft r</u> )</b>																		
1. <u>Lonicera japonica</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACU</u>	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.														
2. <u>Vitis riparia</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>FAC</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
	<u>15</u>	= Total Cover																
Remarks: (Include photo numbers here or on a separate sheet.)				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____														

**SOIL**

Sampling Point: 1580 segment 4 W12

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 2	10YR 2/1	100					Silty Clay Loam	
2 - 9	10YR 4/1	95	10YR 4/4	5	C	M	Silty Clay Loam	
9 - 24	10YR 5/1	75	10YR 5/6	25	C	M	Silty Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR R, MLRA 149B)

- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 149B)
- Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Line 1580 City/County: Oxford Sampling Date: 2020-09-24
Applicant/Owner: Eversource State: Connecticut Sampling Point: 1418 W19
Investigator(s): MHZ, RKV Section, Township, Range:
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 5
Subregion (LRR or MLRA): R 144A Lat: 41.4221191 Long: -73.1527415 Datum: WGS 84
Soil Map Unit Name: 45B Woodbridge fine sandy loam/ 84B Paxton and Montauk fine sandy loam NWI classification: PSS

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No [checked] (If no, explain in Remarks.)
Are Vegetation [checked], Soil [checked], or Hydrology [checked] significantly disturbed? Are "Normal Circumstances" present? Yes No [checked]
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes [checked] No
Hydric Soil Present? Yes [checked] No
Wetland Hydrology Present? Yes [checked] No
Is the Sampled Area within a Wetland? Yes [checked] No
If yes, optional Wetland Site ID: 1418 W19
Remarks: (Explain alternative procedures here or in a separate report.)
Drought
Surrounded by maintained lawn

HYDROLOGY

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

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**VEGETATION – Use scientific names of plants.**

Sampling Point: 1418 W19

Tree Stratum (Plot size: <u>30 ft r</u> )	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)  Total Number of Dominant Species Across All Strata: <u>5</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>60.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover				<b>Prevalence Index worksheet:</b> <table style="width:100%; border:none;"> <tr> <td style="width:50%;">Total % Cover of:</td> <td style="width:50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>45</u></td> <td>x 2 = <u>90</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>25</u></td> <td>x 4 = <u>100</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>70</u> (A)</td> <td><u>190</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.71</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>45</u>	x 2 = <u>90</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>25</u>	x 4 = <u>100</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>70</u> (A)	<u>190</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>45</u>	x 2 = <u>90</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>25</u>	x 4 = <u>100</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>70</u> (A)	<u>190</u> (B)																	
<u>40</u> = Total Cover																		
<b>Sapling/Shrub Stratum (Plot size: <u>15 ft r</u> )</b>																		
1. <u>Cornus amomum</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
2. <u>Rosa multiflora</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>FACU</u>															
3. <u>Lonicera morrowii</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACU</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>40</u> = Total Cover																		
<b>Herb Stratum (Plot size: <u>5 ft r</u> )</b>																		
1. <u>Eupatorium perfoliatum</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
2. <u>Impatiens capensis</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
3. <u>Carex scoparia</u>	<u>5</u>	_____	<u>FACW</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>30</u> = Total Cover																		
<b>Woody Vine Stratum (Plot size: <u>30 ft r</u> )</b>																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.)				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____														

**SOIL**

Sampling Point: 1418 W19

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 8	10YR 3/1	98	7.5YR 3/4	2	C	M	Loamy Sand	
8 - 11	10YR 3/2	85	10YR 5/2	5	D	M	Loamy Sand	
8 - 11			5YR 3/4	10	C	M	Loamy Sand	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR R, MLRA 149B)
- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 149B)
- Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: Rock  
 Depth (inches): 11

Hydric Soil Present? Yes  No

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Line 1580 City/County: Oxford Sampling Date: 2020-09-24
Applicant/Owner: Eversource State: Connecticut Sampling Point: 1418 W20
Investigator(s): MHZ, RKV Section, Township, Range:
Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 5-10
Subregion (LRR or MLRA): R 144A Lat: 41.4216614 Long: -73.1523575 Datum: WGS 84
Soil Map Unit Name: 84B Paxton and Montauk fine sandy loam NWI classification: PEM/PSS

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No [checked] (If no, explain in Remarks.)
Are Vegetation [checked], Soil [checked], or Hydrology [checked] significantly disturbed? Are "Normal Circumstances" present? Yes No [checked]
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes [checked] No
Hydric Soil Present? Yes [checked] No
Wetland Hydrology Present? Yes [checked] No
Is the Sampled Area within a Wetland? Yes [checked] No
If yes, optional Wetland Site ID: 1418 W20
Remarks: (Explain alternative procedures here or in a separate report.)
Drought
Alluvial

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)
Secondary Indicators (minimum of two required)
Surface Water (A1) Water-Stained Leaves (B9) Surface Soil Cracks (B6)
High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10)
[checked] Saturation (A3) Marl Deposits (B15) Moss Trim Lines (B16)
Water Marks (B1) [checked] Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2)
Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Crayfish Burrows (C8)
Drift Deposits (B3) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stressed Plants (D1)
Iron Deposits (B5) Thin Muck Surface (C7) [checked] Geomorphic Position (D2)
[checked] Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Shallow Aquitard (D3)
Sparsely Vegetated Concave Surface (B8) [checked] FAC-Neutral Test (D5)

Field Observations:
Surface Water Present? Yes No [checked] Depth (inches):
Water Table Present? Yes No [checked] Depth (inches):
Saturation Present? Yes [checked] No Depth (inches): 0
Wetland Hydrology Present? Yes [checked] No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



**VEGETATION – Use scientific names of plants.**

Sampling Point: 1418 W20

Tree Stratum (Plot size: <u>30 ft r</u> )	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A)  Total Number of Dominant Species Across All Strata: <u>7</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>71.43</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover				<b>Prevalence Index worksheet:</b> <table style="width:100%; border:none;"> <tr> <td style="width:50%; text-align:right;">Total % Cover of:</td> <td style="width:50%; text-align:left;">Multiply by:</td> </tr> <tr> <td>OBL species <u>10</u></td> <td>x 1 = <u>10</u></td> </tr> <tr> <td>FACW species <u>30</u></td> <td>x 2 = <u>60</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>10</u></td> <td>x 4 = <u>40</u></td> </tr> <tr> <td>UPL species <u>5</u></td> <td>x 5 = <u>25</u></td> </tr> <tr> <td>Column Totals: <u>65</u> (A)</td> <td><u>165</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.54</u>	Total % Cover of:	Multiply by:	OBL species <u>10</u>	x 1 = <u>10</u>	FACW species <u>30</u>	x 2 = <u>60</u>	FAC species <u>10</u>	x 3 = <u>30</u>	FACU species <u>10</u>	x 4 = <u>40</u>	UPL species <u>5</u>	x 5 = <u>25</u>	Column Totals: <u>65</u> (A)	<u>165</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>10</u>	x 1 = <u>10</u>																	
FACW species <u>30</u>	x 2 = <u>60</u>																	
FAC species <u>10</u>	x 3 = <u>30</u>																	
FACU species <u>10</u>	x 4 = <u>40</u>																	
UPL species <u>5</u>	x 5 = <u>25</u>																	
Column Totals: <u>65</u> (A)	<u>165</u> (B)																	
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u> )				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)														
1. <u>Lonicera morrowii</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACU</u>															
2. <u>Salix discolor</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
3. <u>Cornus amomum</u>	<u>5</u>	<input type="checkbox"/>	<u>FACW</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
<u>30</u> = Total Cover				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
Herb Stratum (Plot size: <u>5 ft r</u> )					<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.													
1. <u>Impatiens capensis</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
2. <u>Persicaria sagittata</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>OBL</u>															
3. <u>Eupatorium perfoliatum</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
<u>25</u> = Total Cover				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>														
Woody Vine Stratum (Plot size: <u>30 ft r</u> )																		
1. <u>Vitis riparia</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FAC</u>															
2. <u>Celastrus orbiculatus</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>UPL</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
<u>15</u> = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.)																		

**SOIL**

Sampling Point: 1418 W20

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 14	10YR 3/1	100					Mucky Sand	Alluvial Hydrogen sulfide
14 - 24	10YR 3/1	100					Sand	Hydrogen sulfide
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR R, MLRA 149B)

- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 149B)
- Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

**Alluvial**

**WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region**

Project/Site: 1580 Segment 4 City/County: New Haven County Sampling Date: 2023-10-18  
 Applicant/Owner: Eversource State: Connecticut Sampling Point: 1580 segment 4 W15  
 Investigator(s): Matt Regan and Claire Esterman Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Marsh Local relief (concave, convex, none): Concave Slope (%): 2  
 Subregion (LRR or MLRA): R 144A Lat: 41.421516 Long: -73.1532348 Datum: WGS 84  
 Soil Map Unit Name: 45B - Woodbridge fine sandy loam, 3 to 8 percent slopes NWI classification: R5UBH

Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No  (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No _____ If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) <b>Climate conditions wetter than normal.</b>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<b>Secondary Indicators (minimum of two required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input checked="" type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>13</u> Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>10</u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

**VEGETATION – Use scientific names of plants.**

Sampling Point: 1580 segment 4 W15

Tree Stratum (Plot size: <u>30 ft r</u> )	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>3</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.67</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
	<u>0</u>	= Total Cover		<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%; text-align: center;">Total % Cover of:</td> <td style="width:50%; text-align: center;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>40</u></td> <td>x 2 = <u>80</u></td> </tr> <tr> <td>FAC species <u>35</u></td> <td>x 3 = <u>105</u></td> </tr> <tr> <td>FACU species <u>15</u></td> <td>x 4 = <u>60</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>90</u> (A)</td> <td><u>245</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.72</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>40</u>	x 2 = <u>80</u>	FAC species <u>35</u>	x 3 = <u>105</u>	FACU species <u>15</u>	x 4 = <u>60</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>90</u> (A)	<u>245</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>40</u>	x 2 = <u>80</u>																	
FAC species <u>35</u>	x 3 = <u>105</u>																	
FACU species <u>15</u>	x 4 = <u>60</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>90</u> (A)	<u>245</u> (B)																	
<b>Sapling/Shrub Stratum (Plot size: <u>15 ft r</u> )</b>																		
1. <u>Rosa multiflora</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>FACU</u>															
2. <u>Ligustrum japonicum</u>	<u>5</u>	<input checked="" type="checkbox"/>	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
	<u>20</u>	= Total Cover																
<b>Herb Stratum (Plot size: <u>5 ft r</u> )</b>																		
1. <u>Solidago rugosa</u>	<u>35</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)														
2. <u>Symphotrichum lanceolatum</u>	<u>35</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
3. <u>Artemisia vulgaris</u>	<u>25</u>	<input checked="" type="checkbox"/>	_____															
4. <u>Impatiens capensis</u>	<u>5</u>	_____	<u>FACW</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
	<u>100</u>	= Total Cover																
<b>Woody Vine Stratum (Plot size: <u>30 ft r</u> )</b>																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
	<u>0</u>	= Total Cover																
Remarks: (Include photo numbers here or on a separate sheet.)				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____														

**SOIL**

Sampling Point: 1580 segment 4 W15

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 12	10YR 3/1	100					Loam	
12 - 20	10YR 4/1	95	10YR 4/4	5	C	M	Loamy Sand	
20 - 24	10YR 4/1	90	10YR 4/4	10	C	M	Sand	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR R, MLRA 149B)
- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 149B)
- Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

**WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region**

Project/Site: 1580 Segment 4 City/County: New Haven County Sampling Date: 2023-10-18  
 Applicant/Owner: Eversource State: Connecticut Sampling Point: 1580 segment 4 W16  
 Investigator(s): Matt Regan and Claire Esterman Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Marsh Local relief (concave, convex, none): Concave Slope (%): 2  
 Subregion (LRR or MLRA): R 144A Lat: 41.4193511 Long: -73.1541804 Datum: WGS 84  
 Soil Map Unit Name: 45B - Woodbridge fine sandy loam, 3 to 8 percent slopes NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No  (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No _____ If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) <b>Climate conditions are wetter than normal.</b>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) _____ <input checked="" type="checkbox"/> High Water Table (A2) _____ <input checked="" type="checkbox"/> Saturation (A3) _____ _____ Water Marks (B1) _____ _____ Sediment Deposits (B2) _____ _____ Drift Deposits (B3) _____ _____ Algal Mat or Crust (B4) _____ _____ Iron Deposits (B5) _____ _____ Inundation Visible on Aerial Imagery (B7) _____ _____ Sparsely Vegetated Concave Surface (B8) _____ _____ Water-Stained Leaves (B9) _____ _____ Aquatic Fauna (B13) _____ _____ Marl Deposits (B15) _____ _____ Hydrogen Sulfide Odor (C1) _____ _____ Oxidized Rhizospheres on Living Roots (C3) _____ _____ Presence of Reduced Iron (C4) _____ _____ Recent Iron Reduction in Tilled Soils (C6) _____ _____ Thin Muck Surface (C7) _____ _____ Other (Explain in Remarks) _____	<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>.5</u> Water Table Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>4</u> Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0</u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

**VEGETATION – Use scientific names of plants.**

Sampling Point: 1580 segment 4 W16

Tree Stratum (Plot size: <u>30 ft r</u> )	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)  Total Number of Dominant Species Across All Strata: <u>3</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
	<u>0</u>	= Total Cover		<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%; text-align: center;">Total % Cover of:</td> <td style="width:50%; text-align: center;">Multiply by:</td> </tr> <tr> <td>OBL species <u>25</u></td> <td>x 1 = <u>25</u></td> </tr> <tr> <td>FACW species <u>30</u></td> <td>x 2 = <u>60</u></td> </tr> <tr> <td>FAC species <u>50</u></td> <td>x 3 = <u>150</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>105</u> (A)</td> <td><u>235</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.24</u>	Total % Cover of:	Multiply by:	OBL species <u>25</u>	x 1 = <u>25</u>	FACW species <u>30</u>	x 2 = <u>60</u>	FAC species <u>50</u>	x 3 = <u>150</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>105</u> (A)	<u>235</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>25</u>	x 1 = <u>25</u>																	
FACW species <u>30</u>	x 2 = <u>60</u>																	
FAC species <u>50</u>	x 3 = <u>150</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>105</u> (A)	<u>235</u> (B)																	
<b>Sapling/Shrub Stratum (Plot size: <u>15 ft r</u> )</b>																		
1. <u>Cornus alba</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
2. <u>Ligustrum japonicum</u>	<u>10</u>	<input checked="" type="checkbox"/>	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
	<u>20</u>	= Total Cover																
<b>Herb Stratum (Plot size: <u>5 ft r</u> )</b>																		
1. <u>Solidago rugosa</u>	<u>30</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)														
2. <u>Euthamia graminifolia</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FAC</u>															
3. <u>Juncus effusus</u>	<u>15</u>	_____	<u>OBL</u>															
4. <u>Symphyotrichum lanceolatum</u>	<u>15</u>	_____	<u>FACW</u>															
5. <u>Lythrum salicaria</u>	<u>10</u>	_____	<u>OBL</u>															
6. <u>Verbena hastata</u>	<u>5</u>	_____	<u>FACW</u>															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
	<u>95</u>	= Total Cover																
<b>Woody Vine Stratum (Plot size: <u>30 ft r</u> )</b>																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
	<u>0</u>	= Total Cover																
Remarks: (Include photo numbers here or on a separate sheet.)				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____														

**SOIL**

Sampling Point: 1580 segment 4 W16

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 8	10YR 3/1	100					Clay Loam	
8 - 24	10YR 5/1	100					Clay Loam	Rock at bottom
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR R, MLRA 149B)
- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 149B)
- Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:



WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Line 1580 City/County: New Haven County Sampling Date: 2020-09-24
Applicant/Owner: Eversource State: Connecticut Sampling Point: 1415 W21
Investigator(s): MHZ, RKV Section, Township, Range:
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 5
Subregion (LRR or MLRA): R 144A Lat: 41.4177246 Long: -73.1586248 Datum: WGS 84
Soil Map Unit Name: 103 - Rippowam fine sandy loam NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No [checked] (If no, explain in Remarks.)
Are Vegetation [checked], Soil [checked], or Hydrology [checked] significantly disturbed? Are "Normal Circumstances" present? Yes No [checked]
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes [checked] No
Hydric Soil Present? Yes [checked] No
Wetland Hydrology Present? Yes [checked] No
Is the Sampled Area within a Wetland? Yes [checked] No
If yes, optional Wetland Site ID: 1415 W21
Remarks: (Explain alternative procedures here or in a separate report.)
Drought
Next to utility structure and access road

HYDROLOGY

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

**VEGETATION – Use scientific names of plants.**

Sampling Point: 1415 W21

Tree Stratum (Plot size: <u>30 ft r</u> )	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>8</u> (A)  Total Number of Dominant Species Across All Strata: <u>9</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>88.89</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
	<u>0</u>	= Total Cover		<b>Prevalence Index worksheet:</b> <table style="width:100%; border:none;"> <tr> <td style="width:50%;">Total % Cover of:</td> <td style="width:50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>20</u></td> <td>x 1 = <u>20</u></td> </tr> <tr> <td>FACW species <u>20</u></td> <td>x 2 = <u>40</u></td> </tr> <tr> <td>FAC species <u>5</u></td> <td>x 3 = <u>15</u></td> </tr> <tr> <td>FACU species <u>5</u></td> <td>x 4 = <u>20</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>50</u> (A)</td> <td><u>95</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>1.90</u>	Total % Cover of:	Multiply by:	OBL species <u>20</u>	x 1 = <u>20</u>	FACW species <u>20</u>	x 2 = <u>40</u>	FAC species <u>5</u>	x 3 = <u>15</u>	FACU species <u>5</u>	x 4 = <u>20</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>50</u> (A)	<u>95</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>20</u>	x 1 = <u>20</u>																	
FACW species <u>20</u>	x 2 = <u>40</u>																	
FAC species <u>5</u>	x 3 = <u>15</u>																	
FACU species <u>5</u>	x 4 = <u>20</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>50</u> (A)	<u>95</u> (B)																	
<b>Sapling/Shrub Stratum (Plot size: <u>15 ft r</u> )</b>																		
1. <u>Cornus amomum</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
2. <u>Ilex verticillata</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
3. <u>Lonicera morrowii</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>FACU</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
	<u>15</u>	= Total Cover																
<b>Herb Stratum (Plot size: <u>5 ft r</u> )</b>																		
1. <u>Impatiens capensis</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
2. <u>Juncus effusus</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>OBL</u>															
3. <u>Lythrum salicaria</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>OBL</u>															
4. <u>Persicaria sagittata</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>OBL</u>															
5. <u>Scirpus cyperinus</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>OBL</u>															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
	<u>30</u>	= Total Cover																
<b>Woody Vine Stratum (Plot size: <u>30 ft r</u> )</b>																		
1. <u>Vitis riparia</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>FAC</u>															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
	<u>5</u>	= Total Cover																
Remarks: (Include photo numbers here or on a separate sheet.)          				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  <b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.   <b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____														

**SOIL**

Sampling Point: 1415 W21

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 12	10YR 3/1	85	10YR 4/2	10	D	M	Loamy Sand	
0 - 12			2.5YR 3/6	5	C	M		
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR R, MLRA 149B)
- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 149B)
- Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: Boulder  
 Depth (inches): 12

Hydric Soil Present? Yes  No

Remarks:

**Bouldery hummocks**

**WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region**

Project/Site: Line 1580: 2020 City/County: Oxford Sampling Date: 2020-09-25  
 Applicant/Owner: Eversource State: Connecticut Sampling Point: 1413-1c-3  
 Investigator(s): SME, JSC Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 10  
 Subregion (LRR or MLRA): R 144A Lat: 41.4144287 Long: -73.1567774 Datum: NAD 83  
 Soil Map Unit Name: 103 Rippowam fine sandy loam NWI classification: PSS

Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No  (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_\_ No   
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No _____ If yes, optional Wetland Site ID: <u>1413 1C</u>
Remarks: (Explain alternative procedures here or in a separate report.)  <h2 style="margin: 0;">Drought</h2>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> ___ Surface Water (A1)      ___ Water-Stained Leaves (B9) ___ High Water Table (A2)      ___ Aquatic Fauna (B13) <input checked="" type="checkbox"/> Saturation (A3)      ___ Marl Deposits (B15) <input checked="" type="checkbox"/> Water Marks (B1)      ___ Hydrogen Sulfide Odor (C1) ___ Sediment Deposits (B2) <input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) ___ Drift Deposits (B3)      ___ Presence of Reduced Iron (C4) ___ Algal Mat or Crust (B4)      ___ Recent Iron Reduction in Tilled Soils (C6) ___ Iron Deposits (B5)      ___ Thin Muck Surface (C7) <input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7)      ___ Other (Explain in Remarks) ___ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> ___ Surface Soil Cracks (B6) ___ Drainage Patterns (B10) ___ Moss Trim Lines (B16) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) <input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9) ___ Stunted or Stressed Plants (D1) ___ Geomorphic Position (D2) ___ Shallow Aquitard (D3) ___ Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0</u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  _____  _____	
Remarks:  _____  _____	

**VEGETATION – Use scientific names of plants.**

Sampling Point: 1413-1c-3

Tree Stratum (Plot size: <u>30 ft r</u> )	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)  Total Number of Dominant Species Across All Strata: <u>5</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				<b>Prevalence Index worksheet:</b> <table style="width:100%; border:none;"> <tr> <td style="width:50%; text-align:right;">Total % Cover of:</td> <td style="width:50%; text-align:left;">Multiply by:</td> </tr> <tr> <td>OBL species <u>60</u></td> <td>x 1 = <u>60</u></td> </tr> <tr> <td>FACW species <u>10</u></td> <td>x 2 = <u>20</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>20</u></td> <td>x 4 = <u>80</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>90</u> (A)</td> <td><u>160</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>1.8</u>	Total % Cover of:	Multiply by:	OBL species <u>60</u>	x 1 = <u>60</u>	FACW species <u>10</u>	x 2 = <u>20</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>20</u>	x 4 = <u>80</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>90</u> (A)	<u>160</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>60</u>	x 1 = <u>60</u>																	
FACW species <u>10</u>	x 2 = <u>20</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>20</u>	x 4 = <u>80</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>90</u> (A)	<u>160</u> (B)																	
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u> )				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)														
1. <u>Lonicera japonica</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FACU</u>															
2. <u>Ilex verticillata</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
<u>30%</u> = Total Cover				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.   <b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____														
Herb Stratum (Plot size: <u>5 ft r</u> )																		
1. <u>Persicaria sagittata</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>OBL</u>															
2. <u>Symphotrichum puniceum</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>OBL</u>															
3. <u>Typha latifolia</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>OBL</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>60%</u> = Total Cover																		
Woody Vine Stratum (Plot size: <u>30 ft r</u> )																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
_____ = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.)																		

**SOIL**

Sampling Point: 1413-1c-3

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 4	10YR 2/1	100					Loam	
4 - 14	10YR 4/2	80	5YR 5/6	20	C	PL	Sandy loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR R, MLRA 149B)
- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 149B)
- Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

**WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region**

Project/Site: Line 1580: 2020 City/County: Oxford Sampling Date: 2020-09-25  
 Applicant/Owner: Eversource State: Connecticut Sampling Point: 1409 1B 1 JSC  
 Investigator(s): SME, JSC Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0-3  
 Subregion (LRR or MLRA): R 144A Lat: 41.4068909 Long: -73.1596589 Datum: NAD 83  
 Soil Map Unit Name: 13 Walpole sandy loam NWI classification: PSS

Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No  (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_\_ No   
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No _____ If yes, optional Wetland Site ID: <u>1409 1B</u>
Remarks: (Explain alternative procedures here or in a separate report.)  <h2 style="margin: 0;">Drought</h2>	

**HYDROLOGY**

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

**VEGETATION – Use scientific names of plants.**

Sampling Point: 1409 1B 1 JSC

Tree Stratum (Plot size: <u>30 ft r</u> )	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A)  Total Number of Dominant Species Across All Strata: <u>5</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover				<b>Prevalence Index worksheet:</b> <table style="width:100%; border:none;"> <tr> <td style="width:50%;">Total % Cover of:</td> <td style="width:50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>30</u></td> <td>x 1 = <u>30</u></td> </tr> <tr> <td>FACW species <u>50</u></td> <td>x 2 = <u>100</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>80</u> (A)</td> <td><u>130</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>1.63</u>	Total % Cover of:	Multiply by:	OBL species <u>30</u>	x 1 = <u>30</u>	FACW species <u>50</u>	x 2 = <u>100</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>80</u> (A)	<u>130</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>30</u>	x 1 = <u>30</u>																	
FACW species <u>50</u>	x 2 = <u>100</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>80</u> (A)	<u>130</u> (B)																	
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u> )	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Alnus incana</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FACW</u>	<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)														
2. <u>Lindera benzoin</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
3. <u>Toxicodendron vernix</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>OBL</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>50</u> = Total Cover				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
Herb Stratum (Plot size: <u>5 ft r</u> )	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Persicaria sagittata</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>OBL</u>		<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.													
2. <u>Spiraea tomentosa</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	<u>OBL</u>															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>30</u> = Total Cover																		
Woody Vine Stratum (Plot size: <u>30 ft r</u> )	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.)																		



**SOIL**

Sampling Point: 1409 1B 1 JSC

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 12	10YR 2/1	100					Silt Loam	
12 - 18	10YR 6/1	85	10YR 5/8	15	C	M	Silt Loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR R, MLRA 149B)
- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 149B)
- Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

**WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region**

Project/Site: Line 1580: 2020 City/County: Oxford Sampling Date: 2020-09-25  
 Applicant/Owner: Eversource State: Connecticut Sampling Point: 1406 1B 4 JSC  
 Investigator(s): SME, JSC Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 10  
 Subregion (LRR or MLRA): R 144A Lat: 41.4002686 Long: -73.1624881 Datum: NAD 83  
 Soil Map Unit Name: 45B Woodbridge fine sandy loam NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No  (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_\_ No   
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No _____ If yes, optional Wetland Site ID: <u>1406 1B</u>
Remarks: (Explain alternative procedures here or in a separate report.)  <h2 style="margin: 0;">Drought</h2>	

**HYDROLOGY**

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

**VEGETATION – Use scientific names of plants.**

Sampling Point: 1406 1B 4 JSC

Tree Stratum (Plot size: <u>30 ft r</u> )	Absolute % Cover	Dominant Species?	Indicator Status																
1. _____	_____	_____	_____																
2. _____	_____	_____	_____																
3. _____	_____	_____	_____																
4. _____	_____	_____	_____																
5. _____	_____	_____	_____																
6. _____	_____	_____	_____																
7. _____	_____	_____	_____																
	<u>0</u>	= Total Cover																	
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u> )																			
1. <u>Ilex verticillata</u>	<u>40</u>	<input checked="" type="checkbox"/>	<u>FACW</u>																
2. <u>Cornus amomum</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACW</u>																
3. _____	_____	_____	_____																
4. _____	_____	_____	_____																
5. _____	_____	_____	_____																
6. _____	_____	_____	_____																
7. _____	_____	_____	_____																
	<u>50</u>	= Total Cover																	
Herb Stratum (Plot size: <u>5 ft r</u> )																			
1. <u>Panicum sagittata</u>	<u>40</u>	<input checked="" type="checkbox"/>	<u>OBL</u>																
2. <u>Phragmites australis</u>	<u>10</u>	_____	<u>FACW</u>																
3. <u>Cyperus odoratus</u>	<u>5</u>	_____	<u>OBL</u>																
4. _____	_____	_____	_____																
5. _____	_____	_____	_____																
6. _____	_____	_____	_____																
7. _____	_____	_____	_____																
8. _____	_____	_____	_____																
9. _____	_____	_____	_____																
10. _____	_____	_____	_____																
11. _____	_____	_____	_____																
12. _____	_____	_____	_____																
	<u>55</u>	= Total Cover																	
Woody Vine Stratum (Plot size: <u>30 ft r</u> )																			
1. _____	_____	_____	_____																
2. _____	_____	_____	_____																
3. _____	_____	_____	_____																
4. _____	_____	_____	_____																
	<u>0</u>	= Total Cover																	
Remarks: (Include photo numbers here or on a separate sheet.)				<p><b>Dominance Test worksheet:</b></p> <p>Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)</p> <p>Total Number of Dominant Species Across All Strata: <u>3</u> (B)</p> <p>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)</p> <hr/> <p><b>Prevalence Index worksheet:</b></p> <table style="width:100%; border:none;"> <tr> <td style="width:50%; text-align:right;">Total % Cover of:</td> <td style="width:50%; text-align:left;">Multiply by:</td> </tr> <tr> <td>OBL species <u>45</u></td> <td>x 1 = <u>45</u></td> </tr> <tr> <td>FACW species <u>60</u></td> <td>x 2 = <u>120</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>105</u> (A)</td> <td><u>165</u> (B)</td> </tr> </table> <p style="text-align:right;">Prevalence Index = B/A = <u>1.57</u></p> <hr/> <p><b>Hydrophytic Vegetation Indicators:</b></p> <p><input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation</p> <p><input checked="" type="checkbox"/> 2 - Dominance Test is &gt;50%</p> <p><input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0<sup>1</sup></p> <p>___ 4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)</p> <p>___ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)</p> <p><small><sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.</small></p> <hr/> <p><b>Definitions of Vegetation Strata:</b></p> <p><b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.</p> <p><b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.</p> <p><b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.</p> <p><b>Woody vines</b> – All woody vines greater than 3.28 ft in height.</p> <hr/> <p><b>Hydrophytic Vegetation Present?</b>      Yes <input checked="" type="checkbox"/>      No _____</p>		Total % Cover of:	Multiply by:	OBL species <u>45</u>	x 1 = <u>45</u>	FACW species <u>60</u>	x 2 = <u>120</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>105</u> (A)	<u>165</u> (B)
Total % Cover of:	Multiply by:																		
OBL species <u>45</u>	x 1 = <u>45</u>																		
FACW species <u>60</u>	x 2 = <u>120</u>																		
FAC species <u>0</u>	x 3 = <u>0</u>																		
FACU species <u>0</u>	x 4 = <u>0</u>																		
UPL species <u>0</u>	x 5 = <u>0</u>																		
Column Totals: <u>105</u> (A)	<u>165</u> (B)																		

**SOIL**

Sampling Point: 1406 1B 4 JSC

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 12	10YR 2/1	90	10YR 4/6	5	C	PL	Silt Loam	
0 - 12			7.5YR 6/2	5	D	M	Silt Loam	
12 - 18	10YR 5/2	80	7.5YR 4/6	20	C	PL	Sandy Loam	Course
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR R, MLRA 149B)

- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 149B)
- Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

**WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region**

Project/Site: Line 1580: 2020 City/County: Oxford Sampling Date: 2020-09-28  
 Applicant/Owner: Eversource State: Connecticut Sampling Point: 1403 1B JSC  
 Investigator(s): JSC, RKV Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 5-8  
 Subregion (LRR or MLRA): R 144A Lat: 41.3947754 Long: -73.1657112 Datum: NAD 83  
 Soil Map Unit Name: 60C Canton and Charlton fine sandy loam NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No  (If no, explain in Remarks.)  
 Are Vegetation , Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_\_ No   
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No _____ If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.)  <h2 style="margin: 0;">Drought</h2>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> ___ Surface Water (A1)      ___ Water-Stained Leaves (B9) ___ High Water Table (A2)      ___ Aquatic Fauna (B13) <input checked="" type="checkbox"/> Saturation (A3)      ___ Marl Deposits (B15) ___ Water Marks (B1)      ___ Hydrogen Sulfide Odor (C1) ___ Sediment Deposits (B2)      ___ Oxidized Rhizospheres on Living Roots (C3) ___ Drift Deposits (B3)      ___ Presence of Reduced Iron (C4) ___ Algal Mat or Crust (B4)      ___ Recent Iron Reduction in Tilled Soils (C6) ___ Iron Deposits (B5)      ___ Thin Muck Surface (C7) <input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7)      ___ Other (Explain in Remarks) ___ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> <input checked="" type="checkbox"/> Surface Soil Cracks (B6) <input checked="" type="checkbox"/> Drainage Patterns (B10) ___ Moss Trim Lines (B16) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) <input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9) ___ Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) ___ Shallow Aquitard (D3) ___ Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0</u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  Remarks:  <h2 style="margin: 0;">Cobblely hillslope</h2>	

**VEGETATION – Use scientific names of plants.**

Sampling Point: 1403 1B JSC

Tree Stratum (Plot size: <u>30 ft r</u> )	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A)  Total Number of Dominant Species Across All Strata: <u>6</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover				<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%; text-align: center;">Total % Cover of:</td> <td style="width:50%; text-align: center;">Multiply by:</td> </tr> <tr> <td>OBL species <u>35</u></td> <td>x 1 = <u>35</u></td> </tr> <tr> <td>FACW species <u>70</u></td> <td>x 2 = <u>140</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>115</u> (A)</td> <td><u>205</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>1.78</u>	Total % Cover of:	Multiply by:	OBL species <u>35</u>	x 1 = <u>35</u>	FACW species <u>70</u>	x 2 = <u>140</u>	FAC species <u>10</u>	x 3 = <u>30</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>115</u> (A)	<u>205</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>35</u>	x 1 = <u>35</u>																	
FACW species <u>70</u>	x 2 = <u>140</u>																	
FAC species <u>10</u>	x 3 = <u>30</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>115</u> (A)	<u>205</u> (B)																	
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u> )	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Alnus incana</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACW</u>	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)														
2. <u>Cornus amomum</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
3. <u>Salix nigra</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>OBL</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>25</u> = Total Cover				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
Herb Stratum (Plot size: <u>5 ft r</u> )	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Impatiens capensis</u>	<u>50</u>	<input checked="" type="checkbox"/>	<u>FACW</u>		<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.													
2. <u>Persicaria arifolia</u>	<u>30</u>	<input checked="" type="checkbox"/>	<u>OBL</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>80</u> = Total Cover																		
Woody Vine Stratum (Plot size: <u>30 ft r</u> )	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Vitis riparia</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
<u>10</u> = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.)																		

**SOIL**

Sampling Point: 1403 1B JSC

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 6	10YR 2/1	95	7.5YR 3/4	5	C	PL	Silt Loam	
6 - 9	10YR 5/2	55	10YR 3/1	25	C	M	Sandy Loam	Coarse sandy loam
6 - 9			7.5YR 4/6	20	C	PL		Refusal at 9 inches rock
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR R, MLRA 149B)
- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 149B)
- Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

**WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region**

Project/Site: Line 1580: 2020 City/County: Oxford Sampling Date: 2020-09-28  
 Applicant/Owner: Eversource State: Connecticut Sampling Point: 1399 1A JSC  
 Investigator(s): RKV, JSC Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Undulating Slope (%): 0  
 Subregion (LRR or MLRA): R 144A Lat: 41.3868103 Long: -73.1692415 Datum: NAD 83  
 Soil Map Unit Name: 306 Udorthents-Urban land complex NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_\_ No   
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No _____ If yes, optional Wetland Site ID: <u>1399 1A</u>
Remarks: (Explain alternative procedures here or in a separate report.)  <b>Drought</b> <b>Dirt bike/off-road activity</b>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply) <table style="width:100%; border: none;"> <tr> <td><input type="checkbox"/> Surface Water (A1)</td> <td><input type="checkbox"/> Water-Stained Leaves (B9)</td> </tr> <tr> <td><input type="checkbox"/> High Water Table (A2)</td> <td><input type="checkbox"/> Aquatic Fauna (B13)</td> </tr> <tr> <td><input type="checkbox"/> Saturation (A3)</td> <td><input type="checkbox"/> Marl Deposits (B15)</td> </tr> <tr> <td><input checked="" type="checkbox"/> Water Marks (B1)</td> <td><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</td> </tr> <tr> <td><input type="checkbox"/> Sediment Deposits (B2)</td> <td><input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)</td> </tr> <tr> <td><input type="checkbox"/> Drift Deposits (B3)</td> <td><input type="checkbox"/> Presence of Reduced Iron (C4)</td> </tr> <tr> <td><input type="checkbox"/> Algal Mat or Crust (B4)</td> <td><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</td> </tr> <tr> <td><input type="checkbox"/> Iron Deposits (B5)</td> <td><input type="checkbox"/> Thin Muck Surface (C7)</td> </tr> <tr> <td><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</td> <td><input type="checkbox"/> Other (Explain in Remarks)</td> </tr> <tr> <td><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</td> <td></td> </tr> </table>	<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input checked="" type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<b>Secondary Indicators (minimum of two required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)																				
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)																				
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)																				
<input checked="" type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)																				
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)																				
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)																				
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)																				
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)																				
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)																				
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)																					
<b>Field Observations:</b> Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No _____																				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  _____  _____  _____																					
Remarks:  _____  _____  _____																					



**VEGETATION – Use scientific names of plants.**

Sampling Point: 1399 1A JSC

Tree Stratum (Plot size: <u>30 ft r</u> )	Absolute % Cover	Dominant Species?	Indicator Status		
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
	_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u> )					
1. <u>Carex typhina</u>	<u>25</u>	<input checked="" type="checkbox"/>	<u>OBL</u>		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
	<u>25%</u> = Total Cover				
Herb Stratum (Plot size: <u>5 ft r</u> )					
1. <u>Carex lurida</u>	<u>35</u>	<input checked="" type="checkbox"/>	<u>OBL</u>		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
12. _____	_____	_____	_____		
	<u>35%</u> = Total Cover				
Woody Vine Stratum (Plot size: <u>30 ft r</u> )					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
	_____ = Total Cover				

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)  
 Total Number of Dominant Species Across All Strata: 2 (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

**Prevalence Index worksheet:**  
 Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_  
 OBL species 60 x 1 = 60  
 FACW species 0 x 2 = 0  
 FAC species 0 x 3 = 0  
 FACU species 0 x 4 = 0  
 UPL species 0 x 5 = 0  
 Column Totals: 60 (A) 60 (B)  
 Prevalence Index = B/A = 1.0

**Hydrophytic Vegetation Indicators:**  
 1 - Rapid Test for Hydrophytic Vegetation  
 2 - Dominance Test is >50%  
 3 - Prevalence Index is ≤3.0<sup>1</sup>  
 \_\_\_ 4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
 \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**  
**Tree** – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  
**Sapling/shrub** – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  
**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  
**Woody vines** – All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?** Yes  No \_\_\_\_\_

Remarks: (Include photo numbers here or on a separate sheet.)  
**Dirt bike area %55**

**SOIL**

Sampling Point: 1399 1A JSC

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 3	10YR 4/3	85	7.5YR 4/6	15	C	M	Sandy loam	
3 - 8	10YR 5/2	55	7.5YR 5/6	45	C	M	Loamy sand	
8 - 14	2.5Y 5/2	80	7.5YR 4/6	20	C	M	Sandy loam	Fine sandy loam
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR R, MLRA 149B)
- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 149B)
- Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

**Disturbed soil**

**WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region**

Project/Site: Line 1580 City/County: Monroe Sampling Date: 2021-03-03  
 Applicant/Owner: Eversource State: Connecticut Sampling Point: 204 W40  
 Investigator(s): MHZ, RKV Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): \_\_\_\_\_ Slope (%): 5-8  
 Subregion (LRR or MLRA): R 144A Lat: 41.3756714 Long: -73.1733335 Datum: WGS 84  
 Soil Map Unit Name: 3, 73C NWI classification: PFO1E

Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No  (If no, explain in Remarks.)  
 Are Vegetation , Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_\_ No   
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No _____ If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.)    	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input checked="" type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) ___ Water Marks (B1) ___ Sediment Deposits (B2) ___ Drift Deposits (B3) ___ Algal Mat or Crust (B4) ___ Iron Deposits (B5) <input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7) ___ Sparsely Vegetated Concave Surface (B8)	___ Surface Soil Cracks (B6) <input checked="" type="checkbox"/> Drainage Patterns (B10) ___ Moss Trim Lines (B16) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) <input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) ___ Shallow Aquitard (D3) <input checked="" type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input checked="" type="checkbox"/> Water-Stained Leaves (B9) ___ Aquatic Fauna (B13) ___ Marl Deposits (B15) ___ Hydrogen Sulfide Odor (C1) ___ Oxidized Rhizospheres on Living Roots (C3) ___ Presence of Reduced Iron (C4) ___ Recent Iron Reduction in Tilled Soils (C6) ___ Thin Muck Surface (C7) ___ Other (Explain in Remarks)	

<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>1</u> Water Table Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0</u> Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0</u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No _____
--	--

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
**Hillside seep, water actively flowing on surface, drainage patterns**

**VEGETATION – Use scientific names of plants.**

Sampling Point: 204 W40

	Absolute % Cover	Dominant Species?	Indicator Status															
<b>Tree Stratum</b> (Plot size: <u>30 ft r</u> )																		
1. <u>Tsuga canadensis</u>	<u>40</u>	<input checked="" type="checkbox"/>	<u>FACU</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)  Total Number of Dominant Species Across All Strata: <u>5</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80.00</u> (A/B)														
2. <u>Betula alleghaniensis</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FAC</u>															
3. <u>Acer rubrum</u>	<u>10</u>		<u>FAC</u>															
4. <u>Liriodendron tulipifera</u>	<u>5</u>		<u>FACU</u>															
5. _____																		
6. _____																		
7. _____																		
	<u>75</u>			<b>Prevalence Index worksheet:</b> <table style="width:100%; border:none;"> <tr> <td style="width:50%; text-align:right;">Total % Cover of:</td> <td style="width:50%; text-align:left;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>45</u></td> <td>x 2 = <u>90</u></td> </tr> <tr> <td>FAC species <u>30</u></td> <td>x 3 = <u>90</u></td> </tr> <tr> <td>FACU species <u>45</u></td> <td>x 4 = <u>180</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>120</u> (A)</td> <td><u>360</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.00</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>45</u>	x 2 = <u>90</u>	FAC species <u>30</u>	x 3 = <u>90</u>	FACU species <u>45</u>	x 4 = <u>180</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>120</u> (A)	<u>360</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>45</u>	x 2 = <u>90</u>																	
FAC species <u>30</u>	x 3 = <u>90</u>																	
FACU species <u>45</u>	x 4 = <u>180</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>120</u> (A)	<u>360</u> (B)																	
<b>Sapling/Shrub Stratum</b> (Plot size: <u>15 ft r</u> )																		
1. <u>Lindera benzoin</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
	<u>10</u>																	
<b>Herb Stratum</b> (Plot size: <u>5 ft r</u> )																		
1. <u>Osmundastrum cinnamomeum</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FACW</u>	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)														
2. <u>Onoclea sensibilis</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
9. _____																		
10. _____																		
11. _____																		
12. _____																		
	<u>35</u>																	
<b>Woody Vine Stratum</b> (Plot size: <u>30 ft r</u> )																		
1. _____				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.														
2. _____																		
3. _____																		
4. _____																		
	<u>0</u>																	
<table style="width:100%; border:none;"> <tr> <td style="width:60%;"></td> <td style="width:10%;"><b>Hydrophytic Vegetation Present?</b></td> <td style="width:10%;">Yes <input checked="" type="checkbox"/></td> <td style="width:20%;">No <input type="checkbox"/></td> </tr> </table>						<b>Hydrophytic Vegetation Present?</b>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>										
	<b>Hydrophytic Vegetation Present?</b>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>															
Remarks: (Include photo numbers here or on a separate sheet.)																		

**SOIL**

Sampling Point: 204 W40

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0 - 6	10YR 2/1	100					Silt Loam	
6 - 14	10YR 4/1	95	10YR 3/6	5	C	M	Silt Loam	
14 - 20	10YR 4/1	95	10Y 3/6	5	C	M	Sand	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR R, MLRA 149B)
- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 149B)
- Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

**Very bouldery**



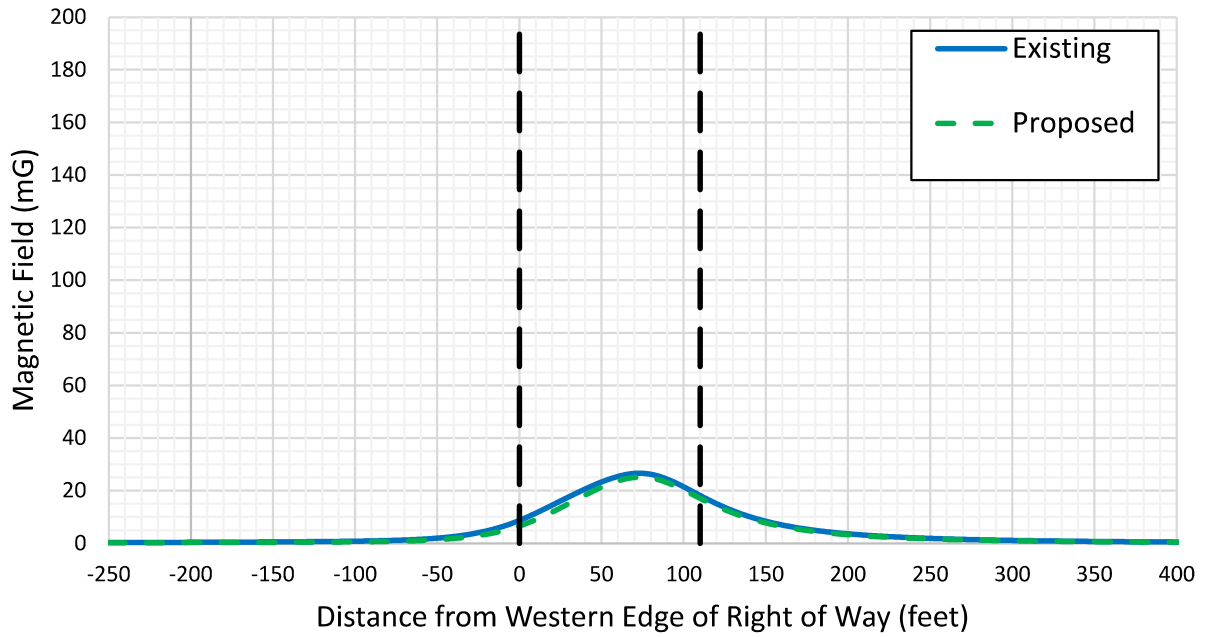
## Attachment E

### EMF Graphs

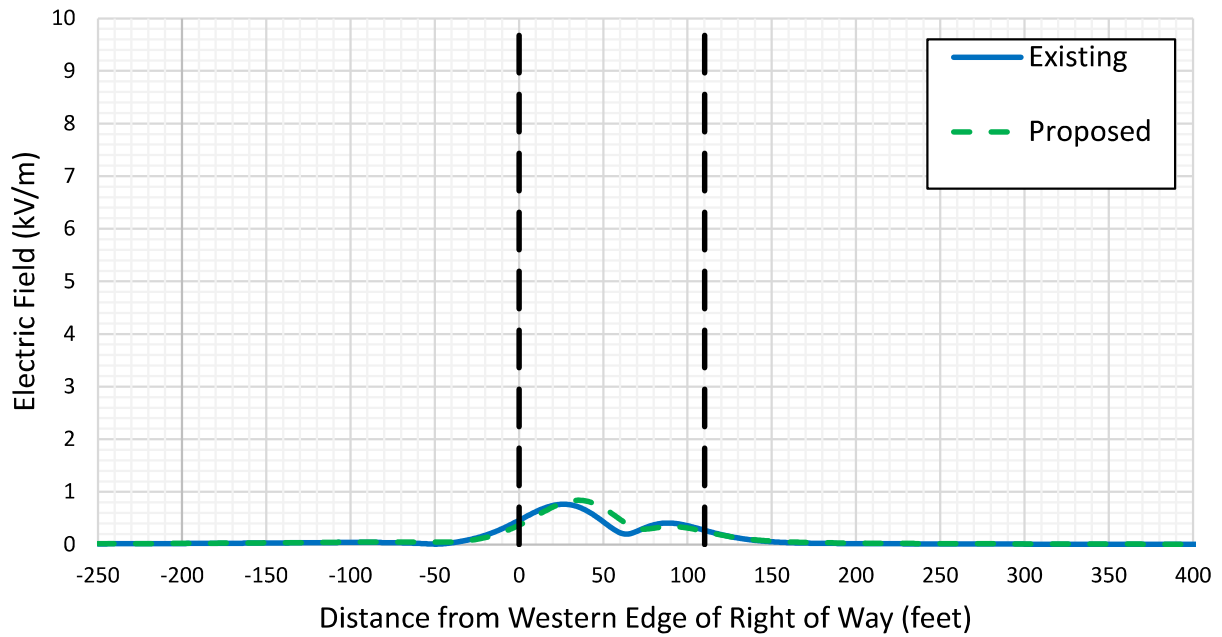




### Calculated Magnetic Fields (Annual Average Loads) Stevenson S/S - Christian Road Junction



### Calculated Electric Fields (Annual Average Loads) Stevenson S/S - Christian Road Junction





## Attachment F

### Letter to Abutters and Affidavit



February 19, 2024

Dear Neighbor,

At Eversource, we're always working to serve you better. We are submitting a Petition to the Connecticut Siting Council (CSC) for a proposed electric reliability project in your area.

### **Proposed Project Information**

The Project, called the Christian Street Junction to Stevenson Substation Rebuild Project ("Project"), is one of several projects designed to support the continued reliability of the transmission system in your region. The Project work would be located within the existing Eversource right-of-way (powerline corridor) on or near your property in the towns of Oxford and Monroe.

The proposed project includes the replacement of existing transmission towers, conductor and shield wires along 5.5 miles between the Junction on Christian Street in Oxford, to Cottage Street in Monroe, slightly past the Stevenson Substation at 1 Roosevelt Drive. This work includes:

- Replace the existing steel lattice towers and select steel monopoles with new steel monopole structures. The location and heights of the new structures will vary depending on location, topography, and other factors. In select areas, additional new monopole structures will be installed within the right-of-way to meet updated engineering and electric code standards.
- Replace the existing conductor (energized wires) with new, upgraded conductor of the same voltage (115-kV).
- Replace the shield wire (top-most wire) with Optical Ground Wire (OPGW). The new wire will improve electric reliability by enabling communications between substations.
- Remove select trees and vegetation within the right-of-way as needed for construction, and conduct vegetation maintenance, which includes removing incompatible, tall-growing vegetation to comply with electric safety standards.
- Build or improve gravel roads and work pads to provide access to structure locations and to create a stable work area for equipment. Temporary construction matting will be used in and around environmentally sensitive areas (e.g., wetlands).

### **What You Can Expect**

Pending receipt of the necessary approvals for this proposed work, construction is expected to begin in Quarter 3 of 2024.

### **Contact Information**

Eversource is committed to being a good neighbor and doing our work with respect for you and your property. For more information, please call our Projects Hotline at 1-800-793-2202 or send an email to [ProjectInfo@eversource.com](mailto:ProjectInfo@eversource.com).

If you would like to send comments regarding Eversource's Petition to the CSC, please send them via email to [siting.council@ct.gov](mailto:siting.council@ct.gov) or send a letter to the following address: Melanie Bachman, Executive Director, Connecticut Siting Council, Ten Franklin Square, New Britain, CT 06051.

Sincerely,

**Taylor LaPierre**

Project Manager – Eversource Energy

AFFIDAVIT OF SERVICE OF NOTICE

STATE OF CONNECTICUT     )  
  ) ss. Berlin  
COUNTY OF HARTFORD     )

Sec. 16-50j-40 of the Regulations of Connecticut State Agencies (“RCSA”) provides that proof of notice to the affected municipalities, property owners and abutters shall be submitted with a petition for declaratory ruling to the Connecticut Siting Council (“Council”). In accordance with that RCSA section, I hereby certify that I caused notice of the petition for a declaratory ruling of The Connecticut Light and Power Company doing business as Eversource Energy to be served by mail or courier upon the following municipal officials:

Honorable George R. Temple  
First Selectman  
Town of Oxford  
Oxford Town Hall  
486 Oxford Road  
Oxford, CT 06478

Honorable Terrence P. Rooney  
First Selectman  
Town of Monroe  
Monroe Town Hall  
7 Fan Hill Road  
Monroe, CT 06468

I also certify that I caused notice of the proposed modifications to be served by mail or courier upon owners of abutting properties shown on Attachment A to the Petition.

*Deborah Denfeld*

Deborah Denfeld  
Team Lead - Transmission Siting

On this the 19th day of February 2024, before me, the undersigned representative, personally appeared, Deborah Denfeld, known to me (or satisfactorily proven) to be the person whose name is subscribed to the foregoing instrument and acknowledged that she executed the same for the purposes therein contained.

In witness whereof, I hereunto set my hand and official seal.

Notary Public/My Commission expires:

Officer of the Superior Court/ Juris No.: *Andrew W. Sol* -

413393\_



