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September 19, 2023

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

Re: Montville Substation to North of Kitemaug Road Rebuild Project

Dear Ms. Bachman:

The Connecticut Light and Power Company doing business as Eversource Energy ("Eversource") is requesting a Declaratory Ruling that no Certificate of Environmental Compatibility and Public Need is required for the Montville Substation to North of Kitemaug Road Rebuild Project ("Project") which proposes modifications to the existing 115-kilovolt ("kV") 1090/1000 transmission lines, located in the Town of Montville, Connecticut ("Petition").

Prior to submitting this Petition, Eversource representatives briefed the municipality 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 as *Attachment A: Petition Map Set*.

Eversource is submitting this filing electronically and will be providing an original and 15 copies to the Council, along with the requisite \$625 filing fee.

Sincerely,

Deborah Denfeld

Deborah Denfeld

Attachments

cc: Honorable Ronald K. McDaniel, Mayor, Town of Montville

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 1090/1000 LINES IN THE TOWN OF MONTVILLE, 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 1090/1000 Lines, 115-kilovolt ("kV") transmission lines, located within an existing transmission right-of-way ("ROW") from Montville Substation, to a northerly location 1200 feet north of Kitemaug Road, in the Town of Montville, 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 replace existing shield wire to meet Eversource's long term build out of its fiber optic network on the 1090/1000 Lines, along an approximate 1.1-mile section of the existing ROW between Montville Substation, located in Montville, across Horton Cove (a tributary to the Thames River) to structures located approximately 1200 feet north of Kitemaug Road, in Montville. The installation of new 0.646-inch Optical Ground Wire ("OPGW") would cause stress to the existing structures potentially leading to structure failure, and therefore, this installation requires that the structures be replaced. A total of 10 structures (steel lattice towers or wood H-frames) on the 1090/1000 lines will be replaced with new structures that will meet current National Electrical Safety Code ("NESC") clearance standards. Additionally, conductor will be replaced over an approximate 1.0-mile segment of the Project as a result of the pull

¹ Conductor will be transferred (not replaced) for an approximate 0.1-mile segment on the 1090 Line and 1000 Line at the north end of the Project, north of Kitemaug Road.

tensions required to accommodate the vertical NESC clearances on the taller replacement structures.

Six of the structures to be replaced are located south of Horton Cove and four of the structures to be replaced are located north of Horton Cove, all such structures are located within the existing Eversource ROW or on Eversource owned property. Figure 1 on the following page illustrates the proposed Project area².

[End of Page]

^{2 &}quot;Project area" described in the Petition is synonymous with the existing facility "Site" described in RCSA §16-50j-2a (29). In the Petition, "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.

Thames River 32 Montville 1410/1787 Lines 1280 Line (12) Ledyard Waterford Hunts **EVERS**URCE INDEX MAP Legend Substation Figure 1 - Overview Map Overhead Eversource Project Line Open Water Montville Substation to North of Kitemaug Road - Overhead Eversource Line Rebuild Project Montville, CT Project Area Town 0007 Adjacent Town Date: July, 2023 ALL-POINTS

Figure 1: Project Area Overview Map - Existing Project Area

3. Existing Project Area Description

As shown on *Attachment A: Petition Map Set*, the Project area encompasses approximately 1.1 miles of existing Eversource ROW and Eversource owned property. Multiple 115-kV transmission lines leave the north side of the Montville Substation and extend across Horton Cove, as listed below from west to east in the ROW:

- 1090/1000 lines
- 1080/1280 lines
- 1410/1787 lines

After crossing the Horton Cove waterbody to the north, the transmission lines divide into one of two ROWs, as follows:

- in a northerly ROW, including the 1090, 1000 and 1080 lines, and
- in an easterly ROW, including the 1280, 1410, and 1787 lines.

A brief description of the ROW in the Project area, by segment, is described as follows:

Segment 1: Montville Substation to North of Depot Road, approximately 1,500 feet (0.28 miles):

This 200-feet wide ROW segment encompasses the following:

- The 1090/1000 lines are supported by double-circuit steel lattice tower structures constructed in 1952. The conductor on these lines is 556 aluminum conductor steel reinforced ("ACSR"), also installed in 1952. The existing shield wire is 3/8-inch copperweld on this segment of the 1090/1000 lines.
- The 1080/1280 lines are supported by double-circuit steel monopoles installed in 1972.
 The conductor on these lines is 1272 ACSR also installed in 1972. The 1080 and 1280 lines both have OPGW shield wire, installed in 2018 and 2022 respectively.
- The 1410/1787 lines are supported by galvanized steel single-circuit and double-circuit monopoles replaced under a prior Petition³. This prior work also included replacement of the previous 100 Line (69-kV) with upgrades to accommodate the future 1787 Line (115-kV) with new 1272-kcmil⁴ 54/19 Aluminum Conductor Steel Supported ("ACSS") conductor and OPGW.

Segment 2: North of Depot Road to the North Side of Horton Cove, approximately 3,050 feet (0.58 miles):

This 200-foot wide to 280-foot wide ROW segment includes a 1,900-foot long water crossing span over Gay Cemetery Pond and Horton Cove, to the junction at the north side of Horton Cove, and encompasses the following:

• The existing 1090/1000 lines have the same structure types, conductor, and shield wire for the lines as described in Segment 1 (above).

³ Siting Council Petition 1468, 'Montville to Horton Cove Rebuild Project', included structure replacements on the 1410/100 Lines, and installation of new conductor and OPGW. Modifications included upgrades to the 100 (69-kV) Line as a component of the future 1787 (115-kV) Line, which was completed and energized as part of another project (Petition 1405).

⁴ kcmil represents thousand circular mils, to describe the cross-sectional area of a conductor.

- The 1080/1280 lines and the 1410/1787 lines are supported by galvanized steel single-circuit and double-circuit monopole structures as replaced under a prior Petition⁵. The prior work also included installation of new conductor (1590-kcmil 54/19 ACSS) and OPGW on the replaced structures of these four lines.
- A 13.2-kV distribution line also occupies or bisects portions of this Project area segment.

Segment 3: North Side of Horton Cove to North of Kitemaug Road, approximately 1,200 feet (0.23 miles):

The junction area north of Horton Cove is 280 feet wide above the crossing, then splits into two separate Eversource ROWs; with the 1090 Line, 1000 Line, and 1080 Line continuing in a northerly ROW; and the 1280 Line, 1410 Line, and 1787 Line continuing in an easterly ROW. This Project does not include work in the easterly ROW, which runs towards Point Breeze Road. Beyond the junction, the 250-foot wide northerly ROW segment encompasses the following:

- The 1090/1000 lines are supported on Structure 7608, a double-circuit steel lattice tower which was installed in 1952, and by structures 7609 and 7610, both double-circuit wood H-frames, replaced in 2016⁶. In this segment, the 1090 Line continues onto Structure 7611A, which was replaced under a prior Petition⁷. The 1000 Line continues onto Structure 7611B (a single-circuit wood H-frame structure). The existing 1090/1000 lines have the same type of conductor and shield wire as described in Segment 1 (above).
- The 1080 Line is supported on Structure 6309, which was also replaced in 2016 as maintenance work. The 1080 Line continues to Structure 6310, which was replaced in 2018 as part of a prior Sub-Petition project⁸. The 556 ACSR conductor was replaced with 1590-kcmil 54/19 ACSS on the 1080 Line, between the junction's Structure 7009A and Structure 6309, under the prior Petition. From Structure 6309 to Structure 6310, the existing conductor is 556 ACSR, installed in the early 1960's.

Project Area Vegetation:

The amount of maintained ROW varies along the Project area. This Petition's 1090/1000 lines rebuild project is located along the westerly side of the ROW.

From Montville Substation to south of Horton Cove, vegetation has been maintained across most of the ROW width, but mature vegetation is present along the easterly side of the ROW

⁵ Siting Council Petition 1405, 'Horton Cove Circuit Separation Project', included modifications to the 1080/1280 Lines and the 1410/1787 Lines.

⁶ Structures 7609 and 7610 were replaced in 2016 with structures of a similar height, as maintenance work due to asset condition.

⁷ Siting Council Petition 1545, 'Wawecus Junction to Montville Junction Upgrade Project'.

⁸ The 6310 Structure was replaced as part of Sub-Petition No. 1293-LFBNM-01, the 'Card to Montville to Tunnel Upgrade Project', in 2018.

at various locations. More specifically, in Segment 1, 190 feet of the ROW is fully maintained, while approximately 10 feet remains vegetated along the eastern edge of the ROW. In Segment 2 from Depot Road to structure 7606, 190 feet of the ROW is fully maintained, while approximately 10 feet remains vegetated along the eastern edge of the ROW. Along the portion of Segment 2 from structure 7606 to the south side of Horton Cove, the ROW width is 280 feet wide, but vegetation is maintained within approximately 230 feet of the ROW width, leaving approximately 50 feet of vegetation along the east side of the ROW. The most recent vegetation management along this ROW corridor was performed in November 2022 and consisted of removal of hazard trees and side trimming.

On the north side of Horton Cove, at the junction and to a location 1200 feet north of Kitemaug Road, non-compatible hardwood and softwood trees are present intermittently across the ROW width. The most recent vegetation management along this part of the ROW was also performed in November 2022, and consisted of removal of a few hazard trees and side trimming.

4. Project Description

The Project includes installation of new OPGW and conductor, and the replacement of 10 structures on the 1090/1000 lines, needed to address overstressed conditions due to structural loading associated with the installation of the new OPGW and new conductor. At the completion of this Project, all structures in the ROW from Montville Substation to 1200 feet north of Kitemaug Road will have been replaced within the last six years, except for four steel pole structures installed on the 1080/1280 Lines in 1972.

Details of the proposed Project scope of work on the 1090/1000 lines include the following:

- Replace five double-circuit steel lattice tower structures with five double-circuit galvanized⁹ steel monopoles;
- Replace two double-circuit steel lattice tower structures with four single-circuit¹⁰ galvanized steel monopoles;

9 Galvanized steel structures are proposed for the replacement structures, where galvanized steel has already been used for other line structures in the same segments of the ROW.

¹⁰ Paired single-circuit structures will be installed to allow for slack span into the substation, and to accommodate conductor and wire pull at line angle changes in the ROW.

- Replace one double-circuit wood H-frame structure, with two single-circuit¹¹ galvanized steel monopoles;
- Replace one double-circuit wood H-frame structure, with a double-circuit weatheringsteel monopole structure (7610)¹²;
- Replace one single-circuit wood H-frame angle structure that supports the 1000 Line, with a single-circuit weathering steel 3-pole dead-end structure (7611B)¹³;
- Replace approximately 1.0 mile of existing conductor with 1590-kcmil 54/19 ACSS from Montville Substation to Structures 7609/7609-1;
- Transfer 0.1 mile of existing 556 ACSR conductor on the 1090 Line and 1000 Line¹⁴; and,
- Replace approximately 1.1 miles of existing shield wire with OPGW from Montville Substation to Structure 7611A on the 1090 Line and to Structure 7611B on the 1000 Line.

In addition to the work described above, counterpoise and lightning arrestors would be installed at structure locations, as needed, and lightning arrestors at existing structures will be transferred to the new structures. The Project does not include any work at the Montville Substation.

The Attachment A: Petition Map Set depicts the locations of existing and proposed replacement structures, as well as the work pads, pull pads, and access roads to be used for Project construction. The maps also illustrate the limits of the existing Eversource ROW and Eversource owned property, as well as environmental and land use features in the Project area and other Project elements. The Attachment B: List of Structure Replacements provides detailed information regarding the heights and types of existing and replacement structures. The Attachment C: Cross Sections depict typical views along the ROW of the existing and proposed structures.

Nine replacement structures require an increase in height and one replacement structure does not, as compared with the corresponding existing structures. The heights of the 10 structures that will

¹¹ Two single-circuit dead-end structures are proposed to replace the double-circuit lattice tower Structure 7609 .to allow for the transition from the new heavier and higher tension 1590-kcmil 54/19 ACSS conductor where it will be connected to existing 556 ACSR conductor.

¹² Weathering-sted structures are proposed to replace the wood poles to match the visual aesthetic of the surrounding wooded landscape, and other transmission structures in that area.

¹³ A 3-pole dead end structure will be installed to accommodate conductor and wire pull at line angle changes in the ROW.

¹⁴ The 556 ACSR conductor is consistent with the existing 1090/1000 Line conductor in the northerly segment of the ROW (north of the junction at the north side of Horton Cove), and it does not need to be replaced at this time.

be replaced range from 52 feet to 127 feet. The heights of the replacement structures range from 56.5 feet to 187 feet. The proposed height increases range from 15.5 feet to 60 feet above the corresponding existing structures. Three double-circuit monopoles structures are being replaced with paired single-circuit monopoles each, where the 1000 Line is being carried on the corresponding replacement structure, and the 1090 Line on an additional structure, which will be the same height as the adjacent 1000 Line replacement structure.

The average corresponding structure height increase is approximately 31 feet. Height increases are required to comply with current NESC and Eversource clearance requirements, with some additional contributing factors as follows:

- Two replacement structures (7607 and 7608) will have height increases that are over 50 feet (60 feet and 54.5 feet, respectively), at either side of the Horton Cove crossing. The height increases are required to meet current NESC standards for a river crossing. The replacement structure heights for the 1090/1000 lines at this location will be comparable to the recently replaced structures on either side of the Horton Cove crossing in the same ROW on the 1410/1787 and 1080/1280 lines.
- Replacement structure 7605 will have a height increase of 45.5 feet, as the structure is proposed to be shifted to a lower elevation than the lattice tower structure it is replacing.
- Replacement structure 7609 will have a height increase of 39.5 feet, due to the steep terrain traversed by the conductor.

Most replacement structures would be located 25 feet or less from the existing structure. The two replacement structures on the 1090/1000 Lines on either side of the Horton Cove crossing (structures 7607 and 7608) will be located approximately 37 feet north of the respective existing structures.

5. Existing Environment, Environmental Effects, and Mitigation

The Project is proposed to be constructed within the existing Eversource ROW or on Eversource owned property. It will extend from Montville Substation to the north, span Horton Cove, and continue 1200 feet north of Kitemaug Road in Montville. No expansion of the existing ROW is required. The Project would not have a substantial adverse environmental effect for the reasons explained below.

5.1 Land Use

The Project is in the southeastern portion of the Town of Montville, in upland areas approximately 0.5 mile west of the Thames River. Land uses in the Project area include a mix of residential and commercial/industrial developments. Montville Power LLC / Montville Generating Station

("Generating Station") is proximate to the Project area. The active New England Central Railroad line extends parallel and approximately 600 feet east of the Project Area/ROW. An abandoned railroad spur crosses the Eversource ROW on the south side of Horton Cove and is disconnected from the main line tracks and overgrown with vegetation¹⁵.

An area encumbered by an Environmental Land Use Restriction (ELUR), due to prior activities associated with the Generating Station, is located north of Montville Substation. OPGW and conductor will be pulled over the ELUR; however, the Project will not affect the ELUR area because all ground work areas and accessways are located outside of the ELUR limits (See *Attachment A – Map Sheet 1*).

Additional land uses in the Project area include undeveloped forested areas, Gay Cemetery Pond (an impounded portion of Oxoboxo Brook), the Thames River, Horton Cove and the Point Breeze Water Access area. These resources are primarily used for recreational activities that include boating, fishing, and hiking. Additionally, the Town of Montville Water Pollution Control Authority Waste Water Plant is located slightly northwest of the ROW near Gay Cemetery Pond and Horton Cove.

All Project work would occur within the existing Eversource ROW or on Eversource owned property, which is dedicated to long-term use as an electric transmission line corridor. As such, the Project will not result in adverse impacts to existing land uses.

5.2 Clearing and Vegetation Management

Currently maintained portions of the ROW (as described in Section 3 above) are managed for low-growth and compatible species, consistent with overhead transmission line clearance requirements. While the majority of the Project will be located within the maintained portions of the ROW, some limited tree clearing, and vegetation management will be required in select areas to accommodate access roads, work pad installation and improvements, removal of incompatible vegetation, and side tree trimming along the edge of the Project ROW to provide conductor clearances consistent with current NESC standards.

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¹⁵ A May 1, 1938, Land Agreement (Permit #6418), between Central Vermont Railway and Connecticut Light and Power Company ("CL&P"), describes a lease granted to CL&P for the pole lines and wire crossing over the tracks at this location.

In general, vegetation will be cut to an above ground height of 6-8 inches, while Project work pad areas and access roads will be mowed as applicable.

Tree clearing will be conducted on the north side of Horton Cove in upland areas of the Project, specifically around the junction area and in the northerly ROW. No tree clearing is proposed in wetlands. Approximately 1.57 acres of tree clearing is necessary to meet current NESC clearance standards (See *Attachment A – Sheet 3.*)

Tree clearing at the junction area will take place within the ROW on the west, south and east sides of the existing graveled area. Additional tree clearing will take place within the northerly ROW, between Structure 7608 to Structure 7611B¹⁶.

Given the overall limited extent of forest conversion to shrubland, or emergent vegetation, there will be no significant adverse effect to forested habitat within the Project area. Further, shrubland and early successional habitat (and the preservation of such existing habitat) along the ROW is beneficial for many species of wildlife because shrubland habitat is otherwise declining in New England¹⁷.

5.3 Scenic, Recreational and Cultural Resources

The Project is not anticipated to have a substantial adverse effect to scenic, recreational, and/or cultural resources. The ROW does not traverse nor is not located near any locally or state designated scenic roadways¹⁸.

Similarly, the Project area neither crosses nor is proximate to any recreational resources such as the Connecticut Forest & Park Association¹⁹, blue-blazed hiking trails, or other known recreational trail systems²⁰. The nearest mapped trail system to the Project area, the Decatur Trail, is in Gales

¹⁶ Non-compatible trees within the ROW will be removed. Additionally, danger/hazard trees outside the limits of the ROW will be evaluated and may be removed as necessary following property owner consultation.

¹⁷ Connecticut's Wildlife Action Plan has identified 47 wildlife species of Greatest Conservation Need (GCN) that are associated with shrubland habitat and require active management.

¹⁸ Connecticut Department of Transportation (CTDOT), Connecticut State Scenic Roads. Updated January 11, 2022. Accessed June 22, 2023. Available URL: https://portal.ct.gov/DOT/Programs/Connecticut-Scenic-Roads. The municipality of Montville does not have any listed scenic roads in proximity to the Project.

¹⁹ Connecticut Forest & Park Association URL: https://www.ctwoodlands.org/

²⁰ Based on a desktop review of the Connecticut Department of Energy and Environmental Protection, GIS Data URL: https://portal.ct.gov/DEEP/GIS-and-Maps/Data/GIS-DATA and field investigations data.

Ferry, approximately 0.75 mile to the east, across the Thames River while the closest publicly available boat launch is at the eastern end of Dock Road in Montville, approximately 0.23 mile east of the transmission line ROW. The nearest public open space to the Project area is the Point Breeze Water Access area, an undeveloped wooded parcel owned and managed by Connecticut Department of Energy and Environmental Protection ("CTDEEP") for recreational purposes. This Water Access Area is located immediately south of the Project area (see *Attachment A – Map Sheet 3*).

To evaluate the potential presence of archaeological and historic resources within or proximate to the Project area, a Phase 1A Cultural Resources Assessment Survey ("Phase 1A") was conducted by Heritage Consultants, LLC ("Heritage") in June of 2023. This assessment included a review of previously recorded cultural resources on file with the Connecticut State Historic Preservation Office ("SHPO"). The Phase 1A did not identify any National Register of Historic Places properties/districts within 500 feet of the Project areas. However, one state-listed historic structure and three previously identified archeological sites are located within 500 feet of the Project area. These historical and archeological resources will not be impacted by the Project.

Heritage further evaluated the archaeological sensitivity of the Project area via a Pedestrian Survey in June of 2023. As a result of the Phase 1A and the Pedestrian Survey, Heritage determined that three Project work areas retain a moderate to high archaeological sensitivity and recommended a Phase 1B Cultural Resources Reconnaissance Survey ("Phase 1B") be completed if ground disturbance could not be avoided in these areas.

Ground disturbance at two of these areas will be avoided by using construction matting. Therefore, Heritage has determined that further archeological examination will not be required. Because ground disturbance may occur in the Segment 3 work area, a Phase 1B survey (shovel test) was conducted to further assess the area for potential archeological resources. Heritage completed Phase 1B testing in late August of 2023. No significant cultural materials were found at this location and no further examination of this area is recommended.

Eversource will provide the results of the Phase 1B to the SHPO and the Tribal Historic Preservation Offices ("THPO") for review in the next few weeks. Any additional protection

measures recommended by either the SHPO or THPO will be incorporated into Eversource's construction criteria for the Project²¹.

5.4 Water Resources

Eversource identified and delineated water resources in the Project area in December 2019 and updated the review in June 2023 (Refer to Attachment D: Wetlands and Watercourses Report and Attachment A: Petition Map Set, which depicts water resources). Water resources found in the Project area include inland wetlands, tidal wetlands, Gay Cemetery Pond and Horton Cove. In addition, the Project area crosses a Coastal Boundary Area and Federal Emergency Management Agency ("FEMA") designated 100- and 500-year flood zones associated with Horton Cove.

All Project work proximate to these 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" or "BMP Manual") and the conditions of applicable regulatory permits and approvals. Additionally, work activities associated with the crossing of Horton Cove for reconductoring and OPGW installation will meet all applicable terms and conditions of the reply to Self-Verification Notification Forms submitted to the U.S. Army Corps of Engineers, prior to start of construction.

Water resource areas are summarized in more detail below.

5.4.1 Watercourses and Waterbodies

Watercourses and waterbodies within the Project area include Gay Cemetery Pond and Horton Cove. Gay Cemetery Pond is an impoundment of Oxoboxo Brook, which drains into Horton Cove, a tidal cove associated with the Thames River. There will be no temporary or permanent effects to watercourses or waterbodies as a result of the Project.

²¹ Gravestones were previously identified near the existing access road south of Structure 7610 (See Attachment A – Sheet 3). Construction contractors will be notified of this location and advised to avoid this area with construction equipment and materials. Use of the existing access road will be "as is" and off access road travel or staging will not be permitted. To further protect these burial locations, high visibility fencing will be installed in this area to keep construction activities from inadvertently s traying off the access road.

5.4.2 Wetlands

Wetlands in the Project area were identified and delineated in accordance with industry standard methodology. A total of three wetlands were identified and delineated within or proximate to the Project area including one inland wetland and two tidal wetlands located along the western and eastern shores of Horton Cove (*Attachment A: Petition Map Set*). No work is proposed within any wetland resource. Therefore, no wetland impacts are anticipated.

5.4.3 Vernal Pools

The Project area was surveyed for potential vernal pools in December 2019 and reviewed again in June 2023 (*Attachment D: Wetlands and Watercourses Report*). Survey work consisted of investigating wetlands for the presence of physical and hydrologic indicators of vernal pools (depressed wetlands with seasonally flooded hydrology). No such indicators were observed within the Project area wetlands.

Wetland 1 is associated with Gay Cemetery Pond. The wetland is permanently flooded and no backwater or vegetated shallows were observed that could support vernal pools. Wetlands 2 and 3 border Horton Cove, which is tidally influenced, permanently flooded and brackish. These wetlands do not have a hydrology suitable to support breeding by vernal pool indicator species.

5.4.4 Federal Emergency Management Agency Flood Zones

The Project ROW extends across FEMA 100-year and 500-year flood zones associated with Horton Cove. However, no new structures or equipment will be installed within these areas.

Some tree clearing within the ROW on the north side of Horton Cove is within the FEMA 100-year flood zone. Eversource would utilize its BMPs to minimize any impacts in this area, including removal of downed tree materials from the flood zone in accordance with details described in Section 7.3 – Tree Clearing and Vegetation Management Methods. Any disturbed areas would be promptly stabilized to minimize the potential for soil erosion and the discharge of sediment into nearby resource areas. Project activities would not affect the flood storage capacity of the FEMA 100-year flood zone.

5.4.5 Water Supply

Based on Aquifer Protection Areas ("APA") mapping maintained by CTDEEP, there are no APAs within or proximate to the Project ROW. The Project is not located within a public water supply

watershed and no public supply reservoirs, or public water supply wells are located within the ROW or proximate to the Project area.

The majority of the Project area is serviced by public drinking water with a few scattered parcels serviced by private wells^{22.} No private water supply wells were observed within the Project area during field investigation activities. Eversource would require its contractors to employ best management practices for the proper storage, secondary containment, and handling of diesel fuel, motor oil, grease, and other lubricants, to protect water quality within the Project area. Construction activities would conform to Eversource's BMPs, as well as to the requirements of a Spill Prevention and Control Plan, which would be prepared prior to the commencement of construction.

5.4.5 Coastal Boundary

Portions of the ROW that contain proposed structure replacements, access roads (both existing and proposed matted) and gravel/matted work areas (*Attachment A: Petition Map Set*) lie within the Coastal Boundary. As referenced in Section 5.2, some tree clearing is needed in this area to meet NESC clearance standards. These construction activities are located within upland areas of the ROW and will not affect any public access to coastal areas or result in impacts to coastal resources.

5.5 Habitat and Wildlife

A habitat assessment was conducted within the Project limits on June 28, 2023, and included both visual and auditory observations methods. The following habitat types were noted:

- Early successional uplands (a.k.a. old field or shrubland)
- Mixed hardwood forest edge (i.e., forest/shrubland ecotone)
- Estuarine embayment (Horton's Cove and Gay Cemetery Pond)

In June 2022, Eversource submitted a Natural Diversity Database ("NDDB") State-listed Species Review request to the CTDEEP for Project activities within NDDB-mapped habitat areas. The NDDB Determination received in July 2022 identified one state-listed species known to occur proximate to the Project area. No adverse impacts to the identified species are anticipated.

22 Connecticut's Drinking Water GIS Map Viewer -

https://maps.ct.gov/portal/apps/View/index.html?appid=6a340817f7d648d589ebbcc3a699edda&extent=-73.4042,41.1799,-71.7864,41.7879

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 that one federal-listed endangered species, the Northern Long-eared Bat ("NLEB"; *Myotis septentrionalis*), may occur in proximity to the Project area. The 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 2019), there are no known roost trees within 150 feet of the Project area while the nearest hibernacula is approximately 33 miles away to the southwest in North Branford. On June 14, 2023, the USFWS issued a "no effect" determination on the NLEB for activities associated with the Project. It further stated that no further consultation with USFWS is required.

5.6 Invasive Species

Invasive species exist within the ROW. The Project would adhere to Eversource's BMPs to minimize the disturbance and spread of soil and/or plant matter as specified in the BMP Manual, including the following additional actions 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 compressed air.

5.7 Visual Effects

The Project would result in a minimal change to the visual character of the existing transmission lines because the proposed replacement structures are similar in design to some of the existing structures and to structures supporting other lines in the same ROW. In the Montville Substation to Horton Cove section of the ROW, the proposed 1090/1000 lines galvanized steel monopole replacement structures will present a consistent appearance with other structures of the 1410/1787 lines and 1080/1280 lines in the same ROW. North of Kitemaug Road, the proposed 1090/1000 lines weathering steel monopole replacement structures are comparable in appearance to the original wood structures and will blend in with the landscape surrounding the

ROW.²³ Additionally, proposed replacement structure heights are comparable to the heights of the other structures in the ROW (Refer to *Attachment B: List of Structure Replacements* and *Attachment C: Cross Sections*).

As a result of limited shifts in replacement structure locations, and replacement structure finishes and heights that are comparable to other structures in the same ROW, the Project would not result in a detrimental impact to the existing visual character of the transmission line ROW.

Tree clearing, side tree trimming, and vegetation removal are required to accommodate the work and/or meet current NESC clearance standards. The majority of tree removals would occur north of Horton Cove, at the junction area, and along the western portion of the northerly ROW, both south and north of Kitemaug Road (*Attachment A – Map Sheet 3*). While some vegetative screening will remain in these areas, the potential increase in visibility due to removal of vegetation from the northern shore of Horton Cove and for immediate abutters of the ROW along Kitemaug and Cove Road is possible. It is anticipated that views from these locations will be similar to that of the ROW on the south side of Horton Cove.

5.8 Federal Aviation Administration (FAA) Consideration

Eversource used the FAA Notice Criteria Tool to assess the heights of the Project's proposed replacement structures, with a result that no FAA Notice Criteria was triggered.

5.9 Air Quality

Short-term, localized effects from the Project construction on air quality may result, 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 would be limited by requiring contractors to properly maintain construction equipment and vehicles, and to minimize the idling time of equipment and vehicles, including diesel construction equipment, in accordance with Connecticut regulatory requirements²⁴.

²³ The 1080 Line structures in the same northerly ROW include Structure 6309, replaced with single circuit galvanized steel H-frame under Petition 1405, and Structure 6310, a weathering steel structure, as the line transitions to the wooded area to the north.

²⁴ Regulations of Connecticut State Agencies (RCSA) Section 22a-174-18(b)(3)(C) generally prohibits the idling of motor vehicles for more than three consecutive minutes when not in motion.

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. In addition, Project personnel will monitor for occurrences of dirt being tracked onto local paved roads by Project work. Any such tracking will be promptly swept and removed. To further minimize dust, water may be used to wet down disturbed soils or work areas with heavy tracking as needed.

5.10 Noise

The Project construction would result in short-term and localized noise, as is typical of any similar construction project. 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, crane, trucks, etc.)²⁵.

After the completion of the Project, operation of the existing 115-kV lines will not impact noise levels.

5.11 Radio and Television Interference; Sound

There would be no increase in radio interference or audible noise from the operation of the modified transmission facilities.

5.12 Electric and Magnetic Fields

The level of an electric field near an energized power line depends on the applied voltage, the distance between the conductors, and the distance to the measurement location, measured in units of kilovolts per meter ("kV/m"). The level of the magnetic field near line conductors carrying current depends on the magnitude of the current, the distance between the conductors, and the distance from the conductors to the measurement location measured in units of milligauss ("mG"). Both electric and magnetic fields decrease rapidly as the distance from the source increases.

Changes to the electric fields arise from changes to the line geometry and conductor size within the ROW, while changes to the magnetic fields arise from both changes to line geometry within the ROW and the change in line loads based on future state for post-construction calculations.

²⁵ Construction noise is exempted under the Connecticut regulations for the control of noise, RCSA 22a-69-1.8(g).

To calculate the electric and magnetic fields ("EMF"), the annual average loading conditions of all lines in the ROW are included. The EMF calculations are based on the proposed/modified transmission circuits, referencing the segments described in Section 3 above, with results as follows:

 Segments 1 and 2 (the 200 feet wide ROW section): from Montville Substation (Structures 7602/7602-1) to South of Horton Cove (replacement Structures 7606/7606-1), with calculated EMF results shown below in Table 1:

Table 1 - Magnetic and Electric Field Loads (calculated results)				
Montville Substation to South of Horton Cove (Annual Average Loading*)		West ROW Edge	Max in ROW	East ROW Edge
Magnetic Field (mG)	Existing	47.4	98.8	38.8
wagnetic Field (IIIG)	Proposed	40.8	104.4	39.7
	Existing	0.10	2.20	0.12
Electric Fields (kV/m)	Proposed	0.15	2.30	0.12
*Calculations are based on the June 2021 load flow study, to predict future loads.				

 Segment 2 (the 280 feet wide ROW section): Horton Cove Crossing (replacement Structure 7606/7606-1 to Structure 7608), with calculated EMF results shown below in Table 2:

Table 2 - Magnetic and Electric Field Loads (calculated results)				
Horton Cove Crossing (Annual Average Loading*)		West ROW Edge	Max in ROW	East ROW Edge
Magnetic Field (mG)	Existing	19.5	33.7	11.5
wagnetic Field (ilig)	Proposed	15.7	23.2	12.0
	Existing	0.02	0.79	0.09
Electric Fields (kV/m)	Proposed	0.13	0.65	0.08
*Calculations are based on the June 2021 load flow study, to predict future loads.				

Across Segments 1 and 2, the resulting calculations indicate that after the rebuild of
this Project's 1090 and 1000 transmission lines, the electric and magnetic fields
values will closely resemble the existing fields. Slight decreases and increases in
fields are seen within the ROW corridor, but the changes are negligible (*Attachment E: EMF Graphs*). Segment 3 (the 250 feet wide section): from North of Horton Cove
(replacement Structures 7608) to replacement Structure 7611B (and Structure
7611A)

Across Segment 3, differences between existing and post-construction EMF at the edge of the ROW are negligible because there will be minimal changes in geometry and location of the

transferred existing conductor to the replacement structures. In general, the replacement structures will be taller than the existing, and as a result, EMF will decrease slightly.

Comparison of Calculated Fields to International Guidelines

There are no state or federal limits for electric or magnetic field levels at the edge of a transmission line ROW. However, the International Council on Electromagnetic Safety ("ICES") and the International Commission on Non-Ionizing Radiation Protection ("ICNIRP") have issued guideline limits for long-term public exposure limits for 60-Hz electric and magnetic fields. The modeled values at the edge of the ROW from the proposed transmission lines are well below these international guidelines which are summarized in Table 3:

Table 3 - International Guidelines for EMF Exposure			
Organization Recommending Limit	Magnetic Fields (mG)	Electric Fields (kV/m)	
ICES Maximum Permissible	9,040	5 (in General)	
Exposure ICNIRP Restriction Level	2,000	10 (on ROW) 4.2	

6. Construction Traffic Management

The Project area extends across various local roads; there are no crossings of State Routes nor active rail lines within the Project area.

Construction-related vehicular and equipment movements would utilize public roads in the Project area to access the transmission line ROW. However, the Project-related traffic is generally expected to be temporary and highly localized in the vicinity of the ROW access points and at the Staging Area described below in Section 7.1. Due to phasing of construction work, Project-related traffic is not expected to significantly affect transportation patterns or levels of service on public roads.

To safely move construction vehicles and equipment onto and off of the ROW while minimizing disruptions to vehicular traffic along public roads, Eversource and its Project contractor would work with the municipalities to develop and implement traffic management procedures, as needed. 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.

Construction vehicles and equipment to be used for the work may include 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. In the event helicopters are utilized, advanced notification to affected property owners would be provided. Pullers and tensioners would be used for the line work.

Guard trucks would be used for protection of local roads during the overhead line work. Additional construction precautions will be used at ground level for managing the overhead line work at the water crossings (Refer to Section 7.7). The abandoned railroad spur will not require guard trucks for the overhead line crossings since it is not an active line²⁶.

7. Construction Activities and Sequence

The Project will use existing access roads, stone work pads and pull pads, where these features are present within the Project area²⁷.

Before the start of Project construction, contractors will be made aware of sensitive environmental and cultural resources along the ROW that require certain protective work procedures, including the locations of invasive species (refer to Section 5.6 above). Project construction would include the following activities in approximately the sequence as presented below:

7.1 Establishing Staging Area

During Project construction, Eversource proposes to use an existing two-acre staging area located at 82 Depot Road in Montville, adjacent to the Project area. This staging area, which is depicted in Figure 2 below (also illustrated on *Attachment A - Sheet 2*) was used by Eversource as a staging area for the Montville to Horton Cove Rebuild Project.

²⁶ The abandoned and overgrown railroad spur across the south side of Horton Cove is no longer used for rail traffic, and therefore there is no need to coordinate for guard trucks when conducting the overhead wire crossing maintenance work, as allowed under the standing CL&P Lease agreement.

²⁷ Some of these features were installed during prior work authorized under Petition 1405 and Petition 1468 and include an off-ROW access road with easement rights.

Figure 2: Eversource Staging Area (82 Depot Road, Town of Montville)



In addition to Eversource's staging area in Montville, Project contractor(s) would be responsible for identifying and managing other staging areas as may be needed for the Project work. Because Eversource has not yet awarded a construction contract for the Project, additional staging areas, if needed, will be identified later.

The Eversource staging area in Montville, as well as yet-to-be identified contractor yards, would be used for storing or staging Project construction materials, equipment, tools, and supplies (including cable reels, insulators, hardware, poles, and construction mats). Office trailers and Conex storage containers may also be located at the staging sites. Components removed during the work (structures, hardware, and insulators) may be accumulated and stored temporarily at the staging area prior to removal off-site for salvage and/or disposal.

In addition, the staging area may also be used by construction crews and other Project personnel for parking personal vehicles, construction vehicles and equipment storage, and for performing minor maintenance, on construction equipment. Vehicles or equipment also may be refueled at the staging areas.

Appropriate soil erosion and sedimentation ("E&S") controls would be installed at the staging areas, as required, and maintained until completion of the work in accordance with Project permits and Eversource's BMPs.

7.2 Soil Erosion & Sediment Controls 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 Eversource's BMPs. As planned, the Project would result in less than one acre of soil disturbance and would not require a Connecticut Stormwater Pollution Control Plan.

Typical E&S control measures include, but are not limited to, straw blankets, silt fencing, gravel anti-tracking pads, soil and slope protection, water bars, check dams, berms, swales, plunge pools, and sediment basins. Silt fence would be installed as needed prior to construction to intercept and retain sediment and/or construction materials from disturbed areas and minimize the potential for sedimentation outside of the Project area. Temporary E&S control measures would be installed prior to site disturbances and maintained and inspected for the duration of the Project to ensure their integrity and effectiveness.

Temporary E&S control measures would be maintained and inspected by an Eversource appointed environmental inspector on a weekly basis throughout the Project construction to ensure their integrity and effectiveness and for conformance to BMPs and Connecticut Guidelines.

After the installation of the Project facilities, seeding and mulching or hydroseeding would be completed to permanently stabilize the areas of the ROW disturbed by the work. After construction

is complete, temporary E&S control measures would remain in place and inspected monthly until all disturbed areas have been deemed stabilized after which they would be removed.

7.3 Tree Clearing and Vegetation Management Methods

Tree clearing and vegetation removal would be accomplished using mechanical methods and typically requires the use of, but not limited to, flat-bed trucks, brush hogs or other types of mowing equipment, skidders, forwarders, bucket trucks for canopy trimming, feller bunchers for mechanical tree cutting, woodchippers, log trucks, and chip vans. Eversource would conduct vegetation removal activities in accordance with its BMPs.

Trees, where designated to be removed (refer to Section 5.2 shall be cut parallel to and close to the ground. Limited, if any, stump removal may be conducted in consultation with an affected property owner.

In sensitive environmental and cultural resource areas (i.e., NDDB areas, state-listed species and their habitats, and cultural resources, etc.), Eversource would require the contractor to use low-impact methods for vegetation clearing. Low-impact methods incorporate a variety of approaches, techniques, and equipment to minimize site disturbance, depending on the specific settings and situations:

- 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 and around sensitive resource 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.

Woody debris, including logs and branches, will be removed from the ROW. If there are areas where debris removal is not possible because there is no equipment access, slash will not be piled greater than three feet in height or within 50 feet of any road, or within 25 feet of any property boundary, in upland areas. If chipping debris, then all wood chips will be removed from the ROW.

If the property owner requests that the wood be left, it will be left as logs not to exceed 25 feet in length and will be piled typically along the new edge of clearing.

7.4 Access Roads and Work Pads

Access to each proposed transmission replacement structure location will be required during Project construction. As a result of recent projects and the operation and maintenance of the existing lines within the ROW, some access roads are already established and Eversource will utilize these existing access roads to the extent possible. However, some new access roads will be required within the ROW.

Construction matting will be used to install temporary access roads through environmentally sensitive and/or established lawn/agricultural areas to reach certain structure locations. Additionally, high visibility fencing will be installed in the historical burial locations area, at the existing access road south of Structure 7610 (as discussed in Section 5.3), to keep construction activities from inadvertently straying off the access road. The access roads expected to be used for the Project are illustrated on the maps in *Attachment A*.

Existing access roads may need to be improved (graded, widened, and/or reinforced with additional stone and/or gravel material) to accommodate the safe passage of construction vehicles and equipment. Access road improvements typically include trimming adjacent vegetation and widening roads, as needed, to provide a maximum travel surface that 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 utilized to discourage all-terrain vehicles from accessing the ROW. It is standard work practice to close and lock all gates at the end of the workday. In addition, for any new access points that do not have gates or pole barriers, Eversource will install these upon request by the property owner during and/or after construction.

At each transmission line structure location, a work pad is required to stage material for final onsite assembly and/or removal of structures, to install OPGW and new conductor or transfer conductor, and to provide a safe, level work base for the construction equipment. The proximate locations and configuration of the work pads, as determined based on the environmental field studies and constructability reviews, are shown on *Attachment A*.

Typical work pads are 125 feet by 125 feet but, due to terrain and spacing between the existing and proposed structures, the work pads may be up to approximately 150 feet by 150 feet. In areas where machinery is needed for pulling OPGW or conductor through an angled structure, work/pull pads of approximately 130 feet by 80 feet are required. Most work pads will be graveled, though

some will use temporary matting to protect sensitive resource areas (i.e., environmentally sensitive resource areas, agricultural lands, lawn areas, meadow, identified cultural resource areas, etc.).

To facilitate future transmission line maintenance, access roads and structure work pads in uplands, would be left in place (Refer to *Attachment A*). If an individual property owner requests their removal, the Project representatives will work with the property owner on mitigation options. No new permanent access roads or work pads are proposed in sensitive environmental and cultural resource areas.

7.5 Foundation Installation and Excavated Soil Management

The proposed replacement structures would be either drilled (caisson) concrete or have directly embedded foundations. This work would require the use of equipment such as mechanical excavators (drill rigs), pneumatic hammers, augers, drill rigs, dump trucks, concrete trucks, grapple trucks 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 as the shaft is being drilled or as the structure is being set. The water would then be managed in accordance with 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 7.10).

7.6 Structure Assembly/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. After assembly, the area around the directly embedded structures would be backfilled with processed gravel.

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 Conductor/Shield Wire 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 conductor reels, conductor pulling and tensioning rigs, guard trucks or structures and bucket trucks. The removal of the existing 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.

Prior to construction activities over Horton Cove and Gay Cemetery Pond, the Eversource Outreach team will contact local and state recreational departments (i.e., Town of Montville, Connecticut Department of Energy and Environmental Protection) to discuss and evaluate the best ways to connect with the public and notify recreational boaters of the Project's construction in general (i.e., structures that are being replaced on either side of the Cove) and conductor/OPGW installation over the Pond and Cove in particular. Eversource plans to perform outreach to abutting property owners along Dock Road and the Point Breeze Water Access area to caution and prevent boaters from passing through the construction zone during any wire pulling activities. In addition, Eversource proposes to post "CAUTION: ACTIVE CONSTRUCTION ZONE OVER RIVER" signs along the river at the Montville boat launch facility located on Dock Road and the Point Breeze Water Access area.

Special precautions will be taken when installing conductor and OPGW over Horton Cove and Gay Cemetery Pond on the 1090 Line and the 1000 Line. The new conductor and OPGW would be installed such that the wire would avoid contact with water at crossings throughout the pulling activity. Conductor and OPGW are typically installed using "traveler blocks" (a series of pulleys) and hardline or rope. The 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 hardline and pulled out using a V Groove Machine while pulling in a hardline 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 is pulled into position, the traveler blocks will be removed and the OPGW will be clipped in.

7.8 Conductor Transfer

The transfer of the conductor from the existing structures to the new structures in the North of Kitemaug Road segment of the ROW would occur after the replacement structures are erected. The equipment required for these activities would include cranes and bucket trucks.

7.9 Existing Structure Removal

After the replacement structures, conductor and OPGW are in place, the existing structures would be removed. Structure removal work would be staged from the work pads depicted in *Attachment A*. The existing poles and hardware would be removed from the ROW and recycled, or otherwise disposed of properly. Although no specific data is available, it is likely that the wood H-frame structures were chemically treated prior to installation and will be managed as such, removed completely from the ground, and properly disposed of. (Also see Section 7.11 – Waste Management below.)

7.10 Restoration

ROW restoration activities would include the removal of construction debris, signage, flagging, and temporary fencing, as well as the removal of construction mats and structure work pads that are designated for removal. Areas affected by construction would be re-graded as practical and stabilized using revegetation or other measures before removing temporary E&S controls. Eversource would perform ROW restoration in accordance with the protocols specified in the BMPs and in consultation with affected property owners.

After tree clearing and vegetation removal is completed, Eversource would perform ROW restoration in accordance with the protocols specified in the BMPs and based on consultation with any property owners affected by the construction work.

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, 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 in accordance with Eversource BMPs and any applicable local, state, or federal laws.

For work within sensitive environmental resource areas (i.e., NDDB areas, etc.), work pad restoration measures will be implemented to mitigate impacts, which includes the amendment of the work pad surface with stockpiled topsoil or fine process gravel (whichever is applicable), application of a native warm season seed mix, and installation of temporary erosion and sediment controls (e.g., straw mulch, compost filters, biodegradable erosion control blankets, etc.), which will be regularly inspected and maintained until final stabilization has been achieved.

7.11 Waste Management

Waste materials, such as structure components (i.e., wood and 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 managed/disposed of in accordance with Eversource's BMPs, applicable regulations or recycled consistent with applicable rules and regulations and Eversource policies. Treated wood pole butts shall be removed completely from the ground and properly disposed at an off-site location.

8. Construction Schedule and Work Hours

Eversource proposes to begin construction in the 4th quarter 2023. Normal work hours would be Monday through Saturday from 7:00 AM to 7:00 PM. However, E&S control and other inspections may occur outside of these standard hours, as necessary, to comply with BMP and permit requirements. At the Project staging area(s), workers may arrive for and leave work outside of these times but will not perform any noisy construction activities before or after the designated work hours.

Sunday work hours or evening work hours past 7:00 PM may also be necessary due to delays caused by unforeseen circumstances, inclement weather and/or outage constraints. In the event that evening, or Sunday work shifts are necessary, Eversource will provide notice to the Siting Council, the Town of Montville and abutters.

9. Municipal and Property Owner Outreach

In June 2023, Eversource consulted with the Town of Montville to brief municipal officials on the proposed Project. Eversource will continue to communicate with municipal officials throughout the Project planning process and during construction and restoration.

In June 2023, Eversource also conducted outreach to property owners located along the ROW. In conjunction with the submission of this Petition, abutting property owners were notified of the filing and provided information on how to obtain additional information on the Project, as well as

how to submit comments to the Council (See Attachment F: Letter to the Abutters and Affidavit of Service).

Eversource Project outreach personnel continue to meet with and work with affected property owners to address their concerns. Two property owners have requested relocation of blueberry bushes. The requests will be reviewed prior to construction and if the requests are not feasible, Eversource will work with the property owners to provide reasonable mitigation. Eversource representatives will be in contact with adjacent property owners to provide advance notification of start of construction activities and will continue to update property owners throughout the phases of construction and restoration and respond to any inquiries or concerns.

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, historic, 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:

Dehorah Denfeld

Deborah Newfeld

List of Attachments

Attachment A: Petition Map Set

Attachment B: List of Structure Replacements

Attachment C: Cross Sections

Attachment D: Wetlands and Watercourses Report

Attachment E: EMF Graphs

Attachment F: Letter to the Abutters and Affidavit of Service

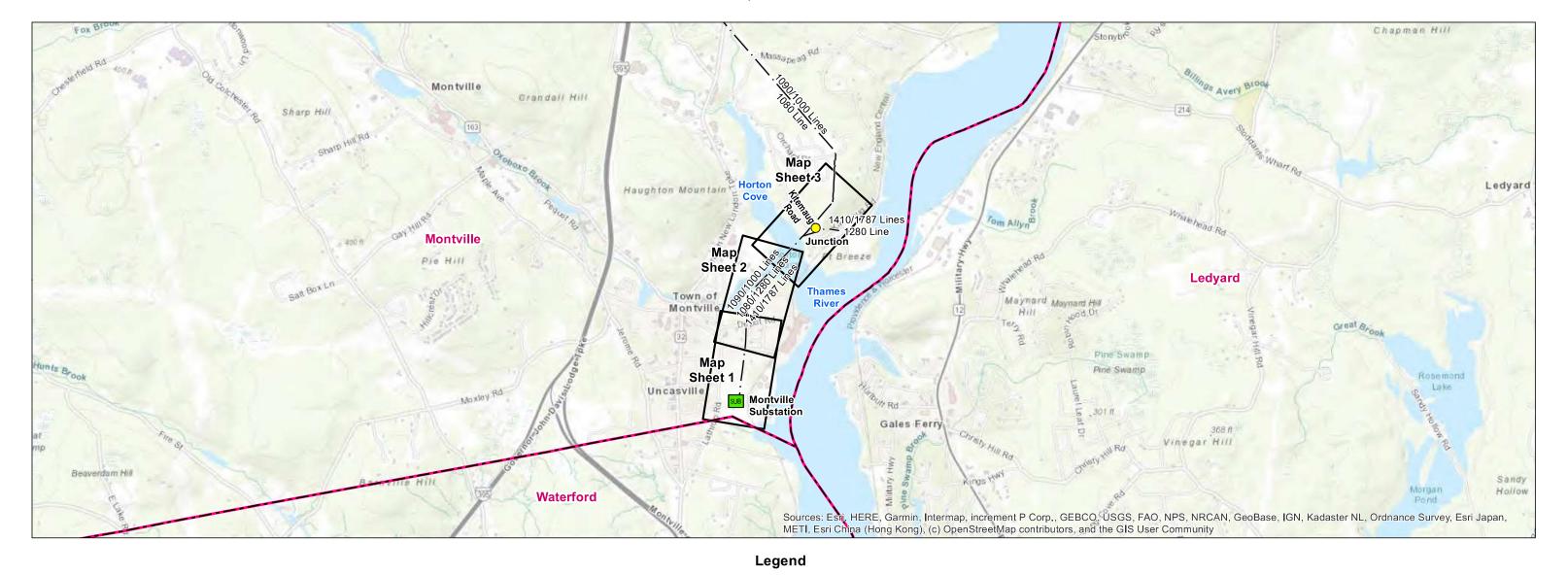
Attachment A:

Petition Map Set

Montville Substation to North of Kitemaug Road Rebuild Project

Montville, CT Petition Map Set

Date: September 05, 2023



PREPARED FOR:



INDEX OF FIGURES

Title Sheet / Index Map Abutter Tables and Map Sheets 1-3

Map Sheet — Municipal Boundary



MAP SHEET 1 OF 3

Montville Substation to North of Kitemaug Road Rebuild Project Town of Montville, Connecticut

AREA DESCRIPTION

Existing Land Use & Resource Areas

100 and 500-Year Flood Zones

- Natural Diversity Database (NDDB) Area
- Residential
- Industrial
- Montville Substation
- Montville Power LLC / Montville Generating Station
- Environmental Land Use Restriction (ELUR)
- Eversource Owned Property
- Railroad (New England Central)
- Coastal Boundary

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use & Resource Areas

- Maintained ROW
- ELUR
- Montville Substation
- NDDB Area
- Coastal Boundary

Water Resources

- Wetlands None
- Wetland Cover Types None
- Watercourses None

Wetland and Watercourse Crossings

None

Right-of-Way Vegetation

- Scrub-shrub
- Residential, Lawn, Existing Gravel

Access

- Structures 7602-1/7602 to 7603 Dock Road
- Structure 7604 Dock Road
- Structure 7605 Depot Road

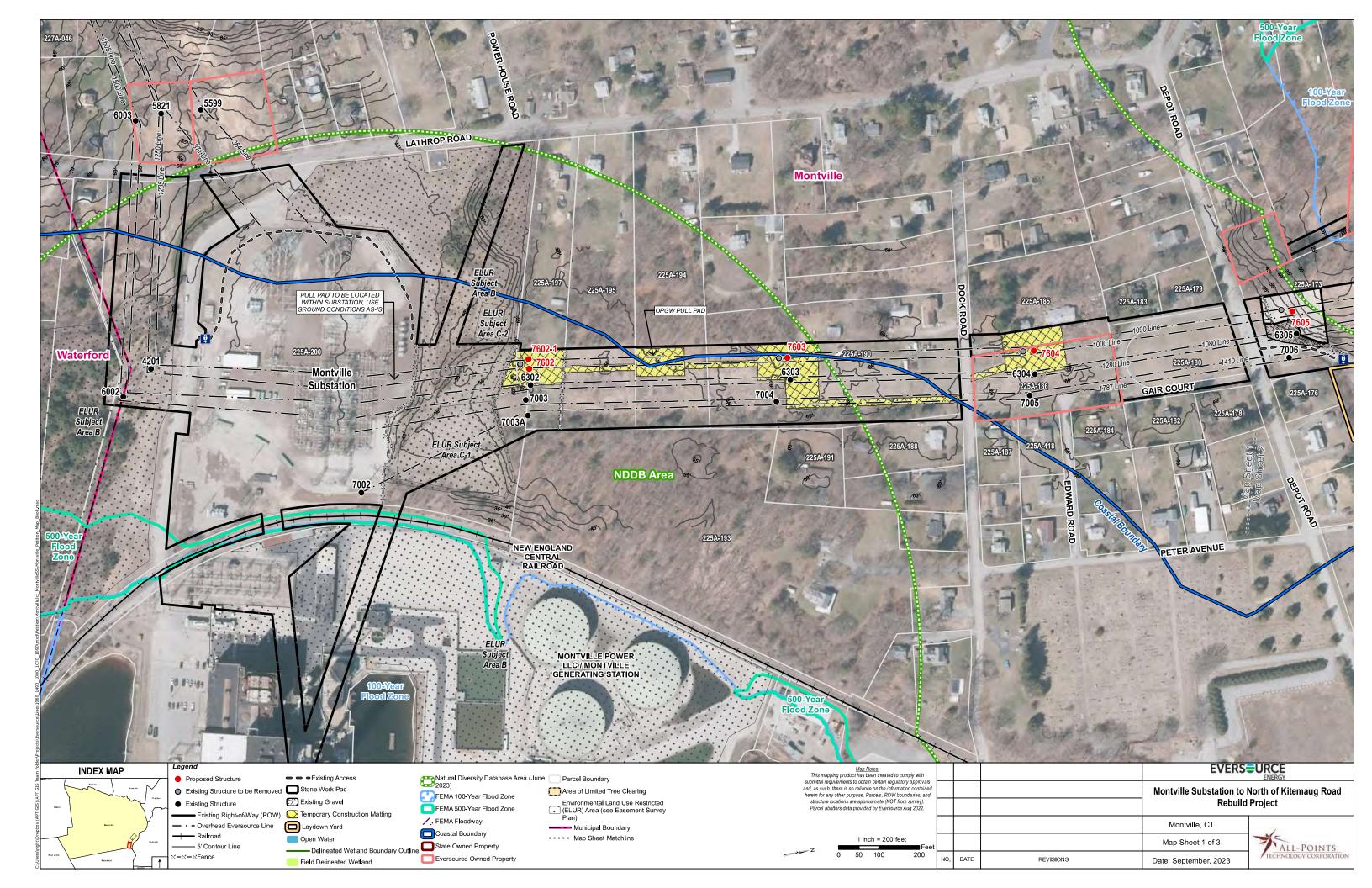
Road Crossings

- Dock Road
- Edward Road
- Gair Court
- Depot Road

Existing Maintained Right-of-Way Width / Proposed Right-of-Way Clearing

200-Feet / 0-Feet

<u>LLN</u>	Parcel Address	City	<u>State</u>	<u>Owner</u>
225A-173	82 DEPOT RD	MONTVILLE	CT	UNCASVILLE LLC
225A-176	92 DEPOT RD	MONTVILLE	СТ	JOCELYN F TRTE JOHNSON
225A-178	23 GAIR CT	MONTVILLE	CT	PETER F KERTTULA
225A-179	3 GAIR CT	MONTVILLE	СТ	CR INVESTMENTS LLC
225A-180	87 DEPOT RD	MONTVILLE	CT	UNCASVILLE LLC
225A-182	19 GAIR CT	MONTVILLE	СТ	RICHARD A JR & CRYSTAL J DAIGLE
225A-183	7 GAIR CT	MONTVILLE	CT	HOWARD E & LINDA L KISSEL
225A-184	15 EDWARD RD	MONTVILLE	СТ	FIELDS FAMILY LIVING TRUST c/o FIELDS RICHARD L & DIANE R TRUSTEES
225A-185	20 DOCK RD	MONTVILLE	CT	GARY & LOIS C O BERN
225A-186	24 DOCK RD	MONTVILLE	СТ	CONNECTICUT LIGHT & POWER COMPANY
225A-187	28 DOCK RD	MONTVILLE	СТ	PAUL G & MARY JO GUILLEMETTE
225A-188	29 DOCK RD	MONTVILLE	CT	ELAINE L BACIEWSKI
225A-190	19 DOCK RD	MONTVILLE	CT	REGINALD JR ORBE
225A-191	27 DOCK RD	MONTVILLE	СТ	CRAIG HEWITT
225A-193	39 DOCK RD	MONTVILLE	CT	REALTY INC
225A-194	46 LATHROP RD	MONTVILLE	CT	KEVIN A & CYNTHIA E PERKINS
225A-195	50 LATHROP RD	MONTVILLE	CT	SANDRA A & WILLIAM J JR GORMAN
225A-197	54 LATHROP RD	MONTVILLE	CT	GLENN P & LAURA A PHILLIPS
225A-200	60-90 LATHROP RD	MONTVILLE	CT	POWER LLC C/O NRG - TAX DEPT
225A-418	12 EDWARD RD	MONTVILLE	СТ	JANET E WOZNY



MAP SHEET 2 OF 3

Montville Substation to North of Kitemaug Road Rebuild Project Town of Montville, Connecticut

AREA DESCRIPTION

Existing Land Use & Resource Areas

- Gay Cemetery Pond
- Horton Cove (Thames River)
- 100 and 500-Year Flood Zones
- Coastal Boundary
- Natural Diversity Database (NDDB) Area
- Residential
- Industrial
- Railroad (New England Central)
- Eversource Owned Property
- Municipal (Town of Montville WPCA Waste Water Treatment Plant)
- Existing Eversource Equipment Laydown Yard

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use & Resource Areas

- Maintained ROW
- NDDB Area
- Gay Cemetery Pond
- Horton Cove (Thames River)
- 100 and 500-Year Flood Zones
- Railroad (New England Central)
- Archeological Sensitive Area
- Coastal Boundary

Water Resources

- Wetlands W1 Gay Cemetery Pond, W2 (tidal)
- Wetland Cover Types POW. PSS, R1US
- Watercourses S1 Horton Cove (Thames River),

Wetland and Watercourse Crossings

None

Right-of-Way Vegetation

- Scrub-shrub
- Residential, Lawn, Existing Gravel

Access

- Structure 7604 Dock Road
- Structures 7605 to 7607 Depot Road

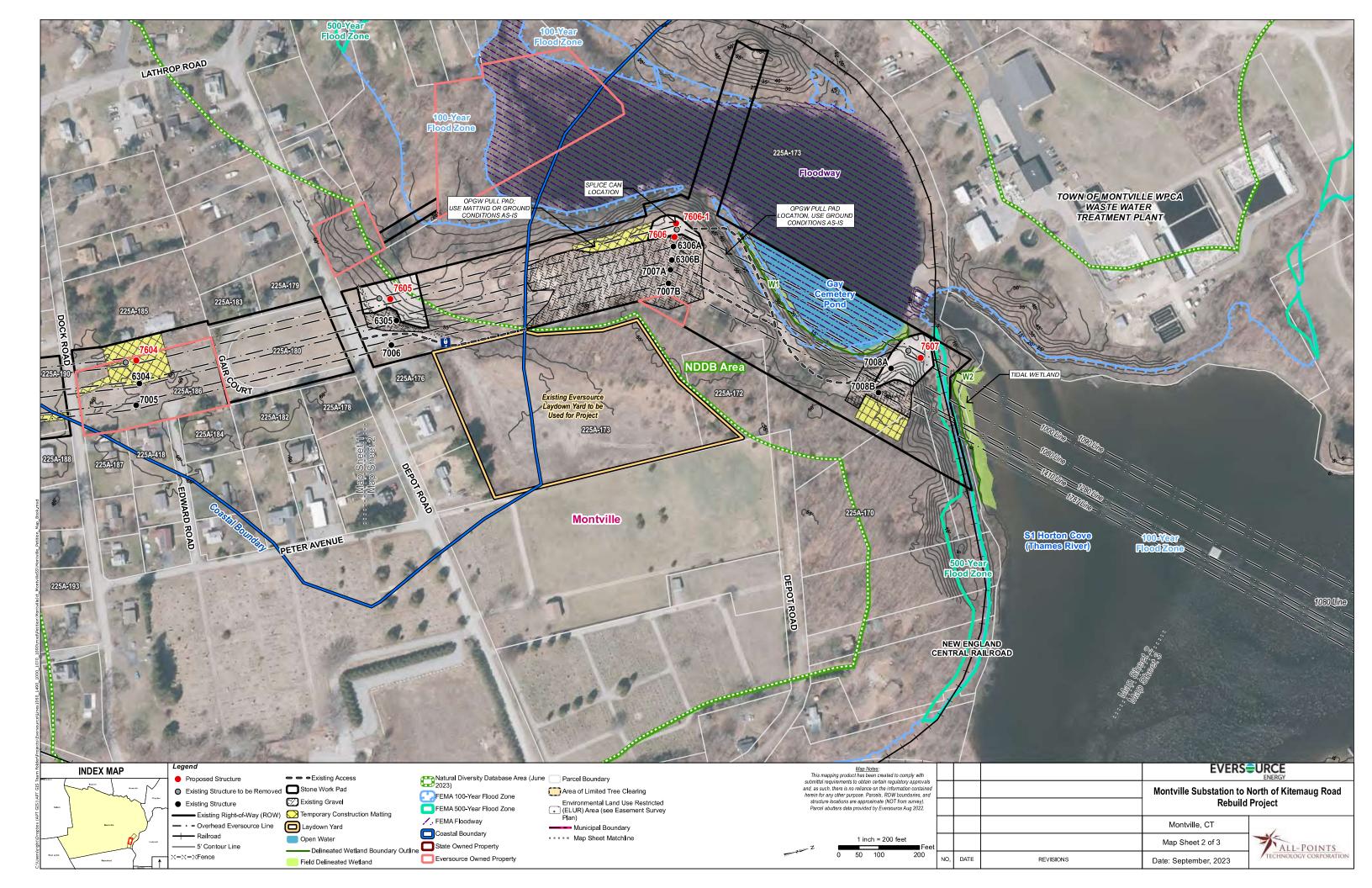
Road Crossings

- Dock Road
- Edward Road
- Gair Court
- Depot Road

Existing Maintained Right-of-Way Width / Proposed Right-of-Way Clearing

280-200-Feet / 0-Feet

<u>LLN</u>	Parcel Address	<u>City</u>	<u>State</u>	<u>Owner</u>
				ST PATRICK CEMETERY CO & C/O DIOCESE OF NORWICH
225A-170	183 DEPOT RD EXT	MONTVILLE	CT	CEMETERY CORP
225A-172	DEPOT RD EXT	MONTVILLE	CT	UNCASVILLE LLC
225A-173	82 DEPOT RD	MONTVILLE	CT	UNCASVILLE LLC
225A-176	92 DEPOT RD	MONTVILLE	СТ	JOCELYN F TRTE JOHNSON
225A-178	23 GAIR CT	MONTVILLE	СТ	PETER F KERTTULA
225A-179	3 GAIR CT	MONTVILLE	CT	CR INVESTMENTS LLC
225A-180	87 DEPOT RD	MONTVILLE	CT	UNCASVILLE LLC
225A-182	19 GAIR CT	MONTVILLE	СТ	RICHARD A JR & CRYSTAL J DAIGLE
225A-183	7 GAIR CT	MONTVILLE	СТ	HOWARD E & LINDA L KISSEL
				FIELDS FAMILY LIVING TRUST c/o FIELDS RICHARD L & DIANE
225A-184	15 EDWARD RD	MONTVILLE	CT	R TRUSTEES
225A-185	20 DOCK RD	MONTVILLE	СТ	GARY & LOIS C O BERN
225A-186	24 DOCK RD	MONTVILLE	СТ	CONNECTICUT LIGHT & POWER COMPANY
225A-187	28 DOCK RD	MONTVILLE	СТ	PAUL G & MARY JO GUILLEMETTE
225A-188	29 DOCK RD	MONTVILLE	СТ	ELAINE L BACIEWSKI
225A-190	19 DOCK RD	MONTVILLE	СТ	REGINALD JR & KAREN G ORBE
225A-193	39 DOCK RD	MONTVILLE	СТ	REALTY INC
225A-418	12 EDWARD RD	MONTVILLE	СТ	JANET E WOZNY



MAP SHEET 3 OF 3

Montville Substation to North of Kitemaug Road Rebuild Project Town of Montville, Connecticut

AREA DESCRIPTION

Existing Land Use & Resource Areas

- Horton Cove (Thames River)
- 100 and 500-Year Flood Zones
- Coastal Boundary
- Natural Diversity Database (NDDB) Area
- State-owned property (Point Breeze Water Access)
- Railroad (New England Central)
- Junction
- Residential

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use & Resource Areas

- Horton Cove (Thames River)
- 100 and 500-Year Flood Zones
- NDDB Area
- Coastal Boundary
- Junction
- Maintained ROW
- Residential

Water Resources

- Wetlands W3 (tidal)
- Wetland Cover Types R1US, POW
- Watercourses S1 Horton Cove (Thames River)

Wetland and Watercourse Crossings

None

Right-of-Way Vegetation

- Scrub-shrub
- Residential, Lawn, Existing Gravel

Access

Structures 7608 – 7611B – Kitemaug Road

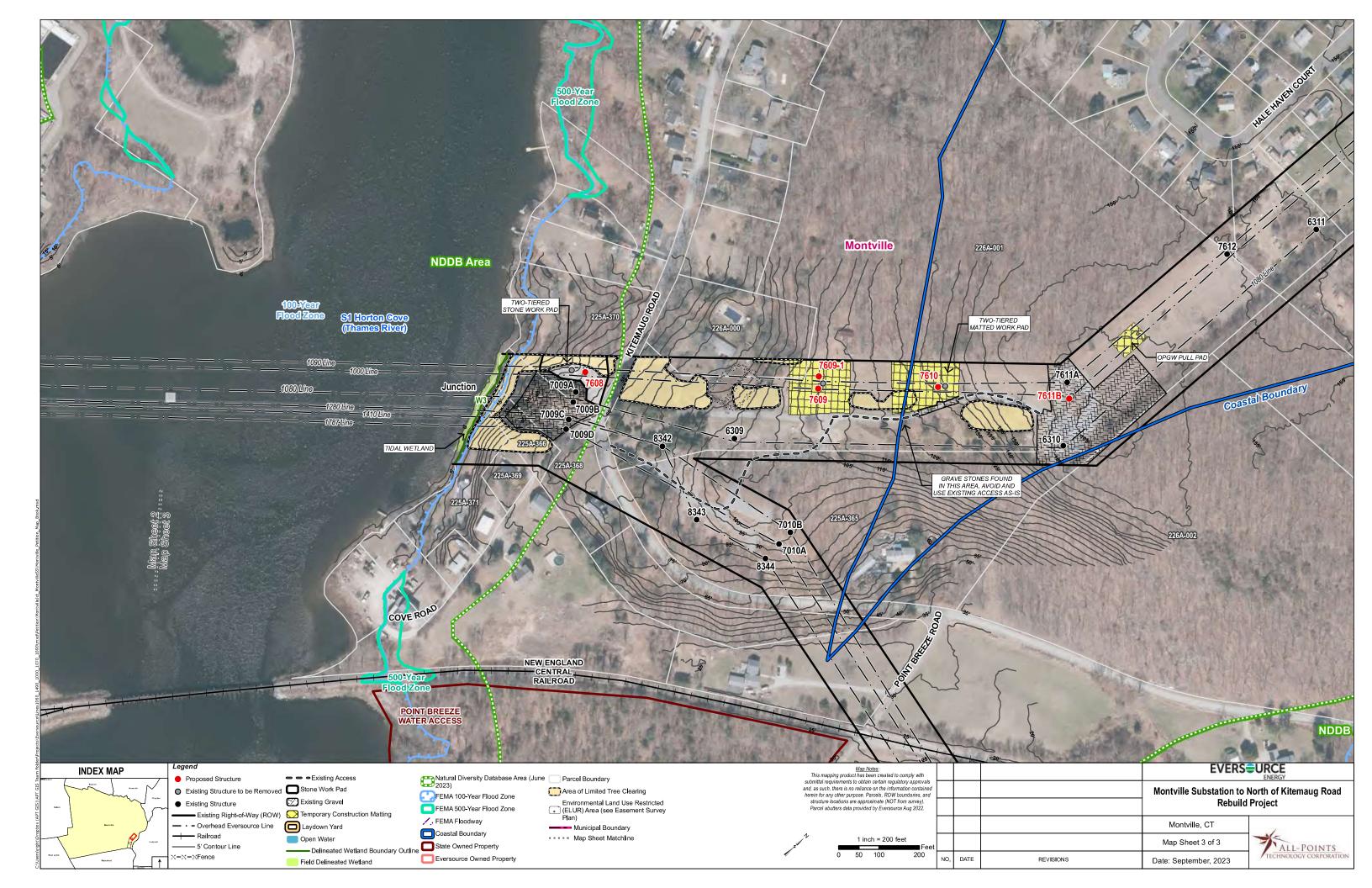
Road Crossings

- Kitemaug Road
- Cove Road

Existing Maintained Right-of-Way Width / Proposed Right-of-Way Clearing

- 250-280 Feet / 260-Feet (Structure 7608/Junction)
- 250 Feet / 60-120 Feet (Kitemaug Road to Structures 7609-1/7609)
- 250 Feet / 70 Feet (Structures 7610 to 7611B)

<u>LLN</u>	Parcel Address	<u>City</u>	<u>State</u>	<u>Owner</u>
225A-365	248 KITEMAUG RD	MONTVILLE	CT	ROBIN MEYER
225A-366	207 KITEMAUG RD	MONTVILLE	CT	THEODORE L & MELANIE D MORRISSETTE
225A-368	203 KITEMAUG RD	MONTVILLE	CT	PHILLIP A & CHELSEA R FRANCINE
225A-369	13 COVE RD	MONTVILLE	CT	SEAN PAUL METCALFE
225A-370	193 KITEMAUG RD	MONTVILLE	CT	MARY ANN GOGUEY
225A-371	21 COVE RD	MONTVILLE	CT	COLLEEN C BRADLEY
226A-000	192 KITEMAUG RD	MONTVILLE	CT	AMBER L JARVIS
226A-001	204 KITEMAUG RD	MONTVILLE	CT	BRANDON J & NOELE M MORSE
226A-002	252 KITEMAUG RD	MONTVILLE	СТ	THOMAS F & DEBORAH JP SAVOY



Attachment B:

List of Structure Replacements

List of Structure Replacments Montville Substation to North of Kitemaug Road Rebuild Project

Existing Structure No.	Line Number	Proposed Structure No.	Existing Structure Type	Existing Structure Material	Proposed Structure Type	August 2023 Proposed Structure Material	Structure Height Existing (feet)	Structure Height Proposed (feet)	Structure Height Increase (feet)
7602	1090	*7602-1	NA	NA	SCSP	Galvanized Steel	NA	96.5	NA
7002	1000	7602	DCLT	Steel	SCSP	Galvanized Steel	81	96.5	15.5
7603	1090/1000	7603	DCLT	Steel	DCSP	Galvanized Steel	81	101.5	20.5
7604	1090/1000	7604	DCLT	Steel	DCSP	Galvanized Steel	81	111.5	30.5
7605	1090/1000	7605	DCLT	Steel	DCSP	Galvanized Steel	81	126.5	45.5
7606	1090	*7606-1	NA	NA	SCSP	Galvanized Steel	NA	101.5	NA
7606	1000	7606	DCLT	Steel	SCSP	Galvanized Steel	81	101.5	20.5
7607	1090/1000	7607	DCLT	Steel	DCSP	Galvanized Steel	127	187	60
7608	1090/1000	7608	DCLT	Steel	DCSP	Galvanized Steel	127	181.5	54.5
7600	1090	*7609-1	NA	NA	SCSP	Galvanized Steel	NA	91.5	NA
7609	1000	7609	DCHF	Wood	SCSP	Galvanized Steel	52	91.5	39.5
7610	1090/1000	7610	DCHF	Wood	DCSHF	Weathering Steel	56.5	83.5	27
7611B	1000	7611B	SCHF	Wood	SC 3-POLE	Weathering Steel	56.5	56.5	0
_	uit Steel Poles at D ace Existing Doubl	ual Pole Deadend e Circuit	DCLT - Double Circui	t Lattice Tower	SCSP - Single Circuit S	teel Monopole	Average Height Increase:		31.35
			DCHE - Double Circui	·	DCSP - Double Circuit	0. 114			

DCSP - Double Circuit Steel Monopole

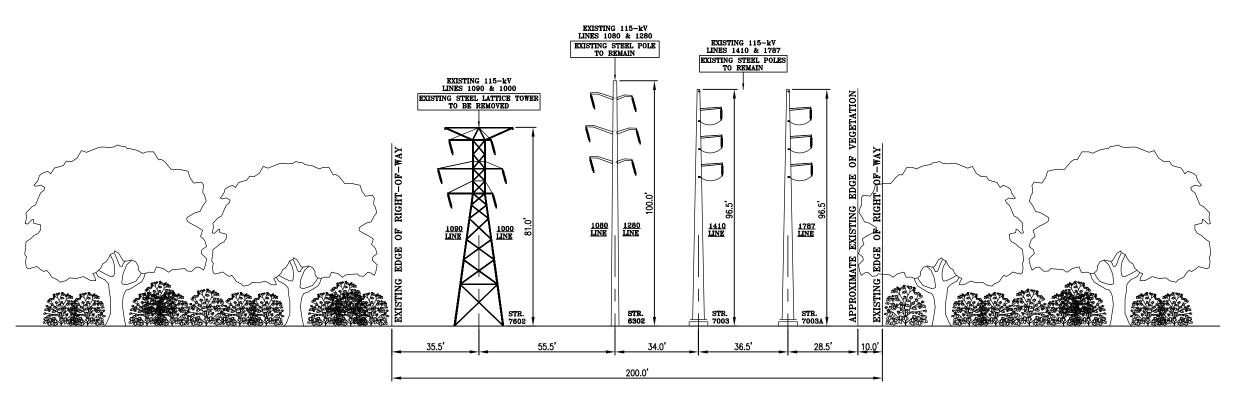
SCHF - Single Ciruit H-Frame

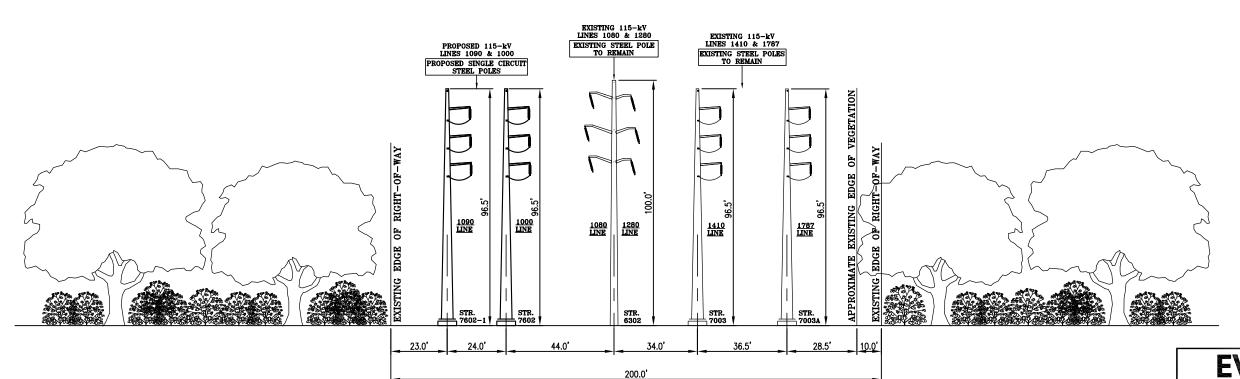
DCSHF - Double Circuit Steel H-Frame

SC 3-Pole - Single Circuit 3-Pole

Attachment C:

Cross Sections





NOTES: PROPOSED 1090/1000 AND EXISTING 1410/1787 LINE STRUCTURE HEIGHTS

INCLUDE 1.5 FT CONCRETE REVEALS. LINE ARRESTERS TO BE ADDED AS REQUIRED.

PROPOSED R.O.W. CONFIGURATION SINGLE CIRCUIT STEEL POLE DESIGN LOOKING FROM MONTVILLE SUBSTATION TO NORTH OF KITEMAUG ROAD IN THE TOWN OF MONTVILLE, CT STR. #7602 & 7602-1

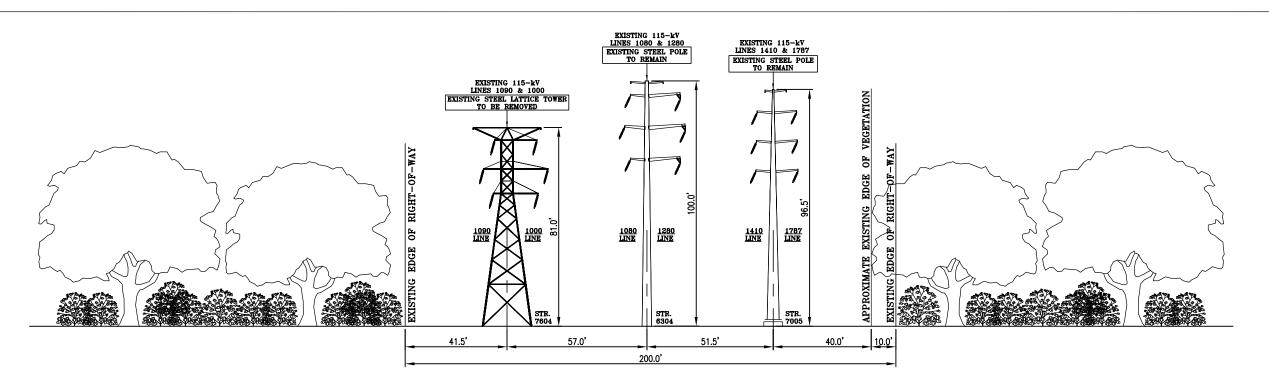
EVERS©URCE

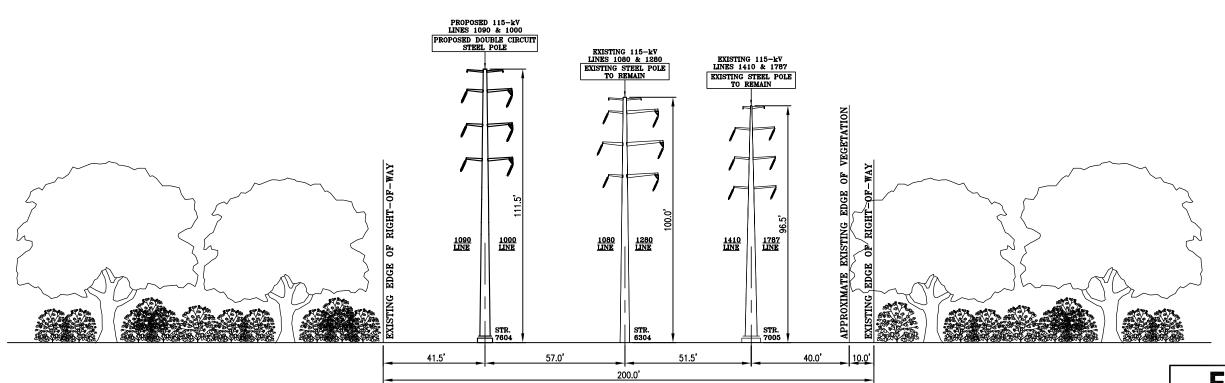
MONTVILLE JUNCTION - NORTH OF KITEMAUG ROAD

XS-1

115-ky transmission line 1090 & 1000 RIGHT OF WAY CROSS SECTION

	MONIVILLE,	CONNECTICUT	
BY BSS	CHOD GJG	APP JFAP	APP
DATE 06/26/23	DATE 09/18/23	DATE 09/18/23	DATE
H-SCALE N.T.S.	SOTE D	FIELD BOOK & PAGES	•
V-SCALE N.T.S.	V.S.	R.E. DNG	
R.E. PROJ. HUMBER	405712 / TPC086	DNG NO. 011	05_85003n0(





NOTES:

PROPOSED 1090/1000 LINE AND EXISTING 1410/1787 LINE STRUCTURE HEIGHTS

- EXISTING 1080/1280 LINE STRUCTURE
- HEIGHT IS BASED ON AS-BUILT LIDAR.

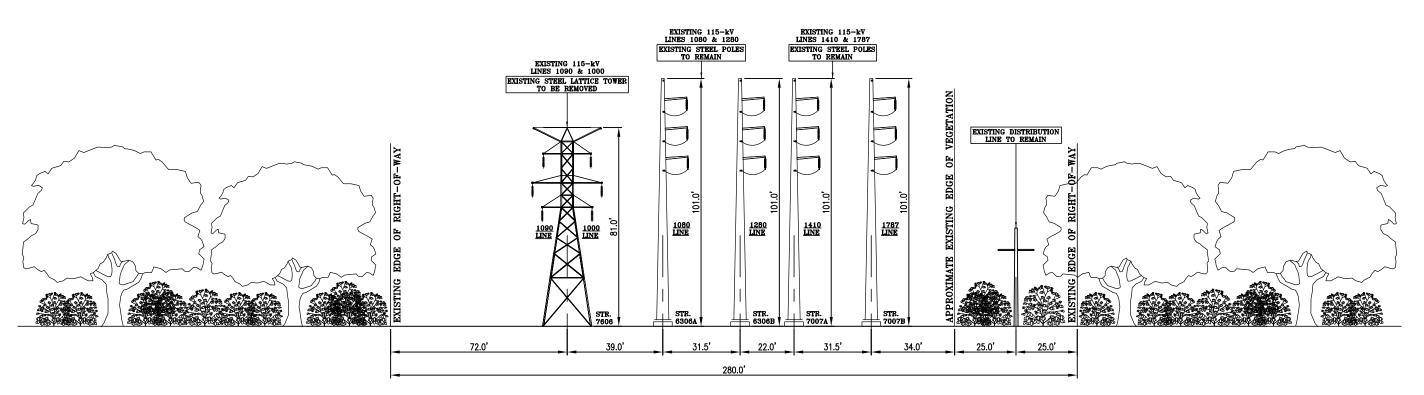
 LINE ARRESTERS TO BE ADDED AS REQUIRED.

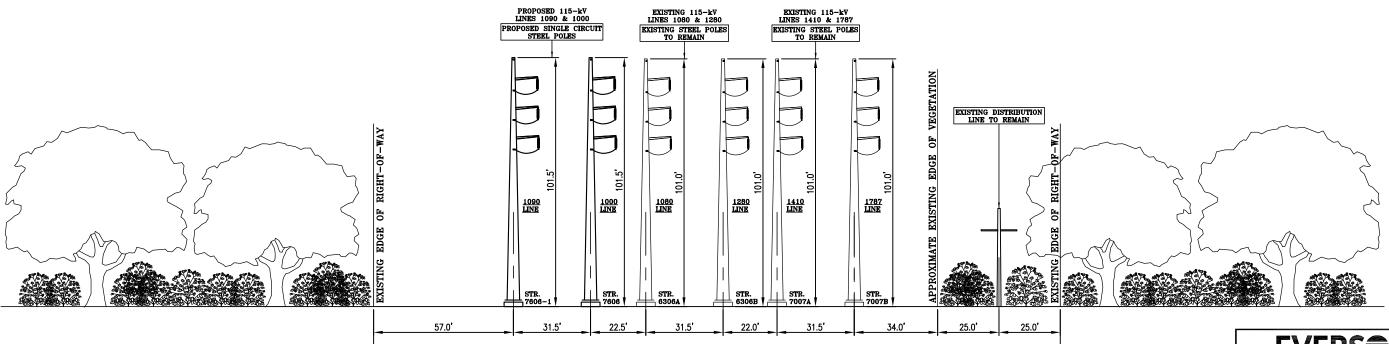
PROPOSED R.O.W. CONFIGURATION DOUBLE CIRCUIT STEEL POLE DESIGN LOOKING FROM MONTVILLE SUBSTATION TO NORTH OF KITEMAUG ROAD IN THE TOWN OF MONTVILLE, CT STR. #7604

EVERS\$URCE

XS-2

MONTVILLE, CONNECTICUT							
BY BSS	CHIO GJG	APP JFAP	APP				
DATE 06/26/23	DATE 09/18/23	DATE 09/18/23	DATE				
H-SCALE N.T.S.	SIZE D	FIELD BOOK & PAGES	•				
v-scale N.T.S.	vs.	R.E. DNG					
R.E. PROJ. NUMBER	405712 / TPC086	DWG NO. 011	05-85003p0				





NOTES:

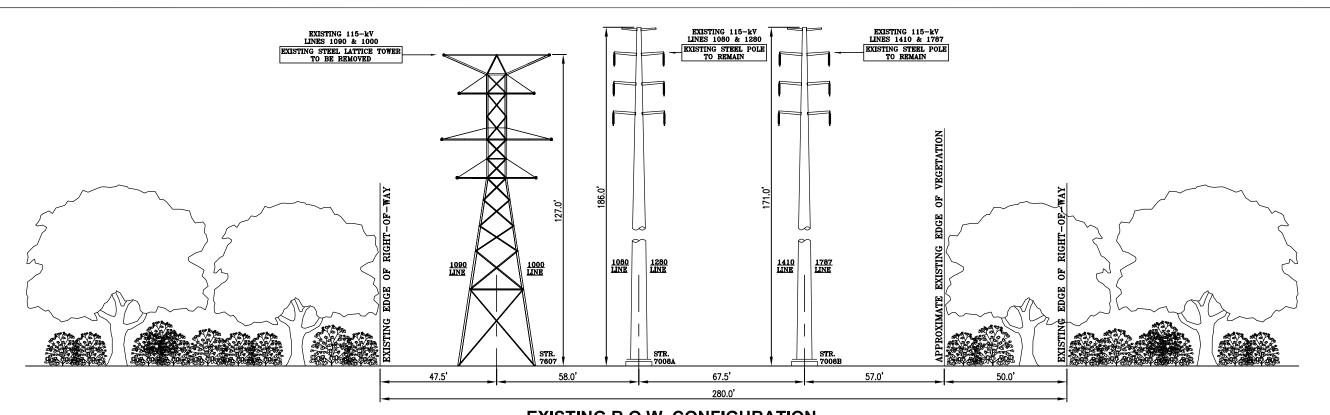
- PROPOSED 1090/1000 LINE STRUCTURE HEIGHTS INCLUDE 1.5 FT CONCRETE REVEALS.
- EXISTING 1080/1280 AND 1410/1787
 LINE STRUCTURE HEIGHTS INCLUDE 1 FT
 CONCRETE REVEALS.
- LINE ARRESTERS TO BE ADDED AS
 REQUIRED.

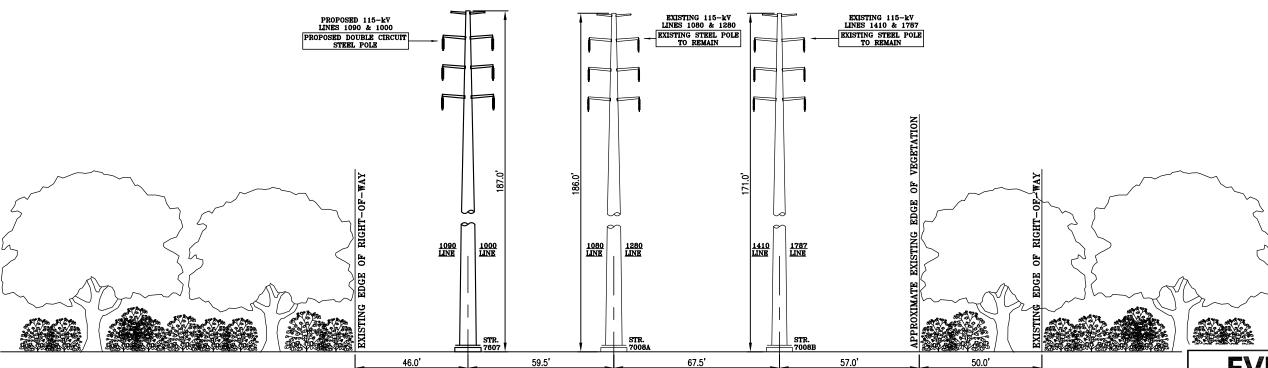
PROPOSED R.O.W. CONFIGURATION SINGLE CIRCUIT STEEL POLE DESIGN LOOKING FROM MONTVILLE SUBSTATION TO NORTH OF KITEMAUG ROAD IN THE TOWN OF MONTVILLE, CT STR. #7606 & 7606-1

XS-3

EVERSOURCEENERGY

MONTVILLE, CONNECTICUT							
BY BSS	CHOD GJG	APP JFAP	APP .				
DATE 06/26/23	DATE 09/18/23	DATE 09/18/23	DATE				
H-SCALE N.T.S.	SIZE D	FIELD BOOK & PAGES	•				
V-SCALE N.T.S.	V.S.	R.E. DNG					
R.E. PROJ. NUMBER	405712 / TPC086	DWG NO. 011	05-85003p00				





- NOTES:
 PROPOSED 1090/1000 LINE STRUCTURE
 HEIGHT INCLUDES 2 FT CONCRETE REVEAL.
- EXISTING 1080/1280 AND 1410/1787 LINE STRUCTURE HEIGHTS INCLUDE 1 FT CONCRETE REVEALS.
- LINE ARRESTERS TO BE ADDED AS

PROPOSED R.O.W. CONFIGURATION **DOUBLE CIRCUIT STEEL MONPOLE DESIGN** LOOKING FROM MONTVILLE SUBSTATION TO NORTH OF KITEMAUG ROAD IN THE TOWN OF MONTVILLE, CT STR. #7607

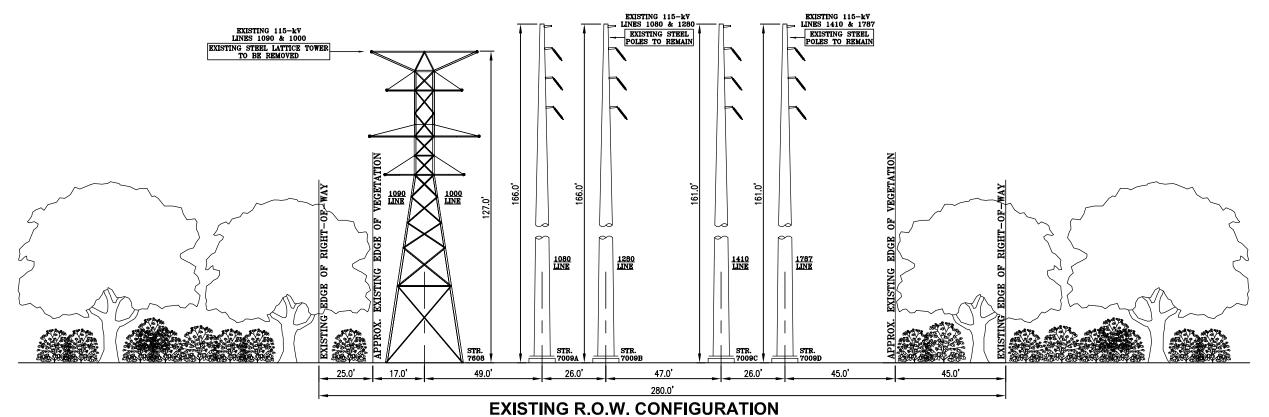
280.0

EVERS©URCE

XS-4

MONTVILLE JUNCTION - NORTH OF KITEMAUG ROAD 115-ky transmission line 1090 & 1000 RIGHT OF WAY CROSS SECTION

ı			MONIVILLE,	CON	NECTICUT	
BY	BSS	CHEO	GJG	APP	JFAP	APP
DATE	06/26/23	DATE	09/18/23	DATE	09/18/23	DATE
H-SCALE	N.T.S.	SZE	D	FIELD 8	OOK & PAGES	•
V-SCALE	N.T.S.	V.S.		R.E. DR	C	
R.E. PROJ. HUMBER AC		5712 / TPC086	DWG NO	N110	15_85003n00	



DOUBLE CIRCUIT STEEL LATTICE TOWER DESIGN LOOKING FROM MONTVILLE SUBSTATION TO NORTH OF KITEMAUG ROAD IN THE TOWN OF MONTVILLE, CT

STR. #7608 PROPOSED 115-kV LINES 1090 & 1000 PROPOSED DOUBLE CIRCUIT STEEL POLE EXISTING 115-kV LINES 1410 & 1787 EXISTING STEEL POLES TO REMAIN EXISTING 115-kV LINES 1080 & 1280 EXISTING STEEL
POLES TO REMAIN EXISTING EDGE OF RIGHT-OF-WAY PROPOSEB EDGE OF VEGETATION MANAGEMENT 1090 LINE 1080 LINE STR. 70090 42.0' 47.0'

- NOTES:

 PROPOSED 1090/1000 LINE STRUCTURE HEIGHT INCLUDES 1.5 FT CONCRETE REVEAL.
- EXISTING 1080/1280 AND 1410/1787 LINE STRUCTURE HEIGHTS INCLUDE 1 FT CONCRETE REVEALS.
- LINE ARRESTERS TO BE ADDED AS

PROPOSED R.O.W. CONFIGURATION

DOUBLE CIRCUIT STEEL MONOPOLE DESIGN LOOKING FROM MONTVILLE SUBSTATION TO NORTH OF KITEMAUG ROAD IN THE TOWN OF MONTVILLE, CT

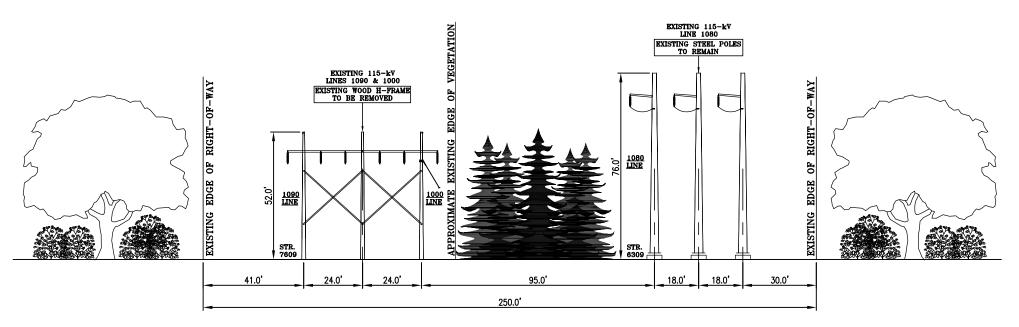
280.0'

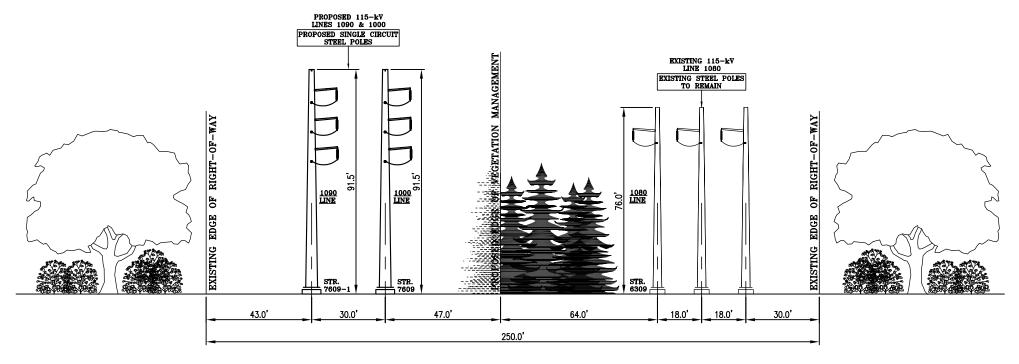
STR. #7608

EVERS©URCE

XS-5

ı			MONIVILLE,	CON	NECTICUT	
BY	BSS	CHIO	GJG	APP	JFAP	APP
DATE	06/26/23	DATE	09/19/23	DATE	09/19/23	DATE
H-SCALE	N.T.S.	SZE	D	FIELD 8	OOK & PAGES	•
V-SCALE	N.T.S.	V.S.		R.E. DR	C	
R.E. PROJ. HUMBER AC		5712 / TPC086	DWG NO	N110	15_85003n00	





PROPOSED R.O.W. CONFIGURATION SINGLE CIRCUIT STEEL POLE DESIGN LOOKING FROM MONTVILLE SUBSTATION TO NORTH OF KITEMAUG ROAD IN THE TOWN OF MONTVILLE, CT STR. #7609 & 7609-1

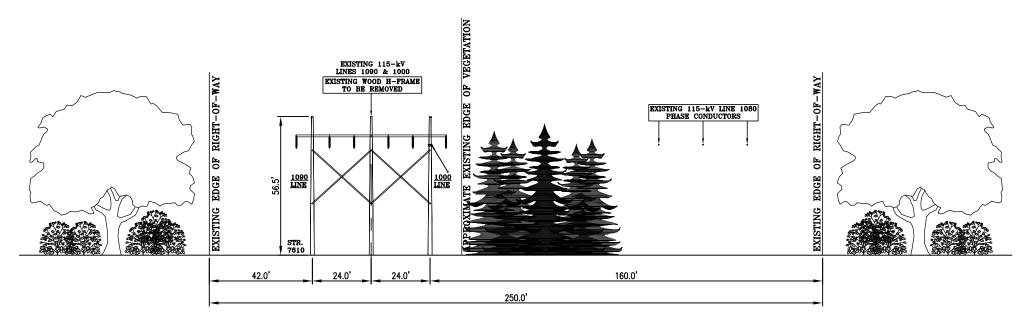
OTES:

- PROPOSED 1090/1000 LINE STRUCTURE
 HEIGHTS INCLUDE 1.5 FT CONCRETE
 REVEALS.
- EXISTING 1080 LINE STRUCTURE HEIGHTS INCLUDE 1 FT CONCRETE REVEALS.
 LINE ARRESTERS TO BE ADDED AS

XS-6

EVERS URCE ENERGY

ı			MONIVILLE,	CON	NECTICUT	
BY	BSS	CHEO	GJG	APP	JFAP	APP
DATE	06/26/23	DATE	09/18/23	DATE	09/18/23	DATE
H-SCALE	N.T.S.	SZE	D	FIELD B	OOK & PAGES	•
V-SCALE	N.T.S.	V.S.		RE. DN	c	
R.E. PROJ. HUMBER		5712 / TPCOR6	DING NO	0110	15_85003n00	



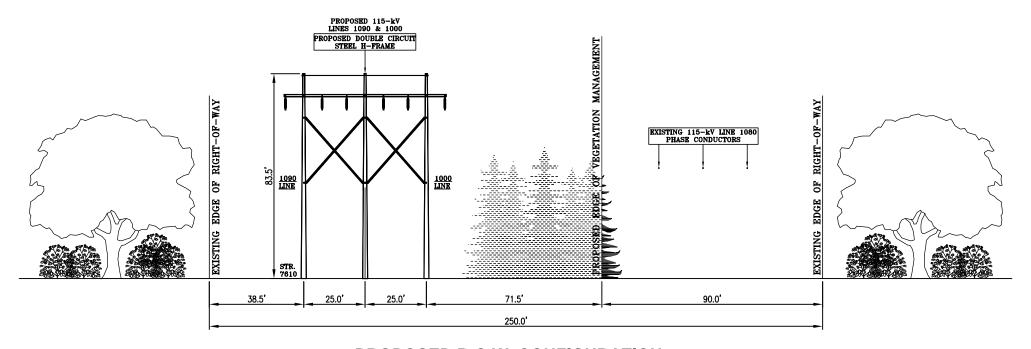
EXISTING R.O.W. CONFIGURATION

DOUBLE CIRCUIT WOOD H-FRAME DESIGN

LOOKING FROM MONTVILLE SUBSTATION TO NORTH OF KITEMAUG ROAD

IN THE TOWN OF MONTVILLE, CT

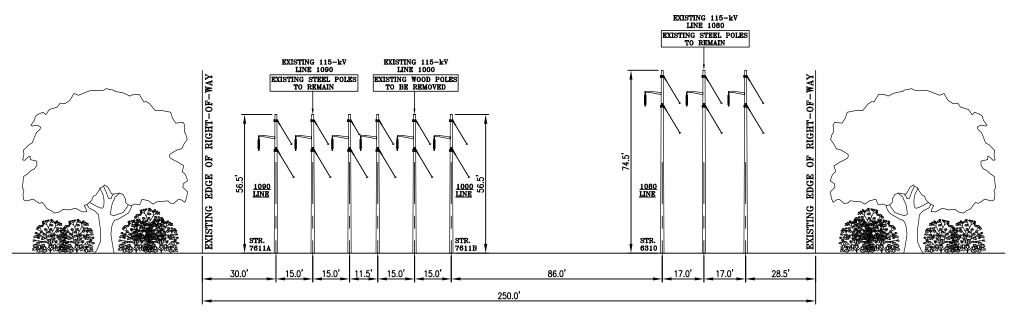
STR. #7610



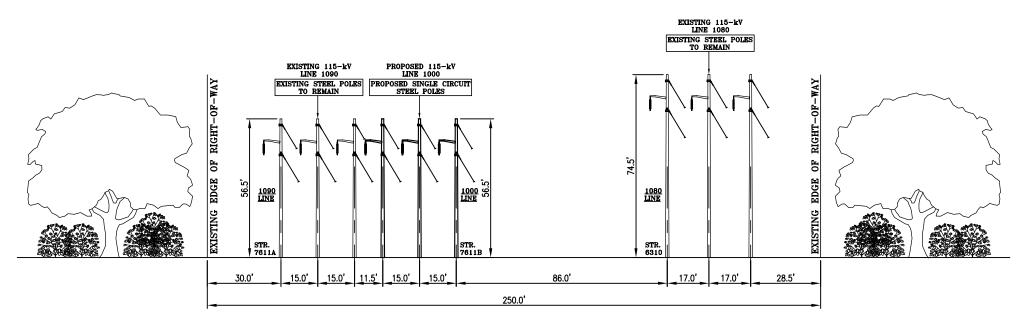
XS-7

EVERSOURCEENERGY

1	MONTVILLE, CONNECTICUT					
BY	BSS	CHIO	GJG	APP	JFAP	APP
DATE	06/26/23	DATE	09/18/23	DATE	09/18/23	DATE
H-SCALE	N.T.S.	SIZE	D	FIELD 8	DOK & PAGES	•
V-SCALE	N.T.S.	V.S.		RE. DW	•	
R.E. PROJ.	HUMBER	40	5712 / TPCOR6	DMG NO	0110	5_85003n006



EXISTING R.O.W. CONFIGURATION SINGLE CIRCUIT WOOD POLE DESIGN LOOKING FROM MONTVILLE SUBSTATION TO NORTH OF KITEMAUG ROAD IN THE TOWN OF MONTVILLE, CT STR. #7611B



PROPOSED R.O.W. CONFIGURATION
SINGLE CIRCUIT STEEL POLE DESIGN
LOOKING FROM MONTVILLE SUBSTATION TO NORTH OF KITEMAUG ROAD
IN THE TOWN OF MONTVILLE, CT
STR. #7611B

XS-8

EVERSQUE ENERGY

MONTVILLE, CONNECTICUT						
BY	BSS	CHIO	GJG	APP	JFAP	APP
DATE	06/26/23	DATE	09/18/23	DATE	09/18/23	DATE
H-SCALE	N.T.S.	SZE	D	FIELD 8	OOK & PAGES	•
V-SCALE	N.T.S.	V.S.		RE DI	c	
R.E. PRO.	i. Humber	40	5712 / TPC086	DWG NO	0110	5-85003p006

Attachment D:

Wetlands and Watercourses Report



Biodiversity Studies • Wetland Delineation & Assessment • Habitat Management • GIS Mapping • Permitting • Forestry

Wetlands and Watercourses Delineation Report Eversource Montville Substation to North of Kitemaug Road Rebuild Project

Prepared For:

Eversource Energy

56 Prospect Street Hartford, CT 06103

Project Location: Montville, Connecticut

Date(s) of Investigations: December, 2019 (Updated June 2023)

Wetland/Watercourse Delineation Methodology:

□Connecticut Inland Wetlands and Watercourses

⊠Connecticut Tidal Wetlands

□Massachusetts Wetlands

⊠U.S. Army Corps of Engineers

The wetlands inspection was performed by:

Davison Environmental, LLC

Matthew Davison

Professional Soil Scientist Professional Wetland Scientist

ATTACHMENTS

- 1. Wetland Photographs
- 2. Wetland Delineation Field Forms

Introduction

Davison Environmental Connecticut Registered Soil Scientists and a Certified Professional Wetland Scientists Eric Davison and Matthew Davison delineated the Connecticut and Federal jurisdictional wetlands in December of 2019. The wetland boundaries were reviewed in June 2023 and confirmed to be unchanged. The limits of the delineation area consisted of the Montville Substation to north of Kitemaug Road Transmission Line right-of-way (ROW), referred to hereafter as the "Project area". The Project area is located in the Town of Montville. The Project originates north of Kitemaug Road on the northern end of the Project area and runs south to Montville Substation in Montville.

From a biogeographical perspective, the Project area is located within the southern limits of the Southern New England Coastal Plains and Hills Ecoregion, just north of the transition from the Long Island Sound Coastal Lowlands Ecoregion (source: U.S. Environmental Protection Agency). The Southern New England Coastal Plains and Hills ecoregion covers much of Connecticut, Rhode Island, and southeastern Massachusetts, and is diverse in its characteristics and habitats. The landforms of the ecoregion are irregular plains with low hills and some open high hills with relief of about 100 to 400 feet. Elevations range up to about 1000 feet, with the highest elevations found in western Connecticut. Bedrock types are mostly granites, schist, and gneiss, although some soft marble occurs in western Connecticut. Surface materials are mostly glacial till, with some stratified deposits in valleys. Soil patterns are complex and heterogeneous where the numerous, small, till-covered bedrock hills rise above the valleys and general level of outwash. Coarse-loamy and sandy, mesic Inceptisols and some Entisols are typical.

Regulatory Requirements

The regulations governing the delineation of wetlands and watercourses at the site include Connecticut inland wetlands and Federal wetlands regulated by the U.S. Army Corp of Engineers (USACE). A summary of the regulatory language for each jurisdictional body are described below:

The Connecticut jurisdictional wetlands and watercourses delineation was conducted by a soil scientist according to the requirements of the Connecticut Inland Wetlands and Watercourses Act (P.A. 155). Inland wetlands include soil types designated as poorly drained, very poorly drained, alluvial, and floodplain by the National Cooperative Soils Survey as may be amended from time to time, of the National Resources Conservation Service (NRCS). Watercourses means rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs and all other bodies of water,

natural or artificial, vernal or intermittent. Intermittent watercourses shall be delineated by a defined permanent channel and bank and the occurrence of two or more of the following characteristics: (A) Evidence of scour or deposits of recent alluvium or detritus, (B) the presence of standing or flowing water for a duration longer than a particular storm incident, and (C) the presence of hydrophytic vegetation.

Federal wetlands were delineated in accordance with the <u>Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region</u> (Version 2.0, January 2012). According to this method, three parameters must be satisfied for an area to be mapped as a wetland. These are wetland soils, hydrophytic vegetation, and wetland hydrology.

Methods

Soils, vegetation and hydrology were examined per the aforementioned regulatory requirements. Along each wetland boundary, a hand auger was used to investigate the soil profiles to a minimum depth of 20 inches. This was necessary to determine the U.S. Department of Agriculture drainage class (per State requirements) as well as the presence of hydric soil indicators per the USACE requirements (e.g., reduced matrix, redoximorphic features). Soil profiles were reviewed approximately every 15-30 feet along the boundary, typically digging one hole on either side of the defining boundary to confirm the wetland limit. This information was coupled with observed hydrology (or the presence of hydrologic indicators) as well as the presence of hydrophytic vegetation to determine the final location of the placement of each wetland flag. As is typically the case with most Connecticut wetlands, the boundary of State and Federal jurisdictional wetlands was identical. Wetland boundaries were field demarcated with pink plastic flagging tape labeled "Wetland Delineation". The wetland flag locations were field located using a Trimble R1 GNSS Receiver capable of sub-meter accuracy.

Results and Wetland Descriptions

In total, 3 wetland boundaries were delineated in the Project area as summarized in Table 1 and illustrated on the Project mapping. The boundaries correspond to the east and west banks of Horton Cove and Gay Cemetery Pond. Table 1 indicates the Map Sheet location, as well as the wetland vegetation type and hydrology observed.

Table 1: Delineated Wetlands and Watercourses within the Montville Substation to North of Kitemaug Road Rebuild Project Area

Aerial Map Sheet No.	Wetland No.1	Dominant NWI Class ²	Other NWI Classes	Dominant Water Regime	Associated Watercourse	Associated Vernal Pool
2	1	POW	PSS	Permanently Flooded	(2222)	344)
2	2	R1US	POW	Regularly Flooded (Tidal)		***
3	3	R1US	POW	Regulated Flooded	1.000	777

¹Wetland No. refers to the number generated during the 2019 field surveys. This Wetland No. is keyed to those depicted on the 200 scale Aerial Maps (Attached to the Petition).
²Wetlands classified according to Cowardin et al 1979; PEM = Palustrine Emergent Wetland; PFO = Palustrine Forested Wetland; PSS = Palustrine Scrub-Shrub Wetland; POW = Palustrine Open Water.

Wetlands consist of Gay Cemetery Pond (an impoundment of Oxoboxo Brook) and Horton Cove, a tidal cove associated with the Thames River. The NWI Classes present include Palustrine Open Water (Gay Cemetery Pond) and Riverine (Horton Cove).

Wetland Photographs
Eversource Montville SS to North of Kitemaug Road Rebuild Project
Photos taken on June 22, 2023

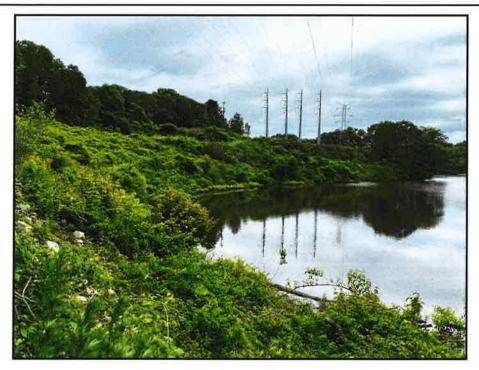


Photo 1: View of Wetland 1 (Gay Cemetery Pond)



Photo 2: View of Wetland 2 (west side of Horton Cove)

Wetland Characteristics Summary Form

Wetland I.D.: 1		
WETLAND HYDROLOGY:		
Intermittently Flooded □	Artificially Flooded □	Permanently Flooded ⊠
Semipermanently Flooded	Seasonally Flooded □	Temporarily Flooded □
Permanently Saturated □	Seasonally Saturated/seepag	
Comments: Gay Cemetery Po		s = Codomany Catalana politica =
Comments out, comment, co		
WETLAND TYPE:		TP2
Emergent	Scrub-shrub ⊠	Forested
Open Water ⊠	Disturbed □	Wet Meadow □
Comments:		
WATERCOURSE TYPE:		
Perennial ⊠	Intermittent □	Ephemeral □
Watercourse Name: Oxoboxo		4/
Comments: Gay Cemetery Po	nd is an impoundment of Oxob	oxo Brook
SPECIAL AQUATIC HABITAT:		The same of the sa
Vernal Pool : Yes □ No ☒ Po		Other □
Vernal Pool Habitat Type: Non	e	
Comments:		
WETLAND SOIL TYPE (s):		
Soil Types: NA (OHW)		
DOMINANT PLANTS:		
Specked Alder (Alnus rugosa	1)	
Red Maple (Acer rubrum)		
* denotes Connecticut Invasive S	pecies Council invasive plant spe	cies
GENERAL COMMENTS:		
GENERAL COMMENTS:		
Dense shrubs and tree re-sprou	uts along the banks of the pond.	boundary is well-defined by topographic
relief. Primary resource is the p	oond which is an open-water fe	ature that is unvegetated.

Wetland Characteristics Summary Form

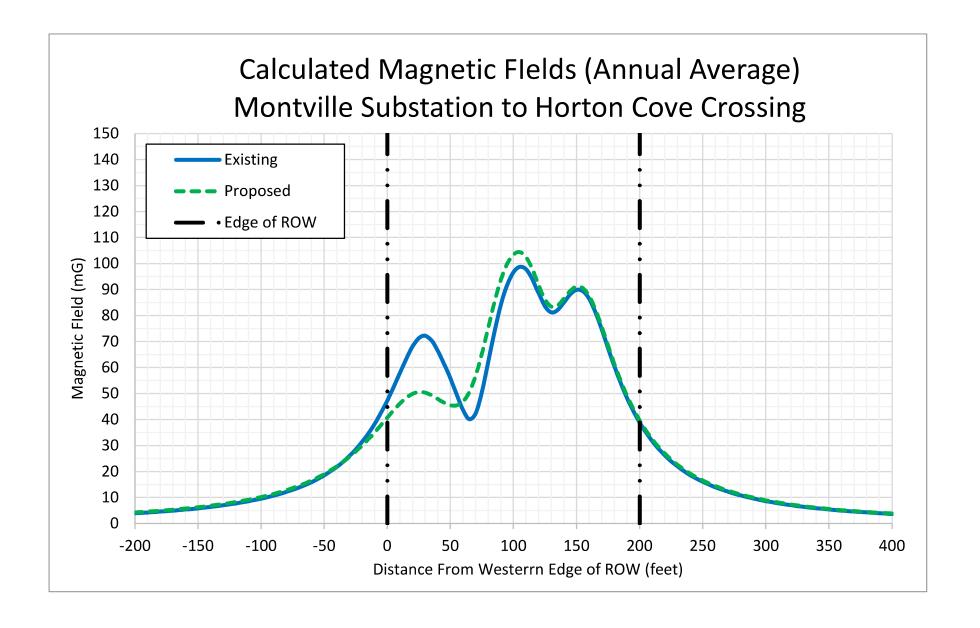
Wetland I.D.:	2			
WETLAND HYDROLOG	Y:			
Intermittently Flooded	Intermittently Flooded □ Artificially Floode			Permanently Flooded □
Semipermanently Flood	ed □	Seasonally Floode	d 🗆	Temporarily Flooded □
Permanently Saturated		Seasonally Satura		
Comments: Horton Cov				
WETLAND TYPE:				•
Emergent □		Scrub-shrub		Forested
Open Water ⊠		Disturbed □		Wet Meadow □
Comments: Riverine				
WATERCOURSE TYPE:				
Perennial		Intermittent □		Ephemeral □
Watercourse Name: Ho	rton Co			Ерпенета Б
Comments: Horton Cove			Lwith the Than	noe Divor
Comments. Horton Cove	5 15 a li	dai cove associated	will the man	ies rivei
SPECIAL AQUATIC HAR	BITAT:			
Vernal Pool : Yes ☐ No	⊠ Pc	tential		Other □
Vernal Pool Habitat Typ	e: Non	е		
Comments:				
WETLAND SOIL TYPE	s):			
Soil Types: NA (OHW)				
DOMINANT PLANTS:				
High-tide bush (Iva fru	tescen	s)		
Groundsel tree (Bacch				
Smooth cordgrass (Sp	artina	alterniflora)		
* denotes Connecticut Inva	sive Sp	pecies Council invasi	ve plant specie	S
GENERAL COMMENTS:				
			sociated with I	Horton Cove on the west side of the
COVE	along	OTTVV/IVITTVV/OJE do	Socialed Willia	TOTOTI COVE OIT THE WEST SIDE OF THE
33.5				

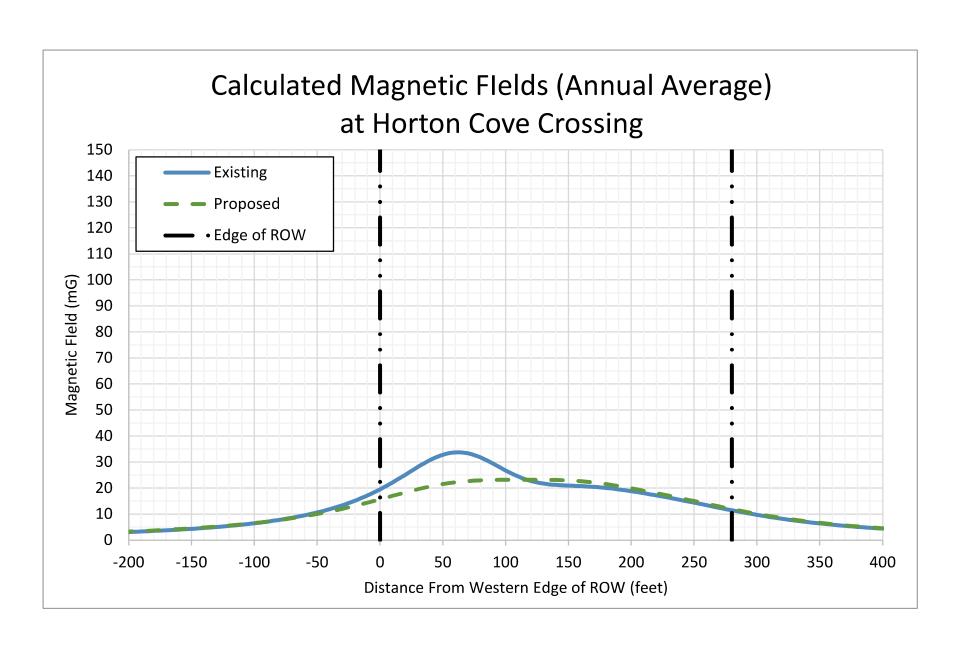
Wetland Characteristics Summary Form

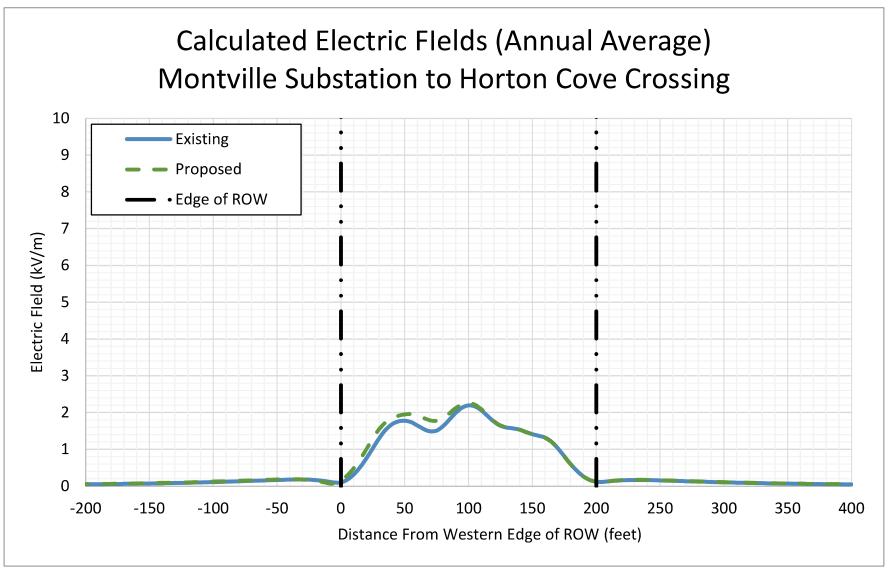
Wetland I.D.: 3		
WETLAND HYDROLOGY:		
Intermittently Flooded □	Permanently Flooded □	
Semipermanently Flooded □	Artificially Flooded □ Seasonally Flooded □	Temporarily Flooded □
Permanently Saturated □	Seasonally Saturated/seepage	
	I) with Regularly Flooded Hydrolog	
WETLAND TYPE:		
Emergent □	Scrub-shrub □	Forested
Open Water ⊠	Disturbed □	Wet Meadow □
Comments: Riverine	Distarbed L	wet meadow 🗆
Comments, revenue		
WATERCOURSE TYPE:		
Perennial □	Intermittent □	Ephemeral □
Watercourse Name: Horton Co	ove	
Comments: Horton Cove is a ti	dal cove associated with the Than	nes River
ODEOLAL AGUATIO HADITAT		
SPECIAL AQUATIC HABITAT: Vernal Pool : Yes □ No ☒ Po	tential C	Other D
Vernal Pool Habitat Type: Non		Other 🗆
Comments:		
Comments.		
WETLAND SOIL TYPE (s):		
Soil Types: NA (OHW)		
DOMINANT PLANTS:		
High-tide bush (Iva frutescen	s)	
Groundsel tree (Baccharus h		
Smooth cordgrass (Spartina	alterniflora)	
* denotes Connecticut Investus S	pagina Causall is unit a plant and in	
denotes Connecticut invasive Sp	pecies Council invasive plant specie	S
GENERAL COMMENTS:		
Tidal wetland is located along	OHW/MHW/CJL associated with	Horton Cove on the east side of the
cove		

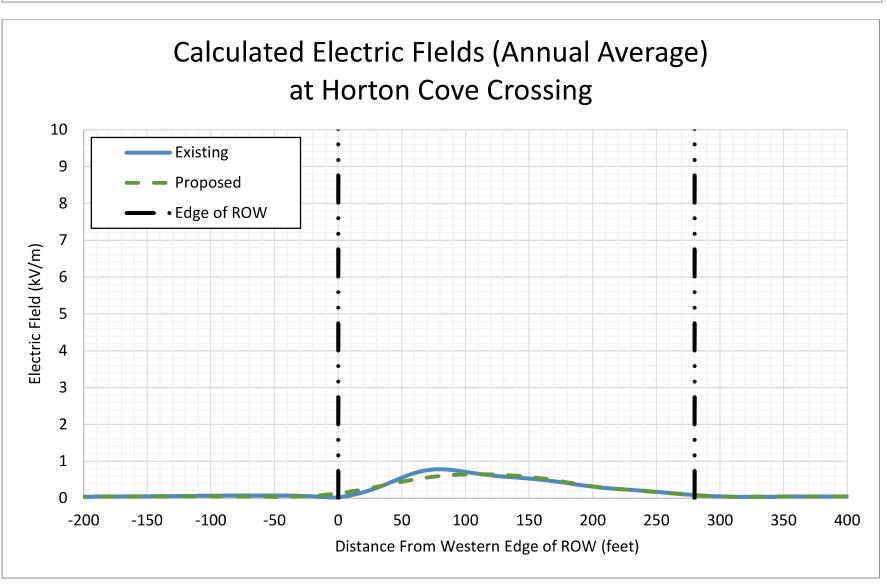
Attachment E:

EMF Graphs



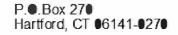






Attachment F:

Letter to Abutters and Affidavit of Service





September 19, 2023

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 structure and conductor replacement project in your area.

Proposed Project Information

The Project, called the Montville Substation to North of Kitemaug Road Rebuild Project, will be taking place within the right of way on or near your property between the Montville Substation, located in Montville, across Horton Cove, and continuing approximately 1200 feet north of Kitemaug Road in Montville, over approximately one and one tenth miles. The Proposed modifications on the 1090/1000 transmission lines include:

- Replacement of 10 various existing wood and steel structures with new steel structures. Seven of the existing structures are currently steel lattice towers.
 - The structure replacements are due to overstress, as a result of the proposed conductor and shield wire replacement and to comply with National Electric Safety Code (NESC) clearance requirements.
 - Two of the new steel structures will have a finish that "weathers" or darkens over time. Eight of the new steel structures will have a galvanized finish. Three of the structure types proposed for installation will include a pair of two (single circuit) monopoles. This new design proposes to "match" the design of the structures which were recently replaced on the opposite side of the right-of-way.
 - The existing structure heights range from 52 feet to 127 feet above ground level ("AGL") and the new structures will range in height from 56.5 feet to 187 feet AGL. The average structure height increase is approximately 31 feet.
- Installation of new wire (conductor), over approximately one mile; and transfer of existing conductor on the 1090 and 1000 circuits for approximately one tenth mile.
- Replacement of existing shield wire with communication wire called Optical Ground Wire (OPGW) on the 1090 and 1000 circuits for approximately one and one tenth mile. With these improvements, Eversource will improve electric reliability by enabling communication between substations.
- Select tree and vegetation removal and trimming within the right of way to comply with updated electrical standards.

What You Can Expect

Pending all necessary approvals for this proposed work, construction is expected to begin in the fourth quarter of 2023. We anticipate completing construction, including restoration of affected areas, by the third quarter of 2024.

For More Information

Eversource is committed to being a good neighbor and doing our work with respect for you and your property. For more information, please contact Colin Canton at 603-631-4998 email ccanton@burnsmcd.com or call our projects hotline at 1-800-793-2202 or send an email to 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 or send a letter to the following address: Melanie Bachman, Executive Director, Connecticut Siting Council, Ten Franklin Square, New Britain, CT 06051.

Sincerely,

Heather Hayes

Heather Hayes

Project Manager on Behalf of Eversource Energy Transmission

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 Ronald K. McDaniel, Jr., Mayor Town of Montville Montville Town Hall 310 Norwich-New London Turnpike Uncasville, CT 06382

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 September 2023, 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.: Salan W. Lol -

413393_