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May 17, 2023

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

Re: Southington Substation to Cook Hill Junction 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 proposed rebuild to four existing 115-killovolt ("kV") double-circuit and single-circuit transmission lines. The lines associated with the Southington Substation to Cook Hill Junction Rebuild Project include the 1355, 1610, 1690 and 1208 lines in the Towns of Southington, Cheshire, and Wallingford, and the City of Meriden, Connecticut ("Petition").

Prior to submitting this Petition, representatives from Eversource briefed municipal officials about the Project. Eversource provided written notice of the proposed work and notice of the filing of this Petition with the Connecticut Siting Council ("Council") to all abutters. Maps and line lists identifying the abutting property owners who were notified of the Project are provided in the Petition as Attachment A: Southington Substation to Cook Hill Junction Rebuild Project – Aerial Maps.

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

Sincerely,

Deborah Denfeld

Deborah Denfeld

Enclosure

cc: Mark Sciota, Town Manager, Town of Southington
The Honorable Tim Slocum, Town Council Chair, Town of Cheshire
The Honorable Kevin Scarpati, Mayor, City of Meriden
The Honorable William Dickinson, Mayor, Town of Wallingford

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 1355, 1610, 1690 AND 1208 LINES IN THE TOWNS SOUTHINGTON, WALLINGFORD, AND CHESHIRE, AND CITY OF MERIDEN, 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 modifications to the 1355, 1610, 1690, and 1208 transmission lines consisting of a 115-kilovolt ("kV") double-circuit and single-circuit transmission structures located within existing transmission rights-of-way ("ROWs") in the Towns of Southington, Cheshire and Wallingford, and the City of Meriden, Connecticut ("Municipalities"), 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 reduce the risk of age-related failures of deteriorating lattice tower structures and H-frame wood structures by replacing these structures with new structures, to replace aged copper conductor and replace obsolete copper shield wire. To

execute the work, the Project would include replacement of 101 existing structures and add 23 new structures in the ROW extending from the east side of Southington Substation (Southington) through Lucchini Junction (Meriden) to Hanover Substation (Meriden), from Lucchini Junction to Schwab Junction (Wallingford), and from Schwab Junction to Cook Hill Junction (Cheshire). In addition to the structure modifications, and to avoid crossing of overhead transmission lines at Lucchini Junction, a short length of the 1690 line will be installed underground in a duct bank from Structure 785 to Structure 2515-R on the 1690 Line at Lucchini Junction.

Figure 1 below illustrates the general location of the proposed Project.

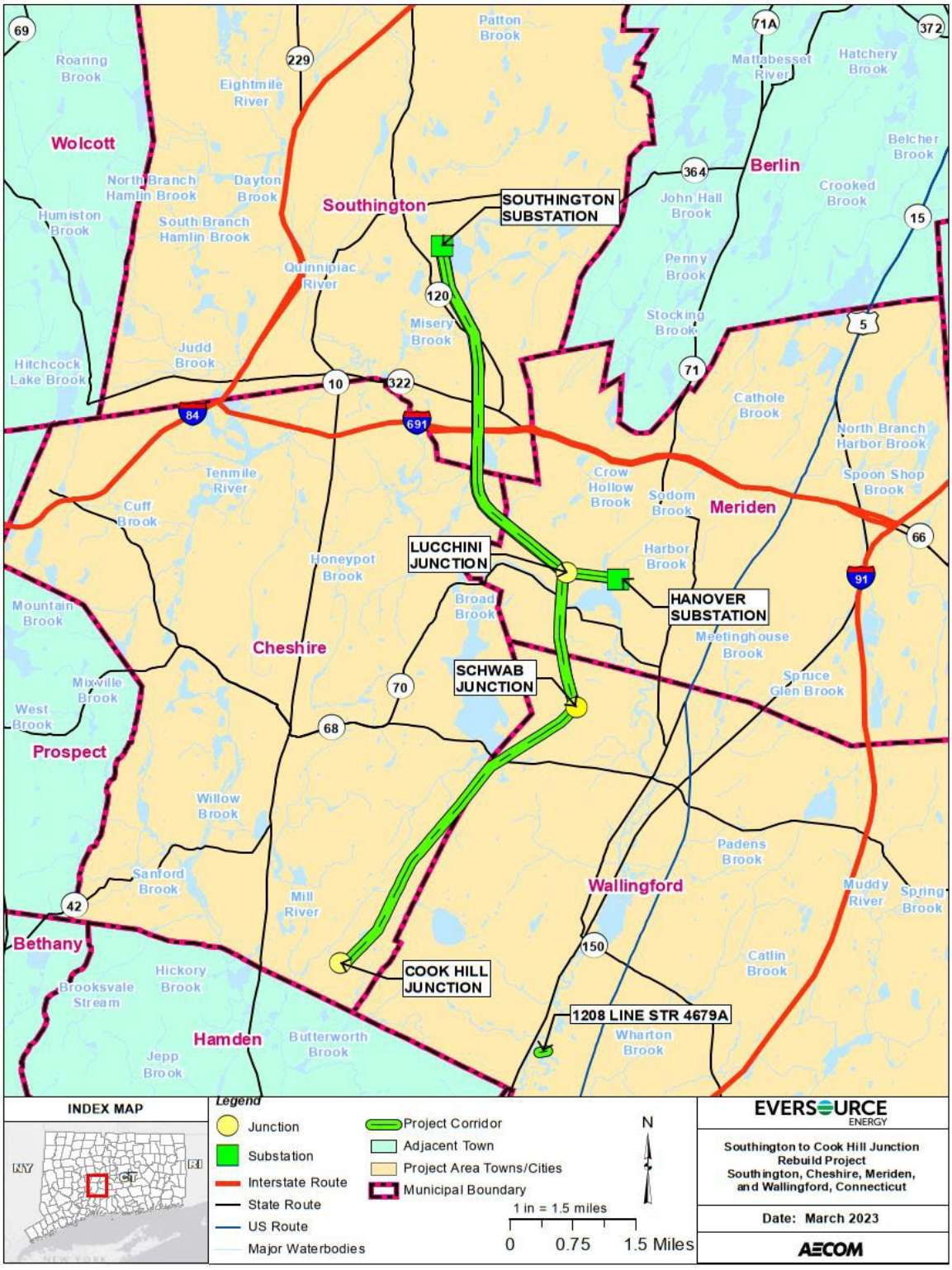


Figure 1: Project Area Map

3. Project Area Description

The Project area extends approximately 11.2 miles, and is located between Southington Substation, Lucchini Junction and Hanover Substation, and from Lucchini Junction south to Schwab Junction, and to Cook Hill Junction. It includes the entirety of the 1690 Line and portions of the 1208, 1355 and 1610 lines. The transmission line segments of the Project area are described below:

Southington Substation to Lucchini Junction

- This segment of the ROW was established in 1923 and is approximately 4.6-miles long. The width of the ROW varies from 175 to 230 feet and is maintained to an approximate width of 175 feet. The ROW contains the 1355, 1610, 1690 and 1208 lines.
- The 1355/1610 lines were constructed in 1954 on mostly double circuit lattice structures. The 1355 Line is a three-terminal line.
- The 1610 Line conductor and shield wire were installed in 1957.
- The current 1355 Line conductor was installed in 1986 and the shield wire was installed in 1954.
- The 1690 Line, including conductor and shield wire, was constructed in 1929 on double-circuit lattice structures. The 1690 Line is also a three-terminal line and it is the only line occupying the structures from Southington Substation to Luchinni Junction.
- The 1208 Line, including conductor and shield wire, was constructed in 1989 on single-circuit wood H-frame structures.

Lucchini Junction to Hanover Substation

- This segment of the ROW was established in 1923 and is approximately 0.5 miles long. The width of the ROW is approximately 160 feet and is maintained edge to edge. This section of the ROW contains the 1355 and 1690 lines.
- In this part of the ROW the 1355/1690 lines are installed on double-circuit lattice towers that were constructed in 1929. The 1355/1690 lines copper conductor was also installed in 1929.
- The 1355/1690 lines shield wire was replaced with optical ground wire ("OPGW") in 2019.

Lucchini Junction to Schwab Junction

- This segment of the ROW was established in 1923 and is approximately 1.7 miles long. The width of the ROW varies from 160 feet to 175 feet and is maintained to an approximate width of 160 feet. This section of the ROW contains the 1355, 1610 and 1208 lines.
- The 1355/1610 lines were constructed in 1954 on double-circuit lattice towers.
- The current 1355 Line conductor was installed in 1986 and the shield wire was installed in 1954.
- The 1610 Line conductor was installed in 1957. OPGW was installed in 2019.
- The 1208 Line, including conductor and shield wire, was constructed in 1989 on single circuit wood H-frame structures.

Schwab Junction to Cook Hill Junction

- This segment of the ROW was established in 1923 and is approximately 4.4 miles long. The width of the ROW is approximately 165 feet and is maintained edge to edge. This section of the ROW contains the 1610 and 1208 lines.
- The 1610 Line, including conductor and shield wire, was constructed in 1952 on single-circuit wood H-frames.
- The 1208 Line, including conductor and shield wire, was constructed in 1989 on single-circuit wood H-frames.

Wallingford Resident Disposal Center

- While not a three-terminal line, the 1208 Line is connected to the Wallingford Resident Disposal Center utilizing a single wood 3-pole angle structure that is showing signs of deterioration. This structure was constructed in 1989. The shield wire and conductor were added in 1989. This 3-pole angle structure will be replaced with a weathering steel 3-pole angle structure.

An electric distribution line (13.8 kV) is co-located in portions of the Project Area.[1]

[1] The distribution line is present between Lucchini Junction and Hanover Substation; and from Allen Avenue in Meriden to Lucchini Junction.

4. Proposed Project Scope

The Project scope consists of structure, conductor, and static wire replacements for the 1355, 1610, 1690, and the 1208 lines. Of the existing 101 structures to be replaced, 90 double-circuit structures will be replaced with new double-circuit weathering steel poles and 11 double-circuit structures will be replaced with paired single-circuit weathering steel poles for varying reasons described below. Additionally, 12 new structures are also proposed (also explained in detail below) for a total of 124 structures. In addition, a section of the 1690 Line at Lucchini Junction will be relocated underground for approximately 650 feet. Please see Attachment C*, List of Replacements and New Structures*, for structure detail.

The proposed scope of work by transmission line segments of the Project area is summarized as follows:

Southington Substation to Lucchini Junction

- Replace one double-circuit lattice tower structure (4111) adjacent to the Southington Substation with two single circuit weathering steel monopole structures on the 1355/1610 line for line separation into the substation.

- Replace twenty-four double-circuit lattice tower structures with twenty-four double-circuit weathering steel monopole structures on the 1355/1610 Line.

- Replace seven double-circuit lattice tower structures with 14 single-circuit weathering steel monopole structures on the 1355/1610 lines. Three of the additional seven structures are required because they are at intermittent angle locations along the ROW where paired single-circuit structures will replace the double-circuit lattice structures

to facilitate conductor and wire tensioning and reduce sag. Four of the additional structures are located in two locations where there is an angle in the orientation of the ROW. The first location is just west of Meriden Avenue and the second location is just east of Savage Street where two single-circuit structures are preferred in each of the four double-circuit structure locations to reduce the difficulty with physically tensioning the conductor and wiring during construction.

- Install three new mid-span structures to meet current National Electrical Safety Code ("NESC") clearance requirements within the existing ROW on the 1355/1610 line.

- Replace two double-circuit lattice tower structures with four single-circuit weathering steel monopole structures on the 1355/1610 lines, two on either side of the I-691 highway crossing, to improve tensioning and sag control.

- Replace one double-circuit lattice tower (1355/1610 line) with one single-circuit weathering steel monopole (4077-R) on the 1610 Line and one single-circuit weathering steel monopole (4077-L) on the 1355 Line.

- Replace 33 double-circuit lattice tower structures with 33 single-circuit weathering steel monopole structures on the 1690 Line.

- Replace one double-circuit steel pole structure with a single-circuit weathering steel monopole structure on the 1690 Line (Structure 2515R).

- Install one new mid-span single circuit weathering steel monopole (Structure 3679-1) on the 1208 Line to meet NESC clearance requirements within the existing ROW.

- Replace three single-circuit wood H-frame structures with one weathering steel single-circuit monopole and two weathering steel single-circuit H-frames on the 1208 Line.

- Install one new single-circuit weathering steel monopole on the 1690 Line. This new riser structure will accommodate the 1690 Line transition from overhead to underground (moving easterly).[2]

- Replace one double-circuit wood H-frame structure with two weathering steel single-circuit monopoles). One of the structures is a riser structure which will accommodate the transition of the underground portion of the 1690 Line from underground to overhead.

- Install approximately 650-feet of underground cross link polyethylene ("XLPE") conductor and OPGW enclosed in a concrete-encased ductbank on the 1690 Line at Lucchini Junction.

- Replace existing 4/0 copper conductors with Eversource standard Aluminum Conductor Steel Supported ("ACSS") conductor on the 1690 Line.

- Replace the existing shield wires on the 1690 Line with OPGW.[3]

- Replace the existing 556-kcmil Aluminum Conductor Steel Reinforced ("ACSR") conductor with Eversource standard 1272 ACSS conductor on each of the 1355 and 1610 lines.

[2] A small portion of the 1690 Line is proposed to be relocated underground through Lucchini Junction to avoid overhead crossings of existing transmission lines at this location and to mitigate future maintenance safety concerns that an all-overhead design would entail.

[3] There will be two portions were new OPGW will be added; from Structure 4093(1) to Structure 4092, and from Structure 4094 to Structure 4090.

- Transfer existing OPGW from existing structures for the 1610 Line to the replacement and new structures.

- Replace the copper shield wire on the 1355 Line with OPGW.

- Transfer conductor and OPGW from existing structures for the 1208 Line to the replacement structures.

- Install new hardware, insulators and counterpoise as needed.

- Install new lightning arrestors, as needed.

- Relocate a portion of the electric distribution line to replacement Structures 4082, 4081 4080. 4079 and 4078.[4]

Lucchini Junction to Hanover Substation

- Replace three existing double-circuit lattice structures with three double-circuit steel monopole structures on the 1355/1690 lines.

- Install two new single-circuit weathering steel monopoles (2519-R and 2519-L) one for the 1690 Line and one for the1355 Line, as the Hanover Substation terminal structures cannot support full tension from the combined 1355/1690 lines. Therefore, the two lines need to be separated onto two separate structures outside the Hanover Substation.

[4] The existing distribution line will be relocated onto these five 1355/1610 double-circuit transmission line structures (in this segment only) to better facilitate future maintenance and repair work by reducing concerns about the presence of other transmission lines in this segment (the 1690 Line and the 1208 Line).

- Replace the existing copper conductors with ACSS on the 1355 and 1690 lines.
- Replace the OPGW on the 1690 Line from 4077-L to Hanover Substation.
- Install OPGW on the 1355 Line from structure 4077-L to 2515-L and relocate existing OPGW from structure 2515 to Hanover Substation.
- Install new hardware, insulators and counterpoise as needed.
- Install new lightning arresters as needed.

Lucchini Junction to Schwab Junction

- Replace twelve double-circuit lattice towers with twelve double-circuit weathering steel monopole structures on the 1355/1610 lines.
- Replace three single-circuit wood H-frame structures with three single-circuit weathering steel H-frame structure on the 1208 Line.
- Install two new double-circuit weathering steel monopole structures (4069-1 and 4066-1) on the 1355/1610 Line to meet clearance requirements by reducing span lengths.
- Install two new single-circuit weathering steel H-frame structures (Structures 3666-1 and 3663-1) on the 1208 Line to meet clearance requirements by reducing span lengths.
- Replace one wood 3-pole angle structure with one weathering steel 3-pole angle structure on the 1208 Line.

- Replace the existing 556-kcmil ACSR conductor with 1272 ACSS conductors on each of the 1355 and 1610 lines.

- Replace the existing shield wire on the 1355 Line with Eversource standard OPGW.

- Relocate the existing OPGW on the 1610 Line from the existing structures to new structures.

- Transfer conductor and OPGW from existing structures to the replacement structures on the 1208 Line.

- Install new hardware, insulators and counterpoise as needed.

- Install new lightning arresters, as needed.

Schwab Junction to Cook Hill Junction

- Replace three single-circuit wood H-frame structures on the 1610 Line with three single-circuit weathering steel H-frame structures.

- Replace five single-circuit wood H-frame structures on the 1208 Line with five single-circuit weathering steel H-frame structures.

- Install one new single-circuit wood H-frame structure (4058-2) on the 1208 to meet clearance requirements by reducing mid-spans.

- Replace the existing copperweld shield wire on the 1610 Line with OPGW.

- Relocate conductors on the 1208 Line and 1610 Line to replacements structures.

- Install new hardware, insulators and counterpoise as needed.

- Install new lightning arresters as needed.

Wallingford Resident Disposal Center

- Replace one guyed three-pole wood dead-end structure on the 1208 Line with one guyed three-pole weathering steel dead-end structure.

Additionally, there are telecommunications antennas located on Structure 783 on the 1690 Line.[5]

The maps in *Attachment A*: – Aerial Maps, depict the locations of existing and proposed structures, work pads, pull pads and access roads to be used for the Project, and other Project elements and ROW features. The cross-section drawings in *Attachment B:* - Right of Way Cross Section, depict typical views along the ROW of the existing and proposed structures. *Attachment C:* List of Replacement and New Structures, provides information on structure heights and the type of replacement and new structures.

5. Existing Environment, Environmental Effects and Mitigation

The Project would be constructed entirely within the existing transmission ROWs or on Eversource owned property. No expansion of the existing ROWs would be required for the

[5] The telecommunications carriers will be responsible for any required filings with the Council to re-locate equipment after the replacement structure is in place.

Project. The Project is not anticipated to have a substantial adverse environmental effect, for reasons explained below.

Land Use

Land uses in the Project area vicinity consist of a mix of rural, residential, industrial, recreational, agricultural lands, and undeveloped lands, such as forests, early successional habitats and riparian corridors associated with Misery Brook, Sodom Brook, Harbor Brook, the Quinnipiac River, the Mill River and multiple associated unnamed tributaries, public water supply properties, open space areas and reservoirs (including Broad Brook reservoir).

Though the Project would be traversing through some of these water resource areas, it would not impact adjacent land uses and no changes to land use are anticipated. Eversource would work with any affected property owners regarding restoration upon completion of the Project.

The Project work would take place within Eversource's existing ROWs or on Eversource property, which has been dedicated to long term use as an electric transmission corridor. As such, the Project would not result in adverse impacts to existing land uses.

Vegetation Management

No tree clearing is required for the Project. The Project is located within the maintained ROWs and would require mowing and brush removal within work pad areas and along access roads. In most locations, vegetation removal for Project construction would be accomplished using mechanical methods. This work typically requires the use of flat-bed trucks, mowers, brush hogs or other types of mowing equipment, skidders, forwarders, bucket trucks for canopy trimming, and chippers.

Temporary construction mats would be used to provide a stable base for equipment to cross watercourses or wetlands where hand work is not feasible. Such temporary mats would minimize disturbances to wetland soils, and the mats would be removed after the work activities are complete. Work activities in wetlands 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 comply with Project permits and approvals.

After construction is completed, Eversource would perform ROW restoration in accordance with the protocols specified in the BMPs.

In limited areas, as applicable, Eversource would require the contractor to use low-impact methods to remove brush vegetation to protect wetlands, vernal pools, watercourses, state-listed species and their habitats, and cultural resources. These low-impact methods incorporate a variety of approaches, techniques, and equipment to minimize site disturbance. Eversource would require the contractor to use some or all of the following low impact methods, depending on 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 access routes;

- Utilize hand clearing methods for vegetation removal work within sensitive wetland and vernal pool areas;

- Use appropriately sized equipment for site conditions, where possible, to minimize impacts; and,

- Where practical, cut brush close to the ground (approximately 6-8 inches above ground height), leaving root systems and stumps, to retain soil stability.

The existing width of the Project ROWs is typically between 160 feet and 175 feet wide and is maintained edge to edge. Side trimming would be conducted in select areas where additional and temporary workspace is necessary for construction of the Project, or to maintain the required safety clearances from conductors.

Invasive Species

Eversource has evaluated the Project area for existing invasive species and has identified invasive species within both upland and wetland work areas.

Eversource will follow the practices listed in the BMP Manual 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.

Scenic, Recreational and Cultural Resources

The Project is not anticipated to have a substantial adverse effect to scenic, recreational, and/or cultural resources, as discussed below.

Scenic Resources

No state-designated scenic roads or other scenic resource areas are located within the Project area.

Recreational Resources

The following three trails cross the Project corridor: Quinnipiac River Trail; Meriden Linear Trail; and a Cheshire Land Trust Trail. In addition, the Project is located adjacent to athletic fields associated with the Wilcox Technical School and Legion Field in Meriden. Currently, and as proposed, there is an aerial crossing above the Quinnipiac River Trail / Park near River Road / Oregon Road in Meriden; however, this is limited to an aerial span of the feature and Project access via the Quinnipiac River Trail / Park itself has been avoided. Further north, Project access will use the Meriden Linear Trail, as this access route avoids incurring impacts to water resource areas at this location (i.e., access to Structure 2518 utilizes existing infrastructure to avoid crossing Harbor Brook, Sodom Brook and associated wetlands). The Project team has acquired temporary rights from, and is coordinating with, the City of Meriden regarding the partial use of the Meriden Linear Trail for access to the ROW during construction

and will undertake post-construction restoration of these disturbed locations, as agreed to between the Project and the City. Lastly, the Project intersects with a Cheshire Land Trust walking trail (the Ives Farm Trail System "Blue Trail"), partially located within the Eversource ROW. Access to the ROW will be along an existing access road that partially overlaps this trail feature. Eversource will require the use of this portion of trail to be closed during construction and is coordinating with the Cheshire Land Trust to mitigate impacts to this resource.

Several public open space properties that intersect the Project area were also identified through a desktop review of the Connecticut Department of Energy and Environmental Protection ("CT DEEP"), other state and local available GIS data and other websites. These include town managed and/or town open space parcels in Southington (381 Bellview Avenue; 65 Meriden Avenue; 143 Stewart Drive; 186 Steeple Chase Drive; 1090 Meriden Avenue; 434 Meriden Waterbury Turnpike); Meriden (Quinnipiac River Trail / Park, and Dana Lane parcel); and Cheshire (Boulder Road parcels and Cook Hill Road parcels). The Meriden Water Company owns and controls select open space parcels in Wallingford (950 and 989 Church Street) and Cheshire (Yalesville Road) adjacent to the Broad Brook Reservoir. In addition, a privately held parcel under a home-owners association open space restriction overlaps the Project (Strathmore Farms / Highland Avenue - Wallingford), as does the private open and recreational lands associated with the Southington Country Club (Southington).

Eversource would coordinate construction and restoration activities in these open space properties with the property owners and employ the BMPs during construction. As such, the Project is not anticipated to result in permanent adverse impacts to existing recreational resources.

Cultural Resources

A cultural (archaeological and historical) resources review of the proposed Project area was conducted by Heritage Consultants, LLC ("Heritage") in June 2022. A desktop Phase 1A review (preliminary archaeological and historical resources assessment) was completed by Heritage and supplemented with pedestrian surveys (cultural resource in-field assessments) and Phase 1B investigations were performed by Heritage, as warranted. The Phase 1A literature review revealed that no State Register of Historic Places properties are located in the vicinity of the Project; however, one previously identified archaeological site, two individually listed National Register of Historic Places ("NRHP"): the Dr. J. Porter House and the Red Bridge, and one historical standing structure (380 Main Street, Meriden) are located within 500 feet of the Project. With respect to the identified NRHP properties and historical standing structure, Heritage has concluded that the Project would not result in adverse impacts to these resources. Specifically, the Dr. J. Porter House would not be adversely impacted by the Project due to the distance from the feature and the presence of intervening vegetation. No impacts to the Red Bridge are anticipated, as Project activities are confined to the adjacent hillslopes and no work is planned at the bridge itself. With respect to the historical standing structure at 380 Main Street, this resource is located approximately 75 feet from the ROW. Heritage concluded the nature of the structure replacement near this location (one lattice tower being replaced with steel monopole), is unlikely to result in impacts to this resource.

Consistent with industry standard methodology and based on a review of relevant features (e.g., historic maps, aerial photographs, available soil profiles, distances to water sources, and/or proximity to other known cultural features), multiple Project elements, including

proposed work pads, pull pads, access routes and structure locations, were ranked relative to their potential for archaeological sensitivity. Based on the results of the Phase 1A assessment, Project areas that were determined to have "no/low" archaeological sensitivity were eliminated from further investigation. Pedestrian surveys and/or Phase 1B cultural resources reconnaissance surveys were recommended for Project areas demonstrating "moderate/high" archaeological sensitivity[6]. Heritage completed the pedestrian surveys and/or Phase 1B cultural reconnaissance survey (shovel pit testing) at these locations as appropriate and either reclassified the features' potential archaeological sensitivity to the "no/low" ranking based on in-field conditions; reached a determination for three discrete areas that the disturbance of cultural resources, if present, would be avoided due to the Project's planned use of timber construction matting at these locations; and/or found no physical evidence of archaeological significance. The one previously identified archaeological site, investigated by Heritage as part of a Phase 1B cultural resources reconnaissance survey was determined by Heritage to not likely be impacted by the Project.[7] A cultural resource report was submitted to SHPO and the applicable tribes (Mashantucket Pequot, Mohegan and Wampanoag). Heritage has concluded that no further cultural investigations are recommended or warranted for the Project. If unanticipated cultural resources were discovered during Project construction, appropriate agency coordination would be undertaken.

[6] The Phase 1B survey also included the previously identified archeological resource and yielded no cultural materials.

[7] Timber matting will be applied at this location for environmental reasons due to NDDB requirements (See "Wildlife and Habitat' section below).

Federal Aviation Administration Notification

To comply with applicable Federal Aviation Administration ("FAA") regulations, Eversource filed a Notice of Proposed Construction or Alteration, for the new, permanently installed structures in June 2022. FAA notification is necessary for new structures placed within 4 miles of Meriden Markham Municipal Airport. The FAA has commenced an obstruction evaluation and is expected to issue a final determination and marking requirements around July 2023. Eversource expects that the FAA will require that several structures be marked. Additionally, the construction contractor will also need to file a separate notice due to placing temporary obstructions of similar height (e.g., cranes) inside the notification zone. FAA may provide recommendations regarding the work or comments on marking or lighting of structures in its final determination.

Water Resources

Eversource identified and delineated water resources in the vicinity of the Project area during the 2020, 2021, and 2022 growing seasons (see Attachment E: Wetlands and Watercourses Summary Report and Attachment F: Vernal Pools Summary Report). Water resources within the Project area include inland wetlands, watercourses (perennial and intermittent streams), potential vernal pools, ponds, water protection areas and Federal Emergency Management Agency ("FEMA") Flood Zones. All work in or near these areas would be conducted in accordance with Eversource's BMP Manual and with the conditions of applicable regulatory permit conditions and approvals. Eversource has filed a Natural Diversity Data Base State Listed Species Review Request and will register under the CT DEEP *General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction*

Activities (”General Permit”), including the Project specific Storm Water Pollution Control Plan (“SWPCP”). Details on water resource areas are provided below.

Wetlands

Wetlands in the Project area were identified and delineated in accordance with industry standard methodology. A total of 80 wetlands were identified, including 77 federal wetlands and three Connecticut only wetlands in or proximate to the Project area. Temporary impacts to select wetland areas will be required in order to access work areas or perform Project activities. These temporary impacts will be predominantly limited to timber matting placed in wetlands and/or spanning smaller watercourses. Only minimal permanent wetland impacts are anticipated in association with Project resulting from eighteen structure replacements that are planned for installation in wetland areas. Work in wetland areas will be performed in accordance with the BMP Manual and conditions of environmental permitting approvals. Anticipated effects to wetlands from the Project are detailed on Table W-1 (Summary of Project Effects to Wetlands and Watercourses located in Attachment D: Wetlands and Watercourse Report).

Watercourses and Waterbodies

Within the Project area, 45 watercourses, including 32 perennial and 13 intermittent watercourses, were identified. No new permanent access roads through these watercourses would be required; however, limited temporary impacts including spanning these streams, or repairs to existing crossings, will be required. Work in watercourse areas will be performed in accordance with the BMP Manual and appropriate environmental permitting approvals and regulatory conditions.

Table W-1 below provides a summary of anticipated effects to wetlands and watercourses.

Table W-1 (pg 1 of 2): Summary of Project Effects to Wetlands and Watercourses				
Wetland / Watercourse ID	**Petition Map Sheet Number**	**Structure Number(s) and Comment**	**Wetland / Watercourse Effects (± square feet)***	
			Temporary (Matting)	**Permanent (Structures)**
W04	2	Workpad for Structures 4105 and 757	6,276	0
W05A	2	Workpad and Access for Structure 758	5,296	50
W05A	3	Workpad for Structures 4103 and 759	8,173	50
W06	3	Workpad for Structures 4102 and 760	11,339	150
W07	3	Workpad and Access for Structure 4101 and 761	31,382	100
W07	3	Workpad for Structures 4100 and 762	29,413	100
W08A	4	Workpads for Structures 4099 and 763	38,457	150
W08A	4	Workpad for Structures 4098 and 764	12,405	50
W08B	4	Workpad for Structure 4097-2	2,779	0
W09	4	Workpad for Structures 4096 and 766	7,004	50
W10	5	Workpads and Access for Structures 4095-2, 4095-1 and 767	15,488	0
W11	6	Workpads and Access for Structures 4091 and 771.	10,215	0
W13	7	Workpad for Structure 775	3,837	50
W20	8	Workpad for structure 780	2,735	0
W22	9	Workpad and access for Structures 2515, 2516 and 4076	7,389	0
W25	9	Access for Structure 3672	1,473	0
W28	12	Workpad for Structure 3672	942	0
W29	12	Workpad for Structure 4075	2,799	0
W36	13	Access for Structures 4067 and 3664	829	0

* No gravel fill in wetland areas, timber mating only. Watercourses to be spanned.

Table W-1 (pg 2 of 2) Summary of Project Effects to Wetlands and Watercourses				
Wetland / Watercourse ID	Petition Map Sheet Number	Structure Number(s) and Comment	Wetland / Watercourse Effects (± square feet)*	
			Temporary (Matting)	Permanent (Structures)
W37	14	Workpad for Structures 3663-1 and 4066-1	3,453	0
W39	14	Access for Structure 4066	157	0
W40	14	Workpad and Access for Structure 4065	878	0
W42	14	Workpad and Access for Structure 5269	3,203	0
W42	15	Workpad for Structure 5268	1,411	0
W43	15	Workpad and Access for Structures 5265 and 5264	25,580	100
W44	16	Access for structure 5263	2,388	0
W55	17	Workpad for Structure 5256	469	0
W58	17	Workpad and Access for Structure 5255	1,108	0
W58	17	Access for Structure 5254	2,580	0
W62	18	Workpad for Structure 4042	13,817	100
W62	19	Workpad for Structure 5246	2,385	0
W62	19	Workpad and Access for Structure 5243	5,447	0
W63	19	Workpad and Access for Structure 5242 and 4037	19,114	100
W63	20	Workpad and Access road for Structure 5241	6,409	0
W64	20	Access for Structure 5239	2,514	0
W65	20	Workpad for Structure 5239	422	0
W66	21	Access for Structure 5236	1,927	0
W70	22	Workpad and Access for Structure 5230	5,401	100
W77	23	Workpad for Structure 4679A	6,539	150
		Total	**303,433**	**1300**

* No gravel fill in wetland areas, timber mating only. Watercourses to be spanned.

Vernal Pools

Within the Project area, 9 vernal pools were confirmed during field reviews within or adjacent to the existing ROWs. Direct impacts to vernal pools will be avoided, as no work will occur within the vernal pool depressions. Temporary impacts are anticipated within the 100-foot vernal pool envelope associated with several of these pools in order to facilitate access to the structures and/or for establishment of work areas. Work within the vernal pool envelope has been minimized as practicable and work in the vicinity of vernal pools will be performed in accordance with the BMP Manual and appropriate environmental permitting approvals and regulatory conditions.

FEMA Flood Zones

The Project ROW extends across the 100-year Federal Emergency Management Agency ("FEMA") flood zones associated with Misery Brook (two crossings), Sodom Brook (one crossing) and Harbor Brook (one crossing). The Project crosses the FEMA 100-year flood zone and Floodway associated with the Quinnipiac River, in an aerial capacity only. No Project work would occur in the FEMA Floodway. Only one replacement structure is proposed within a 100-year flood zone and will be located immediately adjacent to the existing structure, which will be removed. No adverse impacts to flood storage capacity or flooding conditions are anticipated as a result of this structure replacement work. All matted work pads within the 100-year flood zone will be anchored, as required to prevent lateral movement during rain events.

Water Supply

Based on Aquifer Protection Areas ("APA") mapping maintained by CT DEEP, there are 6 APAs within or proximate to the Project ROWs. In addition, two Public Water Supply Watersheds (as provided by Connecticut Department of Public Health) were identified within the Project area. Residences within the Project area are generally served by a mix of private water supply wells and public water.

Eversource would require its contractors to employ best practices for the proper storage, secondary containment, and handling of diesel fuel, motor oil, grease and other lubricants – including implementing precautions and protocols for refueling practices, and accidental spill response readiness - to protect water resources quality within the Project area. Construction activities would conform to Eversource's BMPs, as well as to the requirements of the Project specific SWPCP, which would be prepared prior to the commencement of construction. The Project construction contractor would be required to adhere to these plans and BMPs.

Wildlife and Habitat

Eversource has reviewed the CT DEEP Natural Diversity Database ("NDDB") and determined that several work areas are proposed within a NDDB buffered area and wetland jurisdictional area. Following submission of a request to review, the NDDB program has issued protective measures to be employed by the Project in these areas. Work will be conducted in accordance with these NDDB protective conditions and with Eversource's BMPs to avoid or minimize impact to habitats that may support rare species. Protection measures include, but are not limited to additional surveys, contractor training, time of year best management practices, monitoring, and installation of exclusionary features (e.g., silt or snow fencing,

construction matting) to be directed by qualified individuals. Consequently, no adverse impact to rare species will result from activities proposed in the work areas.

Visual Effects

The Project will result in some change to the visual character of the lines, though Eversource does not believe that the change will result in significant impacts. As noted above, the Project work is planned within the existing ROWs, which have a long history of use as a transmission corridor and currently contain existing structures. Minimal vegetative removal is required within the ROWs for the Project to meet operational clearance requirements and to accommodate the installation of work pads, pull pads and access roads. Replacement structures would be located as close as possible to the existing structure locations in accordance with the engineering design. Although there will be 12 additional structures installed, these additional structures will be similar in design to the replacement structures and so present a uniform visual appearance.

The heights of the existing structures range from 43 feet to 111 feet. The replacement and new structures would range in height from 25 feet to 137 feet. Six of the replacement structures will decrease in height. Seven of the replacement structures will remain the same height and the remainder will increase in height. The majority of the replacement structure height increases vary from 1 foot to 30 feet; however, eight replacement structures have height increases over 30 feet. Height increases are driven by the need to adhere to the current NESC clearance requirements and Eversource standards. Please see below for all height increase detail.

The change between overall existing and replacement structure heights varies across the Project from a decrease in height of approximately 23 feet to an increase of approximately 56

feet, with an average height increase of approximately 14 feet for existing structures being replaced. There are eight replacement structures with a height increase of over 30 feet. These are:

- Replacement structures 4099 and 4099A (near ROW crossing of Savage Street) have height increases of 36 feet due to vertical clearance requirements.

- Replacement Structures 4083, 4082, 4081, and 4080 have height increases between 36 feet and 56 feet due to terrain variations and clearance requirements from the co-located distribution lines.

- Replacement structure 783 (near where the ROW crosses Edgemark Acres Road) has a height increases of 36 feet due to vertical clearance requirements.

- Replacement structure 3674 has a height increase of 32 feet due to the reconfiguration of crossing conductor transmission lines at Lucchini Junction.

- The twelve new structures will have heights between 25 feet [8] to 127 feet.

As the Project area is an existing maintained ROW that contains more than one transmission line, and in some cases more than two transmission lines, of comparable heights, the overall visual impact is anticipated to be minimal. Visual effects throughout the Project area would be further mitigated by utilizing weathering steel for the new structures, which blend in with

[8] This short structure is required to support ADSS, only.

adjacent vegetation. As a result, the new structures would not result in significant change to the existing visual character of the overall Project area.

Noise

The Project construction would result in short-term and localized noise,[9] as is typical of any similar construction project, from the operation of standard types of construction equipment and other vehicles. There would be no permanent changes to the noise levels along the transmission ROWs resulting from the Project.

Air Quality

Short-term, localized effects on air quality may result from the Project construction work, primarily from fugitive dust and equipment emissions. Compliance with Eversource's BMP Manual dust control provisions would minimize the amount of dust generated by construction activities, in addition to following proper erosion and sediment (E&S) control practices. Temporary gravel anti-tracking pads would be installed at points of construction vehicle ingress/egress from the ROW to minimize the potential for equipment to track dirt onto local roads. To further minimize dust, water may be used to wet down disturbed soils or work areas with heavy tracking as needed. Vehicle emissions will be limited by requiring contractors to properly maintain construction equipment and vehicles, and by minimizing the idling time of

[9] Construction noise is exempted under Regulations of Connecticut State Agencies 22a-69-1.8(g) for the control of noise.

equipment and vehicles, including diesel construction equipment, in accordance with Connecticut regulatory requirements[10].

Radio and Television Interference

There will be no increase in radio interference or audible noise from the operation of the replacement and new transmission facilities.

Electric and Magnetic Fields

Eversource prepared calculations of the existing and post-Project Electric and Magnetic fields ("EMF"). The calculations were based on average annual loading conditions, which are most representative of typical conditions. The calculations are made relative to the centerline of the proposed, modified transmission circuits. The calculations apply at one meter (3.28 feet) above grade and assume that the lowest conductor for each 115-kV circuit would be 30 feet above grade. (Attachment G: EMF Calculations)

From Schwab Junction to Cook Hill Junction, Eversource does not propose to change conductor or structure configuration as part of the Project, and therefore electric and magnetic fields are not expected to change.

Elsewhere within the Project area, proposed magnetic fields at ROW edges are expected to remain approximately equal to the calculated existing magnetic fields. Peak magnetic fields within the ROW are expected to increase slightly. The proposed larger conductors contribute

[10] Regulations of Connecticut State Agencies (RCSA) Section 22a-174-18(b)(3)(C) prohibits the idling of motor vehicles for more than three consecutive minutes, with limited exceptions.

to slightly increased electric fields at ROW edges, as well as the peak measurement within the ROW. Changes have been calculated and are presented in Tables 1-4 below. Please refer to Attachment G: EMF Graphs for additional information.

Table 1: Electric and Magnetic Fields, Southington Substation – Allen Avenue

Southington Substation-Allen Avenue (Annual Average Loads)		East ROW Edge	Max in ROW	West ROW Edge
Magnetic Fields (mG)	Existing	11.5	31.8	8.0
	Proposed	**9.6**	**32.5**	**7.1**
Electric Fields (kV/m)	Existing	0.52	1.59	0.45
	Proposed	**0.66**	**1.82**	**0.14**

Table 2: Electric and Magnetic Fields, Allen Avenue - Lucchini Junction

Allen Avenue - Lucchini Junction (Annual Average Loads)		North ROW Edge	Max in ROW	South ROW Edge
Magnetic Fields (mG)	Existing	17.2	30.8	8.8
	Proposed	**12.8**	**31.0**	**8.1**
Electric Fields (kV/m)	Existing	0.43	1.55	0.44
	Proposed	**0.66**	**1.82**	**0.14**

Table 3: Electric and Magnetic Fields, Lucchini Junction – Schwab Junction

Lucchini Junction - Schwab Junction (Annual Average Loads)		East ROW Edge	Max in ROW	West ROW Edge
Magnetic Fields (mG)	Existing	8.8	30.8	5.2
	Proposed	**7.5**	**30.9**	**4.6**
Electric Fields (kV/m)	Existing	0.55	1.60	0.20
	Proposed	**0.67**	**1.83**	**0.19**

Table 4: Electric and Magnetic Fields, Lucchini Junction – Hanover Substation

Lucchini Junction - Hanover Substation (Annual Average Loads)		North ROW Edge	Max in ROW	South ROW Edge
Magnetic Fields (mG)	Existing	7.0	30.6	23.6
	Proposed	**7.7**	**30.9**	**23.9**
Electric Fields (kV/m)	Existing	0.12	1.51	0.05
	Proposed	**0.13**	**1.97**	**0.05**

Comparison of Calculated Fields to International Guidelines

The anticipated fields resulting from the proposed Project would be well below the internationally established exposure limits for 60-Hz electric and magnetic fields. Specifically, these established exposure limits are the guideline limits identified by the International Council on Electromagnetic Safety ("ICES") and the International Council on Non-Ionizing Radiation Protection ("ICNIRP") as summarized below in Table 5.

Table 5 - International Guidelines for EMF Exposure

	Magnetic Field (mG)	Electric Field (kV/m)
ICNIRP	2000	4.2
ICES	9040	5 (in General)
		10 (on ROW)

6. Construction Traffic Management

Construction vehicles and equipment used for the work would include pickup trucks, bucket trucks, flat-bed trucks, concrete trucks, drill rigs, front loaders, bulldozers, woodchippers, forklifts, side booms, dump trucks and cranes.

Construction-related vehicular and equipment movements would utilize public roads in the Project area to access the 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 areas. Due to phasing of construction work, these Project-related traffic movements are not expected to significantly affect transportation patterns or levels of service on public roads.

7. Construction Sequence

To safely move construction vehicles and equipment onto and off of the ROW while minimizing disruptions to vehicular traffic along public roads, Eversource or its Project contractor would, as appropriate, work with the municipalities and the Connecticut Department of Transportation to develop and implement traffic management procedures, as needed to accommodate the pulling of conductor and OPGW as well as accessing the ROW from State roads in certain locations. The construction contractor is typically 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 necessary.

Project construction would include the following activities:

Establishing Staging Areas

Eversource contractors would be responsible for providing and determining a staging area to construct the Project. To date, no staging area has been identified. Temporary staging area(s) from available parcels in the vicinity or within the project area that would be used to store construction equipment and materials. The staging areas may also be used for parking personal vehicles, for construction vehicles, and for performing minor maintenance when needed, on construction equipment. An environmental review of potential staging area locations would be completed, and erosion and sedimentation ("E&S") controls would be installed and maintained, as needed, prior to establishing the staging area and remain until Project completion in accordance with Eversource's BMPs.

Soil Erosion and Sediment Control Installation

Project construction would conform to best management practices for E&S control, including those provided in the 2002 *Connecticut Guidelines for Soil Erosion and Sediment Control* ("Connecticut Guidelines") and Eversource's BMP Manual.

Typical E&S control measures include, but are not limited to, straw blankets, strawbales, 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 prior to construction to intercept and retain sediment and/or construction materials from disturbed areas and prevent such materials from discharging to water resources or off ROW. Temporary E&S control measures would be maintained and inspected by a qualified inspector for the duration of the Project, through site stabilization, a minimum of weekly and within 24 hours of the end

of a storm that generates a discharge that equals or exceeds 0.5 inch. For storms that generate a discharge of less than 0.5 inch, an inspection shall occur immediately upon the start of the subsequent normal working hours to ensure their integrity and effectiveness and for compliance with the BMP Manual. The temporary E&S control measures would remain in place until the Project work is complete and all disturbed areas have been stabilized.

Access Roads and Work Pads

Access to each structure location will be required during Project construction. As a result of prior transmission system maintenance activities, some access roads are already established and Eversource will utilize these existing access roads to the extent possible. However, some new off-ROW and new in-ROW access routes will be required. None of these new access routes would permanently impact wetlands or watercourses. The access routes expected to be used for the proposed Project are illustrated on the maps in Attachment A: Aerial Maps.

Existing access roads may need to be improved (graded, widened, and/or reinforced) with additional stone material in order 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 minimum travel surface that is approximately 16 feet wide (additional width may be needed at turning or passing locations). New access roads would typically be graveled in upland areas. E&S would be installed as necessary before the commencement of any improvements to or development of access roads.

At each transmission line structure site a work pad is required to stage material for final on-site assembly and/or removal, and to provide a safe, level work base for the construction equipment. Typical work pads would be approximately 150 feet by 150 feet along the segment

between Southington Substation and Lucchini Junction, and approximately 75 feet by 150 feet along the segment between Lucchini and Schwab Junctions. Between Schwab Junction and Cook Hill Junction, work pads for OPGW installation work along the 1610 Line will be approximately 50 feet by 50 feet and structure replacement work pads on the 1208 Line and 1610 Line will be approximately 100 feet by 100 feet along this segment between Schwab Junction and Cook Hill Junction.

A typical (upland) installation of a work pad at a structure location involves several steps: (1) removal of vegetation, (2) removal of the upper three to six inches of topsoil (which is usually unsuitable to support the necessary construction activities) and (3) grading to create a level work area.) The removed topsoil would be temporarily stockpiled within the ROW, typically near the work pad. A rock base at the work pad, which allows drainage, would be layered on top of filter fabric, if necessary. Additional layers of rock with dirt/rock fines (processed gravel) are typically placed over the rock base. The preliminary locations and configuration of the work pads, as determined based on the environmental field studies and constructability reviews, are shown on Attachment A: *Aerial Maps*. Use of timber work pads in water resource areas will result in temporary impacts to these resources a (wetlands and watercourses).

Underground 1690 Line Segment Installation

Approximately 650 feet of 115-kV XLPE transmission cable will be installed in a concrete-encased ductbank from Structure 785 to Structure 2515-R on the 1690 Line at Lucchini Junction. The ductbank will consist of three (3) 8-inch polyvinyl chloride (“PVC”) conduits, two (2) 4-inch PVC conduits, and two (2) 2-inch PVC conduits. The conduits will be backfilled with concrete, with minimum of 3,000 pounds per square-inch compressive strength. The concrete

ductbank will then be backfilled with an approved thermal backfill consisting of either fluidized thermal backfill or thermal sand.

Upon completion of the ductbank, the new 5000-kcmil copper XLPE transmission cable will be installed. Additionally, six (6) new cable terminations will be installed, three on each of the two new riser structures.

Various equipment will be used to construct the ductbank and install the new cable. Equipment will include an excavator, pickup trucks, flatbed trucks, crane, and a concrete truck. A small dump truck would be required if thermal sand is used for the thermal backfill.

Before commissioning the underground line, impedance testing, jacket integrity testing, and an AC high potential (hi-pot) test would be performed to ensure the integrity of the new cable.

Foundation Installation

The new structure foundations will be either a direct embed or a drilled concrete pier type foundation. Direct embed type consists of a drilled hole with the pole base inserted and the hole backfilled with stone. A concrete foundation consists of a drilled hole with rebar and anchor bolt cage inserted and backfilled with concrete. Foundation installation work would require the use of equipment such as pneumatic hammers, augers, drill rigs, and dump 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 wastewaters would then be managed in accordance with the General Permit.

Excavated soils that are generated during construction activities would be temporarily stored or stockpiled outside of a wetland, and not adjacent to a watercourse, in accordance with the General Permit requirements and BMPs and later spread in upland areas to the extent practical. Any remaining excavated material will be managed off-site in accordance with applicable regulations and Eversource standards. No material will be placed in FEMA flood storage areas.

As needed, counterpoise installation would also take place at this time. Depending on site-specific soil conductivity, supplemental grounding will be installed. A quad "ditch-witch" plow-cable trencher would be used to install the counterpoise after the proposed structures are constructed.

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 and bucket trucks.

Foundation Backfill and Excavation Material Management

Excavated soils will be spread in upland areas within the Project area to the extent possible and stabilized in accordance with Eversource's BMPs and the Stormwater Pollution Control Plan. Any excavated soils that cannot be spread on the property from which they were excavated would be transported from the Project area and properly managed off-site in accordance with Eversource's BMPs.

Conductor and Shield Wire Installation/Transfer

The transfer of the existing conductor and OPGW wire from the existing structures to the replacement structures, would occur after the new structures are installed.

New conductor and OPGW installation would be installed after the new structures have been erected. The equipment required for these activities would include conductor reels, conductor pulling tension rigs and bucket trucks. Helicopters may be used to install OPGW in certain sections of the Project. In the event helicopters are utilized, advanced notification to the affected municipality and property owners would be provided. Bat wing trucks and guard trucks would be used for protection of road crossings during the line work.

Restoration

After the transmission lines are re-energized and the existing structures are removed, the remaining restoration of the ROW would begin and would include the removal of construction debris, signage, flagging, and temporary fencing, as well as the removal of construction mats, pull pads, and structure work pads that are designated for removal. Disturbed areas would be restored as practical and stabilized using revegetation or other measures before removing temporary E&S controls.

For work within environmentally sensitive areas, work pad restoration measures will be implemented to mitigate impacts, which include resurfacing the work pad with stockpiled topsoil or fine process gravel (whichever is applicable), application of a native 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.

Eversource would perform ROW restoration in accordance with the protocols specified in Eversource's BMPs, permit approvals and in consultation with affected property owners. As mentioned previously, Eversource is proposing to apply fine processed gravel and seed to gravel work pads in NDDB areas following construction.

Waste Management

Waste materials, such as structure components (i.e., wood and steel from the removed structures, associated hardware, etc.), conductor, shield wire, 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. As described above, excess soils would be managed in accordance with applicable regulations and disposal facility policies. Dewatering during construction activities would be conducted in accordance with the Connecticut Guidelines, Eversource's BMPs and applicable regulations.

9. Construction Schedule and Work Hours

Eversource proposes to begin construction in the third quarter of 2023. Normal work hours would be Monday through Saturday from 7:00 AM to 7:00 PM. Sunday work hours may be necessary due to delays caused by inclement weather and/or outage constraints. Multiple crews may work concurrently on different sections of the line.

The proposed in-service date is in the fourth quarter of 2024.

10. Municipal and Property Owner Outreach

Beginning in the June of 2022 Eversource provided municipal officials in the Towns and City with information on the proposed Project. Additionally, in May 2023 Eversource provided representatives of the Towns and City with written notice of the pending Petition filing.

Beginning in June 2022 Eversource conducted outreach to property owners proximate to where the work activities will take place. In conjunction with the submission of this Petition, all 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. Eversource representatives will continue contact with adjacent property owners and the municipalities to provide advance notification as to the start of construction activities and will continue to update property owners and municipalities throughout Project construction and restoration.

11. 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 impact existing scenic, historical or recreational values. Accordingly, Eversource requests that the Council issue a declaratory ruling that the proposed modifications would have no substantial adverse environmental effect.

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

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

List of Attachments

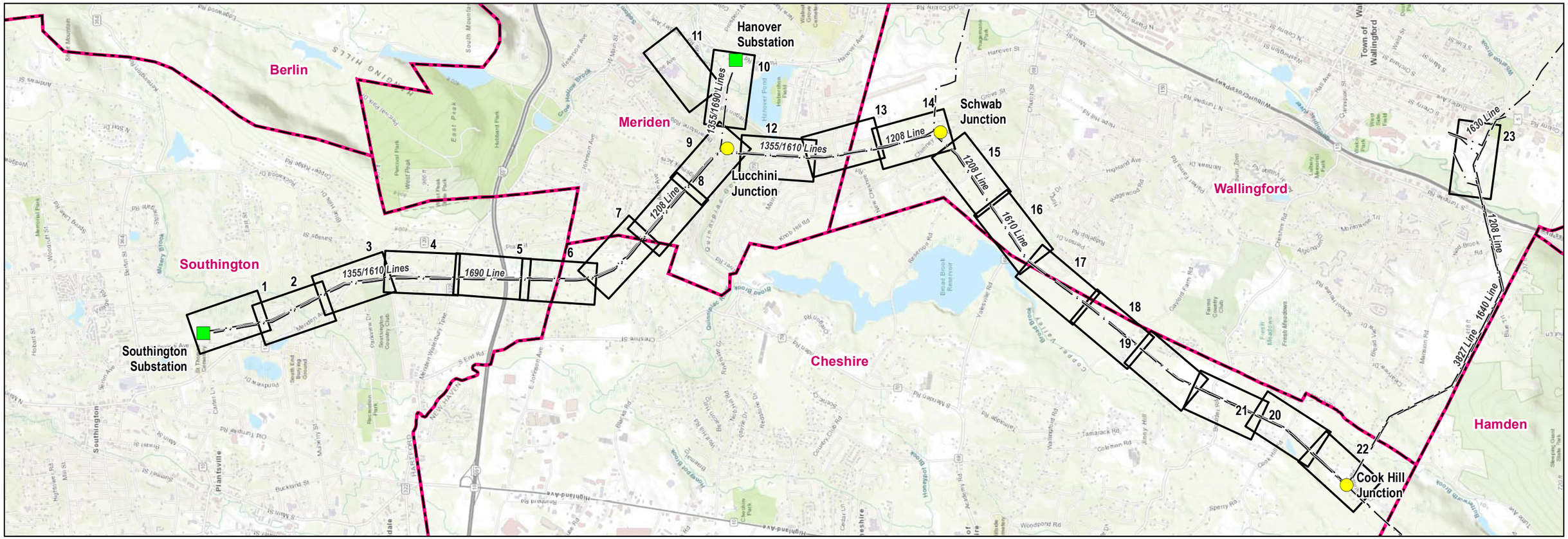
Attachment A: Aerial Maps
Attachment B: Right-of-Way Cross Sections
Attachment C: List of Replacement and New Structures
Attachment D: Wetlands and Watercourses Report
Attachment E: Vernal Pool Assessment
Attachment F: EMF Graphs
Attachment G: Letter to the Abutters and Affidavit

Attachment A: – Aerial Maps

Southington Substation to Cook Hill Junction Rebuild Project

SOUTHINGTON, CHESHIRE, MERIDEN AND WALLINGFORD, CT
Petition Map Set

Date: April 14, 2023



Legend

Junction | Substation | Map Sheet | Municipal Boundary

PREPARED FOR:

EVERSOURCE ENERGY

107 Selden Street
Berlin, CT 06037

N

0 0.25 0.5 1 Miles

INDEX OF FIGURES

Title Sheet / Index Map
Abutter Tables & Map Sheets 1-23

NO.	DATE	REVISIONS

PREPARED BY:

AECOM

500 Enterprise Drive
Rocky Hill, CT 06067

MAPSHEET 1 of 23
Southington Substation to Cook Hill Junction Rebuild Project
1355/1610 Line: Replacement Structures 4111 to 4108
1690 Line: Replacement Structures 751 to 754
Southington, Connecticut

AREA DESCRIPTION

Existing Land Use

- **Mixed Residential**
- **Commercial**
- **Undeveloped, forest**
- **Agricultural**
- **Natural Diversity Database Area**
- **Misery Brook**

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use

- **Maintained electric transmission facilities corridor**
- **Eversource Electrical substation – Southington 4C**
- **Residential/lawn**
- **Wetlands and associated watercourses**
- **Roadway, East Street south of Structures 4108 & 754**

Right-of-Way Vegetation

- **Scrub-shrub**
- **Herbaceous**
- **Palustrine forested (PFO) wetland**
- **Palustrine scrub-shrub (PSS) wetland**
- **Palustrine unconsolidated bottom permanently flooded wetland (PUBH)**
- **Agricultural field**
- **Lawn/landscaping**
- **Barren/unvegetated**
- **Paved – asphalt/concrete**

Water Resources

- **Wetlands W01, W02.**
- **Wetland Cover Types – PSS, PFO, PUBH**

Wetland and Watercourse Crossings

- **Wetland W01, W02 – No temporary or permanent work pads or access road crossings.**

Access

- **Structures 4111 and 751: via Belleview Avenue/Southington Substation**
- **Structures 752 and 4110: via Blueberry Lane (pending access rights)**
- **Structures 4109, 4108, 754 and 753: in-ROW access via Strawberry Lane**

Road Crossings

- **East Street**

Existing Right-of-Way Width

- **Varies: 160 feet – 230 feet**
- **Additional ROWs present beyond Project area**

ABUTTERS TO PROJECT RIGHT-OF-WAY		
LINE LIST NUMBER	**OWNER NAME (NOW OR FORMERLY)**	**PARCEL ADDRESS (SOUTHINGTON, CT)**
206-145	PETER M & CHRISTINE J MCGURGAN	47 SOUTH PLAINS RD
206-146	PETER M & CHRISTINE J MCGURGAN	43 SOUTH PLAINS RD
206-147	PETER M & CHRISTINE J MCGURGAN	41 SOUTH PLAINS RD
206-148	WILLIAM C & MARRYANN T VETRE	110 FOREST LN
206-149	PETER M & CHRISTINE J MCGURGAN	31 SOUTH PLAINS RD
206-150	ROBERT & SHARON ALIA	100 EAST ST
206-153	ROBERT C & SHARON M ALIA	108 EAST ST
206-152	ROBERT C & SHARON M ALIA	118 EAST ST
206-155	PATRICK & LENORA MUNSON	90 STRAWBERRY LN
206-156	ERIC A & MICHELE D PERRY	91 STRAWBERRY LN
206-157	TOWN OF SOUTHINGTON	135 EAST ST
206-161	TOWN OF SOUTHINGTON	65 MERIDEN AVE
206-158	MATTHEW R KIEWLEN	23 BLUEBERRY LN
206-159	REGINALD H GARCIA	53 BLUEBERRY LN
206-160	ELLEN J LONG TRUSTEE	63 BLUEBERRY LN
206-161	TOWN OF SOUTHINGTON	65 MERIDEN AVE
281C-313	THE CONNECTICUT LIGHT & POWER CO	297 BELLEVIEW AVE
281C-316	TOWN OF SOUTHINGTON	381 BELLEVIEW AVE

Abutters Line List Data Date: January 27, 2023.

Southington

Misery Brook

LLN# 281C-316

LLN# 281C-316

LLN# 281C-313

LLN# 206-157

APA Well 7, 8

Map Sheet 2

NDDB Area

EAST STREET

S PLAINS ROAD

4112

Southington 4C Substation

W01

4111

4111

4111A

1355/1610 Line

1208 Line

1690 Line

3708

751

W01

4110

3707

752

4109

3706

753

4108

3705

754

LLN# 206-152

LLN# 206-147

LLN# 206-149

LLN# 206-153

LLN# 206-146

LLN# 206-150

W03

LLN# 206-148

LLN# 206-161

LLN# 206-160

LLN# 206-159

W02

LLN# 206-156

LLN# 206-155

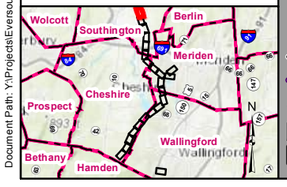
LLN# 206-158

BELLEVIEW AVENUE

BLUEBERRY LANE

STRAWBERRY LANE

INDEX MAP



- Proposed Structure Str Label
- Existing Structure Str Label Str Label
- Existing Structure to be Removed
- Existing Access
- Off-ROW Access Pending Rights
- Overhead Eversource Line
- Existing Gravel
- Stone Work Pad
- Pull Pad on Paved/Existing Gravel Surface
- Temporary Construction Matting
- Estimated Waterbody
- Field Delineated Wetland Boundary Outline
- Field Delineated Wetland
- Open Water
- FEMA 100-Year Flood Zone
- FEMA Floodway
- Aquifer Pretection Area
- Rare Species Habitat (Dec. 2022)
- Parcel Boundary
- Eversource Owned Property
- Municipal Boundary
- 5' Contour Line
- Gate

N

0 50 100 200 Feet

EVERSOURCE ENERGY

Southington Substation to Cook Hill Junction Rebuild Project

Southington,Connecticut

Map Sheet 1 of 23

4/14/2023

AECOM

Document Path: Y:\Projects\Eversource\Line 1355_1610_1690\1355-1610-1690 Lines_PetitionDraftMaps_031423.mxd

MAPSHEET 2 of 23
Southington Substation to Cook Hill Junction Rebuild Project
1355/1610 Line: Replacement Structures 4108 to 4104
1690 Line: Replacement Structures 754 to 758
Southington, Connecticut

AREA DESCRIPTION

Existing Land Use

- **Mixed Residential**
- **Misery Brook**
- **Undeveloped / Forest**
- **Natural Diversity Database Area**

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use

- **Maintained electric transmission facilities corridor**
- **Residential/lawn**
- **Wetlands and associated Watercourses**
- **Roadway, East Street south of Structures 4108 & 754**
- **Roadway, Stuart Drive northwest of Structures 4105 & 757**

Right-of-Way Vegetation

- **Scrub-shrub**
- **Herbaceous**
- **Palustrine emergent (PEM) wetland**
- **Palustrine scrub-shrub (PSS) wetland**
- **Palustrine forested (PFO) wetland**
- **Lawn/landscaping**
- **Barren/unvegetated**
- **Paved – asphalt/concrete**

Water Resources

- **Wetland W03, W04, W05A.**
- **Wetland cover types – PEM, PSS, PFO**
- **Watercourse S1 (Misery Brook),**
- **Watercourse S2 (Unnamed Tributary to Misery Brook)**

Wetland and Watercourse Crossings

- **Wetland 03 – No temporary or permanent work pads or access roads crossings**
- **Wetland 04 – Temporary construction matting near Structures 4105 and 757**
- **Wetland 05A – Temporary construction matting near Structure 758**
- **Watercourse S1 – No temporary or permanent work pads or access roads crossings**
- **Watercourse S2 – Temporary construction matting near Structure 758**

Access

- **Structures 4106, 4107, 755 and 756: in-ROW access via Forest Lane**
- **Structures 4105 and 757: in-ROW access via Stuart Drive**
- **Structures 4104 and 758: in-ROW access via Beechwood Drive (Map Sheet 3)**

Road Crossings

- **East Street**
- **Stuart Drive**

Existing Right-of-Way Width

- **160 feet**

ABUTTERS TO PROJECT RIGHT-OF-WAY

LINE LIST NUMBER	OWNER NAME (NOW OR FORMERLY)	PARCEL ADDRESS (SOUTHINGTON, CT)
206-126	TOWN OF SOUTHINGTON	186 STEEPLE CHASE DR
206-123	BLOCHER FAMILY REALTY INC	921 MERIDEN AVE
206-130	PAUL L & DIANE U ALBRYCHT	152 STUART DR
206-129	MICHAEL & CHARITY CLEARY	124 STUART DR
206-133	RAYMOND J F VISELLE	111 SOUTH PLAINS RD
206-134	JAMES M JENDREJCAK	101 SOUTH PLAINS RD
206-135	JOSEPH J T & JUNE M LAGUEUX	91 SOUTH PLAINS RD
206-136	ANDREW DESANTI	81 SOUTH PLAINS RD
206-137	PAUL J BORSE	60 FOREST LN
206-139	DALE & CHRISTIE BOUCHER	70 FOREST LN
206-138	PIERRE C & MARYBETH QUINN	73 SOUTH PLAINS RD
206-141	JUSTIN ROSSITTO	80 FOREST LN
206-140	WILLIAM J RAUDSI JR	63 SOUTH PLAINS RD
206-143	JAMES & STACI PRATT	90 FOREST LN
206-142	JEAN W GALKA	57 SOUTH PLAINS RD
206-144	JESSICA SPRAGUE TRUSTEE	100 FOREST LN
206-145	PETER M & CHRISTINE J MCGURGAN	47 SOUTH PLAINS RD
206-146	PETER M & CHRISTINE J MCGURGAN	43 SOUTH PLAINS RD
206-147	PETER M & CHRISTINE J MCGURGAN	41 SOUTH PLAINS RD
206-148	WILLIAM C & MARRYANN T VETRE	110 FOREST LN
206-149	PETER M & CHRISTINE J MCGURGAN	31 SOUTH PLAINS RD
206-150	ROBERT & SHARON ALIA	100 EAST ST
206-153	ROBERT C & SHARON M ALIA	108 EAST ST
206-152	ROBERT C & SHARON M ALIA	118 EAST ST

Abutters Line List Data Date: January 27, 2023.

Southington

APA Well 7, 8

APA Well 2

Map Sheet 1

Map Sheet 3

LLN# 206-157

LLN# 206-126

LLN# 206-123

LLN# 206-121

LLN# 206-122

LLN# 206-129

LLN# 206-130

LLN# 206-132

LLN# 206-133

LLN# 206-134

LLN# 206-135

LLN# 206-136

LLN# 206-137

LLN# 206-138

LLN# 206-139

LLN# 206-140

LLN# 206-141

LLN# 206-142

LLN# 206-143

LLN# 206-144

LLN# 206-145

LLN# 206-146

LLN# 206-147

LLN# 206-148

LLN# 206-149

LLN# 206-150

LLN# 206-152

LLN# 206-153

LLN# 206-161

EAST STREET

S PLAINS ROAD

STUART DRIVE

FOREST LANE

MERIDEN AVENUE

PORRIELLO DRIVE

GREENWOOD DRIVE

NDDB Area

Misery Brook

TEMPORARY ACCESS ROAD
WETLAND IMPACT OF: 647 SQ. FT.

SPAN WATERCOURSE

TEMPORARY WORK PAD
WETLAND IMPACT OF: 6,276 SQ. FT.

TEMPORARY WORK PAD
WETLAND IMPACT OF: 4,649 SQ. FT.

TEMPORARY WORK PAD
WETLAND IMPACT OF: 8,173 SQ. FT.

1355/1610 Line

1208 Line

1690 Line

W03

W04

W05A

S1

S2

4104

4105

4106

4107

4107A

4108

3701

3702

3703

3704

3705

754

755

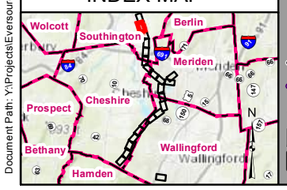
756

757

758

120

INDEX MAP



Proposed Structure Str Label
Existing Structure Str Label
Existing Structure to be Removed
Existing Access
Off-ROW Access Pending Rights
Overhead Eversource Line
Existing Gravel
Stone Work Pad

Temporary Construction Matting
Str Label Delineated Perennial Watercourse
Delineated Intermittent Watercourse
Field Delineated Wetland Boundary Outline
Field Delineated Wetland
Open Water
FEMA 100-Year Flood Zone

FEMA Floodway
Aquifer Protection Area
Rare Species Habitat (Dec. 2022)
Parcel Boundary
Municipal Boundary
5' Contour Line

N

0 50 100 200 Feet

EVERSOURCE ENERGY

Southington Substation to Cook Hill Junction Rebuild Project

Southington,Connecticut

Map Sheet 2 of 23

4/14/2023

AECOM

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MAPSHEET 3 of 23
Southington Substation to Cook Hill Junction Rebuild Project
1355/1690 Line: Replacement Structures 4103 to 4100
1690 Line: Replacement Structures 759 to 762
Southington, Connecticut

AREA DESCRIPTION

Existing Land Use

- **Mixed Residential**
- **Undeveloped / Forest**
- **Other – Southington Country Club**

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use

- **Maintained electric transmission facilities corridor**
- **Residential/lawn**
- **Wetlands and associated watercourses**
- **Vernal pool**
- **Roadway, Beechwood Drive southeast of Structures 4103 & 759**
- **Roadway, Meriden Avenue (State Route 120) south of Structures 4102 & 760**
- **Roadway, Savage Street south of Structures 4400 & 762**

Right-of-Way Vegetation

Scrub-shrub

- **Herbaceous**
- **Palustrine emergent (PEM) wetland**
- **Palustrine scrub-shrub (PSS) wetland**
- **Palustrine forested (PFO) wetland**
- **Lawn/landscaping**
- **Barren/unvegetated**
- **Paved – asphalt/concrete**

Water Resources

- **Wetland W05A, W05B, W06, W07, W08A**
- **Wetland cover types – PSS, PFO, PEM**
- **Watercourse S3 (Unnamed Tributary to Misery Brook)**
- **Vernal pool VP01 (Associated with W06)**

Wetland and Watercourse Crossings

- **Wetland 05A– Temporary construction matting near Structures 4103 and 759**
- **Wetland 05B – No work pads or access road crossings**
- **Wetland 06 – Temporary construction matting near Structures 4102 and 760**
- **Wetland 07 –Temporary construction matting near Structures 4101 & 4100 and Structures 761 & 762**
- **Wetland 08A – Temporary construction matting near Structures 4099 to 4098 and 763 to 764 (Mapsheet 4)**
- **Watercourse S3 – Temporary construction matting work pads and access road crossings near Savage Street**
- **Vernal Pool 01 – Temporary construction matting in 100-foot vernal pool envelope near Structure 4102, no work within vernal pool depression**

Access

- **Structures 4103 and 759: in-ROW access via Beechwood Drive**
- **Structures 4102 to 4101 and 760 to 761: in-ROW access via Meriden Avenue**
- **Structures 4100 and 762: in-ROW access via Savage Street**

Road Crossings

- **Beechwood Drive**
- **Meriden Ave**
- **Savage Street**

Existing Right-of-Way Width

- **160 feet**

ABUTTERS TO PROJECT RIGHT-OF-WAY

LINE LIST NUMBER	OWNER NAME (NOW OR FORMERLY)	PARCEL ADDRESS (SOUTHINGTON, CT)
206-116	DANIEL J & JUDITH E LOGAN	1043 MERIDEN AVE
206-115	RICHARD A DESCHAINE & DEBORAH A LASKOWSKI	1053 MERIDEN AVE
206-113	DANA BAILLARGEON & MARTINE GERVAIS	1063 MERIDEN AVE
206-110	JANESSA & DANIEL ALLEN	1084 MERIDEN AVE
206-108	TOWN OF SOUTHINGTON	1090 MERIDEN AVE
206-109	RITA MASSERMAN	1098 MERIDEN AVE
206-107	RONALD D & ANTOINETTE M OAKES JR	1112 MERIDEN AVE
206-111	RYAN M & REBECCA L EARNHEART	1119 MERIDEN AVE
206-106	ROBERT D CRINITI	1124 MERIDEN AVE
206-105	JOSE M & JUDYTH RIVERA	1144 MERIDEN AVE
206-102	SOUTHINGTON COUNTRY CLUB INC	150 SAVAGE ST #REAR
206-118	GEORGE F COPELAND	20 GLENN DR
206-176	AMANDA JACOBS	30 BEECHWOOD DR
206-117	BRUCE W & ROBYN L IVERSON	30 GLENN DR
206-122	DAVID MALONEY	31 BEECHWOOD DR
206-114	38 GLENN DRIVE LLC	38 GLENN DR
206-098	SYLVIA ORR	438 SAVAGE ST
206-104	SOUTHINGTON COUNTRY CLUB INC	445 SAVAGE ST
206-186	THE CONNECTICUT LIGHT & POWER CO	448 SAVAGE ST
206-101	THE CONNECTICUT LIGHT & POWER CO	455 SAVAGE ST
206-103	GEORGIA Y & WAYNE R KURTH	469 SAVAGE ST
206-112	RICHARD J & KERIANNE A FALENCKI	56 GLENN DR
206-120	BARRY M & PATRICIA A WEICHSEL	60 BEECHWOOD DR
206-121	STANLEY J & MARIE D SEPIOL	61 BEECHWOOD DR
206-123	BLOCHER FAMILY REALTY INC	921 MERIDEN AVE

Abutters Line List Data Date: January 27, 2023.

Southington

SAVAGE STREET

GLENN DRIVE

BEECHWOOD DRIVE

MERIDEN AVENUE

120

LLN# 206-123

LLN# 206-121

LLN# 206-118

LLN# 206-120

LLN# 206-114

LLN# 206-112

LLN# 206-111

LLN# 206-117

LLN# 206-113

LLN# 206-115

LLN# 206-176

LLN# 206-122

LLN# 206-116

LLN# 206-110

LLN# 206-109

LLN# 206-107

LLN# 206-106

LLN# 206-105

LLN# 206-104

LLN# 206-104

LLN# 206-103

LLN# 206-108

LLN# 206-102

LLN# 206-101

LLN# 206-186

LLN# 206-098

W05A

W05B

W06

W07

W08A

4102

VP01

4102A

4103

3700

3699

760

759

4101

4101

3698

761

761

4100

4100

3697

762

762

S3

TEMPORARY ACCESS ROAD
WETLAND IMPACT OF: 3,578 SQ. FT.

TEMPORARY WORK PAD
WETLAND IMPACT OF: 11,339 SQ. FT.

TEMPORARY WORK PAD
WETLAND IMPACT OF: 8,173 SQ. FT.

TEMPORARY WORK PAD
WETLAND IMPACT OF: 27,804 SQ. FT.

TEMPORARY WORK PAD
WETLAND IMPACT OF: 8,559 SQ. FT.

TEMPORARY WORK PAD
WETLAND IMPACT OF: 20,854 SQ. FT.

TEMPORARY WORK PAD
WETLAND IMPACT OF: 4,639 SQ. FT.

1355/1610 Line

1208 Line

1690 Line

SPAN STREAM

APA Well 2

Unnamed Tributary to Misery Brook

SCENIC DRIVE

SHWEKY LANE

ZWICKS FARM ROAD

FARM ROAD

PARKVIEW DRIVE

Map Sheet12

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INDEX MAP

- Proposed Structure (Str Label)
- Existing Structure (Str Label)
- Existing Structure to be Removed
- Existing Access
- Overhead Eversource Line
- Existing Gravel
- Stone Work Pad
- Temporary Construction Matting
- Delineated Perennial Watercourse
- Delineated Intermittent Watercourse
- Field Delineated Wetland Boundary Outline
- Field Delineated Wetland
- Open Water
- FEMA 100-Year Flood Zone
- Aquifer Pretection Area
- Parcel Boundary
- Eversource Owned Property
- Municipal Boundary
- 5' Contour Line
- Culvert

N

0 50 100 200 Feet

EVERSOURCE ENERGY

Southington Substation to Cook Hill Junction Rebuild Project

Southington,Connecticut

Map Sheet 3 of 23

4/14/2023

AECOM

MAPSHEET 4 of 23
Southington Substation to Cook Hill Junction Rebuild Project
1355/1610 Line: Replacement Structures 4099 to 4096
1690 Line: Replacement Structures 763 to 766
Southington, Connecticut

AREA DESCRIPTION

Existing Land Use

- **Mixed Residential**
- **Undeveloped / Forest**
- **Other – Southington Country Club**
- **Natural Diversity Database Area**

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use

- **Maintained electric transmission facilities corridor**
- **Residential/lawn**
- **Wetlands and associated watercourses**
- **Roadway, Savage Street north of Structures 4099 and 763**
- **Roadway, Scarano Road south of Structures 4097-1 and 765**
- **Roadway, Meriden-Waterbury Turnpike (State Route 322) south of Structures 4096 and 766**

Right-of-Way Vegetation

- **Scrub-shrub**
- **Herbaceous**
- **Palustrine emergent (PEM) wetland**
- **Palustrine scrub-shrub (PSS) wetland**
- **Palustrine forested (PFO) wetland**
- **Lawn/landscaping**
- **Barren/unvegetated**
- **Paved – asphalt/concrete**

Water Resources

- **Wetland W08A, W08B, W09, W10**
- **Wetland cover types – PEM, PSS, PFO**
- **Watercourse S3 (Unnamed Tributary to Misery Brook)**
- **Watercourse S4 (Unnamed Tributary to S5)**
- **Watercourse S5 (Unnamed Tributary to S3)**

Wetland and Watercourse Crossings

- **Wetland 08A – Temporary construction matting near Structures 4099 to 4098 and 763 to 764, including pull pad**
- **Wetland 08B – Temporary construction matting near Structure 4097-2**
- **Wetland 09 – Temporary construction matting near Structures 766 and 4096**
- **Wetland 10 – Temporary construction matting near Structures 4095 and 767 (Map Sheet 5)**
- **Watercourse S3 – Temporary construction matting work pads and access road crossings near Savage Street**
- **Watercourses S4, & S5 – No temporary or permanent work pads or access road crossings**

Access

- **Structures 4099 and 763: in-ROW access via Savage Street**
- **Structures 4097, 4098, 764 and 765: in-ROW access via Scarano Road**
- **Structures 4096 and 766: in-ROW access via Meriden-Waterbury Turnpike**

Road Crossings

- **Savage Street**
- **Scarano Road**
- **Meriden-Waterbury Turnpike**

Existing Right-of-Way Width

- **Varies: 160 feet – 175 feet**

ABUTTERS TO PROJECT RIGHT-OF-WAY

LINE LIST NUMBER	OWNER NAME (NOW OR FORMERLY)	PARCEL ADDRESS (SOUTHINGTON, CT)
206-067	TOWN OF SOUTHINGTON	434 MERIDEN WATERBURY TPKE
206-068	LEONTE A LANDINO & MARIANA CORZO	10 EVAN RD
206-069	ROSEMARY DUGEE	20 EVAN RD
206-070	LAURENCE W GREGG II	32 EVAN RD
206-071	DAVID J HUNT	42 EVAN RD
206-073	BRENDAN MAZZOCHI	50 EVAN RD
206-072	ADRIANA CONNELLAN	66 SCARANO RD
206-074	ANDRE J & KAREN L MSADOQUES	62 EVAN RD
206-075	MARCO S NEVES & LISA M BRAYFIELD	189 SHWEKY LN
206-076	CLIFFORD J & JOYCE A HEISLER	70 EVAN RD
206-077	DAVID J & NANCY S MASTRIANNI	175 SHWEKY LN
206-078	MARY ANN PULASKI	80 EVAN RD
206-079	JENNIFER DISHEREITS & IAN BEZRUTCZYK	163 SHWEKY LN
206-080	JOHN & KARI J REIMAN	92 EVAN RD
206-081	EGEREM & FEJZIJE HALIMI	151 SHWEKY LN
206-082	JAMES R & LESLEY ANNE DEANGELO JR	100 EVAN RD
206-083	CHESTER & ANN M FISCHER III	139 SHWEKY LN
206-084	KEVIN P & LISA N CONROY	108 EVAN RD
206-085	ANDREW D & YVALESSE NELSON JR	127 SHWEKY LN
206-086	KEVIN D SOBOLEWSKI	115 SHWEKY LN
206-087	MICHAEL E & CATHY JEAN ROGERS	103 SHWEKY LN
206-088	LAWRENCE D LISEO	89 SHWEKY LN
206-089	CAROLYN L MERCIER	77 SHWEKY LN
206-090	RONALD A & LYNN G DEPAOLO	63 SHWEKY LN
206-092	CHARLES M & ELIZABETH K SCALESSE	51 SHWEKY LN
206-094	MARY P CRINITI	39 SHWEKY LN
206-096	HOWARD M & JULIE A LEVINE	27 SHWEKY LN
206-098	SYLVIA ORR	438 SAVAGE ST
206-186	THE CONNECTICUT LIGHT & POWER CO	448 SAVAGE ST
206-101	THE CONNECTICUT LIGHT & POWER CO	455 SAVAGE ST
206-102	SOUTHINGTON COUNTRY CLUB INC	150 SAVAGE ST #REAR
206-194	PAMELA LEBEL	440 MERIDEN WATERBURY TPKE

Abutters Line List Data Date: January 27, 2023.

Southington

MERIDEN AVENUE

120

KINGSWOOD DRIVE

SAVAGE STREET

JEREMY WOODS DRIVE

JADE CIRCLE

EVAN ROAD

MERIDEN-WATERBURY TURNPIKE

Map Sheet 5

NDDB Area

SPAN STREAM

W08A

W08B

W07

W09

W10

1355/1610 Line

1690 Line

1208 Line

LLN# 206-102

LLN# 206-103

LLN# 206-104

LLN# 206-101

LLN# 206-186

LLN# 206-098

LLN# 206-096

LLN# 206-094

LLN# 206-092

LLN# 206-090

LLN# 206-089

LLN# 206-088

LLN# 206-087

LLN# 206-086

LLN# 206-085

LLN# 206-084

LLN# 206-083

LLN# 206-082

LLN# 206-081

LLN# 206-080

LLN# 206-079

LLN# 206-078

LLN# 206-077

LLN# 206-076

LLN# 206-075

LLN# 206-074

LLN# 206-073

LLN# 206-072

LLN# 206-071

LLN# 206-070

LLN# 206-069

LLN# 206-068

LLN# 206-067

LLN# 206-194

4099

4099A

4098

4097

4097-1

4097-2

4096

3696

3695

3694

3693

763

764

765

766

S3

S4

S5

TEMPORARY WORK PAD
WETLAND IMPACT OF: 22,183 SQ. FT.

TEMPORARY WORK PAD
WETLAND IMPACT OF: 7,655 SQ. FT.

TEMPORARY WORK PAD
WETLAND IMPACT OF: 12,405 SQ. FT.

TEMPORARY WORK PAD
WETLAND IMPACT OF: 2,779 SQ. FT.

TEMPORARY WORK PAD
WETLAND IMPACT OF: 4,639 SQ. FT.

TEMPORARY WORK PAD
WETLAND IMPACT OF: 3,980 SQ. FT.

TEMPORARY WORK PAD
WETLAND IMPACT OF: 7,004 SQ. FT.

TEMPORARY ACCESS
ROAD WETLAND
IMPACT OF: 306 SQ. FT.

SHWEKY LANE

SCARANO ROAD

MCKENZIE DRIVE

Unnamed Tributarty to Misery Brook

INDEX MAP

Wolcott
Southington
Berlin
Meriden
Prospect
Cheshire
Bethany
Wallingford
Hamden

Proposed Structure Str Label
Existing Structure Str Label Str Label
Existing Structure to be Removed
Existing Access
Off-ROW Access Pending Rights
Proposed Access
Overhead Eversource Line
Existing Gravel

Temporary Construction Matting
Delineated Perennial Watercourse
Delineated Intermittent Watercourse
Estimated Waterbody
Field Delineated Wetland Boundary Outline
Field Delineated Wetland
Open Water

FEMA 100-Year Flood Zone
Rare Species Habitat (Dec. 2022)
Parcel Boundary
Eversource Owned Property
Municipal Boundary
5' Contour Line
Culvert

0 50 100 200 Feet

EVERSOURCE ENERGY

Southington Substation to Cook Hill Junction Rebuild Project

Southington,Connecticut

Map Sheet 4 of 23

4/14/2023

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MAPSHEET 5 of 23
Southington Substation to Cook Hill Junction Rebuild Project
1208 Line: Replacement Structure 3690
1355/1610 Line: Replacement Structures 495 to 491
1690 Line: Replacement Structures 767 to 771
Southington, Connecticut

AREA DESCRIPTION

Existing Land Use

- **Mixed Residential**
- **Transportation Infrastructure – Interstate 691**
- **Natural Diversity Database Area**
- **Undeveloped / Forest**

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use

- **Maintained electric transmission facilities corridor**
- **Residential/lawn**
- **Roadway, Interstate 691 north of Structures 4092 & 770**
- **Roadway, Rahlene Drive north of Structure 4093-2**
- **Wetlands**

Right-of-Way Vegetation

- **Scrub-shrub**
- **Herbaceous**
- **Palustrine scrub-shrub (PSS) wetland**
- **Lawn/landscaping**
- **Barren/unvegetated**
- **Paved – asphalt/concrete**

Water Resources

- **Wetland W10, W11**
- **Wetland cover types – PSS**
- **Vernal pool VP02**

Wetland and Watercourse Crossings

- **Wetland 10 – Temporary construction matting near Structures 4095-1, 4905-2, and 767**
- **Wetland 11 – Temporary construction matting near Structures 4091 and 771**
- **Vernal Pool 02 – Temporary construction matting in 100-foot vernal pool envelope near Structure 767, no work within vernal pool depression**

Access

- **Structures 4095-2 to 4095-1 and 767: from in-ROW access via Meriden Waterbury Turnpike (State Route 322), as well as an off-ROW component (Rights Pending)**
- **Structures 4095-2 to 4093, 767 to 769, and 3690: from in-ROW access via Rahlene Drive**
- **Structures 4092 to 4091 and 770 to 771: from in-ROW access via E Johnson Avenue (Map Sheet 6)**

Road Crossings

- **Meriden-Waterbury Turnpike (State Route 322)**
- **Rahlene Drive**
- **Interstate 691**

Existing Right-of-Way Width

- **160 feet**

ABUTTERS TO PROJECT RIGHT-OF-WAY

LINE LIST NUMBER	OWNER NAME (NOW OR FORMERLY)	PARCEL ADDRESS (SOUTHINGTON, CT)
206-052	CHERYL J MORAN	92 SOUTHSHIRE DR
206-053	CHERYL J MORAN	144 SOUTHSHIRE DR #REAR
206-055	JOHN L SULLIVAN III & YULIN WANG	168 SOUTHSHIRE DR
206-056	CHRISTINE A BOUCHARD	170 SOUTHSHIRE DR
206-057	JEFFREY J & ROSEANN LEVESQUE	57 HONEY LN
206-059	ROBERT J & MARYANN R LAROCHE	111 RAHLENE DR
206-062	STANISLAW & ANDRZEJ BUKOWSKI	113 RAHLENE DR
206-063	LYUDMYLA & IHOR VORONCHAK	157 RAHLENE DR
206-066	JAMES A BERG JR	114 RAHLENE DR
206-065	EDWARD STEVENS	154 RAHLENE DR
206-067	TOWN OF SOUTHINGTON	434 MERIDEN WATERBURY TPKE
206-058	JOSE M & MONIKA GONCALVES	43 HONEY LN
206-061	JEFFREY A & ALISON WIGHT	23 HONEY LN
206-064	TIMOTHY S & DEBORAH J TORELLI	120 RAHLENE DR
206-194	PAMELA LEBEL	440 MERIDEN WATERBURY TPKE

Abutters Line List Data Date: January 27, 2023.

Southington

MASTHAY CIRCLE

MERIDEN-WATERBURY TURNPIKE

Map Sheet 4

322

NDDB Area

RAHLENE DRIVE

Map Sheet 6

691

691

LLN# 206-064

LLN# 206-059

LLN# 206-062

LLN# 206-053

LLN# 206-068

LLN# 206-067

LLN# 206-066

LLN# 206-052

LLN# 206-056

LLN# 206-055

LLN# 206-065

LLN# 206-063

LLN# 206-061

LLN# 206-058

LLN# 206-194

LLN# 206-057

4095-2

4095-1

4095

4094

4094

4093-2

4093

4093-1

4093-1A

3690

4092

4092

4092A

4091

W11

3688

3689

771

770

769

3691

768

3692

767

W10

VP02

1208 Line

1690 Line

1355/1610 Line

TEMPORARY ACCESS ROAD WETLAND IMPACT OF: 306 SQ. FT.

TEMPORARY WORK PAD WETLAND IMPACT OF: 8,396 SQ. FT.

TEMPORARY WORKPAD WETLAND IMPACT OF: 2,887 SQ. FT.

TEMPORARY WORK PAD WETLAND IMPACT OF: 3,899 SQ. FT.

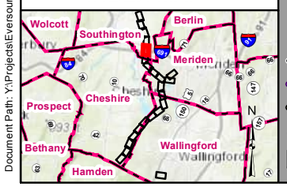
TEMPORARY WORK PAD WETLAND IMPACT OF: 4,506 SQ. FT.

APA North Cheshire

SOUTHSHIRE DRIVE

S BOROUGH ROAD

INDEX MAP



- Proposed Structure (Str Label)
- Existing Structure (Str Label) (Str Label)
- Existing Structure to be Removed
- Existing Access
- Off-ROW Access Pending Rights
- Proposed Access
- Overhead Eversource Line
- Existing Gravel
- Stone Work Pad
- Temporary Construction Matting
- Field Delineated Wetland Boundary Outline
- Field Delineated Wetland
- Aquifer Pretection Area
- Rare Species Habitat (Dec. 2022)
- Parcel Boundary
- Municipal Boundary
- 5' Contour Line

N

0 50 100 200 Feet

EVERSOURCE ENERGY

Southington Substation to Cook Hill Junction Rebuild Project

Southington,Connecticut

Map Sheet 5 of 23

4/14/2023

AECOM

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MAPSHEET 6 of 23
Southington Substation to Cook Hill Junction Rebuild Project
1355/1610 Line: Replacement Structures 491 to 487
1690 Line: Replacement Structures 771 to 775
Southington, Connecticut & Cheshire, Connecticut

AREA DESCRIPTION

Existing Land Use

- **Mixed Residential**
- **Undeveloped / Forest**
- **Recreational /Open Space: Cheshire Land Trust Property & Trail (Ives Farm; Blue Trail)**
- **Natural Diversity Database Area**

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use

- **Maintained electric transmission facilities corridor**
- **Residential/lawn**
- **Roadway, East Johnson Avenue north of Structures 4089 & 773**
- **Wetlands and associated watercourses**

Right-of-Way Vegetation

- **Scrub-shrub**
- **Herbaceous**
- **Palustrine forested (PFO) wetland**
- **Palustrine scrub-shrub (PSS) wetland**
- **Lawn/landscaping**
- **Barren/unvegetated**
- **Paved – asphalt/concrete**

Water Resources

- **Wetland W11, W12, W13**
- **Wetland cover types – PFO, PSS**
- **Watercourse S6 (Unnamed Tributary to S7)**
- **Watercourse S7 (Unnamed Tributary to Quinnipiac River)**
- **Watercourse S8 (Unnamed Tributary to S7)**

Wetland and Watercourse Crossings

- **Wetland 11 – Temporary construction matting near Structures 4091 and 771**
- **Watercourse S6 – Temporary construction matting in between Structures 4091 and 4090**
- **Watercourse S7 – Stream crossing improvements and gravel removal along access road crossing**
- **Watercourse S8 – No temporary or permanent work pads or access road crossings**
- **Wetland 12 – No temporary or permanent work pads or access road crossings**
- **Wetland 13 – Temporary construction matting near Structure 775**

Access

- **Structures 4091 through 4089 and 771 through 773: from in-ROW access via East Johnson Avenue**
- **Structures 4088 through 4087 and 774 through 775: via Finch Avenue (MapSheet 7)**

Road Crossings

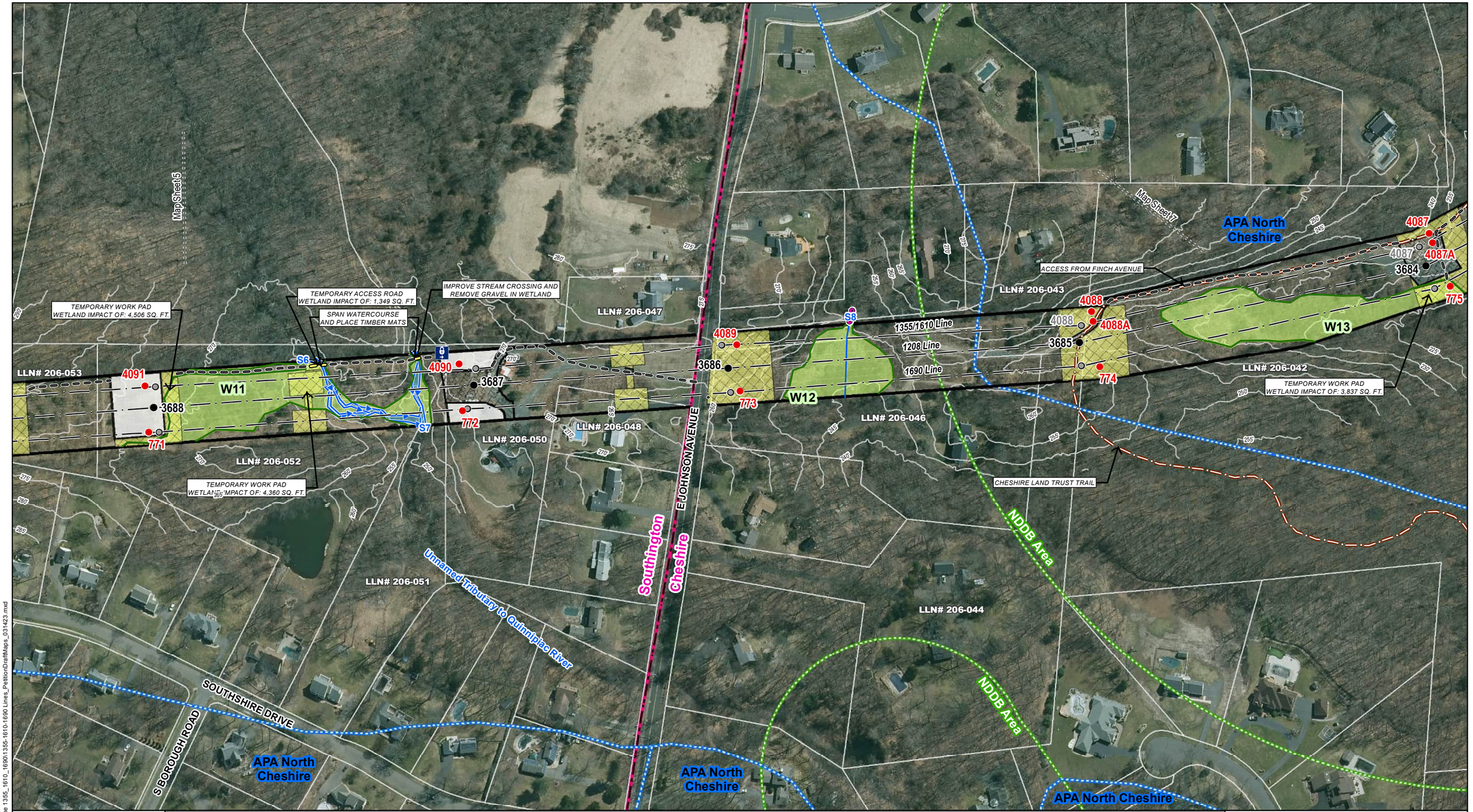
- **East Johnson Avenue**

Existing Right-of-Way Width

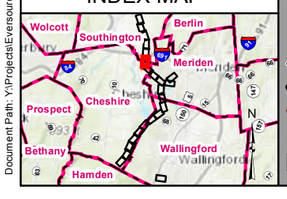
- **Varies: 160 feet – 200 feet**

ABUTTERS TO PROJECT RIGHT-OF-WAY			
LINE LIST NUMBER	**OWNER NAME (NOW OR FORMERLY)**	**PARCEL ADDRESS (SOUTHINGTON, CT)**	**PARCEL ADDRESS (CHESHIRE, CT)**
206-042	CHESHIRE LAND TRUST INC		E JOHNSON AVE
206-044	MEGHAN HARTE	-	805 E JOHNSON AVE
206-046	HUGH O FORBES	-	885 E JOHNSON AVE
206-043	YVONNE D PETRIN	-	905 E JOHNSON AVE
206-047	REBECCA H FEDE	900 JOHNSON AVE	-
206-050	GEORGE ZAKRETA	870 JOHNSON AVE	-
206-048	RICHARD & SUSAN L/U HANSEN	860 JOHNSON AVE	-
206-052	CHERYL J MORAN	92 SOUTHSHIRE DR	-
206-053	CHERYL J MORAN	144 SOUTHSHIRE DR #REAR	
206-051	RICHARD J & TERESA R PAGANO	76 SOUTHSHIRE DR	-

Abutters Line List Data Date: January 27, 2023.



INDEX MAP



- Proposed Structure (Str Label)
- Existing Structure (Str Label)
- Existing Structure to be Removed
- Existing Access
- Proposed Access
- HikingTrail
- Overhead Eversource Line
- Existing Gravel
- Stone Work Pad
- Temporary Construction Matting
- Delineated Perennial Watercourse
- Estimated Waterbody
- Field Delineated Wetland Boundary Outline
- Field Delineated Wetland
- Open Water
- Aquifer Pretection Area
- Rare Species Habitat (Dec. 2022)
- Parcel Boundary
- Municipal Boundary
- 5' Contour Line
- Culvert

Feet
0 50 100 200

EVERSOURCE ENERGY

Southington Substation to Cook Hill Junction Rebuild Project

Southington and Cheshire,Connecticut

Map Sheet 6 of 23

4/14/2023

AECOM

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MAPSHEET 7 of 23
Southington Substation to Cook Hill Junction Rebuild Project
1355/1610 Line: Replacement Structures 4087 to 4084
1690 Line: Replacement Structures 775 to 778
1208 Line: Replacement Structure 3681
Cheshire and Meriden, Connecticut

AREA DESCRIPTION

Existing Land Use

- **Mixed Residential**
- **Commercial**
- **Undeveloped / Forest**
- **Natural Diversity Database Area**
- **Recreational /Open Space: Cheshire Land Trust Property & Trail (Ives Farm; Blue Trail)**

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use

- **Maintained electric transmission facilities corridor**
- **Residential/lawn**
- **Wetlands and associated watercourses**
- **Roadway, Finch Avenue northeast of Structure 4084 and 778**
- **Other – Franciscan Mental Health & Senior Care Facility parking**
- **Other – Cheshire Land Trust Property & Trail (Ives Farm; Blue Trail)**

Right-of-Way Vegetation

- **Scrub-shrub**
- **Herbaceous**
- **Palustrine forested (PFO) wetland**
- **Palustrine scrub-shrub (PSS) wetland**
- **Palustrine emergent (PEM) wetland**
- **Lawn/landscaping**
- **Barren/unvegetated**
- **Paved – asphalt/concrete**

Water Resources

- **Wetlands – W13, W14, W15, W16, W17, W18**
- **Wetland cover types – PSS, PFO, PEM**
- **Watercourse S9 (Unnamed Tributary to Quinnipiac River)**
- **Watercourse S10 (Unnamed Tributary to S11 & Quinnipiac River)**
- **Watercourse S11 (Unnamed Tributary to Quinnipiac River)**

Wetland and Watercourse Crossings

- **Wetland 13 – Temporary construction matting near Structure 775**
- **Wetland 14 and Watercourse S9 – Temporary access road crossing / stream span**
- **Wetland 15 through 18 – No temporary or permanent work pads or access road crossings**
- **Watercourses S9, S10, & S11 – No temporary or permanent work pads or access roads crossings**

Access

- **Structures 3681, 4087 through 4084, and 775 through 778: from off-ROW access (rights secured) via Finch Avenue**

Road Crossings

- **Finch Avenue**

Existing Right-of-Way Width

- **Varies: 160 feet – 200 feet**

ABUTTERS TO PROJECT RIGHT-OF-WAY

LINE LIST NUMBER	OWNER NAME (NOW OR FORMERLY)	PARCEL ADDRESS (CHESHIRE, CT)
206-035	STEVEN J FISETTE & ROBIN J MENDEZ	781 ALLEN AVENUE
206-037	SUSAN T CLARE TRUSTEE	801 ALLEN AVE
206-039	ADVOCATE COMMUNITY INC & TRUSTEE FOR FRANCISCAN LIFE CENTER	FINCH AVE
206-041	JOHN J HILZINGER & KRISTA H OSTUNO TRUSTEE	1568 ALLEN CT
206-040	ERIC & NICOLE J MARTONE	19 SUFFIELD CT
206-042	CHESHIRE LAND TRUST INC	E JOHNSON AVE

Abutters Line List Data Date: January 27, 2023.

LLN# 206-043

Map Sheet 6

SUFFIELD COURT

Meriden
Cheshire

Map Sheet 8

BEVERLY DRIVE

FINCH AVENUE

LLN# 206-035

LLN# 206-037

4087

4087

W13

3684

4087A

775

SPAN STREAM

APA North
Cheshire

W14

W15

S9

TEMPORARY WORK PAD
WETLAND IMPACT OF: 3,837 SQ. FT.

LLN# 206-042

4086

W16

4086

3683

4086A

776

1208 Line

1355/1610 Line

1690 Line

LLN# 206-040

NDDB Area

4085

4085

4085A

3682

W17

S10

777

4084

3681

778

W18

4083

3680

S11

ALLEN AVENUE

LLN# 206-039

LLN# 206-041

LLN# 206-036

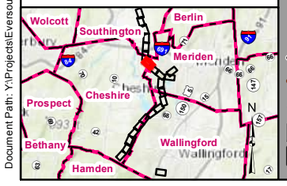
LLN# 206-034

CHESHIRE LAND TRUST TRAIL

N POND ROAD

Unnamed Tributary to Quinnipiac River

INDEX MAP



- Proposed Structure (Str Label)
- Existing Structure (Str Label)
- Existing Structure to be Removed
- Existing Access
- HikingTrail
- Overhead Eversource Line
- Existing Gravel
- Stone Work Pad
- Temporary Construction Matting
- Delineated Perennial Watercourse (Str Label)
- Field Delineated Wetland Boundary Outline
- Field Delineated Wetland
- Open Water
- Aquifer Pretection Area
- Rare Species Habitat (Dec. 2022)
- Parcel Boundary
- Municipal Boundary
- 5' Contour Line
- Culvert

N

0 50 100 200 Feet

EVERSOURCE ENERGY

Southington Substation to Cook Hill Junction Rebuild Project

Cheshire and Meriden,Connecticut

Map Sheet 7 of 23

4/14/2023

AECOM

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MAPSHEET 8 of 23
Southington Substation to Cook Hill Junction Rebuild Project
1355/1610 Line: Replacement Structures 4083 to 4080
1690 Line: Replacement Structures 779 to 782
1208 Line: Replacement Structure 3679-1
Cheshire and Meriden, Connecticut

AREA DESCRIPTION

Existing Land Use

- **Mixed Residential**
- **Commercial**
- **Undeveloped / Forest**
- **Natural Diversity Database Area**

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use

- **Maintained electric transmission facilities corridor**
- **Residential/lawn**
- **Roadway, Finch Avenue west of Structure 4083**
- **Roadway, Allen Avenue north of Structure 779**
- **Roadway, Old Gate Road east of Structure 4081**
- **Wetlands and associated watercourses**

Right-of-Way Vegetation

Scrub-shrub

- **Herbaceous**
- **Palustrine emergent (PEM) wetland**
- **Palustrine scrub-shrub (PSS) wetland**
- **Lawn/landscaping**
- **Barren/unvegetated**
- **Paved – asphalt/concrete**

Water Resources

- **Wetlands – W18, W19, W20, W21A, 21B.**
- **Wetland cover types – PSS, PEM**
- **Watercourse S11 (Unnamed Tributary to Quinnipiac River)**

Wetland and Watercourse Crossings

- **Wetland 18, 19 21A and 21B – No temporary or permanent work pads or access road crossings**
- **Wetland 20 – Temporary construction matting near Structure 780**
- **Watercourse S11 – No temporary or permanent work pads or access roads crossings**

Access

- **Structures 4083, 3679-1, and 779, Span-Guy Pole & D5 through D7: from in-ROW access via Allen Avenue**
- **Structures 4082 through 4081, 780 through 781 and D8 through D13: from in-ROW access via Old Gate Road**
- **Structures 4080 and 782 : from off-ROW access (rights secured) via Edgemark Acres (Map Sheet 9)**

Road Crossings

- **Finch Avenue**
- **Allen Avenue**
- **Old Gate Road**

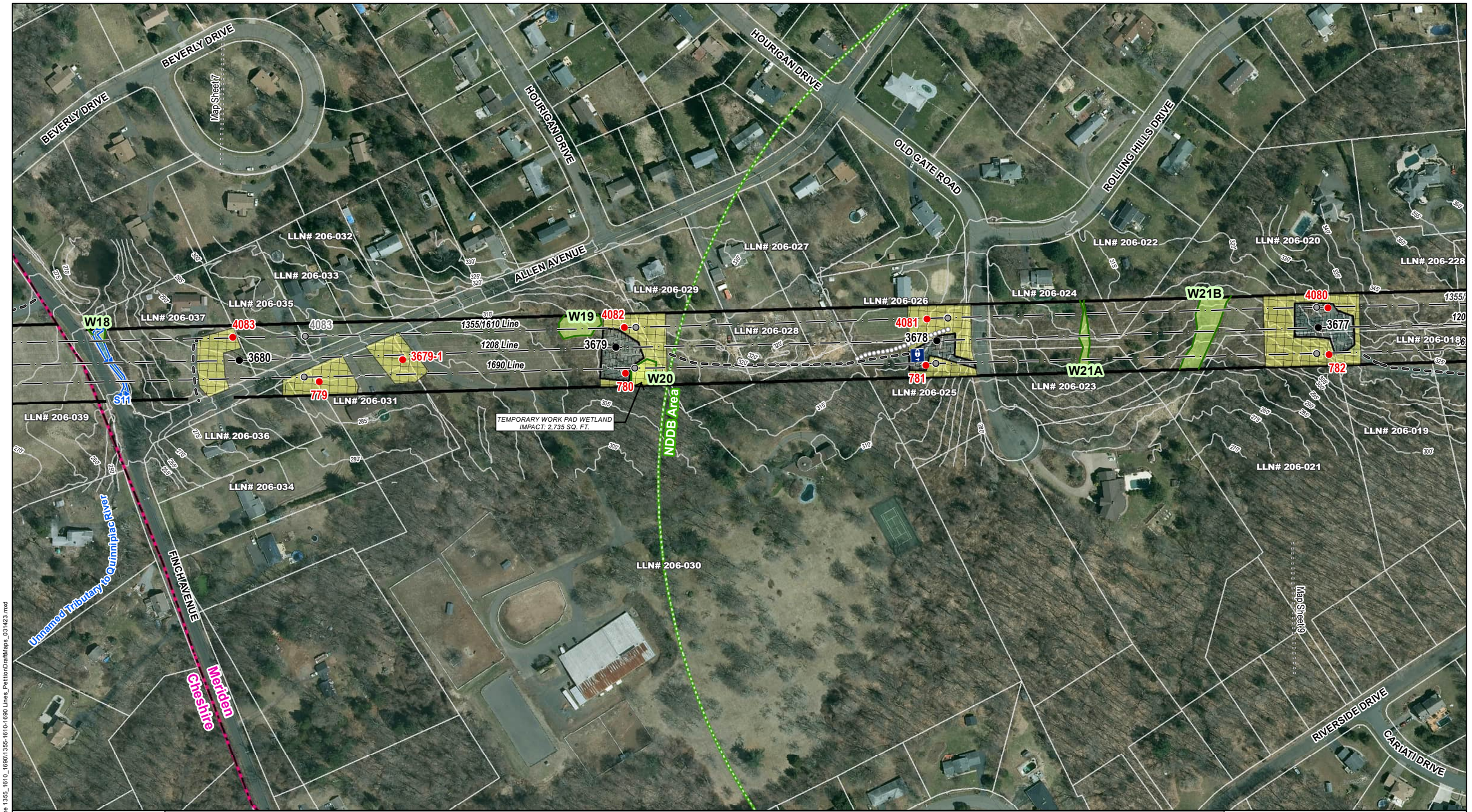
Existing Right-of-Way Width

- **160 feet**

ABUTTERS TO PROJECT RIGHT-OF-WAY

LINE LIST NUMBER	OWNER NAME (NOW OR FORMERLY)	PARCEL ADDRESS (VERNON, CT)
206-018	GENNARO MARTORELLI TRUSTEE	282 RIVERSIDE DRIVE
206-019	GENNARO MARTORELLI TRUSTEE	280 RIVERSIDE DRIVE
206-021	OTTAVIA FOR ALL INC	238 RIVERSIDE DRIVE
206-020	GOLAM M I CHOWDHURY & DR PRAJNA P SIDDIQUI	167 EDGEMARK ACRES
206-022	SHADDEL JAMES & LAUREN ANN SIMPSON	118 ROLLING HILLS DR
206-023	GENNARO MARTORELLI TRUSTEE	74 OLD GATE RD
206-024	SHERIFF ODONKOR	138 ROLLING HILLS DR
206-025	GENNARO MARTORELLI TRUSTEE	69 OLD GATE RD
206-026	JAMES A DORSEY SR	49 OLD GATE RD
206-027	HAROLD G & LILLIAN JANDREAU	672 ALLEN AVE
206-028	PETER J & CHERIE A JANDREAU	680 ALLEN AVE
206-029	BONNIE L RABE	730 ALLEN AVE
206-031	ROBERTA J STANFORD	804 ALLEN AVE
206-034	SUSAN A KILLIAN	354 FINCH AVE
206-036	DONALD A ADDUCI	806 ALLEN AVE
206-032	DANIEL P NICHOLS	761 ALLEN AVE
206-033	CHRISTIAN J ACEVEDO	771 ALLEN AVE
206-035	STEVEN J FISETTE & ROBIN J MENDEZ	781 ALLEN AVE
206-037	SUSAN T CLARE TRUSTEE	801 ALLEN AVE
206-228	JEFFEY T & KRISTINA M HARRISON	175 EDGEMARK ACRES
206-030	LOUIS B ARATA	750 ALLEN AVENUE

Abutters Line List Data Date: January 27, 2023.



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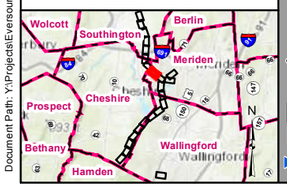
INDEX MAP



- Proposed Structure (Str Label)
- Existing Structure (Str Label)
- Existing Structure to be Removed
- Existing Access
- Overhead Eversource Line
- Existing Gravel
- Temporary Construction Matting
- Delineated Perennial Watercourse
- Field Delineated Wetland Boundary Outline
- Field Delineated Wetland
- Open Water
- Rare Species Habitat (Dec. 2022)
- Parcel Boundary
- Municipal Boundary
- 5' Contour Line
- Stonewall

N

0 50 100 200 Feet

EVERSOURCE ENERGY

Southington Substation to Cook Hill Junction Rebuild Project

Cheshire and Meriden,Connecticut

Map Sheet 8 of 23

4/14/2023

AECOM

MAPSHEET 9 of 23
Southington Substation to Cook Hill Junction Rebuild Project
1355/1610 Line: Replacement Structures 480 to 476
1355/1690 Line: Replacement Structures 2515
1690 Line: Replacement Structures 782 to 784
1208 Line: Replacement Structure 3672
Lucchini Junction: Replacement Structures 2514 & UG Riser 1 to UG Riser 2
Meriden, Connecticut

AREA DESCRIPTION

Existing Land Use

- **Mixed Residential**
- **Undeveloped / Forest**
- **Natural Diversity Database Area**

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use

- **Maintained electric transmission facilities corridor including Lucchini Junction**
- **Residential/lawn**
- **Roadway, Edgemark Acres northwest of Structure 4079**
- **Wetlands and associated watercourses**

Right-of-Way Vegetation

- **Scrub-shrub**
- **Herbaceous**
- **Palustrine forested (PFO) wetland**
- **Palustrine scrub-shrub (PSS) wetland**
- **Palustrine emergent (PEM) wetland**
- **Lawn/landscaping**
- **Barren/unvegetated**
- **Paved – asphalt/concrete**

Water Resources

- **Wetland W22, W25, W26, W27, W28, W29.**
- **Wetland cover types – PSS, PFO, PEM**
- **Watercourse S12 (Unnamed Tributary to Quinnipiac River)**

Wetland and Watercourse Crossings

- **Wetland 22 – Temporary construction matting near UG Riser STR #2 and east of Structure 2515**
- **Wetland 25 – Temporary construction matting at Structure 4076**
- **Wetland 26, 27, & 28 – No temporary or permanent work pads or access roads crossings**
- **Wetland 29 – Temporary construction matting near Structure 4075**
- **Watercourse S12 – temporary construction matting east of Structure 2515**

Access

- **Structures 4080, 782 and D14 through D16: from off-ROW access (rights secured) via Edgemark Acres**
- **Structures 4079 through 4076, 783 through 784, UG Riser Structure 1 & 2, Structures 2514 through 2515, Structure 3672– from in-ROW access via Edgemark Acres.**

Road Crossings

- **Edgemark Acres**

Existing Right-of-Way Width

- **Varies: 160 feet – 175 feet**
- **Beyond Project area: 50 feet**

ABUTTERS TO PROJECT RIGHT-OF-WAY

LINE LIST NUMBER	OWNER NAME (NOW OR FORMERLY)	PARCEL ADDRESS (MERIDEN, CT)
206-010	DANIEL J & KIM P LUCA	270 EDGEMARK ACRES
206-009	GENNARO MARTORELLI TRUSTEE	51 JACLYN TERR
206-011	GENNARO MARTORELLI TRUSTEE	41 JACLYN TERR
206-013	GENNARO MARTORELLI TRUSTEE	29 JACLYN TERR
206-012	JUSTIN W & KELLY L TRELLA	268 EDGEMARK ACRES
206-014	GENNARO MARTORELLI TRUSTEE	178 EDGEMARK ACRES
206-016	GENNARO MARTORELLI TRUSTEE	217 EDGEMARK ACRES
206-018	GENNARO MARTORELLI TRUSTEE	282 RIVERSIDE DR
206-019	GENNARO MARTORELLI TRUSTEE	280 RIVERSIDE DR
206-021	GENNARO MARTORELLI TRUSTEE	238 RIVERSIDE DR
206-020	GOLAM M I & SIDDIQUI CHOWDHURY & DR PRAJNA P & CHOWDURY PROTTOYA DS	167 EDGEMARK ACRES
206-015	MARTORELLI REALTY COMPANY	200 EDGEMARK ACRES
206-228	JEFFEY T & KRISTINA M HARRISON	175 EDGEMARK ACRES
206-001	CYNROSE LIMITED PARTNERSHIP	525 OREGON RD
206-002	TINA WORBOYS	375 BROWNSTONE RDG
206-237	KEITH BUSH & DORA MOORE & SV	387 BROWNSTONE RDG
206-238	CHANTU & SUE RINTHARAMY	407 BROWNSTONE RDG
206-239	ROGER L KEMP	421 BROWNSTONE RDG
206-003	CYNROSE LIMITED PARTNERSHIP	356 EDGEMARK ACRES
206-006	RICHARD VIDRO SR SV & JULIAN R VIDRO SV	354 EDGEMARK ACRES
206-005	DONALD CARIATI C/O GENARO MARTORELLI	19 ANDREA HGTS
206-007	DONALD CARIATI C/O GENARO MARTORELLI	25 ANDREA HGTS
232-475	DONALD CARIATI C/O GENARO MARTORELLI	20 ANDREA HGTS
232-476	DONALD CARIATI C/O GENARO MARTORELLI	31 ANDREA HGTS
232-478	DONALD CARIATI C/O GENARO MARTORELLI	1 ANDREA HGTS
232-477	GIOVANNI & VINCENZA P ZACCHIA	286 EDGEMARK ACRES
206-008	380 ALLEN AVENUE LLC	380 ALLEN AVENUE
209B-458	BROWNSTONE ESTATES LLC C/O ANITA CARIATI	260 CARIATI BLVD
209B-459	BROWNSTONE ESTATES LLC C/O ANITA CARIATI	252 CARIATI BLVD
209B-460	BROWNSTONE ESTATES LLC C/O ANITA CARIATI	384 EDGEMARK ACRES

Abutters Line List Data Date: January 27, 2023.

Meriden

ORCHARD HILL ROAD

JACLYN TERRACE

EDGEMARK ACRES

RIVERSIDE DRIVE

CARIATI DRIVE

BROWNSTONE RIDGE

Map Sheet 10

Map Sheet 12

Map Sheet 8

LLN# 206-240
LLN# 206-239
LLN# 206-238
LLN# 206-237
LLN# 206-002
LLN# 206-008
LLN# 206-009
LLN# 206-007
LLN# 206-020
LLN# 206-228
LLN# 206-014
LLN# 206-013
LLN# 206-011
LLN# 206-015
LLN# 206-012
LLN# 206-010
LLN# 206-016
LLN# 206-018
LLN# 206-019
LLN# 206-021
LLN# 232-477
LLN# 232-476
LLN# 206-005
LLN# 232-475
LLN# 232-478
LLN# 206-006
LLN# 206-003
LLN# 206-001
LLN# 209B-460
LLN# 209B-459
LLN# 209B-458
LLN# 209B-458

NDDB Area
NDDB Area

Lucchini Junction

1355/1610 Line
1208 Line
1690 Line

4080
4079
4078
4077
4077-L
4077-R
3677
3676
3675
3674
782
783
784
785
2514
2515
2515-L
2515-R
2516
3673
4076
3672

W22
W25
W26
W27
W28
W29
S12

SPAN STREAM
SPAN STREAM

TEMPORARY ACCESS ROAD
WETLAND IMPACT OF: 1,868 SQ. FT.

TEMPORARY WORK PAD
WETLAND IMPACT OF: 3,859 SQ. FT.

APPROXIMATE 1690 LINE
UG CONFIGURATION

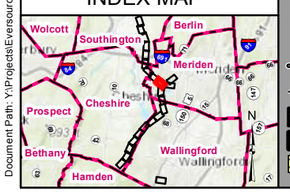
TEMPORARY ACCESS ROAD
WETLAND IMPACT OF: 663 SQ. FT.

TEMPORARY WORK PAD
WETLAND IMPACT OF: 999 SQ. FT.

TEMPORARY ACCESS ROAD
WETLAND IMPACT OF: 1,473 SQ. FT.

TEMPORARY WORK PAD
WETLAND IMPACT OF: 3,741 SQ. FT.

INDEX MAP



- Proposed Structure (Str Label)
- Existing Structure (Str Label)
- Existing Structure to be Removed
- Existing Access
- Overhead Eversource Line
- Existing Gravel
- Stone Work Pad
- Temporary Construction Matting
- Delineated Perennial Watercourse
- Field Delineated Wetland Boundary Outline
- Field Delineated Wetland
- Open Water
- Rare Species Habitat (Dec. 2022)
- Parcel Boundary
- Municipal Boundary
- 5' Contour Line
- Culvert
- Underground 115 Kv Line Encased in Concrete

N

Feet
0 50 100 200

EVERSOURCE ENERGY

Southington Substation to Cook Hill Junction Rebuild Project

Meriden,Connecticut

Map Sheet 9 of 23

4/14/2023

AECOM

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MAPSHEET 10 of 23
Southington Substation to Cook Hill Junction Rebuild Project
1355/1690 Line: Replacement Structures 2516 to 2519
Meriden, Connecticut

AREA DESCRIPTION

Existing Land Use

- **Mixed Residential**
- **Commercial**
- **Recreational/Open Space (Legion Field)**
- **Recreational/Open Space (Meriden Linear Trail)**
- **Harbor Brook**
- **Sodom Brook**
- **Hanover Pond**
- **Undeveloped / Forest**
- **Natural Diversity Database Area**
- **Other – HC Wilcox Technical High School**

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use

- **Maintained electric transmission facilities corridor**
- **Eversource Electrical Substation – Hanover 12F Substation**
- **Wetlands and associated watercourses**
- **Roadway, Oregon Road west of Structure 2517**
- **Roadway, Chase Street east of Hanover 12F Substation**
- **High School parking lot/fields in vicinity of Structure 2517**

Right-of-Way Vegetation

- **Scrub-shrub**
- **Herbaceous**
- **Palustrine scrub-shrub (PSS) wetland**
- **Palustrine emergent (PEM) wetland**
- **Lawn/landscaping**
- **Barren/unvegetated**
- **Paved – asphalt/concrete**

Water Resources

- **Wetland W23, W24, CTW1**
- **Wetland cover types – PSS, PEM**
- **Watercourse 13 (Sodom Brook)**
- **Watercourse 14 (Harbor Brook)**

Wetland and Watercourse Crossings

- **Wetland 23, 24, & CTW1 – No temporary or permanent work pads or access road crossings**
- **Watercourses 13 & 14 – No temporary or permanent work pads or access roads crossings**

Access

- **Structure 2516: from in-ROW access via Edgemark Acres (Map Sheet 9)**
- **Structures 2517: from in-ROW access via Oregon Road**
- **Structure 2518A: from off-ROW access (rights secured) via Cole Avenue (Map Sheet 11)**
- **Hanover Substation Structures from 1355 & 1690 Line – from existing access in Hanover Substation via Chase Street & Hanover Road**

Road Crossings

- **Oregon Road**
- **Chase Street**

Existing Right-of-Way Width

- **160 feet**

ABUTTERS TO PROJECT RIGHT-OF-WAY

LINE LIST NUMBER	OWNER NAME (NOW OR FORMERLY)	PARCEL ADDRESS (MERIDEN, CT)
206-001	CYNROSE LIMITED PARTNERSHIP	525 OREGON RD
206-243	ALLEN & ANDREA P ATKINS	379 OREGON RD
206-239	ROGER L KEMP	421 BROWNSTONE RIDGE
206-240	SEAN DEAN & LUCY DIAZ & SV	435 BROWNSTONE RIDGE
206-242	MOSHE ZLICHA	305 OREGON RD
206-244	STATE OF CONNECTICUT & WILCOX TECHNICAL SCHOOL	275 OREGON RD
206-250	CITY OF MERIDEN QUINNIPIAC TRAIL	480 OREGON RD
206-247	THE CONNECTICUT LIGHT & POWER CO	35 CHASE ST
206-245	CITY OF MERIDEN	739 HANNOVER RD REAR
206-250	CITY OF MERIDEN DOSSIN BEACH	480 OREGON RD

Abutters Line List Data Date: January 27, 2023.

Meriden

Map Sheet 11

APA
Lincoln-Platt

Brook

Sodom

GLEN PLACE

GLEN HILLS ROAD

BROWNSTONE RIDGE

LLN# 206-240

LLN# 206-242

LLN# 206-239

LLN# 206-244

LLN# 206-245

LLN# 206-247

LLN# 206-001

LLN# 206-243

LLN# 206-250

ACCESS FROM COE AVENUE

ACCESS FROM EDGEMARK ACRES.

1355/1690 Line

PROPOSED NEW GATE TO BE COORDINATED WITH PROPERTY OWNER.

PARKING LOT EXPANSION COMPLETED BY LANDOWNER. DO NOT BLOCK EXISTING ACCESS PATH (HANDICAP ACCESSIBLE EVACUATION ROUTE). SEE NRCM FOR DETAIL.

SURROUND PAD WITH TEMPORARY FENCING FOR PUBLIC SAFETY.

SURROUND PAD WITH TEMPORARY FENCING FOR PUBLIC SAFETY.

MERIDEN LINEAR TRAIL

W23

W24

S13

S14

2516

2517

2518

2519-L

2519-R

2519A

2519B

CTW1

Harbor Brook

NDDB Area

NDDB Area

Hanover 12F Substation

OREGON ROAD

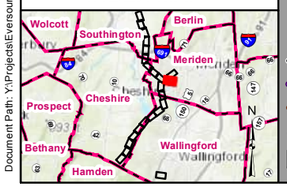
CHASE STREET

HANOVER ROAD

HARRINGTON STREET

Hanover Pond

INDEX MAP



- Proposed Structure (Str Label)
- Existing Structure (Str Label)
- Existing Structure to be Removed
- Existing Access
- Off-ROW Access Pending Rights
- HikingTrail
- Overhead Eversource Line
- Existing Gravel
- Temporary Construction Matting
- Delineated Perennial Watercourse (Str Label)
- Field Delineated Wetland Boundary Outline
- CT-State Only Wetland Area
- Field Delineated Wetland
- Open Water
- FEMA 100-Year Flood Zone
- FEMA Floodway
- Aquifer Pretection Area
- Rare Species Habitat (Dec. 2022)
- Parcel Boundary
- Eversource Owned Property
- Municipal Boundary
- 5' Contour Line

N

0 50 100 200 Feet

EVERSOURCE ENERGY

Southington Substation to Cook Hill Junction Rebuild Project

Meriden,Connecticut

Map Sheet 10 of 23

4/14/2023

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MAPSHEET 11 of 23
Southington Substation to Cook Hill Junction Rebuild Project
Meriden, Connecticut

AREA DESCRIPTION

Existing Land Use
- **Mixed Residential**
- **Commercial**
- **Undeveloped / Forest**
- **Natural Diversity Database Area**
- **Sodom Brook**
- **Recreational/Open Space (Meriden Linear Trail)**
- **Other – Orville H. Platt High School**

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use
- **No Project ROW in Mapsheet**

Water Resources
- **Watercourse S13 (Sodom Brook)**

Wetland and Watercourse Crossings
- **No Wetland or Watercourse Crossings**

Right-of-Way Vegetation
- **No Project ROW in Mapsheet**

Access
- **Structure 2518A (Map Sheet 10): Off-ROW access (rights secured) via Cole Avenue**

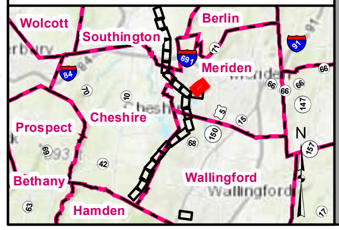
Road Crossings
- **Cole Avenue**

Existing Right-of-Way Width
- **No Project ROW in Mapsheet**

ABUTTERS TO PROJECT RIGHT-OF-WAY		
LINE LIST NUMBER	**OWNER NAME (NOW OR FORMERLY)**	**PARCEL ADDRESS (CHESHIRE, CT)**
206-244	STATE OF CONNECTICUT & WILCOX TECHNICAL SCHOOL	275 OREGON RD
206-250	CITY OF MERIDEN QUINNIPIAC TRAIL	480 OREGON RD
206-245	CITY OF MERIDEN	739 HANNOVER RD REAR

Abutters Line List Data Date: January 27, 2023.

INDEX MAP



Existing Access
HikingTrail
FEMA 100-Year Flood Zone
Aquifer Pretection Area
Rare Species Habitat (Dec. 2022)
Parcel Boundary
Municipal Boundary
5' Contour Line

0 50 100 200 Feet

EVERSOURCE ENERGY

Southington Substation to Cook Hill Junction Rebuild Project

Meriden,Connecticut

Map Sheet 11 of 23

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MAPSHEET 12 of 23
Southington Substation to Cook Hill Junction Rebuild Project
1355/1610 Line: Replacement Structures 4075 to 4071
1208 Line: Replacement Structures 3672 to 3670.
Meriden, Connecticut

AREA DESCRIPTION

Existing Land Use

- **Mixed Residential**
- **Undeveloped / Forest**
- **Quinnipiac River**
- **Natural Diversity Database Area**
- **Recreational /Open Space (Hiking Trail – Quinnipiac River Greenway)**

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use

- **Maintained electric transmission facilities corridor**
- **Residential/lawn**
- **Roadway, River Road north of Structure 4074**
- **Roadway, Dana Lane south of Structure 3670**
- **Roadway, Main Street north of Structure 4072**
- **Wetlands and associated watercourses**

Right-of-Way Vegetation

- **Scrub-shrub**
- **Herbaceous**
- **Palustrine forested (PFO) wetland**
- **Palustrine scrub-shrub (PSS) wetland**
- **Lawn/landscaping**
- **Barren/unvegetated**
- **Paved – asphalt/concrete**

Water Resources

- **Wetland W27, W28, W29, W30, W32, CTW2**
- **Wetland cover types – PSS, PFO**
- **Watercourse S12 (Unnamed Tributary to Quinnipiac River)**
- **Watercourse S15 (Quinnipiac River)**
- **Watercourse S16 (Unnamed Tributary to Quinnipiac River)**
- **Watercourse S17 (Unnamed Tributary to Quinnipiac River)**

Wetland and Watercourse Crossings

- **Wetland W27 – No temporary or permanent work pads or access road crossings**
- **Wetlands W28 & W29 – Temporary construction matting near Structure 3672 and 4075.**
- **Wetlands W30, W32, & CTW2 – No temporary or permanent work pads or access road crossings.**
- **Watercourses S12, S15, S16, & S17 – No temporary or permanent work pads or access road crossings.**

Access

- **Structures 3672 and 4075: from in-ROW access via Edgemark Acres (Map Sheet 10))**
- **Structures 4074 to 4073 and 3671 to 3670: from in-ROW access via Dana Lane.**
- **Structures 4072 and 4071: from in-ROW access via Main Street.**

Road Crossings

- **Dana Lane**
- **Main Street**

Existing Right-of-Way Width

- **175 feet**

ABUTTERS TO PROJECT RIGHT-OF-WAY

LINE LIST NUMBER	OWNER NAME (NOW OR FORMERLY)	PARCEL ADDRESS (MERIDEN, CT)
206-001	CYNROSE LIMITED PARTNERSHIP	525 OREGON RD
209B-439	DIST LODGE CT NO 1 VASA ORDER OF AMERICA	358 MAIN ST
209B-440	AHMADIYYA MOVEMENT IN ISLAM INC USA C/O MR. ZAFFAR	410 MAIN ST
209B-441	JUSTIN & MARIA RODRIGUEZ	392 MAIN ST
209B-442	CITY OF MERIDEN	16 DANA LN
209B-443	ALICIA H MUELLER	387 MAIN ST
209B-444.01 through 209B-444.33	MULTI-OWNER COMPLEX (VILLAGE VIEW TERRACE)	6 VILLAGE VIEW
209B-445	CITY OF MERIDEN	19 DANA LN
209B-446	ISAAC ACEVES	39 DANA LN
209B-447	MARY J L/U & KEVIN P & MICHAEL P GRENIER & ANGELA WEBSSTER	67 DANA LN
209B-448	MELANIE L & WAYNE A RIVERA	75 DANA LN
209B-449	MARLENE E ASCARE	83 DANA LN
209B-450	PETER L CHILDS	91 DANA LN
209B-451	CRUZ HIRAM TORRES & MADELINE J LOPEZ	97 DANA LN
209B-452	HEATHER N WELLS	105 DANA LN
209B-453	CITY OF MERIDEN QUINNIPIAC PARK	201 RIVER RD
209B-456	CITY OF MERIDEN VACANT LAND	199 RIVERSIDE DR
209B-457	BROWNSTONE ESTATES LLC C/O ANITA CARIATI	259 CARIATI BLVD
209B-458	BROWNSTONE ESTATES LLC C/O ANITA CARIATI	260 CARIATI BLVD
209B-459	BROWNSTONE ESTATES LLC C/O ANITA CARIATI	252 CARIATI BLVD

Abutters Line List Data Date: January 27, 2023.

Meriden

LLN# 206-001

LLN# 206-250

LLN# 209B-444.01 through 444.33

LLN# 209B-439

LLN# 209B-441

LLN# 209B-443

LLN# 209B-443

LLN# 209B-453

LLN# 209B-445

LLN# 209B-452

LLN# 209B-451

LLN# 209B-450

LLN# 209B-449

LLN# 209B-448

LLN# 209B-447

LLN# 209B-446

LLN# 209B-442

LLN# 209B-440

LLN# 209B-458

LLN# 209B-458

LLN# 209B-459

LLN# 209B-459

LLN# 209B-457

LLN# 209B-457

LLN# 209B-456

OREGON ROAD

QUINNIPIAC RIVER GREENWAY

TEMPORARY WORK PAD
WETLAND IMPACT OF: 3,741 SQ. FT.

W27

W29

W28

W30

W32

S12

S15

S16

S17

CTW2

1355/1610 Line

1208 Line

4075

3672

4074

3671

4073

3670

4072

3669

4071

3668

VILLAGE VIEW TERRACE

MAIN STREET

RIVER ROAD

DANA LANE

HIGH MEADOW LANE

FARM HILL ROAD

JEPSON LANE

LYNN DRIVE

DOUGLAS DRIVE

CHARLES STREET

CARIATI DRIVE

NDDB Area

NDDB Area

APA
Evansville

Quinnipiac River

Map Sheet 13

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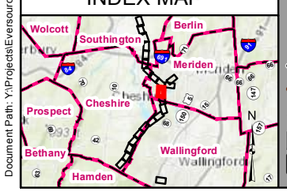
INDEX MAP



Proposed Structure Str Label
Existing Structure Str Label
Existing Structure to be Removed Str Label
Existing Access
HikingTrail
Overhead Eversource Line
Existing Gravel
Stone Work Pad

Temporary Construction Matting
Delineated Perennial Watercourse
Delineated Intermittent Watercourse
Field Delineated Wetland Boundary Outline
CT-State Only Wetland Area
Field Delineated Wetland
Open Water

FEMA Floodway
Aquifer Pretection Area
Rare Species Habitat (Dec. 2022)
Parcel Boundary
Municipal Boundary
5' Contour Line
Culvert

0 50 100 200 Feet

EVERSOURCE ENERGY

Southington Substation to Cook Hill Junction Rebuild Project

Meriden,Connecticut

Map Sheet 12 of 23

4/14/2023

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MAPSHEET 13 of 23
Southington Substation to Cook Hill Junction Rebuild Project
1355/1610 Line: Replacement Structures 4071 to 4068 and New Midspan 4069-1
1208 Line: New Midspan Structure 3666-1
Meriden and Wallingford, Connecticut

AREA DESCRIPTION

Existing Land Use

- **Mixed Residential**
- **Undeveloped / Forest**
- **Commercial**
- **Natural Diversity Database Area**

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use

- **Maintained electric transmission facilities corridor**
- **Residential/lawn**
- **Roadway, Dee Avenue north of Structures 4069-1 & 3666-1**
- **Roadway, New Cheshire Road north of Structure 4069**
- **Wetlands and Watercourses**

Right-of-Way Vegetation

- **Scrub-shrub**
- **Herbaceous**
- **Forested**
- **Palustrine forested (PFO) wetland**
- **Palustrine scrub-shrub (PSS) wetland**
- **Lawn/landscaping**
- **Barren/unvegetated**
- **Paved – asphalt/concrete**

Water Resources

- **Wetland W33, W34, W35, W36**
- **Wetland cover types – PSS, PFO**
- **Watercourse S17 (Unnamed Tributary to Quinnipiac River)**
- **Watercourse S18 (Unnamed Tributary to Minute Pond)**
- **Watercourse S19 (Unnamed Tributary to S18)**
- **Watercourse S20 (Unnamed Tributary to S18)**
- **Watercourse S21 (Unnamed Tributary to S22)**
- **Watercourse S22 (Unnamed Tributary to S23)**
- **Watercourse S23 (Unnamed Tributary to S24)**

Wetland and Watercourse Crossings

- **Wetland 33 through 35 – No work pads or access road crossings**
- **Wetland 36 and Watercourse S23 – Temporary construction matting access between Structures 4068 and 4067**
- **Watercourses S17 through S22 – No work pads or access road crossings**

Access

- **Structures 4071 and 4070: from in-ROW access via Main Street (Map Sheet 12)**
- **Structures 4069 and 4068: from in-ROW access via New Cheshire Road**

Road Crossings

- **Dee Avenue**
- **New Cheshire Road**

Existing Right-of-Way Width

- **175 feet**
- **Beyond Project area: 40 – 105 feet**

ABUTTERS TO PROJECT RIGHT-OF-WAY

LINE LIST NUMBER	OWNER NAME (NOW OR FORMERLY)	PARCEL ADDRESS (MERIDEN, CT)	PARCEL ADDRESS (WALLINGFORD, CT)
209B-423	ROBERT J & JOAN T RANCOURT	-	190 NEW CHESHIRE RD
209B-424	JASON & MARLENE CHRISTOPHER	-	2 RAVEN LN
209B-430	AMY J MOFFO	149 NEW CHESHIRE RD	-
209B-431	SAUL & IRIS I CASTRO	104 DEE AVE	-
209B-432	THOMAS & APRIL & SV NEWVINE	135 DEE AVE	-
209B-433	KEVIN KEARNS	198 JEPSON LN	-
209B-434	CYNTHIA CONSTANTINOPLE	192 JEPSON LN	-
209B-435	WILLIAM L SIEGEL	184 JEPSON LN	-
209B-436	ELAINE RUSZCZYK	176 JEPSON LN	-
209B-437	PHILLIP J & VANESSA MAGRUDER	170 JEPSON LN	-
209B-438	JAMES DAVIS	160 JEPSON LN	-
209B-439	DIST LODGE CT NO 1 VASA ORDER OF AMERICA	358 MAIN ST	-
209B-663	DOMINIC W & ROBIN A MEROLA	167 NEW CHESHIRE RD	

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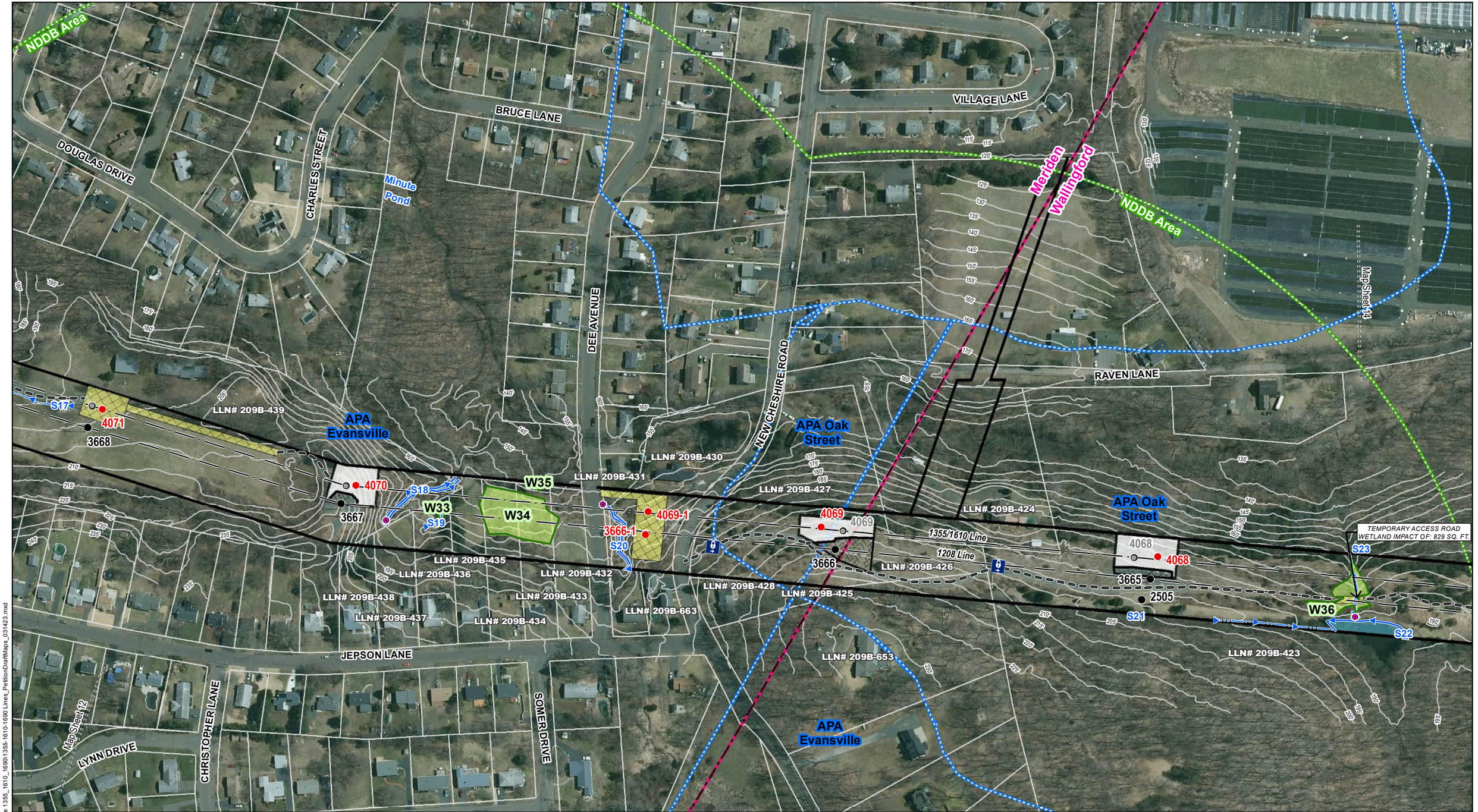
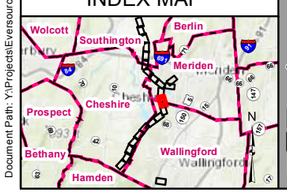


INDEX MAP



- Proposed Structure Str Label
- Existing Structure Str Label
- Existing Structure to be Removed Str Label
- Existing Access
- Overhead Eversource Line
- Existing Gravel
- Stone Work Pad
- Temporary Construction Matting
- Delineated Perennial Watercourse
- Delineated Intermittent Watercourse
- Field Delineated Wetland Boundary Outline
- Field Delineated Wetland
- Open Water
- Aquifer Pretection Area
- Rare Species Habitat (Dec. 2022)
- Parcel Boundary
- Municipal Boundary
- 5' Contour Line
- Culvert

0 50 100 200 Feet

EVERSOURCE ENERGY

Southington Substation to Cook Hill Junction Rebuild Project

Meriden and Wallingford,Connecticut

Map Sheet 13 of 23

4/14/2023

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MAPSHEET 14 of 23
Southington Substation to Cook Hill Junction Rebuild Project
1355/1610 Line: Replacement Structures 4067 to 4065, New Midspan 4066-1
1610 Line: Maintenance Structures 5270 to 5269
1208 Line: Replacement Structure 3664, New Midspan Structure 3663-1
Wallingford, Connecticut

AREA DESCRIPTION

Existing Land Use

- **Mixed Residential**
- **Commercial**
- **Undeveloped / Forested**
- **Natural Diversity Database Area**
- **Other – Meriden Markham Municipal Airport**

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use

- **Maintained electric transmission facilities corridor**
- **Residential/lawn**
- **Roadway, Chimney Hill Road northeast of Structure 5270**
- **Roadway, Chimney Sweep Road east of Schwab Junction**
- **Wetlands and associated watercourses**

Right-of-Way Vegetation

- **Scrub-shrub**
- **Herbaceous**
- **Forested**
- **Palustrine emergent (PEM) wetland**
- **Palustrine scrub-shrub (PSS) wetland**
- **Palustrine forested (PFO) wetland**
- **Lawn/landscaping**
- **Barren/unvegetated**
- **Paved – asphalt/concrete**

Water Resources

- **Wetland W36, W37, W38, W39, W40, W41, W42**
- **Wetland cover types: PSS, PFO, PEM**
- **Watercourse S22 (Unnamed Tributary to S23)**
- **Watercourse S23 (Unnamed Tributary to S24)**
- **Watercourse S24 (Unnamed Tributary to Unnamed Pond)**
- **Watercourse S25 (Unnamed Tributary to S24)**
- **Watercourse S26 (Unnamed Tributary to S27)**
- **Watercourse S27 (Unnamed Tributary to Unnamed Pond)**

Wetland and Watercourse Crossings

- **Wetland 37 – Temporary construction matting near Structures 3663-1 and 4066-1**
- **Wetlands 38 and 41 – No temporary or permanent work pads or access roads**
- **Wetland 39 – Temporary construction matting between Structures 4066 and 4065**
- **Wetland 40 and Watercourse S27 – Temporary construction matting near Structures 4065**
- **Wetland 42 – Temporary construction matting near Structure 5269**
- **Watercourse S22 through S26 – No temporary or permanent work pads or access roads crossings**

Access

- **Structures 4067 & 3664: from in-ROW access via New Cheshire Road (Map Sheet 13)**
- **Structures 4066, 4066-1 & 3663-1: from off-ROW access (existing rights) via Chimney Hill Road**
- **Structure 4065 : from in-ROW access via Chimney Hill Road / Schwab Junction**
- **Structure 5270: from in-ROW access via Chimney Hill Road**
- **Structure 5269: from in-ROW access via Highland Avenue (Map Sheet 15)**

Road Crossings

- **Chimney Hill Road**

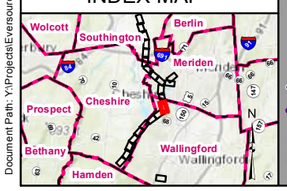
Existing Right-of-Way Width

- **Varies: 165 – 175 feet**
- **Beyond Project area: 125 feet**

ABUTTERS TO PROJECT RIGHT-OF-WAY		
LINE LIST NUMBER	**OWNER NAME (NOW OR FORMERLY)**	**PARCEL ADDRESS (WALLINGFORD, CT)**
202-001	MATTHEW T & BRIANNE M HALL	105 CHIMNEY HILL RD
202-003	DEBRA C & GEORGE M PICH	101 CHIMNEY HILL RD
202-004	STRATHMORE FARMS HOMEOWNERS ASSOC INC	83 CHIMNEY HILL RD
209A-521	CONNECTICUT LIGHT AND POWER CO & PROPERTY TAX DEPT	110 CHIMNEY HILL RD
209B-418	STEVEN M & TRACY READ	122 CHIMNEY HILL RD
209B-419	FRANCIS S & TINA G OLSZEWSKI SR	126 CHIMNEY HILL RD
209B-693	THOMAS M & ARLENE SUCCI	130 CHIMNEY HILL RD
209B-692	TINA & FRANCIS S OLSZEWSKI JR	132 CHIMNEY HILL RD
209B-421.002	SHEREE A & DONALD K COTRONA	134 CHIMNEY HILL RD
209B-422	CHARLES M & JANET G & AARON CRAIG	136 CHIMNEY HILL RD
209B-423	ROBERT J & MARYANN R & JOAN T RANCOURT	190 NEW CHESHIRE RD
209A-516	JAMES & AMY DOBSON	26 CHIMNEY SWEEP RD

Abutters Line List Data Date: January 27, 2023.

INDEX MAP



- Proposed Structure (Str Label)
- Existing Structure (Str Label)
- Existing Structure to be Maintained (Str Label)
- Existing Structure to be Removed (Str Label)
- Existing Access
- Off-ROW Access Pending Rights
- Overhead Eversource Line
- Existing Right-of-Way (ROW)
- Existing Gravel
- Stone Work Pad
- Temporary Construction Matting
- Delineated Perennial Watercourse
- Delineated Intermittent Watercourse
- Field Delineated Wetland Boundary Outline
- Field Delineated Wetland
- Open Water
- Aquifer Protection Area
- Rare Species Habitat (Dec. 2022)
- Parcel Boundary
- Eversource Owned Property
- Municipal Boundary
- 5' Contour Line
- Gate
- Culvert
- Stonewall

Feet
0 50 100 200

EVERSOURCE ENERGY

Southington Substation to Cook Hill Junction Rebuild Project

Wallingford,Connecticut

Map Sheet 14 of 23

4/14/2023

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Southington Substation to Cook Hill Junction Rebuild Project
1208 Line: Replacement Structures 4058-1 & 4058-2
1610 Line: Replacement Structure 5265
1610 Line: Maintenance Structures 5269 to 5266 & 5264 to 5263
Wallingford, Connecticut

AREA DESCRIPTION

Existing Land Use

- **Mixed Residential**
- **Undeveloped / Forest**

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use

- **Maintained electric transmission facilities corridor**
- **Residential/lawn**
- **Roadway, Highland Avenue south of Structure 4058-2**
- **Wetlands and one associated Vernal Pool**

Right-of-Way Vegetation

- **Scrub-shrub**
- **Herbaceous**
- **Forested**
- **Palustrine forested (PFO) wetland**
- **Palustrine scrub-shrub (PSS) wetland**
- **Lawn/landscaping**
- **Barren/unvegetated**
- **Paved – asphalt/concrete**

Water Resources

- **Wetland W42, W43**
- **Wetland cover types – PSS, PFO**
- **Vernal Pool VP03**

Wetland and Watercourse Crossings

- **Wetland 42 – Temporary construction matting near Structure 5269 and 5268**
- **Wetland 43 – Temporary construction matting near and between Structures 5265 and 5264**
- **Vernal Pool 03 – No temporary or permanent work pads or access roads crossings**

Access

- **Structures 5269 through 5264 and 4058-1 through 4058-2: from in-ROW access via Highland Avenue**
- **Structure 5263: from existing access via Church Street (Map Sheet 16)**

Road Crossings

- **Highland Avenue**

Existing Right-of-Way Width

- **165 feet**

ABUTTERS TO PROJECT RIGHT-OF-WAY		
LINE LIST NUMBER	**OWNER NAME (NOW OR FORMERLY)**	**PARCEL ADDRESS (WALLINGFORD, CT)**
202-001	MATTHEW T & BRIANNE M HALL	105 CHIMNEY HILL RD
202-003	DEBRA C & GEORGE M PICH	101 CHIMNEY HILL RD
202-004	STRATHMORE FARMS HOMEOWNERS ASSOC INC	83 CHIMNEY HILL RD
202-009	ROBERTA & WILLIAM L PIEDMOND IV	300 HIGHLAND AVE
202-014	STRATHMORE FARMS HOMEOWNERS ASSOC INC	305 HIGHLAND AVE
202-013	MICHAEL J & DEBRA FUSCO	307 HIGHLAND AVE
202-018	JEFFREY & JUDITH MAYS	9 CRYSTAL LN
202-016	ABO IRREVOCABLE FAMILY TRUST & STEPHEN ABO & ALLYSON L SALEK TRUSTEES	15 SHIRE DR
202-017	JAMES G COOKE	17 SHIRE DR
202-020	DONALD G RAINEY	347 HIGHLAND AVE
202-019	CHARLES & SHARON KENT III	16 SHIRE DR

Abutters Line List Data Date: January 27, 2023.

Wallingford

BUTTONWOOD CIRCLE

HAYLEDGE COURT

HIGHLAND AVENUE

SHIRE DRIVE

Map Sheet 16

Map Sheet 14

TEMPORARY WORK PAD
WETLAND IMPACT OF: 2,500 SQ. FT.

TEMPORARY WORK PAD
WETLAND IMPACT OF: 1,411 SQ. FT.

TEMPORARY ACCESS ROAD
WETLAND IMPACT OF: 7,743 SQ. FT.

TEMPORARY WORK PAD
WETLAND IMPACT OF: 13,918 SQ. FT.

TEMPORARY WORK PAD
WETLAND IMPACT OF: 2,500 SQ. FT.

TEMPORARY ACCESS ROAD
WETLAND IMPACT OF: 703 SQ. FT.

TEMPORARY ACCESS ROAD
WETLAND IMPACT OF: 1,419 SQ. FT.

LOW COMMUNICATIONS LINE WIRE

LLN# 202-003

LLN# 202-004

LLN# 202-001

LLN# 202-009

LLN# 202-013

LLN# 202-014

LLN# 202-016

LLN# 202-017

LLN# 202-018

LLN# 202-019

LLN# 202-020

LLN# 202-021

5269

5268

4059

5267

5266

4058

4058-2

4058-1

1610 Line

1208 Line

W42

W43

W44

5265

4057

5264

VP03

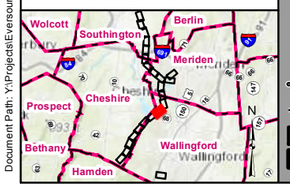
4056

5263

APA Oak
Street

Public Water
Supply Watershed
Broad Brook Reservoir

INDEX MAP



- Proposed Structure (Str Label)
- Existing Structure (Str Label)
- Existing Structure to be Maintained
- Existing Structure to be Removed (Str Label)
- Existing Access
- Overhead Eversource Line
- Existing Gravel
- Stone Work Pad
- Temporary Construction Matting
- Field Delineated Wetland Boundary Outline
- Field Delineated Wetland
- Public Water Supply Watershed
- Aquifer Pretection Area
- Parcel Boundary
- Municipal Boundary
- 5' Contour Line
- Low Communication Wires

N

0 50 100 200 Feet

EVERSOURCE ENERGY

Southington Substation to Cook Hill Junction Rebuild Project

Wallingford,Connecticut

Map Sheet 15 of 23

4/14/2023

AECOM

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MAPSHEET 16 of 23
Southington Substation to Cook Hill Junction Rebuild Project
1610 Line: Maintenance Structures 5263 to 5258
Wallingford and Cheshire, Connecticut

AREA DESCRIPTION

Existing Land Use

- **Mixed Residential**
- **Broad Brook Reservoir**
- **Undeveloped / Forest**
- **Natural Diversity Database Area**

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use

- **Maintained electric transmission facilities corridor**
- **Roadway, Church Street / Yalesville Road (State Route 68) north of Structure 5260**
- **Wetlands and associated Watercourses**

Right-of-Way Vegetation

- **Scrub-shrub**
- **Herbaceous**
- **Palustrine forested (PFO) wetland**
- **Palustrine scrub-shrub (PSS) wetland**
- **Lawn/landscaping**
- **Barren/unvegetated**
- **Paved – asphalt/concrete**

Water Resources

- **Wetland W44, W45, W46, W47, W48, W49, W50**
- **Wetland cover types – PSS, PFO**
- **Watercourse S28 (Unnamed Tributary to Broad Brook)**
- **Watercourse S29 (Unnamed Tributary to Broad Brook)**

Wetland and Watercourse Crossings

- **Wetland 44 – Temporary construction matting between Structure 5263 and 5262**
- **Wetlands 45 through 50 – No temporary or permanent work pads or access road crossings**
- **Watercourses S28 & S29 – No temporary or permanent work pads or access roads crossings**

Access

- **Structures 5263 through 5258: from in-ROW access via Church Street (State Route 68)**

Road Crossings

- **Church Street**

Existing Right-of-Way Width

- **165 feet**

ABUTTERS TO PROJECT RIGHT-OF-WAY

LINE LIST NUMBER	OWNER NAME (NOW OR FORMERLY)	PARCEL ADDRESS (WALLINGFORD, CT)	PARCEL ADDRESS (CHESHIRE,CT)
202-016	ABO IRREVOCABLE FAMILY TRUST	15 SHIRE DR	
202-017	JAMES G. COOKE	17 SHIRE DR	
202-020	DONALD G RAINEY	347 HIGHLAND AVE	
202-019	CHARLES & SHARON KENT III	16 SHIRE DR	
202-021	JAY & LISA BUNNELL	14 SHIRE DR	
202-018	JEFFREY & JUDITH MAYS	9 CRYSTAL LN	
202-024	CITY OF MERIDEN WATER DEPT	950 CHURCH ST	
202-026	CITY OF MERIDEN WATER DEPT	989 CHURCH ST	
202-028	CITY OF MERIDEN WATER DEPT		YALESVILLE RD

Abutters Line List Data Date: January 27, 2023.

Unnamed Tributary to Broad Brook

Map Sheet 15

Map Sheet 17

CHURCH STREET

NDDB Area

Public Water Supply Watershed Broad Brook Reservoir

LLN# 202-016

LLN# 202-016

LLN# 202-019

LLN# 202-021

LLN# 202-017

LLN# 202-018

LLN# 202-026

LLN# 202-024

LLN# 202-020

LLN# 202-028

TEMPORARY ACCESS ROAD
WETLAND IMPACT OF: 2,388 SQ. FT.

EXISTING FORD

W44

W45

W46

W47

W48

W49

W50

5263

4055

5262

4054

5261

4053

5260

4052

5259

5258

4051

1208 Line

1610 Line

S28

S29

68

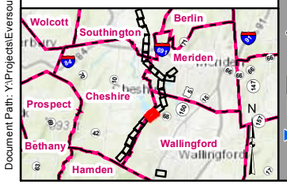
YALESVILLE ROAD

Wallingford

Cheshire

Broad Brook Reservoir

INDEX MAP



- Existing Structure (Str Label)
- Existing Structure to be Maintained (Str Label)
- Existing Access
- Overhead Eversource Line
- Existing Gravel
- Temporary Construction Matting
- Delineated Perennial Watercourse
- Field Delineated Wetland Boundary Outline
- Field Delineated Wetland
- Open Water
- FEMA 100-Year Flood Zone
- Public Water Supply Watershed
- Rare Species Habitat (Dec. 2022)
- Parcel Boundary
- Municipal Boundary
- 5' Contour Line
- Culvert

0 50 100 200 Feet

EVERSOURCE ENERGY

Southington Substation to Cook Hill Junction Rebuild Project

Wallingford and Cheshire,Connecticut

Map Sheet 16 of 23

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MAPSHEET 17 of 23
Southington Substation to Cook Hill Junction Rebuild Project
1610 Line: Maintenance Structures 5257 to 5253
Wallingford and Cheshire, Connecticut

AREA DESCRIPTION

Existing Land Use

- **Mixed Residential**
- **Undeveloped / Forest**
- **Broad Brook Reservoir**
- **Natural Diversity Database Area**

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use

- **Maintained electric transmission facilities corridor**
- **Wetlands, associated Watercourses and one Vernal Pool**

Right-of-Way Vegetation

- **Scrub-shrub**
- **Palustrine forested (PFO) wetland**
- **Palustrine scrub-shrub (PSS) wetland**
- **Palustrine emergent (PEM) wetland**
- **Barren/unvegetated**

Water Resources

- **Wetland W51, W52, W53, W54, W55, W56, W57, W58**
- **Wetland cover types – PSS, PFO, PEM**
- **Watercourse S30 (Unnamed Tributary to S32)**
- **Watercourse S31 (Unnamed Tributary to S32)**
- **Watercourse S32 (Unnamed Tributary to Broad Brook).**
- **Vernal Pool 04**

Wetland and Watercourse Crossings

- **Wetland 51 through 54 and 56 through 57– No temporary or permanent work pads or access road crossings**
- **Wetland 55 – Temporary construction matting near Structure 5256**
- **Wetland 58 and Vernal Pool 04 – Temporary construction matting near Structure 5255**
- **Watercourse S30 – No temporary or permanent work pads or access road crossings**
- **Watercourse S31 – Temporary construction matting on access road between Structures 4049 and 4048**
- **Watercourse S32 – Temporary construction matting on access road between Structures 5255 and 5254**
- **Vernal Pool 04 – Temporary construction matting in 100-foot vernal pool envelope near Structure 5255, no work within vernal pool depression**

Access

- **Structure 5257 through 5253: from in-ROW access via Church Street (Map Sheet 16) and/or from in-ROW access via Wallingford Road (Map Sheet 18)**

Road Crossings

- **None**

Existing Right-of-Way Width

- **165 feet**

ABUTTERS TO PROJECT RIGHT-OF-WAY

LINE LIST NUMBER	OWNER NAME (NOW OR FORMERLY)	PARCEL ADDRESS (WALLINGFORD, CT)	PARCEL ADDRESS (CHESHIRE)
202-026	CITY OF MERIDEN WATER DEPT	989 CHURCH ST	-
202-027	CORMIER CONSTRUCTION CORPORATION	25 SHARON DR	-
202-029	TOWN OF WALLINGFORD	SHARON DR (REAR)	-
202-030	CITY OF MERIDEN WATER DEPT	54 CALHOUN RD	-
202-028	CITY OF MERIDEN WATER DEPT		YALESVILLE RD
202-031	DENNIS B & ELIZABETH COLEMAN	WALLINGFORD RD	

Abutters Line List Data Date: January 27, 2023.

PIEPER DRIVE

SHARON DRIVE

Map Sheet 16

Map Sheet 18

LLN# 202-026

LLN# 202-027

LLN# 202-028

LLN# 202-029

LLN# 202-030

LLN# 202-031

Public Water
Supply Watershed
Broad Brook Reservoir

Wallingford
Cheshire

TEMPORARY WORK PAD
WETLAND IMPACT OF: 469 SQ. FT.

TEMPORARY WORK PAD
WETLAND IMPACT OF: 504 SQ. FT.

TEMPORARY ACCESS ROAD
WETLAND IMPACT OF: 604 SQ. FT.

TEMPORARY ACCESS ROAD
WETLAND IMPACT OF: 2,580 SQ. FT.

SPAN STREAM

1610 Line

1208 Line

5257
5256
5255
5254
5253
4050
4049
4048
4047

W51
W52
W53
W54
W55
W56
W57
W58

S30
S31
S32

VP04

NDDB Area

Unnamed Tributary to Broad Brook

Unnamed Tributa

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INDEX MAP

- Existing Structure (Str Label)
- Existing Structure to be Maintained (Str Label)
- Existing Access
- Overhead Eversource Line
- Existing Gravel
- Stone Work Pad
- Temporary Construction Matting
- Delineated Perennial Watercourse
- Delineated Intermittent Watercourse
- Field Delineated Wetland Boundary Outline
- Field Delineated Wetland
- Open Water
- FEMA 100-Year Flood Zone
- Public Water Supply Watershed
- Rare Species Habitat (Dec. 2022)
- Parcel Boundary
- Municipal Boundary
- 5' Contour Line
- Culvert

N

0 50 100 200 Feet

EVERSOURCE ENERGY

Southington Substation to Cook Hill Junction Rebuild Project

Wallingford and Cheshire,Connecticut

Map Sheet 17 of 23

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MAPSHEET 18 of 23
Southington Substation to Cook Hill Junction Rebuild Project
1208 Line: Replacement Structures 4045 & 4042
1610 Line: Maintenance Structures 5253 to 5247
Wallingford and Cheshire, Connecticut

AREA DESCRIPTION

Existing Land Use

- **Mixed Residential**
- **Commercial**
- **Undeveloped / Forest**

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use

- **Maintained electric transmission facilities corridor**
- **Roadway, Wallingford Road south of Structure 5248**
- **Roadway, Thorn Hollow Road east of Structure 4042**
- **Wetlands and associated Watercourses**

Right-of-Way Vegetation

- **Scrub-shrub**
- **Herbaceous**
- **Palustrine emergent (PEM) wetland**
- **Palustrine forested (PFO) wetland**
- **Palustrine scrub-shrub (PSS) wetland**
- **Barren/unvegetated**
- **Paved – asphalt/concrete**

Water Resources

- **Wetland W59, W60, W61, W62**
- **Wetland cover types – PEM, PSS, PFO**
- **Watercourse S33 (Unnamed Tributary to S35)**
- **Watercourse S34 (Unnamed Tributary to S35)**
- **Watercourse S35 (Unnamed Tributary to Broad Brook Reservoir)**
- **Vernal Pool VP05**

Wetland and Watercourse Crossings

- **Wetland 59 through 61 – No work pads or access road crossings**
- **Wetland 62 – Temporary construction matting at Structures 4042 and 5247**
- **Watercourse S35 – Temporary construction matting between Structures 4042 and 5247**
- **Vernal Pool 05 – No work pads or access road crossings in vernal pool envelope or depression**

Access

- **Structures 5253 through 5247, Structures 4042 and 4045: from in-ROW access via Wallingford Road.**

Road Crossings

- **Wallingford Road**
- **Thorn Hollow Road**

Existing Right-of-Way Width

- **165 feet**

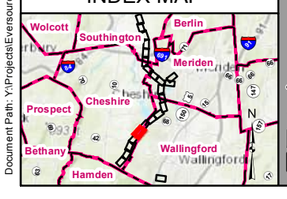
ABUTTERS TO PROJECT RIGHT-OF-WAY

LINE LIST NUMBER	OWNER NAME (NOW OR FORMERLY)	PARCEL ADDRESS (CHESHIRE, CT)	PARCEL ADDRESS (WALLINGFORD, CT)
202-028	CITY OF MERIDEN WATER DEPT		YALESVILLE RD
202-031	DENNIS B & ELIZABETH COLEMAN	WALLINGFORD RD	-
202-032	DENNIS B & ELIZABETH COLEMAN	WALLINGFORD RD	-
202-034	PAUL B JOHNSON & JESSICA COFFEY	1117 WALLINGFORD RD	-
202-037 Through 202-037.50	MULTI-OWNER COMPLEX (CHESHIRE CROSSING)	OFF WALLINGFORD RD	-
202-036	PAUL J HARRISON	WALLINGFORD RD	-
202-035	DAVID R & MARY E YAGER	1057 WALLINGFORD RD	-

Abutters Line List Data Date: January 27, 2023.

Wallingford
Cheshire
Unnamed Tributary to Broad Brook Reservoir
Public Water Supply Watershed Broad Brook Reservoir
LLN# 202-031
LLN# 202-032
LLN# 202-036
LLN# 202-034
LLN# 202-035
LLN# 202-037 through 202-037.050
LLN# 202-028
TEMPORARY WORK PAD WETLAND IMPACT OF: 11,282 SQ. FT.
TEMPORARY WORK PAD WETLAND IMPACT OF: 2,535 SQ. FT.
BRIDGE WATERCOURSE AS REQUIRED
THORN HOLLOW ROAD
WALLINGFORD ROAD
WYNDMERE COURT
Map Sheet 17
Map Sheet 19
W59
1610 Line
1208 Line
W60
W61
W62
S33
S34
S35
VP05
5248
5247
5253
5252
5251
5250
5249
4046
4045
4044
4043
4042
4041

INDEX MAP



- Proposed Structure (Str Label)
- Existing Structure (Str Label)
- Existing Structure to be Maintained
- Existing Structure to be Removed
- Existing Access
- Overhead Eversource Line
- Existing Gravel
- Stone Work Pad
- Temporary Construction Matting
- Delineated Perennial Watercourse
- Delineated Intermittent Watercourse
- Field Delineated Wetland Boundary Outline
- Field Delineated Wetland
- Open Water
- Public Water Supply Watershed
- Parcel Boundary
- Municipal Boundary
- 5' Contour Line
- Existing Pipeline (Approximate)

0 50 100 200 Feet

EVERSOURCE ENERGY

Southington Substation to Cook Hill Junction Rebuild Project

Wallingford and Cheshire,Connecticut

Map Sheet 18 of 23

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MAPSHEET 19 of 23
Southington Substation to Cook Hill Junction Rebuild Project
1208 Line: Replacement Structure 4037
1610 Line: Maintenance Structures 5247 to 5242
Cheshire, Connecticut

AREA DESCRIPTION

Existing Land Use

- **Mixed Residential**
- **Undeveloped / Forest**
- **Natural Diversity Database Area**

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use

- **Maintained electric transmission facilities corridor**
- **Wetlands and associated Watercourses**
- **Vernal Pools**

Right-of-Way Vegetation

- **Scrub-shrub**
- **Herbaceous**
- **Palustrine scrub-shrub (PSS) wetland**
- **Palustrine emergent (PEM) wetland**
- **Lawn/landscaping**
- **Barren/unvegetated**
- **Paved – asphalt/concrete**

Water Resources

- **Wetland W62, W63**
- **Wetland cover types – PSS, PEM**
- **Watercourse S34 (Unnamed Tributary to S35)**
- **Watercourse S35 (Unnamed Tributary to Broad Brook)**
- **Vernal Pools VP05, VP06, VP07**

Wetland and Watercourse Crossings

- **Wetland 62 – Temporary construction matting work pads and access for Structures 5247 through 5243.**
- **Wetland 63 – Temporary construction matting work pad and access for Structures 5242 and 4037.**
- **Watercourses S34 & S35 (Unnamed Tributary to Broad Brook) – No work pads or access roads crossings**
- **Vernal Pools 05 – No temporary or permanent work pads or access road crossings**
- **Vernal Pool 06 – Temporary construction matting work pad in vernal pool envelope at near Structure 5245, no work in vernal pool depression**
- **Vernal Pool 07 – Temporary construction matting work pad in vernal pool envelope at near Structure 5243, no work in vernal pool depression. Structure 5244 maintenance work proposed at existing work pad in vernal pool envelope.**

Access

- **Structure 5247: from in-ROW access via Thorn Hollow Road**
- **Structures 5246 through 5242 and Structure 4037: from off ROW access pending rights via Thorn Hollow Road**

Road Crossings

- **Thorn Hollow Road**

Existing Right-of-Way Width

- **165 feet**

ABUTTERS TO PROJECT RIGHT-OF-WAY		
LINE LIST NUMBER	**OWNER NAME (NOW OR FORMERLY)**	**PARCEL ADDRESS (CHESHIRE, CT)**
202-037 Through 202-037.50	MULTI-OWNER COMPLEX (CHESHIRE CROSSING)	OFF WALLINGFORD RD
202-035	DAVID R & MARY E YAGER	1057 WALLINGFORD RD
202-036	PAUL HARRISON	WALLINGFORD RD
202-038	DAVID FLORENCE & PATRICIA DEWEYHARRIS	1015 WALLINGFORD RD
202-040	TOWN OF CHESHIRE	866 BOULDER RD
202-039	KIMBERLY JACKMAN	BOULDER RD

Abutters Line List Data Date: January 27, 2023.

Cheshire

BRAMBLE WAY

THORN HOLLOW ROAD

LLN# 202-036

LLN# 202-037 through 202-037.050

Public Water Supply Watershed Broad Brook Reservoir

LLN# 202-040

ACCESS FROM BOULDER ROAD

W63

TEMPORARY ACCESS ROAD WETLAND IMPACT OF: 10,016 SQ. FT.

5242

4037

TEMPORARY WORK PAD WETLAND IMPACT OF: 9,098 SQ. FT.

TEMPORARY WORK PAD WETLAND IMPACT OF: 1,223 SQ. FT.

VP07

TEMPORARY WORK PAD WETLAND IMPACT OF: 2,385 SQ. FT.

STRUCTURE MUST BE CLIMBED

W62

1610 Line

1208 Line

5247

4041

VP05

S34

S35

4040

5246

5245

VP06

4039

5244

5243

4038

TEMPORARY ACCESS ROAD WETLAND IMPACT OF: 899 SQ. FT.

TEMPORARY ACCESS ROAD WETLAND IMPACT OF: 3,325 SQ. FT.

LLN# 202-035

Unnamed Tributary to Broad Brook

LLN# 202-038

LLN# 202-039

NDDB Area

Map Sheet 18

Map Sheet 20

WYNDMERE COURT

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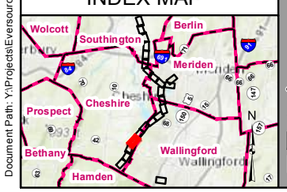
INDEX MAP



- Proposed Structure (Str Label)
- Existing Structure (Str Label)
- Existing Structure to be Maintained (Str Label)
- Existing Structure to be Removed (Str Label)
- Existing Access
- Overhead Eversource Line
- Existing Gravel
- Temporary Construction Matting
- Delineated Perennial Watercourse
- Delineated Intermittent Watercourse
- Field Delineated Wetland Boundary Outline
- Field Delineated Wetland
- Public Water Supply Watershed
- Rare Species Habitat (Dec. 2022)
- Parcel Boundary
- Municipal Boundary
- 5' Contour Line
- Existing Pipeline (Approximate)

Feet
0 50 100 200

EVERSOURCE ENERGY

Southington Substation to Cook Hill Junction Rebuild Project

Cheshire,Connecticut

Map Sheet 19 of 23

4/14/2023

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MAPSHEET 20 of 23
Southington Substation to Cook Hill Junction Rebuild Project
1610 Line: Maintenance Structures 5241 to 5237
Cheshire, Connecticut

AREA DESCRIPTION

Existing Land Use

- **Mixed Residential**
- **Undeveloped / Forest**
- **Agricultural**
- **Natural Diversity Database Area**

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use

- **Maintained electric transmission facilities corridor**
- **Roadway, Boulder Road**
- **Wetlands and associated Watercourses**
- **Vernal Pool**

Right-of-Way Vegetation

- **Scrub-shrub**
- **Herbaceous**
- **Palustrine emergent (PEM) wetland**
- **Lawn/landscaping**
- **Barren/unvegetated**
- **Paved – asphalt/concrete**

Water Resources

- **Wetland W63, W64, W65, W66**
- **Wetland cover types – PEM**
- **Vernal Pool VP08**
- **Watercourse S36 (Unnamed Tributary to S37)**

Wetland and Watercourse Crossings

- **Wetland 63 – Temporary construction matting work pad and access route to Structure 5241**
- **Wetland 64 – Temporary construction matting access between Structures 5240 and 5439**
- **Wetland 65 – Temporary construction matting work pad at Structure 5239**
- **Wetland 66 and Watercourse S36 – Temporary construction matting at off-ROW access route southeast of Structure 5237 and on alternate in-ROW access route southwest of Structure 5237**
- **Vernal Pool 08 – Temporary construction matting work pad in 100-foot vernal pool envelope near Structures 5239, no work within vernal pool depression**

Access

- **Structures 5241-5237: from in-ROW access via Boulder Road; includes an off-ROW extension (rights secured) near Structure 5237**

Road Crossings

- **Boulder Road**

Existing Right-of-Way Width

- **165 feet**

ABUTTERS TO PROJECT RIGHT-OF-WAY

LINE LIST NUMBER	OWNER NAME (NOW OR FORMERLY)	PARCEL ADDRESS (CHESHIRE, CT)
202-040	TOWN OF CHESHIRE	WEST ST
202-042	TOWN OF CHESHIRE	866 BOULDER RD
202-043	TOWN OF CHESHIRE	COOK HILL RD
202-045	TOWN OF CHESHIRE	COOK HILL RD

Abutters Line List Data Date: January 27, 2023.

Cheshire

LLN# 202-040

LLN# 202-042

LLN# 202-043

LLN# 202-045

TEMPORARY ACCESS ROAD
WETLAND IMPACT OF: 10,016 SQ. FT.

TEMPORARY WORK PAD
WETLAND IMPACT OF: 2,500 SQ. FT.

TEMPORARY ACCESS ROAD
WETLAND IMPACT OF: 3,909 SQ. FT.

TEMPORARY ACCESS ROAD
WETLAND IMPACT OF: 2,514 SQ. FT.

TEMPORARY WORK PAD
WETLAND IMPACT OF: 422 SQ. FT.

TEMPORARY ACCESS ROAD
WETLAND IMPACT OF: 709 SQ. FT.

SPAN STREAM

S36

VP08

1610 Line

1208 Line

5241 4036 5240 4035 5239 5238 4034 4033 5237

W63 W64 W65 W66

TEMPORARY WORK PAD
WETLAND IMPACT OF: 9,098 SQ. FT.

TEMPORARY ACCESS ROAD
WETLAND IMPACT OF: 1,218 SQ. FT.

BOULDER ROAD

NDDB Area

Public Water
Supply Watershed
Broad Brook Reservoir

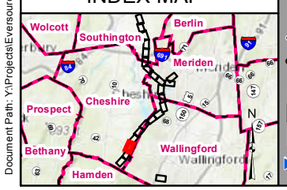
Public Water
Supply Watershed
Mill River System

Map Sheet 19

Map Sheet 21

Document Path: Y:\Projects\Eversource\Line 1355_1610_1690\1355-1610-1690 Lines_PetitionDraftMaps_031423.mxd

INDEX MAP



- Existing Structure (Str Label)
- Existing Structure to be Maintained (Str Label)
- Existing Access
- Proposed Access
- Overhead Eversource Line
- Existing Gravel
- Temporary Construction Matting
- Delineated Intermittent Watercourse
- Field Delineated Wetland Boundary Outline
- Field Delineated Wetland
- Open Water
- Public Water Supply Watershed
- Rare Species Habitat (Dec. 2022)
- Parcel Boundary
- 5' Contour Line
- Culvert
- Existing Pipeline (Approximate)

N

0 50 100 200 Feet

EVERSOURCE ENERGY

Southington Substation to Cook Hill Junction Rebuild Project

Cheshire,Connecticut

Map Sheet 20 of 23

4/14/2023

AECOM

MAPSHEET 21 of 23
Southington Substation to Cook Hill Junction Rebuild Project
1610 Line: Maintenance Structures 5234 to 5231
Cheshire, Connecticut

AREA DESCRIPTION

Existing Land Use

- **Mixed Residential**
- **Undeveloped / Forest**
- **Cook Hill Pond**

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use

- **Maintained electric transmission facilities corridor**
- **Residential/lawn**
- **Roadway, Cook Hill Road**
- **Roadway, Pine Brook Court**
- **Wetlands and associated Watercourses**
- **Vernal Pool**

Right-of-Way Vegetation

- **Scrub-shrub**
- **Herbaceous**
- **Palustrine emergent (PEM) wetland**
- **Palustrine forested (PFO) wetland**
- **Palustrine scrub-shrub (PSS) wetland**
- **Lawn/landscaping**
- **Barren/unvegetated**
- **Paved – asphalt/concrete**

Water Resources

- **Wetland W66, W67, W68, W69, W70**
- **Wetland cover types – PEM, PSS, PFO**
- **Vernal Pool 09**
- **Watercourse S36 (Unnamed Tributary to S37)**
- **Watercourse S37 (Unnamed Tributary to Cook Hill Pond)**
- **Watercourse S38 (Unnamed Tributary to S39)**
- **Watercourse S39 (Unnamed Tributary to Mill River)**

Wetland and Watercourse Crossings

- **Wetland 66 and Watercourse S36 – Temporary construction matting at off-ROW access route southeast of Structure 5237 and on alternate in-ROW access route southwest of Structure 5237**
- **Wetland 67 through 70 – No work pads or access road crossings**
- **Watercourse S37 through S39 – No temporary or permanent work pads or access roads crossings.**
- **Vernal Pool 09 – Temporary construction matting in 100-foot vernal pool envelope near Structure 5236, no work within vernal pool depression**

Access

- **Structures 5236 & 5235: from in-ROW access via Boulder Road (Map Sheet 20); includes an off-ROW extension (rights secured) near Structure 5237**
- **Structures 5234 through 5231: from in-ROW access via Cook Hill Road**

Road Crossings

- **Cook Hill Road**
- **Pine Brook Court**

Existing Right-of-Way Width

- **165 feet**

ABUTTERS TO PROJECT RIGHT-OF-WAY

LINE LIST NUMBER	OWNER NAME (NOW OR FORMERLY)	PARCEL ADDRESS (CHESHIRE, CT)
202-043	TOWN OF CHESHIRE	COOK HILL RD
202-045	TOWN OF CHESHIRE	COOK HILL RD
202-046	US BANK NA TRUSTEE	630 COOK HILL RD
202-589	JEFFREY N. KING	700 COOK HILL RD
202-053	FRANK A. SCARPO & ANITA BORYSEVICZ	PINE BROOK CT
202-052	LOUIS M & JAMIE GENNUSA JR	50 PINE BROOK CT
202-051	PAUL M & SUSAN C MATHEWS	40 PINE BROOK CT
202-050	GARRY & JANICE E TROJANOWSKI	30 PINE BROOK CT
202-049	JAMES D & MARIA DZIURA	20 PINE BROOK CT
202-048	NANCY A RICCI-COLLINS & DANIEL A COLLINS	10 PINE BROOK CT
202-047	VICTOR CORREA	4 PINE BROOK CT

Abutters Line List Data Date: January 27, 2023.

Cheshire

LLN# 202-589

LLN# 202-045

LLN# 202-043

LLN# 202-046

LLN# 202-047

LLN# 202-048

LLN# 202-049

LLN# 202-050

LLN# 202-051

LLN# 202-052

LLN# 202-053

COOK HILL ROAD

PINE BROOK COURT

BLUEFIELD COURT

Map Sheet 22

Map Sheet 20

Public Water Supply Watershed Mill River System

Cook Hill Pond

TEMPORARY ACCESS ROAD WETLAND IMPACT OF: 709 SQ. FT.

TEMPORARY ACCESS ROAD WETLAND IMPACT OF: 1,218 SQ. FT.

SPAN STREAM

1610 Line

1208 Line

W66 W67 W68 W69 W70

S36 S37 S38 S39

VP09

4029 4030 4031 4032 4033

5231 5232 5233 5234 5235 5236 5237

INDEX MAP

Wolcott Southington Berlin Meriden Cheshire Prospect Bethany Wallingford Hamden

Existing Structure Str Label
Existing Structure to be Maintained Str Label
Existing Access
Proposed Access
Overhead Eversource Line
Existing Gravel
Temporary Construction Matting
Delineated Perennial Watercourse
Delineated Intermittent Watercourse
Field Delineated Wetland Boundary Outline
Field Delineated Wetland
Open Water
Public Water Supply Watershed
Parcel Boundary
5' Contour Line
Culvert

0 50 100 200 Feet

EVERSOURCE ENERGY

Southington Substation to Cook Hill Junction Rebuild Project

Cheshire,Connecticut

Map Sheet 21 of 23

4/14/2023

AECOM

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MAPSHEET 22 of 23
Southington Substation to Cook Hill Junction Rebuild Project
1610 Line: Replacement Structures 5230 & 5229, Maintenance Structures 5231, 5228 & 5227
1208 Line: Replacement Structures 4027-1 & 4027-2
Cheshire, Connecticut

AREA DESCRIPTION

Existing Land Use

- **Mixed Residential**
- **Undeveloped / Forest**

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use

- **Maintained electric transmission facilities corridor including Cook Hill Junction**
- **Residential/lawn**
- **Roadway, Old Farms Road**
- **Wetlands and associated Watercourses**

Right-of-Way Vegetation

- **Scrub-shrub**
- **Herbaceous**
- **Palustrine forested (PFO) wetland**
- **Palustrine scrub-shrub (PSS) wetland**
- **Palustrine emergent (PEM) wetland**
- **Lawn/landscaping**
- **Barren/unvegetated**
- **Paved – asphalt/concrete**

Water Resources

- **Wetland W70, W71, W72, W73, W74, W75**
- **Wetland cover types – PSS, PFO, PEM**
- **Watercourse S38 (Unnamed Tributary to S39)**
- **Watercourse S39 (Unnamed Tributary to Mill River)**
- **Watercourse S40 (Unnamed Tributary to S42)**
- **Watercourse S41 (Unnamed Tributary to S42)**
- **Watercourse S42 (Unnamed Tributary to S39)**
- **Watercourse S43 (Unnamed Tributary to Mill River)**

Wetland and Watercourse Crossings

- **Wetland 70 – Temporary construction matting work pad and access to Structure 5230**
- **Wetland 71 through 75 – No temporary or permanent work pads or access roads crossings**
- **Watercourse S39– Temporary construction matting along edge on access road to Structure 5230**
- **Watercourses S38 and S40 through S42 – No temporary or permanent work pads or access roads crossings**

Access

- **Structures 5230 through 5228 and 4027: from off-ROW access (rights secured) via Pine Brook Court**
- **Structure 5227 – from off-ROW access (rights secured) via Old Farms Road**

Road Crossings

- **Pine Brook Court**
- **Old Farms Road**

Existing Right-of-Way Width

- **Varies: 165 feet – 200 feet**
- **Beyond Project area: 200 feet**

ABUTTERS TO PROJECT RIGHT-OF-WAY		
LINE LIST NUMBER	**OWNER NAME (NOW OR FORMERLY)**	**PARCEL ADDRESS (CHESHIRE, CT)**
202-061	JOSEPH A & DORENE J MARRONE JR	47 OLD FARMS ROAD
202-062	STEVEN C & DEBRA GRAVES	41 OLD FARMS ROAD
202-063	JAMES R & VALERIE W PECKINGHAM	37 OLD FARMS ROAD
202-064	DONNA M MONTESI	33 OLD FARMS ROAD
269B-002	WILLIAM LESLIE & HOLLY MARIE RICHARD	66 OLD FARMS ROAD
269B-003	STEPHEN J & LISA A BERARDI	86 OLD FARMS ROAD
269B-004	MICHEAL A & PATRICIA A GARGIULO	90 OLD FARMS ROAD
269B-005	JANET L BRENNAN ET AL	102 OLD FARMS ROAD
202-060	CHRISTOPHER S TEXEIRA & PHYLLIS CUMMINGS-TEXEIRA	53 OLD FARMS RD
202-059	DEEPAK & PRERANA MURTHY	59 OLD FARMS RD
202-058	ELEANOR M DEANGELO	65 OLD FARMS RD
202-056	DIANE J GARNER	71 OLD FARMS RD
202-055	ADAM V & MEREDITH M NAPOLITANO	77 OLD FARMS RD
202-054	FRANK A SCARPO	54 PINE BROOK CT
202-053	FRANK A SCARPO	PINE BROOK CT
202-052	LOUIS M & JAMIE GENNUSA	50 PINE BROOK CT
202-051	PAUL M & SUSAN C MATHEWS	40 PINE BROOK CT
202-050	GARRY & JANICE E TROJANOWSKI	30 PINE BROOK CT
202-049	JAMES D & MARIA A DZIURA	20 PINE BROOK CT
202-057	TOWN OF CHESHIRE	OLD LANE RD

Abutters Line List Data Date: January 27, 2023.

Cheshire

Map Sheet 21

LLN# 269B-005

LLN# 269B-004

LLN# 269B-003

LLN# 269B-002

OLD FARMS ROAD

1208 Line

3827 Line

PINE BROOK COURT

Public Water Supply Watershed Mill River System

LLN# 202-050

LLN# 202-051

LLN# 202-052

LLN# 202-055

LLN# 202-058

LLN# 202-049

LLN# 202-053

LLN# 202-054

LLN# 202-056

LLN# 202-057

LLN# 202-059

LLN# 202-060

LLN# 202-061

LLN# 202-062

LLN# 202-063

LLN# 202-064

Cook Hill Junction

1610 Line

1208 Line

3827 Line

S38 S39 S40 S41 S42 S43

W70 W71 W72 W73 W74 W75

5227 5228 5229 5230 5231

4026 4027 4028 24206 5226.5

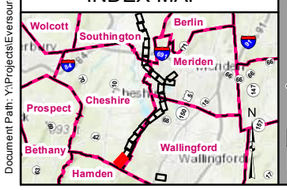
TEMPORARY ACCESS ROAD
WETLAND IMPACT OF: 3,129 SQ. FT.

TEMPORARY WORK PAD
WETLAND IMPACT OF: 2,272 SQ. FT.

AIR BRIDGE MATS AT CULVERT

Unnamed Tributary to Mill River

INDEX MAP



Proposed Structure Str Label
Existing Structure Str Label
Existing Structure to be Maintained
Existing Structure to be Removed Str Label
Existing Access
Overhead Eversource Line
Existing Gravel
Temporary Construction Matting

Delineated Perennial Watercourse
Delineated Intermittent Watercourse
Field Delineated Wetland Boundary Outline
Field Delineated Wetland
Open Water
Public Water Supply Watershed
Parcel Boundary

5' Contour Line
Culvert

N

0 50 100 200 Feet

EVERSOURCE ENERGY

Southington Substation to
Cook Hill Junction Rebuild Project

Cheshire,Connecticut

Map Sheet 22 of 23

4/14/2023

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MAPSHEET 23 of 23
Southington Substation to Cook Hill Junction Rebuild Project
1208 Line: Replacement Structure 4679A
Wallingford, Connecticut

AREA DESCRIPTION

Existing Land Use

- **Commercial**
- **Undeveloped / Forest**
- **Quinnipiac River**
- **Natural Diversity Database Area (Including Critical Habitat)**
- **Recreational/ Open Space (Hiking Trail – Quinnipiac River Greenway)**

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use

- **Maintained electric transmission facilities corridor**
- **Roadway, Ball Street (Outside of Project area)**
- **Wetlands and associated Watercourses**

Water Resources

- **Wetland W76, W77, CTW3**
- **Wetland cover types – PSS, PEM**
- **Watercourse S44 (Unnamed Tributary to Quinnipiac River)**
- **Watercourse S45 (Quinnipiac River)**

Wetland and Watercourse Crossings

- **Wetland CTW3 – No work pads or access road crossings**
- **Wetland 76 & 77 – Temporary construction matting work pad near Structure 4679A**
- **Watercourses S44 & S45 – No temporary or permanent work pads or access roads crossings**

Right-of-Way Vegetation

- **Landfill Cap Cover / Herbaceous**
- **Scrub-shrub**
- **Forested**
- **Palustrine scrub-shrub (PSS) wetland**
- **Palustrine emergent (PEM) wetland**
- **Lawn/landscaping**
- **Barren/unvegetated**
- **Paved – asphalt/concrete**

Access

- **Structure 4679A: from existing off-ROW access road (rights secured) via Ball Street.**

Road Crossings

- **Ball Street**

Existing Right-of-Way Width

- **200 feet**
- **Additional ROWs (Eversource and Others) present beyond Project area**

ABUTTERS TO PROJECT RIGHT-OF-WAY		
LINE LIST NUMBER	**OWNER NAME (NOW OR FORMERLY)**	**PARCEL ADDRESS (WALLINGFORD, CT)**
269B-037	CONNECTICUT LIGHT AND POWER COMPANY	4 OLIVER CREEK ROAD
269B-038	MATERIALS INNOVATION AND RECYCLING	2 OLIVER CREEK ROAD
269B-039	TOWN OF WALLINGFORD	3 OLIVER CREEK ROAD

Abutters Line List Data Date: March 2, 2023.

Wallingford

WILBUR CROSS PKWY

15

QUINNIPIAC RIVER GREENWAY

Wallingford Electric Line

TEMPORARY WORK PAD
WETLAND IMPACT OF: 6,539 SQ. FT.

W76

W77

4679A

4679

LLN# 269B-037

1208 Line

24225

CTW3

S45

S44

LLN# 269B-038

4680

1640 Line

24226

3827 Line

4681

LLN# 269B-039

4682

24228

Oliver Creek Rd

PENT RD

4683

4679

BALL ST

NDDB Area

4680

1630 Line

4681

S CHERRY ST

4682

24229

4683

4684A

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INDEX MAP

- Proposed Structure (Str Label)
- Existing Structure (Str Label) (Str Label)
- Existing Structure to be Removed
- Existing Non-Eversource Owned Structure
- Existing Access
- HikingTrail
- Overhead Eversource Line
- Temporary Construction Matting
- Delineated Perennial Watercourse
- Field Delineated Wetland Boundary Outline
- CT-State Only Wetland Area
- Field Delineated Wetland
- Open Water
- FEMA 100-Year Flood Zone
- FEMA Floodway
- Rare Species Habitat (Dec. 2022)
- Critical Habitat
- Parcel Boundary
- Eversource Owned Property
- Municipal Boundary
- 5' Contour Line
- Gate

N

0 50 100 200 Feet

EVERSOURCE ENERGY

Southington Substation to Cook Hill Junction Rebuild Project

Wallingford,Connecticut

Map Sheet 23 of 23

4/14/2023

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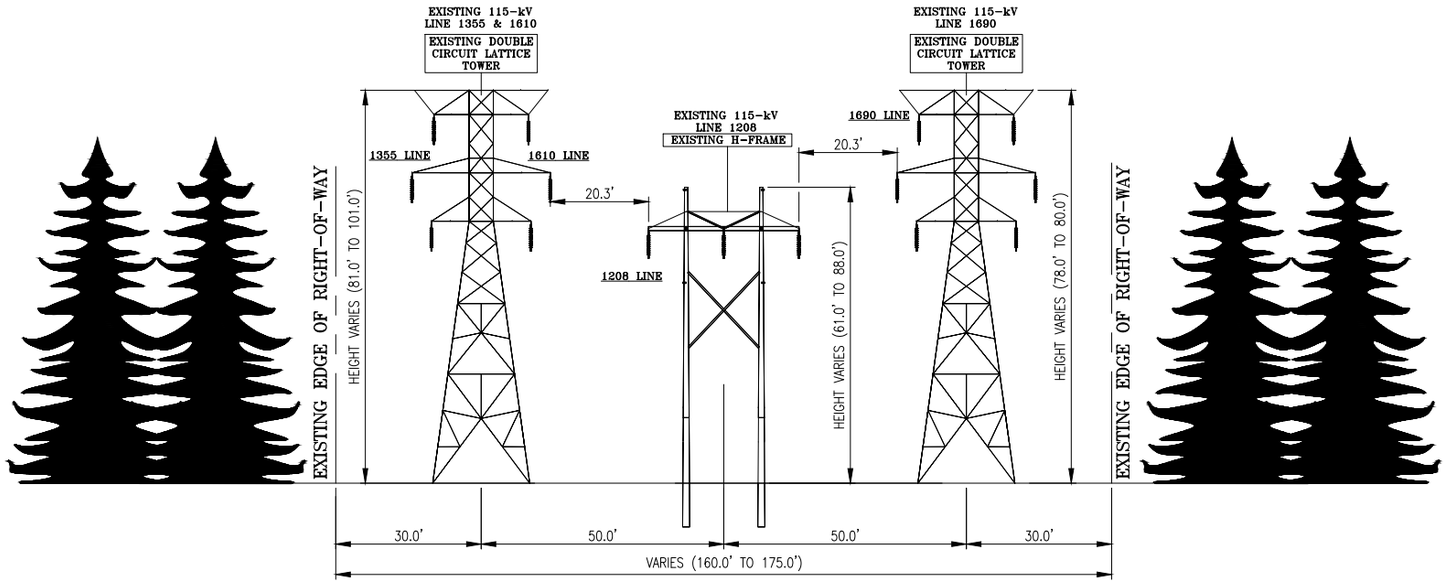
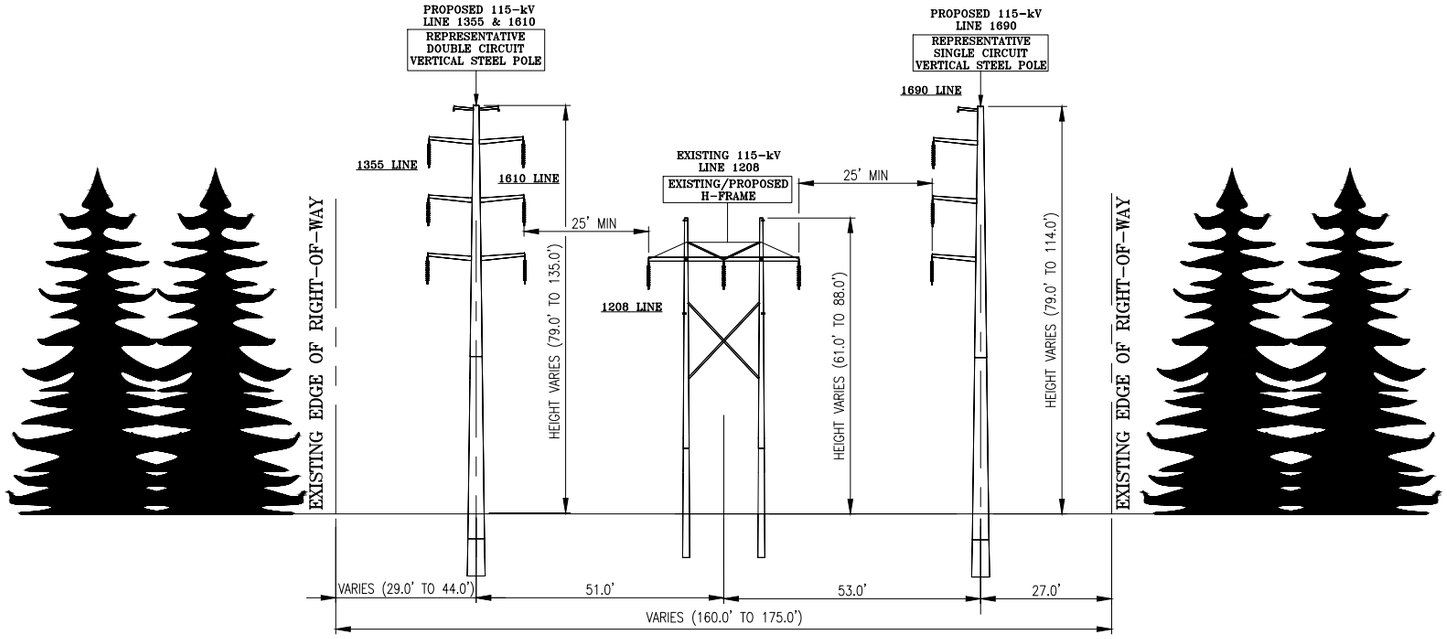
Attachment B: Right-of-Way Cross Sections



EXISTING R.O.W. CONFIGURATION
LINES 1355, 1610, & 1690 REBUILDS
LOOKING FROM SOUTHINGTON SUBSTATION TO LUCCHINI JUNCTION
IN THE TOWNS OF SOUTHINGTON & MERIDEN, CONNECTICUT
4.6 MILES BETWEEN STR. #751 AND STR. #784 ON LINE 1690
& STR. #4111 AND STR. #4077 ON LINES 1355 & 1610



PROPOSED R.O.W. CONFIGURATION
LINES 1355, 1610, & 1690 REBUILDS
LOOKING FROM SOUTHINGTON SUBSTATION TO LUCCHINI JUNCTION
IN THE TOWNS OF SOUTHINGTON & MERIDEN, CONNECTICUT
4.6 MILES BETWEEN STR. #751 AND STR. #785 ON LINE 1690 & STR. #4111 AND STR. #4077 ON LINES 1355 & 1610

EVERSOURCE ENERGY

TITLE	SOUTHINGTON S/S - HANOVER S/S - SCHWAB JCT. 115-kV TRANSMISSION LINE RIGHT OF WAY CROSS SECTION SOUTHINGTON & MERIDEN, CONNECTICUT

BY	RMK/DLD	CHKD	DLD	APP	DLD	APP	
DATE	2/21/23	DATE	2/21/23	DATE	2/21/23	DATE	
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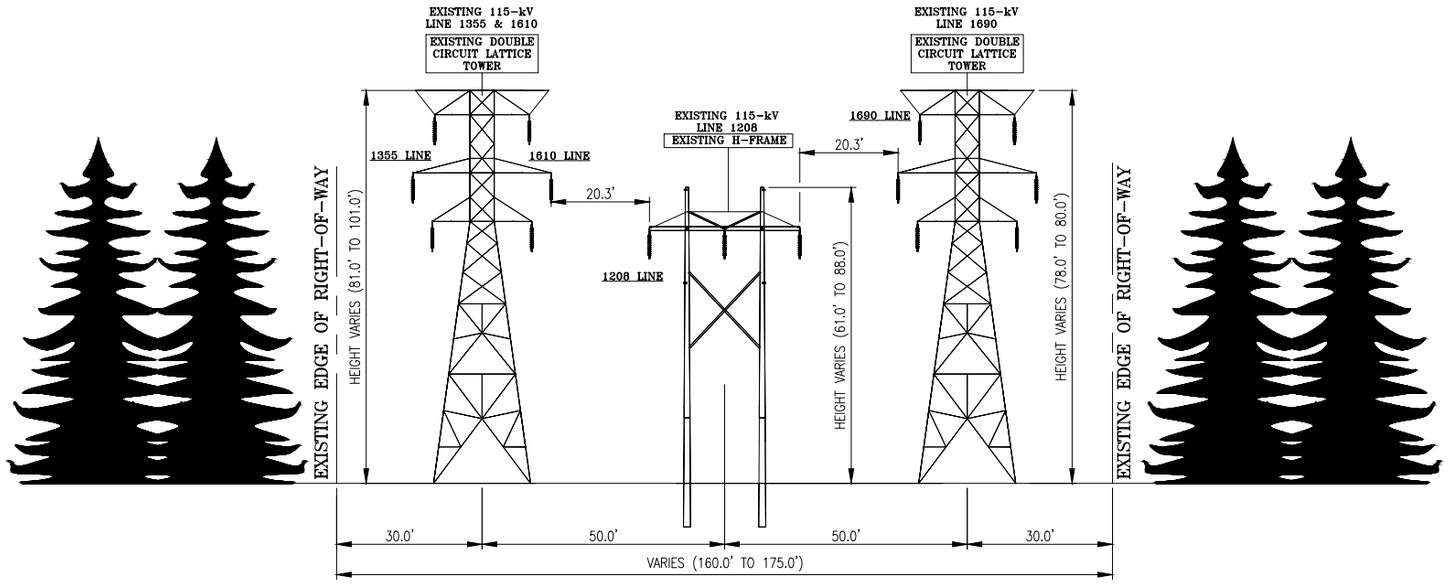
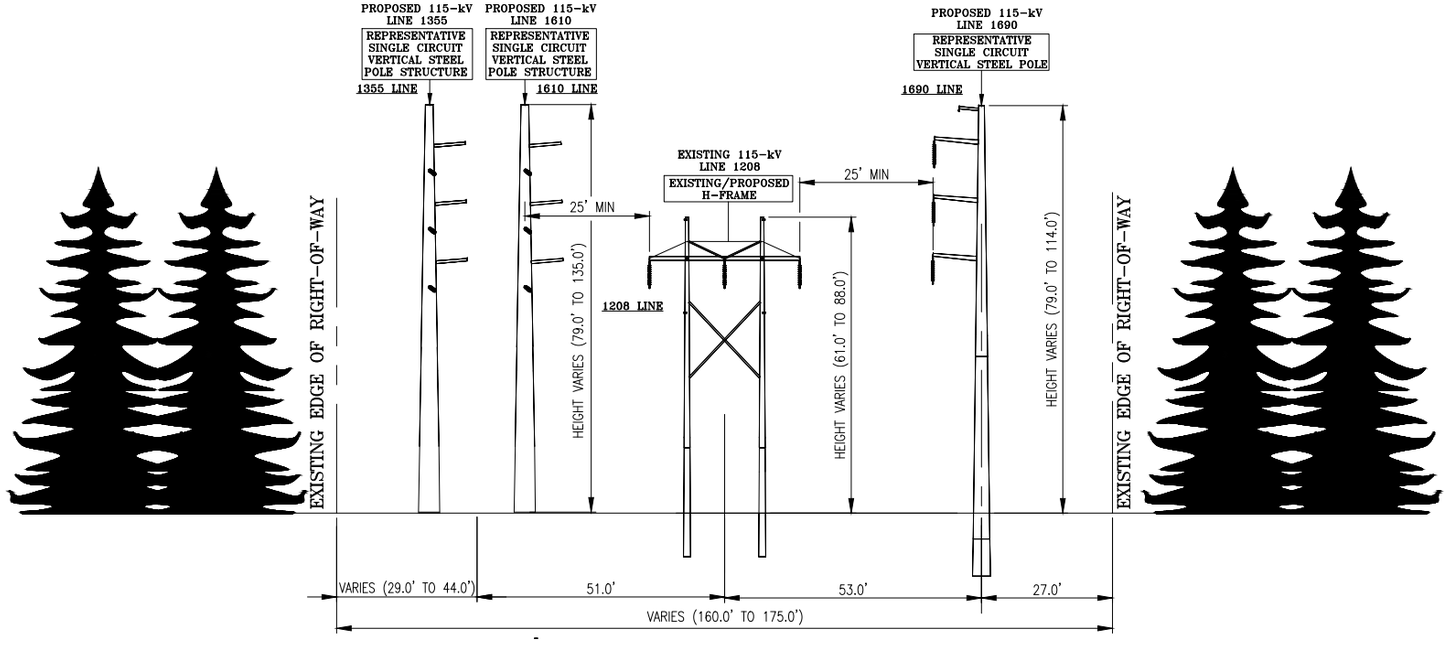
V-SCALE	N.T.S.	V.S.		R.E. DWG			
R.E. PROJ. NUMBER		80043577		DWG NO.	01249-85000p001		



EXISTING R.O.W. CONFIGURATION
LINES 1355, 1610, & 1690 REBUILDS
LOOKING FROM SOUTHINGTON SUBSTATION TO LUCCHINI JUNCTION
IN THE TOWNS OF SOUTHINGTON & MERIDEN, CONNECTICUT
4.6 MILES BETWEEN STR. #751 AND STR. #784 ON LINE 1690
& STR. #4111 AND STR. #4077 ON LINES 1355 & 1610



PROPOSED R.O.W. CONFIGURATION
LINES 1355, 1610, & 1690 REBUILDS
LOOKING FROM SOUTHINGTON SUBSTATION TO LUCCHINI JUNCTION
IN THE TOWNS OF SOUTHINGTON & MERIDEN, CONNECTICUT
4.6 MILES BETWEEN STR. #751 AND STR. #785 ON LINE 1690 & STR. #4111 AND STR. #4077 ON LINES 1355 & 1610

EVERSOURCE ENERGY

TITLE: SOUTHINGTON S/S - HANOVER S/S - SCHWAB JCT.
115-kV TRANSMISSION LINE
RIGHT OF WAY CROSS SECTION
SOUTHINGTON & MERIDEN, CONNECTICUT

BY DLD	CHKD DLD	APP DLD	APP
DATE 2/21/23	DATE 2/21/23	DATE 2/21/23	DATE
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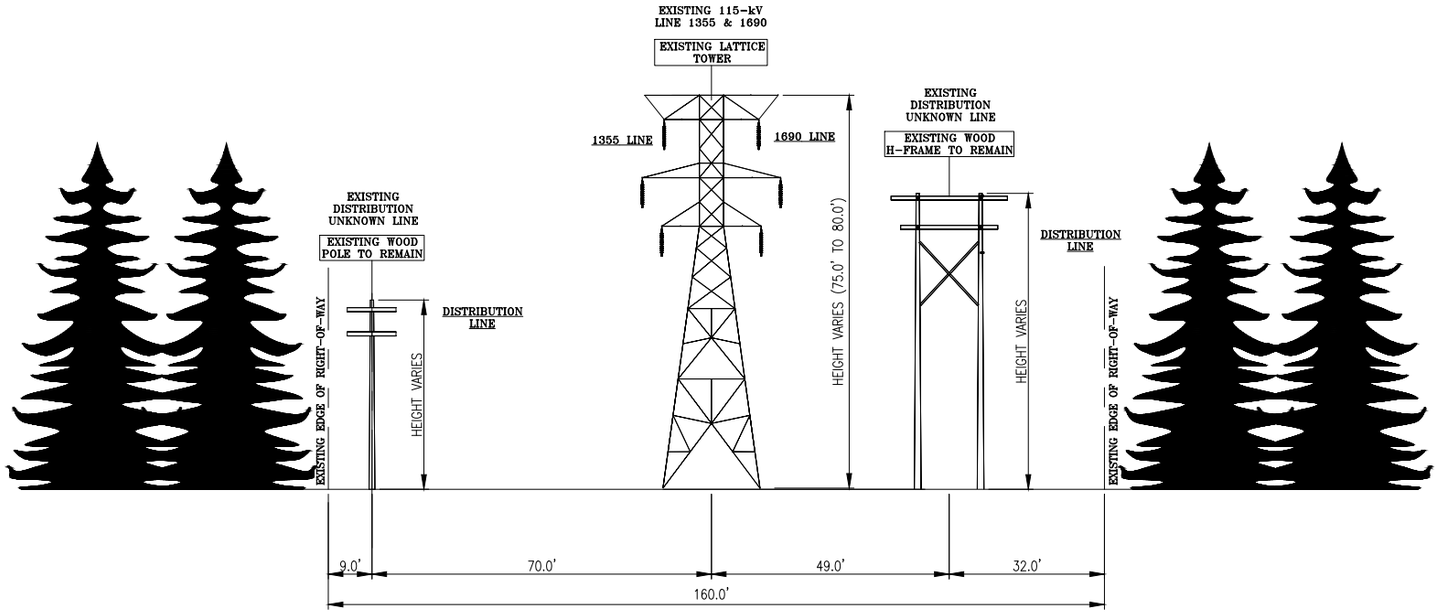
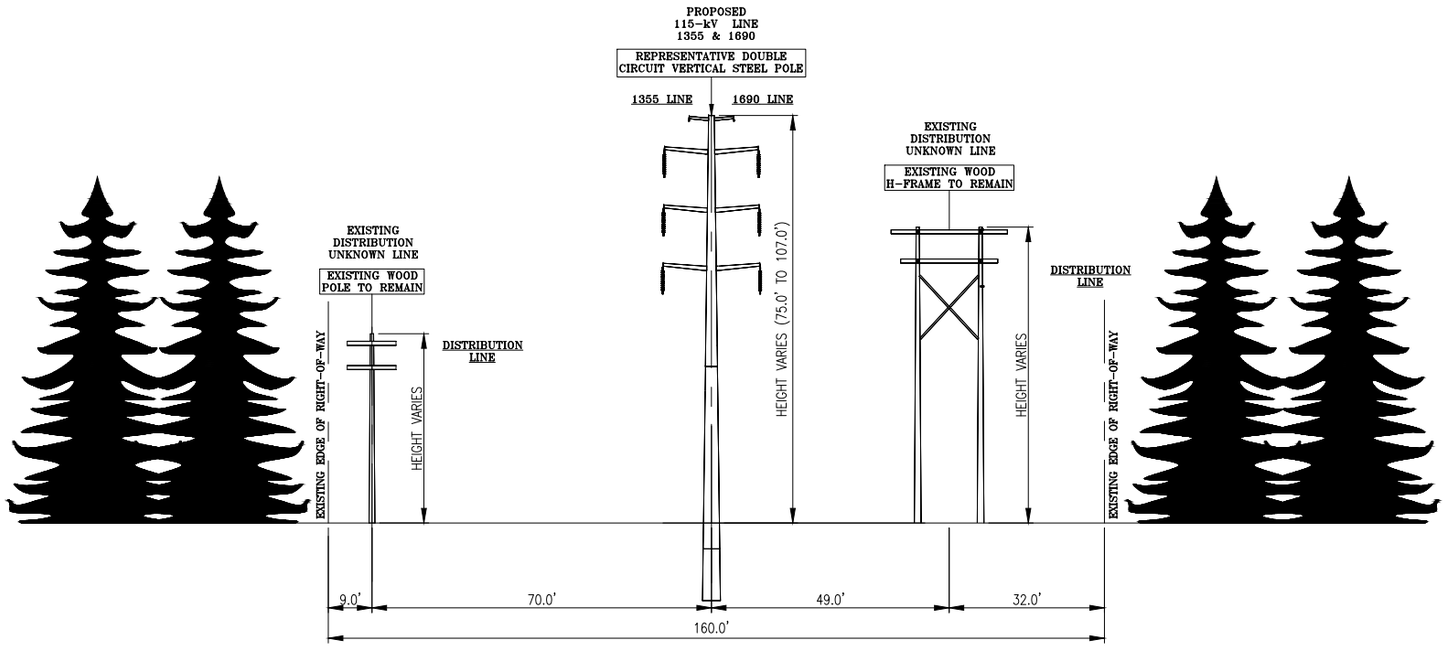


EXISTING R.O.W. CONFIGURATION
LINES 1355 & 1690 REBUILD
LOOKING FROM LUCCHINI JUNCTION TO HANOVER SUBSTATION
IN THE TOWN OF MERIDEN, CONNECTICUT
0.5 MILES BETWEEN STR. #2515 AND STR. #2518 ON LINES 1355 & 1690



PROPOSED R.O.W. CONFIGURATION
LINES 1355 & 1690 REBUILD
LOOKING FROM LUCCHINI JUNCTION TO HANOVER SUBSTATION
IN THE TOWN OF MERIDEN, CONNECTICUT
0.5 MILES BETWEEN STR. #2515-L/R AND STR. #2519-L/R ON LINES 1355 & 1690

EVERSOURCE ENERGY

TITLE: SOUTHINGTON S/S - HANOVER S/S - SCHWAB JCT.
115-kV TRANSMISSION LINE
RIGHT OF WAY CROSS SECTION
SOUTHINGTON & MERIDEN, CONNECTICUT

BY	RMK/DLD	CHKD	DLD	APP	DLD	APP	
DATE	2/21/23	DATE	2/21/23	DATE	2/21/23	DATE	
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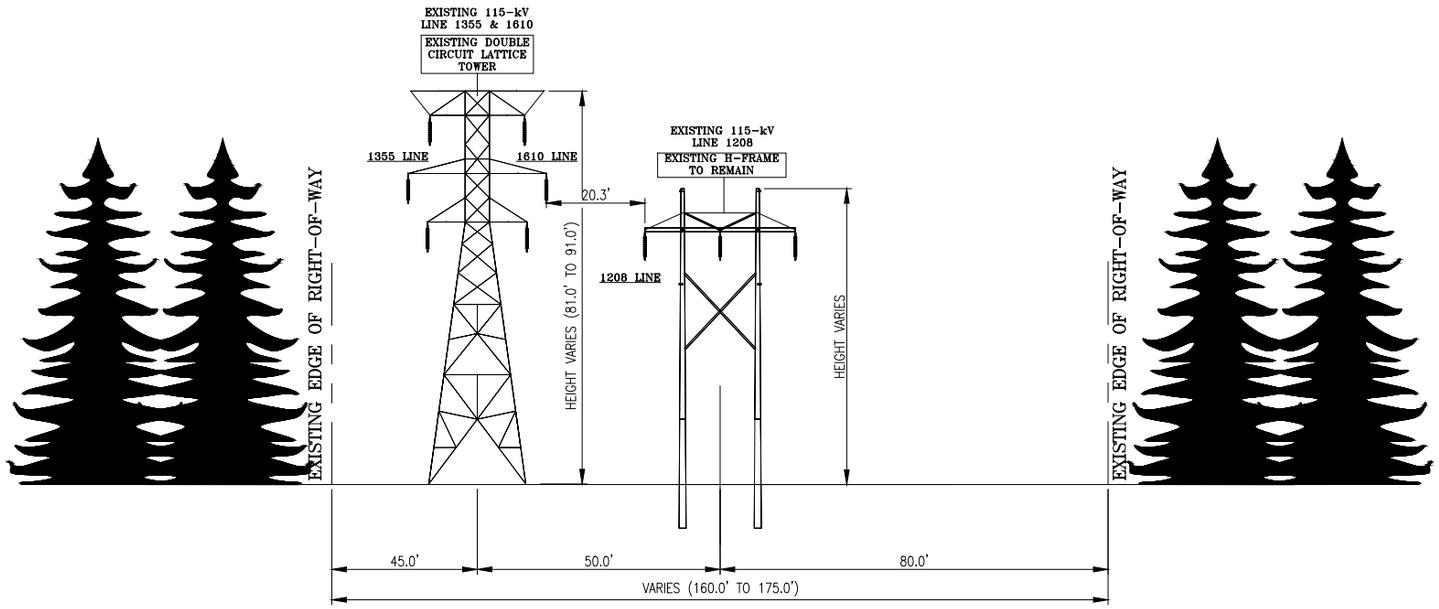
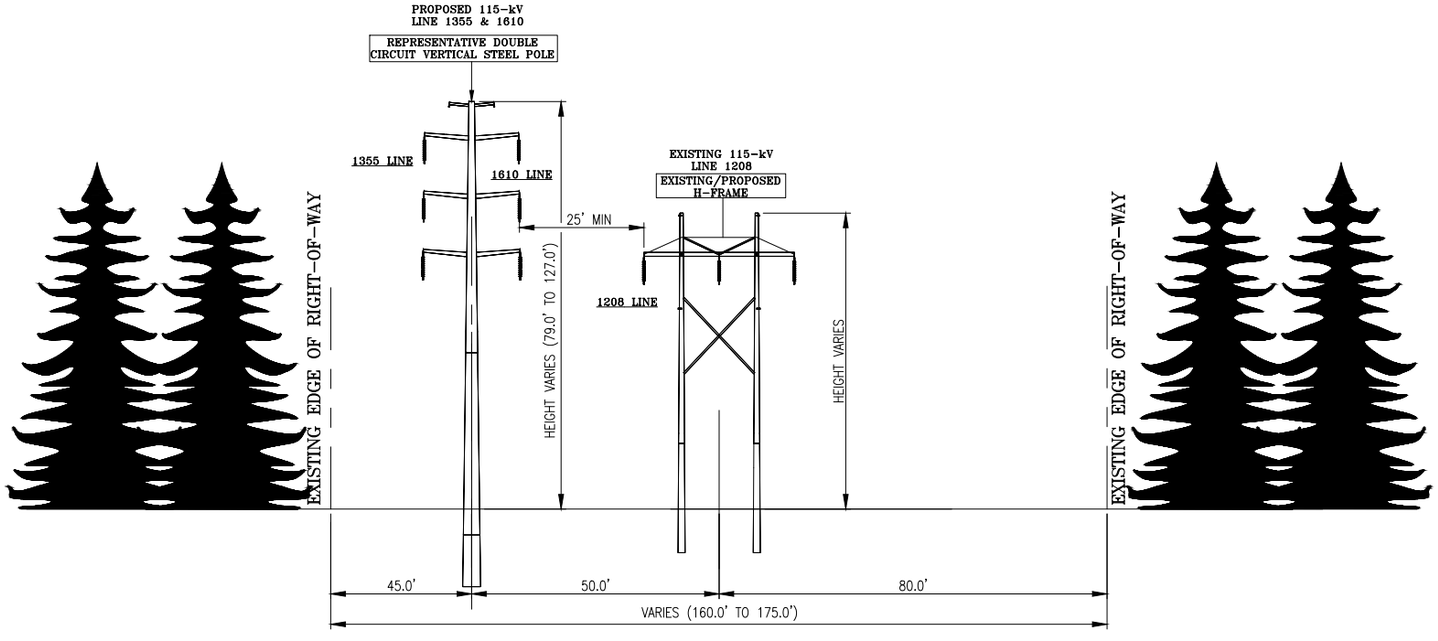


EXISTING R.O.W. CONFIGURATION
LINES 1355 & 1610 REBUILD
LOOKING FROM LUCCHINI JUNCTION TO SCHWAB JUNCTION
IN THE TOWNS OF MERIDEN & WALLINGFORD, CONNECTICUT
1.7 MILES BETWEEN STR. #4076 AND STR. #4065 ON LINE 1610



PROPOSED R.O.W. CONFIGURATION
LINES 1355 & 1610 REBUILD
LOOKING FROM LUCCHINI JUNCTION TO SCHWAB JUNCTION
IN THE TOWNS OF MERIDEN & WALLINGFORD, CONNECTICUT
1.7 MILES BETWEEN STR. #4076 AND STR. #4065 ON LINE 1610

EVERSOURCE ENERGY

TITLE	SOUTHINGTON S/S - HANOVER S/S - SCHWAB JCT. 115-kV TRANSMISSION LINE RIGHT OF WAY CROSS SECTION SOUTHINGTON & MERIDEN, CONNECTICUT

BY	RMK/DLD	CHKD	DLD	APP	DLD
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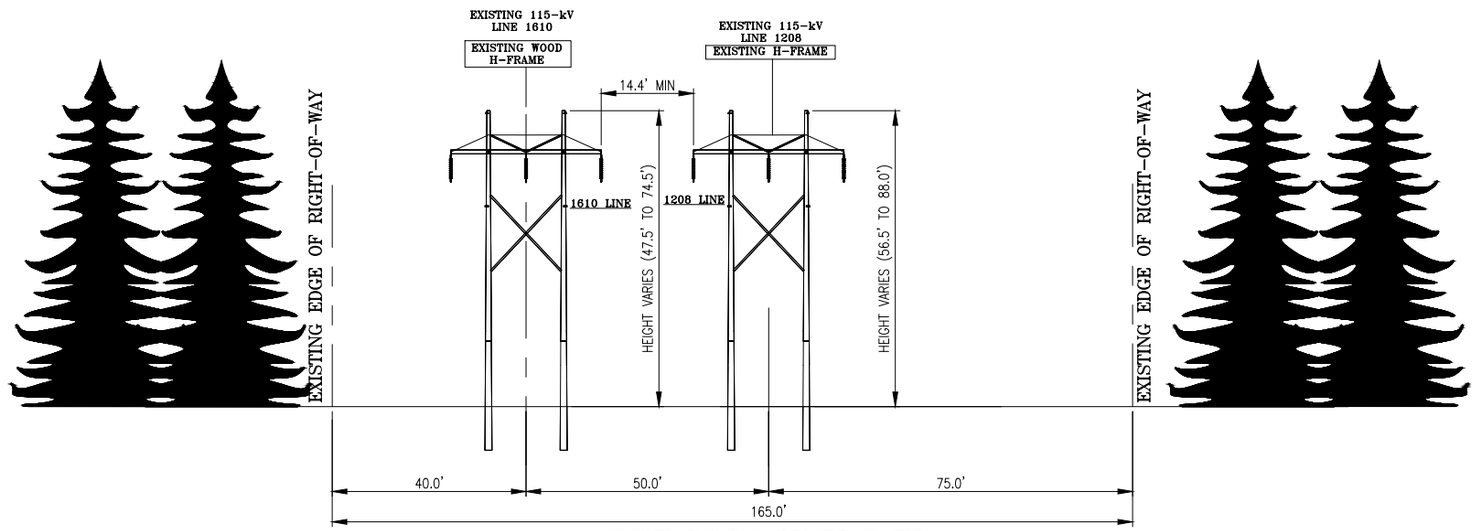
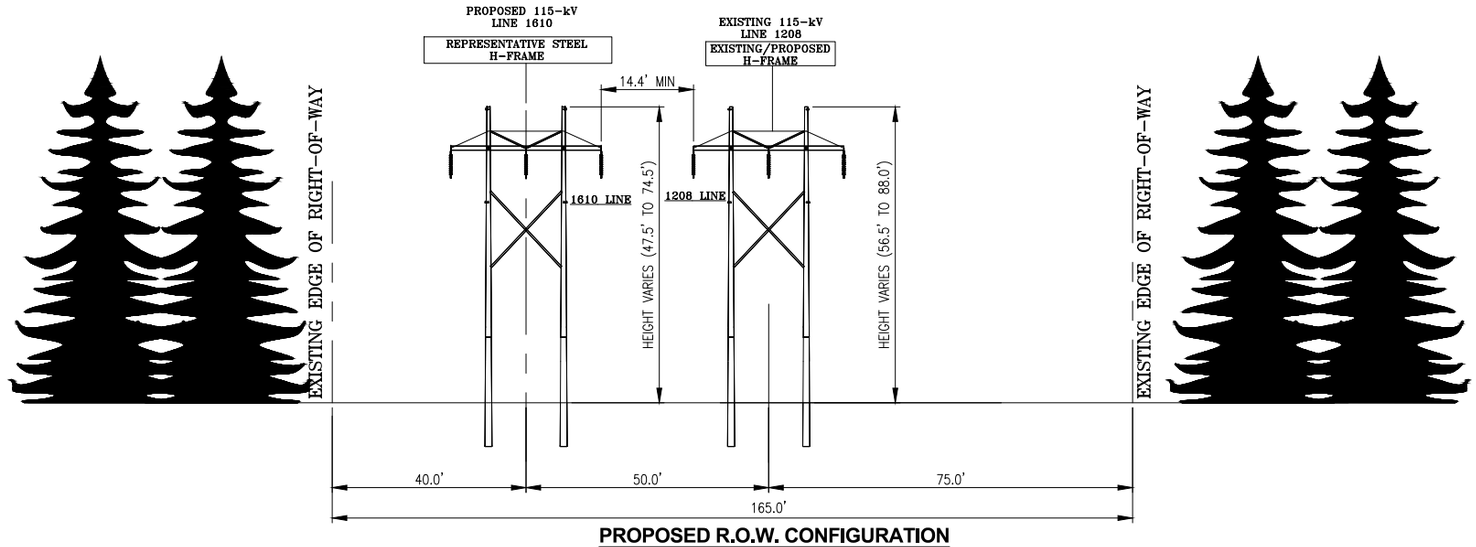


EXISTING R.O.W. CONFIGURATION

LINES 1610 AND 1208 STRUCTURE REPLACEMENT
LOOKING FROM SCHWAB JUNCTION TO COOK HILL JUNCTION
IN THE TOWNS OF CHESHIRE & WALLINGFORD, CONNECTICUT
4.4 MILES BETWEEN STR. #5270 AND STR. #5226 ON THE 1610 LINE;
AND STR #4060 TO STR #4026 ON THE 1208 LINE



PROPOSED R.O.W. CONFIGURATION

LINES 1610 AND 1208 STRUCTURE REPLACEMENT
LOOKING FROM SCHWAB JUNCTION TO COOK HILL JUNCTION
IN THE TOWNS OF CHESHIRE & WALLINGFORD, CONNECTICUT
4.4 MILES BETWEEN STR. #5270 AND STR. #5226 ON THE 1610 LINE;
AND STR #4060 TO STR #4026 ON THE 1208 LINE

EVERSOURCE ENERGY

TITLE: SOUTHINGTON S/S - HANOVER S/S - SCHWAB JCT.
115-kV TRANSMISSION LINE
RIGHT OF WAY CROSS SECTION
SOUTHINGTON & MERIDEN, CONNECTICUT

BY	RMK/DLD	CHKD	DLD	APP	DLD	APP	
DATE	2/21/23	DATE	2/21/23	DATE	2/21/23	DATE	
H-SCALE	N.T.S.	SIZE	D	FIELD BOOK & PAGES			
V-SCALE	N.T.S.	Y.S.		R.E. DWG			
R.E. PROJ. NUMBER		80043577		DWG NO.	01249-85000p005		

Attachment C: List of Replacement and New Structures

Project Segment	Existing Structure #	Line(s)	New Structure #	Existing Structure Type	Proposed Structure Type	Existing Height (feet)	Proposed Height (feet)	Height Increase (feet)
Southington Substation to Lucchini Junction	4111	1610	4111	DCLT	SCSP	81	87	6
		1355	4111A		SCSP		92	11
	4110	1355/1610	4110	DCLT	DCSP	81	89	8
	4109	1355/1610	4109	DCLT	DCSP	81	94	13
	4108	1355/1610	4108	DCLT	DCSP	81	89	8
	4107	1610	4107	DCLT	SCSP	81	82	1
		1355	4107A		SCSP		82	1
	4106	1355/1610	4106	DCLT	DCSP	81	84	3
	4105	1355/1610	4105	DCLT	DCSP	81	79	-2
	4104	1355/1610	4104	DCLT	DCSP	81	94	13
	4103	1355/1610	4103	DCLT	DCSP	86	103	17
	4102	1610	4102	DCLT	SCSP	86	112	26
		1355	4102A		SCSP		112	26
	4101	1355/1610	4101	DCLT	DCSP	101	102	1
	4100	1355/1610	4100	DCLT	DCSP	91	97	6
	4099	1610	4099	DCLT	SCSP	81	117	36
		1355	4099A		SCSP		117	36
	4098	1355/1610	4098	DCLT	DCSP	101	107	6
	New	1355/1610	4097-2	New	DCSP	New	94	New
	4097	1355/1610	4097-1	DCLT	DCSP	91	89	-2
	4096	1355/1610	4096	DCLT	DCSP	86	94	8
	New	1355/1610	4095-2	New	DCSP	New	79	New
	4095	1355/1610	4095-1	DCLT	DCSP	81	84	3
	4094	1355/1610	4094	DCLT	DCSP	91	82	-9
	New	1355/1610	4093-2	New	DCSP	New	89	New
	4093	1610	4093-1	DCLT	SCSP	81	102	21
		1355	4093-1A		SCSP		102	21
	4092	1610	4092	DCLT	SCSP	81	87	6
		1355	4092A		SCSP		87	6
	4091	1355/1610	4091	DCLT	DCSP	81	89	8
	4090	1355/1610	4090	DCLT	DCSP	81	88	7
	4089	1355/1610	4089	DCLT	DCSP	81	103	22
	4088	1610	4088	DCLT	SCSP	91	107	16
		1355	4088A		SCSP		112	21
	4087	1610	4087	DCLT	SCSP	81	92	11
		1355	4087A		SCSP		92	11
	4086	1610	4086	DCLT	SCSP	86	102	16
		1355	4086A		SCSP		102	16
	4085	1610	4085	DCLT	SCSP	91	112	21
		1355	4085A		SCSP	91	112	21
	4084	1355/1610	4084	DCLT	DCSP	86	108	22
	4083	1355/1610	4083	DCLT	DCSP	81	137	56

Project Segment	Existing Structure #	Line(s)	New Structure #	Existing Structure Type	Proposed Structure Type	Existing Height (feet)	Proposed Height (feet)	Height Increase (feet)
	4082	1355/1610	4082	DCLT	DCSP	91	137	46
	4081	1355/1610	4081	DCLT	DCSP	91	127	36
	4080	1355/1610	4080	DCLT	DCSP	91	127	36
	4079	1355/1610	4079	DCLT	DCSP	91	103	12
	4078	1355/1610	4078	DCLT	DCSP	81	107	26
	4077	1610	4077-R	DCLT	SCSP	111	117	6
	751	1690	751	DCLT	SCSP	78	82	4
	752	1690	752	DCLT	SCSP	78	84	6
	753	1690	753	DCLT	SCSP	78	89	11
	754	1690	754	DCLT	SCSP	78	89	11
	755	1690	755	DCLT	SCSP	80	82	2
	756	1690	756	DCLT	SCSP	78	79	1
	757	1690	757	DCLT	SCSP	78	79	1
	758	1690	758	DCLT	SCSP	78	94	16
	759	1690	759	DCLT	SCSP	78	103	25
	760	1690	760	DCLT	SCSP	78	107	29
	761	1690	761	DCLT	SCSP	78	103	25
	762	1690	762	DCLT	SCSP	78	98	20
	763	1690	763	DCLT	SCSP	80	87	7
	764	1690	764	DCLT	SCSP	78	103	25
	765	1690	765	DCLT	SCSP	78	108	30
	766	1690	766	DCLT	SCSP	78	98	20
	767	1690	767	DCLT	SCSP	78	98	20
	768	1690	768	DCLT	SCSP	78	97	19
	769	1690	769	**DCSP**	SCSP	102	102	0
	770	1690	770	DCLT	SCSP	78	97	19
	771	1690	771	DCLT	SCSP	78	89	11
	772	1690	772	DCLT	SCSP	78	92	14
	773	1690	773	DCLT	SCSP	78	98	20
	774	1690	774	DCLT	SCSP	80	107	27
	775	1690	775	DCLT	SCSP	78	107	29
	776	1690	776	DCLT	SCSP	78	107	29
	777	1690	777	DCLT	SCSP	78	107	29
	778	1690	778	DCLT	SCSP	78	103	25
	779	1690	779	DCLT	SCSP	78	98	20
	780	1690	780	DCLT	SCSP	78	98	20
	781	1690	781	DCLT	SCSP	78	108	30
	782	1690	782	DCLT	SCSP	78	108	30
	783	1690	783	DCLT	SCSP	78	102	24
	784	1690	784	DCLT	SCSP	78	84	6
	New	1208	3679-1	New	SCSP	New	25	New
	3674	1208	3674	SCHF	SCSP	85-85	117	32
	3681	1208	3681	SCHF	SCHF	75-75	84-84	9

Project Segment	Existing Structure #	Line(s)	New Structure #	Existing Structure Type	Proposed Structure Type	Existing Height (feet)	Proposed Height (feet)	Height Increase (feet)
	3690	1208	3690	SCHF	SCHF	75-75	75-75	0
	New	1690	785	New	SCSP/RISER	New	107	New
	2515	1690	2515-R	DCLT	SCSP/RISER	78	107	29
		1355	2515-L		SCSP		97	19
Lucchini Junction to Hanover Substation	2516	1355/1690	2516	DCLT	DCSP	78	103	25
	2517	1355/1690	2517	DCLT	DCSP	78	87	9
	2518	1355/1690	2518	DCLT	DCSP	80	102	22
	New	1690	2519-R	New	SCSP	New	77	New
	New	1355	2519-L	New	SCSP	New	77	New
Lucchini Junction to Schwab Junction	4076	1355/1610	4076	DCLT	DCSP	81	102	21
	4075	1355/1610	4075	DCLT	DCSP	86	98	12
	4074	1355/1610	4074	DCLT	DCSP	86	94	8
	4073	1355/1610	4073	DCLT	DCSP	81	94	13
	4072	1355/1610	4072	DCLT	DCSP	81	94	13
	4071	1355/1610	4071	DCLT	DCSP	81	79	-2
	4070	1355/1610	4070	DCLT	DCSP	91	87	-4
	New	1355/1610	4069-1	New	DCSP	New	127	New
	4069	1355/1610	4069	DCLT	DCSP	91	94	3
	4068	1355/1610	4068	DCLT	DCSP	81	103	22
	4067	1355/1610	4067	DCLT	DCSP	91	112	21
	New	1355/1610	4066-1	New	DCSP	New	127	New
	4066	1355/1610	4066	DCLT	DCSP	81	89	8
	4065	1355/1610	4065	DCLT	DCSP	91	102	11
	New	1208	3663-1	New	SCHF	New	127-127	New
	3664	1208	3664	3-Pole Angle	3-Pole Angle	88-88-88	88-88-88	0
	New	1208	3666-1	New	SCHF	New	117-117	New
	3670	1208	3670	SCHF	SCHF	66-66	75-75	9
	3671	1208	3671	SCHF	SCHF	85-85	88-88	3
	3672	1208	3672	SCHF	SCHF	79-79	97-97	18
Schwab Junction to Cook Hill Junction	5265	1610	5265	SCHF	SCHF	57-57	61-61	4
	5230	1610	5230	SCHF	SCHF	61-61	70-70	9
	5229	1610	5229	SCHF	SCHF	52-52	61-61	9
	4027	1208	4027	SCHF	SCHF	75-75	88-88	13
	4037	1208	4037	SCHF	SCHF	84-84	84-84	0
	4042	1208	4042	SCHF	SCHF	70-70	70-70	0
	4045	1208	4045	SCHF	SCHF	75-75	75-75	0
	4058	1208	4058-1	SCHF	SCHF	84-84	61-61	-23
	New	1208	4058-2	New	SCHF	New	61-61	New
Wallingford	4679A	1208	4679A	3-Pole Angle	3-Pole Angle	43-43-43	43-43-43	0

NOTE: DCLT (Double Circuit Lattice Tower), DCSP (Double Circuit Steel Pole), SCSP (Single Circuit Steel Pole), SCHF (Single Circuit H-Frame)

Attachment D: Wetlands and Watercourses Report

EVERSOURCE ENERGY

Southington to Cook Hill Junction Rebuild Project

WETLANDS AND WATERCOURSES REPORT

EVERSOURCE ENERGY

April 2023

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Southington to Cook Hill Junction Rebuild Project

WETLANDS AND WATERCOURSES REPORT

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List of Appendices

1.0 Introduction

Eversource Energy (Eversource), proposes to replace structures, maintain existing structures and add structures where needed along an approximately 11.2-mile section of its existing 1355, 1610, 1690 and 1208 lines right-of-way (ROW) in Southington, Cheshire, Meriden and Wallingford, Connecticut (Project). The Project will extend between Southington Substation in Southington to Cook Hill Junction in Cheshire and will include work at Lucchini Junction, Hanover Substation, Schwab Junction and one structure outside of the Wallingford Resident Disposal Center. This report provides a summary of wetland and watercourse inventories and field delineations conducted by AECOM within the Project area. Specifically, this report discusses applicable federal and state wetland and watercourse regulations, the methodologies used to identify the wetland and watercourse resources encountered along the Project and summarizes the findings of the surveys. These field delineations were conducted to identify both federal and State of Connecticut jurisdictional water resources.

Tables listing all wetlands and watercourses identified during the course of the surveys are located in Appendix A. Appendix B contains U.S. Army Corps of Engineers wetland transect data forms for all wetlands which will have temporary Project related impacts. Wetland and Watercourse mapping can be found in Appendix A of the Connecticut Siting Council Petition: Southington to Cook Hill Junction Rebuild Project.

1.1 Project Background and Summary of Proposed Action

The proposed Project includes the replacement of and the addition of some structures where needed along the 1355/1610 lines, 1690 line, 1208 line and the replacement of structures and optical ground wire (OPGW) work along the 1610 Line. Project work would be completed along the existing ROW section between Southington Substation and Cook Hill Junction and includes a short route between Lucchini Junction and Hanover Substation and one structure replacement at the terminus of the 1208 line in Wallingford Connecticut. The Project includes the crossing of wetlands, watercourses and state land.

Structures will be replaced utilizing a combination of existing gravel areas, additional gravel work pads and temporary matting. The exact location of the structures, the configuration and type of the various work pads and the exact access points to be utilized by construction personnel are depicted in the mapping provided in Appendix A of the Connecticut Siting Council Petition: Southington to Cook Hill Junction Rebuild Project.

1.2 Physiographic and Geologic Overview

The Project area is situated within the Connecticut Valley (59a) level IV Ecoregion[1] of Connecticut. The Connecticut Valley region is characterized by a mostly level rolling landscape with some higher hills. In contrast to the surrounding upland ecoregions, this portion of Connecticut is dominated by Jurassic-age Holyoke basalt with prominent north-south trending features and where surficial geologic deposits in valleys are relatively thick and include glacial outwash, alluvial materials and glaciolacustrine deposits. The dominant geology is sedimentary, such as arkose, siltstone, sandstone, shale and conglomerate. The landscape of Connecticut was heavily shaped

1 Griffith, G.E., Omernik, J.M., Bryce, S.A., Royte, J., Hoar, W.D., Homer, J.W., Keirstead, D., Metzler, K.J.and Hellyer, G., 2009, *Ecoregions of New England* (color poster with map, descriptive text, summary tables and photographs): Reston, Virginia, U.S. Geological Survey (map scale 1:1,325,000).

by the late Wisconsin glaciation episode from the Laurentide ice sheet and the associated outwash meltwaters which resulted in a flattened Connecticut River Valley. Natural vegetation in this ecoregion tends towards deciduous forests of transitional hardwood in uplands and red and silver maple/cottonwood dominated floodplain areas. Coarse-loamy and sandy, mesic Inceptisols and some Entisols are typical, with large lowland very poorly drained areas exhibiting Histosols. While vegetation in this ecoregion is historically dominated by deciduous hardwoods, many areas were cleared for farming, grazing or other purposes.

2.0 Wetland and Watercourse Regulations

In Connecticut, wetlands and watercourses are subject to state or federal jurisdiction based upon the federal Clean Water Act ("CWA"; 33 U.S.C. 1251 *et seq.*) and the Connecticut Inland Wetland and Watercourses Act ("IWWA"; C.G.S. Section 22a-36 through 45) and implementing regulations (R.C.S.A. Section 22a-39-1 to 22a-39-15). The following wetland and watercourse regulations are applicable to the Project.

2.1 Section 404 – Clean Water Act

Wetlands, springs and other waters of the United States are regulated under Section 404 CWA (33 U.S.C. 1344) by the United States Army Corps of Engineers ("Corps"). Federal jurisdictional "waters of the United States" include:

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2. All interstate waters including interstate wetlands;
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:
    i. Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
    ii. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
    iii. Which are used or could be used for industrial purpose by industries in interstate commerce;
4. All impoundments of waters otherwise defined as waters of the United States under the definition;
5. Tributaries of waters identified in paragraphs (1)-(4) above;
6. The territorial seas;
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (1)-(6) above.

According to the *1987 Corps of Engineers Wetland Delineation Manual*[2] (Corps Manual), areas must exhibit three distinct characteristics to be considered wetlands jurisdictional under Section 404 of the CWA:

- Hydrophytic Vegetation: Plants growing in water or in a substrate that is at least periodically deficient in oxygen during a growing season as a result of excessive water content;
- Hydric Soils: Soils that, in an undrained condition, are saturated, flooded, or ponded long enough during a growing season to develop an anaerobic condition that supports the growth and regeneration of hydrophytic vegetation; and,

[2] Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual*. Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.

- Wetland Hydrology: Inundation or saturation by surface or groundwater at a frequency and duration during the growing season sufficient to support a prevalence of hydrophytic vegetation typically adapted for life in saturated soil conditions.

In January 2012, the USACE issued a *Regional Supplement to the Corps of Engineers Delineation Manual*[3] (Regional Supplement), which provides further guidance for wetland delineations in the northeastern United States. The Regional Supplement provides wetland indicators, delineation guidance and other information specific to the Northcentral and Northeast Regions, supplementing the 1987 USACE Manual. Indicators and procedures in the Regional Supplement are designed to identify wetlands as defined jointly by the USACE (33 CFR 328.2) and the U.S. Environmental Protection Agency (40 CFR 230.3) and subject to regulation under Section 404 of the CWA.

2.2 Connecticut Inland Wetland and Watercourses Act

The State of Connecticut Department of Energy and Environmental Protection ("DEEP") regulates work in and around inland wetlands under the IWWA (C.G.S. Section 22a-36 through 45) and implementing regulations (R.C.S.A. Section 22a-39-1 to 22a-39-15). Typically, the state statute is implemented through the Inland Wetlands and Watercourse Regulations as administered by individual municipalities.

Under Section 2 of the IWWA, a wetland is defined as "land, including submerged land…which consists of poorly drained, very poorly drained, alluvial and floodplain soils as defined by the National Cooperative Soils Survey. Such areas may include filled, graded or excavated sites which possess an aquic (saturated) moisture regime as defined by the United States Department of Agriculture (USDA) Cooperative Soil Survey."

Watercourses are defined in the IWWA as "rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs and all other bodies of water, natural or artificial, vernal or intermittent, public or private, which are contained within, flow through or border upon the state or any portion thereof." The IWWA defines Intermittent Watercourses as having a defined permanent channel bed and bank and the occurrence of two of the following: A) evidence of scour or deposits of recent alluvium or detritus, B) the presence of standing or flowing water for a duration of longer than a particular storm incident, or C) the presence of hydrophytic vegetation.

[3] U.S. Army Corps of Engineers. 2011a. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0)*, ed. J.S. Wakeley, R.W. Lichvar, C.V. Nobleand J.F. Berkowitz. ERDC/EL TR-12-1. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

3.0 Wetland and Watercourse Delineation Procedures

On behalf of Eversource, AECOM conducted wetland and watercourse identification and delineations along the Project's existing ROW corridor on October 9-12, 2020; November 2, 2020; March 30, 2021; May 5, 2021; June 6, 2021; December 6-7, 2021; December 15, 2021; January 24, 2022; April 18, 2022; and May 10, 2022 to determine state and federal wetland boundaries in accordance with applicable regulations. The investigation methods and procedures used include pre-survey desktop investigations and on-site field surveys to determine the wetland and watercourse resources within the Project area.

3.1 Pre-survey Desktop Investigations

Prior to the commencement of field surveys, AECOM reviewed information from multiple sources to determine the potential extent of state and federal wetlands within the Project area. Pre-survey information reviewed included:

- United States Geological Survey (USGS) 7.5-minute topographical quadrangles;
- USGS National Hydrography Dataset (NHD);
- National Wetlands Inventory (NWI) map data;
- Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) data;
- U.S. Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) web soil surveys;
- Mapping from previous wetland delineations in the Project area; and,
- CT DEEP inland wetland soils mapping.

3.2 Field Surveys

The wetland delineation methodologies outlined in the Corps Manual and the Regional Supplement and definitions included in the IWWA were used in conjunction with NRCS soil surveys to identify and delineate wetlands within and adjacent to the Project area. During the process of delineating wetlands within the ROW, both state and federal methodologies were utilized and state and federal wetland criteria were evaluated. In order to meet federal jurisdictional wetland status, wetlands must meet the hydric soil, hydrophytic vegetation and wetland hydrology criteria per the Corps Manual and Regional Supplement. Connecticut-only jurisdictional wetlands consist of areas of poorly drained, very poorly drained, alluvial and floodplain soils.

Field surveys were initiated with an inspection of the ROW to identify soil types, topographic and drainage features and plant associations that would indicate the potential for jurisdictional wetland classification. Soil profiles were sampled using a Dutch auger to determine if any alluvial, floodplain, poorly drained, very poorly drained or hydric soil indicators were present. The indicator status of dominant plant species in each stratum was evaluated in the field to determine whether a hydrophytic plant association was present. Indicators of wetland hydrology were also observed and recorded. Specific methods for characterizing and evaluating the soil, vegetation and hydrologic indicators are described below.

3.2.1 Soils

At the center of each wetland data plot, AECOM observed and documented the soil profile morphology to classify the soil type and depth to evidence of aquic conditions. Typically, a soil pit was dug to 20 inches with a Dutch auger to provide a soil profile for examination. The information collected for each soil profile included soil horizons, depth, texture, color and the presence or absence of redoximorphic features (mottles and other features). Colors of the soil matrix and mottles were identified using Munsell Soil Color Charts. AECOM based all hydric soil determinations on criteria established in the Corps Manual, Regional Supplement and *Field Indicators for Identifying Hydric Soils in New England* [4]. Additionally, AECOM noted the presence of any saturation and/or standing water encountered during the soil profile description.

3.2.2 Vegetation

Species abundance in both upland and wetland communities was visually estimated. Dominant trees and shrubs/saplings were recorded within a 30-foot and 15-foot radius, respectively, from the center of each documentation plot. Woody vines were recorded within a 30-foot radius plot. Dominant herbaceous vegetation was recorded within a 5-foot radius plot. AECOM identified plant species using appropriate botanical reference material for the region. The hydrophytic indicator status of each species was identified using *The National Wetland Plant List: 2014 Update of Wetland Ratings*[5].

Indicators of hydrophytic vegetation are satisfied if the results of the rapid assessment include all species rated as OBL or FACW (Indicator 1), the dominance test is greater than 50% (Indicator 2), or the prevalence index is less than or equal to 3.0 (Indicator 3) based on the Corps Wetland Determination Data Form.

3.2.3 Hydrology

The term wetland hydrology encompasses all hydrologic characteristics for areas that are periodically inundated or have soils saturated to the surface at some time during the growing season. Site hydrology was evaluated during field surveys by initially observing whether the soil at the surface was inundated or saturated. If the ground surface was dry, the depth to freestanding groundwater or saturated soil was measured and the presence or absence of other indicators of wetland hydrology (e.g., drift lines, water-stained leaves, etc.) was noted. The wetland hydrology criterion was met if one or more primary or two or more secondary field indicators were present.

3.2.4 Wetland and Watercourse Boundary Flagging

For the purposes of documenting and organizing the wetland and watercourse information on maps and tables for this Project, each wetland resource area was assigned a unique alpha-numeric code. Wetlands and watercourses were numbered sequentially from the northern extent of the Project to the southern extent. Wetlands were labeled with a “W” prefix and watercourses were labeled with an “S” prefix. Tables 1 and 2 (Attachment A) list the delineated wetlands and watercourses identified within the Project area, respectively.

4 New England Hydric Soils Technical Committee. 2019 Version 4, Field Indicators for Identifying Hydric Soils in New England. New England Interstate Water Pollution Control Commission, Lowell, MA.

5 U.S. Army Corps of Engineers 2018. National Wetland Plant List, version 3.4

During the field investigations, the boundaries of each resource area were identified by sequentially-numbered vinyl flagging tied to vegetation and spaced at regular intervals. Wetland/upland boundaries were flagged with pink ribbon preprinted with the words “Wetland Delineation” in black letters and watercourses were flagged with blue flagging. Watercourses less than three feet wide were field-identified with a single series of flags established along the centerline of the stream. In instances where the watercourse was greater than three feet wide, the ordinary high-water mark (OHWM) boundary on each bank was flagged.

3.3 Wetland Classification

While in the field, AECOM soil and wetland scientists classified the various wetlands and watercourses according to the “Cowardin system”, which is a process discussed in *Classification of Wetlands and Deepwater Habitats of the United States*[6]. Identified wetlands were classified as Palustrine Forested (PFO), Palustrine Scrub-Shrub (PSS), or Palustrine Emergent (PEM), all of which are further described below. In some cases, a wetland complex contained more than one wetland classification type. In those situations, each wetland type is listed and the first classification type represents the more dominant characteristic. Wetland vegetation found in these plant community types within the Project area are described in Section 4.0.

3.3.1 Palustrine Forested Wetlands (PFO)

Palustrine forested wetlands are characterized by woody vegetation that is six meters (approximately 20 feet) tall or taller. These areas normally contain an overstory of trees, an understory of young trees and/or shrubs and an herbaceous layer. These wetland types are located predominantly in unmanaged or non-cleared areas of the existing ROW or in adjacent off-ROW areas.

3.3.2 Palustrine Scrub-Shrub Wetlands (PSS)

Palustrine scrub-shrub wetlands are typically dominated by woody vegetation less than six meters (approximately 20 feet) tall. Areas classified as scrub-shrub cover types may represent a successional stage that through natural processes would transition to a forested wetland; or may contain trees or shrubs that are small and/or stunted due to environmental conditions. Within the Project area, PSS wetlands often occur within the ROW as a result of ongoing routine vegetation management practices or an extended hydroperiod, which limits the development of large trees.

3.3.3 Palustrine Emergent Wetlands (PEM)

Palustrine emergent wetlands are characterized by erect, rooted, herbaceous hydrophytes not including mosses and lichens. These wetlands maintain the same appearance year after year and are typically dominated by perennial plants that are present for the majority of the growing season.

3.4 Watercourses

According to the IWWA, “Rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs and all other bodies of water, natural or artificial, vernal or intermittent, public or private, which are contained within, flow through or border upon the state or any portion thereof” are considered watercourses. The “top of bank”, or OHWM, was used to demarcate the limits of a

[6] Cowardin, L.M., V. Carter, F.C. Goletand E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. United States Fish and Wildlife Service Biological Report 79/31. Washington, D.C.

watercourse when no wetlands were adjacent to the channel. Watercourses were investigated to determine if they are listed as a National Wild and Scenic River under the National Wild and Scenic Rivers Act (16 U.S.C. §§ 1271-1287) or rivers designated by the CT DEEP Protected Rivers Act (C.G.S. §§ 25-200 through 25-210). Water quality designations were determined using CT DEEP mapping resources.

3.5 Post-Survey Desktop Analysis

The wetland and watercourse boundaries were plotted on aerial imagery and subsequently reviewed and confirmed by AECOM field personnel. The aerial-based maps show the locations of the delineated resources relative to the proposed limits of the Project.

4.0 Results

A total of 77 state and federal wetlands, 3 CT-only wetlands and 45 watercourses were identified within this portion of Eversource's ROW or fee-owned properties in proximity to proposed Project activities, including access to Project locations, as shown on mapping presented in Appendix A. A summary of the wetlands and watercourses are presented in Tables 1 and 2, respectively, in Appendix A.

4.1 Wetlands

Wetland 1
This wetland was classified in the field as a depressional PSS/PFO with a large pond. Hydrology indicators within this wetland consisted of saturated soils and a high water table. Vegetation identified within the wetland included common reed (*Phragmites australis),* speckled alder (*Alnus incana*) and sensitive fern (*Onoclea sensibilis*). Soils within this wetland satisfy criteria for "Depleted Matrix" (F3) and "Redox Dark Surface" (F6).

Wetland 2
This wetland was classified in the field as a PUBH wetland located in a local depressional area with a culvert inlet. Hydrology indicators within this wetland area consisted of geomorphic position, a high water table and saturated soils. Vegetation identified within the wetland included woolgrass (*Scirpus cyperinus*), lurid sedge (*Carex Lurida*) and silky dogwood (*Cornus amomum*). Soils within this wetland satisfy criteria for "Red Parent Material" (F21) and appeared to be altered showing stratified layers.

Wetland 3
This wetland was classified in the field as a depressional PSS wetland. This wetland was severely impacted with construction debris from residential activities during field review. Hydrology indicators within this wetland consisted of geomorphic position and sparsely vegetated concave surface. No vegetation was identified during field reviews.

Wetland 4
This wetland was classified in the field as a PSS/PFO wetland within a valley and contains Stream S1. Hydrology indicators within this wetland area consisted of standing water, a high water table, saturated soils, drift deposits and drainage patterns. Vegetation identified within the wetland included sensitive fern (*Onoclea sensibilis*) common reed (*Phragmites australis*), red maple (*Acer rubrum),* fox grape *(Vitis labrusca) and* oriental bittersweet *(Celastrus orbiculatus)*. Soils within this wetland satisfy criteria for "Depleted Matrix" (F3) and "Depleted Below Dark Surface" (A11).

Wetland 5
This wetland was classified in the field as a PSS/PFO wetland. Wetland 5 is divided into Wetland 5A located north of Beechwood Avenue and Wetland 5B located south of Beechwood Avenue. Wetland 5B shares similar wetland characteristics with Wetland 5A. A gravel road subdivides Wetland 5A. Hydrology indicators within this wetland area consisted of a high water table and saturated soils. Vegetation identified within the wetland included red maple (*Acer rubrum*), silky dogwood (*Cornus amomum*), speckled alder (*Alnus incana*), winterberry (*Ilex verticillata*) and Japanese knotweed (*Polygonum cuspidatum*). Soils within this wetland satisfy criteria for "Redox Dark Surface" (F6). Wetland 5A is associated with Stream S2.

Wetland 6

This wetland was classified in the field as a PSS/PFO wetland. Hydrology indicators within this wetland area consisted of water stained leaves, drainage patters, saturated soils and a high water table. Vegetation identified within the wetland included common reed (*Phragmites australis*), speckled alder (*Alnus incana*), hard hack (*Spiraea tomentosa*) and skunk cabbage (*Symplocarpus foetidus*). Soils within this wetland satisfy criteria for "Depleted Matrix" (F3) and "Depleted Below Dark Surface" (A11). A depressional area of this wetland located in the eastern portion of the ROW was identified as a vernal pool.

Wetland 7

This wetland was classified in the field as a PSS/PFO wetland. Hydrology indicators within this wetland area consisted of a high water table, surface water and saturated soils. Vegetation identified within the wetland included common reed (*Phragmites australis*) silky dogwood (*Cornus amomum*), fox grape *(Vitis labrusca)*. Soils within this wetland satisfy criteria for "Redox Dark Surface" (F6).

Wetland 8

This wetland was classified in the field as a PSS wetland. Wetland 8 is divided into Wetland 8A located north of Wetland 8B. Wetland 8B shares similar wetland characteristics with Wetland 8A. Hydrology indicators within this wetland area consisted of standing water, a high water table and saturated soils. Vegetation identified within the wetland included common reed (*Phragmites australis*), silky dogwood (*Cornus amomum*), hard hack (*Spiraea tomentosa*) and lurid sedge (*Carex Lurida*). Wetland 8B also contains a dominance of buckthorn (*Rhamnus cathartica*). Soils within this wetland satisfy criteria for "Depleted Matrix" (F3) and "Depleted Below Dark Surface" (A11). This wetland is associated with Streams 3, 4and 5.

Wetland 9

This wetland was classified in the field as a PEM/PSS wetland. Hydrology indicators within this wetland area consisted of a high water table, saturated soils and drainage patterns. Vegetation identified within the wetland included Canada goldenrod (*Solidago canadensis*), wrinkleleaf goldenrod (*Solidago rugosa*) northern spicebush (*Lindera benzoin*), arrowwood (*Viburnum dentatum*), joe-pye weed (*Eutrochium purpureum*) and oriental bittersweet (*Celastrus orbiculatus).* Soils within this wetland satisfy criteria for Depleted Matrix (F3).

Wetland 10

This wetland was classified in the field as a PSS wetland. Hydrology indicators within this wetland area consisted of saturated soils, a high water table, standing water and oxidized rhizospheres on living roots. Vegetation identified within the wetland included winterberry (*Ilex verticillata*) common boneset (*Eupatorium perfoliatum*) jewelweed (*Impatiens capensis*) wrinkleleaf goldenrod (*Solidago rugosa*) arrowhead (*Sagittaria latifolia*) and oriental bittersweet (*Celastrus orbiculatus*). Soils within this wetland satisfy criteria for "Depleted Matrix" (F3) and "Redox Dark Surface" (F6).

Wetland 11

This wetland was classified in the field as a PSS wetland which contains several streams. Hydrology indicators within this wetland area consisted of saturated soils and a high water table. Vegetation identified within the wetland included northern spicebush (*Lindera benzoin*), jewelweed (*Impatiens capensis*) and skunk cabbage (*Symplocarpus foetidus*). Soils within this wetland satisfy criteria for "Depleted Matrix" (F3) and "Histic Epipedon" (A2). This wetland is associated with Stream S6 and S7.

Wetland 12
This wetland was classified in the field as a PSS wetland. Hydrology indicators within this wetland area consisted of water stained leaves, drainage patterns, saturated soils and a high water table. Vegetation identified within the wetland included silky dogwood (*Cornus amomum*), winterberry (*Ilex verticillata*), Multiflora rose (*Rosa multiflora*), tussock sedge (*Carex stricta*) and sensitive fern (*Onoclea sensibilis*). Soils within this wetland satisfy criteria for "Histic Epipedon" (A2) and "Redox Dark Surface" (F6). This wetland is associated with Stream S8.

Wetland 13
This wetland was classified in the field as a PSS/PFO wetland. Hydrology indicators within this wetland area consisted of a high water table, saturated soils and standing water. Vegetation identified within the wetland included common reed (*Phragmites australis*), royal fern (*Osmunda regalis*) skunk cabbage (*Symplocarpus foetidus*). Soils within this wetland satisfy criteria for "Redox Dark Surface" (F6) and "Depleted Dark Surface" (F7).

Wetland 14
This wetland was classified in the field as a PSS wetland. Hydrology indicators within this wetland area consisted of a high water table, drainage patterns and saturated soils. Vegetation identified within the wetland included winterberry (*Ilex verticillata*), common reed (*Phragmites australis*), honeysuckle (*Lonicera japonica*) common greenbrier (*Smilax rotundifolia*). Soils within this wetland satisfy criteria for "Histic Epipedon" (A2). This wetland is associated with Stream S9 and contains an unimproved wetland/watercourse crossing that will require timber matting.

Wetland 15
This wetland was classified in the field as a PEM wetland which flows east to west and stops at an access road. Hydrology indicators within this wetland area consisted of standing water, a high water table and saturated soils. Vegetation identified within the wetland included silky dogwood (*Cornus amomum*), lurid sedge (*Carex lurida*) and mile-a-minute vine (*Persicaria perfoliate*). Soils within this wetland satisfy criteria for "Depleted Matrix" (F3).

Wetland 16
This wetland was classified in the field as a PSS wetland which is covered in debris. Hydrology indicators within this wetland area consisted of a high water table, saturated soils and standing water. Vegetation identified within the wetland included sensitive fern (*Onoclea sensibilis*), tussock sedge (*Carex stricta*) and hardhack (*Spirea tomentosa*). Soils within this wetland satisfy criteria for "Depleted Matrix" (F3).

Wetland 17
This wetland was classified in the field as a PSS wetland. Hydrology indicators within this wetland area consisted of a high water table and saturated soils. Vegetation identified within the wetland included Japanese knotweed (*Polygonum cuspidatum*), sensitive fern (*Onoclea sensibilis*), speckled alder (*Alnus incana*) and common reed (*Phragmites australis*). Soils within this wetland satisfy criteria for "Redox Dark Surface" (F6). This wetland is associated with Stream S10.

Wetland 18
This wetland was classified in the field as a PSS wetland and is associated with a perennial stream. Hydrology indicators within this wetland area consisted of a high water table, saturated soils, drainage patterns and standing water. Vegetation identified within the wetland included sensitive fern (*Onoclea sensibilis*), highbush blueberry (*Vaccinium corymbosum*), silky dogwood (*Cornus amomum*), reed canary grass (*Phalaris arundinacea*). Soils within this wetland satisfy criteria for Redox Dark Surface (F6). This wetland is also associated with Stream S11.

Wetland 19
This wetland was classified in the field as a PSS wetland. Hydrology indicators within this wetland area consisted of oxidized rhizospheres and geomorphic position. Vegetation identified within the wetland included common reed (*Phragmites australis*), wrinkleleaf goldenrod (*Solidago rugosa*), White doll's daisy (*Boltonia asteroides*). Soils within this wetland satisfy criteria for "Redox Dark Surface" (F6).

Wetland 20
This wetland was classified in the field as a PEM wetland. Hydrology indicators within this wetland area consisted of oxidized rhizospheres and geomorphic position. Vegetation identified within the wetland included common reed (*Phragmites australis*) and American sycamore (*Platanus occidentalis*). Soils within this wetland satisfy criteria for "Redox Dark Surface" (F6).

Wetland 21
This wetland was classified in the field as a PSS wetland. Wetland 21 is divided into two areas within the ROW: Wetland 21A is located north of Wetland 21B. Wetland 21B shares similar wetland characteristics with Wetland 21A. Hydrology indicators within this wetland area consisted of standing water, a high water table and drainage patterns. Vegetation identified within the wetland included silky dogwood (*Cornus amomum*) lurid sedge (*Carex lurida*) deertongue (*Dichanthelium clandestinum*), mugwort (*Artemisia vulgaris*) and soft rush (*Juncus effusus*). Soils within this wetland satisfy criteria for "Red Parent Material" (F21).

Wetland 22
Hydrology indicators within this wetland area consisted of saturated soils, a high water table and standing water. Vegetation identified within the wetland included soft rush (*Juncus effusus*), silky dogwood (*Cornus amomum*), cattails (*Typha latifolia*) and garlic mustard (*Alliaria petiolate*). Soils within this wetland satisfy criteria for "Red Parent Material" (F21). This wetland is associated with Stream S12.

Wetland 23
This wetland is a PSS floodplain wetland located along the banks of Stream S13. Hydrology within this wetland consisted of saturated soils and a high water table. Vegetation identified within the wetland included Japanese knotweed (*Polygonum cuspidatum*), common reed (*Phragmites australis*). Soils within this wetland satisfy criteria for "Redox Dark Surface" (F6).

Wetland 24
This wetland is a PEM/PSS floodplain wetland located along the banks of Stream S14. Hydrology within this wetland consisted of saturated soils and a high water table. Vegetation identified within the wetland included Japanese knotweed (*Polygonum cuspidatum*), soft rush (*Juncus effusus*), common reed (*Phragmites australis*) and rattlesnake managrass (*glyceria canadensis*). Soils within this wetland satisfy criteria for "Redox Dark Surface" (F6).

Connecticut Only Wetland 1
This wetland does not meet USACE Criteria for either hydrology or prominence of hydrophytic vegetation, however, soils were classified in the field to the Bash Soil Series which is considered and Inland Wetland Soil by the Connecticut Inland Wetlands and Watercourses Act, Connecticut General Statutes Section 22a-38. Bash soils are considered alluvial soils. Vegetation identified within the Connecticut wetland included multiflora rose (*Rosa multiflora*), Queen Anne's lace (*Daucus carota*), daisy fleabane (*Erigeron annuus*) and mugwort (*Artemisia vulgaris*).

Wetland 25
This wetland was classified in the field as a PSS wetland. Hydrology indicators within this wetland area consisted of geomorphic position and FAC-neutral test. Vegetation identified within the wetland included silky dogwood (*Cornus amomum*), common reed (*Phragmites australis*) and deer tongue (*Dichanthelium clandestinum*). Soils within this wetland satisfy criteria for "Red Parent Material" (F21).

Wetland 26
This wetland was classified in the field as a PEM wetland and is located within a highly disturbed seep valley that, during field reviews, was observed to be filled with cut vegetation. Hydrology indicators within this wetland area consisted of standing water, high water table and saturated soils. Vegetation was highly disturbed and species level identifications were not possible. Soils within this wetland satisfy criteria for "Loamy Gleyed Matrix" (F2). This wetland is associated with Stream S12.

Wetland 27
This wetland was classified in the field as a PFO wetland. Hydrology indicators within this wetland area consisted of moss trim lines, oxidized rhizosphere, water stained leaves, drainage patterns, a high water table and saturated soils. Vegetation identified within the wetland included red maple (*Acer rubrum*), winterberry (*Ilex verticillata*), sensitive fern (*Onoclea sensibilis*), barberry (*Berberis vulgaris*) and eastern red cedar (*Juniperus virginiana*). Soils within this wetland satisfy criteria for "Depleted Matrix" (F3).

Wetland 28
This wetland was classified in the field as a PSS wetland and is associated with a highly sinuous stream located on a hillslope. Hydrology indicators within this wetland area consisted of a high water table, drainage patterns and saturated soils. Vegetation identified within the wetland included highbush blueberry (*Vaccinium corymbosum*), sensitive fern (*Onoclea sensibilis*), silky dogwood (*Cornus amomum*), honeysuckle (*Lonicera japonica*) and false indigo bush (*Amorpha fruticosa*). Soils within this wetland satisfy criteria for "Redox Dark Surface" (F6). This wetland is associated with Stream S12.

Wetland 29
This wetland was classified in the field as a PSS/PFO wetland. Hydrology indicators within this wetland area consisted of drainage patterns, a high water table and saturated soils. Vegetation identified within the wetland included sensitive fern (*Onoclea sensibilis*), silky dogwood (*Cornus amomum*), Multiflora rose (*Rosa multiflora*) and false indigo bush (*Amorpha fruticosa*). Soils within this wetland satisfy criteria for "Red Parent Material" (F21).

Wetland 30
This wetland was classified in the field as a PSS wetland. Dispersed stream channels run throughout the wetland. Hydrology indicators within this wetland area consisted of a geomorphic position and drainage patterns. Vegetation identified within the wetland included silky dogwood (*Cornus amomum*), multiflora rose (*Rosa multiflora*), sensitive fern (*Onoclea sensibilis*) mugwort (*Artemisia vulgaris*), northern spicebush (*Lindera benzoin*) and river grape (*Vitis riparia*). Soils within this wetland satisfy criteria for "Red Parent Material" (F21). This wetland is hydrologically connected to Wetland 28 via a culvert located on the northern portion of Wetland 30 that drains under an existing multiuse path.

Connecticut Only Wetland 2
This Connecticut wetland was identified on the south banks of the Quinnipiac River within a significant floodplain. The area is closely maintained as a park in the northern portion of the ROW, but the southern portion shows evidence of wracking and bent vegetation indicating bank overtopping. Soils in this wetland were classified in the field as most similar to Hadley Soil Series, an alluvial soil in Connecticut.

Wetland 31
This wetland was incorporated into the boundaries of Stream (S16) following additional field reviews.

Wetland 32
This wetland was classified in the field as a PSS wetland and is associated with stream S17, the northern portion of which is a drainage ditch on the side of an access road. This drainage ditch portion lacks a defined channel, contains low flow, with variable width and contains vegetation throughout with no significant change in vegetation characteristics. Hydrology indicators within this wetland area consisted of a high water table, drainage patterns and saturated soils. Vegetation identified within the wetland included silky dogwood (*Cornus amomum*), reed canary grass (*Phalaris arundinacea*), wrinkleleaf goldenrod (*Solidago rugosa*) and wool grass (*Scirpus cyperinus*). Soils within this wetland satisfy criteria for “Thick Dark Surface” (A12).

Wetland 33
This wetland was classified in the field as a PSS/PFO wetland. Hydrology indicators within this wetland area consisted of standing water, a high water table and saturated soils. Vegetation identified within the wetland included nightshade (*Solanum dulcamara*), river grape (*Vitis riparia*), honeysuckle (*Lonicera japonica*), common reed (*Phragmites australis*) and multiflora rose (*Rosa multiflora*). Soils within this wetland satisfy criteria for “Hydrogen Sulfide” (A4). This wetland is associated with Stream S19.

Wetland 34
This wetland was classified in the field as a PSS wetland identified as a seep. Hydrology indicators within this wetland area consisted of a high water table and saturated soils. Vegetation identified within the wetland included silky dogwood (*Cornus amomum*), gray dogwood (*Cornus racemose*), lurid sedge (*Carex lurida*), cattails (*Typha latifolia*) and common reed (*Phragmites australis*). Soils within this wetland satisfy criteria for “Redox Dark Surface” (F6) and “Depleted Below Dark Surface” (A11).

Wetland 35
This wetland was classified in the field as a PFO wetland. Hydrology indicators within this wetland area consisted of a high water table and drainage patterns. Vegetation identified within the wetland included lurid sedge (*Carex lurida*), red maple (*Acer rubrum*), multiflora rose (*Rosa multiflora*), slippery elm (*Ulmus rubra*), switchgrass (*Panicum virgatum*) and wrinkleleaf goldenrod (*Solidago rugosa*). Soils within this wetland satisfy criteria for “Redox Dark Surface” (F6).

Wetland 36
This wetland was classified in the field as a PSS/PFO wetland. This wetland is fed by outfall from a pond overflow. The wetland is crossed by an access road representing an existing impact. Hydrology indicators within this wetland area consisted of a high water table and saturated soils. Vegetation identified within the wetland included sensitive fern (*Onoclea sensibilis*), silky dogwood (*Cornus amomum*), cattails (*Typha latifolia*), wrinkleleaf goldenrod (*Solidago rugosa*), lurid sedge

(*Carex lurida*) and royal fern (*Osmunda regalis*). Soils within this wetland satisfy criteria for "Depleted Matrix" (F3). This wetland is associated with Stream S23.

Wetland 37
This wetland was classified in the field as a PEM/PFO wetland and is a large depressional wetland in a valley. Hydrology indicators within this wetland area consisted of drainage patterns and oxidized rhizospheres. Vegetation identified within the wetland included soft rush (*Juncus effusus*), lurid sedge (*Carex lurida*), sensitive fern (*Onoclea sensibilis*), silky dogwood (*Cornus amomum*) and mile-a-minute vine (*Persicaria perfoliate*). Soils within this wetland satisfy criteria for "Redox Dark Surface" (F6). This wetland is associated with Stream S24.

Wetland 38
This wetland was classified in the field as a PSS wetland. Hydrology indicators within this wetland area consisted of a high water table and saturated soils. Vegetation identified within the wetland included common reed (*Phragmites australis*) and nightshade (*Solanum dulcamara*). Soils within this wetland satisfy criteria for "Depleted Matrix" (F3). This wetland is associated with Stream S25.

Wetland 39
This wetland was classified in the field as a PEM wetland. Hydrology indicators within this wetland consisted of drainage patterns and an oxidized rhizosphere. The area is highly disturbed and vegetation was unidentifiable. Soils within this wetland satisfy criteria for "Redox Dark Surface" (F6). This wetland is associated with Stream S26.

Wetland 40
This wetland was classified in the field as a PSS wetland and is associated with stream S27 which runs through it. Hydrology indicators within this wetland consisted of drainage patterns, saturated soils and a high water table. Vegetation identified within the wetland included silky dogwood (*Cornus amomum*), Japanese knotweed (*Polygonum cuspidatum*), cattails (*Typha latifolia*), sensitive fern (*Onoclea sensibilis*), reed canary grass (*Phalaris arundinacea*) and deer tongue (*Dichanthelium clandestinum*). Soils within this wetland satisfy criteria for "Redox Dark Surface" (F6).

Wetland 41
This wetland is included in initial field investigations and on prior mapping, but is located outside of the project area and therefore, was therefore not evaluated for this report.

Wetland 42
This wetland was classified in the field as a PSS/PFO wetland. Hydrology indicators within this wetland consisted of saturated soils and a high water table. Vegetation identified within the wetland included winterberry (*Ilex verticillata*), red maple (*Acer rubrum*), soft rush (*Juncus effusus*), lurid sedge (*Carex lurida*), greenbriar (*smilax rotundifolia*) and silky dogwood (*Cornus amomum*). Soils within this wetland appear to satisfy criteria for "Redox Dark Surface" (F6) but were not deep enough to confirm, extremely stony soils created a naturally problematic condition. This wetland is associated with Stream S27.

Wetland 43
This wetland was classified in the field as a PSS/PFO wetland. Hydrology indicators within this wetland consisted of saturated soils and a high water table. Vegetation identified within the wetland included silky dogwood (*Cornus amomum*), winterberry (*Ilex verticillata*), red maple (*Acer*

rubrum), speckled alder (*Alnus incana*), wrinkleleaf goldenrod (*Solidago rugosa*) and sensitive fern (*Onoclea sensibilis*). Soils within this wetland satisfy criteria for "Depleted Matrix" (F3).

Wetland 44
This wetland was classified in the field as a PFO/PSS wetland. Hydrology indicators within this wetland consisted of high water table and saturated soils. Vegetation identified within the wetland included multiflora rose (*Rosa multiflora*), silky dogwood (*Cornus amomum*), red maple (*Acer rubrum*), sensitive fern (*Onoclea sensibilis*) and arrowwood (*Viburnum dentatum*). Soils within this wetland satisfy criteria for "Depleted Matrix" (F3) and "Histic Epipedon" (A2).

Wetland 45
This wetland was classified in the field as a PSS wetland. Hydrology indicators within this wetland consisted of a high water table, oxidized rhizospheres and saturated soils. Vegetation identified within the wetland included multiflora rose (*Rosa multiflora*), sensitive fern (*Onoclea sensibilis*), multiflora rose (*Rosa multiflora*), common arrowhead (*Sagittaria latifolia*), nannyberry (*Viburnum lentago*) and tussock sedge (*Carex stricta*). Soils within this wetland satisfy criteria for "Depleted Matrix" (F3).

Wetland 46
This wetland was classified in the field as a PSS wetland. Hydrology indicators within this wetland consisted of a high water table, oxidized rhizospheres and saturated soils. Vegetation identified within the wetland included cattails (*Typha latifolia*), sensitive fern (*Onoclea sensibilis*), multiflora rose (*Rosa multiflora*), common arrowhead (*Sagittaria latifolia*), nannyberry (*Viburnum lentago*) and tussock sedge (*Carex stricta*). Soils within this wetland satisfy criteria for "Depleted Matrix" (F3). This wetland is associated with stream S28.

Wetland 47
This wetland was classified in the field as a PFO/PSS wetland with similar characteristics to Wetland 46. Hydrology indicators within this wetland consisted of a high water table, oxidized rhizospheres and saturated soils. Vegetation identified within the wetland included cattails (*Typha latifolia*), sensitive fern (*Onoclea sensibilis*), multiflora rose (*Rosa multiflora*), common arrowhead (*Sagittaria latifolia*), nannyberry (*Viburnum lentago*) and tussock sedge (*Carex stricta*). Soils within this wetland satisfy criteria for "Depleted Matrix" (F3).

Wetland 48
This wetland was classified in the field as a PSS wetland. Hydrology indicators within this wetland consisted of a high water table and standing water. Vegetation identified within the wetland included common arrowhead (*Sagittaria latifolia*), pussy willow (*Salix discolor*), purple loosestrife (*Lythrum salicaria*) and woolgrass (*Scirpus cyperinus*). Soils within this wetland satisfy criteria for "Depleted Matrix" (F3).

Wetland 49
This wetland was classified in the field as a PSS wetland. Hydrology indicators within this wetland consisted of a high water table, oxidized rhizospheres and saturated soils. Vegetation identified within the wetland included sensitive fern (*Onoclea sensibilis*), pussy willow (*Salix discolor*), arrowwood (*Viburnum dentatum*), multiflora rose (*Rosa multiflora*) and wrinkleleaf goldenrod (*Solidago rugosa*). Soils within this wetland satisfy criteria for "Depleted Matrix" (F3) and "Redox Dark Surface" (F6).

Wetland 50
This wetland was classified in the field as a PSS wetland. Hydrology indicators within this wetland consisted of a high water table, oxidized rhizospheres and saturated soils. Vegetation identified within the wetland included sensitive fern (*Onoclea sensibilis*), skunk cabbage (*Symplocarpus foetidus*), common arrowhead (*Sagittaria latifolia*) and purple loosestrife (*Lythrum salicaria*). Soils within this wetland satisfy criteria for "Depleted Matrix" (F3) and "Histic Epipedon" (A2). This wetland is associated with stream S29.

Wetland 51
This wetland was classified in the field as a PSS wetland. Hydrology indicators within this wetland consisted of a high water table, oxidized rhizospheres and saturated soils. Vegetation identified within the wetland included tussock sedge (*Carex stricta*), sensitive fern (*Onoclea sensibilis*), arrowwood (*Viburnum dentatum*), pussy willow (*Salix discolor*) and skunk cabbage (*Symplocarpus foetidus*). Soils within this wetland satisfy criteria for "Depleted Matrix" (F3).

Wetland 52
This wetland was classified in the field as a PSS wetland. This wetland is separated from Wetland 51 by an existing access road and shares similar characteristics to Wetland 51. Hydrology indicators within this wetland consisted of a high water table, oxidized rhizospheres and saturated soils. Vegetation identified within the wetland included tussock sedge (*Carex stricta*), sensitive fern (*Onoclea sensibilis*), arrowwood (*Viburnum dentatum*), pussy willow (*Salix discolor*) and skunk cabbage (*Symplocarpus foetidus*). Soils within this wetland satisfy criteria for "Depleted Matrix" (F3).

Wetland 53
This wetland was classified in the field as a PSS wetland. Hydrology indicators within this wetland consisted of a high water table and oxidized rhizospheres. Vegetation identified within the wetland included sensitive fern (*Onoclea sensibilis*), arrowwood (*Viburnum dentatum*), skunk cabbage (*Symplocarpus foetidus*), wrinkleleaf goldenrod (*Solidago rugosa*), arrowhead (*Sagittaria latifolia*) winterberry (*Ilex verticillata*), highbush blueberry (*Vaccinium corymbosum*) and aster (*Aster sp.*). Soils within this wetland satisfy criteria for "Depleted Matrix" (F3).

Wetland 54
This wetland was classified in the field as a PSS/PEM wetland. This wetland is separated from Wetland 53 by an existing access road and shares similar characteristics to Wetland 53. Hydrology indicators within this wetland consisted of a high water table and oxidized rhizospheres. Vegetation identified within the wetland included sensitive fern (*Onoclea sensibilis*), arrowwood (*Viburnum dentatum*), skunk cabbage (*Symplocarpus foetidus*), wrinkleleaf goldenrod (*Solidago rugosa*), arrowhead (*Sagittaria latifolia*) winterberry (*Ilex verticillata*), highbush blueberry (*Vaccinium corymbosum*) and aster (*Aster sp*). Soils within this wetland satisfy criteria for "Depleted Matrix" (F3). This wetland is associated with Stream S30.

Wetland 55
This wetland was classified in the field as a PSS wetland. Hydrology indicators within this wetland consisted of a high water table and saturated soils. Vegetation identified within the wetland included winterberry (*Ilex verticillata*), multiflora rose (*Rosa multiflora*), silky dogwood (*Cornus amomum*), sensitive fern (*Onoclea sensibilis*), arrowhead (*Sagittaria latifolia*), honeysuckle (*Lonicera sp*.) and highbush blueberry (*Vaccinium corymbosum*). Soils within this wetland satisfy criteria for "Depleted Matrix" (F3).

Wetland 56
This wetland was classified in the field as a PSS/PFO wetland. This wetland is separated from Wetland 55 by an existing access road and shares similar characteristics to Wetland 55. Hydrology indicators within this wetland consisted of a high water table and saturated soils. Vegetation identified within the wetland included winterberry (*Ilex verticillata*), multiflora rose (*Rosa multiflora*), silky dogwood (*Cornus amomum*), sensitive fern (*Onoclea sensibilis*), arrowhead (*Sagittaria latifolia*), honeysuckle (*Lonicera sp*.) and highbush blueberry (*Vaccinium corymbosum*). Soils within this wetland satisfy criteria for "Depleted Matrix" (F3) and "Redox Dark Surface" (F6).

Wetland 57
This wetland was classified in the field as a PSS/PFO wetland. Hydrology indicators within this wetland consisted of high water table and saturated soils. Vegetation identified within the wetland included sensitive fern (*Onoclea sensibilis*), honeysuckle (*Lonicera sp.*), multiflora rose (*Rosa multiflora*), arrowwood (*Viburnum dentatum),* silky dogwood (*Cornus amomum*) and sensitive fern (*Onoclea sensibilis*). Soils within this wetland satisfy criteria for "Depleted Matrix" (F3). This wetland is associated with Stream S31.

Wetland 58
This wetland was classified in the field as a PSS/PFO wetland. Hydrology indicators within this wetland consisted of standing water, a high water table and saturated soils. Vegetation identified within the wetland included sensitive fern (*Onoclea sensibilis*), multiflora rose (*Rosa multiflora*), winterberry (*Ilex verticillata*), nannyberry (*Viburnum lentago*) and peat moss (*Sphagnum sp.*). Soils within this wetland satisfy criteria for "Depleted Matrix" (F3). This wetland is associated with Stream S32.

Wetland 59
This wetland was classified in the field as an isolated PEM wetland and is located in a ditch adjacent to an access road and piled slash. Hydrology indicators within this wetland consisted of saturated soils, a high water table and standing water. Vegetation identified within the wetland included soft rush (*Juncus effusus*), tussock sedge (*Carex stricta*), cattails (*Typha latifolia*) and yellow nutsedge (*Cyperus esculentus*). Soils within this wetland satisfy criteria for "Redox Dark Surface" (F6).

Wetland 60
This wetland was classified in the field as a PFO wetland. Hydrology indicators within this wetland consisted of oxidized rhizospheres, water stained leaves, saturated soils and a high water table. Vegetation identified within the wetland included red maple (*Acer rubrum*), American hornbeam (*Carpinus caroliniana*), sensitive fern (*Onoclea sensibilis*) and cinnamon fern (*Osmundastrum cinnamomeum*). Soils within this wetland satisfy criteria for "Depleted Matrix" (F3). This wetland is associated with Stream S33.

Wetland 61
This wetland was classified in the field as a PSS/PFO wetland. Hydrology indicators within this wetland consisted of oxidized rhizospheres. Vegetation identified within the wetland included highbush blueberry (*Vaccinium corymbosum*), swamp rose (*Rosa palustris*,), silky dogwood (*Cornus amomum*) and skunk cabbage (*Symplocarpus foetidus*). Soils within this wetland satisfy criteria for "Depleted Matrix" (F3) and "Redox Dark Surface" (F6).

Wetland 62
This wetland was classified in the field as a PSS wetland. Hydrology indicators within this wetland consisted of saturated soil, a high water table and standing water. There is a highly sinuous stream channel which runs through the wetland. Vegetation identified within the wetland included silky dogwood (*Cornus amomum*), cattails (*Typha latifolia*), lurid sedge (*Carex lurida*), tussock sedge (*Carex stricta*). Soils within this wetland satisfy criteria for "Hydrogen Sulfide" (A4). This wetland is associated with Stream S34 & 35.

Wetland 63
This wetland was classified in the field as a PEM wetland. Hydrology indicators within this wetland consisted of a high water table. Vegetation identified within the wetland included reed canary grass (*Phalaris arundinacea*) and blue vervain (*Verbena hastata*). Soils within this wetland satisfy criteria for "Depleted Matrix" (F3), Depleted Dark Surface (F7) and Depleted Below Dark Surface (A11).

Wetland 64
This wetland was classified in the field as a PEM wetland. Hydrology indicators within this wetland consisted of high water table and saturated soils. Vegetation identified within the wetland included reed canary grass (*Phalaris arundinacea*), wrinkleleaf goldenrod (*Solidago rugosa*), grass-leaved goldenrod (*Solidago graminifolia*), blue vervain (*Verbena hastata*), orchard grass (*Dactylis glomerata*) and soft rush (*Juncus effusus*). Soils within this wetland satisfy criteria for "Histic Epipedon" (A2), "Depleted Below Dark Surface" (A11) and "Depleted Matrix" (F3)

Wetland 65
This wetland was classified in the field as a PEM wetland. Hydrology indicators within this wetland consisted of oxidized rhizospheres, saturated soils and a high water table. Vegetation identified within the wetland included wrinkleleaf goldenrod (*Solidago rugosa*), reed canary grass (*Phalaris arundinacea*), blue vervain (*Verbena hastata*) and cattails (*Typha latifolia*). Soils within this wetland satisfy criteria for "Depleted Matrix" (F3) and "Black Histic" (A3).

Wetland 66
This wetland was classified in the field as a PEM wetland. Hydrology indicators within this wetland consisted of oxidized rhizospheres, saturated soils and a high water table. Vegetation identified within the wetland included soft rush, (*Juncus effusus*) wrinkleleaf goldenrod (*Solidago rugosa*) and reed canary grass (*Phalaris arundinacea*). Soils within this wetland satisfy criteria for "Redox Dark Surface" (F6). This wetland is associated with Stream S36.

Wetland 67
This wetland was classified in the field as a PEM wetland and is a large depressional wetland in a valley. Hydrology indicators within this wetland area consisted of drainage patterns and oxidized rhizospheres. Vegetation identified within the wetland included sensitive fern (*Onoclea sensibilis*) and skunk cabbage (*Symplocarpus foetidus*). Soils within this wetland satisfy criteria for "Depleted Matrix" (F3) and "Black Histic" (A3). Stream S37 flows through this wetland.

Wetland 68
This wetland was classified in the field as a PSS/PFO wetland. Hydrology indicators within this wetland consisted of high water table and standing water. Vegetation identified within the wetland included sensitive fern (*Onoclea sensibilis*), skunk cabbage (*Symplocarpus foetidus*), pussy willow (*Salix discolor*), silky dogwood (*Cornus amomum*), multiflora rose (*Rosa multiflora*), honeysuckle (*Lonicera sp.*) and mountain-laurel (*Kalmia latifolia*). Soils within this wetland satisfy

criteria for “Histic Epipedon” (A2), “Depleted Below Dark Surface” (A11) and “Depleted Matrix” (F3).

Wetland 69
This wetland was classified in the field as a PSS/PFO wetland. This wetland was located within the same geographic location as Wetland 68 and shares similar characteristics. Hydrology indicators within this wetland consisted of high water table and standing water. Vegetation identified within the wetland included sensitive fern (*Onoclea sensibilis*), skunk cabbage (*Symplocarpus foetidus*), pussy willow (*Salix discolor*), silky dogwood (*Cornus amomum*), multiflora rose (*Rosa multiflora*), honeysuckle (*Lonicera sp.*) and mountain-laurel (*Kalmia latifolia*). Soils within this wetland satisfy criteria for “Histic Epipedon” (A2), “Depleted Below Dark Surface” (A11) and “Depleted Matrix” (F3).

Wetland 70
This wetland was classified in the field as a PEM wetland. This wetland was located within the same geographic location as Wetland 68 and 69 and shares similar characteristics. Hydrology indicators within this wetland consisted of high water table and standing water. Vegetation identified within the wetland included sensitive fern (*Onoclea sensibilis*), skunk cabbage (*Symplocarpus foetidus*), pussy willow (*Salix discolor*), silky dogwood (*Cornus amomum*), lurid sedge (*Carex lurida*) and tussock sedge (*Carex stricta*). Soils within this wetland satisfy criteria for “Histic Epipedon” (A2), “Depleted Below Dark Surface” (A11) and “Depleted Matrix” (F3). This wetland is associated with Stream S38, 39, 42 and 41.

Wetland 71
This wetland was classified in the field as a PSS/PFO wetland. Hydrology indicators within this wetland consisted of saturated soils and a high water table. Vegetation identified within the wetland included silky dogwood (*Cornus amomum*), pussy willow (*Salix discolor*) and skunk cabbage (*Symplocarpus foetidus*). Soils within this wetland satisfy criteria for “Histic Epipedon” (A2). This wetland is associated with Stream S40 and S41.

Wetland 72
This wetland is classified as a PSS/PFO wetland and consists of a fringe along the edges of Stream S43. Hydrology indicators within this wetland consisted of saturated soils and a high water table. Vegetation identified within the wetland included Multiflora rose (*Rosa multiflora*), sensitive fern (*Onoclea sensibilis*), wrinkleleaf goldenrod (*Solidago rugosa*) and skunk cabbage (*Symplocarpus foetidus*). Soils within this wetland satisfy criteria “Redox Dark Surface” (F6).

Wetland 73
This wetland was classified in the field as a PEM wetland. Hydrology indicators within this wetland consisted of saturated soils and a high water table. Vegetation identified within the wetland included silky dogwood (*Cornus amomum*), sensitive fern (*Onoclea sensibilis*), narrow-leaf cattail (*Typha angustifolia*), wrinkleleaf goldenrod (*Solidago rugosa*) and skunk cabbage (*Symplocarpus foetidus*). Soils within this wetland satisfy criteria for “Histic Epipedon” (A2) and “Redox Dark Surface” (F6). Stream S43 flows through this wetland.

Wetland 74
This wetland was classified in the field as a PSS wetland. Hydrology indicators within this wetland consisted of saturated soil, a high water table and standing water. Vegetation identified within the wetland included silky dogwood (*Cornus amomum*), speckled alder (*Alnus incana*) sensitive fern (*Onoclea sensibilis*), lurid sedge (*Carex lurida*) and tussock sedge (*Carex stricta*). Soils within this wetland satisfy criteria for “Redox Dark Surface” (F6).

Wetland 75
This wetland was classified in the field as a PEM wetland. Hydrology indicators within this wetland consisted of oxidized rhizospheres and sparsely vegetated concave surface. No vegetation was identified within the wetland, several eastern hemlocks (*Tsuga canadensis*) shade the wetland. Soils within this wetland satisfy criteria for "Redox Dark Surface" (F6).

Wetland 76
This wetland was classified in the field as a PSS wetland. Hydrology indicators within this wetland consisted of saturated soil, a high water table and oxidized rhizospheres. Vegetation identified within the wetland included common reed (*Phragmites australis*), Japanese knotweed (*Polygonum cuspidatum*), mile-a-minute vine (*Persicaria perfoliata*) and sensitive fern (*Onoclea sensibilis*). Soils within this wetland satisfy criteria for "Red Parent Material" (F21).

Wetland 77
This wetland was classified in the field as a PEM wetland. Hydrology indicators within this wetland consisted of saturated soil and a high water table. Vegetation identified within the wetland included common reed (*Phragmites australis*), reed canary grass (*Phalaris arundinacea*) and Kentucky bluegrass (*Poa pratensis*). Soils within this wetland satisfy criteria for "Red Parent Material" (F21).

Connecticut Only Wetland 3
This Connecticut wetland was identified between Stream S44 and S45. The area shows signs of consistent overland flow in the form of wracking, bent vegetation and sediment deposits. Soils in this wetland were classified in the field as most similar to Rippowam Soil Series, an alluvial soil in Connecticut.

4.2 Watercourses

A total of 32 perennial and 13 intermittent watercourses were identified within the Project area and are included in the watercourse summary table (Table 2) in Appendix A. No watercourses along the Project fall under the jurisdiction of the National Wild and Scenic Rivers Act or are designated as wild and scenic under the CT DEEP Protected Rivers Act.

Stream 1
This stream is a perennial watercourse associated with Wetland W4. This stream originates east of the ROW and flows west, continuing outside of the ROW. Stream substrate within the ROW consists of a mix of organics, sand and small gravel. Stream S1 is located within a wide floodplain valley. Stream S1 is also known as Misery Brook.

Stream 2
This stream is an intermittent watercourse associated with Wetland W5A. This stream originates within the ROW where it is crossed by an existing access road and flows east off the ROW. Stream substrate within the ROW consists predominantly of organics, sand and gravel.

Stream 3
This stream is an intermittent watercourse associated with Wetland W8. This stream originates within the ROW along the edge of Wetland W8. The stream exhibited low flow within a swale channel. The stream has a vegetated channel throughout much of the reach.

Stream 4
This stream is a perennial watercourse associated with Wetland W8. This stream originates within the wetland and flows west into the Stream S5 and then into the Stream S3 channel. The stream substrate consists of gravel, cobble and boulders.

Stream 5
This stream is a perennial watercourse associated with Wetland W8. This stream originates within the wetland and flows west into the Stream S3 channel. The stream substrate consists of gravel, cobble and boulders.

Stream 6
This stream is a perennial watercourse associated with Wetland W11. This stream originates east of the ROW and flows west into Stream S7. Stream substrate within the ROW consists of gravel to boulders.

Stream 7
This stream is a perennial watercourse associated with Wetland W11 and located at the base of a sloped workpad. This stream originates east of the ROW and flows west continuing off ROW. Stream substrate within the ROW consists of organics, gravel and boulders.

Stream 8
This stream is a perennial watercourse associated with Wetland W12. This stream originates east of the ROW and flows west, continuing outside of the ROW. Stream substrate within the ROW consists of sand and gravel.

Stream 9
This stream is a perennial watercourse associated with Wetland W14. This stream originates east of the ROW and flows west off ROW. Stream substrate within the ROW consists of gravel to boulders.

Stream 10
This stream is a perennial watercourse associated with Wetland W17. The stream is located within a well-defined localized valley. This stream originates east of the ROW, flows west and continues off of the western side of the ROW. Substrate within the ROW consists of sand silt and organics.

Stream 11
This stream is a perennial watercourse associated with Wetland W18. The stream is located within a well-defined localized valley. This stream originates east of the ROW, flows west and continues off of the western side of the ROW. Substrate within the ROW consists of sand to boulders.

Stream 12
This stream is a perennial watercourse associated with Wetlands W22, W26, W27, W28 and W30. The stream flows under the Quinnipiac River Trail into Wetland W30 where it breaks into a braided stream system. Substrate within the ROW consists of sand to boulders.

Stream 13
This stream is a perennial watercourse associated with Wetland W23 and is a named stream (Sodom Brook). This stream originates north of the ROW, flows south and flows into S14 immediately south of the ROW. Substrate within the ROW was unable to be determined due to the high flow and volume of the stream. The stream is contained within a defined valley consisting of a large moderate floodplain.

Stream 14
This stream is a perennial watercourse associated with Wetland W24 and CTW1 and is a named stream (Harbor Brook). This stream originates north of the ROW, flows south through the ROW. Substrate within the ROW was unable to be determined due to the high flow and volume of the stream. The stream is contained within a defined valley consisting of a large floodplain to the east.

Stream 15
This stream is a perennial watercourse associated with Wetland W30 and CTW2 and is a named stream (Quinnipiac River). This stream originates east of the ROW, flows west and continues west off the ROW. Substrate within the ROW was unable to be determined due to the high flow and volume of the stream. The stream is located within a large valley consisting of tiered levels along the east and west banks.

Stream 16
This stream is a perennial watercourse without an associated wetland fringe. This stream originates east of the ROW and flows west into the ROW via a culvert under Dana Lane. The stream flows east off the ROW. Stream substrate within the ROW consists of sand to boulders.

Stream 17
This stream is an intermittent watercourse associated with Wetland W32. This stream originates at a swale which turns into a drainage ditch then an intermittent stream with defined flow and bed and bank. Stream substrate within the ROW consists of organics, sand and gravel.

Stream 18
This stream is a perennial watercourse which flows down a vegetated hillslope and is not associated with any wetland. This stream originates west of the ROW and flows east off ROW. the stream channel is deep and wide but flow during field reviews was limited indicating highly variable flow. Stream substrate within the ROW consists of gravel to boulders.

Stream 19
This stream is a small perennial watercourse associated with Wetland W33. This stream originates at a headcut within the ROW and flows east discharging into W33. Stream substrate within the ROW consists of organics, sand and gravel.

Stream 20
This stream is a perennial watercourse not associated with any wetland. This stream originates west of the ROW and flows east off ROW. Stream substrate within the ROW consists of gravel to boulders.

Stream 21
This stream is an intermittent watercourse not associated with a wetland. This stream acts as a drainage ditch along the western edge of a historic roadway and discharges into a ponded portion of Stream S22. The stream channel within the ROW consists of a vegetated swale.

Stream 22
This stream is a perennial watercourse that has been historically impounded to create a pond within the ROW. The stream has an outfall that discharges into Stream S23 and Wetland W36. This stream originates west of the ROW.

Stream 23
This stream is an intermittent watercourse fed by discharge from the impounded S22 and associated with Wetland W36. The stream flows east off the ROW. Stream substrate within the ROW consists of gravel to boulders. There is evidence of historic dumping in the area including rusting metal and wire.

Stream 24
This stream is a perennial watercourse associated with Wetland W37. This stream originates west of the ROW and flows east off ROW. The stream and wetland are contained within a wide flat bottom valley. Stream substrate within the ROW consists of organics, sand and boulders.

Stream 25
This stream is a small intermittent drainage swale originating as driveway drainage and flowing into Wetland W38. The stream channel consists of a vegetated swale.

Stream 26
This stream is a perennial watercourse that is ponded within the ROW and flows east off ROW. The stream is very deep with a substrate consisting of a thick organic layer.

Stream 27
This stream is a perennial watercourse associated with Wetlands W40 and W42. This stream originates west of the ROW and flows east off ROW. Within the ROW, S27 flows under Chimney Hill Road via a culvert. There are existing impacts to the stream where project matting is proposed. Stream substrate within the ROW consists of sand, gravel and cobble.

Stream 28
This stream is a perennial watercourse associated with Wetland W46. This stream originates east of the ROW and flows west off ROW. The stream flows under an existing access road via an existing ford. Stream substrate within the ROW consists of organics, sand and gravel.

Stream 29
This stream is a perennial watercourse associated with Wetland W50. This stream originates east of the ROW and flows west off ROW. The stream flows under an existing access road via a culvert. Stream substrate within the ROW consists of organics, sand and gravel.

Stream 30
This stream is an intermittent watercourse associated with Wetland W54. This stream originates east of the ROW and flows west off ROW. The stream is located at the base of a steep slope. Stream substrate within the ROW consists of gravel to boulders.

Stream 31
This stream is an intermittent watercourse associated with Wetland W57. This stream originates east of the ROW and flows west off ROW following the contours of W57. Stream substrate within the ROW consists of gravel to boulders. The stream flows over an existing access road without existing improvements.

Stream 32
This stream is a perennial watercourse associated with Wetland W58. This stream originates east of the ROW and flows west off ROW. Stream substrate within the ROW consists of gravel, cobble and boulders.

Stream 33
This stream is a perennial watercourse associated with Wetland W60. This stream exists west of the ROW. The stream is highly sinuous with a substrate within the ROW consisting of organics, sand and gravel.

Stream 34
This stream is an intermittent watercourse associated with Wetland W62. This stream originates within W62 and flows west joining Stream S35. Stream substrate within the ROW consists of organics.

Stream 35
This stream is an intermittent watercourse associated with Wetland W62. This stream originates west of the ROW and flows through the ROW within W62 eventually flowing under Wallingford Road. Stream S33 and S35 are the same stream system but exist in different areas of the ROW. Stream substrate consists of organics, silt and sand.

Stream 36
This stream is an intermittent watercourse associated with Wetland W66. This stream originates within W66 and flows west within the wetland. Stream substrate within the ROW consists of organics, sand and gravel.

Stream 37
This stream is a perennial watercourse associated with Wetland W67. The stream flows from east to west within a wide river valley. Stream substrate within the ROW consists of sand, silt and organics.

Stream 38
This stream is a perennial watercourse associated with Wetland W70. This stream originates east of the ROW and flows west joining with Stream S39. Stream substrate within the ROW consists of gravel to boulders.

Stream 39
This stream is a perennial watercourse associated with Wetland W70. This stream consists of a large, ponded area with numerous inlets and outlets consisting of culverts, as well as a broad area of connecting wetlands. Visible substrate consisted of sand and gravel.

Stream 40
This stream is an intermittent watercourse associated with Wetland W71. This stream originates east of the ROW and flows west joining with S42. Stream substrate within the ROW consists of sand, silt and organics.

Stream 41
The stream is an intermittent watercourse associated with Wetland W70. The stream originates as a swale within the ROW And flows north to join S42. Stream substrate within the ROW consists of gravel, cobble and boulders.

Stream 42
This stream is a perennial watercourse associated with Wetlands W71 and W72. This stream originates east of the ROW and flows west draining into S39. Stream substrate within the ROW consists of sand, silt and organics.

Stream 43
This stream is a perennial watercourse associated with Wetlands W72 and W73. This stream originates east of the ROW and flows west off ROW. Stream substrate within the ROW consists of organics, sand and gravel.

Stream 44
This stream is a perennial watercourse associated with Wetland CTW3 and appears to be a branch of the Quinnipiac River. This stream originates north of the study area and flows south joining S45 (the main branch of the Quinnipiac River). Substrate within the ROW was unable to be determined due to the high flow and volume of the stream.

Stream 45
This stream is a perennial watercourse associated with Wetland CTW3. This stream is known as the Quinnipiac River. This stream originates north of the ROW and flows south off ROW. Substrate within the ROW was unable to be determined due to the high flow and volume of the stream.

Appendix A

Wetland and Watercourse Summary Tables

Table 1 – Summary of Wetlands Delineated along the 1610 / 1355 / 1690 / 1208 Lines

Table 2 – Summary of Watercourses Delineated along the 1610 / 1355 / 1690 / 1208 Lines

Table 1

Wetland ID	Town	Mapsheet	Wetland Type	Closest Structure	Latitude	Longitude	Associated Watercourse
1	Southington	Mapsheet 1	PSS/PFO	4110, 752 (N of)	41.587215	-72.865124	
2	Southington	Mapsheet 1	PUBH	753 (N of)	41.583843	-72.866250	
3	Southington	Mapsheet 1 & 2	PSS	4107, 755 (N of)	41.580656	-72.865259	
4	Southington	Mapsheet 2	PSS/PFO	4105 (S of)	41.576913	-72.862734	Stream 1
5 A/B	Southington	Mapsheets 2 & 3	PSS/PFO	4104, 758 / 4103, 759 (S of)	41.574818	-72.861336	Stream 2
6	Southington	Mapsheet 3	PSS/PFO	4102, 760 (N/S of)	41.572991	-72.860144	
7	Southington	Mapsheets 3 &4	PSS/PFO	4101, 761 & 4100, 762 (N/S of)	41.571951	-72.859310	
8 A/B	Southington	Mapsheet 4	PSS	4099, 763, 764 (N/S of)	41.568969	-72.858849	Streams 3, 4, & 5
9	Southington	Mapsheet 4	PEM/PSS	766 (S of)	41.565289	-72.858376	
10	Southington	Mapsheets 4 & 5	PSS	4095-1, 4095-2, 767 (N/S of)	41.559607	-72.858556	
11	Southington	Mapsheets 5 & 6	PSS	4091, 771 (S of); 4090, 772 (N of)	41.557968	-72.858541	Streams 6 & 7
12	Cheshire	Mapsheet 6	PSS	4089, 773 (S of)	41.550101	-72.858553	Stream 8
13	Cheshire	Mapsheets 6 & 7	PSS/PFO	775 (N of)	41.546559	-72.858739	
14	Cheshire	Mapsheet 7	PSS	4087 (S of)	41.543740	-72.858612	Stream 9
15	Cheshire	Mapsheet 7	PEM	4086 (N of)	41.542079	-72.857869	
16	Cheshire	Mapsheet 7	PSS	4086 (E of)	41.541564	-72.857219	
17	Cheshire	Mapsheet 7	PSS	4085 (SE of)	41.540791	-72.856517	Stream 10
18	Meriden	Mapsheets 7 & 8	PSS	4083 (NW of)	41.538868	-72.854503	Stream 11
19	Meriden	Mapsheet 8	PSS	4082 (NW of)	41.537509	-72.852080	
20	Meriden	Mapsheet 8	PEM	780 (SW of)	41.535566	-72.849117	
21 A/B	Meriden	Mapsheet 8	PSS	4080, 782 (NW of)	41.535064	-72.849020	
22	Meriden	Mapsheet 9	PSS/PFO	2515 (E of)	41.532985	-72.845349	Stream 12
23	Meriden	Mapsheet 10	PSS	2518 (W of)	41.528007	-72.837891	Stream 13
24	Meriden	Mapsheet 10	PEM/PSS	2519-L, 2519-R (W of)	41.527691	-72.829361	Stream 14
25	Meriden	Mapsheet 9	PSS	4076 (SW of)	41.527116	-72.827066	Stream 12
26	Meriden	Mapsheet 9	PEM	4076 (S of)	41.526993	-72.839129	Stream 12
27	Meriden	Mapsheet 9	PFO	4076 (SE of)	41.526570	-72.838885	
28	Meriden	Mapsheets 9 & 12	PSS	4076 (S of); 3672 (E of)	41.526470	-72.838573	Stream 12
29	Meriden	Mapsheets 9 & 12	PSS/PFO	4075 (N of)	41.525519	-72.839401	

Wetland ID	Town	Mapsheet	Wetland Type	Closest Structure	Latitude	Longitude	Associated Watercourse
30	Meriden	Mapsheet 12	PSS	4075 (S of)	41.525335	-72.839028	
32	Meriden	Mapsheet 12	PSS	4072 (W of)	41.519551	-72.839833	Stream 17
33	Meriden	Mapsheet 13	PSS/PFO	4070 (S of)	41.515888	-72.839727	Stream 19
34	Meriden	Mapsheet 13	PSS	4070 (S of)	41.515433	-72.839601	
35	Meriden	Mapsheet 13	PFO	4070 (S of)	41.515362	-72.839322	
36	Wallingford	Mapsheet 13	PSS/PFO	3664 (N of)	41.510423	-72.838464	Stream 23
37	Wallingford	Mapsheet 14	PEM/PFO	4066-1, 3663-1 (N of)	41.508235	-72.837764	Stream 24
38	Wallingford	Mapsheet 14	PSS	4066 (W of)	41.506576	-72.837343	Stream 25
39	Wallingford	Mapsheet 14	PEM	4066 (S of)	41.505439	-72.836878	Stream 26
40	Wallingford	Mapsheet 14	PSS	4065 (N of)	41.504432	-72.836362	Stream 27
41	Wallingford	Mapsheet 14	PEM	N/A	41.503662	-72.833990	
42	Wallingford	Mapsheets 14 & 15	PSS/PFO	5269 & 5268 (NE-SW of)	41.501968	-72.838530	Stream 27
43	Wallingford	Mapsheet 15	PSS/PFO	5265 & 5264 (NE-SW of)	41.498444	-72.844779	
44	Wallingford	Mapsheets 15 & 16	PFO/PSS	5263 (SW of)	41.496937	-72.847452	
45	Wallingford	Mapsheet 16	PSS	5262 (W of)	41.496537	-72.849114	
46	Wallingford	Mapsheet 16	PSS	5261 (SW of)	41.495272	-72.851187	Stream 28
47	Wallingford	Mapsheet 16	PSS/PFO	5260 (SW of)	41.494955	-72.852056	
48	Wallingford	Mapsheet 16	PSS	5260 (S of)	41.494131	-72.853366	
49	Wallingford	Mapsheet 16	PSS	5259 (NE of)	41.493880	-72.853391	
50	Wallingford/Cheshire	Mapsheet 16	PSS	5257 (NE of)	41.493809	-72.854134	Stream 29
51	Cheshire	Mapsheet 17	PSS	5257 (S of)			
52	Wallingford/Cheshire	Mapsheet 17	PSS	5257 (SW of)	41.491325	-72.857199	
53	Cheshire	Mapsheet 17	PSS	5257 (S of)			
54	Wallingford/Cheshire	Mapsheet 17	PSS/PEM	5256 (NE of)	41.491435	-72.857528	Stream 30
55	Cheshire	Mapsheet 17	PSS	5256 (N of)	41.490861	-72.857713	
56	Wallingford/Cheshire	Mapsheet 17	PSS/PFO	5256 (NW of)	41.490994	-72.857887	
57	Cheshire	Mapsheet 17	PSS/PFO	5256 (SW of)	41.490164	-72.858381	Stream 31
58	Cheshire	Mapsheet 17	PSS/PFO	5255 (SW of)	41.490298	-72.858573	Stream 32
59	Cheshire	Mapsheet 18	PEM	5251 (S of)	41.489834	-72.858939	
60	Cheshire	Mapsheet 18	PFO	4045 (W of)	41.487970	-72.860529	Stream 33

Wetland ID	Town	Mapsheet	Wetland Type	Closest Structure	Latitude	Longitude	Associated Watercourse
61	Cheshire	Mapsheet 18	PSS/PFO	5248 (W of)	41.484087	-72.864914	
62	Cheshire	Mapsheets 18 &19	PSS	4042, 5247-5243	41.483910	-72.864523	Streams 34 & 35
63	Cheshire	Mapsheets 19 & 20	PEM	5242-5241 (NE-SW of)	41.484186	-72.865173	
64	Cheshire	Mapsheet 20	PEM	5240 (S of)	41.481523	-72.867623	
65	Cheshire	Mapsheet 20	PEM	5239 (S of)	41.481523	-72.867623	
66	Cheshire	Mapsheets 20 & 21	PEM	5236 (W of)	41.477672	-72.871327	
67	Cheshire	Mapsheet 21	PEM	5235 (S of)	41.472621	-72.875737	Stream 36
68	Cheshire	Mapsheet 21	PEM	5233 (SW of)	41.470597	-72.876886	Stream 37
69	Cheshire	Mapsheet 21	PSS/PFO	5232 (NE of)	41.469340	-72.877620	
70	Cheshire	Mapsheets 21 & 22	PSS/PFO	5231 to 5230 (NE-SW of)	41.463908	-72.880982	Streams 38, 39, 42, & 41
71	Cheshire	Mapsheet 22	PSS/PFO	5229 (N of)	41.461540	-72.883446	Streams 40 & 42
72	Cheshire	Mapsheet 22	PSS/PFO	5227 (E of)	41.461214	-72.883817	Stream 43
73	Cheshire	Mapsheet 22	PEM	5227 (E of)	41.459918	-72.885458	Stream 43
74	Cheshire	Mapsheet 22	PSS	5227 (SW of)	41.458333	-72.886510	
75	Cheshire	Mapsheet 22	PEM	5227 (S of)	41.456339	-72.889609	
76	Wallingford	Mapsheet 23	PSS	4679A (W of)	41.455576	-72.889686	
77	Wallingford	Mapsheet 23	PEM	4679A (E of)	41.455674	-72.890589	
CTW1	Meriden	Mapsheet 10	PEM	2519 (W of)	41.526578	-72.826376	Stream 14
CTW2	Meriden	Mapsheet 12	PEM	4074 (N of)	41.523685	-72.839385	Stream 15
CTW3	Wallingford	Mapsheet 23	PSS/PFO	4679 (W of)	41.440682	-72.845511	Streams 44 & 45

Table 2

Watercourse ID	Map Sheet	Watercourse Name	Latitude	Longitude	Flow Regime	CT DEEP Water Quality Designation
Stream 1	Mapsheet 2	Misery Brook	41.577547	-72.862814	Perennial	A
Stream 2	Mapsheet 2	Unnamed Tributary to the Misery Brook	41.575651	-72.862018	Intermittent	A
Stream 3	Mapsheets 3 & 4	Unnamed Tributary to the Misery Brook	41.564167	-72.858717	Intermittent	A
Stream 4	Mapsheet 4	Unnamed Tributary to the Misery Brook	41.564674	-72.858395	Intermittent	A
Stream 5	Mapsheet 4	Unnamed Tributary to the Misery Brook	41.564622	-72.858396	Intermittent	A
Stream 6	Mapsheet 6	Unnamed Tributary to the Quinnipiac River	41.549166	-72.858885	Perennial	A
Stream 7	Mapsheet 6	Unnamed Tributary to the Quinnipiac River	41.549124	-72.858962	Perennial	A
Stream 8	Mapsheet 6	Unnamed Tributary to the Quinnipiac River	41.546514	-72.858620	Perennial	A
Stream 9	Mapsheet 7	Unnamed Tributary to the Quinnipiac River	41.542026	-72.857854	Perennial	A
Stream 10	Mapsheet 7	Unnamed Tributary to the Quinnipiac River	41.538844	-72.854550	Perennial	A
Stream 11	Mapsheets 7 & 8	Unnamed Tributary to the Quinnipiac River	41.537078	-72.852300	Perennial	A
Stream 12	Mapsheet 9	Unnamed Tributary to the Quinnipiac River	41.527632	-72.838185	Perennial	B
Stream 13	Mapsheet 10	Sodom Brook	41.527982	-72.829195	Perennial	A
Stream 14	Mapsheet 10	Harbor Brook	41.527544	-72.827377	Perennial	B
Stream 15	Mapsheet 12	Quinnipiac River	41.524044	-72.839661	Perennial	B
Stream 16	Mapsheet 12	Unnamed Tributary to the Quinnipiac River	41.521131	-72.839621	Perennial	B
Stream 17	Mapsheets 12 & 13	Unnamed Tributary to the Quinnipiac River	41.519266	-72.839659	Intermittent	B
Stream 18	Mapsheet 13	Unnamed Tributary to the Minute Pond	41.516205	-72.839928	Perennial	A
Stream 19	Mapsheet 13	Unnamed Tributary to the Minute Pond	41.515890	-72.839816	Perennial	A
Stream 20	Mapsheet 13	Unnamed Tributary to the Minute Pond	41.514913	-72.839344	Perennial	A
Stream 21	Mapsheet 13	Unnamed Tributary to the Quinnipiac River	41.511098	-72.838934	Intermittent	A
Stream 22	Mapsheets 13 & 14	Unnamed Tributary to the Quinnipiac River	41.510285	-72.838644	Perennial	A
Stream 23	Mapsheets 13 & 14	Unnamed Tributary to the Quinnipiac River	41.510369	-72.838486	Intermittent	A
Stream 24	Mapsheet 14	Unnamed Tributary to the Quinnipiac River	41.507764	-72.837979	Perennial	A
Stream 25	Mapsheet 14	Isolated	41.506483	-72.837101	Intermittent	A
Stream 26	Mapsheet 14	Unnamed Tributary to the Quinnipiac River	41.505623	-72.836710	Perennial	B
Stream 27	Mapsheet 14	Unnamed Tributary to the Quinnipiac River	41.503996	-72.836706	Perennial	B
Stream 28	Mapsheet 16	Unnamed Tributary to the Broad Brook Reservoir	41.495121	-72.851468	Perennial	AA

Watercourse ID	Map Sheet	Watercourse Name	Latitude	Longitude	Flow Regime	CT DEEP Water Quality Designation
Stream 29	Mapsheet 16	Unnamed Tributary to the Broad Brook Reservoir	41.493960	-72.854173	Perennial	AA
Stream 30	Mapsheet 17	Unnamed Tributary to the Broad Brook Reservoir	41.491412	-72.858092	Intermittent	AA
Stream 31	Mapsheet 17	Unnamed Tributary to the Broad Brook Reservoir	41.489815	-72.859019	Intermittent	AA
Stream 32	Mapsheet 17	Unnamed Tributary to the Broad Brook Reservoir	41.487456	-72.860782	Perennial	AA
Stream 33	Mapsheet 18	Unnamed Tributary to the Broad Brook	41.483622	-72.865544	Perennial	AA
Stream 34	Mapsheets 18 & 19	Unnamed Tributary to the Broad Brook	41.479984	-72.869091	Intermittent	AA
Stream 35	Mapsheets 18 & 19	Unnamed Tributary to the Broad Brook	41.480537	-72.868671	Intermittent	AA
Stream 36	Mapsheets 20 & 21	Unnamed Tributary to Cook Hill Pond	41.466344	-72.879019	Intermittent	AA
Stream 37	Mapsheet 21	Unnamed Tributary to Cook Hill Pond	41.463601	-72.881544	Perennial	AA
Stream 38	Mapsheet 21 & 22	Unnamed Tributary to the Mill River	41.460497	-72.885043	Perennial	AA
Stream 39	Mapsheet 21 & 22	Unnamed Tributary to the Mill River	41.459212	-72.886176	Perennial	AA
Stream 40	Mapsheet 22	Unnamed Tributary to the Mill River	41.458151	-72.886479	Intermittent	AA
Stream 41	Mapsheet 22	Unnamed Tributary to the Mill River	41.458397	-72.886861	Perennial	AA
Stream 42	Mapsheet 22	Unnamed Tributary to the Mill River	41.458272	-72.886329	Perennial	AA
Stream 43	Mapsheet 22	Unnamed Tributary to the Mill River	41.455568	-72.889704	Perennial	AA
Stream 44	Mapsheet 23	Unnamed Tributary to the Quinnipiac River	41.440499	-72.845616	Perennial	B
Stream 45	Mapsheet 23	Quinnipiac River	41.440205	-72.846698	Perennial	B

Appendix B
USACE Data Forms

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 1610/1355/1690 and 1208 Lines City/County: Southington/Hartford Sampling Date: 05/05/21

Applicant/Owner: Eversource Energy State: CT Sampling Point: W04

Investigator(s): AECOM Section, Township, Range:

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 6-10

Subregion (LRR or MLRA): LRR R, MLRA 145 Lat: 41.577485 Long: -72.863157 Datum: NAD 83

Soil Map Unit Name: Manchester gravelly sandy loam, 15 to 45 percent slopes (37E) NWI classification: PSS1E

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No ____	**within a Wetland?**	**Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)
This wetland was classified in the field as a PSS wetland. Wetland 4 is located within a large valley depression. Wetland 4 is associated with S1 aka Misery Brook.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches):	____
Water Table Present?	Yes X	No ____	Depth (inches):	8
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches):	6

Wetland Hydrology Present? **Yes** X **No** ____

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

Remarks:
Primary wetland hydrology indicators are present onsite.

VEGETATION – Use scientific names of plants. Sampling Point: W04

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft)			
1. *Alnus incana*	15	Yes	FACW
2. *Acer rubrum*	10	Yes	FAC
3. *Acer rubrum*	5	No	FAC
4. *Viburnum dentatum*	5	No	FAC
5.			
6.			
7.			
	35 =Total Cover		
Herb Stratum (Plot size: 5ft)			
1. *Phragmites australis*	60	Yes	FACW
2. *Onoclea sensibilis*	10	No	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	70 =Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1. *Vitis riparia*	10	Yes	FAC
2. *Celastrus orbiculatus*	10	Yes	UPL
3.			
4.			
	20 =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 80.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	85	x 2 =	170
FAC species	30	x 3 =	90
FACU species	0	x 4 =	0
UPL species	10	x 5 =	50
Column Totals:	125 (A)		310 (B)

Prevalence Index = B/A = 2.48

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation meets dominance test and prevalence index for hydrophytic vegetation.

SOIL

Sampling Point: W04

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 2/1	100					Loamy/Clayey	
8-16	7.5YR 3/1	100					Loamy/Clayey	
16-24	10YR 6/1	90	7.5YR 5/6	10	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- _x_ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

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

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _X_ **No** _____

Remarks:

Soil in the area meet criteria for Depleted Below Dark Surface (A12) hydric soil indicator.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 1610/1355/1690 and 1208 Lines City/County: Southington/Hartford Sampling Date: 10/09/20

Applicant/Owner: Eversource Energy State: CT Sampling Point: W05A

Investigator(s): AECOM Section, Township, Range:

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0-2

Subregion (LRR or MLRA): LRR R, MLRA 145 Lat: 41.57481815530 Long: -72.86133622090 Datum: NAD 83

Soil Map Unit Name: 6-Wilbraham and Menlo soils, 0 to 8 percent slopes, extremely stony NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No ____	**within a Wetland?**	**Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)
This wetland was classified in the field as a PSS/PFO wetland. Wetland 5 is divided into Wetland 5A located north of Beechwood Avenue and Wetland 5B located south of Beechwood Avenue. Wetland 5B shares similar wetland characteristics with Wetland 5A. A gravel road subdivides Wetland 5A. Wetland 5A is associated with Stream S2.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes X	No ____	Depth (inches): 8
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 6

Wetland Hydrology Present? **Yes** X **No** ____

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

Remarks:
Primary wetland hydrology indicators are present onsite.

VEGETATION – Use scientific names of plants. Sampling Point: W05A

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft)			
1. *Cornus amomum*	40	Yes	FACW
2. *Alnus incana*	15	Yes	FACW
3. *Acer rubrum*	10	No	FAC
4. *Ilex verticillata*	10	No	FACW
5.			
6.			
7.			
	75 =Total Cover		
Herb Stratum (Plot size: 5ft)			
1. *Reynoutria japonica*	15	Yes	FACU
2. *Spiraea tomentosa*	10	Yes	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	25 =Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	75	x 2 =	150
FAC species	10	x 3 =	30
FACU species	15	x 4 =	60
UPL species	0	x 5 =	0
Column Totals:	100 (A)		240 (B)

Prevalence Index = B/A = 2.40

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

_X_ 2 - Dominance Test is >50%

_X_ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation meets dominance test and prevalence index for hydrophytic vegetation.

SOIL

Sampling Point: W05A

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	7.5YR 3/2	95	5YR 4/4	5	C	M	Loamy/Clayey	Distinct redox concentrations
6-18	7.5YR 3/2	55	7.5YR 3/4	40	C	M	Loamy/Clayey	Distinct redox concentrations
			7.5YR 5/6	5	C	M		Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

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

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

Soil in the area meet criteria forRedox Dark Surface (F6) hydric soil indicator.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 1610/1355/1690 and 1208 Lines City/County: Southington/ Hartford Sampling Date: 12/06/2021

Applicant/Owner: Eversource Energy State: CT Sampling Point: W06

Investigator(s): AECOM Section, Township, Range:

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0-2

Subregion (LRR or MLRA): LRR R, MLRA 145 Lat: 41.57195146580 Long: -72.85931009110 Datum: NAD 83

Soil Map Unit Name: 6-Wilbraham and Menlo soils, 0 to 8 percent slopes, extremely stony NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No	**within a Wetland?**	**Yes** X **No**
Wetland Hydrology Present?	Yes X	No	If yes, optional Wetland Site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)
This wetland was classified in the field as a PSS/PFO wetland. A depressional area of this wetland located in the eastern portion of the ROW was identified as a vernal pool.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- Marl Deposits (B15)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- Moss Trim Lines (B16)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- Microtopographic Relief (D4)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	No X	Depth (inches):
Water Table Present?	Yes X	No	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes X	No	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No**

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

Remarks:
Primary and secondary wetland hydrology indicators are present onsite.

VEGETATION – Use scientific names of plants.

Sampling Point: W06

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft)			
1. *Cornus amomum*	60	Yes	FACW
2. *Alnus incana*	15	Yes	FACW
3.			
4.			
5.			
6.			
7.			
	75 =Total Cover		
Herb Stratum (Plot size: 5ft)			
1. *Phragmites australis*	60	Yes	FACW
2. *Symplocarpus foetidus*	15	Yes	OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	75 =Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	15	x 1 =	15
FACW species	135	x 2 =	270
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	150 (A)		285 (B)

Prevalence Index = B/A = 1.90

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation meets dominance test and prevalence index for hydrophytic vegetation.

SOIL

Sampling Point: W06

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/1	100					Loamy/Clayey	
6-9	10YR 2/1	100					Loamy/Clayey	
9-18	10YR 6/2	85	2.5YR 4/4	15	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

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

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

Soil in the area meet criteria for Depleted Matrix (F3) and Depleted Below Dark Surface (A11) hydric soil indicators.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 1610/1355/1690 and 1208 Lines City/County: Southington/ Hartford Sampling Date: 05/05/21

Applicant/Owner: Eversource Energy State: CT Sampling Point: W07

Investigator(s): AECOM Section, Township, Range:

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0-2

Subregion (LRR or MLRA): LRR R, MLRA 145 Lat: 41.56896866200 Long: -72.85884924960 Datum: NAD 83

Soil Map Unit Name: 15-Scarboro muck, 0 to 3 percent slopes NWI classification: PSS1E

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No ____	**within a Wetland?**	**Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)
This wetland was classified in the field as a PSS/PFO wetland. The southern portion of this wetland contains an established access road.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ____	Depth (inches):	0.5
Water Table Present?	Yes X	No ____	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches):	0

Wetland Hydrology Present? **Yes** X **No** ____

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

Remarks:
Primary wetland hydrology indicators are present onsite.

VEGETATION – Use scientific names of plants. Sampling Point: W07

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft)			
1. *Cornus amomum*	20	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	20 =Total Cover		
Herb Stratum (Plot size: 5ft)			
1. *Phragmites australis*	70	Yes	
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	70 =Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1. *Vitis labrusca*	10	Yes	FACU
2.			
3.			
4.			
	10 =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	0	x 3 =	0
FACU species	10	x 4 =	40
UPL species	0	x 5 =	0
Column Totals:	30 (A)		80 (B)

Prevalence Index = B/A = 2.67

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation meets dominance test and prevalence for hydrophytic vegetation.

SOIL

Sampling Point: W07

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	7.5YR 3/1	100					Loamy/Clayey	
4-12	7.5YR 3/2	95	5YR 4/4	5	C	M	Loamy/Clayey	Distinct redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

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

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

Soil in the area meet criteria for Redox Dark Surface (F6) hydric soil indicators.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 1610/1355/1690 and 1208 Lines City/County: Southington/ Hartford Sampling Date: 05/05/21

Applicant/Owner: Eversource Energy State: CT Sampling Point: W08

Investigator(s): AECOM Section, Township, Range:

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0-2

Subregion (LRR or MLRA): LRR R, MLRA 145 Lat: 41.56528900630 Long: -72.85837571610 Datum: NAD 83

Soil Map Unit Name: 15-Scarboro muck, 0 to 3 percent slopes NWI classification: PEM1/PSS1Ed

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area**
Hydric Soil Present?	Yes X	No	**within a Wetland?** **Yes** X **No**
Wetland Hydrology Present?	Yes X	No	If yes, optional Wetland Site ID:

Remarks: (Explain alternative procedures here or in a separate report.)
This wetland was classified in the field as a PSS wetland. Wetland 8 is divided into Wetland 8A located north of Wetland 8B. Wetland 8B shares similar wetland characteristics with Wetland 8A. This wetland is associated with Streams 3, 4, and 5.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- Marl Deposits (B15)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Moss Trim Lines (B16)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- Microtopographic Relief (D4)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No	Depth (inches): 2
Water Table Present?	Yes X	No	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes X	No	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No**

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

Remarks:
Primary wetland hydrology indicators are present onsite.

VEGETATION – Use scientific names of plants. Sampling Point: W08

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft)			
1. *Cornus amomum*	20	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	20 =Total Cover		
Herb Stratum (Plot size: 5ft)			
1. *Phragmites australis*	75	Yes	FACW
2. *Spiraea tomentosa*	20	No	FACW
3. *Carex lurida*	20	No	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	115 =Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	20	x 1 =	20
FACW species	115	x 2 =	230
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	135 (A)		250 (B)

Prevalence Index = B/A = 1.85

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation meets dominance test and prevalence for hydrophytic vegetation.

SOIL

Sampling Point: W08

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-8	10YR 3/2	100					Loamy/Clayey	
8-15	7.5YR 5/2	90	7.5YR 5/6	10	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

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

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Soil in the area meet criteria for Depleted Matrix (F3) and Depleted Below Dark Surface (A11) hydric soil indicators.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 1610/1355/1690 and 1208 Lines City/County: Southington/ Hartford Sampling Date: 12/06/21

Applicant/Owner: Eversource Energy State: CT Sampling Point: W09

Investigator(s): AECOM Section, Township, Range:

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): concave Slope (%): 0-2

Subregion (LRR or MLRA): LRR R, MLRA 145 Lat: 41.55960714450 Long: -72.85855589970 Datum: NAD 83

Soil Map Unit Name: 6-Wilbraham and Menlo soils, 0 to 8 percent slopes, extremely stony NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No ____	**within a Wetland?**	**Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)
This wetland was classified in the field as a PEM/PSS wetland. This wetland exhibits areas of historic disturbance from ROW activities.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes X	No ____	Depth (inches): 4
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 2

Wetland Hydrology Present? **Yes** X **No** ____

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

Remarks:
Primary and secondary wetland hydrology indicators are present onsite.

VEGETATION – Use scientific names of plants. Sampling Point: W09

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft)			
1. *Vibernum dentatum*	20	Yes	FAC
2. *Lindera benzoin*	15	Yes	FACW
3.			
4.			
5.			
6.			
7.			
	35 =Total Cover		
Herb Stratum (Plot size: 5ft)			
1. *Solidago rugosa*	45	Yes	FAC
2. *Solidago canadensis*	20	Yes	FACU
3. *Eutrochium purpureum*	25	Yes	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	90 =Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1. *Celastrus orbiculatus*	10	Yes	UPL
2.			
3.			
4.			
	10 =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	90	x 3 =	270
FACU species	20	x 4 =	80
UPL species	10	x 5 =	50
Column Totals:	135 (A)		430 (B)

Prevalence Index = B/A = 3.19

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation meets dominance test for hydrophytic vegetation.

SOIL

Sampling Point: W09

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	7.5YR 2.5/1	100					Loamy/Clayey	
2-10	5YR 4/2	100					Loamy/Clayey	
10-16	7.5YR 5/2	90	7.5YR 4/6	10	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

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

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

Soil in the area meet criteria for Depleted Matrix (F3) hydric soil indicators.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 1610/1355/1690 and 1208 Lines City/County: Southington/ Hartford Sampling Date: 12/06/21

Applicant/Owner: Eversource Energy State: CT Sampling Point: W10

Investigator(s): AECOM Section, Township, Range:

Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 2-4

Subregion (LRR or MLRA): LRR R, MLRA 145 Lat: 41.55796792450 Long: -72.85854105130 Datum: NAD 83

Soil Map Unit Name: 6-Wilbraham and Menlo soils, 0 to 8 percent slopes, extremely stony NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No	**within a Wetland?**	**Yes** X **No**
Wetland Hydrology Present?	Yes X	No	If yes, optional Wetland Site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)
This wetland was classified in the field as a PSS wetland. Portions of the wetland are located east of an estblished access road seperated by a culvert. The eastern portion of the wetland is a PFO.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No	Depth (inches):	0.5
Water Table Present?	Yes X	No	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes X	No	Depth (inches):	0

Wetland Hydrology Present? **Yes** X **No**

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

Remarks:
Primary wetland hydrology indicators are present onsite.

VEGETATION – Use scientific names of plants. Sampling Point: W10

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft)			
1. *Ilex verticillata*	25	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	25 =Total Cover		
Herb Stratum (Plot size: 5ft)			
1. *Eupatorium perfoliatum*	35	Yes	FACW
2. *Impatiens capensis*	15	Yes	FACW
3. *Solidago rugosa*	10	No	FAC
4. *Sagittaria latifolia*	10	No	OBL
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	70 =Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1. *Celastrus orbiculatus*	30	Yes	UPL
2.			
3.			
4.			
	30 =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	10	x 1 =	10
FACW species	75	x 2 =	150
FAC species	10	x 3 =	30
FACU species	0	x 4 =	0
UPL species	30	x 5 =	150
Column Totals:	125 (A)		340 (B)

Prevalence Index = B/A = 2.72

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation meets dominance test and prevalence index for hydrophytic vegetation.

SOIL

Sampling Point: W10

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	7.5YR 3/2	95	7.5YR 4/6	5	C	PL	Loamy/Clayey	Prominent redox concentrations
8-18	5YR 4/2	95	5YR 4/6	5	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

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

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

Soil in the area meet criteria for Depleted Matrix (F3), Depleted Below Dark Surface (A11), and Redox Dark Surface (F6) hydric soil indicators.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 1610/1355/1690 and 1208 Lines City/County: Southington/ Hartford Sampling Date: 12/06/21

Applicant/Owner: Eversource Energy State: CT Sampling Point: W11

Investigator(s): AECOM Section, Township, Range:

Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 4-6

Subregion (LRR or MLRA): LRR R, MLRA 145 Lat: 41.55010090680 Long: -72.85855324970 Datum: NAD 83

Soil Map Unit Name: 6-Wilbraham and Menlo soils, 0 to 8 percent slopes, extremely stony NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No	**within a Wetland?**	**Yes** X **No**
Wetland Hydrology Present?	Yes X	No	If yes, optional Wetland Site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)
This wetland was classified in the field as a PSS wetland which contains several streams. This wetland is associated with Stream S6 and S7.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	No X	Depth (inches):
Water Table Present?	Yes X	No	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes X	No	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No**

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

Remarks:
Primary wetland hydrology indicators are present onsite.

VEGETATION – Use scientific names of plants. Sampling Point: W11

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft)			
1. *Lindera benzoin*	40	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	40 =Total Cover		
Herb Stratum (Plot size: 5ft)			
1. *Symplocarpus foetidus*	35	Yes	OBL
2. *Impatiens capensis*	20	Yes	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	55 =Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	35	x 1 =	35
FACW species	60	x 2 =	120
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	95 (A)		155 (B)

Prevalence Index = B/A = 1.63

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation meets dominance test and prevalence index for hydrophytic vegetation.

SOIL

Sampling Point: W11

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	7.5YR 2.5/1	100					Muck	
10-20	7.5YR 4/1	95	7.5YR 4/4	5	C	M	Loamy/Clayey	Distinct redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- _X_ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- _X_ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- _X_ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

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

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _X_ **No** ___

Remarks:

Soil in the area meet criteria for Depleted Matrix (F3), Histic Epipedon (A2), and Depleted Below Dark Surface (A11) hydric soil indicators.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 1610/1355/1690 and 1208 Lines City/County: Cheshire/ New Haven Sampling Date: 10/10/20

Applicant/Owner: Eversource Energy State: CT Sampling Point: W13

Investigator(s): AECOM Section, Township, Range:

Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 4-6

Subregion (LRR or MLRA): LRR R, MLRA 145 Lat: 41.54374021550 Long: -72.85861171560 Datum: NAD 83

Soil Map Unit Name: 69B-Yalesville fine sandy loam, 3 to 8 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No ____	**within a Wetland?**	**Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)
This wetland was classified in the field as a PSS/PFO wetland. The wetland is expansive within the ROW and occupies a depression with steep slopes west of the access road.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ____	Depth (inches):	0.5
Water Table Present?	Yes X	No ____	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches):	0

Wetland Hydrology Present? **Yes** X **No** ____

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

Remarks:
Primary wetland hydrology indicators are present onsite.

VEGETATION – Use scientific names of plants.

Sampling Point: W13

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Herb Stratum (Plot size: 5ft)			
1. *Phragmites australis*	80	Yes	FACW
2. *Osmunda regalis*	10	No	OBL
3. *Symplocarpus foetidus*	10	No	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	20	x 1 =	20
FACW species	80	x 2 =	160
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		180 (B)

Prevalence Index = B/A = 1.80

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation meets dominance test and prevalence index for hydrophytic vegetation.

SOIL

Sampling Point: W13

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	5YR 3/2	100					Loamy/Clayey	
2-10	5YR 3/2	80	5YR 5/3	20	C	M	Loamy/Clayey	Faint redox concentrations
10-18	5YR 3/2	90	7.5YR 4/4	5	C	M	Loamy/Clayey	Distinct redox concentrations
			10YR 2/1	5	C	M		Faint redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- x Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

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

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

Soil in the area meet criteria for Redox Dark Surface (F6) hydric soil indicators.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 1610/1355/1690 and 1208 Lines City/County: Cheshire/ New Haven Sampling Date: 10/10/20

Applicant/Owner: Eversource Energy State: CT Sampling Point: W14

Investigator(s): AECOM Section, Township, Range:

Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 2-4

Subregion (LRR or MLRA): LRR R, MLRA 145 Lat: 41.54207857660 Long: -72.85786873680 Datum: NAD 83

Soil Map Unit Name: 6-Wilbraham and Menlo soils, 0 to 8 percent slopes, extremely stony NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No ____	**within a Wetland?**	**Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)
This wetland was classified in the field as a PSS wetland. This wetland is associated with Stream S9 and contains an unimproved wetland/watercourse crossing.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- x Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches):	____
Water Table Present?	Yes X	No ____	Depth (inches):	10
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches):	8

Wetland Hydrology Present? **Yes** X **No** ____

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

Remarks:
Primary and secondary wetland hydrology indicators are present onsite.

VEGETATION – Use scientific names of plants. Sampling Point: W14

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft)			
1. *Ilex verticillata*	20	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	20 =Total Cover		
Herb Stratum (Plot size: 5ft)			
1. *Phalaris arundinacea*	80	Yes	FACW
2. *Phragmites australis*	10	No	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	90 =Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1. *Lonicera japonica*	50	Yes	FACU
2. *Smilax rotundifolia*	20	Yes	FAC
3.			
4.			
	70 =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	110	x 2 =	220
FAC species	20	x 3 =	60
FACU species	50	x 4 =	200
UPL species	0	x 5 =	0
Column Totals:	180 (A)		480 (B)

Prevalence Index = B/A = 2.67

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation meets dominance test and prevalence index for hydrophytic vegetation.

SOIL

Sampling Point: W14

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	7.5YR 3/2	100					Loamy/Clayey	
2-10	2.5YR 3/2	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- x Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

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

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

Soil in the area meet criteria for Hydrogen Sulfide (A4) hydric soil indicators. Refusal at 10" extremely stony.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 1610/1355/1690 and 1208 Lines City/County: Meriden/ New Haven Sampling Date: 10/10/20

Applicant/Owner: Eversource Energy State: CT Sampling Point: W20

Investigator(s): AECOM Section, Township, Range:

Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 2-4

Subregion (LRR or MLRA): LRR R, MLRA 145 Lat: 41.53506394370 Long: -72.84902011830 Datum: NAD 83

Soil Map Unit Name: 40B-Ludlow silt loam, 3 to 8 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No ____	**within a Wetland?**	**Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)
This wetland was classified in the field as a PEM wetland. The wetland was contained within a significant depression with steep slopes.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** X **No** ____

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

Remarks:
Primary and secondary wetland hydrology indicators are present onsite.

VEGETATION – Use scientific names of plants. Sampling Point: W20

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft)			
1. *Platanus occidentalis*	10	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	10 =Total Cover		
Herb Stratum (Plot size: 5ft)			
1. *Phragmites australis*	90	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	90 =Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		200 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation meets dominance test and prevalence index for hydrophytic vegetation.

SOIL

Sampling Point: W20

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 3/2	100					Loamy/Clayey	
2-10	7.5YR 3/2	98	7.5YR 4/6	2	C	PL/M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7)
___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
___ High Chroma Sands (S11) (**LRR K, L)**
___ Loamy Mucky Mineral (F1) (**LRR K, L**)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
x Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)
___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

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

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

Soil in the area meet criteria for Redox Dark Surface (F6) hydric soil indicators. Refusal at 10" extremely stony.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 1610/1355/1690 and 1208 Lines City/County: Meriden/ New Haven Sampling Date: 05/05/21

Applicant/Owner: Eversource Energy State: CT Sampling Point: W22

Investigator(s): AECOM Section, Township, Range:

Landform (hillside, terrace, etc.): riverine Local relief (concave, convex, none): concave Slope (%): 4-6

Subregion (LRR or MLRA): LRR R, MLRA 145 Lat: 41.52800727260 Long: -72.83789130860 Datum: NAD 83

Soil Map Unit Name: 5-Wilbraham silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation , Soil X , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No	**within a Wetland?**	**Yes** X **No**
Wetland Hydrology Present?	Yes X	No	If yes, optional Wetland Site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)
This wetland was classified in the field as a PEM wetland. This wetland is associated with Stream S12. The wetland intersects the ROW in multiple locations along the S12 reach. Red Parent Material Present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- Marl Deposits (B15)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Moss Trim Lines (B16)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- Microtopographic Relief (D4)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No	Depth (inches):	0.5
Water Table Present?	Yes X	No	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes X	No	Depth (inches):	0

Wetland Hydrology Present? **Yes** X **No**

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

Remarks:
Primary wetland hydrology indicators are present onsite.

VEGETATION – Use scientific names of plants. Sampling Point: W22

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft)			
1. *Cornus amomum*	20	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	20 =Total Cover		
Herb Stratum (Plot size: 5ft)			
1. *Juncus effusus*	20	Yes	OBL
2. *Typha latifolia*	20	Yes	OBL
3. *Alliaria petiolate*	10	Yes	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	50 =Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	40	x 1 =	40
FACW species	20	x 2 =	40
FAC species	0	x 3 =	0
FACU species	10	x 4 =	40
UPL species	0	x 5 =	0
Column Totals:	70 (A)		120 (B)

Prevalence Index = B/A = 1.71

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation meets dominance test and prevalence index for hydrophytic vegetation.

SOIL

Sampling Point: W22

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	5YR 3/3	100					Loamy/Clayey	
4-10	5YR 4/4	90	5YR 3/2	10	C	M	Loamy/Clayey	Distinct redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

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

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

Soil in the area meet criteria for Red Parent Material (F21) problematic hydric soil indicator.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 1610/1355/1690 and 1208 Lines City/County: Meriden/ New Haven Sampling Date: 05/05/21

Applicant/Owner: Eversource Energy State: CT Sampling Point: W25

Investigator(s): AECOM Section, Township, Range:

Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 4-6

Subregion (LRR or MLRA): LRR R, MLRA 145 Lat: 41.52699264220 Long: -72.83912938350 Datum: NAD 83

Soil Map Unit Name: 63C-Cheshire fine sandy loam, 8 to 15 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation , Soil x , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No	**within a Wetland?**	**Yes** X **No**
Wetland Hydrology Present?	Yes X	No	If yes, optional Wetland Site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)
This wetland was classified in the field as a PSS wetland. The wetland represents a seep along a hillside.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- x High Water Table (A2)
- x Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	No X	Depth (inches):	
Water Table Present?	Yes X	No	Depth (inches):	4
Saturation Present? (includes capillary fringe)	Yes X	No	Depth (inches):	2

Wetland Hydrology Present? **Yes** X **No**

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

Remarks:
Primary wetland hydrology indicators are present onsite.

VEGETATION – Use scientific names of plants. Sampling Point: W25

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft)			
1. *Cornus amomum*	20	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	20 =Total Cover		
Herb Stratum (Plot size: 5ft)			
1. *Phragmites australis*	80	Yes	FACW
2. *Dichanthelium clandestinum*	20	Yes	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	120	x 2 =	240
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	120 (A)		240 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation meets dominance test and prevalence index for hydrophytic vegetation.

SOIL

Sampling Point: W25

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	5YR 3/2	100					Loamy/Clayey	
2-5	5YR 3/3	95	7.5YR 4/4	5	C	M	Loamy/Clayey	Faint redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

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

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** x **No** _____

Remarks:

Soil in the area meet criteria for Red Parent Material (F21) problematic hydric soil indicator.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 1610/1355/1690 and 1208 Lines City/County: Meriden/ New Haven Sampling Date: 12/06/21

Applicant/Owner: Eversource Energy State: CT Sampling Point: W28

Investigator(s): AECOM Section, Township, Range:

Landform (hillside, terrace, etc.): hillside/riverine Local relief (concave, convex, none): concave Slope (%): 4-6

Subregion (LRR or MLRA): LRR R, MLRA 145 Lat: 41.52551921440 Long: -72.83940059310 Datum: NAD 83

Soil Map Unit Name: 63C-Cheshire fine sandy loam, 8 to 15 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**		
Hydric Soil Present?	Yes X	No ____	**within a Wetland?**	**Yes** X	**No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID:		

Remarks: (Explain alternative procedures here or in a separate report.)
This wetland was classified in the field as a PSS wetland and is associated with a highly sinuous stream located on a hillslope. The wetland exists as a weltand fringe along the stream margins.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____	
Water Table Present?	Yes X	No ____	Depth (inches): 4	
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 0	**Wetland Hydrology Present?** **Yes** X **No** ____

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

Remarks:
Primary and secondary wetland hydrology indicators are present onsite.

VEGETATION – Use scientific names of plants. Sampling Point: W28

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft)			
1. *Cornus amomum*	30	Yes	FACW
2. *Vaccinium corymbosum*	20	Yes	FACW
3. *Amorpha fruticosa*	20	Yes	FACW
4.			
5.			
6.			
7.			
	70 =Total Cover		
Herb Stratum (Plot size: 5ft)			
1. *Onoclea sensibilis*	30	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	30 =Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1. *Lonicera japonica*	15	Yes	FACU
2.			
3.			
4.			
	15 =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 80.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	15	x 4 =	60
UPL species	0	x 5 =	0
Column Totals:	115 (A)		260 (B)

Prevalence Index = B/A = 2.26

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation meets dominance test for hydrophytic vegetation.

SOIL

Sampling Point: W28

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	5YR 3/2	100					Loamy/Clayey	
2-6	5YR 4/4	100					Loamy/Clayey	outwash pebbles & small rocks
6-10	5YR 3/2	75	2.5YR 3/4	15	C	M	Loamy/Clayey	Distinct redox concentrations
10-18	5YR 3/2	70	2.5YR 3/6	30	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

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

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

Soil in the area meet criteria for Redox Dark Surface (F6) hydric soil indicator.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 1610/1355/1690 and 1208 Lines City/County: Meriden/ New Haven Sampling Date: 12/06/21

Applicant/Owner: Eversource Energy State: CT Sampling Point: W29

Investigator(s): AECOM Section, Township, Range:

Landform (hillside, terrace, etc.): hillside Local relief (concave, convex, none): concave Slope (%): 4-6

Subregion (LRR or MLRA): LRR R, MLRA 145 Lat: 41.52533502970 Long: -72.83902756730 Datum: NAD 83

Soil Map Unit Name: 63C-Cheshire fine sandy loam, 8 to 15 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil x, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No ____	**within a Wetland?**	**Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)
This wetland was classified in the field as a PSS/PFO wetland.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes X	No ____	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ____

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

Remarks:
Primary and secondary wetland hydrology indicators are present onsite.

VEGETATION – Use scientific names of plants. Sampling Point: W29

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft)			
1. *Cornus amomum*	45	Yes	FACW
2. *Rosa multiflora*	10	No	FACU
3. *Amorpha fruticosa*	10	No	FACW
4.			
5.			
6.			
7.			
	65 =Total Cover		
Herb Stratum (Plot size: 5ft)			
1. *Onoclea sensibilis*	40	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	40 =Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	95	x 2 =	190
FAC species	0	x 3 =	0
FACU species	10	x 4 =	40
UPL species	0	x 5 =	0
Column Totals:	105 (A)		230 (B)

Prevalence Index = B/A = 2.19

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation meets dominance test and prevalence index for hydrophytic vegetation.

SOIL

Sampling Point: W29

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	5YR 3/2	100					Loamy/Clayey	
2-10	5YR 3/3	90	7.5YR 5/6	10	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

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

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** x **No** _____

Remarks:

Soil in the area meet criteria for Red Parent Material (F21) hydric soil indicator. Refusal at 10" extremely stony

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 1610/1355/1690 and 1208 Lines City/County: Wallingford/ New Haven Sampling Date: 12/07/21

Applicant/Owner: Eversource Energy State: CT Sampling Point: W36

Investigator(s): AECOM Section, Township, Range:

Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): concave Slope (%): 4-6

Subregion (LRR or MLRA): LRR R, MLRA 145 Lat: 41.51042301500 Long: -72.83846413750 Datum: NAD 83

Soil Map Unit Name: 89C-Wethersfield loam, 3 to 15 percent slopes, extremely stony NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No ____	**within a Wetland?**	**Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)
This wetland was classified in the field as a PSS/PFO wetland. This wetland is fed by outfall from a pond overflow. The wetland is crossed by an access road representing an existing impact. This wetland is associated with Stream S23.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes X	No ____	Depth (inches): 6
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 3

Wetland Hydrology Present? **Yes** X **No** ____

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

Remarks:
Primary wetland hydrology indicators are present onsite.

VEGETATION – Use scientific names of plants. Sampling Point: W36

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft)			
1. *Cornus amomum*	25	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	25 =Total Cover		
Herb Stratum (Plot size: 5ft)			
1. *Onoclea sensibilis*	25	Yes	FACW
2. *Carex lurida*	15	Yes	OBL
3. *Typha latifolia*	10	No	OBL
4. *Osmunda regalis*	10	No	OBL
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	60 =Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	35	x 1 =	35
FACW species	50	x 2 =	100
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	85 (A)		135 (B)

Prevalence Index = B/A = 1.59

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation meets dominance test and prevalence index for hydrophytic vegetation.

SOIL

Sampling Point: W36

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/1	100					Loamy/Clayey	
3-6	10YR 4/1	90	7.5YR 4/3	10	C	M	Loamy/Clayey	Distinct redox concentrations
6-18	10YR 4/1	85	7.5YR 4/6	15	C	M	Loamy/Clayey	Distinct redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

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

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** x **No** _____

Remarks:

Soil in the area meet criteria for Depleted Matrix (F3) hydric soil indicator.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 1610/1355/1690 and 1208 Lines City/County: Wallingford/ New Haven Sampling Date: 06/01//22

Applicant/Owner: Eversource Energy State: CT Sampling Point: W37

Investigator(s): AECOM Section, Township, Range:

Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 0-2

Subregion (LRR or MLRA): LRR R, MLRA 145 Lat: 41.508121 Long: -72.837648 Datum: NAD 83

Soil Map Unit Name: Wethersfield loam, 15 to 25 percent slopes (87D) NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No ____	**within a Wetland?**	**Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)
This wetland is a large depressional wetland within a broad valley, was classified in the field as a PEM wetland, and is associated with stream S24 which flows through it.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** X **No** ____

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

Remarks:
Primary and secondary wetland hydrology indicators are present onsite.

VEGETATION – Use scientific names of plants. Sampling Point: W37

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Herb Stratum (Plot size: 5ft)			
1. *Juncus effusus*	30	Yes	OBL
2. *Carex lurida*	20	Yes	OBL
3. *Onoclea sensibilis*	15	No	FACW
4. *Cornus amomum*	15	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	80 =Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1. *Persicaria perfoliata*	10	Yes	FAC
2.			
3.			
4.			
	10 =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	50	x 1 =	50
FACW species	30	x 2 =	60
FAC species	10	x 3 =	30
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	90 (A)		140 (B)

Prevalence Index = B/A = 1.56

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation meets dominance test for hydrophytic vegetation.

SOIL

Sampling Point: W37

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	5YR 3/2	100					Loamy/Clayey	
2-6	5YR 3/2	90	7.5YR 4/4	10	C	PL/M	Loamy/Clayey	
6-18	5YR 4/4	80	7.5YR 4/4	10	C	M	Loamy/Clayey	
			7.5YR 4/4	10	C	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

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

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** _____

Remarks:

Soil in the area meet criteria for Redox Dark Surface (F6) hydric soil indicator.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 1610/1355/1690 and 1208 Lines City/County: Wallingford/ New Haven Sampling Date: 12/07/21

Applicant/Owner: Eversource Energy State: CT Sampling Point: W39

Investigator(s): AECOM Section, Township, Range:

Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 0-2

Subregion (LRR or MLRA): LRR R, MLRA 145 Lat: 41.505496 Long: -72.836805 Datum: NAD 83

Soil Map Unit Name: Ludlow silt loam, 3 to 8 percent slopes (40B) NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X , Soil ____ , or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____ , Soil ____ , or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No ____	**within a Wetland?**	**Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)
This wetland is small depressional wetland fromed within a poorly drained field. This wetland was classified in the field as a PEM wetland and drains into a ponded portion of S26. Vegetation within the area was highly disturbed and predominalty unidentifyable.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____	
Water Table Present?	Yes ____	No X	Depth (inches): ____	
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____	**Wetland Hydrology Present?** **Yes** X **No** ____

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

Remarks:
Primary and secondary wetland hydrology indicators are present onsite.

VEGETATION – Use scientific names of plants. Sampling Point: W39

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Herb Stratum (Plot size: 5ft)			
1. *Juncus effusus*	15	Yes	OBL
2. *Phalaris arundinacea*	10	Yes	FACW
3. *Trifolium pratense*	5	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	30 =Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	15	x 1 =	15
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	5	x 4 =	20
UPL species	0	x 5 =	0
Column Totals:	30 (A)		55 (B)

Prevalence Index = B/A = 1.83

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation meets dominance test for hydrophytic vegetation.

SOIL

Sampling Point: W39

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	7.5YR 3/1	100					Loamy/Clayey	
2-10	7.5YR 3/2	90	7.5YR 5/4	10	C	PL/M	Loamy/Clayey	
10-18	5YR 5/4	85	5YR 4/6	15	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

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

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

Soil in the area meet criteria for Redox Dark Surface (F6) hydric soil indicator.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 1610/1355/1690 and 1208 Lines City/County: Wallingford/ New Haven Sampling Date: 12/07/21

Applicant/Owner: Eversource Energy State: CT Sampling Point: W40

Investigator(s): AECOM Section, Township, Range:

Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 4-6

Subregion (LRR or MLRA): LRR R, MLRA 145 Lat: 41.50443157820 Long: -72.83636152450 Datum: NAD 83

Soil Map Unit Name: 40B-Ludlow silt loam, 3 to 8 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No	**within a Wetland?**	**Yes** X **No**
Wetland Hydrology Present?	Yes X	No	If yes, optional Wetland Site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)
This wetland was classified in the field as a PSS wetland and is associated with stream S27 which runs through it.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	No X	Depth (inches):
Water Table Present?	Yes X	No	Depth (inches): 10
Saturation Present? (includes capillary fringe)	Yes X	No	Depth (inches): 8

Wetland Hydrology Present? **Yes** X **No**

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

Remarks:
Primary and secondary wetland hydrology indicators are present onsite.

VEGETATION – Use scientific names of plants. Sampling Point: W40

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft)			
1. *Cornus amomum*	30	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	30 =Total Cover		
Herb Stratum (Plot size: 5ft)			
1. *Reynoutria japonica*	30	Yes	FACU
2. *Typha latifolia*	10	Yes	OBL
3. *Onoclea sensibilis*	10	Yes	FACW
4. *Phalaris arundinacea*	10	Yes	FACW
5. *Dichanthelium clandestinum*	10	Yes	FACW
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	70 =Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 83.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	10	x 1 =	10
FACW species	60	x 2 =	120
FAC species	0	x 3 =	0
FACU species	30	x 4 =	120
UPL species	0	x 5 =	0
Column Totals:	100 (A)		250 (B)

Prevalence Index = B/A = 2.50

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation meets dominance test and prevalence index for hydrophytic vegetation.

SOIL

Sampling Point: W40

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	5YR 3/2	100					Peat	
10-18	5YR 3/2	90	2.5YR 3/6	10	C	M	Loamy/Clayey	Distinct redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- X Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

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

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

Soil in the area meet criteria for Redox Dark Surface (F6) and Histic Epipedon (A2) hydric soil indicator.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 1610/1355/1690 and 1208 Lines City/County: Wallingford/ New Haven Sampling Date: 12/07/21

Applicant/Owner: Eversource Energy State: CT Sampling Point: W42

Investigator(s): AECOM Section, Township, Range:

Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 2-4

Subregion (LRR or MLRA): LRR R, MLRA 145 Lat: 41.50196837480 Long: -72.83852971390 Datum: NAD 83

Soil Map Unit Name: 6-Wilbraham and Menlo soils, 0 to 8 percent slopes, extremely stony NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil X, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No ____	**within a Wetland?**	**Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)
This wetland was classified in the field as a PSS/PFO wetland. This wetland is associated with Stream S27. Soils are extremely stony and naturally problematic.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches):	____
Water Table Present?	Yes X	No ____	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches):	0

Wetland Hydrology Present? **Yes** X **No** ____

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

Remarks:
Primary wetland hydrology indicators are present onsite.

VEGETATION – Use scientific names of plants.

Sampling Point: W42

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft)			
1. *Acer rubrum*	20	Yes	FAC
2. *Ilex verticillata*	20	Yes	FACW
3. *Cornus amomum*	10	Yes	FACW
4.			
5.			
6.			
7.			
	50 =Total Cover		
Herb Stratum (Plot size: 5ft)			
1. *Juncus effusus*	30	Yes	OBL
2. *Carex lurida*	30	Yes	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	60 =Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1. *Smilax rotundifolia*	10	Yes	FAC
2.			
3.			
4.			
	10 =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	30	x 1 =	30
FACW species	60	x 2 =	120
FAC species	30	x 3 =	90
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	120 (A)		240 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation meets dominance test and prevalence index for hydrophytic vegetation.

SOIL

Sampling Point: W42

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/1	100					Loamy/Clayey	
6-8	10YR 3/1	80	7.5YR 4/6	20	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

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

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

Refusal at 8" depth on multiple attempts. Soil is naturally problematic.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 1610/1355/1690 and 1208 Lines City/County: Wallingford/ New Haven Sampling Date: 12/07/21

Applicant/Owner: Eversource Energy State: CT Sampling Point: W43

Investigator(s): AECOM Section, Township, Range:

Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 2-4

Subregion (LRR or MLRA): LRR R, MLRA 145 Lat: 41.49844365590 Long: -72.84477882890 Datum: NAD 83

Soil Map Unit Name: 6-Wilbraham and Menlo soils, 0 to 8 percent slopes, extremely stony NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No	**within a Wetland?**	**Yes** X **No**
Wetland Hydrology Present?	Yes X	No	If yes, optional Wetland Site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)
This wetland was classified in the field as a PSS/PFO wetland.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	No X	Depth (inches):
Water Table Present?	Yes X	No	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes X	No	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No**

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

Remarks:
Primary wetland hydrology indicators are present onsite.

VEGETATION – Use scientific names of plants.

Sampling Point: W43

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft)			
1. *Acer rubrum*	15	Yes	FAC
2. *Alnus incana*	10	Yes	FACW
3. *Ilex verticillata*	10	Yes	FACW
4. *Cornus amomum*	10	Yes	FACW
5.			
6.			
7.			
	45 =Total Cover		
Herb Stratum (Plot size: 5ft)			
1. *Onoclea sensibilis*	20	Yes	FACW
2. *Solidago rugosa*	10	Yes	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	30 =Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	60	x 2 =	120
FAC species	15	x 3 =	45
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	75 (A)		165 (B)

Prevalence Index = B/A = 2.20

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

_X_ 2 - Dominance Test is >50%

_X_ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation meets dominance test for hydrophytic vegetation.

SOIL

Sampling Point: W43

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/2	100					Loamy/Clayey	
10-18	10YR 4/2	85	5YR 5/6	15	C	M	Loamy/Clayey	Distinct redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

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

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Soil in the area meet criteria for Depleted Matrix (F3) and Depleted Below Dark Surface (A11) hydric soil indicators.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 1610/1355/1690 and 1208 Lines City/County: Wallingford/ New Haven Sampling Date: 12/07/21

Applicant/Owner: Eversource Energy State: CT Sampling Point: W44

Investigator(s): AECOM Section, Township, Range:

Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 2-4

Subregion (LRR or MLRA): LRR R, MLRA 145 Lat: 41.49693666170 Long: -72.84745201170 Datum: NAD 83

Soil Map Unit Name: 42C-Ludlow silt loam, 2 to 15 percent slopes, extremely stony NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No ____	**within a Wetland?**	**Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID:	

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

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches):	____
Water Table Present?	Yes X	No ____	Depth (inches):	2
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches):	0

Wetland Hydrology Present? **Yes** X **No** ____

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

Remarks:
Primary wetland hydrology indicators are present onsite.

VEGETATION – Use scientific names of plants.

Sampling Point: W44

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft)			
1. *Rosa multiflora*	45	Yes	FACU
2. *Viburnum dentatum*	35	Yes	FAC
3.			
4.			
5.			
6.			
7.			
	80 =Total Cover		
Herb Stratum (Plot size: 5ft)			
1. *Onoclea sensibilis*	65	Yes	FACW
2. *Euthamia graminifolia*	35	Yes	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	65	x 2 =	130
FAC species	70	x 3 =	210
FACU species	45	x 4 =	180
UPL species	0	x 5 =	0
Column Totals:	180 (A)		520 (B)

Prevalence Index = B/A = 2.89

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

_X_ 2 - Dominance Test is >50%

_X_ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation meets dominance test and prevalence index for hydrophytic vegetation.

SOIL

Sampling Point: W44

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-11	7.5YR 4/1	100					Mucky Loam/Clay	
11-20	7.5YR 5/2	95	7.5YR 4/6	5	C	M	Loamy/Clayey	Distinct redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- X Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

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

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Soil in the area meet criteria for Depleted Matrix (F3) and Histic Epipedon (A2) hydric soil indicators.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 1610/1355/1690 and 1208 Lines City/County: Cheshire/ New Haven Sampling Date: 03/30/21

Applicant/Owner: Eversource Energy State: CT Sampling Point: W55

Investigator(s): AECOM Section, Township, Range:

Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 2-4

Subregion (LRR or MLRA): LRR R, MLRA 145 Lat: 41.49016350370 Long: -72.85838064290 Datum: NAD 83

Soil Map Unit Name: 30B-Branford silt loam, 3 to 8 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No ____	**within a Wetland?**	**Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)
This wetland was classified in the field as a PSS wetland. The wetland is located east of an existing access road.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes X	No ____	Depth (inches): 2
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ____

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

Remarks:
Primary wetland hydrology indicators are present onsite.

VEGETATION – Use scientific names of plants. Sampling Point: W55

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft)			
1. *Ilex verticillata*	20	Yes	FACW
2. *Rosa multiflora*	5	No	FACU
3. *Cornus amomum*	5	No	FACW
4.			
5.			
6.			
7.			
	30 =Total Cover		
Herb Stratum (Plot size: 5ft)			
1. *Onoclea sensibilis*	65	Yes	FACW
2. *Sagittaria latifolia*	30	Yes	OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	95 =Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1. *Lonicera*	15	Yes	
2.			
3.			
4.			
	15 =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	30	x 1 =	30
FACW species	90	x 2 =	180
FAC species	0	x 3 =	0
FACU species	5	x 4 =	20
UPL species	0	x 5 =	0
Column Totals:	125 (A)		230 (B)

Prevalence Index = B/A = 1.84

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation meets dominance test and prevalence index for hydrophytic vegetation.

SOIL

Sampling Point: W55

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	7.5YR 3/2	100					Muck	
8-14	7.5YR 5/2	95	7.5YR 4/6	5	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- X Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

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

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

Soil in the area meet criteria for Histic Epipedon (A2), Depleted Matrix (F3), and Depleted Below Dark Surface (A11) hydric soil indicators.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 1610/1355/1690 and 1208 Lines City/County: Cheshire/ New Haven Sampling Date: 03/30/21

Applicant/Owner: Eversource Energy State: CT Sampling Point: W58

Investigator(s): AECOM Section, Township, Range:

Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 2-4

Subregion (LRR or MLRA): LRR R, MLRA 145 Lat: 41.48796961130 Long: -72.86052916670 Datum: NAD 83

Soil Map Unit Name: 12-Raypol silt loam NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No	**within a Wetland?**	**Yes** X **No**
Wetland Hydrology Present?	Yes X	No	If yes, optional Wetland Site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)
This wetland was classified in the field as a PSS/PFO wetland. This wetland is associated with Stream S32.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	No X	Depth (inches):
Water Table Present?	Yes X	No	Depth (inches): 6
Saturation Present? (includes capillary fringe)	Yes X	No	Depth (inches): 4

Wetland Hydrology Present? **Yes** X **No**

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

Remarks:
Primary wetland hydrology indicators are present onsite.

VEGETATION – Use scientific names of plants. Sampling Point: W58

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft)			
1. *Viburnum lentago*	60	Yes	FAC
2. *Ilex verticillata*	15	No	FACW
3. *Rosa multiflora*	15	No	FACU
4.			
5.			
6.			
7.			
	90 =Total Cover		
Herb Stratum (Plot size: 5ft)			
1. *Onoclea sensibilis*	25	Yes	FACW
2. *Sphagnum spp*	25	Yes	
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	50 =Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	40	x 2 =	80
FAC species	60	x 3 =	180
FACU species	15	x 4 =	60
UPL species	0	x 5 =	0
Column Totals:	115 (A)		320 (B)

Prevalence Index = B/A = 2.78

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation meets dominance test and prevalence index for hydrophytic vegetation.

SOIL

Sampling Point: W58

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	7.5YR 2.5/1	100					Muck	
4-11	7.5YR 4/2	100					Loamy/Clayey	
11-20	7.5YR 4/2	93	7.5YR 4/6	2	C	PL/M	Loamy/Clayey	
			7.5YR 5/1	5	D	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

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

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

Soil in the area meet criteria for Depleted Below Dark Surface (A11) and Depleted Matrix (F3) hydric soil indicators.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 1610/1355/1690 and 1208 Lines City/County: Cheshire/ New Haven Sampling Date: 03/30/21

Applicant/Owner: Eversource Energy State: CT Sampling Point: W62

Investigator(s): AECOM Section, Township, Range:

Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 0-2

Subregion (LRR or MLRA): LRR R, MLRA 145 Lat: 41.47767169860 Long: -72.87132674950 Datum: NAD 83

Soil Map Unit Name: 69B-Yalesville fine sandy loam, 3 to 8 percent slopes NWI classification: PSS1E

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No ____	**within a Wetland?**	**Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)
This wetland was classified in the field as a PSS wetland. This wetland is associated with Stream S34 & 35. soils within the deeper portions of this wetland were determined in the field to be Histisols.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- X Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ____	Depth (inches):	2
Water Table Present?	Yes X	No ____	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches):	0

Wetland Hydrology Present? **Yes** X **No** ____

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

Remarks:
Primary wetland hydrology indicators are present onsite.

VEGETATION – Use scientific names of plants.

Sampling Point: W62

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft)			
1. *Cornus amomum*	20	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	20 =Total Cover		
Herb Stratum (Plot size: 5ft)			
1. *Typha latifolia*	40	Yes	OBL
2. *Carex stricta*	20	Yes	FACW
3. *Carex lurida*	20	Yes	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	80 =Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	40	x 1 =	40
FACW species	60	x 2 =	120
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		160 (B)

Prevalence Index = B/A = 1.60

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation meets dominance test and prevalence index for hydrophytic vegetation.

SOIL

Sampling Point: W62

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 2/1	100					Mucky Peat	
6-30	10YR 3/2	100					Mucky Loam/Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- X Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- X Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

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

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Soil in the area meet criteria for Histosol (A1) and Hydrogen Sulfide (A4) hydric soil indicators.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 1610/1355/1690 and 1208 Lines City/County: Cheshire/ New Haven Sampling Date: 12/15/21

Applicant/Owner: Eversource Energy State: CT Sampling Point: W63

Investigator(s): AECOM Section, Township, Range:

Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 0-2

Subregion (LRR or MLRA): LRR R, MLRA 145 Lat: 41.47262076270 Long: -72.87573716480 Datum: NAD 83

Soil Map Unit Name: 69B-Yalesville fine sandy loam, 3 to 8 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No ____	**within a Wetland?**	**Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)
This wetland was classified in the field as a PEM wetland.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes X	No ____	Depth (inches): 16"
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** X **No** ____

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

Remarks:
Primary wetland hydrology indicators are present onsite.

VEGETATION – Use scientific names of plants.

Sampling Point: W63

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Herb Stratum (Plot size: 5ft)			
1. *Phalaris arundinacea*	100	Yes	FACW
2. *Verbena hastata*	15	No	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	115 =Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	115	x 2 =	230
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	115 (A)		230 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation meets dominance test and prevalence index for hydrophytic vegetation.

SOIL

Sampling Point: W63

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/2	100					Loamy/Clayey	
6-16	7.5YR 4/2	90	7.5YR 5/2	5	C	M	Loamy/Clayey	
			7.5YR 4/6	5	C	M		Distinct redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- X Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

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

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

Soil in the area meet criteria for Depleted Matrix (F3), Depleted Dark Surface (F7), and Depleted Below Dark Surface (A11) hydric soil indicators.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 1610/1355/1690 and 1208 Lines City/County: Cheshire/ New Haven Sampling Date: 12/15/21

Applicant/Owner: Eversource Energy State: CT Sampling Point: W64

Investigator(s): AECOM Section, Township, Range:

Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 0-2

Subregion (LRR or MLRA): LRR R, MLRA 145 Lat: 41.47059744800 Long: -72.87688645930 Datum: NAD 83

Soil Map Unit Name: 69B-Yalesville fine sandy loam, 3 to 8 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No ____	**within a Wetland?**	**Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)
This wetland was classified in the field as a PEM wetland. Timber matting was identified within the wetland during field reviews.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ____	Depth (inches):	2
Water Table Present?	Yes X	No ____	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches):	0

Wetland Hydrology Present? **Yes** X **No** ____

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

Remarks:
Primary wetland hydrology indicators are present onsite.

VEGETATION – Use scientific names of plants. Sampling Point: W64

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Herb Stratum (Plot size: 5ft)			
1. *Phalaris arundinacea*	35	Yes	FACW
2. *Juncus effusus*	25	Yes	OBL
3. *Solidago graminifolia*	20	Yes	FAC
4. *Verbena hastata*	10	No	FACW
5. *Solidago rugosa*	10	No	FAC
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	25	x 1 =	25
FACW species	45	x 2 =	90
FAC species	30	x 3 =	90
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		205 (B)

Prevalence Index = B/A = 2.05

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation meets dominance test and prevalence index for hydrophytic vegetation.

SOIL

Sampling Point: W64

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	7.5YR 3/1	100					Mucky Loam/Clay	
8-12	7.5YR 4/2	90	7.5YR 4/6	10	C	M	Loamy/Clayey	Distinct redox concentrations
12-16	5YR 5/1	90	5YR 5/6	5	C	M	Loamy/Clayey	Distinct redox concentrations
			5YR 4/4	5	C	M		Distinct redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

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

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Soil in the area meet criteria for Depleted Matrix (F3) and Depleted Below Dark Surface (A11) hydric soil indicators.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 1610/1355/1690 and 1208 Lines City/County: Cheshire/ New Haven Sampling Date: 12/07/21

Applicant/Owner: Eversource Energy State: CT Sampling Point: W65

Investigator(s): AECOM Section, Township, Range:

Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 2-4

Subregion (LRR or MLRA): LRR R, MLRA 145 Lat: 41.46933972020 Long: -72.87761958870 Datum: NAD 83

Soil Map Unit Name: 103-Rippowam fine sandy loam NWI classification: PEM1E

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No ____	**within a Wetland?**	**Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)
This wetland was classified in the field as a PEM wetland.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes X	No ____	Depth (inches): 4
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ____

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

Remarks:
Primary wetland hydrology indicators are present onsite.

VEGETATION – Use scientific names of plants. Sampling Point: W65

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Herb Stratum (Plot size: 5ft)			
1. *Phalaris arundincea*	35	Yes	FACW
2. *Solidago rugosa*	25	Yes	FACW
3. *Verbena hastata*	15	No	FAC
4. *Typha latifolia*	15	No	OBL
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	90 =Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	15	x 1 =	15
FACW species	60	x 2 =	120
FAC species	15	x 3 =	45
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	90 (A)		180 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation meets dominance test and prevalence index for hydrophytic vegetation.

SOIL

Sampling Point: W65

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-14	10YR 4/2	90	10YR 5/2	5	C	M	Mucky Loam/Clay	Faint redox concentrations
			10YR 5/6	5	C	PL		
14-20	10YR 5/1	90	10YR 5/6	5	C	M	Loamy/Clayey	Distinct redox concentrations
			10YR 5/4	5	C	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- x Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

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

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

Soil in the area meet criteria for Depleted Matrix (F3) and Black Histic (A3) hydric soil indicators.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 1610/1355/1690 and 1208 Lines City/County: Cheshire/ New Haven Sampling Date: 03/30/21

Applicant/Owner: Eversource Energy State: CT Sampling Point: W66

Investigator(s): AECOM Section, Township, Range:

Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 2-4

Subregion (LRR or MLRA): LRR R, MLRA 145 Lat: 41.46581956010 Long: 41.46581956010 Datum: NAD 83

Soil Map Unit Name: 103-Rippowam fine sandy loam NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X , Soil ____ , or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____ , Soil ____ , or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No ____	**within a Wetland?**	**Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)
This wetland was classified in the field as a PEM wetland and is a large depressional wetland in a valley. Vegetation significantly distrubed from use as agricultural land. Stream S37 flows through this wetland.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes X	No ____	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ____

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

Remarks:
Primary wetland hydrology indicators are present onsite.

VEGETATION – Use scientific names of plants. Sampling Point: W66

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Herb Stratum (Plot size: 5ft)			
1. *Phalaris arundinacea*	60	Yes	FACW
2. *Solidago rugosa*	20	Yes	FACW
3. *Juncus effusus*	15	No	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	95 =Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	15	x 1 =	15
FACW species	80	x 2 =	160
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	95 (A)		175 (B)

Prevalence Index = B/A = 1.84

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation meets dominance test and prevalence index for hydrophytic vegetation.

SOIL

Sampling Point: W66

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/1	98	7.5YR 4/4	2	C	M	Loamy/Clayey	
6-18	10YR 3/2	95	7.5YR 4/4	5	C	PL/M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

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

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

Soil in the area meet criteria for Redox Dark Surface (F6) hydric soil indicators.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 1610/1355/1690 and 1208 Lines City/County: Wallingford/ New Haven Sampling Date: 12/15/21

Applicant/Owner: Eversource Energy State: CT Sampling Point: W70

Investigator(s): AECOM Section, Township, Range:

Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 0-2

Subregion (LRR or MLRA): LRR R, MLRA 145 Lat: 41.459266 Long: -72.886013 Datum: NAD 83

Soil Map Unit Name: Yalesville fine sandy loam, 3 to 8 percent slopes (69B) NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No ____	**within a Wetland?**	**Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)
This wetland was classified in the field as a PEM wetland. The wetland consists predominantly of the overflow area associated with a large ponded area. This wetland is associated with Stream S38, 39, 42, and 41.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches):	____
Water Table Present?	Yes X	No ____	Depth (inches):	0"
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches):	0"

Wetland Hydrology Present? **Yes** X **No** ____

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

Remarks:
Primary and secondary wetland hydrology indicators are present onsite.

VEGETATION – Use scientific names of plants.

Sampling Point: W70

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft)			
1. *Salix discolor*	10	Yes	FACW
2. *Cornus amomum*	5	Yes	FACW
3.			
4.			
5.			
6.			
7.			
	15 =Total Cover		
Herb Stratum (Plot size: 5ft)			
1. *Carex stricta*	40	Yes	OBL
2. *Onoclea sensibilis*	25	Yes	FACW
3. *Symplocarpus foetidus*	10	No	OBL
4. *Carex lurida*	10	No	OBL
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	85 =Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	60	x 1 =	60
FACW species	40	x 2 =	80
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		140 (B)

Prevalence Index = B/A = 1.40

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation meets dominance test for hydrophytic vegetation.

SOIL

Sampling Point: W70

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 2/1	100					Loamy/Clayey	
12-16	5YR 4/2	90	5YR 5/8	10	C	M	Loamy/Clayey	
			5YR 4/4	10	C	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

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

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

Soil in the area meet criteria for Depleted Below Dark Surface (A11) hydric soil indicator.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 1610/1355/1690 and 1208 Lines City/County: Wallingford/ New Haven Sampling Date: 12/15/21

Applicant/Owner: Eversource Energy State: CT Sampling Point: W76

Investigator(s): AECOM Section, Township, Range:

Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 2-4

Subregion (LRR or MLRA): LRR R, MLRA 145 Lat: 41.44133608530 Long: -72.84379197050 Datum: NAD 83

Soil Map Unit Name: 103-Rippowam fine sandy loam NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil X, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No ____	**within a Wetland?**	**Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)
This wetland was classified in the field as a PSS wetland.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches):	
Water Table Present?	Yes X	No ____	Depth (inches):	14
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches):	10

Wetland Hydrology Present? **Yes** X **No** ____

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

Remarks:
Primary wetland hydrology indicators are present onsite.

VEGETATION – Use scientific names of plants.

Sampling Point: W76

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Herb Stratum (Plot size: 5ft)			
1. *Phragmites australis*	60	Yes	FACW
2. *Reynoutria japonica*	20	Yes	FACU
3. *Persicaria perfoliata*	15	No	FAC
4. *Onoclea sensibilis*	5	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	65	x 2 =	130
FAC species	15	x 3 =	45
FACU species	20	x 4 =	80
UPL species	0	x 5 =	0
Column Totals:	100 (A)		255 (B)

Prevalence Index = B/A = 2.55

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation meets prevalence index for hydrophytic vegetation.

SOIL

Sampling Point: W76

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	7.5YR 3/2	100					Loamy/Clayey	
6-14	5YR 3/3	80	7.5YR 5/6	10	C	PL/M	Loamy/Clayey	
			5YR 4/4	10	C	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

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

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Soil in the area meet criteria for Red Parent Material (F21) problematic hydric soil indicators.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 1610/1355/1690 and 1208 Lines City/County: Wallingford/ New Haven Sampling Date: 12/15/21

Applicant/Owner: Eversource Energy State: CT Sampling Point: W77

Investigator(s): AECOM Section, Township, Range:

Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 2-4

Subregion (LRR or MLRA): LRR R, MLRA 145 Lat: 41.44133608530 Long: -72.84379197050 Datum: NAD 83

Soil Map Unit Name: 103-Rippowam fine sandy loam NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X , Soil ____ , or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____ , Soil ____ , or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No ____	**within a Wetland?**	**Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)
This wetland was classified in the field as a PEM wetland. Vegetation is maintained. This wetland is located in a depression near a municipal waste facility.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes X	No ____	Depth (inches): 8
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 6

Wetland Hydrology Present? **Yes** X **No** ____

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

Remarks:
Primary wetland hydrology indicators are present onsite.

VEGETATION – Use scientific names of plants.

Sampling Point: W77

Tree Stratum (Plot size: 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15ft)			
1.	60	Yes	
2.	20	Yes	
3.	15	No	
4.			
5.			
6.			
7.			
	95 =Total Cover		
Herb Stratum (Plot size: 5ft)			
1. *Phalaris arundinacea*	60	Yes	FACW
2. *Phragmites australis*	20	Yes	FACW
3. *Poa pretensis*	15	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	95 =Total Cover		
Woody Vine Stratum (Plot size: 30ft)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	80	x 2 =	160
FAC species	0	x 3 =	0
FACU species	15	x 4 =	60
UPL species	0	x 5 =	0
Column Totals:	95 (A)		220 (B)

Prevalence Index = B/A = 2.32

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation meets prevalence index for hydrophytic vegetation.

SOIL

Sampling Point: W77

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	5YR 3/2	100					Loamy/Clayey	
4-16	5YR 3/3	80	7.5YR 5/6	5	C	PL/M	Loamy/Clayey	
			5YR 4/4	15	C	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

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

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks:

Soil in the area meet criteria for Red Parent Material (F21) problematic hydric soil indicators.

Attachment E: Vernal Pool Assessment

t

AECOM
500 Enterprise Drive
Rocky Hill, CT 06067
aecom.com

Project name: Southington to Cook Hill Junction Rebuild Project

Date: April 14, 2023

Subject: Vernal Pool Assessment
Eversource Energy
Southington to Cook Hill Junction Rebuild Project
Southington, Cheshire, Meriden, Wallingford, CT

Summary of Project:
AECOM has prepared this report for Eversource's Southington to Cook Hill Junction Rebuild Project (Project) as a summary of vernal pools documented between Southington Substation and Cook Hill Junction in Southington, Cheshire, Meriden, and Wallingford, CT. The Project is part of an ongoing maintenance program which evaluates the integrity of utility structures and implements repair, upgrade or replacement in order to ensure the safe and reliable transmission of power to its customers. Due to asset condition, the Project proposes to replace structures, maintain existing structures, and add structures where needed along the existing 1355, 1610, 1690 and 1208 Lines. The Project will extend between Southington Substation in Southington to Cook Hill Junction in Cheshire and will include work at Lucchini Junction, Hanover Substation, Schwab Junction, and one structure outside of the Wallingford Resident Disposal Center.

As part of the environmental review process for this project, AECOM wetland and soil scientists reviewed the portion of the Right of Way (ROW) where work is being performed for potential vernal pools (PVPs) on March 30th, April 19th and May 12th, 2021. All vernal pools were classified according to Eversource's December 2019 Vernal Pool Best Management Practices (BMPs). Areas classified as decoy vernal pools are not shown on project mapping. Please see Table 1 for vernal pool identification and classification. Please see Appendix A of the Connecticut Siting Council Petition: Southington to Cook Hill Junction Rebuild Project for Project Mapping and the attached Appendix A for USACE Vernal Pool Characterization Forms for locations and additional information regarding all confirmed vernal pools.

Table 1: Vernal Pools Identified within the Eversource 1355, 1610, 1690, and 1208 Lines ROW

Vernal Pool ID	Type	Cover Type	Latitude / Longitude	Species Identified*	Map Sheet
VP01	Cryptic	Forested	41.571688, -72.858874	WFEM, WFL, SP, FNCL	3
PVP01	Failed	Emergent	41.570694, -72.859166	WFEM, SSEM	3
PVP02	Failed	Forested / Open	41.567700, -72.859118	SSEM, GF, Snapping Turtle	3
PVP03	Failed	Forested	41.558823, -72.85811	SP	5
PVP04	Decoy	Forested	41.557977, -72.858897	SSEM	5
VP02	Cryptic	Forested	41.557889, -72858569	WFL	5
PVP05	Failed	Forested / Scrub-Shrub	41.505561, -72.836632	SP	14
VP03	Cryptic	Emergent	41.497822, -72.845716	WFEM, WFL, SP, TF	15
PVP06	Failed	Forested / Scrub-Shrub	41.49666, -72.847958	SP, WF	16

Vernal Pool ID	Type	Cover Type	Latitude / Longitude	Species Identified*	Map Sheet
VP04	Classic	Open	41.488900, -72.860033	WFEM, WFL	17
PVP07	Decoy	Emergent	41.488631, -72.859942	WFEM, WFL, SSEM	17
VP05	Cryptic	Emergent	41.479692, -72.869568	WFL, SSEM, SP, GF	18, 19
PVP08	Decoy	Forested	41.478875, -72.869731	SSEM	19
VP06	Cryptic	Emergent	41.476912, -72.872363	WFEM, WFL, GF	19
VP07	Cryptic	Emergent / Forested	41.475952, -72.872809	WFL, SP, TF	19
VP08	Cryptic	Emergent	41.469330, -72.877309	WFL	20
VP09	Cryptic	Emergent	41.465756, -72.880045	WFEM, WFL, SP, amphibious snails	21
PVP09	Failed	Open	41.465171, -72.880456	SP	21
PVP10	Failed	Scrub-Shrub	41.46154, -72.88356	SP	21
PVP11	Failed	Scrub-Shrub	41.455669, -72.890477	SP, GF	22

*Species Listed: Wood Frog Egg Mass (WFEM), Wood Frog Larvae (WFL), Spotted Salamander Egg Mass (SSEM), Green Frog (GF), Spring Peepers (SP), and Grey Tree Frog (TF)

Vernal Pool General Description

Vernal Pool 1 (VP1): This area consists of a large pool approximately 6 inches at the deepest point. The pool is associated with a forested wetland system east of the 1355/1610 Line structure 4102 in Southington, please see map sheet 3 of 23. The wetland is a palustrine forested (PFO) wetland classified as a palustrine scrub shrub (PSS) / palustrine emergent (PEM) wetland within the majority of the ROW and PFO on ROW fringes and outside ROW. The pool itself occupies a depressional portion of the wetland and is east of the existing ROW. Vegetation noted in the area, at the time of the site visit, included: red maple (*Acer rubrum*), speckled alder (*Alnus incana*) and common reed (*Phragmites australis*). During the site visit, few wood frog larvae, and wood frog egg masses, few spring peepers were herd, and few fingernail clams were identified. Due to the size and depth of this pool, it is unlikely to entirely dry out each year. This pool is shaded by surrounding trees located outside of the Project ROW. Due to the location of this vernal pool within a larger wetland complex, it is classified as a cryptic vernal pool. There are no Project related impacts to VP1. Temporary impacts to the surrounding wetland and 100' vernal pool envelope will be required. Temporary impacts will be limited to the placement of timber mats during construction; no work will occur within the vernal pool depression.

Potential Vernal Pool 1 (PVP1): This area consists of a shallow depression within a historic matted access road and a mapped PEM/PSS wetland. The water depth was approximately 6 inches at the deepest point. Vegetation within the depression consisted of common reed (*Phragmites australis*) silky dogwood (*Cornus amomum*) and soft rush (*Juncus effusus*). During initial site visits, spring peepers were heard in the vicinity of the ponded area. Subsequent site visits failed to identify any obligate vernal pool species within the ponded area. In addition, historic damage to vegetation from timber matting and construction activities in the area would not be conducive to a successful vernal pool. Due to the lack of obligate vernal pool species and damage to the surrounding area, this pool failed to meet criteria for a vernal pool.

Potential Vernal Pool 2 (PVP2): This area consists of a deep distinct depression within a mapped PEM/PSS wetland. The ponded area consisting of PVP2 is located west of the ROW within a forested area. The water depth was approximately 20 inches at the deepest point. Vegetation within the depression consisted of red maple (*Acer rubrum*), eastern white pine (*Pinus strobus*) and glaucous willow (*Salix discolor*). During initial site visits, spotted salamander egg masses were identified within the ponded area. Subsequent site visits failed to identify egg masses, however, several predator species were identified including green frogs (*Rana clamitans*) and a snapping turtle (*Chelydra*

serpentina) within the ponded area. Due to the lack of obligate vernal pool species and presence of predator species, this pool failed to meet criteria for a vernal pool.

Potential Vernal Pool 3 (PVP3): This area consists of a large shallow depression within a mapped PEM/PSS wetland. The area that contains this ponded portion of the wetland is located east of the ROW within a forested wetland. The water depth was approximately 3 inches at the deepest point. Vegetation within the depression consisted of red maple (*Acer rubrum),* grey birch (*Betula populifolia*) and black walnut (*Juglans nigra*). During initial site visits, spring peepers were heard in the vicinity of the ponded area. Subsequent site visits failed to identify any obligate vernal pool species within the ponded area. Due to the lack of obligate vernal pool species, this pool failed to meet criteria for a vernal pool.

Potential Vernal Pool 4 (PVP4): This pool consists of a shallow inundated area within an existing dirt road. The pool is associated with a PSS / PFO wetland system. This pool is subject to historic and recurring disturbance from ATV usage. Hydrology within this area is likely to be limited to perched surface water and the area is significantly affected by continuing disturbance. The pool is largely devoid of vegetation and consists of hard packed soil and exposed tree roots and is therefore unlikely to hold surface water long enough for full larval development and metamorphosis. Vernal Pool 2, located within the vicinity of this pool, was identified as a cryptic vernal pool and may serve as a source population for amphibian species identified within this pool. During the site visit, spotted salamander egg masses were identified within PVP4. Due to the impact of the ATV road on the pool's hydrology, historic and recurring disturbance within the pool, and the presence of a nearby source pool this area was classified as a decoy vernal pool and excluded from mapping.

Vernal Pool 2 (VP2): This area consists of a medium sized pool approximately 12 inches at the deepest point. The pool is associated with a forested wetland system west of the 1690 Line structure 767 in Southington, please see map sheet 5 of 23. The wetland is a forested (PFO) wetland classified as a PSS / PEM wetland within the majority of the ROW and PFO on ROW fringes and outside ROW. The pool itself occupies a depressional portion of the wetland and is west of the existing ROW. Vegetation noted in the area, at the time of the site visit, included: red maple (*Acer rubrum*), sensitive fern (*Onoclea sensibilis*) and silky dogwood (*Cornus amomum*). During the site visit, wood frog larvae were commonly observed. Due to the size and depth of this pool, it is unlikely to entirely dry out each year. This pool is shaded by surrounding trees located outside of the Project ROW. Due to the location of this vernal pool within a larger wetland complex it is classified as a cryptic vernal pool. There are no Project related impacts to VP2. Temporary impacts to the surrounding wetland and 100' vernal pool envelope will be required. Temporary impacts will be limited to the placement of timber mats during construction; no work will occur within the vernal pool depression.

Potential Vernal Pool 5 (PVP5): This area consists of a large shallow depression as a ponded portion of a stream system. The water depth was unable to be determined due to a thick layer of organic material within the ponded area that exceeded three feet in depth. Vegetation surrounding the depression consisted of red maple (*Acer rubrum),* grey birch (*Betula populifolia*) and multiflora rose (*Rosa multiflora*). During initial site visits, spring peepers were heard in the vicinity of the ponded area. Subsequent site visits failed to identify any obligate vernal pool species within the ponded area. Due to the lack of obligate vernal pool species, this pool failed to meet criteria for a vernal pool.

Vernal Pool 3 (VP3): This area consists of a medium sized pool approximately 2 inches at the deepest point. The pool is associated with an emergent wetland system west of the 1610 Line structure 5264 in Wallingford, please see map sheet 15 of 23. The wetland is an emergent (PEM) wetland classified as a PEM / PSS wetland within the majority of the ROW and PFO on ROW fringes and outside ROW. The pool itself occupies a localized depressional portion of the wetland. Vegetation noted in the area, at the time of the site visit, included: silky dogwood (*Cornus amomum*) and common reed (*Phragmites australis*). During the site visit, many wood frog larvae, wood frog egg masses, few spring peepers, and few grey treefrogs were identified. Due to the size and depth of this pool, it is unlikely to entirely dry out each year. Due to the location of this vernal pool within a larger wetland complex it is classified as a cryptic vernal pool. There are no Project related impacts to VP3. Temporary impacts to the surrounding wetland and 100' vernal pool envelope will be required. Temporary impacts will be limited to the placement of timber mats during construction; no work will occur within the vernal pool depression.

Potential Vernal Pool 6 (PVP6): This area consists of a shallow depression within a mapped PEM/PSS wetland. This ponded portion of the wetland is located west of the ROW within a forested wetland. The water depth was

approximately 6 inches at the deepest point. Vegetation within the depression consisted of multiflora rose (*Rosa multiflora*), silky dogwood (*Cornus amomum*), red maple (*Acer rubrum*), sensitive fern (*Onoclea sensibilis*) and arrowwood (*Viburnum dentatum*). During initial site visits, spring peepers were heard in the vicinity of the ponded area, and adult woodfrogs were identified in the vicinity. Subsequent site visits failed to identify any obligate vernal pool species within the ponded area and did not identify any egg masses in the ponded area. Due to the lack of obligate vernal pool species, this pool failed to meet criteria for a vernal pool.

Vernal Pool 4 (VP4): This area consists of a small pool approximately 6 inches at the deepest point. The pool is associated with an emergent wetland system west of the 1610 Line structure 5255 in Wallingford, please see map sheet 17 of 23. The pool itself occupies a localized depression outside of the boundaries of the wetland. The pool had been traveled over by off-road vehicles but was not part of any existing access road. During the site visit, many wood frog larvae and wood frog egg masses were identified. Due to the size and depth of this pool, it is unlikely to entirely dry out each year. This pool is shaded by surrounding trees located outside of the Project ROW. Due to the location of this vernal pool outside the boundaries of a wetland, it is classified as a classic vernal pool. There are no Project related impacts to VP4. Temporary impacts to the surrounding wetland and 100' vernal pool envelope will be required. Temporary impacts will be limited to the placement of timber mats during construction; no work will occur within the vernal pool depression.

Potential Vernal Pool 7 (PVP7): This pool consists of an inundated area located on the edges of an existing access road. The pool is associated with a PSS / PEM wetland system. This pool is subject to historic and recurring disturbance from the access road which backs up hydrology along its edges creating an opportunistic area for vernal pool species. Hydrology within this area is likely to be limited to perched surface water. Vernal pool 4, located within the vicinity of this pool, was identified as a classic vernal pool and may serve as a source population for amphibian species identified within the PVP7 pool. Vegetation identified in the vicinity of the ponded area included sensitive fern (*Onoclea sensibilis*), multiflora rose (*Rosa multiflora*), winterberry (*Ilex verticillata*), nannyberry (*Viburnum lentago*), and peat moss (*Sphagnum sp.*). During the site visit, spotted salamander eggmasses, wood frog egg masses, and wood frog larvae were identified within PVP7. Due to the impact of the access road on the pool's hydrology, historic and recurring disturbance within the pool, and the presence of a nearby source pool this area was classified as a decoy vernal pool and excluded from mapping.

Vernal Pool 5 (VP5): This area consists of a medium sized pool approximately 12 inches at the deepest point. The pool is associated with an emergent wetland system southwest of the 1610 Line structure 5247 in Cheshire, please see map sheet 19 of 23. The wetland is an emergent (PEM) wetland classified as a PEM / PSS wetland within the majority of the ROW and PFO on ROW fringes and outside ROW. The pool itself occupies a deeper portion of the wetland. Vegetation noted in the area, at the time of the site visit, included: cattails (*Typha latifolia*), lurid sedge (*Carex lurida*), tussock sedge (*Carex stricta*) and skunk cabbage (*Symplocarpus foetidus*). During the site visit, many wood frog larvae, wood frog egg masses, few spring peepers, and few green frogs were identified. Due to the size and depth of this pool, it is unlikely to entirely dry out each year. Due to the location of this vernal pool within a larger wetland complex it is classified as a cryptic vernal pool. There are no Project related impacts to VP5 or its associated 100' vernal pool envelope.

Potential Vernal Pool 8 (PVP8): This pool consists of an inundated area located on the edges of an existing access road and gas line easement. The pool is associated with a PEM wetland system. This pool is subject to historic and recurring disturbance from the access road which backs up hydrology along its edges creating an opportunistic area for vernal pool species. The ponded area exists within a forested portion of the wetland on the edges of the ROW and consists of a significant topographic increase on three sides. Vernal pools 5 and 6, located within the vicinity of this pool, were identified as cryptic vernal pools and may serve as source populations for amphibian species identified within this pool. Vegetation identified in the vicinity of the ponded area included red maple (*Acer rubrum),* grey birch (*Betula populifolia*) and skunk cabbage (*Symplocarpus foetidus*). During the site visit, spotted salamander egg masses were identified within PVP8. Due to the impact of the access road on the pool's hydrology, historic and recurring disturbance within the pool, and the presence of nearby source pools this area was classified as a decoy vernal pool and excluded from mapping.

Vernal Pool 6 (VP6): This area consists of a medium sized pool approximately 30 inches at the deepest point. The pool is associated with an emergent wetland system west of the 1610 Line structure 5245 in Cheshire, please see map sheet 19 of 23. The wetland is an emergent (PEM) wetland classified as a PEM / PSS wetland within the majority of the ROW and PFO on ROW fringes and outside ROW. The pool itself occupies a deep localized depressional portion of the wetland. Vegetation noted in the area, at the time of the site visit, included: lurid sedge (*Carex lurida*), tussock sedge (*Carex stricta*) and common reed (*Phragmites australis*). During the site visit, few wood frog larvae, wood frog egg masses, few spotted salamander egg masses and few green frogs were identified. Due to the size and depth of this pool, it is unlikely to entirely dry out each year. Due to the location of this vernal pool within a larger wetland complex it is classified as a cryptic vernal pool. There are no Project related impacts to VP6. Temporary impacts to the surrounding wetland and 100' vernal pool envelope will be required. Temporary impacts will be limited to the placement of timber mats during construction; no work will occur within the vernal pool depression.

Vernal Pool 7 (VP7): This area consists of a very large sized pool approximately 24 inches at the deepest point. The pool is associated with an emergent wetland system west of the 1610 Line structure 5244 in Cheshire, please see map sheet 19 of 23. The wetland is an emergent (PEM) wetland classified as a PEM / PSS wetland within the majority of the ROW and PFO on ROW fringes and outside ROW. The pool itself occupies a large depressional portion of the wetland. Vegetation noted in the area, at the time of the site visit, included: lurid sedge (*Carex lurida*), tussock sedge (*Carex stricta*), speckled alder (*Alnus incana*) and common reed (*Phragmites australis*). During the site visit, few wood frog larvae, wood frog egg masses, few grey tree frogs and few spring peepers were identified. Due to the size and depth of this pool, it is unlikely to entirely dry out each year. This pool is shaded by surrounding trees located outside of the Project ROW. Due to the location of this vernal pool within a larger wetland complex it is classified as a cryptic vernal pool. There are no Project related impacts to VP7. Temporary impacts to the surrounding wetland and 100' vernal pool envelope will be required. Temporary impacts will be limited to the placement of timber mats during construction

Vernal Pool 8 (VP8): This area consists of a large sized pool approximately 30 inches at the deepest point. The pool is associated with an emergent wetland system west of the 1610 Line structure 5239 in Cheshire, please see map sheet 20 of 23. The wetland is an emergent (PEM) wetland classified as a PEM wetland within the majority of the ROW. The pool itself occupies a depressional portion of the wetland. Vegetation noted in the area, at the time of the site visit, included: cattails (*Typha latifolia*) and common reed (*Phragmites australis*). During the site visit, many wood frog larvae were identified. Due to the size and depth of this pool, it is unlikely to entirely dry out each year. Due to the location of this vernal pool within a larger wetland complex it is classified as a cryptic vernal pool. There are no Project related impacts to VP8. Temporary impacts to the surrounding wetland and 100' vernal pool envelope will be required. Temporary impacts will be limited to the placement of timber mats during construction; no work will occur within the vernal pool depression.

Vernal Pool 9 (VP9): This area consists of a medium sized pool approximately 30 inches at the deepest point. The pool is associated with an emergent wetland system west of the 1610 Line structure 5236 in Cheshire, please see map sheet 21 of 23. The wetland is an emergent (PEM) wetland classified as a PEM wetland within the majority of the ROW and PFO on ROW fringes and outside ROW. The pool itself occupies a confined depressional portion of the wetland. Vegetation noted in the area, at the time of the site visit, included: reed canary grass (*Phalaris arundinacea),* lurid sedge (*Carex lurida*) and tussock sedge (*Carex stricta*). During the site visit, many wood frog larvae, few spring peepers and few amphibious snails were identified. Due to the size and depth of this pool, it is unlikely to entirely dry out each year. Due to the location of this vernal pool within a larger wetland complex it is classified as a cryptic vernal pool. There are no Project related impacts to VP9. Temporary impacts to the surrounding wetland and 100' vernal pool envelope will be required. Temporary impacts will be limited to the placement of timber mats during construction; no work will occur within the vernal pool depression.

Potential Vernal Pool 9 (PVP9): This area was located within an active agricultural area and consisted of an open ponded area. The water depth was approximately 5 inches at the deepest point. The area surrounding the pond was utilized for active agriculture and contained no vegetation. During initial site visits, spring peepers were heard in the vicinity of the ponded area. Subsequent site visits failed to identify any obligate vernal pool species within the ponded area. Due to the lack of obligate vernal pool species, this pool failed to meet criteria for a vernal pool.

Potential Vernal Pool 10 (PVP10): This area consists of a shallow depression within a mapped PSS wetland. Thick vegetation covers this ponded area. The water depth was approximately 3 inches at the deepest point. Vegetation within the depression consisted of sensitive fern (*Onoclea sensibilis*), skunk cabbage (*Symplocarpus foetidus*), pussy willow (*Salix discolor*), silky dogwood (*Cornus amomum*), multiflora rose (*Rosa multiflora*), honeysuckle (*Lonicera sp.*) and mountain-laurel (*Kalmia latifolia*). During initial site visits, spring peepers were heard in the vicinity of the ponded area. Subsequent site visits failed to identify any obligate vernal pool species within the ponded area. Due to the lack of obligate vernal pool species, this pool failed to meet criteria for a vernal pool.

Potential Vernal Pool 11 (PVP11): This area consists of a small distinct depression within a mapped PSS wetland. The water depth was approximately 6 inches at the deepest point. Vegetation within the depression consisted of silky dogwood (*Cornus amomum*), speckled alder (*Alnus incana*) sensitive fern (*Onoclea sensibilis*), lurid sedge (*Carex lurida*) and tussock sedge (*Carex stricta*). During initial site visits, spring peepers were heard, and green frogs were identified in the vicinity of the ponded area. Subsequent site visits failed to identify any obligate vernal pool species within the ponded area. Due to the lack of obligate vernal pool species, this pool failed to meet criteria for a vernal pool.

Appendix A
USACE Vernal Pool Characterization Forms

US Army Corps of Engineers - New England District
DRAFT Vernal Pool Characterization Form

Project File # 60643158/60672216 Project Name Southington to Cook Hill Junction Rebuild Project Pool ID VP01
Observer Terry Ramborger & Conor Makepeace Phone or E-mail 603-557-0034 & 203-640-6692
Landowner/Applicant Applicant - Eversource Energy, Mark Pappalardo Phone or E-mail 860-665-6953
Address 107 Selden Street City Berlin State CT Zip 06037
Location of vernal pool: City/State Southington, Connecticut
Survey date(s) 3-30-21, 3-31-21 & 4-19-21
Longitude/Latitude (in decimal degrees) 41.571688, -72.858874

A. VERNAL POOL CHARACTERISTICS (fill in all information known):

1. Landscape setting (check all that apply):

☐ Upland depression (4 pts; if this is also in a floodplain, use 2 pts)
☐ Pool part of wildlife corridor (4 pts)
☐ Pool part of a pool complex (within 1000 feet of one or more other vernal pools) (NA)
☒ Pool within larger wetland system (4 pts; if this is also in a floodplain, use 2 pts)
☐ Other:_____(variable pts)

2. Vernal pool condition:

Describe any recent modifications to the pool and associated landscape: Pool within wetland at edge of rights-of-way, crypic vernal pool

3. Parent material:

☐ Glacial fluvial ("outwash")
☐ Loose till
☐ Peat
☒ Dense till
☐ Alluvium
☐ Coastal marine sediments

4. Aquatic resource type that best applies to this pool (choose dominant):

☒ Forested wetland (4 pts)
☐ Herbaceous wetland (4 pts)
☐ Floodplain (overflow/oxbow) (3 pts)
☐ Shrub wetland (4 pts)
☐ Open water (2 pts)
☐ Other:_____(variable points)
☐ Peatland (acidic fen or bog) (4 pts)
☐ Intermittent stream reach (2 pts)

5. Pool canopy cover (%): 60

6. Predominant substrate:

☒ Mineral soil
☐ Organic matter (peat/muck) Depth_____Sampling location (e.g., deepest zone, edge, etc.)_____

7. Pool size:

a. Approximate dimensions of pool (at maximum capacity; include units): Length 140 feet Width 95 feet
Area: 10,259 square feet

b. Maximum depth at deepest point at time of survey (include units): 6"

8. Hydrology:

a. Estimated hydroperiod (unless actual, observed hydroperiod value(s) is(are) known, use the presence of these example indicator species to best predict the expected hydroperiod of the pool):

☒ Dries between early March and early July (e.g., *Thelypteris palustris, Carex stricta, Impatiens capensis, Ilex verticillata*) (6 pts)
☐ Dries between early July and early September (e.g., *Sagittaria latifolia, Scirpus cyperinus, Dulichium arund., Cephalanthus occ.*) (8 pts)
☐ Dries between early September and early November (e.g., *Eleocharis palustris, Glyceria cana., Utricularia* spp., *Decodon vert.*) (8 pts)
☐ Dries between early November and late December, or intermittently exposed (e.g., *Nuphar* spp., *Potamogeton* spp.) (2 pts)

b. Inlet/outlet (pick one):

☒ No inlet/outlet (8 pts)
☐ Permanent inlet or outlet (channel with well-defined banks and permanent flow) (2 pts)
☐ Temporary inlet/outlet (6 pts)

9. Water quality:

☐ Clear
☐ High turbidity
☒ High algae content
☐ Tannic

22 **TOTAL for Pool Characteristics (out of 28 max.)**

B. VERNAL POOL ENVELOPE (100 ft) AND CRITICAL HABITAT AREA (100-750 ft) CHARACTERISTICS (fill in all information known):

1. Landuse type and approximate percentage within the 100-ft vernal pool envelope:

[X] Forested 60 % (16 pts) [X] Open (e.g., meadow, agriculture, golf course) 10 % (4 pts)

[X] Shrub 10 % (10 pts) [X] Developed 20 % (0 pts)

2. Landuse type and approximate percentage within the 100 - 750-ft vernal pool critical terrestrial habitat:

[X] Forested 50 % (16 pts) [X] Open (e.g., agriculture, golf course) 10 % (4 pts)

[X] Shrub 20 % (10 pts) [X] Developed 20 % (0 pts)

[X] Are there one or more barriers to vernal pool fauna movement within the envelope and/or critical terrestrial habitat? If so, check here and see directions for explanation of how to incorporate this information.

Based on: [X] Field estimate [ ] GIS [X] Aerial photo estimate

No barriers are present in the 100 ft envelope. Limited partial barriers are present in the 100-750 ft critical terrestrial habitat. No total barriers to movement present.

21.4 **TOTAL for Pool Envelope and Critical Terrestrial Habitat Area (out of 32 max.)**

C. SPECIES PRESENT IN VERNAL POOL

INDICATOR SPECIES	DATE	EGG MASSES (#)	TADPOLES/LARVAE
Wood Frog (*Lithobates sylvaticus*)	3-30-21 4-19-21 5-12-21	3 0 0	0 few few
Spotted Salamander (*Ambystoma maculatum*)			
Blue-spotted Salamander (*Ambystoma laterale*)			
Jefferson's Salamander (*Ambystoma jeffersonianum*)			
Marbled Salamander (*Ambystoma opacum*)			
Fairy Shrimp (*Eubranchipus* spp.)		**PRESENT/ABSENT**	**ABUNDANCE:**
OTHER SPECIES	**DATE**	**PRESENCE/ABSENCE**	**FEW/COMMON/MANY**
Facultative Species (e.g., Spring Peeper (*Pseudacris crucifer*), Gray Tree Frog (*Hyla versicolor*), Caddisflies (Limnephilidae, Phryganeidae), American Toad (*Anaxyrus americanus*), Eastern Spadefoot Toad (*Scaphiopus holbrookii*), Fowler's Toad (*Anaxyrus fowleri*), Fingernail Clams (Sphaeriidae, Pisidiidae))(list):	3-30-21 4-19-21 5-12-21	Spring peepers heard " Fingernail clams	few few few
Rare Species (list):			
Predator Species (e.g., Bullfrog/Green frog tadpoles, Fish) (list):			
Other species (e.g., Ducks, Turtles, etc.)(list):			

Presence of Indicator Species [X] Yes [ ] No

SUMMARY:

22 **TOTAL for Pool Characteristics** 21.4 **TOTAL for Pool Envelope and Critical Terrestrial Habitat Area**

Other comments (append photographs, additional notes, sketch of pool and surrounding landscape): On file.

US Army Corps of Engineers - New England District
DRAFT Vernal Pool Characterization Form

Project File # 60643158/60672216 Project Name Southington to Cook Hill Junction Rebuild Project Pool ID VP02
Observer Terry Ramborger & Conor Makepeace Phone or E-mail 603-557-0034 & 203-640-6692
Landowner/Applicant Applicant - Eversource Energy, Mark Pappalardo Phone or E-mail 860-665-6953
Address 107 Selden Street City Berlin State CT Zip 06037
Location of vernal pool: City/State Southington, Connecticut
Survey date(s) 3-30-21, 3-31-21 & 4-19-21
Longitude/Latitude (in decimal degrees) 41.557889, -72858569

A. VERNAL POOL CHARACTERISTICS (fill in all information known):

1. Landscape setting (check all that apply):

☐ Upland depression (4 pts; if this is also in a floodplain, use 2 pts)
☐ Pool part of wildlife corridor (4 pts)
☐ Pool part of a pool complex (within 1000 feet of one or more other vernal pools) (NA)
☒ Pool within larger wetland system (4 pts; if this is also in a floodplain, use 2 pts)
☐ Other: _____ (variable pts)

2. Vernal pool condition:

Describe any recent modifications to the pool and associated landscape: Pool within wetland at edge of rights-of-way, cryptic vernal pool

3. Parent material:

☐ Glacial fluvial ("outwash")
☐ Loose till
☐ Peat
☒ Dense till
☐ Alluvium
☐ Coastal marine sediments

4. Aquatic resource type that best applies to this pool (choose dominant):

☐ Forested wetland (4 pts)
☐ Herbaceous wetland (4 pts)
☐ Floodplain (overflow/oxbow) (3 pts)
☒ Shrub wetland (4 pts)
☐ Open water (2 pts)
☐ Other: _____ (variable points)
☐ Peatland (acidic fen or bog) (4 pts)
☐ Intermittent stream reach (2 pts)

5. Pool canopy cover (%): _____

6. Predominant substrate:

☒ Mineral soil
☒ Organic matter (peat/muck) Depth 3-4" Sampling location (e.g., deepest zone, edge, etc.) _____

7. Pool size:

a. Approximate dimensions of pool (at maximum capacity; include units): Length 26 feet Width 37 feet
Area: 948 square feet

b. Maximum depth at deepest point at time of survey (include units): 12"

8. Hydrology:

a. Estimated hydroperiod (unless actual, observed hydroperiod value(s) is(are) known, use the presence of these example indicator species to best predict the expected hydroperiod of the pool):

☒ Dries between early March and early July (e.g., *Thelypteris palustris, Carex stricta, Impatiens capensis, Ilex verticillata*) (6 pts)
☐ Dries between early July and early September (e.g., *Sagittaria latifolia, Scirpus cyperinus, Dulichium arund., Cephalanthus occ.*) (8 pts)
☐ Dries between early September and early November (e.g., *Eleocharis palustris, Glyceria cana., Utricularia* spp., *Decodon vert.*) (8 pts)
☐ Dries between early November and late December, or intermittently exposed (e.g., *Nuphar* spp., *Potamogeton* spp.) (2 pts)

b. Inlet/outlet (pick one):

☒ No inlet/outlet (8 pts)
☐ Permanent inlet or outlet (channel with well-defined banks and permanent flow) (2 pts)
☐ Temporary inlet/outlet (6 pts)

9. Water quality:

☐ Clear
☐ High turbidity
☒ High algae content
☐ Tannic

22 **TOTAL for Pool Characteristics (out of 28 max.)**

DRAFT Pool ID VP02

B. VERNAL POOL ENVELOPE (100 ft) AND CRITICAL HABITAT AREA (100-750 ft) CHARACTERISTICS (fill in all information known):

1. Landuse type and approximate percentage within the 100-ft vernal pool envelope:

[X] Forested 50 % (16 pts) [X] Open (e.g., meadow, agriculture, golf course) 0 % (4 pts)

[X] Shrub 50 % (10 pts) [ ] Developed 0 % (0 pts)

2. **Landuse type and approximate percentage within the 100 - 750-ft vernal pool critical terrestrial habitat:**

[X] Forested 30 % (16 pts) [X] Open (e.g., agriculture, golf course) 10 % (4 pts)

[X] Shrub 40 % (10 pts) [X] Developed 20 % (0 pts)

[X] Are there one or more barriers to vernal pool fauna movement within the envelope and/or critical terrestrial habitat? If so, check here and see directions for explanation of how to incorporate this information.

Based on: [X] Field estimate [ ] GIS [X] Aerial photo estimate

No barriers are present in the 100 ft envelope. Limited partial barriers are present in the 100-750 ft critical terrestrial habitat. No total barriers to movement present.

22.2 **TOTAL for Pool Envelope and Critical Terrestrial Habitat Area (out of 32 max.)**

C. SPECIES PRESENT IN VERNAL POOL

INDICATOR SPECIES	DATE	EGG MASSES (#)	TADPOLES/LARVAE
Wood Frog (*Lithobates sylvaticus*)	3-30-21 4-19-21 5-12-21	0 0 0	0 few common
Spotted Salamander (*Ambystoma maculatum*)			
Blue-spotted Salamander (*Ambystoma laterale*)			
Jefferson's Salamander (*Ambystoma jeffersonianum*)			
Marbled Salamander (*Ambystoma opacum*)			
Fairy Shrimp (*Eubranchipus* spp.)		**PRESENT/ABSENT**	**ABUNDANCE:**
OTHER SPECIES	**DATE**	**PRESENCE/ABSENCE**	**FEW/COMMON/MANY**
Facultative Species (e.g., Spring Peeper (*Pseudacris crucifer*), Gray Tree Frog (*Hyla versicolor*), Caddisflies (Limnephilidae, Phryganeidae), American Toad (*Anaxyrus americanus*), Eastern Spadefoot Toad (*Scaphiopus holbrookii*), Fowler's Toad (*Anaxyrus fowleri*), Fingernail Clams (Sphaeriidae, Pisidiidae))(list):			
Rare Species (list):			
Predator Species (e.g., Bullfrog/Green frog tadpoles, Fish) (list):			
Other species (e.g., Ducks, Turtles, etc.)(list):			

Presence of Indicator Species [X] Yes [ ] No

SUMMARY:

22 **TOTAL for Pool Characteristics** 22.2 **TOTAL for Pool Envelope and Critical Terrestrial Habitat Area**

Other comments (append photographs, additional notes, sketch of pool and surrounding landscape): On file.

US Army Corps of Engineers - New England District
DRAFT Vernal Pool Characterization Form

Project File # 60643158/60672216 Project Name Southington to Cook Hill Junction Rebuild Project Pool ID VP03
Observer Terry Ramborger & Conor Makepeace Phone or E-mail 603-557-0034 & 203-640-6692
Landowner/Applicant Applicant - Eversource Energy, Mark Pappalardo Phone or E-mail 860-665-6953
Address 107 Selden Street City Berlin State CT Zip 06037
Location of vernal pool: City/State Wallingford, Connecticut
Survey date(s) 3-30-21, 3-31-21 & 4-19-21
Longitude/Latitude (in decimal degrees) 41.497822, -72.845716

A. VERNAL POOL CHARACTERISTICS (fill in all information known):

1. Landscape setting (check all that apply):

☐ Upland depression (4 pts; if this is also in a floodplain, use 2 pts)
☐ Pool part of wildlife corridor (4 pts)
☐ Pool part of a pool complex (within 1000 feet of one or more other vernal pools) (NA)
☒ Pool within larger wetland system (4 pts; if this is also in a floodplain, use 2 pts)
☐ Other: _____ (variable pts)

2. Vernal pool condition:

Describe any recent modifications to the pool and associated landscape: Within rights-of-way, area traveled over, cryptic vernal pool

3. Parent material:

☐ Glacial fluvial ("outwash")
☐ Loose till
☐ Peat
☒ Dense till
☐ Alluvium
☐ Coastal marine sediments

4. Aquatic resource type that best applies to this pool (choose dominant):

☐ Forested wetland (4 pts)
☐ Herbaceous wetland (4 pts)
☐ Floodplain (overflow/oxbow) (3 pts)
☒ Shrub wetland (4 pts)
☐ Open water (2 pts)
☐ Other: _____ (variable points)
☐ Peatland (acidic fen or bog) (4 pts)
☐ Intermittent stream reach (2 pts)

5. Pool canopy cover (%): 25

6. Predominant substrate:

☒ Mineral soil
☐ Organic matter (peat/muck) Depth _____ Sampling location (e.g., deepest zone, edge, etc.) _____

7. Pool size:

a. Approximate dimensions of pool (at maximum capacity; include units): Length 27 feet Width 22 feet
Area: 481 square feet

b. Maximum depth at deepest point at time of survey (include units): 1-2'

8. Hydrology:

a. Estimated hydroperiod (unless actual, observed hydroperiod value(s) is(are) known, use the presence of these example indicator species to best predict the expected hydroperiod of the pool):

☒ Dries between early March and early July (e.g., *Thelypteris palustris, Carex stricta, Impatiens capensis, Ilex verticillata*) (6 pts)
☐ Dries between early July and early September (e.g., *Sagittaria latifolia, Scirpus cyperinus, Dulichium arund., Cephalanthus occ.*) (8 pts)
☐ Dries between early September and early November (e.g., *Eleocharis palustris, Glyceria cana., Utricularia* spp., *Decodon vert.*) (8 pts)
☐ Dries between early November and late December, or intermittently exposed (e.g., *Nuphar* spp., *Potamogeton* spp.) (2 pts)

b. Inlet/outlet (pick one):

☒ No inlet/outlet (8 pts)
☐ Permanent inlet or outlet (channel with well-defined banks and permanent flow) (2 pts)
☐ Temporary inlet/outlet (6 pts)

9. Water quality:

☒ Clear
☐ High turbidity
☐ High algae content
☐ Tannic

22 **TOTAL for Pool Characteristics (out of 28 max.)**

B. VERNAL POOL ENVELOPE (100 ft) AND CRITICAL HABITAT AREA (100-750 ft) CHARACTERISTICS (fill in all information known):

1. Landuse type and approximate percentage within the 100-ft vernal pool envelope:

[X] Forested 20 % (16 pts) [X] Open (e.g., meadow, agriculture, golf course) 10 % (4 pts)

[X] Shrub 60 % (10 pts) [X] Developed 10 % (0 pts)

2. **Landuse type and approximate percentage within the 100 - 750-ft vernal pool critical terrestrial habitat:**

[X] Forested 40 % (16 pts) [X] Open (e.g., agriculture, golf course) 10 % (4 pts)

[X] Shrub 40 % (10 pts) [X] Developed 10 % (0 pts)

[X] Are there one or more barriers to vernal pool fauna movement within the envelope and/or critical terrestrial habitat? If so, check here and see directions for explanation of how to incorporate this information.

Based on: [X] Field estimate [ ] GIS [X] Aerial photo estimate

No barriers are present in the 100 ft envelope. Limited partial barriers are present in the 100-750 ft critical terrestrial habitat. No total barriers to movement present.

20.4 **TOTAL for Pool Envelope and Critical Terrestrial Habitat Area (out of 32 max.)**

C. SPECIES PRESENT IN VERNAL POOL

INDICATOR SPECIES	DATE	EGG MASSES (#)	TADPOLES/LARVAE
Wood Frog (*Lithobates sylvaticus*)	3-30-21 4-19-21 5-12-21	12 0 0	0 many many
Spotted Salamander (*Ambystoma maculatum*)			
Blue-spotted Salamander (*Ambystoma laterale*)			
Jefferson's Salamander (*Ambystoma jeffersonianum*)			
Marbled Salamander (*Ambystoma opacum*)			
Fairy Shrimp (*Eubranchipus* spp.)		**PRESENT/ABSENT**	**ABUNDANCE:**
OTHER SPECIES	**DATE**	**PRESENCE/ABSENCE**	**FEW/COMMON/MANY**
Facultative Species (e.g., Spring Peeper (*Pseudacris crucifer*), Gray Tree Frog (*Hyla versicolor*), Caddisflies (Limnephilidae, Phryganeidae), American Toad (*Anaxyrus americanus*), Eastern Spadefoot Toad (*Scaphiopus holbrookii*), Fowler's Toad (*Anaxyrus fowleri*), Fingernail Clams (Sphaeriidae, Pisidiidae))(list):	3-30-21 4-19-21 5-12-21	spring peeper spring peeper tree frog	few " "
Rare Species (list):			
Predator Species (e.g., Bullfrog/Green frog tadpoles, Fish) (list):			
Other species (e.g., Ducks, Turtles, etc.)(list):			

Presence of Indicator Species [X] Yes [ ] No

SUMMARY:

22 **TOTAL for Pool Characteristics** 20.4 **TOTAL for Pool Envelope and Critical Terrestrial Habitat Area**

Other comments (append photographs, additional notes, sketch of pool and surrounding landscape): On file.

US Army Corps of Engineers - New England District
DRAFT Vernal Pool Characterization Form

Project File # 60643158/60672216 Project Name Southington to Cook Hill Junction Rebuild Project Pool ID VP04
Observer Terry Ramborger & Conor Makepeace Phone or E-mail 603-557-0034 & 203-640-6692
Landowner/Applicant Applicant - Eversource Energy, Mark Pappalardo Phone or E-mail 860-665-6953
Address 107 Selden Street City Berlin State CT Zip 06037
Location of vernal pool: City/State Cheshire, Connecticut
Survey date(s) 3-30-21, 3-31-21 & 4-19-21
Longitude/Latitude (in decimal degrees) 41.488900, -72.860033

A. VERNAL POOL CHARACTERISTICS (fill in all information known):

1. Landscape setting (check all that apply):

☐ Upland depression (4 pts; if this is also in a floodplain, use 2 pts)
☐ Pool part of wildlife corridor (4 pts)
☐ Pool part of a pool complex (within 1000 feet of one or more other vernal pools) (NA)
☒ Pool within larger wetland system (4 pts; if this is also in a floodplain, use 2 pts)
☐ Other:_____(variable pts)

2. Vernal pool condition:

Describe any recent modifications to the pool and associated landscape: edge of rights-of-way within side access road, cryptic vernal pool

3. Parent material:

☒ Glacial fluvial ("outwash")
☐ Loose till
☐ Peat
☐ Dense till
☐ Alluvium
☐ Coastal marine sediments

4. Aquatic resource type that best applies to this pool (choose dominant):

☒ Forested wetland (4 pts)
☐ Herbaceous wetland (4 pts)
☐ Floodplain (overflow/oxbow) (3 pts)
☐ Shrub wetland (4 pts)
☐ Open water (2 pts)
☐ Other:_____(variable points)
☐ Peatland (acidic fen or bog) (4 pts)
☐ Intermittent stream reach (2 pts)

5. Pool canopy cover (%): 30

6. Predominant substrate:

☒ Mineral soil
☐ Organic matter (peat/muck) Depth_____Sampling location (e.g., deepest zone, edge, etc.)_____

7. Pool size:

a. Approximate dimensions of pool (at maximum capacity; include units): Length 45 feet Width 17 feet
Area: 495 square feet

b. Maximum depth at deepest point at time of survey (include units): 6"

8. Hydrology:

a. Estimated hydroperiod (unless actual, observed hydroperiod value(s) is(are) known, use the presence of these example indicator species to best predict the expected hydroperiod of the pool):

☒ Dries between early March and early July (e.g., *Thelypteris palustris, Carex stricta, Impatiens capensis, Ilex verticillata*) (6 pts)
☐ Dries between early July and early September (e.g., *Sagittaria latifolia, Scirpus cyperinus, Dulichium arund., Cephalanthus occ.*) (8 pts)
☐ Dries between early September and early November (e.g., *Eleocharis palustris, Glyceria cana., Utricularia* spp., *Decodon vert.*) (8 pts)
☐ Dries between early November and late December, or intermittently exposed (e.g., *Nuphar* spp., *Potamogeton* spp.) (2 pts)

b. Inlet/outlet (pick one):

☒ No inlet/outlet (8 pts)
☐ Permanent inlet or outlet (channel with well-defined banks and permanent flow) (2 pts)
☐ Temporary inlet/outlet (6 pts)

9. Water quality:

☒ Clear
☐ High turbidity
☐ High algae content
☐ Tannic

22 **TOTAL for Pool Characteristics (out of 28 max.)**

DRAFT Pool ID VP04

B. VERNAL POOL ENVELOPE (100 ft) AND CRITICAL HABITAT AREA (100-750 ft) CHARACTERISTICS (fill in all information known):

1. Landuse type and approximate percentage within the 100-ft vernal pool envelope:

[X] Forested 40 % (16 pts) [X] Open (e.g., meadow, agriculture, golf course) 10 % (4 pts)

[X] Shrub 50 % (10 pts) [ ] Developed 0 % (0 pts)

2. **Landuse type and approximate percentage within the 100 - 750-ft vernal pool critical terrestrial habitat:**

[X] Forested 40 % (16 pts) [X] Open (e.g., agriculture, golf course) 10 % (4 pts)

[X] Shrub 40 % (10 pts) [X] Developed 10 % (0 pts)

[X] Are there one or more barriers to vernal pool fauna movement within the envelope and/or critical terrestrial habitat? If so, check here and see directions for explanation of how to incorporate this information.

Based on: [X] Field estimate [ ] GIS [X] Aerial photo estimate

No barriers are present in the 100 ft envelope. Limited partial barriers are present in the 100-750 ft critical terrestrial habitat. No total barriers to movement present.

22.6 **TOTAL for Pool Envelope and Critical Terrestrial Habitat Area (out of 32 max.)**

C. SPECIES PRESENT IN VERNAL POOL

INDICATOR SPECIES	DATE	EGG MASSES (#)	TADPOLES/LARVAE
Wood Frog (*Lithobates sylvaticus*)	3-30-21 4-19-21 5-12-21	9 0 0	0 many many
Spotted Salamander (*Ambystoma maculatum*)			
Blue-spotted Salamander (*Ambystoma laterale*)			
Jefferson's Salamander (*Ambystoma jeffersonianum*)			
Marbled Salamander (*Ambystoma opacum*)			
Fairy Shrimp (*Eubranchipus* spp.)		**PRESENT/ABSENT**	**ABUNDANCE:**
OTHER SPECIES	**DATE**	**PRESENCE/ABSENCE**	**FEW/COMMON/MANY**
Facultative Species (e.g., Spring Peeper (*Pseudacris crucifer*), Gray Tree Frog (*Hyla versicolor*), Caddisflies (Limnephilidae, Phryganeidae), American Toad (*Anaxyrus americanus*), Eastern Spadefoot Toad (*Scaphiopus holbrookii*), Fowler's Toad (*Anaxyrus fowleri*), Fingernail Clams (Sphaeriidae, Pisidiidae))(list):			
Rare Species (list):			
Predator Species (e.g., Bullfrog/Green frog tadpoles, Fish) (list):			
Other species (e.g., Ducks, Turtles, etc.)(list):			

Presence of Indicator Species [X] Yes [ ] No

SUMMARY:

22 **TOTAL for Pool Characteristics** 22.6 **TOTAL for Pool Envelope and Critical Terrestrial Habitat Area**

Other comments (append photographs, additional notes, sketch of pool and surrounding landscape): On file.

US Army Corps of Engineers - New England District
DRAFT Vernal Pool Characterization Form

Project File # 60643158/60672216 Project Name Southington to Cook Hill Junction Rebuild Project Pool ID VP05
Observer Terry Ramborger & Conor Makepeace Phone or E-mail 603-557-0034 & 203-640-6692
Landowner/Applicant Applicant - Eversource Energy, Mark Pappalardo Phone or E-mail 860-665-6953
Address 107 Selden Street City Berlin State CT Zip 06037
Location of vernal pool: City/State Cheshire, Connecticut
Survey date(s) 3-30-21, 3-31-21 & 4-19-21
Longitude/Latitude (in decimal degrees) 41.479692, -72.869568

A. VERNAL POOL CHARACTERISTICS (fill in all information known):

1. Landscape setting (check all that apply):

☐ Upland depression (4 pts; if this is also in a floodplain, use 2 pts)
☐ Pool part of wildlife corridor (4 pts)
☐ Pool part of a pool complex (within 1000 feet of one or more other vernal pools) (NA)
☒ Pool within larger wetland system (4 pts; if this is also in a floodplain, use 2 pts)
☐ Other: _____ (variable pts)

2. Vernal pool condition:

Describe any recent modifications to the pool and associated landscape: middle of rights-of-way, cryptic vernal pool

3. Parent material:

☐ Glacial fluvial ("outwash")
☐ Loose till
☐ Peat
☐ Dense till
☒ Alluvium
☐ Coastal marine sediments

4. Aquatic resource type that best applies to this pool (choose dominant):

☐ Forested wetland (4 pts)
☐ Herbaceous wetland (4 pts)
☐ Floodplain (overflow/oxbow) (3 pts)
☒ Shrub wetland (4 pts)
☐ Open water (2 pts)
☐ Other: _____ (variable points)
☐ Peatland (acidic fen or bog) (4 pts)
☐ Intermittent stream reach (2 pts)

5. Pool canopy cover (%): 50

6. Predominant substrate:

☒ Mineral soil
☒ Organic matter (peat/muck) Depth 1-2" Sampling location (e.g., deepest zone, edge, etc.) _____

7. Pool size:

a. Approximate dimensions of pool (at maximum capacity; include units): Length 53 feet Width 25 feet
Area: 1,117 square feet

b. Maximum depth at deepest point at time of survey (include units): 12"

8. Hydrology:

a. Estimated hydroperiod (unless actual, observed hydroperiod value(s) is(are) known, use the presence of these example indicator species to best predict the expected hydroperiod of the pool):

☒ Dries between early March and early July (e.g., *Thelypteris palustris, Carex stricta, Impatiens capensis, Ilex verticillata*) (6 pts)
☐ Dries between early July and early September (e.g., *Sagittaria latifolia, Scirpus cyperinus, Dulichium arund., Cephalanthus occ.*) (8 pts)
☐ Dries between early September and early November (e.g., *Eleocharis palustris, Glyceria cana., Utricularia* spp., *Decodon vert.*) (8 pts)
☐ Dries between early November and late December, or intermittently exposed (e.g., *Nuphar* spp., *Potamogeton* spp.) (2 pts)

b. Inlet/outlet (pick one):

☒ No inlet/outlet (8 pts)
☐ Permanent inlet or outlet (channel with well-defined banks and permanent flow) (2 pts)
☐ Temporary inlet/outlet (6 pts)

9. Water quality:

☐ Clear
☐ High turbidity
☒ High algae content
☐ Tannic

22 **TOTAL for Pool Characteristics (out of 28 max.)**

DRAFT Pool ID VP05

B. VERNAL POOL ENVELOPE (100 ft) AND CRITICAL HABITAT AREA (100-750 ft) CHARACTERISTICS (fill in all information known):

1. Landuse type and approximate percentage within the 100-ft vernal pool envelope:

[X] Forested 10 % (16 pts) [X] Open (e.g., meadow, agriculture, golf course) 10 % (4 pts)

[X] Shrub 70 % (10 pts) [X] Developed 10 % (0 pts)

2. **Landuse type and approximate percentage within the 100 - 750-ft vernal pool critical terrestrial habitat:**

[X] Forested 40 % (16 pts) [X] Open (e.g., agriculture, golf course) 10 % (4 pts)

[ ] Shrub 40 % (10 pts) [X] Developed 10 % (0 pts)

[X] Are there one or more barriers to vernal pool fauna movement within the envelope and/or critical terrestrial habitat? If so, check here and see directions for explanation of how to incorporate this information.

Based on: [X] Field estimate [ ] GIS [X] Aerial photo estimate

No barriers are present in the 100 ft envelope. Limited partial barriers are present in the 100-750 ft critical terrestrial habitat. No total barriers to movement present.

19.8 **TOTAL for Pool Envelope and Critical Terrestrial Habitat Area (out of 32 max.)**

C. SPECIES PRESENT IN VERNAL POOL

INDICATOR SPECIES	DATE	EGG MASSES (#)	TADPOLES/LARVAE
Wood Frog (*Lithobates sylvaticus*)	5-12-21	0	few
Spotted Salamander (*Ambystoma maculatum*)	4-19-21 5-12-21	2 2	0 0
Blue-spotted Salamander (*Ambystoma laterale*)			
Jefferson's Salamander (*Ambystoma jeffersonianum*)			
Marbled Salamander (*Ambystoma opacum*)			
Fairy Shrimp (*Eubranchipus* spp.)		**PRESENT/ABSENT**	**ABUNDANCE:**
OTHER SPECIES	**DATE**	**PRESENCE/ABSENCE**	**FEW/COMMON/MANY**
Facultative Species (e.g., Spring Peeper (*Pseudacris crucifer*), Gray Tree Frog (*Hyla versicolor*), Caddisflies (Limnephilidae, Phryganeidae), American Toad (*Anaxyrus americanus*), Eastern Spadefoot Toad (*Scaphiopus holbrookii*), Fowler's Toad (*Anaxyrus fowleri*), Fingernail Clams (Sphaeriidae, Pisidiidae))(list):	3-30-21	spring peeper	few
Rare Species (list):			
Predator Species (e.g., Bullfrog/Green frog tadpoles, Fish) (list):	5-12-21	Green Frog	few
Other species (e.g., Ducks, Turtles, etc.)(list):			

Presence of Indicator Species [X] Yes [ ] No

SUMMARY:

22 **TOTAL for Pool Characteristics** 19.8 **TOTAL for Pool Envelope and Critical Terrestrial Habitat Area**

Other comments (append photographs, additional notes, sketch of pool and surrounding landscape): On file.

US Army Corps of Engineers - New England District
DRAFT Vernal Pool Characterization Form

Project File # 60643158/60672216 Project Name Southington to Cook Hill Junction Rebuild Project Pool ID VP06
Observer Terry Ramborger & Conor Makepeace Phone or E-mail 603-557-0034 & 203-640-6692
Landowner/Applicant Applicant - Eversource Energy, Mark Pappalardo Phone or E-mail 860-665-6953
Address 107 Selden Street City Berlin State CT Zip 06037
Location of vernal pool: City/State Cheshire, Connecticut
Survey date(s) 3-30-21, 3-31-21 & 4-19-21
Longitude/Latitude (in decimal degrees) 41.476912, -72.872363

A. VERNAL POOL CHARACTERISTICS (fill in all information known):

1. Landscape setting (check all that apply):

☐ Upland depression (4 pts; if this is also in a floodplain, use 2 pts)
☐ Pool part of wildlife corridor (4 pts)
☐ Pool part of a pool complex (within 1000 feet of one or more other vernal pools) (NA)
☒ Pool within larger wetland system (4 pts; if this is also in a floodplain, use 2 pts)
☐ Other: _____ (variable pts)

2. Vernal pool condition:

Describe any recent modifications to the pool and associated landscape: middle of rights-of-way, cryptic vernal pool

3. Parent material:

☐ Glacial fluvial ("outwash")
☒ Loose till
☐ Peat
☐ Dense till
☐ Alluvium
☐ Coastal marine sediments

4. Aquatic resource type that best applies to this pool (choose dominant):

☐ Forested wetland (4 pts)
☐ Herbaceous wetland (4 pts)
☐ Floodplain (overflow/oxbow) (3 pts)
☒ Shrub wetland (4 pts)
☐ Open water (2 pts)
☐ Other: _____ (variable points)
☐ Peatland (acidic fen or bog) (4 pts)
☐ Intermittent stream reach (2 pts)

5. Pool canopy cover (%): 20

6. Predominant substrate:

☒ Mineral soil
☒ Organic matter (peat/muck) Depth 2-3" Sampling location (e.g., deepest zone, edge, etc.) _____

7. Pool size:

a. Approximate dimensions of pool (at maximum capacity; include units): Length 30 feet Width 30 feet
Area: 443 square feet

b. Maximum depth at deepest point at time of survey (include units): 2-3'

8. Hydrology:

a. Estimated hydroperiod (unless actual, observed hydroperiod value(s) is(are) known, use the presence of these example indicator species to best predict the expected hydroperiod of the pool):

☒ Dries between early March and early July (e.g., *Thelypteris palustris, Carex stricta, Impatiens capensis, Ilex verticillata*) (6 pts)
☐ Dries between early July and early September (e.g., *Sagittaria latifolia, Scirpus cyperinus, Dulichium arund., Cephalanthus occ.*) (8 pts)
☐ Dries between early September and early November (e.g., *Eleocharis palustris, Glyceria cana., Utricularia* spp., *Decodon vert.*) (8 pts)
☐ Dries between early November and late December, or intermittently exposed (e.g., *Nuphar* spp., *Potamogeton* spp.) (2 pts)

b. Inlet/outlet (pick one):

☒ No inlet/outlet (8 pts)
☐ Permanent inlet or outlet (channel with well-defined banks and permanent flow) (2 pts)
☐ Temporary inlet/outlet (6 pts)

9. Water quality:

☒ Clear
☐ High turbidity
☐ High algae content
☐ Tannic

22 **TOTAL for Pool Characteristics (out of 28 max.)**

B. VERNAL POOL ENVELOPE (100 ft) AND CRITICAL HABITAT AREA (100-750 ft) CHARACTERISTICS (fill in all information known):

1. Landuse type and approximate percentage within the 100-ft vernal pool envelope:

[X] Forested 10 % (16 pts) [X] Open (e.g., meadow, agriculture, golf course) 10 % (4 pts)

[X] Shrub 70 % (10 pts) [X] Developed 10 % (0 pts)

2. Landuse type and approximate percentage within the 100 - 750-ft vernal pool critical terrestrial habitat:

[X] Forested 50 % (16 pts) [X] Open (e.g., agriculture, golf course) 10 % (4 pts)

[X] Shrub 30 % (10 pts) [X] Developed 10 % (0 pts)

[X] Are there one or more barriers to vernal pool fauna movement within the envelope and/or critical terrestrial habitat? If so, check here and see directions for explanation of how to incorporate this information.

Based on: [X] Field estimate [ ] GIS [X] Aerial photo estimate

No barriers are present in the 100 ft envelope. Limited partial barriers are present in the 100-750 ft critical terrestrial habitat. No total barriers to movement present.

20.4 **TOTAL for Pool Envelope and Critical Terrestrial Habitat Area (out of 32 max.)**

C. SPECIES PRESENT IN VERNAL POOL

INDICATOR SPECIES	DATE	EGG MASSES (#)	TADPOLES/LARVAE
Wood Frog (*Lithobates sylvaticus*)	3-30-21 4-19-21 5-12-21	1 1 0	0 few few
Spotted Salamander (*Ambystoma maculatum*)	5-12-21	6	0
Blue-spotted Salamander (*Ambystoma laterale*)			
Jefferson's Salamander (*Ambystoma jeffersonianum*)			
Marbled Salamander (*Ambystoma opacum*)			
Fairy Shrimp (*Eubranchipus* spp.)		**PRESENT/ABSENT**	**ABUNDANCE:**
OTHER SPECIES	**DATE**	**PRESENCE/ABSENCE**	**FEW/COMMON/MANY**
Facultative Species (e.g., Spring Peeper (*Pseudacris crucifer*), Gray Tree Frog (*Hyla versicolor*), Caddisflies (Limnephilidae, Phryganeidae), American Toad (*Anaxyrus americanus*), Eastern Spadefoot Toad (*Scaphiopus holbrookii*), Fowler's Toad (*Anaxyrus fowleri*), Fingernail Clams (Sphaeriidae, Pisidiidae))(list):			
Rare Species (list):			
Predator Species (e.g., Bullfrog/Green frog tadpoles, Fish) (list):	4-19-21 5-12-21	Adult green frog "	few few
Other species (e.g., Ducks, Turtles, etc.)(list):			

Presence of Indicator Species [X] Yes [ ] No

SUMMARY:

22 **TOTAL for Pool Characteristics** 20.4 **TOTAL for Pool Envelope and Critical Terrestrial Habitat Area**

Other comments (append photographs, additional notes, sketch of pool and surrounding landscape): On file.

US Army Corps of Engineers - New England District
DRAFT Vernal Pool Characterization Form

Project File # 60643158/60672216 Project Name Southington to Cook Hill Junction Rebuild Project Pool ID VP07
Observer Terry Ramborger & Conor Makepeace Phone or E-mail 603-557-0034 & 203-640-6692
Landowner/Applicant Applicant - Eversource Energy, Mark Pappalardo Phone or E-mail 860-665-6953
Address 107 Selden Street City Berlin State CT Zip 06037
Location of vernal pool: City/State Cheshire, Connecticut
Survey date(s) 3-30-21, 3-31-21 & 4-19-21
Longitude/Latitude (in decimal degrees) 41.475952, -72.872809

A. VERNAL POOL CHARACTERISTICS (fill in all information known):

1. Landscape setting (check all that apply):

☐ Upland depression (4 pts; if this is also in a floodplain, use 2 pts)
☐ Pool part of wildlife corridor (4 pts)
☐ Pool part of a pool complex (within 1000 feet of one or more other vernal pools) (NA)
☒ Pool within larger wetland system (4 pts; if this is also in a floodplain, use 2 pts)
☐ Other: _____ (variable pts)

2. Vernal pool condition:

Describe any recent modifications to the pool and associated landscape: edge of rights-of-way, cryptic vernal pool

3. Parent material:

☐ Glacial fluvial ("outwash")
☐ Loose till
☐ Peat
☐ Dense till
☒ Alluvium
☐ Coastal marine sediments

4. Aquatic resource type that best applies to this pool (choose dominant):

☐ Forested wetland (4 pts)
☐ Herbaceous wetland (4 pts)
☐ Floodplain (overflow/oxbow) (3 pts)
☒ Shrub wetland (4 pts)
☐ Open water (2 pts)
☐ Other: _____ (variable points)
☐ Peatland (acidic fen or bog) (4 pts)
☐ Intermittent stream reach (2 pts)

5. Pool canopy cover (%): 30

6. Predominant substrate:

☒ Mineral soil
☒ Organic matter (peat/muck) Depth 2-3" Sampling location (e.g., deepest zone, edge, etc.) _____

7. Pool size:

a. Approximate dimensions of pool (at maximum capacity; include units): Length 314 feet Width 102 feet
Area: 25,879 square feet

b. Maximum depth at deepest point at time of survey (include units): 2'

8. Hydrology:

a. Estimated hydroperiod (unless actual, observed hydroperiod value(s) is(are) known, use the presence of these example indicator species to best predict the expected hydroperiod of the pool):

☒ Dries between early March and early July (e.g., *Thelypteris palustris, Carex stricta, Impatiens capensis, Ilex verticillata*) (6 pts)
☐ Dries between early July and early September (e.g., *Sagittaria latifolia, Scirpus cyperinus, Dulichium arund., Cephalanthus occ.*) (8 pts)
☐ Dries between early September and early November (e.g., *Eleocharis palustris, Glyceria cana., Utricularia* spp., *Decodon vert.*) (8 pts)
☐ Dries between early November and late December, or intermittently exposed (e.g., *Nuphar* spp., *Potamogeton* spp.) (2 pts)

b. Inlet/outlet (pick one):

☒ No inlet/outlet (8 pts)
☐ Permanent inlet or outlet (channel with well-defined banks and permanent flow) (2 pts)
☐ Temporary inlet/outlet (6 pts)

9. Water quality:

☒ Clear
☐ High turbidity
☐ High algae content
☐ Tannic

22 **TOTAL for Pool Characteristics (out of 28 max.)**

DRAFT Pool ID VP07

B. VERNAL POOL ENVELOPE (100 ft) AND CRITICAL HABITAT AREA (100-750 ft) CHARACTERISTICS (fill in all information known):

1. Landuse type and approximate percentage within the 100-ft vernal pool envelope:

[X] Forested 20 % (16 pts) [X] Open (e.g., meadow, agriculture, golf course) 10 % (4 pts)

[X] Shrub 70 % (10 pts) [ ] Developed 0 % (0 pts)

2. **Landuse type and approximate percentage within the 100 - 750-ft vernal pool critical terrestrial habitat:**

[X] Forested 30 % (16 pts) [X] Open (e.g., agriculture, golf course) 20 % (4 pts)

[X] Shrub 40 % (10 pts) [X] Developed 10 % (0 pts)

[X] Are there one or more barriers to vernal pool fauna movement within the envelope and/or critical terrestrial habitat? If so, check here and see directions for explanation of how to incorporate this information.

Based on: [X] Field estimate [ ] GIS [X] Aerial photo estimate

No barriers are present in the 100 ft envelope. Limited partial barriers are present in the 100-750 ft critical terrestrial habitat. No total barriers to movement present.

20.2 **TOTAL for Pool Envelope and Critical Terrestrial Habitat Area (out of 32 max.)**

C. SPECIES PRESENT IN VERNAL POOL

INDICATOR SPECIES	DATE	EGG MASSES (#)	TADPOLES/LARVAE
Wood Frog (*Lithobates sylvaticus*)	3-30-21 4-19-21 5-12-21	0 0 0	0 many many
Spotted Salamander (*Ambystoma maculatum*)			
Blue-spotted Salamander (*Ambystoma laterale*)			
Jefferson's Salamander (*Ambystoma jeffersonianum*)			
Marbled Salamander (*Ambystoma opacum*)			
Fairy Shrimp (*Eubranchipus* spp.)		**PRESENT/ABSENT**	**ABUNDANCE:**
OTHER SPECIES	**DATE**	**PRESENCE/ABSENCE**	**FEW/COMMON/MANY**
Facultative Species (e.g., Spring Peeper (*Pseudacris crucifer*), Gray Tree Frog (*Hyla versicolor*), Caddisflies (Limnephilidae, Phryganeidae), American Toad (*Anaxyrus americanus*), Eastern Spadefoot Toad (*Scaphiopus holbrookii*), Fowler's Toad (*Anaxyrus fowleri*), Fingernail Clams (Sphaeriidae, Pisidiidae))(list):	3-30-21 4-19-21 5-12-21	Gray tree frog Spring peeper " "	few " "
Rare Species (list):			
Predator Species (e.g., Bullfrog/Green frog tadpoles, Fish) (list):			
Other species (e.g., Ducks, Turtles, etc.)(list):			

Presence of Indicator Species [X] Yes [ ] No

SUMMARY:

22 **TOTAL for Pool Characteristics** 20.2 **TOTAL for Pool Envelope and Critical Terrestrial Habitat Area**

Other comments (append photographs, additional notes, sketch of pool and surrounding landscape): On file.

US Army Corps of Engineers - New England District
DRAFT Vernal Pool Characterization Form

Project File # 60643158/60672216 Project Name Southington to Cook Hill Junction Rebuild Project Pool ID VP08
Observer Terry Ramborger & Conor Makepeace Phone or E-mail 603-557-0034 & 203-640-6692
Landowner/Applicant Applicant - Eversource Energy, Mark Pappalardo Phone or E-mail 860-6656953
Address 107 Selden Street City Berlin State CT Zip 06037
Location of vernal pool: City/State Cheshire, Connecticut
Survey date(s) 3-30-21, 3-31-21 & 4-19-21
Longitude/Latitude (in decimal degrees) 41.469330, -72.877309

A. VERNAL POOL CHARACTERISTICS (fill in all information known):

1. Landscape setting (check all that apply):

☐ Upland depression (4 pts; if this is also in a floodplain, use 2 pts)
☐ Pool part of wildlife corridor (4 pts)
☐ Pool part of a pool complex (within 1000 feet of one or more other vernal pools) (NA)
☒ Pool within larger wetland system (4 pts; if this is also in a floodplain, use 2 pts)
☐ Other:_____(variable pts)

2. Vernal pool condition:

Describe any recent modifications to the pool and associated landscape: Within rights-of-way, but extends off, cryptic vernal pool

3. Parent material:

☐ Glacial fluvial ("outwash")
☐ Loose till
☐ Peat
☐ Dense till
☒ Alluvium
☐ Coastal marine sediments

4. Aquatic resource type that best applies to this pool (choose dominant):

☐ Forested wetland (4 pts)
☒ Herbaceous wetland (4 pts)
☐ Floodplain (overflow/oxbow) (3 pts)
☐ Shrub wetland (4 pts)
☐ Open water (2 pts)
☐ Other:_____(variable points)
☐ Peatland (acidic fen or bog) (4 pts)
☐ Intermittent stream reach (2 pts)

5. Pool canopy cover (%): 70 (cattails/phragmites)

6. Predominant substrate:

☒ Mineral soil
☐ Organic matter (peat/muck) Depth_____Sampling location (e.g., deepest zone, edge, etc.)_____

7. Pool size:

a. Approximate dimensions of pool (at maximum capacity; include units): Length 116 feet Width 124 feet
Area: 11,284 square feet

b. Maximum depth at deepest point at time of survey (include units): 2-3'

8. Hydrology:

a. Estimated hydroperiod (unless actual, observed hydroperiod value(s) is(are) known, use the presence of these example indicator species to best predict the expected hydroperiod of the pool):

☐ Dries between early March and early July (e.g., *Thelypteris palustris, Carex stricta, Impatiens capensis, Ilex verticillata*) (6 pts)
☒ Dries between early July and early September (e.g., *Sagittaria latifolia, Scirpus cyperinus, Dulichium arund., Cephalanthus occ.*) (8 pts)
☐ Dries between early September and early November (e.g., *Eleocharis palustris, Glyceria cana., Utricularia* spp., *Decodon vert.*) (8 pts)
☐ Dries between early November and late December, or intermittently exposed (e.g., *Nuphar* spp., *Potamogeton* spp.) (2 pts)

b. Inlet/outlet (pick one):

☐ No inlet/outlet (8 pts)
☐ Permanent inlet or outlet (channel with well-defined banks and permanent flow) (2 pts)
☒ Temporary inlet/outlet (6 pts)

9. Water quality:

☒ Clear
☐ High turbidity
☐ High algae content
☐ Tannic

22 **TOTAL for Pool Characteristics (out of 28 max.)**

B. VERNAL POOL ENVELOPE (100 ft) AND CRITICAL HABITAT AREA (100-750 ft) CHARACTERISTICS (fill in all information known):

1. Landuse type and approximate percentage within the 100-ft vernal pool envelope:

☐ Forested 0 % (16 pts) ☒ Open (e.g., meadow, agriculture, golf course) 100 % (4 pts)

☐ Shrub 0 % (10 pts) ☐ Developed 0 % (0 pts)

2. Landuse type and approximate percentage within the 100 - 750-ft vernal pool critical terrestrial habitat:

☐ Forested 0 % (16 pts) ☒ Open (e.g., agriculture, golf course) 100 % (4 pts)

☐ Shrub 0 % (10 pts) ☐ Developed 0 % (0 pts)

☒ Are there one or more barriers to vernal pool fauna movement within the envelope and/or critical terrestrial habitat? If so, check here and see directions for explanation of how to incorporate this information.

Based on: ☒ Field estimate ☐ GIS ☒ Aerial photo estimate

No barriers are present in the 100 ft envelope. Limited partial barriers are present in the 100-750 ft critical terrestrial habitat. No total barriers to movement present.

8 **TOTAL for Pool Envelope and Critical Terrestrial Habitat Area (out of 32 max.)**

C. SPECIES PRESENT IN VERNAL POOL

INDICATOR SPECIES	DATE	EGG MASSES (#)	TADPOLES/LARVAE
Wood Frog (*Lithobates sylvaticus*)	4-19-21 5-12-21	0 0	many many tadpoles, adults heard
Spotted Salamander (*Ambystoma maculatum*)			
Blue-spotted Salamander (*Ambystoma laterale*)			
Jefferson's Salamander (*Ambystoma jeffersonianum*)			
Marbled Salamander (*Ambystoma opacum*)			
Fairy Shrimp (*Eubranchipus* spp.)		**PRESENT/ABSENT**	**ABUNDANCE:**
OTHER SPECIES	**DATE**	**PRESENCE/ABSENCE**	**FEW/COMMON/MANY**
Facultative Species (e.g., Spring Peeper (*Pseudacris crucifer*), Gray Tree Frog (*Hyla versicolor*), Caddisflies (Limnephilidae, Phryganeidae), American Toad (*Anaxyrus americanus*), Eastern Spadefoot Toad (*Scaphiopus holbrookii*), Fowler's Toad (*Anaxyrus fowleri*), Fingernail Clams (Sphaeriidae, Pisidiidae))(list):			
Rare Species (list):			
Predator Species (e.g., Bullfrog/Green frog tadpoles, Fish) (list):			
Other species (e.g., Ducks, Turtles, etc.)(list):			

Presence of Indicator Species ☒ Yes ☐ No

SUMMARY:

22 **TOTAL for Pool Characteristics** 8 **TOTAL for Pool Envelope and Critical Terrestrial Habitat Area**

Other comments (append photographs, additional notes, sketch of pool and surrounding landscape): On file.

US Army Corps of Engineers - New England District
DRAFT Vernal Pool Characterization Form

Project File # 60643158/60672216 Project Name Southington to Cook Hill Junction Rebuild Project Pool ID VP09
Observer Terry Ramborger & Conor Makepeace Phone or E-mail 603-557-0034 & 203-640-6692
Landowner/Applicant Applicant - Eversource Energy, Mark Pappalardo Phone or E-mail 860-665-6953
Address 107 Selden Street City Berlin State CT Zip _____
Location of vernal pool: City/State Cheshire, Connecticut
Survey date(s) 3-30-21, 3-31-21 & 4-19-21
Longitude/Latitude (in decimal degrees) 41.465756, -72.880045

A. VERNAL POOL CHARACTERISTICS (fill in all information known):

1. Landscape setting (check all that apply):

☐ Upland depression (4 pts; if this is also in a floodplain, use 2 pts)
☐ Pool part of wildlife corridor (4 pts)
☐ Pool part of a pool complex (within 1000 feet of one or more other vernal pools) (NA)
☒ Pool within larger wetland system (4 pts; if this is also in a floodplain, use 2 pts)
☐ Other: _____ (variable pts)

2. Vernal pool condition:

Describe any recent modifications to the pool and associated landscape: Within rights-of-way, cryptic vernal pool

3. Parent material:

☐ Glacial fluvial ("outwash")
☐ Loose till
☐ Peat
☐ Dense till
☒ Alluvium
☐ Coastal marine sediments

4. Aquatic resource type that best applies to this pool (choose dominant):

☐ Forested wetland (4 pts)
☒ Herbaceous wetland (4 pts)
☐ Floodplain (overflow/oxbow) (3 pts)
☐ Shrub wetland (4 pts)
☐ Open water (2 pts)
☐ Other: _____ (variable points)
☐ Peatland (acidic fen or bog) (4 pts)
☐ Intermittent stream reach (2 pts)

5. Pool canopy cover (%): 80 (grasses)

6. Predominant substrate:

☒ Mineral soil
☐ Organic matter (peat/muck) Depth _____ Sampling location (e.g., deepest zone, edge, etc.) _____

7. Pool size:

a. Approximate dimensions of pool (at maximum capacity; include units): Length 44 feet Width 16 feet
Area: 598 square feet

b. Maximum depth at deepest point at time of survey (include units): 2-3'

8. Hydrology:

a. Estimated hydroperiod (unless actual, observed hydroperiod value(s) is(are) known, use the presence of these example indicator species to best predict the expected hydroperiod of the pool):

☒ Dries between early March and early July (e.g., *Thelypteris palustris, Carex stricta, Impatiens capensis, Ilex verticillata*) (6 pts)
☐ Dries between early July and early September (e.g., *Sagittaria latifolia, Scirpus cyperinus, Dulichium arund., Cephalanthus occ.*) (8 pts)
☐ Dries between early September and early November (e.g., *Eleocharis palustris, Glyceria cana., Utricularia* spp., *Decodon vert.*) (8 pts)
☐ Dries between early November and late December, or intermittently exposed (e.g., *Nuphar* spp., *Potamogeton* spp.) (2 pts)

b. Inlet/outlet (pick one):

☒ No inlet/outlet (8 pts)
☐ Permanent inlet or outlet (channel with well-defined banks and permanent flow) (2 pts)
☐ Temporary inlet/outlet (6 pts)

9. Water quality:

☒ Clear
☐ High turbidity
☐ High algae content
☐ Tannic

22 **TOTAL for Pool Characteristics (out of 28 max.)**

DRAFT Pool ID VP09

B. VERNAL POOL ENVELOPE (100 ft) AND CRITICAL HABITAT AREA (100-750 ft) CHARACTERISTICS (fill in all information known):

1. Landuse type and approximate percentage within the 100-ft vernal pool envelope:

[X] Forested 10 % (16 pts) [X] Open (e.g., meadow, agriculture, golf course) 60 % (4 pts)

[X] Shrub 30 % (10 pts) [ ] Developed 0 % (0 pts)

2. **Landuse type and approximate percentage within the 100 - 750-ft vernal pool critical terrestrial habitat:**

[X] Forested 20 % (16 pts) [X] Open (e.g., agriculture, golf course) 40 % (4 pts)

[X] Shrub 20 % (10 pts) [X] Developed 20 % (0 pts)

[X] Are there one or more barriers to vernal pool fauna movement within the envelope and/or critical terrestrial habitat? If so, check here and see directions for explanation of how to incorporate this information.

Based on: [X] Field estimate [ ] GIS [X] Aerial photo estimate

No barriers are present in the 100 ft envelope. Limited partial barriers are present in the 100-750 ft critical terrestrial habitat. No total barriers to movement present.

13.8 **TOTAL for Pool Envelope and Critical Terrestrial Habitat Area (out of 32 max.)**

C. SPECIES PRESENT IN VERNAL POOL

INDICATOR SPECIES	DATE	EGG MASSES (#)	TADPOLES/LARVAE
Wood Frog (*Lithobates sylvaticus*)	3-31-21 4-19-21 5-12-21	7 0 0	0 many many
Spotted Salamander (*Ambystoma maculatum*)			
Blue-spotted Salamander (*Ambystoma laterale*)			
Jefferson's Salamander (*Ambystoma jeffersonianum*)			
Marbled Salamander (*Ambystoma opacum*)			
Fairy Shrimp (*Eubranchipus* spp.)		**PRESENT/ABSENT**	**ABUNDANCE:**
OTHER SPECIES	**DATE**	**PRESENCE/ABSENCE**	**FEW/COMMON/MANY**
Facultative Species (e.g., Spring Peeper (*Pseudacris crucifer*), Gray Tree Frog (*Hyla versicolor*), Caddisflies (Limnephilidae, Phryganeidae), American Toad (*Anaxyrus americanus*), Eastern Spadefoot Toad (*Scaphiopus holbrookii*), Fowler's Toad (*Anaxyrus fowleri*), Fingernail Clams (Sphaeriidae, Pisidiidae))(list):	4-19-21 5-12-21	Spring peeper amphibious snails	few few
Rare Species (list):			
Predator Species (e.g., Bullfrog/Green frog tadpoles, Fish) (list):			
Other species (e.g., Ducks, Turtles, etc.)(list):			

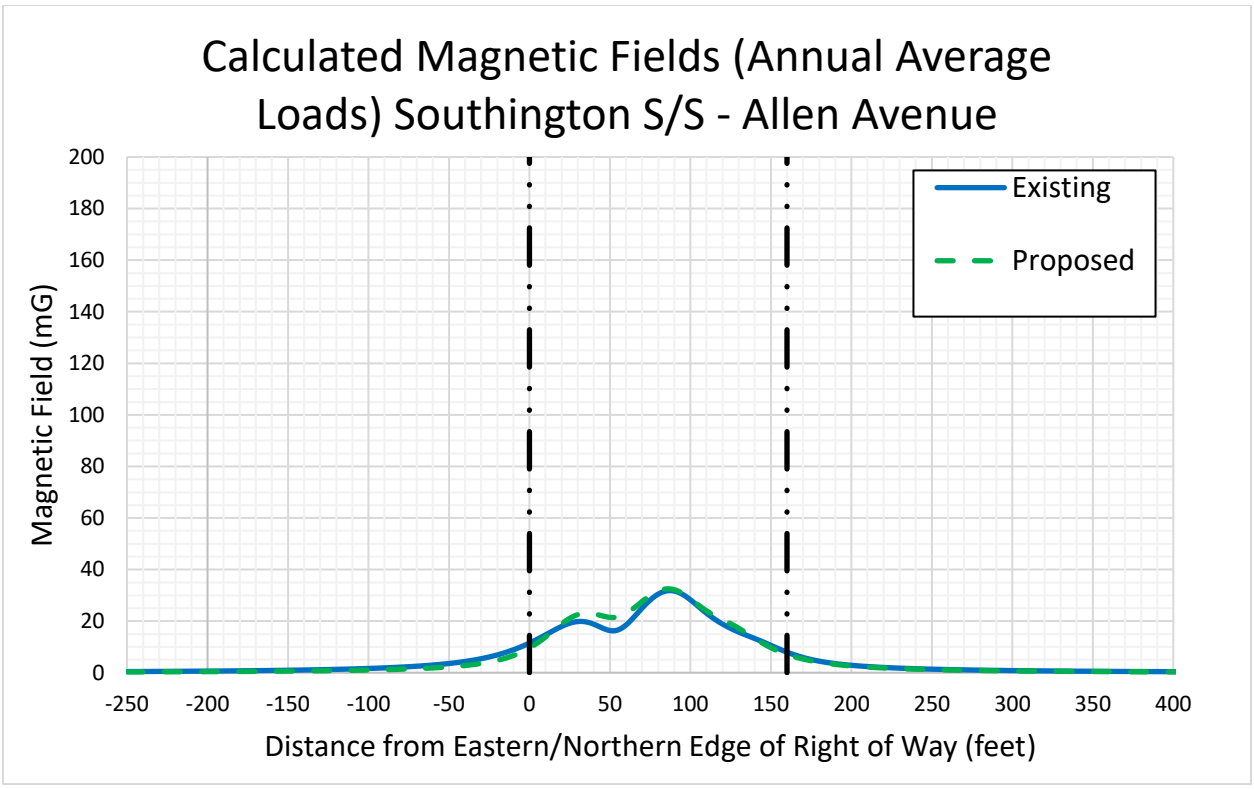
Presence of Indicator Species [X] Yes [ ] No

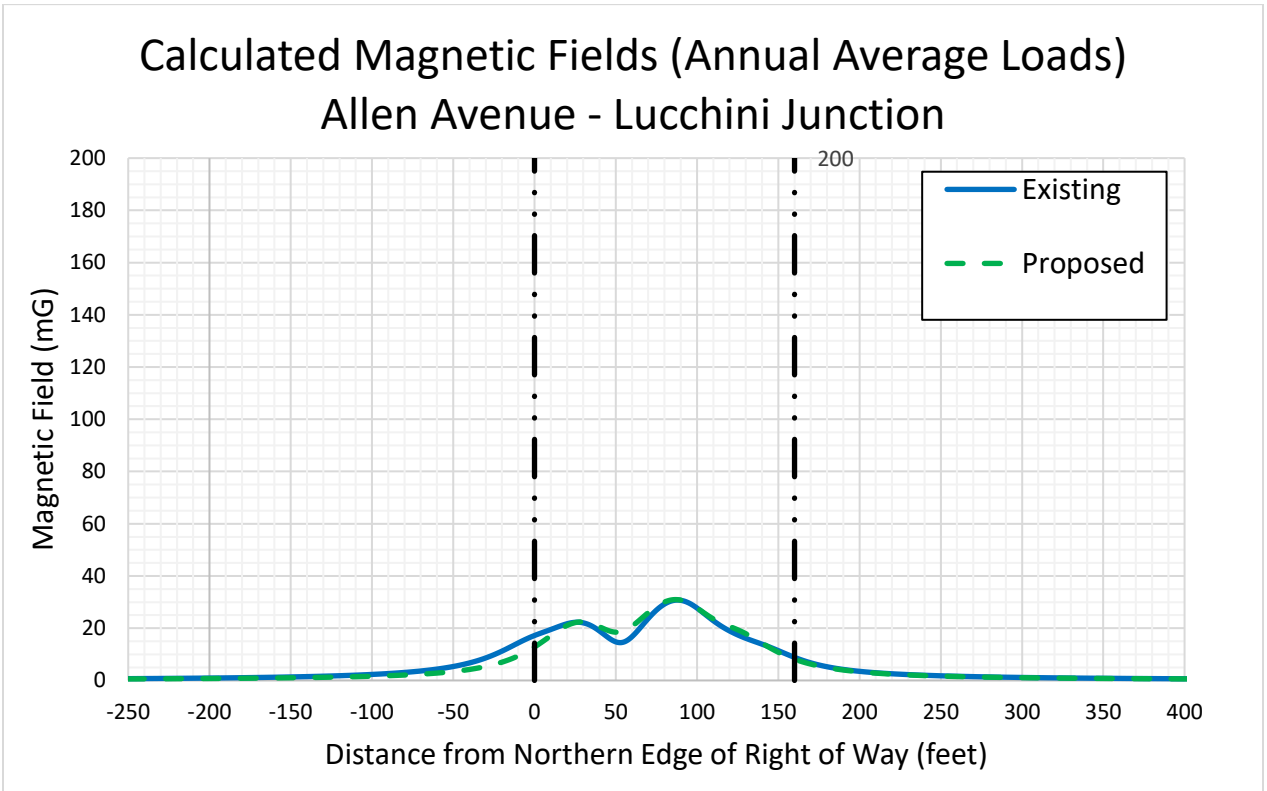
SUMMARY:

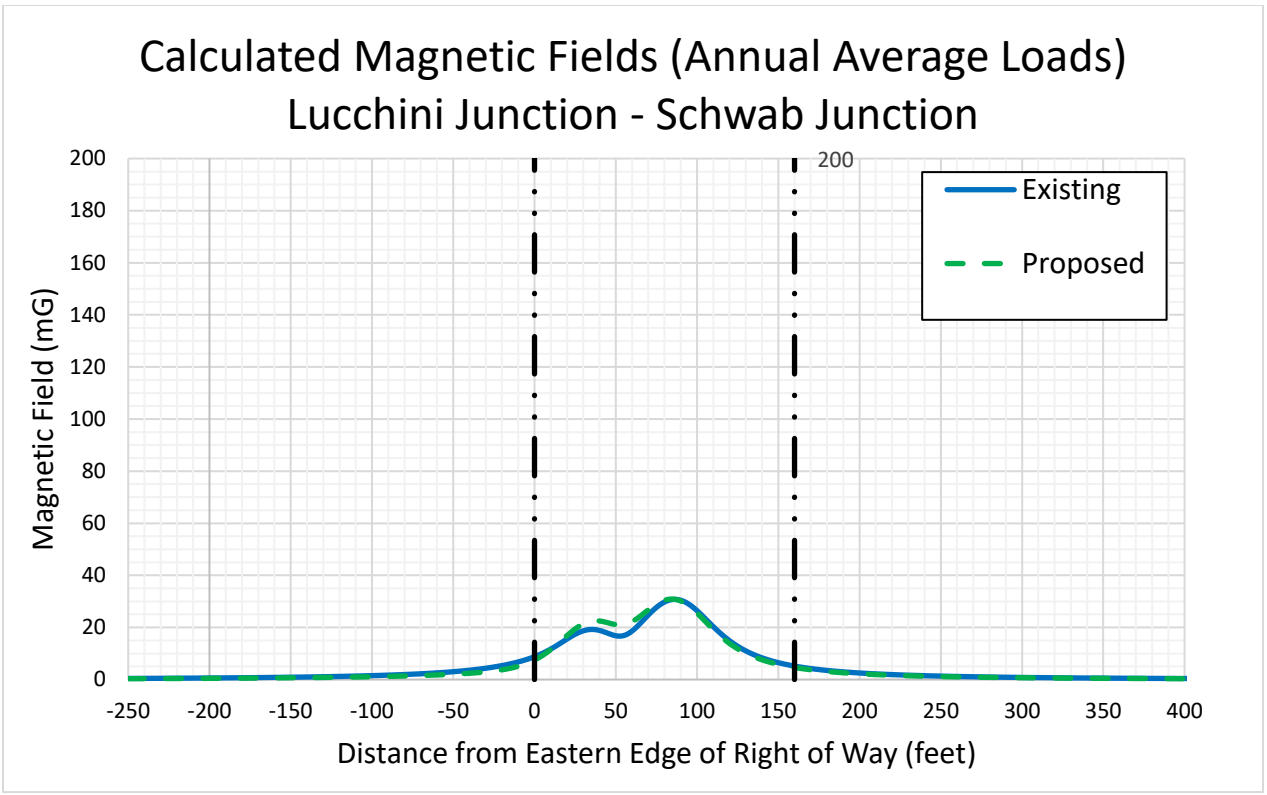
22 **TOTAL for Pool Characteristics** 13.8 **TOTAL for Pool Envelope and Critical Terrestrial Habitat Area**

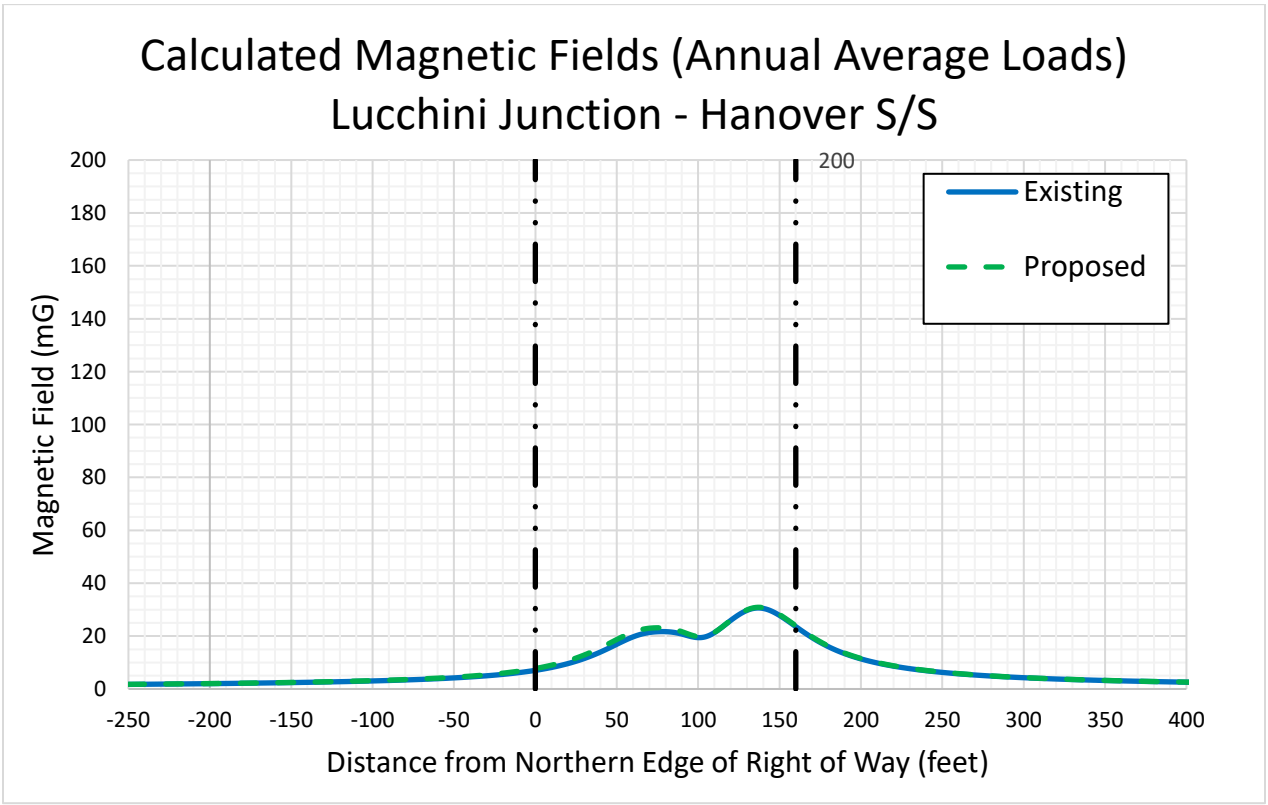
Other comments (append photographs, additional notes, sketch of pool and surrounding landscape): On file.

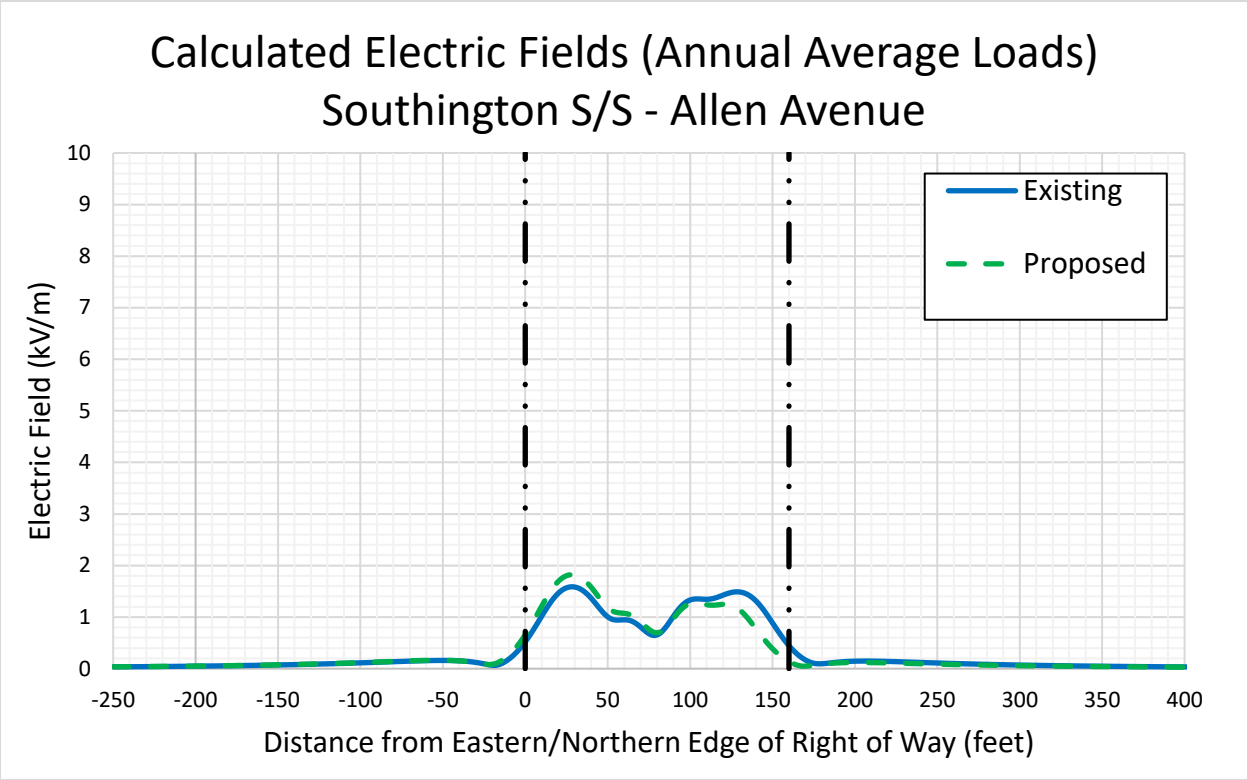
Attachment F: EMF Graphs

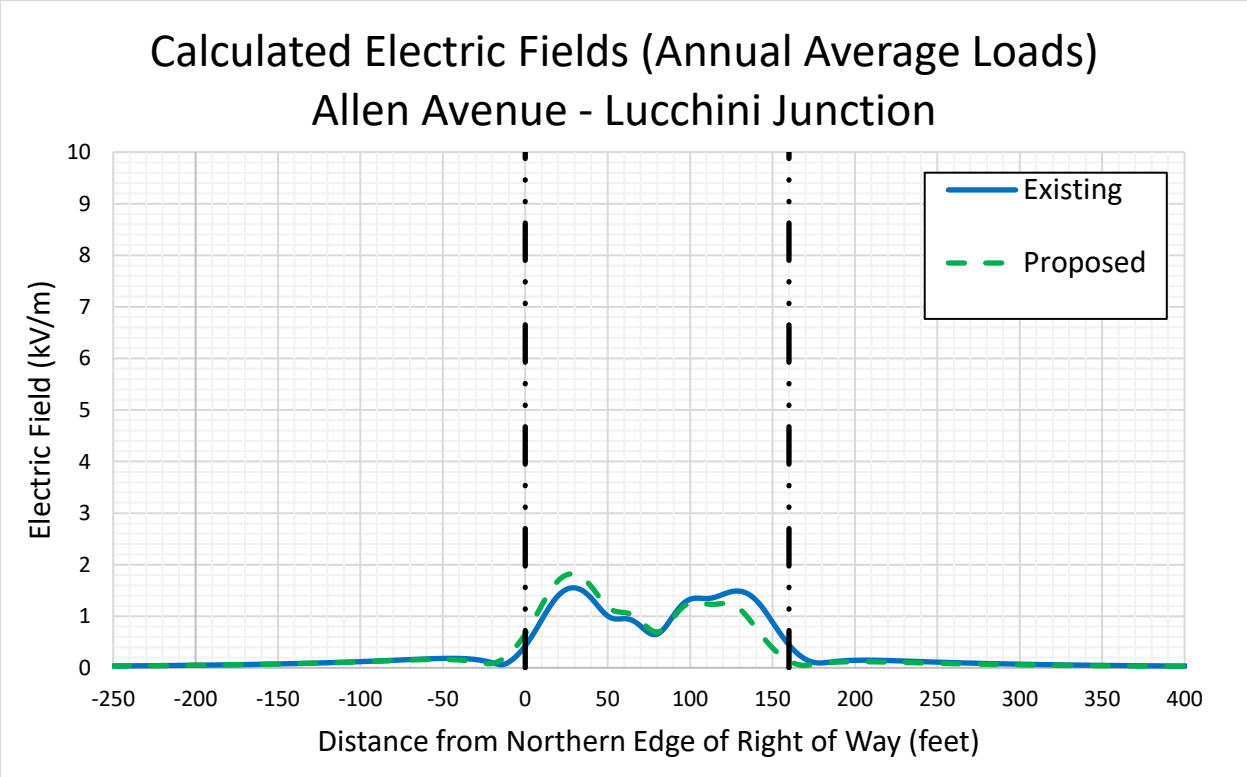

Calculated Magnetic Fields (Annual Average Loads) Southington S/S - Allen Avenue
Magnetic Field (mG)
200
180
160
140
120
100
80
60
40
20
0
-250
-200
-150
-100
-50
0
50
100
150
200
250
300
350
400
Existing
Proposed
Distance from Eastern/Northern Edge of Right of Way (feet)

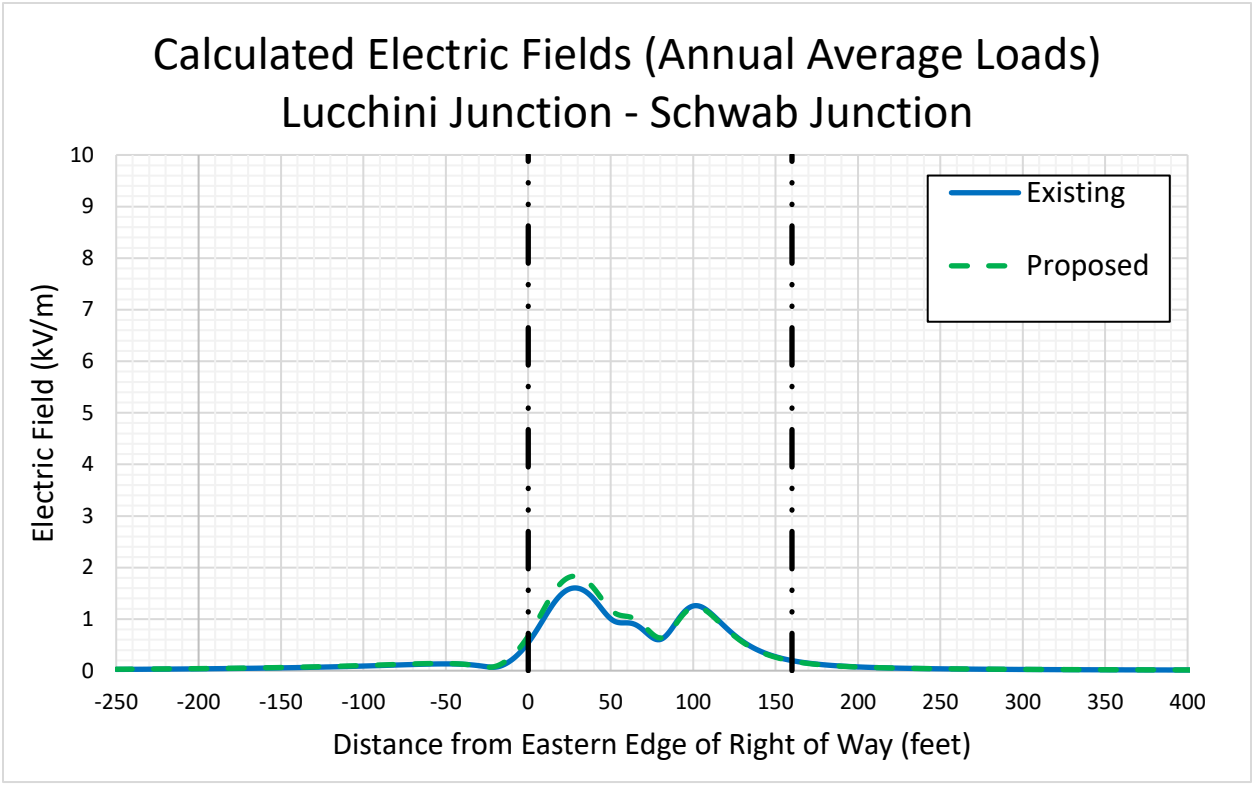

Calculated Magnetic Fields (Annual Average Loads) Allen Avenue - Lucchini Junction
Magnetic Field (mG)
200
180
160
140
120
100
80
60
40
20
0
-250
-200
-150
-100
-50
0
50
100
150
200
250
300
350
400
Existing
Proposed
Distance from Northern Edge of Right of Way (feet)

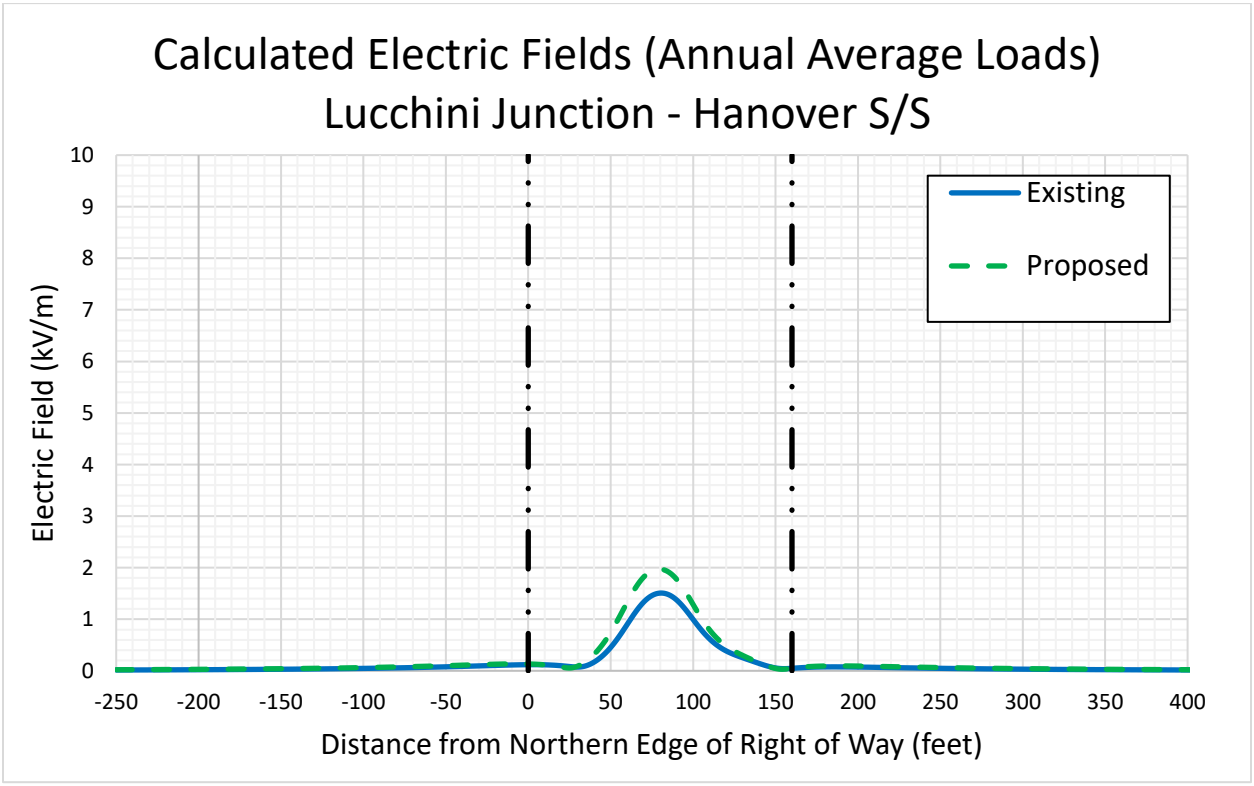

Calculated Magnetic Fields (Annual Average Loads)
Lucchini Junction - Schwab Junction
Magnetic Field (mG)
200
180
160
140
120
100
80
60
40
20
0
-250
-200
-150
-100
-50
0
50
100
150
200
250
300
350
400
200
Existing
Proposed
Distance from Eastern Edge of Right of Way (feet)


Calculated Magnetic Fields (Annual Average Loads)
Lucchini Junction - Hanover S/S
Magnetic Field (mG)
200
180
160
140
120
100
80
60
40
20
0
-250
-200
-150
-100
-50
0
50
100
150
200
250
300
350
400
200
Existing
Proposed
Distance from Northern Edge of Right of Way (feet)


Calculated Electric Fields (Annual Average Loads)
Southington S/S - Allen Avenue
Electric Field (kV/m)
10
9
8
7
6
5
4
3
2
1
0
-250
-200
-150
-100
-50
0
50
100
150
200
250
300
350
400
Existing
Proposed
Distance from Eastern/Northern Edge of Right of Way (feet)


Calculated Electric Fields (Annual Average Loads)
Allen Avenue - Lucchini Junction
Electric Field (kV/m)
10
9
8
7
6
5
4
3
2
1
0
-250
-200
-150
-100
-50
0
50
100
150
200
250
300
350
400
Existing
Proposed
Distance from Northern Edge of Right of Way (feet)


Calculated Electric Fields (Annual Average Loads)
Lucchini Junction - Schwab Junction
Electric Field (kV/m)
10
9
8
7
6
5
4
3
2
1
0
-250
-200
-150
-100
-50
0
50
100
150
200
250
300
350
400
Existing
Proposed
Distance from Eastern Edge of Right of Way (feet)


Calculated Electric Fields (Annual Average Loads)
Lucchini Junction - Hanover S/S
Electric Field (kV/m)
10
9
8
7
6
5
4
3
2
1
0
-250
-200
-150
-100
-50
0
50
100
150
200
250
300
350
400
Existing
Proposed
Distance from Northern Edge of Right of Way (feet)

Attachment G: Letter to the Abutters and Affidavit

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:

- Town Manager, Mark Sciota
  Town of Southington
  75 Main Street
  Southington, CT 06489

- Town Council Chair, Tim Slocum
  Town of Cheshire
  84 South Main Street
  Cheshire, CT06410

- Mayor, Kevin Scarpati
  City of Meriden
  142 East Main Street
  Meriden, CT 06450

- Mayor, William Dickinson
  Town of Wallingford
  45 South Main Street
  Room #310
  Wallingford, CT 06492

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 the List of Abutters included in Attachment D of the Petition.

J. Patrick Holmes
Project Manager

On this the 15th day of May, 2023, before me, the undersigned representative, personally appeared, Patrick Holmes, known to me (or satisfactorily proven) to be the person whose name is subscribed to the foregoing instrument and acknowledged that he 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.: 413393

EVERSOURCE

P.O. Box 270
Hartford, CT 06141-0270

May 15, 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 reliability project in your area.

Proposed Project Information

The proposed Project, called the Southington to Cook Hill Junction Rebuild Project, is designed to bring the electric supply system serving the towns in Central Connecticut into compliance with current national and regional reliability standards. The Project will also provide greater flexibility in operating the power grid, thereby improving Eversource's ability to reliably meet its customers' electric needs in the area.

The Project includes replacing and installing new transmission structures and replacing wire within the right of way (powerline corridor) between Southington Substation in Southington, Lucchini Junction and Hanover Substation in Meriden, from Lucchini Junction south to Schwab Junction in Wallingford, to Cook Hill Junction in Cheshire. Selective vegetation will need to be removed within the right of way to comply with updated electrical standards.

What You Can Expect

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

Contact Information

Eversource is committed to being a good neighbor and doing our work with respect for you and your property. For more information, please call our projects hotline at 1-800-793-2202 or send an email to ProjectInfo@eversource.com.

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,

Patrick Holmes

Patrick Holmes
Eversource Project Manager - Transmission