56 Prospect Street
P.O. Box 270
Hartford, CT 06103

Kathleen M. Shanley
Manager – Transmission Siting
Tel: (860) 728-4527

May 10, 2019

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

Re: 667 Line Rebuild Project

Dear Ms. Bachman:

Attached are an original and fifteen (15) copies of a petition on behalf of The Connecticut Light and Power Company doing business as Eversource Energy ("Eversource") requesting a Declaratory Ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed modifications to an existing 69-killovolt transmission line, ("667 Line Rebuild Project") in the Towns of Canaan ("Falls Village"), Sharon and Salisbury, Connecticut ("Petition").

Prior to submitting this Petition, representatives from Eversource briefed municipal officials in Canaan, Sharon and Salisbury about the Project. Eversource provided written notice of the proposed work to all abutters and of the filing of this Petition with the Council. Maps and line lists identifying the abutting property owners who were notified of the Project are provided in the Petition as Attachment A: 667 Line Rebuild Project – Aerial Maps.

A check in the amount of $625 for the required filing fee is also attached.

Sincerely,

Kathleen M. Shanley

Enclosure

cc: Henry Todd, First Selectman, Town of Canaan (Falls Village)
Brent M. Colley, First Selectman, Town of Sharon
Curtis Rand, First Selectman, Town of Salisbury

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
667 LINE IN THE TOWNS OF CANAAN, SHARON AND SALISBURY, 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 the modifications to the 667 Line, a 69-kilovolt ("kV") transmission line, located within existing transmission rights-of-way ("ROWs") in the Towns of Canaan (Falls Village), Sharon and Salisbury, Connecticut ("Towns"), as described herein (the "Project"). Eversource submits that a Certificate is not required because the proposed modifications would not have a substantial adverse environmental effect.

2. Purpose of the Project

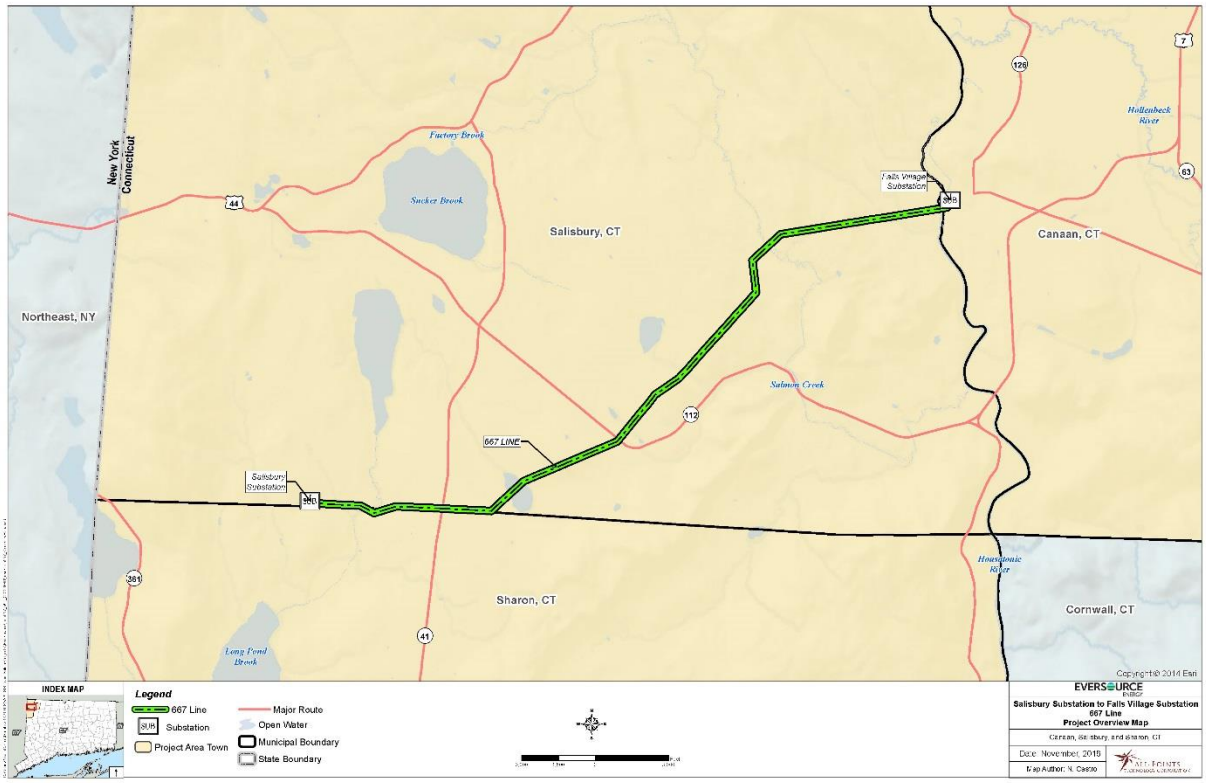
The purpose of the Project is to replace structures and reconductor approximately 6.1 miles of the 667 Line entirely within Eversource's ROW that connects Falls Village Substation, located at 35 Water Street, Falls Village, and Salisbury Substation, located at 316 Indian Mountain Road, Salisbury. The need to rebuild the 667 Line is based on recent outages, and degradation of conductors, shield wire and structures, as described below:

- two conductor failures since 2017;
- two shield wire failures since 2009;
- significant rusting of system hardware;

- numerous structures with missing bolts, bent members and deteriorated metal at structure bases;
- other lines of the same age that have been tested, revealed significant oxidation, corrosion and loss of tensile strength on the conductor's steel core; and
- the current condition of the line has been assessed to jeopardize the physical integrity and continued reliability of the 667 Line under high wind and ice loading conditions.

The 667 Line is a 69-kV line supported primarily by steel lattice structures, with the exception of one embedded wood pole (Structure1052). The width of the existing ROW is 150 feet, except where the line traverses Eversource-owned property (from Structure 1016 to Structure 1014).

Figure 1: Project Overview Map



3. Project Description

The Project scope consists of replacing structures and reconductoring the 667 Line along the entire 6.1 miles of the ROW. Specifically, 51 steel lattice structures and one wood pole structure would be replaced with single-circuit weathering steel monopole structures. One new structure would be added, just outside the Falls Village Substation, which is necessary to maintain required clearances. The new structures would be either directly embedded or constructed on concrete foundations.

Detail of the proposed scope of work is summarized as follows:

- Replace 51 single-circuit steel lattice structures (Structures: 1001-1051) with weathering steel monopole structures, which would generally be constructed in a delta configuration; some angle structures will be replaced with two-pole structures;
- Replace one single-circuit wood pole (Structure 1052) with a weathering steel monopole;
- Install one new single-circuit weathering steel H-frame structure (Structure 1002A), directly embedded and guyed;
- Replace the 4/0 aluminum conductor steel reinforced conductor (ACSR) with 556 kcmil 26/7 Aluminum Conductor Steel Supported (ACSS), which would be capable of carrying 115-kV, but will be energized at 69-kV due to existing restrictions at the Falls Village and Salisbury substations;
- Remove the existing 3/8-inch Alumoweld shield wire and replace it with two 0.646-inch diameter optical ground wires (OPGW);
- Install new hardware, insulators and lightning arresters; and

- Make minor modifications at both substations including installation of new communication cabinets and fiber and relay settings.

Access roads and ROW improvements will be required to support the proposed scope of work. The Project work would require tree clearing and vegetation removal/mowing to accommodate access road installations and improvements, work pads and pull pad installation and for required conductor clearances. Construction is scheduled to begin in the summer of 2019 and the proposed in-service date is December 2019.

The maps in Attachment A: "667 Line Reconductoring and Structure Replacement Project – Aerial Map", dated April 2019, depict the locations of existing and proposed structures, work pads and pull pads to be used for the Project, wetland areas and other ROW features, access roads and other Project elements. The cross-section drawings in Attachment B – "Line 667 Right of Way Cross Section" depict typical views along the ROW of the existing and proposed structures and the existing and proposed limits of managed and unmanaged ROW areas. Attachment C – "List of Structure Replacements" provides information on structure heights and the type of foundation for the replacement structures. The heights of the existing structures range from 63 to 84 feet above ground level and many of the replacement structures must be taller to meet current National Electric Safety Codes ("NESC") clearance requirements. The replacement structures will range in height from 70 feet to 115 feet above ground level. Replacement structures will generally be taller than the corresponding existing structures by less than 10 feet, but there are 19 structures that will be more than ten feet taller and six structures that will be more than 20 feet taller. Two structures will be greater than 25 feet taller than the corresponding existing structures (Structures 1040 and 1039), due to the long span across Beeslick Pond (See Attachment A, Map Sheet 4 of 11).

4. Existing Environment, Environmental Effects and Mitigation

The Project would be constructed entirely within the existing transmission ROW between Salisbury Substation and Falls Village Substation. No expansion of the existing ROW would be required for the Project. The Project would not have a substantial adverse environmental effect, for reasons explained more fully below.

Land Use

Land uses adjacent to the Project area consist of a mix of rural residential areas, agricultural lands, including horse pastures and paddocks, and undeveloped lands such as forests, meadows and rivers (Housatonic) and conservation land, including lands owned or managed by:

- The Salisbury Association Land Trust;
- The Nature Conservancy (Beeslick Pond); and
- the Appalachian National Scenic Trail (adjacent to the Falls Village Substation).

Though the Project would be traversing through some of these areas, it will not impact adjacent land uses. Eversource will work with any affected property owners on restoration upon completion of the Project.

Clearing and Vegetation Removal

The Project ROW is 150-feet wide, approximately 50 feet of which is currently maintained. The maintained area will need to be expanded to 90 feet. Approximately 15 feet of clearing will occur on the north side of the ROW and approximately 25 feet on the south side of the ROW. The required clearing will result in a total forested conversion to scrub-shrub or

herbaceous habitat area of approximately 13.5 acres (±2.6 acres cleared in wetlands). Converting forest (including forested wetland) to shrubland, or emergent vegetation along the transmission line ROW would modify, but not adversely affect habitat. The creation of additional shrubland and early successional habitat (and the preservation of such existing habitat) along the ROW would represent a long-term benefit for many species of wildlife because shrubland habitat is otherwise declining in New England[1].

During clearing and vegetation removal activities, temporary construction mats may be used to provide a stable base for equipment across watercourses or within wetlands where hand clearing work is not feasible. Such temporary support would minimize temporary disturbances to wetland soils, and the mats would be removed after the activities are complete.

Scenic, Recreational and Cultural Resources

The Project ROW traverses across one State-designated scenic road: State Route 41 (Sharon Road). The Project would minimize effects to this scenic resource by aligning the replacement structures immediately adjacent to the existing structures to the extent practical and replacing the existing steel lattice structures with weathering steel pole structures, which are more streamlined in appearance.

Except for the Housatonic River, there are no designated recreational use areas in the Project area. Public open space property or trails were identified through a desktop review of the Connecticut Department of Energy and Environmental Protection ("CT DEEP") GIS data and field investigations revealed conservation land resources owned or managed by the Salisbury Association Land Trust, the Nature Conservancy (Beeslick Pond) and the Appalachian

[1] Connecticut's Wildlife Action Plan has identified 47 wildlife species of Greatest Conservation Need (GCN) as being associated with shrubland habitat and in need of active management.

National Scenic Trail, which is located adjacent to the Falls Village Substation. The Project ROW crosses Salisbury Association Land Trust property between Indian Mountain Road and State Route 41 (Sharon Road) (see Attachment A, Map Sheets 2 and 3). The Project ROW also crosses Nature Conservancy property that includes and surrounds Beeslick Pond (see Attachment A: Map Sheet 4). The Project ROW does not cross Appalachian Trail but, this trail is located in close proximity to proposed work activities south and east of the Falls Village Substation (see Attachment A, Map Sheet 11).

A cultural (archaeological and historical) resources review of the proposed Project was conducted by Heritage Consultants, LLC ("Heritage") in November and December 2018 and January of 2019. This review included the following:

- A Phase IA (preliminary archaeological and historical resources assessment) using a three-step approach to: 1) gather and present data regarding previously identified cultural resources situated within the vicinity of the 667 Line; 2) investigate natural and historical characteristics of the Project corridor; and 3) evaluate the need for completing additional cultural resources investigations. There were six previously identified archaeological sites located within 500 feet of the Project.

- A Phase IB cultural resources reconnaissance survey (shovel testing) where Project activities are proposed in 43 areas that were determined by the Phase IA to have a moderate/high potential for yielding intact archaeological deposits.

- A Phase II National Register testing and evaluation of 2 sites identified during the Phase IB survey and deemed potentially significant under Criterion D of the National Register of Historic Places ("NRHP") in that the two sites "yielded or may be likely to yield information important in prehistory", 36 Code of Federal

Regulations 60-40(d). These two areas are located near structures 1003 and 1004. As recommended by Heritage, Eversource will utilize temporary matting at these locations to avoid ground disturbance.

The cultural resources review also determined that no state listed properties or historic districts (built or above-ground resources) are located within 500 feet of the proposed Project. One NRHP property located within 500 feet of the Project is situated within the Falls Village Historic District, which is located approximately 190 feet northwest of Structure 1001. None of the contributing elements of the Falls Village Historic District would be directly impacted by the Project. Since the structure replacement in this area will be substituting weathering steel poles for steel lattice structures, the visual aspect of the structures will be more streamlined, and the color will more closely blend with the landscape, the viewshed from the historic district will be not be significantly altered or adversely impacted. Of the six identified archaeological sites, the sites closest to the Project are the Warehouse Site and Butler Building Site (identified as Sites 21-34 and 21-35), which are approximately 170 feet west of Structure 1001. The soil in this area is classified as "Udorthents", indicating that the area has been previously disturbed by fill placement or other activities. Project activities in the area will use temporary construction matting to prevent further disturbance.

Wetlands, Watercourses, Waterbodies and Flood Zones

Eversource identified and delineated water resources in the Project area during February through April 2018 (see Attachment D: Wetlands and Watercourses Report; see also the map sheets provided in Attachment A, which depict such water resources). Water resources include inland wetlands, watercourses (perennial and intermittent streams), a pond, one potential vernal pool, and Federal Emergency Management Agency ("FEMA") Flood Zones. All work in or near these areas would be conducted in accordance with *Eversource's 2016*

Construction & Maintenance Environmental Requirements, Best Management Practices Manual for Massachusetts and Connecticut ("BMPs") and with the conditions of applicable regulatory permit conditions and approvals. Details on each of these resource areas is provided below.

Wetlands

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

Permanent wetland effects would result from the replacement of five existing structures (1045, 1040, 1039, 1038, 1016 and 1011) which are located in wetlands. The placement of these structures would result in approximately 480 square feet of permanent effects. In order to minimize disturbance to the wetlands, the existing concrete footings of the steel lattice structures will be left in place. The below-ground portion of these footings are likely extensive and therefore, full or partial removal would result in excess wetland disturbance, with a minimal opportunity for wetland restoration.

The Project will result in approximately 1.8 acres of temporary effects to wetlands due to the placement of construction mats for access roads and work pads. All construction mats will be promptly removed upon Project completion and wetland areas will be restored in accordance with Eversource's BMPs.

In addition to the effects described above, tree removal for temporary work pads in wetlands will result in some habitat conversion. Tree removal in forested wetland areas will result in the temporary modification of approximately 0.7 acres of wetlands

through the conversion of existing palustrine forested ("PFO") cover type to palustrine scrub shrub ("PSS") habitat, representing a temporary cover type change to wetland habitat, but not a net loss of wetlands. Work activities in wetlands, including the proposed tree removal, will be conducted in accordance with the Eversource BMPs and comply with Project permits and approvals.

Anticipated effects to wetlands from the Project are detailed on Table W-1.

Watercourses and Waterbodies

A total of 18 watercourses and waterbodies were delineated within the Project area. These include 11 perennial watercourses (three named and eight unnamed), six intermittent watercourses, and Beeslick Pond. Named watercourses include Long Pond Brook, Salmon Creek, Falls Hill Brook and the Housatonic River.

One of the intermittent watercourses within the Project ROW (S1) is currently traversed by an existing access road via a culvert crossing. Long-term Project effects to watercourses will be avoided as no permanent impacts (i.e., new culverts or hard-bottom crossings) are proposed.

Temporary matting or railroad car frame bridges will be used to span a total of seven watercourses associated with existing access road crossings and two work pad locations. Temporary matting and railroad car frame bridges will be removed immediately following construction. All watercourse crossings will be constructed in accordance with Eversource's BMPs.

The following Table W-1 provides a summary of Project effects to wetlands and watercourses:

Table W-1: Summary of Project Effects to Wetlands and Watercourses

Wetland / Watercourse ID	200 Scale Petition Mapping Sheet No.	Wetland / Watercourse Effects (± square feet)		
		Temporary (Matting and Culvert)	Permanent (Structures)	Secondary** (Tree Clearing)
W4/S4	02	264	0	0
W5/S5	02, 03	11,229	80	10,003
S6	04	920	0	108
W8	04	19,176	160	8,005
W9	04, 05	8,978	80	8,978
W10	06	3,122	0	335
W11	06	6,556	0	0
W13/S9	07	886	0	834
S10	08	157	0	157
/S11	08	62	0	0
W16	08	4,074	0	197
W17	09	9,837	80	729
W18	09	1,159	0	66
W21/S16	09, 10	7,145	80	2,123
W23/S17	10, 11	3,193	0	88
	TOTAL	76,758 (1.8 acres)	480	31,623 (0.7 acres)

Vernal Pools

Project wetland areas were inspected for potential vernal pool habitat in March, April and May 2018 using identified biological, physical and hydrologic characteristics (see Attachment D: Vernal Pool Survey). Survey methodology included visual and audial surveys including dip netting suspected vernal pool hab*itats.* Of the 24 wetlands identified, only four wetlands (W8, W17, W18 and W22) had long duration ponding (e.g., areas of seasonal, semi-permanent or permanent flooding) and therefore had a hydroperiod long enough to support vernal pool breeding. Of those four wetlands, only W17 contained a vernal pool (see Map Sheet 9). This vernal pool (Vernal Pool 1) is a cryptic pool that lies in the north-central portion of the wetland, likely continuing to the north (off-ROW) in additional flooded portions of the wetland. No work activities are proposed within Vernal Pool 1 or within the 100-foot vernal pool envelope. The nearest work activities to Vernal Pool 1 is at the work pad for structure 1016, which is approximately 240 feet to the west and the work pad for structure 1015, which is 290 feet to the east. No adverse impact to Vernal Pool 1 would result from the proposed work activities.

FEMA Flood Zones

The Project ROW extends across 100-year FEMA flood zones associated with Long Pond Brook, Beeslick Pond, Bauer Pond, Salmon Creek and the Housatonic River and the floodway and 500-year flood zones of Salmon Creek and the Housatonic River. None of the replacement structures are proposed to be located within the floodway or 500-year flood zones. The following work activities and materials would be located within 100-year flood zones: Proposed structures 1039, 1031, 1015, 1002 and 1002A (with the exception of the new structure 1002A, all other proposed structures replace

existing lattice structures currently located within the 100-year flood zone); a portion of temporary work pads at proposed structures 1039; entire temporary work pads at proposed structures 1031, 1015, 1002 and 1002A; and portions of temporary access roads to proposed structures 1039, 1031, 1015, 1002 and 1002A.

Eversource would utilize its BMPs to minimize any impacts in these areas including the use of temporary construction mats for work pads and access roads to ensure that hydrology is not adversely affected. All construction mats would be removed after the Project is complete. Areas of disturbance would be promptly stabilized in order to minimize the potential for soil erosion and the discharge of sediment into nearby resource areas. Prior to significant storm events, Eversource will secure the construction mats to impede lateral movement during temporary flooding and remove vulnerable construction equipment and materials.

Replacement of existing steel lattice structures, which each include four concrete foundations, with a steel monopole will result in a net reduction of volume displacement within the 100-year flood zones. This will be accomplished through the removal of the four concrete foundations down to the surrounding ground surface. The single monopole foundation that will be installed would result in less volume displacement in the flood zone than the four concrete foundations that would be removed. Although structure 1002A is a new structure proposed within the 100-year flood zone, nearby structure 1002 is replacing an existing steel lattice structure. Therefore, there would be no net increase in fill within the Housatonic River 100-year flood zone resulting from this work activity. Accordingly, the Project would have a *de minimis* effect on the flood storage capacity of the affected flood zones.

Water Supply

Based on Aquifer Protection Areas ("APA") mapping maintained by CT DEEP, there are no APAs within or proximate to the Project ROW. The Project is not located within a public water supply watershed and no public supply reservoirs or public water supply wells are located within the Project area. No private water supply wells were observed within the Project area during field investigation activities.

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, to protect water quality within the Project area. Construction activities would conform to Eversource's BMP Manual, as well as to the requirements of Project-specific plans (e.g., Stormwater Pollution Control Plan; Spill Prevention and Control Plan), which would be prepared prior to the commencement of construction.

Wildlife and Habitat

The Project would not have a substantial adverse environmental effect on wildlife or wildlife habitat. Eversource has corresponded with the staff of CT DEEP Bureau of Natural Resources Wildlife Division Natural Diversity Database ("NDDB") regarding protection of state-listed species within the Project area. Eversource is awaiting a response from CT DEEP and will adhere to any additional recommendations and or protection strategies that may be identified.

In addition to coordinating with the CT DEEP for the protection of the state-listed species, Eversource is consulting with the U.S. Fish and Wildlife Service ("USFWS") regarding federally-listed species as a part of the Section 7 consultation process that is required for the Project's U.S. Army Corps of Engineers permit application filing. The only federally-listed

species potentially occurring in the vicinity of the Project is the northern long-eared bat ("NLEB"; *Myotis septentrionalis*) and bog turtle (*Clemmys muhlenbergii*). The tree clearing required for the Project would not impact known NLEB hibernacula. If requested by USFWS, Eversource will adhere to any necessary NLEB protection measures. Phase One and Two Surveys for bog turtle were performed between May and June 2018. No bog turtles were observed during the survey work and as a result no further investigation of this species or protection strategies during Work Activities is warranted.

Visual Effects

The Project will result in some change to the visual character of the line, though Eversource does not believe that the change will result in a significant impact. Some clearing is required for the Project in order to meet clearance requirements and accommodate the installation of work pads and pull pads. Replacement structures will be located as close as possible to the existing steel lattice structures but will present a more streamlined appearance. These visual effects would be further mitigated by utilizing weathering steel for the new structures. Structure 1002A would be a new structure located just south of the Falls Village Substation. Although this is a new structure, it would be located in close proximity to the Falls Village Substation, which includes several other lattice and pole structures, and as a result the new structure would not change the existing visual character of this area.

Sound Levels along the Transmission ROW

There would be no changes to the sound levels along the transmission line corridor after completion of the Project. During construction, any impacts to existing noise levels would be short-term and localized in the vicinity of the work sites.

Air Quality

Short-term, localized effects on air quality may result from the Project construction work, primarily from fugitive dust and equipment emissions. To minimize the amount of dust generated by construction activities, the extent of exposed/disturbed areas at any one time would be minimized. Vehicle emissions will be limited by requiring contractors to properly maintain construction equipment and vehicles, and by minimizing the idling time of equipment and vehicles, including diesel construction equipment, in accordance with Connecticut regulatory requirements[2]. Temporary gravel 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.

Radio and Television Interference

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

5. Traffic Management

Construction vehicles and equipment associated with the work would include pickup trucks, bucket trucks, flat-bed trucks, concrete trucks, drill rigs, front loaders, reel trailers, bulldozers, wood chippers, forklifts, side booms, dump trucks and cranes. Pullers and tensioners will be used for the line work.

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

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.

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 Towns and the Connecticut Department of Transportation ("ConnDOT") to develop and implement traffic management procedures, as needed. 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.

6. Construction Sequence

Project construction would include the following activities:

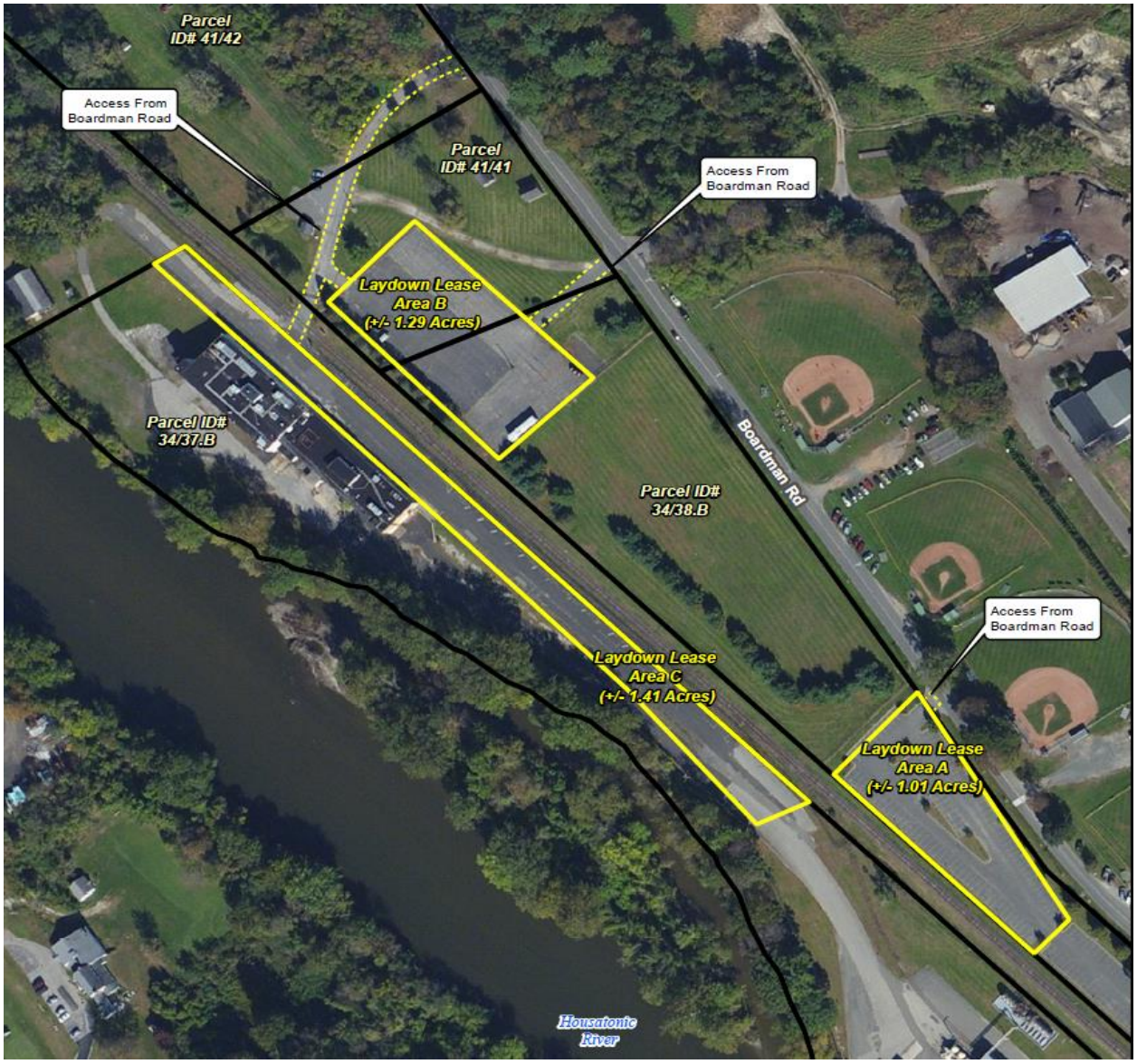
Establishing Staging Areas

The Project is proposing to utilize three sections of a property located at 69 Boardman Road in the Town of New Milford for staging/laydown staging areas. The staging areas are each approximately four acres in size and located on the parking lots of the property (See Figure 2 below). These laydown areas were previously identified for use in connection with the rebuild of the 1555 line. Other staging areas may be identified by the contractors and Eversource would request Council authorization for any additional or alternative laydown areas.

The staging areas would be used for surface storage of construction materials, equipment, tools, and supplies (including conductors, cable reels, insulators, hardware, poles and mats)

for the Project. Two office trailers and Conex storage containers may be located at the staging areas. Components removed during the work (structures, conductor, hardware and insulators) may be temporarily accumulated and stored at the staging areas prior to removal off-site for salvage and/or disposal. The staging areas may also be used by construction crews for parking personal vehicles as well as for construction vehicles and equipment storage, and for performing minor maintenance, when needed, on construction equipment. Appropriate erosion and sedimentation ("E&S") controls would be installed and maintained until completion of the work in accordance with Project permits and Eversource's BMPs.

Figure 2: Staging and Laydown Areas



Clearing and Vegetation Removal

Clearing and vegetation removal would be accomplished using mechanical methods. This work typically requires the use of flat-bed trucks, brush hogs or other types of mowing equipment, skidders, forwarders, bucket trucks for canopy trimming, feller bunchers for

mechanical tree cutting, wood chippers, log trucks, and chip vans. Eversource would conduct vegetation removal activities in accordance with its BMPs.

Eversource would require the clearing contractor to use low-impact clearing methods to remove brush vegetation to protect wetlands, watercourses, state-listed species and their habitats, and cultural resources. Low-impact clearing incorporates 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 clearing methods, depending on site-specific considerations:

- Take into consideration soil and weather conditions when scheduling vegetation removal activities, such as during periods of heavy rainfall.
- Maximize the use of uplands for clearing access routes.
- Use appropriately sized equipment for the site conditions, where possible, to minimize impacts.
- Where practical, cut brush close to the ground, leaving root systems and stumps, to retain soil stability.

Soil Erosion and Sediment Control Installation

Project construction would conform to best management practices for erosion and sedimentation ("E&S") control, including those provided in the *2002 Connecticut Guidelines for Soil Erosion and Sediment Control* ("*Connecticut Guidelines*") and Eversource's BMPs. This will include the development of a project specific Stormwater Pollution Control Plan ("SWPCP") and registration under CT DEEP's *General Permit for the Discharge of*

Stormwater and Dewatering Wastewaters from Construction Activities, effective 10/1/13 ("General Permit").

Typical E&S control measures include, but are not limited to, straw blankets, hay bales, 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 throughout the Project to ensure their integrity and effectiveness and for compliance with the General Permit. The SWPCP inspections will be in accordance with the General Permit requirements. Following completion of construction, seeding and mulching or hydroseeding would be completed to permanently stabilize the areas disturbed by the work. The temporary E&S control measures would remain in place until the Project work is complete and all disturbed areas have been deemed and remain stabilized.

Access Roads and Work Pads

Access to each proposed transmission structure location will be required during Project construction. As a result of maintenance activities, some access roads are already established; Eversource will utilize these existing access roads to the extent possible. However, some new access roads will be required. Construction matting will be utilized to install temporary access roads through wetland areas to reach certain structure locations. The access roads expected to be used for the proposed Project are illustrated on the maps in Attachment A.

Existing access roads may need to be improved (graded, widened, and/or reinforced) with additional stone 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 12 to 16 feet wide (additional width may be needed at turning or passing locations). Access roads would typically be graveled; however, where access roads traverse streams or wetlands, timber construction mats or rail car bridge would be used. E&S controls 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 between approximately 100 feet by 100 feet and 130 feet by 130 feet. Pulling areas would be approximately 130 feet by 80 feet, which may vary based on terrain.

A typical (upland) installation of a work pad at a structure location involves several steps: (1) removal of vegetation, (2) grading to create a level work area, and (3) removal of the upper three to six inches of topsoil (which is usually unsuitable to support the necessary construction activities). The removed topsoil would be temporarily stockpiled within the ROW, typically near the work pad. A rock base, 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.

To facilitate future transmission line maintenance, access roads, structure work pads and pull pads in uplands would be left in place, unless the property owner requests their removal. Access roads and work pads located within improved areas would typically be removed and the area restored, unless the property owner requests that they remain in place. Stone walls

that are located in areas of Project work may be temporarily removed during construction. No new permanent access roads or work pads are proposed in water resource areas.

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.

Foundation Installation

Structures will have either concrete or direct embed foundations. Foundation installation work would require the use of equipment such as augers, drill rigs, and dump trucks. If groundwater is encountered, and when working within wetlands, pumping (vacuum) trucks or other suitable equipment would be used to pump water from the excavated areas as the shaft is being drilled or as the structure is being set. The water would then be discharged in accordance with applicable federal requirements.

Excavated soils that are generated during construction activities would not be stored or stockpiled inside of a wetland, or adjacent to a watercourse. Materials that cannot be utilized as backfill would be disposed in accordance with CT DEEP regulations.

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.

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. After assembly, the area around direct embed foundations would be backfilled with processed gravel.

Conductor and Shield Wire Installation/Removal

The installation of the new conductors, OPGW and removal of the Alumoweld shield wire would occur after the new structures have been erected. The equipment required for these activities would include conductor reels, conductor pulling and tensioning rigs, and bucket trucks.

The removal of the existing conductor and shield wire would take place during the installation of the new conductor/OPGW because the existing conductor and shield wire will be used as pulling lines, if possible. Helicopters may also be used to install the initial pulling lines for the conductors and OPGW. Conductor dead-ending and splicing will be accomplished with pressed hardware and possibly including implosive devices.

Restoration

Once the new structures are erected and the line is energized, the existing structures would be demolished and removed. ROW restoration activities would also 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. Areas affected by construction would be re-graded as practical and stabilized using revegetation or other measures before removing temporary E&S controls. Eversource will work with individual

property owners for the restoration or permanent removal of any stone walls that would be impacted during construction.

Waste Management

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

7. Construction Schedule and Work Hours

Eversource proposes to begin construction in summer of 2019. 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.

8. 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, because these are most representative of typical conditions. The calculations are made relative to the centerline of the proposed, modified transmission lines. The calculations apply at one meter (3.28 feet) above grade and assume that the lowest conductor for each 115-kV circuit is 30 feet above grade.

Eversource's proposed design for the Project employs a single-circuit delta configuration of three phase conductors supported on tubular steel poles, in contrast to the existing horizontal-configuration on lattice structures. Magnetic fields at and beyond the edges of the ROW would be essentially unchanged.

Electric fields at the northern edge of the ROW are expected to increase slightly. The maximum fields in the ROW and at the southern edge will be essentially unchanged.

Table 1 summarizes the calculated electric and magnetic fields at the ROW edges before and after the modifications.

Table 1 - Summary of Calculated Electric and Magnetic Fields

Summary of Fields		667 Line EMF Calculations		
		South Edge	Max	North Edge
MF (mG)	Existing	0.4	4.7	2.0
	Proposed	0.7	6.6	2.2
EF (kV/m)	Existing	0.03	0.57	0.04
	Proposed	0.06	0.56	0.19

The results of the calculations show that the proposed modifications would not substantially increase electric or magnetic fields at the edge of the ROW. See Attachment G: EMF Graphs.

Comparison of Calculated Fields to International Guidelines

The anticipated fields resulting from the proposed Project are well below the internationally established exposure limits for 60-Hz electric and magnetic fields. Specifically, the limits identified by the International Council on Electromagnetic Safety ("ICES") and the International Council on Non-Ionizing Radiation Protection ("ICNIRP"). These standards are summarized below in Table 2.

Table 2 - International Guidelines for EMF Exposure

	EF (kV/m)	MF (milligauss)
ICES	5	9,040
ICNIRP	4.2	2000

9. Municipal and Property Owner Outreach

Beginning in the summer of 2018, Eversource consulted with the municipal officials in the Towns to brief them on the proposed Project. Additionally, in April 2019, Eversource provided representatives of the Towns with written notice of the Petition filing.

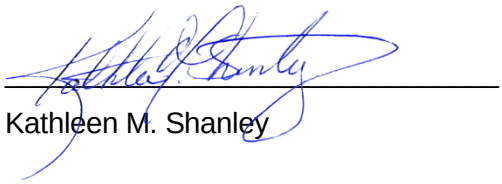
From the summer of 2018 through April 2019, Eversource conducted outreach to property owners located along the ROW. In conjunction with the submission of this Petition. All abutting property owners were notified of the filing and provided information on how to obtain additional information on the Project, as well as how to submit comments to the Council. Eversource representatives will continue contact with adjacent property owners to provide advance notification as to the start of construction activities and will continue to update property owners throughout construction and restoration.

10. Conclusion

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

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

Kathleen M. Shanley
Manager – Transmission Siting
Eversource Energy
PO Box 270
Hartford, CT 06141-0270
Telephone: (860) 728-4527

By: 

Kathleen M. Shanley

List of Attachments

Attachment A: 667 Line Rebuild Project – Aerial Maps
Attachment B: Line 667 – Right-of-Way Cross Section
Attachment C: List of Structure Replacements
Attachment D: Wetlands and Watercourses Report
Attachment E: Vernal Pool Survey
Attachment F: EMF Graphs
Attachment G: Letter to the Abutters and Affidavit

Attachment A: 667 Line Reconductoring and Structure Replacement Project – Aerial Maps

Salisbury Substation to Falls Village Substation
667 Line
Reconductoring & Structure Replacement Project

FINAL Aerial Maps

Towns of Salisbury, Sharon, and Canaan Connecticut

April 25, 2019

Salisbury Substation

Falls Village Substation

01 02 03 04 05 06 07 08 09 10 11

Appalachian Trail

Wononskopomuc Lake

Wonopakook Lake

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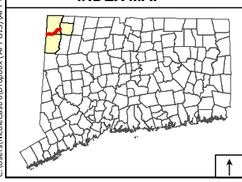
INDEX MAP



Legend

667 Line

Map Sheet

Municipal Boundary

Appalachian Trail

N

1:24,000

0 1,000 2,000 Feet

Base Map Source: ESRI USA Topographic Maps

NO.	DATE	REVISIONS	BY	CHK	APP	APP

EVERSOURCE ENERGY

Salisbury Substation to Falls Village Substation
667 Line - Reconductoring & Structure Replacement Project
Index Map

Salisbury, Sharon, and Canaan CT

Date: April, 2019

Map Author: N. Castro

ALL-POINTS TECHNOLOGY CORPORATION

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MAP SHEET 01

Salisbury Substation to Falls Village Substation
667 Line Reconductoring & Structure Replacement Project
Structures 1052 - 1049
Towns of Sharon and Salisbury, Connecticut

AREA DESCRIPTION

Existing Land Use & Resource Areas

- Salisbury Substation
- Eversource owned property
- Undeveloped, forest
- Residential
- Agriculture field
- Natural Diversity Database Area

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use & Resource Areas

- Salisbury Substation
- Eversource owned property at structure 1052
- 100-year Flood Zone unnamed watercourse

Water Resources

- Wetlands – W1, W2, W3
- Wetland Cover Types – PEM, PSS
- Watercourses – S1, S2, S3

Wetland and Watercourse Crossings

- None

Right-of-Way Vegetation

- Old Field
- Mixed Hardwood
- Hardwood Forest

Access

- Structures 1052 to 1050: existing access from Indian Mountain Road
- Structure 1049: existing access to be improved from Valley Road

Road Crossings

- Dug Road (Sharon) and Valley Road (Salisbury)

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

- 50 feet / 90 feet

ABUTTERS TO THE PROJECT RIGHT-OF-WAY

LLN Number	Parcel Address	Town	Owner Name
101	311 INDIAN MOUNTAIN ROAD	SALISBURY	311 IMR LLC
102	310 INDIAN MOUNTAIN ROAD	SALISBURY	EMILY ELLIOT
103	316 INDIAN MOUNTAIN ROAD	SALISBURY	CONNECTICUT LIGHT & POWER
105	MUDGETOWN ROAD	SHARON	SHARON LAND TRUST INC
106	MUDGETOWN ROAD	SHARON	SHARON LAND TRUST
107	MUDGETOWN ROAD	SHARON	SAMUEL F. JR. POSEY
108	23 VALLEY ROAD	SALISBURY	PATRICIA S. STIMPSON
109	36 DUG ROAD	SHARON	ALEXANDER LOTOCKI DE VELIGOST
110	50 DUG RD	SHARON	LAURA A. GEER
111	40 VALLEY ROAD	SALISBURY	LAURA A. GEER
112	38 VALLEY ROAD	SALISBURY	STUYVESANT K. BEARNS

INDEX MAP

Legend

- Proposed Structure
- Existing Structure
- Existing Structure to be removed
- Existing Right-of-Way (ROW)
- Overhead Eversource Line
- 5' Contour Line
- Stone Wall
- Fence
- Construction Safety Fence
- Gate
- Culvert
- Existing Access
- Proposed Access
- Proposed Alternate Access
- Access Road to be Improved
- Temporary Construction Matting
- Stone Work Pad
- Pull Pad
- Ordinary High Watermark
- Delineated Perennial Watercourse
- Delineated Intermittent Watercourse
- Drainage Channel
- Confirmed Vernal Pool Extent
- 100' Vernal Pool Envelope
- Delineated Wetland Boundary Outline
- Field Delineated Federal Wetland
- Field Delineated Connecticut Wetland Only
- Open Water
- Critical Habitat (2009)
- Natural Diversity Database Area (Dec. 2018)
- State-Owned Property (none in mapped extent)
- Eversource Owned Property
- Parcel Boundary
- FEMA 100-Year Flood Zone
- 500 Year Flood Zone
- FEMA Floodway
- Appalachian Trail
- Railroad
- Municipal Boundary
- Map Sheet Matchline

Map Notes:
Parcel Boundaries provided by Eversource on 4/17/2017 (not from survey). ROW Boundary provided by Eversource (not from survey). Field Investigation/Data by APT/Davison Environmental.

N

1 inch = 200 feet

0 50 100 200 Feet

NO.	DATE	REVISIONS	BY	CHK	APP	APP

EVERSOURCE ENERGY

Salisbury Substation to Falls Village Substation
667 Line
Reconductoring & Structure Replacement Project

Salisbury, CT

Map Sheet 01 of 11

April, 2019

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MAP SHEET 02

Salisbury Substation to Falls Village Substation
667 Line Reconductoring & Structure Replacement Project
Structures 1048 - 1045
Towns of Sharon and Salisbury, Connecticut

AREA DESCRIPTION

Existing Land Use & Resource Areas

- Undeveloped, forest
- Agricultural Field
- Residential
- Critical Habitat
- Natural Diversity Database Area
- Eversource owned property
- Long Pond Brook
- 100-year Flood Zone of Long Pond Brook

RIGHT-OF-WAY DESCRIPTION

Existing Land Use & Resource Areas

- Eversource owned property adjacent to Structure 1045
- Undeveloped, forest
- Agricultural Field
- Natural Diversity Database Area (structures 1047 to 1045) and initial portion of access from Dug Road
- Long Pond Brook
- 100-year Flood Zone of Long Pond Brook

Water Resources

- Wetlands – W4, W5
- Wetland Cover Type: PSS
- Watercourses –S2 (Long Pond Brook), S4, S5

Wetland and Watercourse Crossings

- Wetland W4/Watercourse S4: construction mats for access
- Wetland W5/Watercourse S5: construction mats for work pads and access.

Right-of-Way Vegetation

- Old field
- Mixed Hardwood Forest
- Hayfield

Access

- Structures 1048-1046: proposed and existing access from Dug Road
- Structure 1045: proposed access from Sharon Road (Route 41)

Road Crossings

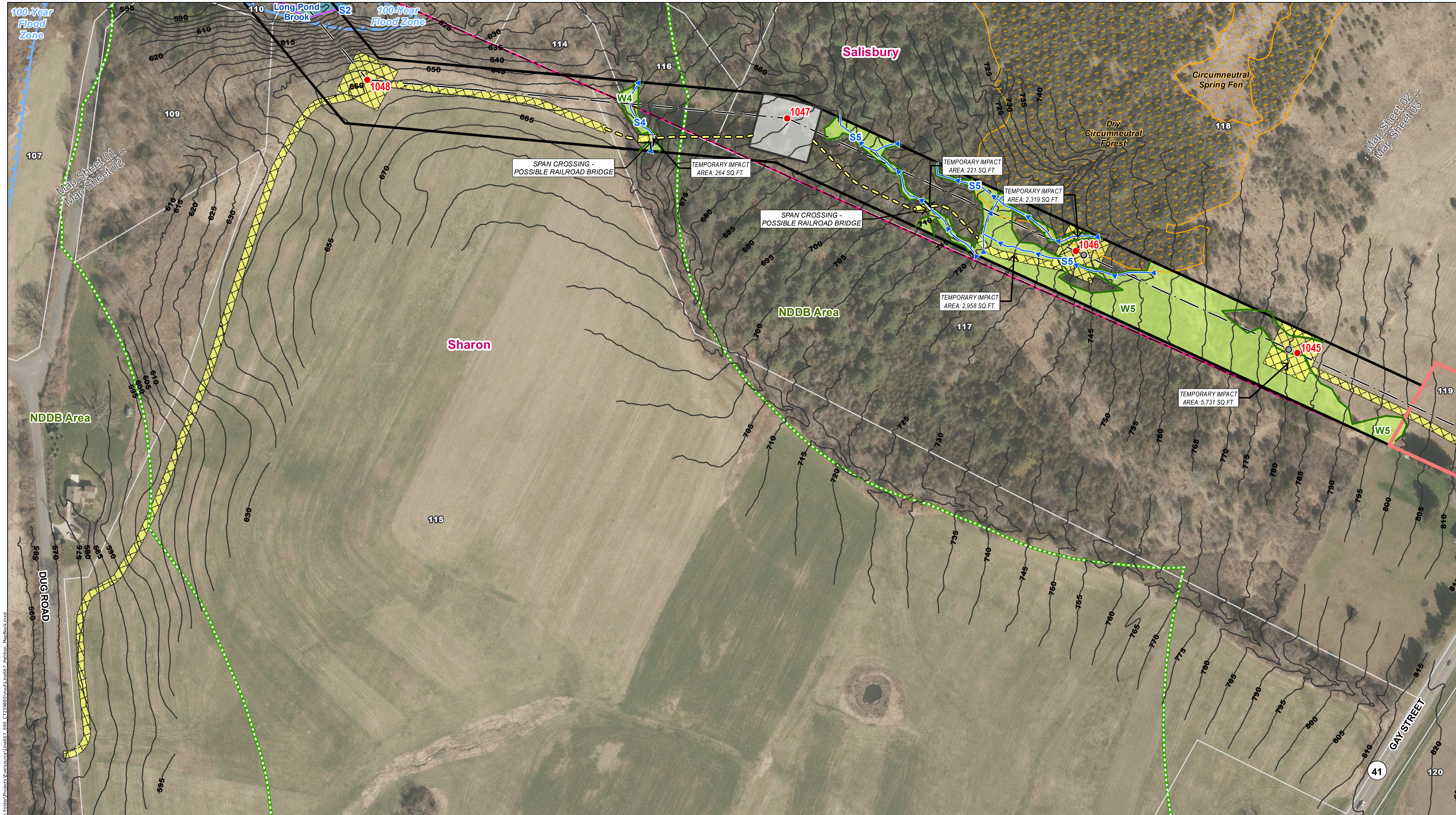
- None

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

- 50 feet / 90 feet

ABUTTERS TO THE PROJECT RIGHT-OF-WAY

LLN Number	Parcel Address	Town	Owner Name
107	MUDGETOWN ROAD	SHARON	SAMUEL F. JR. POSEY
109	36 DUG ROAD	SHARON	ALEXANDER LOTOCKI DE VELIGOST
114	VALLEY ROAD	SALISBURY	SAMUEL F. POSEY JR.
115	GAY STREET	SHARON	SAMUEL F. POSEY JR.
116	SHARON ROAD	SALISBURY	VICTOR MACCAGNAN ET ALS
117	400 GAY STREET	SHARON	VICTOR MACCAGNAN ET ALS
118	SHARON ROAD	SALISBURY	SALISBURY ASSOCIATION INC
119	SHARON ROAD	SALISBURY	CONNECTICUT LIGHT & POWER
120	HOSIER RD	SHARON	SILENT MEADOW PARTNERS LIMIT



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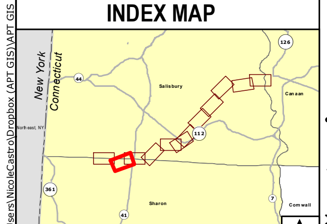

Legend

- Proposed Structure
- Existing Structure
- Existing Structure to be removed
- Existing Right-of-Way (ROW)
- Overhead Eversource Line
- 5' Contour Line
- Stone Wall
- Fence
- Construction Safety Fence
- Gate
- Culvert
- Existing Access
- Proposed Access
- Proposed Alternate Access
- Access Road to be Improved
- Temporary Construction Matting
- Stone Work Pad
- Pull Pad
- Ordinary High Watermark
- Delineated Perennial Watercourse
- Delineated Intermittent Watercourse
- Drainage Channel
- Confirmed Vernal Pool Extent
- 100' Vernal Pool Envelope
- Delineated Wetland Boundary Outline
- Field Delineated Federal Wetland
- Field Delineated Connecticut Wetland Only
- Open Water
- Critical Habitat (2009)
- Natural Diversity Database Area (Dec. 2018)
- State-Owned Property (none in mapped extent)
- Eversource Owned Property
- Parcel Boundary
- FEMA 100-Year Flood Zone
- 500 Year Flood Zone
- FEMA Floodway
- Appalachian Trail
- Railroad
- Municipal Boundary
- Map Sheet Matchline

Map Notes:
Parcel Boundaries provided by Eversource on 4/17/2017 (not from survey). ROW Boundary provided by Eversource (not from survey). Field Investigation/Data by APT/Davison Environmental.

N

1 inch = 200 feet
0 50 100 200 Feet

NO.	DATE	REVISIONS	BY	CHK	APP	APP

EVERSOURCE ENERGY

Salisbury Substation to Falls Village Substation
667 Line
Reconductoring & Structure Replacement Project

Salisbury/Sharon, CT

Map Sheet 02 of 11

April, 2019

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MAP SHEET 03

Salisbury Substation to Falls Village Substation
667 Line Reconductoring & Structure Replacement Project
Structures 1046 - 1042
Towns of Sharon and Salisbury, Connecticut

AREA DESCRIPTION

Existing Land Use & Resource Areas
- Eversource owned property
- Undeveloped, forest
- Agricultural Field
- Residential
- Critical Habitat
- Natural Diversity Database Area

RIGHT-OF-WAY DESCRIPTION

Existing Land Use & Resource Areas
- Eversource owned property at structure 1044
- Undeveloped, forest
- Agricultural Field
- Natural Diversity Database Area from structure 1046 to 1042

Water Resources
- Wetlands – W5, W6, W7
- Wetland Cover Type: PSS, PEM
- Watercourses – S5

Wetland and Watercourse Crossings
- Wetland W5/Watercourse S5: construction mats for work pads and access.

Right-of-Way Vegetation
- Mixed Hardwood Forest
- Old Field
- Hayfield
- Pasture

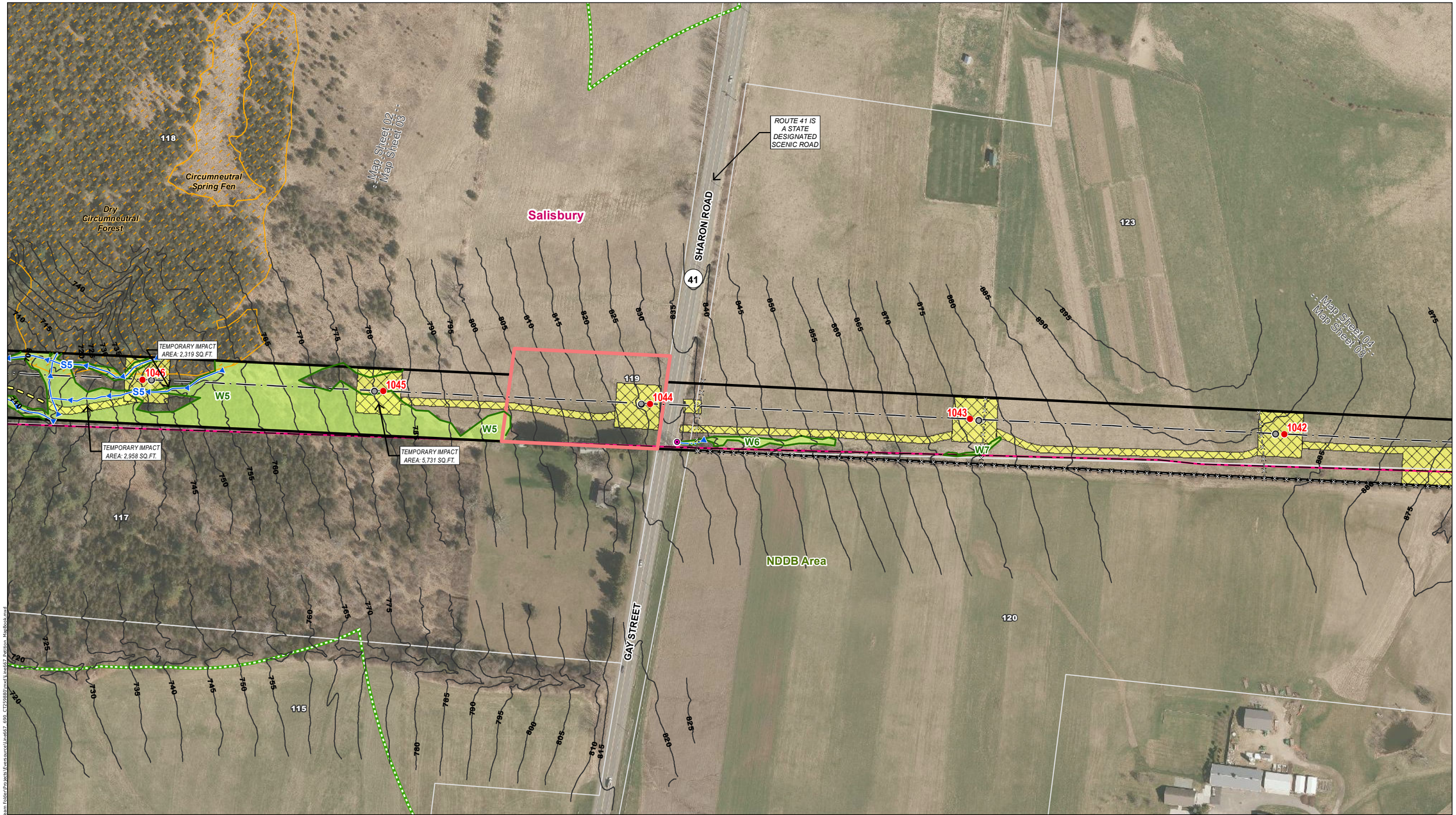
Access
- Structures 1046: proposed and existing access from Dug Road
- Structures 1045 to 1042: proposed access from Sharon Road (Route 41)

Road Crossings
- Sharon Road (Route 41) (Salisbury)

Existing Maintained Right-of-Way Width / Proposed Right-of-Way Clearing
- 50 feet / 90 feet

ABUTTERS TO THE PROJECT RIGHT-OF-WAY

LLN Number	Parcel Address	Town	Owner Name
115	GAY STREET	SHARON	SAMUEL F. POSEY JR.
117	400 GAY STREET	SHARON	VICTOR MACCAGNAN ET ALS
118	SHARON ROAD	SALISBURY	SALISBURY ASSOCIATION INC
119	SHARON ROAD	SALISBURY	CONNECTICUT LIGHT & POWER
120	HOSIER RD	SHARON	SILENT MEADOW PARTNERS LIMIT
123	400 SHARON ROAD	SALISBURY	HOTCHKISS SCHOOL



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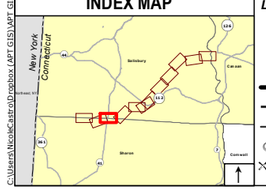

Legend

- Proposed Structure
- Existing Structure
- Existing Structure to be removed
- Existing Right-of-Way (ROW)
- Overhead Eversource Line
- 5' Contour Line
- Stone Wall
- Fence
- Construction Safety Fence
- Gate
- Culvert
- Existing Access
- Proposed Access
- Proposed Alternate Access
- Access Road to be Improved
- Temporary Construction Matting
- Stone Work Pad
- Pull Pad
- Ordinary High Watermark
- Delineated Perennial Watercourse
- Delineated Intermittent Watercourse
- Drainage Channel
- Confirmed Vernal Pool Extent
- 100' Vernal Pool Envelope
- Delineated Wetland Boundary Outline
- Field Delineated Federal Wetland
- Field Delineated Connecticut Wetland Only
- Open Water
- Critical Habitat (2009)
- Natural Diversity Database Area (Dec. 2018)
- State-Owned Property (none in mapped extent)
- Eversource Owned Property
- Parcel Boundary
- FEMA 100-Year Flood Zone
- 500 Year Flood Zone
- FEMA Floodway
- Appalachian Trail
- Railroad
- Municipal Boundary
- Map Sheet Matchline

Map Notes:
Parcel Boundaries provided by Eversource on 4/17/2017 (not from survey). ROW Boundary provided by Eversource (not from survey). Field Investigation/Data by APT/Davison Environmental.

N

1 inch = 200 feet

0 50 100 200 Feet

NO.	DATE	REVISIONS	BY	CHK	APP	APP

EVERSOURCE ENERGY

Salisbury Substation to Falls Village Substation 667 Line Reconductoring & Structure Replacement Project

Salisbury/Sharon, CT

Map Sheet 03 of 11

April, 2019

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MAP SHEET 04

Salisbury Substation to Falls Village Substation
667 Line Reconductoring & Structure Replacement Project
Structures 1041 - 1038
Towns of Sharon and Salisbury, Connecticut

Existing Land Use & Resource Areas
- Agricultural Field
- Undeveloped, forest
- Beeslick Pond
- 100-year Flood Zone
- Critical Habitat
- Natural Diversity Database Area

RIGHT-OF-WAY DESCRIPTION

Existing Land Use & Resource Areas
- Agricultural Field
- Undeveloped, forest
- Beeslick Pond
- 100-year Flood Zone of Beeslick Pond
- Natural Diversity Database Area from structure 1041 to 1038

Water Resources
- Wetlands – W8, W9
- Wetland Cover Types – PEM, PSS
- Watercourses – S6, S7 (Beeslick Pond)

Wetland and Watercourse Crossings
- Watercourse S6 – construction mats for access
- Wetland W8 – construction mats for work pad and access
- Wetland W9 – construction mats for work pad and access

Right-of-Way Vegetation
- Hayfield
- Pasture
- Mixed Hardwood Forest
- Old Field

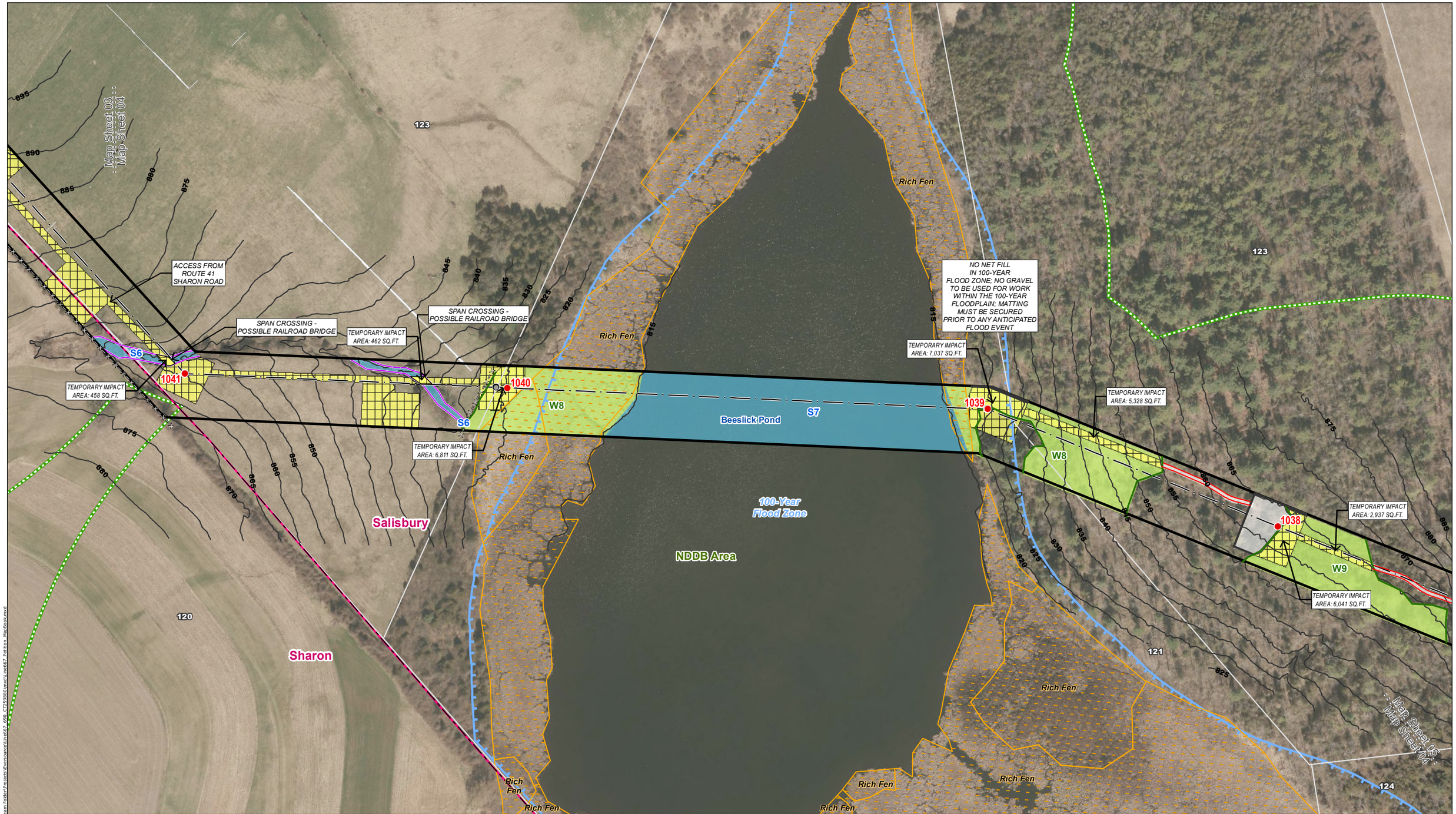
Access
- Structures 1041 to 1040: proposed access from Sharon Road (Route 41)
- Structures 1039 to 1038: proposed, existing to be improved, and existing access from Red Mountain Road

Road Crossings
- None

Existing Maintained Right-of-Way Width / Proposed Right-of-Way Clearing
- 50 feet / 90 feet

ABUTTERS TO THE PROJECT RIGHT-OF-WAY

LLN Number	Parcel Address	Town	Owner Name
120	HOSIER RD	SHARON	SILENT MEADOW PARTNERS LIMIT
121	RED MOUNTAIN ROAD	SALISBURY	NATURE CONSERVANCY OF CONNECTICUT
123	400 SHARON ROAD	SALISBURY	HOTCHKISS SCHOOL
124	15 RED MOUNTAIN ROAD	SALISBURY	CORY L. MURPHY



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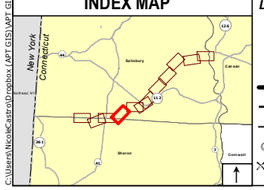

Legend

- Proposed Structure
- Existing Structure
- Existing Structure to be removed
- Existing Right-of-Way (ROW)
- Overhead Eversource Line
- 5' Contour Line
- Stone Wall
- Fence
- Construction Safety Fence
- Gate
- Culvert
- Existing Access
- Proposed Access
- Proposed Alternate Access
- Access Road to be Improved
- Temporary Construction Matting
- Stone Work Pad
- Pull Pad
- Ordinary High Watermark
- Delineated Perennial Watercourse
- Delineated Intermittent Watercourse
- Drainage Channel
- Confirmed Vernal Pool Extent
- 100' Vernal Pool Envelope
- Delineated Wetland Boundary Outline
- Field Delineated Federal Wetland
- Field Delineated Connecticut Wetland Only
- Open Water
- Critical Habitat (2009)
- Natural Diversity Database Area (Dec. 2018)
- State-Owned Property (none in mapped extent)
- Eversource Owned Property
- Parcel Boundary
- FEMA 100-Year Flood Zone
- 500 Year Flood Zone
- FEMA Floodway
- Appalachian Trail
- Railroad
- Municipal Boundary
- Map Sheet Matchline

Map Notes:
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1 inch = 200 feet
0 50 100 200 Feet

NO.	DATE	REVISIONS	BY	CHK	APP	APP

EVERSOURCE ENERGY

Salisbury Substation to Falls Village Substation
667 Line
Reconductoring & Structure Replacement Project

Salisbury/Sharon, CT

Map Sheet 04 of 11

April, 2019

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MAP SHEET 05
Salisbury Substation to Falls Village Substation
667 Line Reconductoring & Structure Replacement Project
Structures 1037 - 1032
Town of Salisbury, Connecticut

AREA DESCRIPTION

Existing Land Use & Resource Areas
- Undeveloped, forest
- Agricultural Field
- Residential
- Natural Diversity Database Area

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use & Resource Areas
- Undeveloped; forest
- Agricultural Field
- Natural Diversity Database Area from structures 1037 to 1032

Water Resources
- Wetlands – W9
- Wetland Cover Type: PSS
- Watercourses – None

Wetland and Watercourse Crossings
- Wetland W9 – construction mats for access

Right-of-Way Vegetation
- Mixed Harwood Forest
- Old Field
- Hayfield
- Nursery

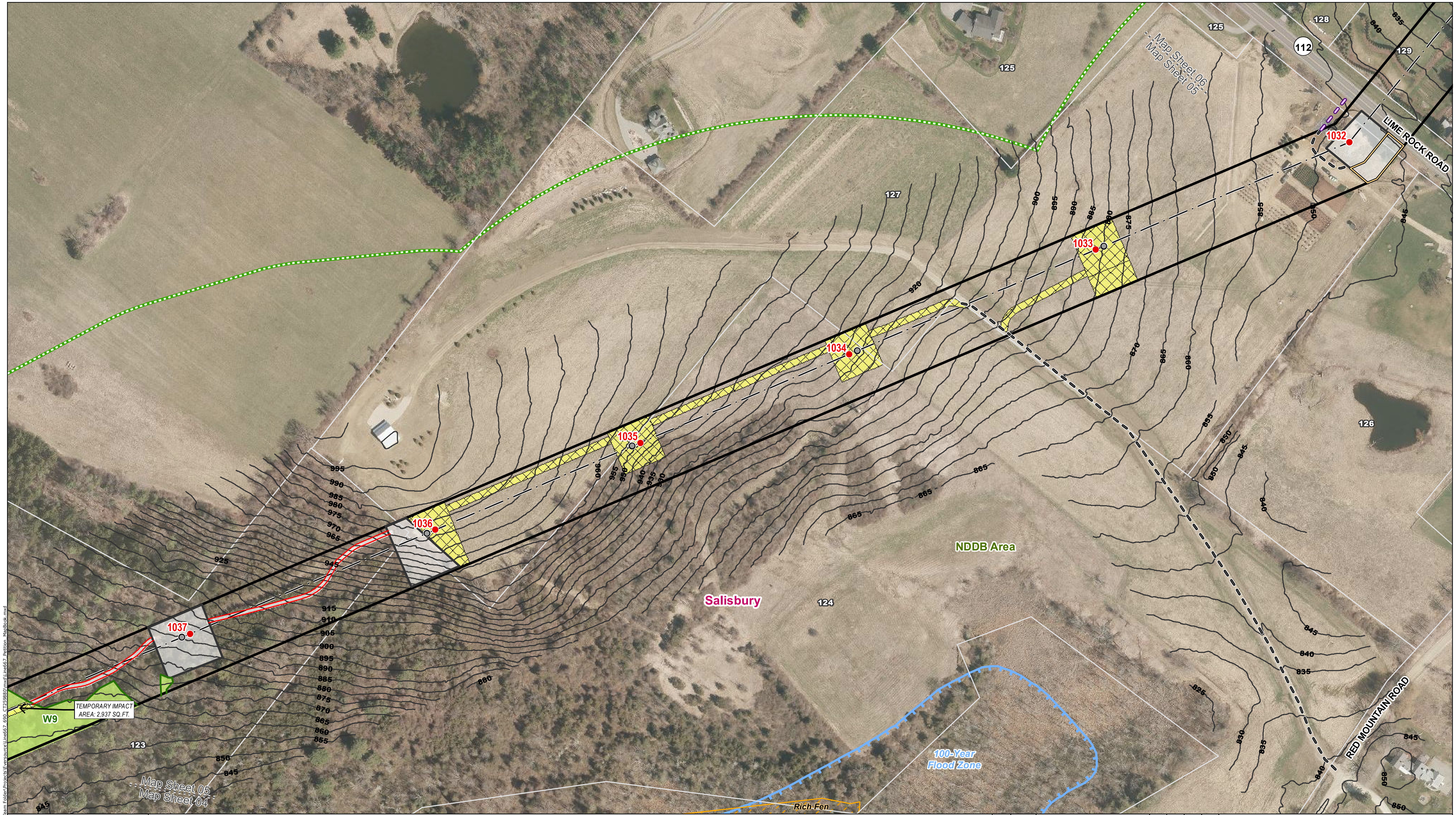
Access
- Structures 1037 to 1033: proposed, existing to be improved, and existing access from Red Mountain Road
- Structures 1032: existing access from Lime Rock Road (Route 112)

Road Crossings
- Lime Rock Road (Route 112)

Existing Maintained Right-of-Way Width / Proposed Right-of-Way Clearing
- 50 feet / 90 feet

ABUTTERS TO THE PROJECT RIGHT-OF-WAY

LLN Number	Parcel Address	Town	Owner Name
123	400 SHARON ROAD	SALISBURY	HOTCHKISS SCHOOL
124	15 RED MOUNTAIN ROAD	SALISBURY	CORY L. MURPHY
125	131 LIME ROCK ROAD	SALISBURY	JANE D. PINCKNEY
126	157 LIME ROCK ROAD	SALISBURY	GREGORY R. MURPHY
127	15 RED MOUNTAIN ROAD	SALISBURY	CORY L. MURPHY
128	140 LIME ROCK ROAD	SALISBURY	MICHAEL KEATING
129	158 LIME ROCK ROAD	SALISBURY	MURPHY JUDITH



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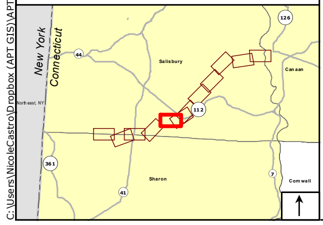
INDEX MAP



Legend

- Proposed Structure
- Existing Structure
- Existing Structure to be removed
- Existing Right-of-Way (ROW)
- Overhead Eversource Line
- 5' Contour Line
- Stone Wall
- Fence
- Construction Safety Fence
- Gate
- Culvert
- Existing Access
- Proposed Access
- Proposed Alternate Access
- Access Road to be Improved
- Temporary Construction Matting
- Stone Work Pad
- Pull Pad
- Ordinary High Watermark
- Delineated Perennial Watercourse
- Delineated Intermittent Watercourse
- Drainage Channel
- Confirmed Vernal Pool Extent
- 100' Vernal Pool Envelope
- Delineated Wetland Boundary Outline
- Field Delineated Federal Wetland
- Field Delineated Connecticut Wetland Only
- Open Water
- Critical Habitat (2009)
- Natural Diversity Database Area (Dec. 2018)
- State-Owned Property (none in mapped extent)
- Eversource Owned Property
- Parcel Boundary
- FEMA 100-Year Flood Zone
- 500 Year Flood Zone
- FEMA Floodway
- Appalachian Trail
- Railroad
- Municipal Boundary
- Map Sheet Matchline

Map Notes:
Parcel Boundaries provided by Eversource on 4/17/2017 (not from survey). ROW Boundary provided by Eversource (not from survey). Field Investigation/Data by APT/Davison Environmental.

N

1 inch = 200 feet

0 50 100 200 Feet

NO.	DATE	REVISIONS	BY	CHK	APP	APP

EVERSOURCE ENERGY

Salisbury Substation to Falls Village Substation
667 Line
Reconductoring & Structure Replacement Project

Salisbury, CT

Map Sheet 05 of 11

April, 2019

ALL-POINTS TECHNOLOGY CORPORATION

MAP SHEET 06
Salisbury Substation to Falls Village Substation
667 Line Reconductoring & Structure Replacement Project
Structures 1032 - 1028
Town of Salisbury, Connecticut

AREA DESCRIPTION

Existing Land Use & Resource Areas
- Residential
- Commercial
- Undeveloped; forest
- Agricultural field
- 100-year flood zone
- Natural Diversity Database Area

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use & Resource Areas
- Undeveloped; forest
- Agricultural field
- 100-year Flood Zone of unnamed watercourse
- Natural Diversity Database Area from structures 1032 to 1028

Water Resources
- Wetlands – W10, W11
- Wetland Cover Types – PEM, PSS
- Watercourses – S8

Wetland and Watercourse Crossings
- Wetland W10/Watercourse S8: construction mats for access
- Wetland W11: construction mats for access and work pad

Right-of-Way Vegetation
- Nursery
- Hayfield
- Old Field

Access
- Structures 1032: existing access from Lime Rock Road (Route 112)
- Strictures 1031 to 1028: proposed access from Wells Hill Road

Road Crossings
- Lime Rock Road (Route 112)

Existing Maintained Right-of-Way Width / Proposed Right-of-Way Clearing
- 50 feet / 90 feet

ABUTTERS TO THE PROJECT RIGHT-OF-WAY

LLN Number	Parcel Address	Town	Owner Name
125	131 LIME ROCK ROAD	SALISBURY	JANE D. PINCKNEY
126	157 LIME ROCK ROAD	SALISBURY	GREGORY R. MURPHY
127	15 RED MOUNTAIN ROAD	SALISBURY	CORY L. MURPHY
128	140 LIME ROCK ROAD	SALISBURY	MICHAEL KEATING
129	158 LIME ROCK ROAD	SALISBURY	MURPHY JUDITH
130	178 LIME ROCK ROAD	SALISBURY	RICHARD TR. MARMET
132	200 LIME ROCK ROAD	SALISBURY	RED MOUNTAIN VIEW LLC

NO NET FILL IN 100-YEAR FLOOD ZONE; NO GRAVEL TO BE USED FOR WORK WITHIN THE 100-YEAR FLOODPLAIN; MATTING MUST BE SECURED PRIOR TO ANY ANTICIPATED FLOOD EVENT

SPAN CROSSING - POSSIBLE RAILROAD BRIDGE

TEMPORARY IMPACT AREA: 3,122 SQ.FT.

TEMPORARY IMPACT AREA: 1,446 SQ.FT.

TEMPORARY IMPACT AREA: 2,927 SQ.FT.

TEMPORARY IMPACT AREA: 2,183 SQ.FT.

1028 1029 1030 1031 1032

S8 W10 W11

NDDB Area

100-Year Flood Zone

Salisbury

Bauer Pond

LIME ROCK ROAD

RED MOUNTAIN ROAD

Map Sheet 05 - - Map Sheet 06

Map Sheet 06 - - Map Sheet 07

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INDEX MAP

Legend

- Proposed Structure
- Existing Structure
- Existing Structure to be removed
- Existing Right-of-Way (ROW)
- Overhead Eversource Line
- 5' Contour Line
- Stone Wall
- Fence
- Construction Safety Fence
- Gate
- Culvert
- Existing Access
- Proposed Access
- Proposed Alternate Access
- Access Road to be Improved
- Temporary Construction Matting
- Stone Work Pad
- Pull Pad
- Ordinary High Watermark
- Delineated Perennial Watercourse
- Delineated Intermittent Watercourse
- Drainage Channel
- Confirmed Vernal Pool Extent
- 100' Vernal Pool Envelope
- Delineated Wetland Boundary Outline
- Field Delineated Federal Wetland
- Field Delineated Connecticut Wetland Only
- Open Water
- Critical Habitat (2009)
- Natural Diversity Database Area (Dec. 2018)
- State-Owned Property (none in mapped extent)
- Eversource Owned Property
- Parcel Boundary
- FEMA 100-Year Flood Zone
- 500 Year Flood Zone
- FEMA Floodway
- Appalachian Trail
- Railroad
- Municipal Boundary
- Map Sheet Matchline

Map Notes:
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1 inch = 200 feet
0 50 100 200 Feet

NO.	DATE	REVISIONS	BY	CHK	APP	APP

EVERSOURCE ENERGY

Salisbury Substation to Falls Village Substation 667 Line Reconductoring & Structure Replacement Project

Salisbury, CT

Map Sheet 06 of 11

April, 2019

ALL-POINTS TECHNOLOGY CORPORATION

MAP SHEET 07
Salisbury Substation to Falls Village Substation
667 Line Reconductoring & Structure Replacement Project
Structures 1027 - 1022
Town of Salisbury, Connecticut

AREA DESCRIPTION

Existing Land Use & Resource Areas
- Agricultural field
- Undeveloped, forest
- Residential
- Natural Diversity Database Area

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use & Resource Areas
- Agricultural field
- Undeveloped, forest
- Natural Diversity Database Area at structure 1027 and from structures 1026 to 1022

Water Resources
- Wetlands – W12, W13
- Wetland Cover Types – PEM, PSS
- Watercourses – S9

Wetland and Watercourse Crossings
- Wetland W13/Watercourse S9: construction mats for access

Right-of-Way Vegetation
- Hayfield
- Old Field
- Mixed Hardwood Forest

Access
- Structures 1027 to 1022: proposed access from Wells Hill Road

Road Crossings
- Wells Hill Road

Existing Maintained Right-of-Way Width / Proposed Right-of-Way Clearing
- 50 feet / 90 feet

ABUTTERS TO THE PROJECT RIGHT-OF-WAY

LLN Number	Parcel Address	Town	Owner Name
132	200 LIME ROCK ROAD	SALISBURY	RED MOUNTAIN VIEW LLC
133	WELLS HILL ROAD	SALISBURY	LESLIE DAY CRAIGE
134	463 WELLS HILL ROAD	SALISBURY	JAMES CRAIGE
135	WELLS HILL ROAD	SALISBURY	JAMES CRAIGE
137	331 WELLS HILL ROAD	SALISBURY	SUSAN G. VREELAND

- - Map Sheet 06 - -
Map Sheet 07

- - Map Sheet 07 - -
Map Sheet 08

132

134

NDDB Area

ACCESS FROM ROUTE 112 LIME ROCK ROAD

SPAN CROSSING - POSSIBLE RAILROAD BRIDGE

TEMPORARY IMPACT AREA: 648 SQ.FT.

TEMPORARY IMPACT AREA: 238 SQ.FT.

1027

1026

1025

1024

1023

1022

BELL DRIVE (PRIVATE ROAD)

W12

W13

S9

S9

SPAN CROSSING - POSSIBLE RAILROAD BRIDGE

133

135

137

Salisbury

NDDB Area

WELLS HILL ROAD

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INDEX MAP

Legend

- Proposed Structure
- Existing Structure
- Existing Structure to be removed
- Existing Right-of-Way (ROW)
- Overhead Eversource Line
- 5' Contour Line
- Stone Wall
- Fence
- Construction Safety Fence
- Gate
- Culvert
- Existing Access
- Proposed Access
- Proposed Alternate Access
- Access Road to be Improved
- Temporary Construction Matting
- Stone Work Pad
- Pull Pad
- Ordinary High Watermark
- Delineated Perennial Watercourse
- Delineated Intermittent Watercourse
- Drainage Channel
- Confirmed Vernal Pool Extent
- 100' Vernal Pool Envelope
- Delineated Wetland Boundary Outline
- Field Delineated Federal Wetland
- Field Delineated Connecticut Wetland Only
- Open Water
- Critical Habitat (2009)
- Natural Diversity Database Area (Dec. 2018)
- State-Owned Property (none in mapped extent)
- Eversource Owned Property
- Parcel Boundary
- FEMA 100-Year Flood Zone
- 500 Year Flood Zone
- FEMA Floodway
- Appalachian Trail
- Railroad
- Municipal Boundary
- Map Sheet Matchline

Map Notes:
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1 inch = 200 feet
0 50 100 200 Feet

NO.	DATE	REVISIONS	BY	CHK	APP	APP

EVERSOURCE ENERGY

Salisbury Substation to Falls Village Substation
667 Line
Reconductoring & Structure Replacement Project

Salisbury, CT

Map Sheet 07 of 11

April, 2019

ALL-POINTS TECHNOLOGY CORPORATION

MAP SHEET 08
Salisbury Substation to Falls Village Substation
667 Line Reconductoring & Structure Replacement Project
Structures 1022 - 1017
Town of Salisbury, Connecticut

AREA DESCRIPTION

Existing Land Use & Resource Areas
- Residential
- Open field
- Undeveloped, forest
- Natural Diversity Database Area

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use & Resource Areas
- Open field
- Undeveloped, forest
- Natural Diversity Database Area from structures 1022 to 1018

Water Resources
- Wetlands – W14, W15, W16, W17
- Wetland Cover Types – PSS, PEM
- Watercourses – S10, S11, S12

Wetland and Watercourse Crossings
- Watercourse S10: construction mats for access
- Watercourse S11: construction mats for access
- Wetland W16: construction mats for access
- Wetland W17: construction mats for access

Right-of-Way Vegetation
- Pasture
- Hayfield
- Old Field
- Mixed Hardwood Forest

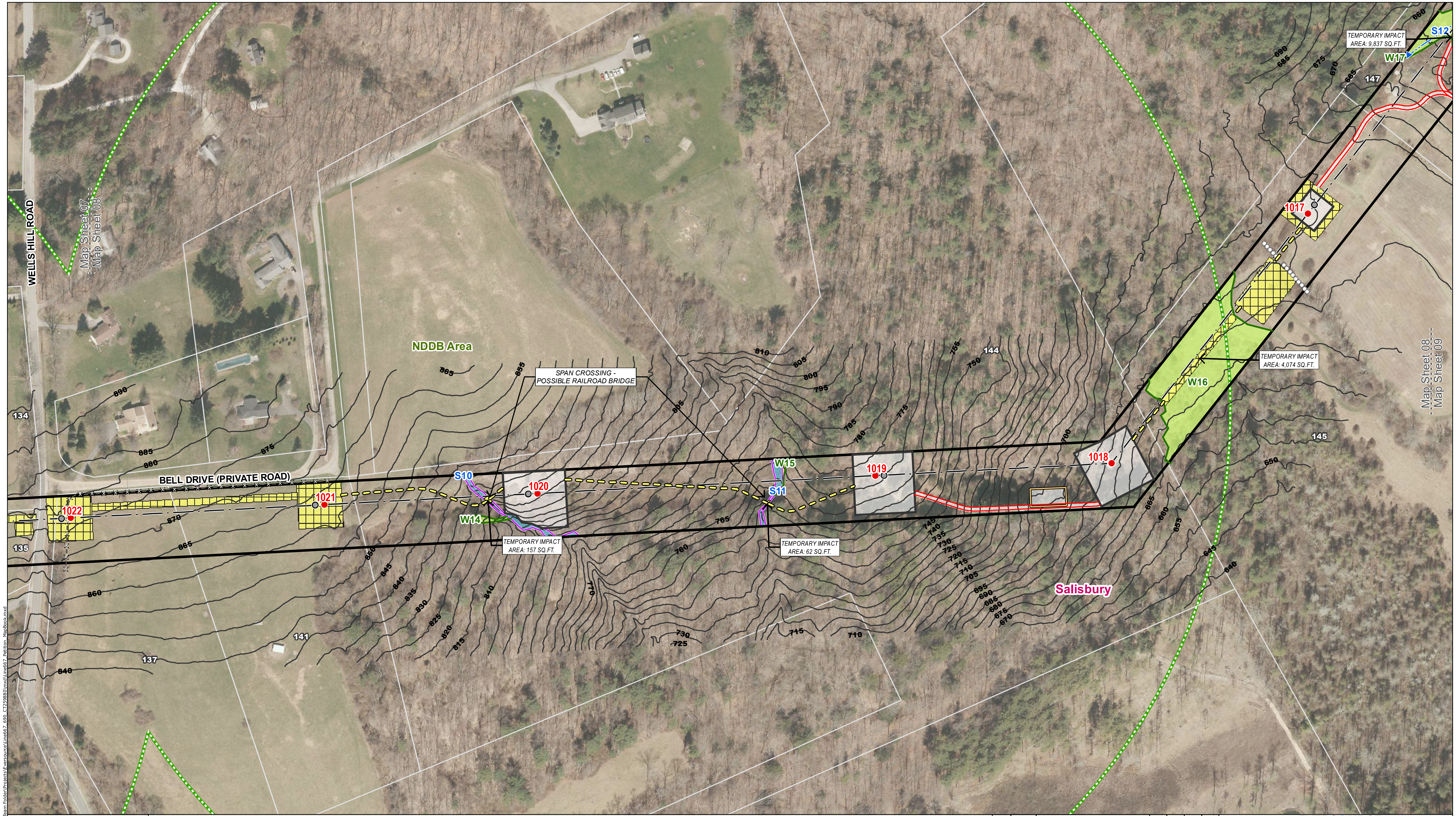
Access
- Structures 1022 to 1017: proposed, existing to be improved, and existing access from Wells Hill Road and Salmon Kill Road

Road Crossings
- Wells Hill Road

Existing Maintained Right-of-Way Width / Proposed Right-of-Way Clearing
- 50 feet / 90 feet

ABUTTERS TO THE PROJECT RIGHT-OF-WAY

LLN Number	Parcel Address	Town	Owner Name
134	463 WELLS HILL ROAD	SALISBURY	JAMES CRAIGE
135	WELLS HILL ROAD	SALISBURY	JAMES CRAIGE
137	331 WELLS HILL ROAD	SALISBURY	SUSAN G. VREELAND
141	331 WELLS HILL ROAD	SALISBURY	SUSAN G. VREELAND
144	WELLS HILL ROAD	SALISBURY	JEFFREY W. GREENBERG
145	319 SALMON KILL ROAD	SALISBURY	JEFFREY W. GREENBERG
147	317 SALMON KILL ROAD	SALISBURY	JEFFREY W. GREENBERG



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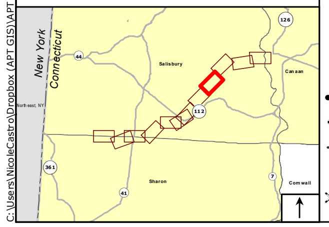


Legend

- Proposed Structure
- Existing Structure
- Existing Structure to be removed
- Existing Right-of-Way (ROW)
- Overhead Eversource Line
- 5' Contour Line
- Stone Wall
- Fence
- Construction Safety Fence
- Gate
- Culvert
- Existing Access
- Proposed Access
- Proposed Alternate Access
- Access Road to be Improved
- Temporary Construction Matting
- Stone Work Pad
- Pull Pad
- Ordinary High Watermark
- Delineated Perennial Watercourse
- Delineated Intermittent Watercourse
- Drainage Channel
- Confirmed Vernal Pool Extent
- 100' Vernal Pool Envelope
- Delineated Wetland Boundary Outline
- Field Delineated Federal Wetland
- Field Delineated Connecticut Wetland Only
- Open Water
- Critical Habitat (2009)
- Natural Diversity Database Area (Dec. 2018)
- State-Owned Property (none in mapped extent)
- Eversource Owned Property
- Parcel Boundary
- FEMA 100-Year Flood Zone
- 500 Year Flood Zone
- FEMA Floodway
- Appalachian Trail
- Railroad
- Municipal Boundary
- Map Sheet Matchline

Map Notes:
Parcel Boundaries provided by Eversource on 4/17/2017 (not from survey). ROW Boundary provided by Eversource (not from survey). Field Investigation/Data by APT/Davison Environmental.

N

1 inch = 200 feet
0 50 100 200 Feet

NO.	DATE	REVISIONS	BY	CHK	APP	APP

EVERSOURCE ENERGY

Salisbury Substation to Falls Village Substation
667 Line
Reconductoring & Structure Replacement Project

Salisbury, CT

Map Sheet 08 of 11

April, 2019

ALL-POINTS TECHNOLOGY CORPORATION

MAP SHEET 09

Salisbury Substation to Falls Village Substation
667 Line Reconductoring & Structure Replacement Project
Structures 1016 - 1012
Town of Salisbury, Connecticut

AREA DESCRIPTION

Existing Land Use & Resource Areas

- Undeveloped, forest
- Open field
- Residential
- Natural Diversity Database Area
- 100-year Flood Zone and Floodway

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use & Resource Areas

- Undeveloped, forest
- Open field
- Natural Diversity Database Area from structures 1014 to 1012
- Salmon Creek
- 100-year Flood Zone and Floodway of Salmon Creek

Water Resources

- Wetlands – W17, W18, W19, W20, W21
- Wetland Cover Types – PEM, PSS, PFO
- Watercourses – S12, S13, S14 (Salmon Creek), S15, S16
- Vernal Pool – VP1

Wetland and Watercourse Crossings

- Wetland W17 – construction mats for access and work pad
- Wetland W18 – construction mats for work pad
- Wetland W21/Watercourse S16 – construction mats for access

Right-of-Way Vegetation

- Old field
- Hayfield
- Mixed Hardwood Forest

Access

- Structures 1016 and 1015: proposed, existing to be improved, and existing access from Wells Hill Road and Salmon Kill Road
- Structures 1014 to 1012: existing to be improved access from Salmon Kill Road

Road Crossings

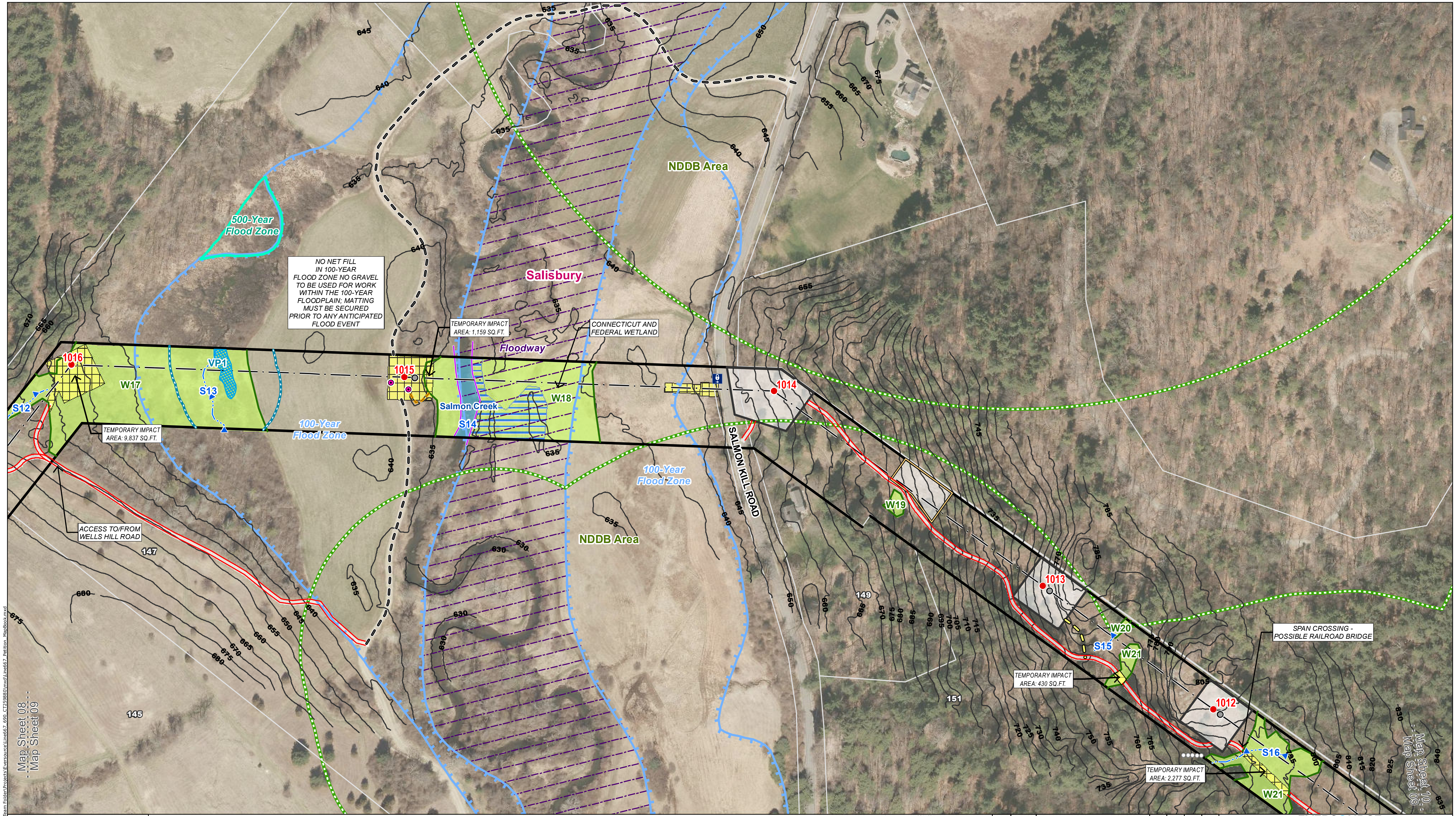
- Salmon Kill Road

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

- 50 feet / 90 feet

ABUTTERS TO THE PROJECT RIGHT-OF-WAY

LLN Number	Parcel Address	Town	Owner Name
145	319 SALMON KILL ROAD	SALISBURY	JEFFREY W. GREENBERG
147	317 SALMON KILL ROAD	SALISBURY	JEFFREY W. GREENBERG
149	290 SALMON KILL ROAD	SALISBURY	JAMES MONTANARI
151	SALMON KILL ROAD	SALISBURY	JEFFERY W. GREENBERG



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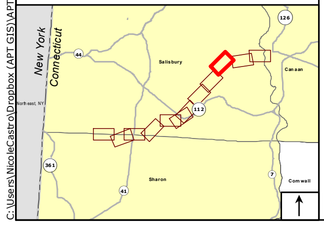
INDEX MAP



Legend

- Proposed Structure
- Existing Structure
- Existing Structure to be removed
- Existing Right-of-Way (ROW)
- Overhead Eversource Line
- 5' Contour Line
- Stone Wall
- Fence
- Construction Safety Fence
- Gate
- Culvert
- Existing Access
- Proposed Access
- Proposed Alternate Access
- Access Road to be Improved
- Temporary Construction Matting
- Stone Work Pad
- Pull Pad
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- Delineated Intermittent Watercourse
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- Confirmed Vernal Pool Extent
- 100' Vernal Pool Envelope
- Delineated Wetland Boundary Outline
- Field Delineated Federal Wetland
- Field Delineated Connecticut Wetland Only
- Open Water
- Critical Habitat (2009)
- Natural Diversity Database Area (Dec. 2018)
- State-Owned Property (none in mapped extent)
- Eversource Owned Property
- Parcel Boundary
- FEMA 100-Year Flood Zone
- 500 Year Flood Zone
- FEMA Floodway
- Appalachian Trail
- Railroad
- Municipal Boundary
- Map Sheet Matchline

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Field Investigation/Data by APT/Davison Environmental.

N

1 inch = 200 feet
0 50 100 200 Feet

NO.	DATE	REVISIONS	BY	CHK	APP	APP

EVERSOURCE ENERGY

Salisbury Substation to Falls Village Substation
667 Line
Reconductoring & Structure Replacement Project

Salisbury, CT

Map Sheet 09 of 11

April, 2019

ALL-POINTS TECHNOLOGY CORPORATION

MAP SHEET 10

Salisbury Substation to Falls Village Substation
667 Line Reconductoring & Structure Replacement Project
Structures 1011 - 1006
Town of Salisbury, Connecticut

AREA DESCRIPTION

Existing Land Use & Resource Areas
- Undeveloped, forest
- Residential
- Natural Diversity Database Area

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use & Resource Areas
- Undeveloped, forest
- Natural Diversity Database Area on structure 1011

Water Resources
- Wetlands – W21, W22, W23
- Wetland Cover Types – PFO, PSS
- Watercourses – S17 (Falls Hill Brook)

Wetland and Watercourse Crossings
- Wetland W21 – construction mats for access and work pad
- Wetland W23/Watercourse S17 – construction mats for access and work pad

Right-of-Way Vegetation
- Mixed Hardwood Forest
- Old Field

Access
- Structures 1011 to 1006: proposed, existing to be improved, and existing access from Salmon Kill Road and Falls Mountain Road

Road Crossings
- None

Existing Maintained Right-of-Way Width / Proposed Right-of-Way Clearing
- 50 feet / 90 feet

ABUTTERS TO THE PROJECT RIGHT-OF-WAY

LLN Number	Parcel Address	Town	Owner Name
151	SALMON KILL ROAD	SALISBURY	JEFFERY W. GREENBERG
153	BRINTON HILL ROAD	SALISBURY	CARRIE TIPPETT COLLINS
156	38 FALLS MOUNTAIN ROAD	SALISBURY	RANDY CHAPELL

NDDB Area

Salisbury

FALLS MOUNTAIN ROAD

BRINTON HILL ROAD

- Map Sheet 10 -
- Map Sheet 09 -

- Map Sheet 11 -
- Map Sheet 10 -

WORK PAD TO BE BI-LEVEL (UPPER TIER WILL BE ACCESSED FROM STR 1009 AND THE LOWER FROM STR 1007

TEMPORARY IMPACT AREA: 3,434 SQ.FT.

TEMPORARY IMPACT AREA: 1,004 SQ.FT.

ACCESS TO/FROM SALMON KILL ROAD

TEMPORARY IMPACT AREA: 3,193 SQ.FT.

SPAN CROSSING - POSSIBLE RAILROAD BRIDGE

Falls Hill Brook

S17

W21

W22

W23

1011

1010

1009

1008

1007

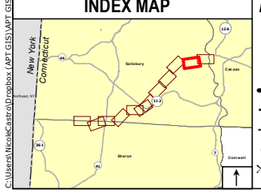
1006

156

151

153

INDEX MAP



Legend

- Proposed Structure
- Existing Structure
- Existing Structure to be removed
- Existing Right-of-Way (ROW)
- Overhead Eversource Line
- 5' Contour Line
- Stone Wall
- Fence
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- Open Water
- Critical Habitat (2009)
- Natural Diversity Database Area (Dec. 2018)
- State-Owned Property (none in mapped extent)
- Eversource Owned Property
- Parcel Boundary
- FEMA 100-Year Flood Zone
- 500 Year Flood Zone
- FEMA Floodway
- Appalachian Trail
- Railroad
- Municipal Boundary
- Map Sheet Matchline

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N

1 inch = 200 feet

0 50 100 200 Feet

NO.	DATE	REVISIONS	BY	CHK	APP	APP

EVERSOURCE ENERGY

Salisbury Substation to Falls Village Substation
667 Line
Reconductoring & Structure Replacement Project

Salisbury, CT

Map Sheet 10 of 11

April, 2019

ALL-POINTS TECHNOLOGY CORPORATION

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MAP SHEET 11

Salisbury Substation to Falls Village Substation
667 Line Reconductoring & Structure Replacement Project
Structures 1006 - 1001
Towns of Canaan and Salisbury, Connecticut

AREA DESCRIPTION

Existing Land Use & Resource Areas

- Undeveloped, forest
- Residential
- Housatonic River
- Natural Diversity Database Area
- Housatonic River
- 100-year Flood Zone and Floodway
- Falls Village Substation

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use & Resource Areas

- Undeveloped, forest
- Natural Diversity Database Area adjacent to structure 1003 to 1001
- Housatonic River
- 100-year Flood Zone and Floodway of Housatonic River
- Falls Village Substation

Water Resources

- Wetlands – W23, W24
- Wetland Cover Type: PSS
- Watercourses – S17 (Falls Hill Brook), S19 (Housatonic River)

Wetland and Watercourse Crossings

- Wetland W23/Watercourse S17 – construction mats for access and work pad

Right-of-Way Vegetation

- Mixed Hardwood Forest
- Old Field

Access

- Structures 1006 to 1005: proposed and existing access to be improved from Falls Mountain Road
- Structures 1004 to 1003: proposed and existing to be improved access from Dugway Road
- Structures 1002 to 1001: proposed and existing access from Water Street

Road Crossings

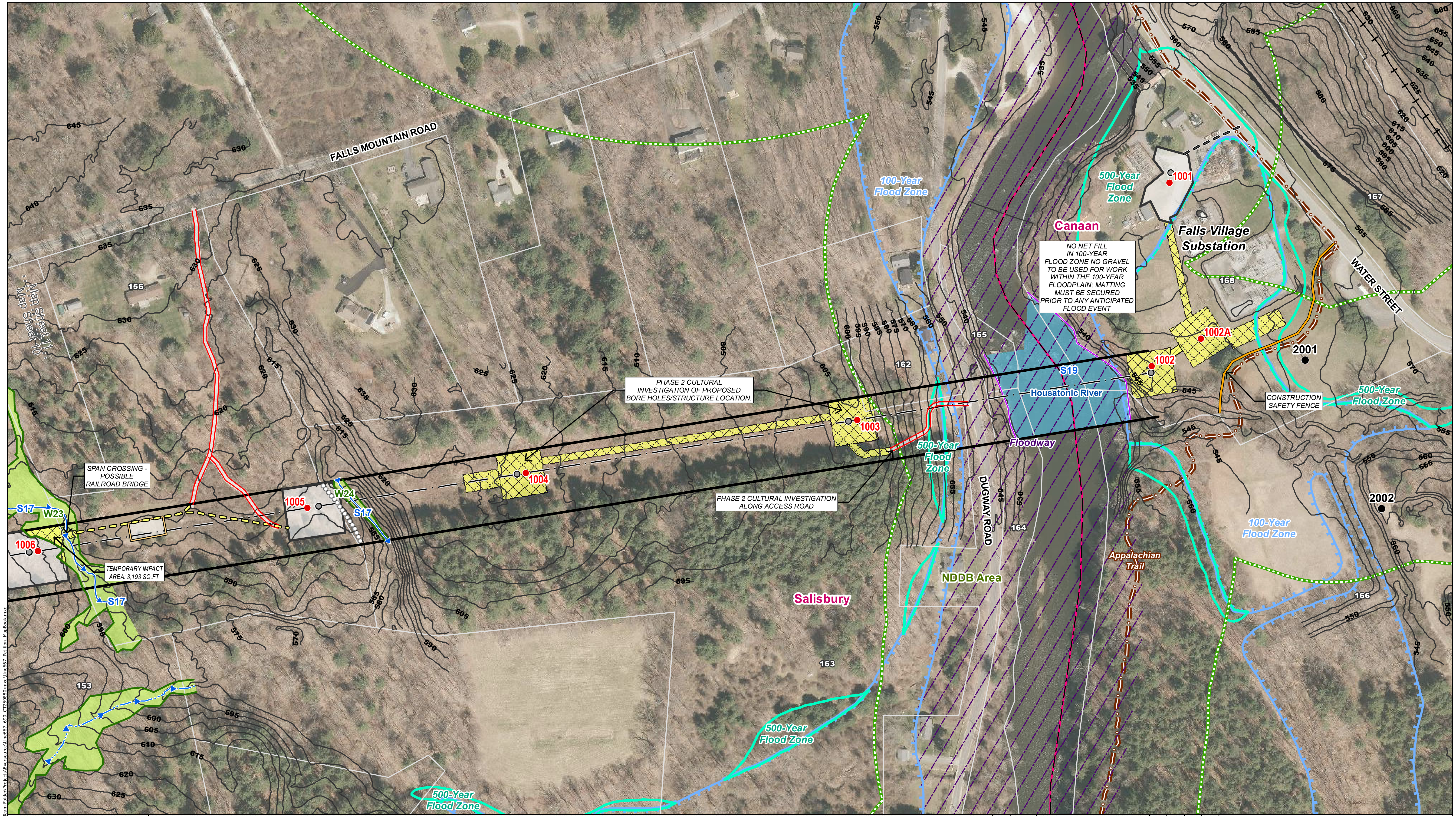
- Dugway Road

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

- 50 feet / 90 feet

ABUTTERS TO THE PROJECT RIGHT-OF-WAY

LLN Number	Parcel Address	Town	Owner Name
153	BRINTON HILL ROAD	SALISBURY	CARRIE TIPPETT COLLINS
156	38 FALLS MOUNTAIN ROAD	SALISBURY	RANDY CHAPELL
162	212 DUGWAY ROAD	SALISBURY	SANDRA K. TR BOYNTON
163	BRINTON HILL ROAD	SALISBURY	SANDRA K. TR BOYNTON
164	DUGWAY ROAD	SALISBURY	CYNTHIA L. TAVLIN
165	DUGWAY ROAD	SALISBURY	SANDRA K. TR BOYNTON
166	0 WATER STREET	CANAAN	USA DEPARTMENT OF INTERIOR
167	0 WATER STREET	CANAAN	FIRST LIGHT HYDRO GENERATING CO
168	35 WATER STREET	CANAAN	FIRST LIGHT HYDRO GENERATING CO.



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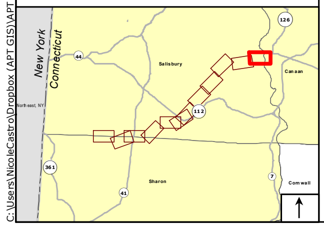
INDEX MAP



Legend

- Proposed Structure
- Existing Structure
- Existing Structure to be removed
- Existing Right-of-Way (ROW)
- Overhead Eversource Line
- 5' Contour Line
- Stone Wall
- Fence
- Construction Safety Fence
- Gate
- Culvert
- Existing Access
- Proposed Access
- Proposed Alternate Access
- Access Road to be Improved
- Temporary Construction Matting
- Stone Work Pad
- Pull Pad
- Ordinary High Watermark
- Delineated Perennial Watercourse
- Delineated Intermittent Watercourse
- Drainage Channel
- Confirmed Vernal Pool Extent
- 100' Vernal Pool Envelope
- Delineated Wetland Boundary Outline
- Field Delineated Federal Wetland
- Field Delineated Connecticut Wetland Only
- Open Water
- Critical Habitat (2009)
- Natural Diversity Database Area (Dec. 2018)
- State-Owned Property (none in mapped extent)
- Eversource Owned Property
- Parcel Boundary
- FEMA 100-Year Flood Zone
- 500 Year Flood Zone
- FEMA Floodway
- Appalachian Trail
- Railroad
- Municipal Boundary
- Map Sheet Matchline

Map Notes:
Parcel Boundaries provided by Eversource on 4/17/2017 (not from survey). ROW Boundary provided by Eversource (not from survey). Field Investigation/Data by APT/Davison Environmental.

N

1 inch = 200 feet

0 50 100 200 Feet

NO.	DATE	REVISIONS	BY	CHK	APP	APP

EVERSOURCE ENERGY

Salisbury Substation to Falls Village Substation
667 Line
Reconductoring & Structure Replacement Project

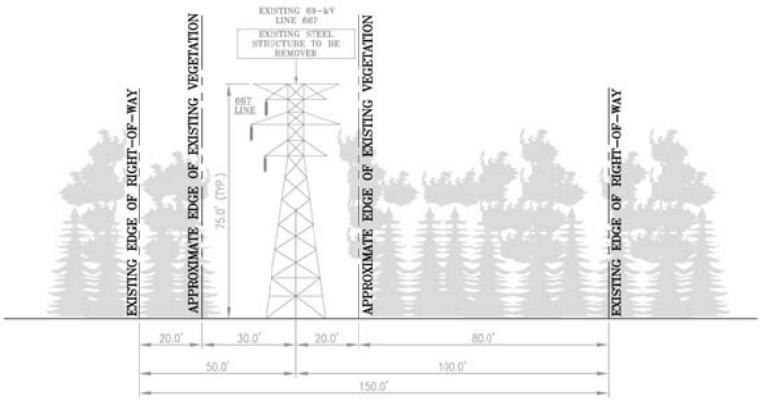
Canaan/Salisbury, CT

Map Sheet 11 of 11

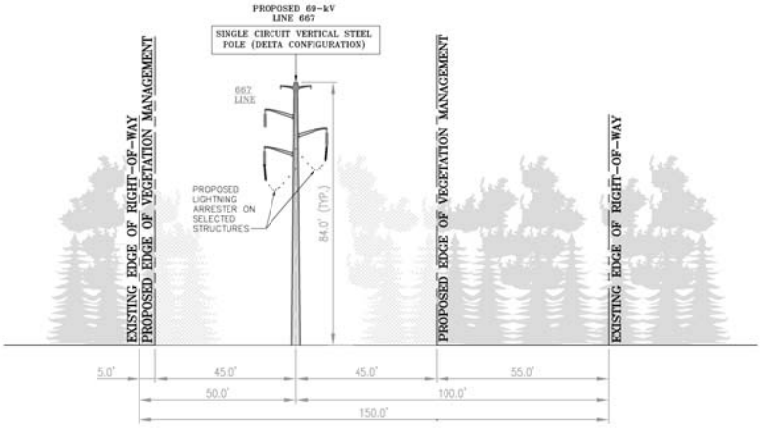
April, 2019

ALL-POINTS TECHNOLOGY CORPORATION

Attachment B: Line 667 – Right-of-Way Cross Section



EXISTING R.O.W. CONFIGURATION
SINGLE CIRCUIT VERTICAL LATTICE DESIGN
LOOKING FROM SALISBURY S/S TO FALLS VILLAGE S/S (6.10 MILES)
IN THE TOWNS OF SALISBURY, SHARON, AND CANAAN, CT



PROPOSED R.O.W. CONFIGURATION
NO ADDITIONAL RIGHT-OF-WAY REQUIRED
SINGLE CIRCUIT STEEL POLE DELTA DESIGN
LOOKING FROM SALISBURY S/S TO FALLS VILLAGE S/S (6.10 MILES)
IN THE TOWNS OF SALISBURY, SHARON, AND CANAAN, CT

EVERSOURCE ENERGY

SALIBURY SUBSTATION TO FALLS VILLAGE SUBSTATION
69-kV TRANSMISSION LINE 667
RIGHT OF WAY CROSS SECTION
SALIBURY, SHARON, & CANAAN, CONNECTICUT

DR SAM	CHKD SAM	APP	APP
DATE 05/06/19	DATE 05/06/19	DATE	DATE
H-SCALE 1" = 20'	SIZE D	FIELD BOOK & PAGES	
V-SCALE 1" = 20'	W.O.	E.C. DWG	
E.C. PROJ. NUMBER		DWG NO.	XS-1

Attachment C: List of Structure Replacements

Attachment C: List of Structure Replacements

667 Line		Existing Structure Height (1)	Proposed Structure Height(1)	Increase in Height	Direct Embed/ Foundations
#	Structure #				
1	1052	66	79	14	Direct Embed
2	1051 *	66	70	5	Foundation
3	1050	66	93	27	Direct Embed
4	1049*	63	84	21	Foundation
5	1048*	63	79	16	Foundation
6	1047	81	102	21	Foundation
7	1046	66	79	14	Direct Embed
8	1045	66	79	14	Direct Embed
9	1044	75	88	14	Direct Embed
10	1043	66	97	32	Direct Embed
11	1042	75	88	14	Direct Embed
12	1041	63	79	16	Foundation
13	1040	81	111	30	Direct Embed
14	1039	81	115	34	Foundation
15	1038*	66	79	14	Foundation
16	1037	66	97	32	Direct Embed
17	1036	66	84	18	Direct Embed
18	1035	70	84	14	Direct Embed
19	1034	66	84	18	Direct Embed
20	1033	66	84	18	Direct Embed
21	1032*	72	84	12	Foundation
22	1031	84	102	18	Direct Embed
23	1030	66	84	18	Direct Embed
24	1029	66	79	14	Direct Embed
25	1028*	63	75	12	Foundation
26	1027	66	88	23	Direct Embed
27	1026*	63	70	7	Foundation
28	1025	66	102	36	Direct Embed
29	1024	70	79	9	Direct Embed
30	1023	66	84	18	Direct Embed
31	1022	66	88	23	Direct Embed
32	1021	66	79	14	Direct Embed
33	1020	66	79	14	Direct Embed
34	1019	66	84	18	Direct Embed
35	1018	63	79	16	Foundation
36	1017	66	84	18	Direct Embed
37	1016	63	84	21	Foundation
38	1015	84	102	18	Direct Embed
39	1014	63	84	21	Foundation
40	1013	70	84	14	Direct Embed
41	1012	66	79	14	Direct Embed
42	1011	66	93	27	Direct Embed
43	1010	63	79	16	Direct Embed
44	1009	70	84	14	Direct Embed
45	1008	70	88	18	Direct Embed
46	1007	79	106	27	Direct Embed
47	1006	66	88	23	Direct Embed
48	1005*	66	84	18	Foundation
49	1004	66	84	18	Direct Embed
50	1003	66	93	27	Foundation
51	1002	66	75	9	Foundation
52	1002A		65**		Direct Embed
53	1001	63	75	12	Foundation
		68	86	18	

(1) in feet above ground level

* The existing structures will be replaced with two-pole structures

** The new structure will be a three-pole structure

Attachment D: Wetlands and Watercourses Report

DAVISON ENVIRONMENTAL

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

Wetland Delineation

November 26, 2018 **DE Project No.: 2018-19**

Prepared For:	Eversource Energy 56 Prospect Street Hartford, CT 06103 Attn: David Askew
Eversource Project Name:	**667 Line Structure Replacement and Reconductoring**
Project Location:	**Salisbury and Canaan, CT**
Date(s) of Investigations:	February through April, 2018
Field Conditions:	Weather: variable, 30s to 50s Soil Moisture: variable, dry to moist
Wetland/Watercourse Delineation Methodology[1]:	☒Connecticut Inland Wetlands and Watercourses ☐Connecticut Tidal Wetlands ☐Massachusetts Wetlands ☒U.S. Army Corps of Engineers

The wetlands inspection was performed by:

Davison Environmental, LLC

Eric Davison
Professional Soil Scientist
Professional Wetland Scientist

Attachments:
Table 1: Delineated Wetlands and Watercourses
Wetland Delineation Field Forms

[1]*Wetlands and watercourses were delineated in accordance with applicable local, state and federal statutes, regulations and guidance.*

Table 1: Delineated Wetlands and Watercourses

Table 1: Delineated Wetlands and Watercourses
667 Line, Salisbury, CT

Aerial Map Sheet No.	Wetland No.	Dominant NWI Class[2]	Other NWI Classes	Dominant Water Regime	Associated Watercourse
1	W1	PEM	PFO	Seasonally Saturated-seepage	S1
1	W2	PSS	PFO	Seasonally Saturated-seepage	S2
1	W3	PSS	PFO	Seasonally Saturated-seepage	S3
2	W4	PSS	PFO	Seasonally Saturated-seepage	S4
2	W5	PSS	PFO	Seasonally Saturated-seepage	S5
3	W6	PEM	---	Seasonally Saturated-seepage	--
3	W7	PEM	---	Permanently Saturated	--
4	W8	PEM	PSS	Permanently Flooded	S6
4/5	W9	PSS	PFO	Seasonally Saturated-seepage	--
6	W10	PSS	PEM	Seasonally Saturated-seepage	S8
6	W11	PSS	PEM	Seasonally Saturated-seepage	--
7	W12	PEM	---	Seasonally Saturated-seepage	--
7	W13	PSS	PFO	Seasonally Saturated-seepage	S9
8	W14	PSS	PFO	Seasonally Saturated-seepage	S10
8	W15	PSS	PFO	Seasonally Saturated-seepage	S11
8	W16	PSS	PFO	Seasonally Saturated-seepage	--

Aerial Map Sheet No.	Wetland No.	Dominant NWI Class[2]	Other NWI Classes	Dominant Water Regime	Associated Watercourse
9	W17	PEM	PSS	Permanently Flooded	S12, S13
9	W18	PSS	PEM	Temporarily Flooded	S14
9	W19	PEM	---	Seansonally Saturated-perched	--
9	W20	PSS	PFO	Seansonally Saturated-perched	S15
9/10	W21	PSS	PFO	Seasonally Saturated-seepage	S15
10	W22	PFO	---	Seasonally Flooded	--
10	W23	PSS	---	Seasonally Saturated-seepage	S16
11	W24	PEM	---	Seasonally Saturated-seepage	S17

[2]Wetlands classified according to Cowardin et al 1979: PEM = Palustrine Emergent Wetland; PFO = Palustrine Forested Wetland; PSS = Palustrine Scrub-Shrub Wetland; POW = Palustrine Open Water.

Wetland Delineation Field Forms

Wetland Delineation Field Form

Wetland I.D.:	Wetland 1	Stream I.D.:	S1
Flag Location Method:	Site Sketch ☐	GPS (sub-meter) located ☒	

WETLAND HYDROLOGY:

NONTIDAL ☒

Intermittently Flooded ☐	Artificially Flooded ☐	Permanently Flooded ☐
Semipermanently Flooded ☐	Seasonally Flooded ☐	Temporarily Flooded ☐
Permanently Saturated ☐	Seasonally Saturated – seepage ☒	Seasonally Saturated - perched ☐
Comments:		

TIDAL ☐

Subtidal ☐	Regularly Flooded ☐	Irregularly Flooded ☐
Irregularly Flooded ☐		
Comments: None		

WETLAND TYPE:

SYSTEM:

Estuarine ☐	Riverine ☐	Palustrine ☒
Lacustrine ☐	Marine ☐	
Comments: None		

CLASS:

Emergent ☒	Scrub-shrub ☐	Forested ☐
Open Water ☐	Disturbed ☐	Wet Meadow ☐
Comments: None		

WATERCOURSE TYPE:

Perennial ☐	Intermittent ☒	Tidal ☐
Watercourse Name: None		
Comments: None		

SPECIAL AQUATIC HABITAT:

Vernal Pool Yes ☐ No ☒ Potential ☐	Other ☐
Vernal Pool Habitat Type: None	
Comments:	

SOILS:

Are field identified soils consistent with NRCS mapped soils?	Yes ☒	No ☐

DOMINANT PLANTS:

Reed Canarygrass* (Phalaris arundinacea)	

* denotes Connecticut Invasive Species Council invasive plant species

Wetland Delineation Field Form

Wetland I.D.:	Wetland 2	Stream I.D.:	S2
Flag Location Method:	Site Sketch ☐	GPS (sub-meter) located ☒	

WETLAND HYDROLOGY:

NONTIDAL ☒

Intermittently Flooded ☐	Artificially Flooded ☐	Permanently Flooded ☐
Semipermanently Flooded ☐	Seasonally Flooded ☐	Temporarily Flooded ☐
Permanently Saturated ☐	Seasonally Saturated – seepage ☒	Seasonally Saturated - perched ☐
Comments:		

TIDAL ☐

Subtidal ☐	Regularly Flooded ☐	Irregularly Flooded ☐
Irregularly Flooded ☐		
Comments: None		

WETLAND TYPE:

SYSTEM:

Estuarine ☐	Riverine ☐	Palustrine ☒
Lacustrine ☐	Marine ☐	
Comments: None		

CLASS:

Emergent ☐	Scrub-shrub ☒	Forested ☐
Open Water ☐	Disturbed ☐	Wet Meadow ☐
Comments: None		

WATERCOURSE TYPE:

Perennial ☒	Intermittent ☐	Tidal ☐
Watercourse Name: Long Pond Brook		
Comments: None		

SPECIAL AQUATIC HABITAT:

Vernal Pool Yes ☐ No ☒ Potential ☐	Other ☐
Vernal Pool Habitat Type: None	
Comments:	

SOILS:

Are field identified soils consistent with NRCS mapped soils?	Yes ☒	No ☐

DOMINANT PLANTS:

Morrow's Honeysuckle* (Lonicera morrowii)	
Multiflora Rose (Rosa multiflora)	

* denotes Connecticut Invasive Species Council invasive plant species

Wetland Delineation Field Form

Wetland I.D.:	Wetland 3	Stream I.D.:	S3
Flag Location Method:	Site Sketch ☐	GPS (sub-meter) located ☒	

WETLAND HYDROLOGY:

NONTIDAL ☒

Intermittently Flooded ☐	Artificially Flooded ☐	Permanently Flooded ☐
Semipermanently Flooded ☐	Seasonally Flooded ☐	Temporarily Flooded ☐
Permanently Saturated ☐	Seasonally Saturated – seepage ☒	Seasonally Saturated - perched ☐
Comments:		

TIDAL ☐

Subtidal ☐	Regularly Flooded ☐	Irregularly Flooded ☐
Irregularly Flooded ☐		
Comments: None		

WETLAND TYPE:

SYSTEM:

Estuarine ☐	Riverine ☐	Palustrine ☒
Lacustrine ☐	Marine ☐	
Comments: None		

CLASS:

Emergent ☐	Scrub-shrub ☒	Forested ☐
Open Water ☐	Disturbed ☐	Wet Meadow ☐
Comments: None		

WATERCOURSE TYPE:

Perennial ☐	Intermittent ☒	Tidal ☐
Watercourse Name: None		
Comments: None		

SPECIAL AQUATIC HABITAT:

Vernal Pool Yes ☐ No ☒ Potential ☐	Other ☐
Vernal Pool Habitat Type: None	
Comments:	

SOILS:

Are field identified soils consistent with NRCS mapped soils?	Yes ☒	No ☐

DOMINANT PLANTS:

Morrow's Honeysuckle* (Lonicera morrowii)	
Green Ash (Fraxinus pennsylvanica)	
Red Maple (Acer rubrum)	

* denotes Connecticut Invasive Species Council invasive plant species

Wetland Delineation Field Form

Wetland I.D.:	Wetland 4	Stream I.D.:	S4
Flag Location Method:	Site Sketch ☐	GPS (sub-meter) located ☒	

WETLAND HYDROLOGY:

NONTIDAL ☒

Intermittently Flooded ☐	Artificially Flooded ☐	Permanently Flooded ☐
Semipermanently Flooded ☐	Seasonally Flooded ☐	Temporarily Flooded ☐
Permanently Saturated ☐	Seasonally Saturated – seepage ☒	Seasonally Saturated - perched ☐
Comments:		

TIDAL ☐

Subtidal ☐	Regularly Flooded ☐	Irregularly Flooded ☐
Irregularly Flooded ☐		
Comments: None		

WETLAND TYPE:

SYSTEM:

Estuarine ☐	Riverine ☐	Palustrine ☒
Lacustrine ☐	Marine ☐	
Comments: None		

CLASS:

Emergent ☐	Scrub-shrub ☒	Forested ☐
Open Water ☐	Disturbed ☐	Wet Meadow ☐
Comments: None		

WATERCOURSE TYPE:

Perennial ☒	Intermittent ☐	Tidal ☐
Watercourse Name: None		
Comments: None		

SPECIAL AQUATIC HABITAT:

Vernal Pool Yes ☐ No ☒ Potential ☐	Other ☐
Vernal Pool Habitat Type: None	
Comments:	

SOILS:

Are field identified soils consistent with NRCS mapped soils?	Yes ☒	No ☐

DOMINANT PLANTS:

Morrow's Honeysuckle* (Lonicera morrowii)	

* denotes Connecticut Invasive Species Council invasive plant species

Wetland Delineation Field Form

Wetland I.D.:	Wetland 5	Stream I.D.:	S5
Flag Location Method:	Site Sketch ☐	GPS (sub-meter) located ☒	

WETLAND HYDROLOGY:

NONTIDAL ☒

Intermittently Flooded ☐	Artificially Flooded ☐	Permanently Flooded ☐
Semipermanently Flooded ☐	Seasonally Flooded ☐	Temporarily Flooded ☐
Permanently Saturated ☐	Seasonally Saturated – seepage ☒	Seasonally Saturated - perched ☐
Comments:		

TIDAL ☐

Subtidal ☐	Regularly Flooded ☐	Irregularly Flooded ☐
Irregularly Flooded ☐		
Comments: None		

WETLAND TYPE:

SYSTEM:

Estuarine ☐	Riverine ☐	Palustrine ☒
Lacustrine ☐	Marine ☐	
Comments: None		

CLASS:

Emergent ☐	Scrub-shrub ☒	Forested ☐
Open Water ☐	Disturbed ☐	Wet Meadow ☐
Comments: None		

WATERCOURSE TYPE:

Perennial ☒	Intermittent ☐	Tidal ☐
Watercourse Name: None		
Comments: None		

SPECIAL AQUATIC HABITAT:

Vernal Pool Yes ☐ No ☒ Potential ☐	Other ☐
Vernal Pool Habitat Type: None	
Comments:	

SOILS:

Are field identified soils consistent with NRCS mapped soils?	Yes ☒	No ☐

DOMINANT PLANTS:

Eastern Red Cedar (Juniperus virginiana)	
Reed Canarygrass* (Phalaris arundinacea)	
Silky Dogwood (Cornus amomum)	
Skunk Cabbage (Symplocarpus foetidus)	

* denotes Connecticut Invasive Species Council invasive plant species

Wetland Delineation Field Form

Wetland I.D.:	Wetland 6	Stream I.D.:	NA
Flag Location Method:	Site Sketch ☐	GPS (sub-meter) located ☒	

WETLAND HYDROLOGY:

NONTIDAL ☒

Intermittently Flooded ☐	Artificially Flooded ☐	Permanently Flooded ☐
Semipermanently Flooded ☐	Seasonally Flooded ☐	Temporarily Flooded ☐
Permanently Saturated ☐	Seasonally Saturated – seepage ☒	Seasonally Saturated - perched ☐
Comments:		

TIDAL ☐

Subtidal ☐	Regularly Flooded ☐	Irregularly Flooded ☐
Irregularly Flooded ☐		
Comments: None		

WETLAND TYPE:

SYSTEM:

Estuarine ☐	Riverine ☐	Palustrine ☒
Lacustrine ☐	Marine ☐	
Comments: None		

CLASS:

Emergent ☒	Scrub-shrub ☐	Forested ☐
Open Water ☐	Disturbed ☐	Wet Meadow ☐
Comments: None		

WATERCOURSE TYPE:

Perennial ☐	Intermittent ☐	Tidal ☐
Watercourse Name: None		
Comments: None		

SPECIAL AQUATIC HABITAT:

Vernal Pool Yes ☐ No ☒ Potential ☐	Other ☐
Vernal Pool Habitat Type: None	
Comments:	

SOILS:

Are field identified soils consistent with NRCS mapped soils?	Yes ☒	No ☐

DOMINANT PLANTS:

Reed Canarygrass* (Phalaris arundinacea)	

* denotes Connecticut Invasive Species Council invasive plant species

Wetland Delineation Field Form

Wetland I.D.:	Wetland 7	Stream I.D.:	NA
Flag Location Method:	Site Sketch ☐	GPS (sub-meter) located ☒	

WETLAND HYDROLOGY:

NONTIDAL ☒

Intermittently Flooded ☐	Artificially Flooded ☐	Permanently Flooded ☐
Semipermanently Flooded ☐	Seasonally Flooded ☐	Temporarily Flooded ☐
Permanently Saturated ☒	Seasonally Saturated – seepage ☐	Seasonally Saturated - perched ☐
Comments:		

TIDAL ☐

Subtidal ☐	Regularly Flooded ☐	Irregularly Flooded ☐
Irregularly Flooded ☐		
Comments: None		

WETLAND TYPE:

SYSTEM:

Estuarine ☐	Riverine ☐	Palustrine ☒
Lacustrine ☐	Marine ☐	
Comments: None		

CLASS:

Emergent ☒	Scrub-shrub ☐	Forested ☐
Open Water ☐	Disturbed ☐	Wet Meadow ☐
Comments: None		

WATERCOURSE TYPE:

Perennial ☐	Intermittent ☐	Tidal ☐
Watercourse Name: None		
Comments: None		

SPECIAL AQUATIC HABITAT:

Vernal Pool Yes ☐ No ☒ Potential ☐	Other ☐
Vernal Pool Habitat Type: None	
Comments:	

SOILS:

Are field identified soils consistent with NRCS mapped soils?	Yes ☒	No ☐

DOMINANT PLANTS:

Reed Canarygrass* (Phalaris arundinacea)	

* denotes Connecticut Invasive Species Council invasive plant species

Wetland Delineation Field Form

Wetland I.D.:	Wetland 8	Stream I.D.:	S6
Flag Location Method:	Site Sketch ☐	GPS (sub-meter) located ☒	

WETLAND HYDROLOGY:

NONTIDAL ☒

Intermittently Flooded ☐	Artificially Flooded ☐	Permanently Flooded ☒
Semipermanently Flooded ☐	Seasonally Flooded ☐	Temporarily Flooded ☐
Permanently Saturated ☐	Seasonally Saturated – seepage ☐	Seasonally Saturated - perched ☐
Comments:		

TIDAL ☐

Subtidal ☐	Regularly Flooded ☐	Irregularly Flooded ☐
Irregularly Flooded ☐		
Comments: None		

WETLAND TYPE:

SYSTEM:

Estuarine ☐	Riverine ☐	Palustrine ☒
Lacustrine ☐	Marine ☐	
Comments: None		

CLASS:

Emergent ☒	Scrub-shrub ☒	Forested ☐
Open Water ☐	Disturbed ☐	Wet Meadow ☐
Comments: None		

WATERCOURSE TYPE:

Perennial ☒	Intermittent ☐	Tidal ☐
Watercourse Name: None		
Comments: None		

SPECIAL AQUATIC HABITAT:

Vernal Pool Yes ☐ No ☒ Potential ☐	Other ☒
Vernal Pool Habitat Type: None	
Comments: Rich Fen Habitat	

SOILS:

Are field identified soils consistent with NRCS mapped soils?	Yes ☒	No ☐

DOMINANT PLANTS:

Common Cattail (Typha latifolia)	Arrowwood (Viburnum dentatum)
Reed Canarygrass* (Phalaris arundinacea)	
Tussock Sedge (Carex stricta)	
Skunk Cabbage (Symplocarpus foetidus)	
Gray Dogwood (Cornus racemosa)	

* denotes Connecticut Invasive Species Council invasive plant species

Wetland Delineation Field Form

Wetland I.D.:	Wetland9	Stream I.D.:	NA
Flag Location Method:	Site Sketch ☐	GPS (sub-meter) located ☒	

WETLAND HYDROLOGY:

NONTIDAL ☒

Intermittently Flooded ☐	Artificially Flooded ☐	Permanently Flooded ☐
Semipermanently Flooded ☐	Seasonally Flooded ☐	Temporarily Flooded ☐
Permanently Saturated ☐	Seasonally Saturated – seepage ☒	Seasonally Saturated - perched ☐
Comments:		

TIDAL ☐

Subtidal ☐	Regularly Flooded ☐	Irregularly Flooded ☐
Irregularly Flooded ☐		
Comments: None		

WETLAND TYPE:

SYSTEM:

Estuarine ☐	Riverine ☐	Palustrine ☒
Lacustrine ☐	Marine ☐	
Comments: None		

CLASS:

Emergent ☐	Scrub-shrub ☒	Forested ☐
Open Water ☐	Disturbed ☐	Wet Meadow ☐
Comments: None		

WATERCOURSE TYPE:

Perennial ☐	Intermittent ☐	Tidal ☐
Watercourse Name: None		
Comments: None		

SPECIAL AQUATIC HABITAT:

Vernal Pool Yes ☐ No ☒ Potential ☐	Other ☐
Vernal Pool Habitat Type: None	
Comments:	

SOILS:

Are field identified soils consistent with NRCS mapped soils?	Yes ☒	No ☐

DOMINANT PLANTS:

Eastern Red Cedar (Juniperus virginiana)	
Green Ash (Fraxinus pensylvanica)	
Morrow's Honeysuckle* (Lonicera morrowii)	

* denotes Connecticut Invasive Species Council invasive plant species

Wetland Delineation Field Form

Wetland I.D.:	Wetland 10	Stream I.D.:	S8
Flag Location Method:	Site Sketch ☐	GPS (sub-meter) located ☒	

WETLAND HYDROLOGY:

NONTIDAL ☒

Intermittently Flooded ☐	Artificially Flooded ☐	Permanently Flooded ☐
Semipermanently Flooded ☐	Seasonally Flooded ☐	Temporarily Flooded ☐
Permanently Saturated ☐	Seasonally Saturated – seepage ☒	Seasonally Saturated - perched ☐
Comments:		

TIDAL ☐

Subtidal ☐	Regularly Flooded ☐	Irregularly Flooded ☐
Irregularly Flooded ☐		
Comments: None		

WETLAND TYPE:

SYSTEM:

Estuarine ☐	Riverine ☐	Palustrine ☒
Lacustrine ☐	Marine ☐	
Comments: None		

CLASS:

Emergent ☒	Scrub-shrub ☐	Forested ☐
Open Water ☐	Disturbed ☐	Wet Meadow ☐
Comments: None		

WATERCOURSE TYPE:

Perennial ☒	Intermittent ☐	Tidal ☐
Watercourse Name: None		
Comments: None		

SPECIAL AQUATIC HABITAT:

Vernal Pool Yes ☐ No ☒ Potential ☐	Other ☒
Vernal Pool Habitat Type: None	
Comments: Calcareous Fen Habitat	

SOILS:

Are field identified soils consistent with NRCS mapped soils?	Yes ☒	No ☐

DOMINANT PLANTS:

Tussock Sedge (Carex stricta)	Shrubby Cinquefoil (Dasiphora fruticosa)
Skunk Cabbage (Symplocarpus foetidus)	
Sensitive Fern (Onoclea sensibilis)	
Morrow's Honeysuckle* (Lonicera morrowii)	
Tamarack (Larix laricina)	

* denotes Connecticut Invasive Species Council invasive plant species

Wetland Delineation Field Form

Wetland I.D.:	Wetland 11	Stream I.D.:	NA
Flag Location Method:	Site Sketch ☐	GPS (sub-meter) located ☒	

WETLAND HYDROLOGY:

NONTIDAL ☒

Intermittently Flooded ☐	Artificially Flooded ☐	Permanently Flooded ☐
Semipermanently Flooded ☐	Seasonally Flooded ☐	Temporarily Flooded ☐
Permanently Saturated ☐	Seasonally Saturated – seepage ☒	Seasonally Saturated - perched ☐
Comments:		

TIDAL ☐

Subtidal ☐	Regularly Flooded ☐	Irregularly Flooded ☐
Irregularly Flooded ☐		
Comments: None		

WETLAND TYPE:

SYSTEM:

Estuarine ☐	Riverine ☐	Palustrine ☒
Lacustrine ☐	Marine ☐	
Comments: None		

CLASS:

Emergent ☐	Scrub-shrub ☒	Forested ☐
Open Water ☐	Disturbed ☐	Wet Meadow ☐
Comments: None		

WATERCOURSE TYPE:

Perennial ☐	Intermittent ☐	Tidal ☐
Watercourse Name: None		
Comments: None		

SPECIAL AQUATIC HABITAT:

Vernal Pool Yes ☐ No ☒ Potential ☐	Other ☐
Vernal Pool Habitat Type: None	
Comments:	

SOILS:

Are field identified soils consistent with NRCS mapped soils?	Yes ☒	No ☐

DOMINANT PLANTS:

Morrow's Honeysuckle* (Lonicera morrowii)	
Meadowsweet (Spiraea latifolia)	
Reed Canarygrass* (Phalaris arundinacea)	
Sensitive Fern (Onoclea sensibilis)	

* denotes Connecticut Invasive Species Council invasive plant species

Wetland Delineation Field Form

Wetland I.D.:	Wetland 12	Stream I.D.:	NA
Flag Location Method:	Site Sketch ☐	GPS (sub-meter) located ☒	

WETLAND HYDROLOGY:

NONTIDAL ☒

Intermittently Flooded ☐	Artificially Flooded ☐	Permanently Flooded ☐
Semipermanently Flooded ☐	Seasonally Flooded ☐	Temporarily Flooded ☐
Permanently Saturated ☐	Seasonally Saturated – seepage ☒	Seasonally Saturated - perched ☐
Comments:		

TIDAL ☐

Subtidal ☐	Regularly Flooded ☐	Irregularly Flooded ☐
Irregularly Flooded ☐		
Comments: None		

WETLAND TYPE:

SYSTEM:

Estuarine ☐	Riverine ☐	Palustrine ☒
Lacustrine ☐	Marine ☐	
Comments: None		

CLASS:

Emergent ☒	Scrub-shrub ☐	Forested ☐
Open Water ☐	Disturbed ☐	Wet Meadow ☐
Comments: None		

WATERCOURSE TYPE:

Perennial ☐	Intermittent ☐	Tidal ☐
Watercourse Name: None		
Comments: None		

SPECIAL AQUATIC HABITAT:

Vernal Pool Yes ☐ No ☒ Potential ☐	Other ☐
Vernal Pool Habitat Type: None	
Comments:	

SOILS:

Are field identified soils consistent with NRCS mapped soils?	Yes ☒	No ☐

DOMINANT PLANTS:

Reed Canarygrass* (Phalaris arundinacea)	
Sensitive Fern (Onoclea sensibilis)	

* denotes Connecticut Invasive Species Council invasive plant species

Wetland Delineation Field Form

Wetland I.D.:	Wetland 13	Stream I.D.:	S9
Flag Location Method:	Site Sketch ☐	GPS (sub-meter) located ☒	

WETLAND HYDROLOGY:

NONTIDAL ☒

Intermittently Flooded ☐	Artificially Flooded ☐	Permanently Flooded ☐
Semipermanently Flooded ☐	Seasonally Flooded ☐	Temporarily Flooded ☐
Permanently Saturated ☐	Seasonally Saturated – seepage ☒	Seasonally Saturated - perched ☐
Comments:		

TIDAL ☐

Subtidal ☐	Regularly Flooded ☐	Irregularly Flooded ☐
Irregularly Flooded ☐		
Comments: None		

WETLAND TYPE:

SYSTEM:

Estuarine ☐	Riverine ☐	Palustrine ☒
Lacustrine ☐	Marine ☐	
Comments: None		

CLASS:

Emergent ☐	Scrub-shrub ☒	Forested ☐
Open Water ☐	Disturbed ☐	Wet Meadow ☐
Comments: None		

WATERCOURSE TYPE:

Perennial ☒	Intermittent ☐	Tidal ☐
Watercourse Name: None		
Comments: None		

SPECIAL AQUATIC HABITAT:

Vernal Pool Yes ☐ No ☒ Potential ☐	Other ☐
Vernal Pool Habitat Type: None	
Comments:	

SOILS:

Are field identified soils consistent with NRCS mapped soils?	Yes ☒	No ☐

DOMINANT PLANTS:

Morrow's Honeysuckle (Lonicera morrowii)	
Eastern Red Cedar (Juniperus virginiana)	

* denotes Connecticut Invasive Species Council invasive plant species

Wetland Delineation Field Form

Wetland I.D.:	Wetland 14	Stream I.D.:	S10
Flag Location Method:	Site Sketch ☐	GPS (sub-meter) located ☒	

WETLAND HYDROLOGY:

NONTIDAL ☒

Intermittently Flooded ☐	Artificially Flooded ☐	Permanently Flooded ☐
Semipermanently Flooded ☐	Seasonally Flooded ☐	Temporarily Flooded ☐
Permanently Saturated ☐	Seasonally Saturated – seepage ☒	Seasonally Saturated - perched ☐
Comments:		

TIDAL ☐

Subtidal ☐	Regularly Flooded ☐	Irregularly Flooded ☐
Irregularly Flooded ☐		
Comments: None		

WETLAND TYPE:

SYSTEM:

Estuarine ☐	Riverine ☐	Palustrine ☒
Lacustrine ☐	Marine ☐	
Comments: None		

CLASS:

Emergent ☐	Scrub-shrub ☒	Forested ☒
Open Water ☐	Disturbed ☐	Wet Meadow ☐
Comments: None		

WATERCOURSE TYPE:

Perennial ☒	Intermittent ☐	Tidal ☐
Watercourse Name: None		
Comments: None		

SPECIAL AQUATIC HABITAT:

Vernal Pool Yes ☐ No ☒ Potential ☐	Other ☐
Vernal Pool Habitat Type: None	
Comments:	

SOILS:

Are field identified soils consistent with NRCS mapped soils?	Yes ☒	No ☐

DOMINANT PLANTS:

Japanese Barberry* (Berberis thunbergii)	
Morrow's Honeysuckle (Lonicera morrowii)	
Green Ash (Fraxinus pensylvanica)	

* denotes Connecticut Invasive Species Council invasive plant species

Wetland Delineation Field Form

Wetland I.D.:	Wetland 15	Stream I.D.:	S11
Flag Location Method:	Site Sketch ☐	GPS (sub-meter) located ☒	

WETLAND HYDROLOGY:

NONTIDAL ☒

Intermittently Flooded ☐	Artificially Flooded ☐	Permanently Flooded ☐
Semipermanently Flooded ☐	Seasonally Flooded ☐	Temporarily Flooded ☐
Permanently Saturated ☐	Seasonally Saturated – seepage ☒	Seasonally Saturated - perched ☐
Comments:		

TIDAL ☐

Subtidal ☐	Regularly Flooded ☐	Irregularly Flooded ☐
Irregularly Flooded ☐		
Comments: None		

WETLAND TYPE:

SYSTEM:

Estuarine ☐	Riverine ☐	Palustrine ☒
Lacustrine ☐	Marine ☐	
Comments: None		

CLASS:

Emergent ☐	Scrub-shrub ☒	Forested ☒
Open Water ☐	Disturbed ☐	Wet Meadow ☐
Comments: None		

WATERCOURSE TYPE:

Perennial ☒	Intermittent ☐	Tidal ☐
Watercourse Name: None		
Comments: None		

SPECIAL AQUATIC HABITAT:

Vernal Pool Yes ☐ No ☒ Potential ☐	Other ☐
Vernal Pool Habitat Type: None	
Comments:	

SOILS:

Are field identified soils consistent with NRCS mapped soils?	Yes ☒	No ☐

DOMINANT PLANTS:

Green Ash (Fraxinus pennsylvanica)	
Morrow's Honeysuckle* (Lonicera morrowii)	

* denotes Connecticut Invasive Species Council invasive plant species

Wetland Delineation Field Form

Wetland I.D.:	Wetland 16	Stream I.D.:	NA
Flag Location Method:	Site Sketch ☐	GPS (sub-meter) located ☒	

WETLAND HYDROLOGY:

NONTIDAL ☒

Intermittently Flooded ☐	Artificially Flooded ☐	Permanently Flooded ☐
Semipermanently Flooded ☐	Seasonally Flooded ☐	Temporarily Flooded ☐
Permanently Saturated ☐	Seasonally Saturated – seepage ☒	Seasonally Saturated - perched ☐
Comments:		

TIDAL ☐

Subtidal ☐	Regularly Flooded ☐	Irregularly Flooded ☐
Irregularly Flooded ☐		
Comments: None		

WETLAND TYPE:

SYSTEM:

Estuarine ☐	Riverine ☐	Palustrine ☒
Lacustrine ☐	Marine ☐	
Comments: None		

CLASS:

Emergent ☐	Scrub-shrub ☒	Forested ☐
Open Water ☐	Disturbed ☐	Wet Meadow ☐
Comments: None		

WATERCOURSE TYPE:

Perennial ☐	Intermittent ☐	Tidal ☐
Watercourse Name: None		
Comments: None		

SPECIAL AQUATIC HABITAT:

Vernal Pool Yes ☐ No ☐ Potential ☐	Other ☒
Vernal Pool Habitat Type: None	
Comments: Calcareous fen	

SOILS:

Are field identified soils consistent with NRCS mapped soils?	Yes ☒	No ☐

DOMINANT PLANTS:

Great Angelica (Angelica atropurpurea)	Willow (Salix sp.)
Marsh Fern (Thelypteris palustris)	Speckled Alder (Alnus rugosa)
Purple Avens (Geum rivale)	Gray Dogwood (Cornus racemosa)
Swamp Buttercup (Ranunculus septentrionalis)	
Morrow's Honeysuckle* (Lonicera morrowii)	

* denotes Connecticut Invasive Species Council invasive plant species

Wetland Delineation Field Form

Wetland I.D.:	Wetland 17	Stream I.D.:	S12, S13
Flag Location Method:	Site Sketch ☐	GPS (sub-meter) located ☒	

WETLAND HYDROLOGY:

NONTIDAL ☒

Intermittently Flooded ☐	Artificially Flooded ☐	Permanently Flooded ☒
Semipermanently Flooded ☐	Seasonally Flooded ☐	Temporarily Flooded ☐
Permanently Saturated ☐	Seasonally Saturated – seepage ☐	Seasonally Saturated - perched ☐
Comments:		

TIDAL ☐

Subtidal ☐	Regularly Flooded ☐	Irregularly Flooded ☐
Irregularly Flooded ☐		
Comments: None		

WETLAND TYPE:

SYSTEM:

Estuarine ☐	Riverine ☐	Palustrine ☒
Lacustrine ☐	Marine ☐	
Comments: None		

CLASS:

Emergent ☒	Scrub-shrub ☒	Forested ☐
Open Water ☐	Disturbed ☐	Wet Meadow ☐
Comments: None		

WATERCOURSE TYPE:

Perennial ☐	Intermittent ☒	Tidal ☐
Watercourse Name: None		
Comments: None		

SPECIAL AQUATIC HABITAT:

Vernal Pool Yes ☒ No ☐ Potential ☐	Other ☐
Vernal Pool Habitat Type: Cryptic	
Comments:	

SOILS:

Are field identified soils consistent with NRCS mapped soils?	Yes ☒	No ☐

DOMINANT PLANTS:

Reed Canarygrass* (Phalaris arundinacea)	
Skunk Cabbage (Symplocarpus foetidus)	
Sensitive Fern (Onoclea sensibilis)	
Sweet Flag (Acorus calamus)	
Willow (Salix sp.)	

* denotes Connecticut Invasive Species Council invasive plant species

Wetland Delineation Field Form

Wetland I.D.:	Wetland 18	Stream I.D.:	S14
Flag Location Method:	Site Sketch ☐	GPS (sub-meter) located ☒	

WETLAND HYDROLOGY:

NONTIDAL ☒

Intermittently Flooded ☐	Artificially Flooded ☐	Permanently Flooded ☐
Semipermanently Flooded ☐	Seasonally Flooded ☐	Temporarily Flooded ☒
Permanently Saturated ☐	Seasonally Saturated – seepage ☐	Seasonally Saturated - perched ☐
Comments:		

TIDAL ☐

Subtidal ☐	Regularly Flooded ☐	Irregularly Flooded ☐
Irregularly Flooded ☐		
Comments: None		

WETLAND TYPE:

SYSTEM:

Estuarine ☐	Riverine ☒	Palustrine ☐
Lacustrine ☐	Marine ☐	
Comments: None		

CLASS:

Emergent ☒	Scrub-shrub ☒	Forested ☐
Open Water ☐	Disturbed ☐	Wet Meadow ☐
Comments: None		

WATERCOURSE TYPE:

Perennial ☒	Intermittent ☐	Tidal ☐
Watercourse Name: Salmon Creek		
Comments: None		

SPECIAL AQUATIC HABITAT:

Vernal Pool Yes ☐ No ☒ Potential ☐	Other ☐
Vernal Pool Habitat Type: None	
Comments:	

SOILS:

Are field identified soils consistent with NRCS mapped soils?	Yes ☒	No ☐

DOMINANT PLANTS:

Multiflora Rose* (Rosa multiflora)	
Sweetflag (Acorus calamus)	
Reed Canarygrass* (Phalaris arundinacea)	

* denotes Connecticut Invasive Species Council invasive plant species

Wetland Delineation Field Form

Wetland I.D.:	Wetland 19	Stream I.D.:	NA
Flag Location Method:	Site Sketch ☐	GPS (sub-meter) located ☒	

WETLAND HYDROLOGY:

NONTIDAL ☒

Intermittently Flooded ☐	Artificially Flooded ☐	Permanently Flooded ☐
Semipermanently Flooded ☐	Seasonally Flooded ☐	Temporarily Flooded ☐
Permanently Saturated ☐	Seasonally Saturated – seepage ☐	Seasonally Saturated - perched ☒
Comments:		

TIDAL ☐

Subtidal ☐	Regularly Flooded ☐	Irregularly Flooded ☐
Irregularly Flooded ☐		
Comments: None		

WETLAND TYPE:

SYSTEM:

Estuarine ☐	Riverine ☐	Palustrine ☒
Lacustrine ☐	Marine ☐	
Comments: None		

CLASS:

Emergent ☒	Scrub-shrub ☐	Forested ☐
Open Water ☐	Disturbed ☐	Wet Meadow ☐
Comments: None		

WATERCOURSE TYPE:

Perennial ☐	Intermittent ☐	Tidal ☐
Watercourse Name: None		
Comments: None		

SPECIAL AQUATIC HABITAT:

Vernal Pool Yes ☐ No ☒ Potential ☐	Other ☐
Vernal Pool Habitat Type: None	
Comments:	

SOILS:

Are field identified soils consistent with NRCS mapped soils?	Yes ☒	No ☐

DOMINANT PLANTS:

Sensitive Fern (Onoclea sensibilis)	
Morrow's Honeysuckly* (Lonicera morrowii)	
Reed Canarygrass* (Phalaris arundinacea)	
Meadowsweet (Spiraea latifolia)	
Tussock Sedge (Carex stricta)	

* denotes Connecticut Invasive Species Council invasive plant species

Wetland Delineation Field Form

Wetland I.D.:	Wetland 20	Stream I.D.:	S15
Flag Location Method:	Site Sketch ☐	GPS (sub-meter) located ☒	

WETLAND HYDROLOGY:

NONTIDAL ☒

Intermittently Flooded ☐	Artificially Flooded ☐	Permanently Flooded ☐
Semipermanently Flooded ☐	Seasonally Flooded ☐	Temporarily Flooded ☐
Permanently Saturated ☐	Seasonally Saturated – seepage ☐	Seasonally Saturated - perched ☒
Comments:		

TIDAL ☐

Subtidal ☐	Regularly Flooded ☐	Irregularly Flooded ☐
Irregularly Flooded ☐		
Comments: None		

WETLAND TYPE:

SYSTEM:

Estuarine ☐	Riverine ☐	Palustrine ☒
Lacustrine ☐	Marine ☐	
Comments: None		

CLASS:

Emergent ☐	Scrub-shrub ☒	Forested ☒
Open Water ☐	Disturbed ☐	Wet Meadow ☐
Comments: None		

WATERCOURSE TYPE:

Perennial ☐	Intermittent ☒	Tidal ☐
Watercourse Name: None		
Comments: None		

SPECIAL AQUATIC HABITAT:

Vernal Pool Yes ☐ No ☒ Potential ☐	Other ☐
Vernal Pool Habitat Type: None	
Comments:	

SOILS:

Are field identified soils consistent with NRCS mapped soils?	Yes ☒	No ☐

DOMINANT PLANTS:

Silky Dogwood (Cornus amomum)	
Morrow's Honeysuckle* (Lonicera morrowii)	
Sensitive Fern (Onoclea sensibilis)	
Multiflora Rose* (Rosa multiflora)	
Meadowsweet (Spiraea latifolia)	

* denotes Connecticut Invasive Species Council invasive plant species

Wetland Delineation Field Form

Wetland I.D.:	Wetland 21	Stream I.D.:	S16
Flag Location Method:	Site Sketch ☐	GPS (sub-meter) located ☒	

WETLAND HYDROLOGY:

NONTIDAL ☒

Intermittently Flooded ☐	Artificially Flooded ☐	Permanently Flooded ☐
Semipermanently Flooded ☐	Seasonally Flooded ☐	Temporarily Flooded ☐
Permanently Saturated ☐	Seasonally Saturated – seepage ☐	Seasonally Saturated - perched ☒
Comments:		

TIDAL ☐

Subtidal ☐	Regularly Flooded ☐	Irregularly Flooded ☐
Irregularly Flooded ☐		
Comments: None		

WETLAND TYPE:

SYSTEM:

Estuarine ☐	Riverine ☐	Palustrine ☒
Lacustrine ☐	Marine ☐	
Comments: None		

CLASS:

Emergent ☐	Scrub-shrub ☒	Forested ☒
Open Water ☐	Disturbed ☐	Wet Meadow ☐
Comments: None		

WATERCOURSE TYPE:

Perennial ☐	Intermittent ☒	Tidal ☐
Watercourse Name: None		
Comments: None		

SPECIAL AQUATIC HABITAT:

Vernal Pool Yes ☐ No ☒ Potential ☐	Other ☐
Vernal Pool Habitat Type: None	
Comments:	

SOILS:

Are field identified soils consistent with NRCS mapped soils?	Yes ☒	No ☐

DOMINANT PLANTS:

Silky Dogwood (Cornus amomum)	
Morrow's Honeysuckle* (Lonicera morrowii)	
Sensitive Fern (Onoclea sensibilis)	
Multiflora Rose* (Rosa multiflora)	
Meadowsweet (Spiraea latifolia)	

* denotes Connecticut Invasive Species Council invasive plant species

Wetland Delineation Field Form

Wetland I.D.:	Wetland 22	Stream I.D.:	NA
Flag Location Method:	Site Sketch ☐	GPS (sub-meter) located ☒	

WETLAND HYDROLOGY:

NONTIDAL ☒

Intermittently Flooded ☐	Artificially Flooded ☐	Permanently Flooded ☐
Semipermanently Flooded ☐	Seasonally Flooded ☒	Temporarily Flooded ☐
Permanently Saturated ☐	Seasonally Saturated – seepage ☐	Seasonally Saturated - perched ☐
Comments:		

TIDAL ☐

Subtidal ☐	Regularly Flooded ☐	Irregularly Flooded ☐
Irregularly Flooded ☐		
Comments: None		

WETLAND TYPE:

SYSTEM:

Estuarine ☐	Riverine ☐	Palustrine ☒
Lacustrine ☐	Marine ☐	
Comments: None		

CLASS:

Emergent ☐	Scrub-shrub ☐	Forested ☒
Open Water ☐	Disturbed ☐	Wet Meadow ☐
Comments: None		

WATERCOURSE TYPE:

Perennial ☐	Intermittent ☐	Tidal ☐
Watercourse Name: None		
Comments: None		

SPECIAL AQUATIC HABITAT:

Vernal Pool Yes ☐ No ☐ Potential ☒	Other ☐
Vernal Pool Habitat Type: None	
Comments: wetland continues offsite; wood frog heard chorusing in distance	

SOILS:

Are field identified soils consistent with NRCS mapped soils?	Yes ☒	No ☐

DOMINANT PLANTS:

Eastern Hemlock (Tsuga canadensis)	
Yellow Birch (Betula alleghaniensis)	
Red Maple (Acer rubrum)	
Highbush Blueberry (Vaccinium corymbosum)	
Winterberry (Ilex verticillata)	

* denotes Connecticut Invasive Species Council invasive plant species

Wetland Delineation Field Form

Wetland I.D.:	Wetland 23	Stream I.D.:	S17
Flag Location Method:	Site Sketch ☐	GPS (sub-meter) located ☒	

WETLAND HYDROLOGY:

NONTIDAL ☒

Intermittently Flooded ☐	Artificially Flooded ☐	Permanently Flooded ☐
Semipermanently Flooded ☐	Seasonally Flooded ☐	Temporarily Flooded ☐
Permanently Saturated ☐	Seasonally Saturated – seepage ☒	Seasonally Saturated - perched ☐
Comments:		

TIDAL ☐

Subtidal ☐	Regularly Flooded ☐	Irregularly Flooded ☐
Irregularly Flooded ☐		
Comments: None		

WETLAND TYPE:

SYSTEM:

Estuarine ☐	Riverine ☐	Palustrine ☒
Lacustrine ☐	Marine ☐	
Comments: None		

CLASS:

Emergent ☐	Scrub-shrub ☒	Forested ☐
Open Water ☐	Disturbed ☐	Wet Meadow ☐
Comments: None		

WATERCOURSE TYPE:

Perennial ☒	Intermittent ☐	Tidal ☐
Watercourse Name: Falls Hill Brook		
Comments: None		

SPECIAL AQUATIC HABITAT:

Vernal Pool Yes ☐ No ☒ Potential ☐	Other ☐
Vernal Pool Habitat Type: None	
Comments:	

SOILS:

Are field identified soils consistent with NRCS mapped soils?	Yes ☒	No ☐

DOMINANT PLANTS:

Specked Alder (Alnus rugosa)	
Cattail (Typha latifolia)	
Morrow's Honeysuckle* (Lonicera morrowii)	
Sedges (Carex sp.)	
Winterberry (Ilex verticillata)	

* denotes Connecticut Invasive Species Council invasive plant species

Wetland Delineation Field Form

Wetland I.D.:	Wetland 24	Stream I.D.:	S18
Flag Location Method:	Site Sketch ☐	GPS (sub-meter) located ☒	

WETLAND HYDROLOGY:

NONTIDAL ☒

Intermittently Flooded ☐	Artificially Flooded ☐	Permanently Flooded ☐
Semipermanently Flooded ☐	Seasonally Flooded ☐	Temporarily Flooded ☐
Permanently Saturated ☐	Seasonally Saturated – seepage ☒	Seasonally Saturated - perched ☐
Comments:		

TIDAL ☐

Subtidal ☐	Regularly Flooded ☐	Irregularly Flooded ☐
Irregularly Flooded ☐		
Comments: None		

WETLAND TYPE:

SYSTEM:

Estuarine ☐	Riverine ☐	Palustrine ☒
Lacustrine ☐	Marine ☐	
Comments: None		

CLASS:

Emergent ☒	Scrub-shrub ☐	Forested ☐
Open Water ☐	Disturbed ☐	Wet Meadow ☐
Comments: None		

WATERCOURSE TYPE:

Perennial ☒	Intermittent ☐	Tidal ☐
Watercourse Name: None		
Comments: None		

SPECIAL AQUATIC HABITAT:

Vernal Pool Yes ☐ No ☒ Potential ☐	Other ☐
Vernal Pool Habitat Type: None	
Comments:	

SOILS:

Are field identified soils consistent with NRCS mapped soils?	Yes ☒	No ☐

DOMINANT PLANTS:

Multiflora Rose* (Rosa multiflora)	
Morrow's Honeysuckle* (Lonicera morrowii)	
Skunk Cabbage (Symplocarpus foetidus)	
Green Ash (Fraxinus pennsylvanica)	

* denotes Connecticut Invasive Species Council invasive plant species

Attachment E: Vernal Pool Survey

DAVISON ENVIRONMENTAL

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

Vernal Pool Survey

August 12, 2018 **DE Project No.: 2018-19**

Prepared For:	Eversource Energy 56 Prospect Street Hartford, CT 06103
Eversource Project Name:	Salisbury Substation to Falls Village Substation 667 Line Reconductoring and Structure Replacement Project
Project Location:	Salisbury, Connecticut
Date(s) of Investigations:	March - May, 2018
Survey Methodology:	Visual and Audial Survey, and Dip Netting

The vernal pool survey was performed by:

Davison Environmental, LLC

Eric Davison
Wildlife Biologist
Professional Soil Scientist
Professional Wetland Scientist

INTRODUCTION

The following details vernal pool surveys conducted by Davison Environmental in support of The Connecticut Light and Power Company doing business as Eversource Energy's ("Eversource") petition to the Connecticut Siting Council for the 667 Line Reconductoring and Structure Replacement Project within an existing transmission line right-of-way ("ROW") in Salisbury, Connecticut ("Project").

VERNAL POOL DEFINITION

Several vernal pool definitions have been developed by both regulatory authorities and conservation organizations. The Connecticut Department of Energy and Environmental Protection (CT DEEP) generally describes vernal pools on its website but cautions that the data provided is informational in nature and should not supplant regulations of municipal inland wetlands agencies. CT DEEP describes vernal pools as *"small bodies of standing fresh water found throughout the spring*" that are "*usually temporary"* and "*result from various combinations of snowmelt, precipitation and high-water tables associated with the spring season*".

Calhoun and Klemens (2002) *Best development practices: Conserving pool-breeding amphibians in residential and commercial developments in the northeastern United States* (BDP Manual) provides the following operational definition of vernal pools:

Vernal pools are seasonal bodies of water that attain maximum depths in the spring or fall, and lack permanent surface water connections with other wetlands or water bodies. Pools fill with snowmelt or runoff in the spring, although some may be fed primarily by groundwater sources. The duration of surface flooding, known as hydroperiod, varies depending upon the pool and the year; vernal pool hydroperiods range along a continuum from less than 30 days to more than one year. Pools are generally small in size (<2 acres), with the extent of vegetation varying widely. They lack established fish populations, usually as a result of periodic drying, and support communities dominated by animals adapted to living in temporary, fishless pools. In the region, they provide essential breeding habitat for one or more wildlife species including Ambystomid salamanders (Ambystoma spp., called "mole salamanders" because they live in burrows), wood frogs (Rana sylvatica), and fairy shrimp (Eubranchipus spp.).

Vernal pool physical characteristics can vary widely while still providing habitat for indicator species. "Classic" vernal pools are natural depressions in a wooded upland with no permanent hydrologic connection to other wetland systems. Anthropogenic depressions such as quarry holes, old farm ponds and borrow pits can also provide similar habitat. Often, vernal pools are

depressions or impoundments embedded within larger wetland systems. These vernal pool habitats are commonly referred to as "cryptic" vernal pools.

Several species of amphibians depend on vernal pools for reproduction and development. These species are referred to as indicator[1] vernal pool species, and their presence in a temporary wetland during the breeding season helps to identify that area as a vernal pool. Indicator species present in Connecticut include the following:

- Blue-spotted salamander *(Ambystoma laterale)*;
- Wood frog *(Rana sylvatica)*;
- Spotted salamander *(Ambystoma maculatum)*;
- Jefferson salamander *(Ambystoma jeffersonianum)*;
- Marbled salamander *(Ambystoma opacum)*; and
- Fairy shrimp *(Branchiopoda anostraca)*.

Facultative vernal pool species are fauna that utilize but do not necessarily require vernal pools for reproductive success. Examples of facultative species include spotted turtles *(Clemmys guttata)* and four-toed salamander *(Hemidactylium scutatum)*. These species may breed or feed in vernal pools but are also capable of carrying out all phases of their lifecycle in other types of wetlands or water bodies. Evidence of breeding by facultative species alone is not considered indicative of the presence of a vernal pool.

EXISTING WETLANDS ALONG THE PROJECT ROW

The ROW traverses multiple steep till hills interspersed by deep stream valleys associated with the drainages of Wononpakook Lake, Beeslick Pond, Lorenzo and Bauer Ponds, Lake Tavolan and Salmon Creek. Project wetlands consist predominately of hillside groundwater slope wetlands[2] which have a saturated hydrology, or headwater streams with narrow flanking wetlands.

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[1] Calhoun and Klemens (2002) argue that "indicator" species is a better word than the commonly used "obligate" species, as they will occasionally breed in roadside ditches and small ponds that are not vernal pools.

[2] Groundwater slope wetlands develop on hillsides or slopes where groundwater discharges to the surface as springs and seeps. Groundwater flow into these wetlands can be continual or seasonal depending on the local geohydrology and on the

These two wetland/stream types do not have a hydrology that can support breeding by vernal pool indicator species.

The lack of vernal pool hydrology is a function of the rugged topography that characterizes the northwest highlands region, lying at the southern extension of the Berkshire and Taconic plateaus.

VERNAL POOL SURVEY & RESULTS

Vernal pool surveys were conducted by biologist Eric Davison of Davison Environmental, LLC coincident to wetland inspections conducted from March through May 2018. Field surveys were conducted to identify both species richness and abundance of indicator species. Survey methods used included visual surveys to identify adults, larvae and egg masses, audial surveys to record breeding choruses and dip-net surveys to identify amphibian larvae.

Of the 24 wetlands identified, only four wetlands (Wetland 8, Wetland 17, Wetland 18 and Wetland 22) had long duration ponding (e.g., areas of seasonal, semi-permanent or permanent flooding) and therefore had a hydroperiod long enough to support vernal pool breeding.

Of those four wetlands, only Wetland 17 contained a vernal pool (see Map Sheet 9). This vernal pool (Vernal Pool 1) is a cryptic pool that lies in the north-central portion of the wetland, likely continuing to the north (off ROW) in additional flooded portions of the wetland.

Wetland 17 is a tributary to Salmon Creek. The wetland drains to the northeast directly into Salmon Creek and is located within the 100-year flood zone. The eastern portions of the wetland are low lying and permanently flooded. Maximum depth in early spring exceeded two feet and stayed fairly consistent throughout the survey period. Due to the unsuitable hydrologic conditions, this portion of the wetland was not part of the Phase 2 survey area. The survey area was limited to the western portion of the wetland which lies on the bordering hillside and has a saturated groundwater-fed hydrology.

Wetland cover types include palustrine emergent and palustrine scrub-shrub within the maintained ROW, with scattered small trees are present. Dominant herbaceous vegetation

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evapotranspiration rates of the wetland and adjacent uplands (source:Wetlands, fourth edition. Mitsch, W.J. and Gosselink, J. G., 2007)

consists of reed canarygrass (*Phalaris arundinacea*), skunk cabbage (*Symplocarpus foetidus*), sensitive fern (*Onoclea sensibilis*) and sweet flag (*Acorus calamus*), along with other sedges (*Carex spp.*) and rushes (*Juncus spp.*). Dominant woody species include speckled alder (*Alnus rugosa*), willow (*Salix spp.*) and morrow's honeysuckle, with tree species including Green ash (*Fraxinus pennsylvanica*), red maple (*Acer rubrum*), American elm (*Ulmus americana*) and swamp white oak (*Quercus bicolor*).

Breeding indicator species include the spotted salamander (*Ambystoma maculatum*) and wood frog (*Lithobates sylvaticus*). Due to the dense vegetation, deep muck soils, deep water, and extensive ponding present within and beyond the ROW, a thorough survey of the wetland was not conducted. Rather, the minimum threshold for a Tier 1 pool (*per* Calhoun and Klemens, 2002), was documented. Greater than 25 spotted salamander egg masses were observed, several wood frog egg masses were observed, and a robust breeding chorus of wood frog was noted. Additional amphibian and reptile species observed in the wetland are listed in Table 1.

Table 1: Amphibians and Reptiles Observed

Common Name	Scienific Name	Life Stage
Spotted Salamander	*Ambystoma maculatum*	Egg Mass
Red-spotted Newt	*Notophthalmus viridescens viridescens*	Adult
Gray Treefrog	*Hyla versicolor*	Calling
Spring Peeper	*Pseudacris crucifer*	Calling
Green Frog	*Lithobates clamitans*	Tadpoles and Adult
Pickerel Frog	*Lithobates palustris*	Adult
Wood Frog	*Lithobates sylvaticus*	Adults/chorusing
Snapping Turtle	*Chelydra serpentina*	Adult and Juvenile
Painted Turtle	*Chrysemys picta ssp.*	Juvenile
Gartersnake	*Thamnophis sirtalis sirtalis*	Adult

Wetland 8 consists of the perimeter of Beeslick Pond. This permanently flooded waterbody did not have any backwater areas suitable to support vernal pools. Open water transitioned abruptly to emergent wetlands with a saturated hydrology.

Wetland 18 includes the floodway of Salmon Creek. There were no seasonally flooded areas within the ROW, but wood frog chorusing was heard in the portion of the wetland to the north (off ROW).

Wetland 22 is a larger wetland with only a small portion of the wetland extending into the southern edge of the ROW. The portions within and immediately adjacent to the ROW are topographically

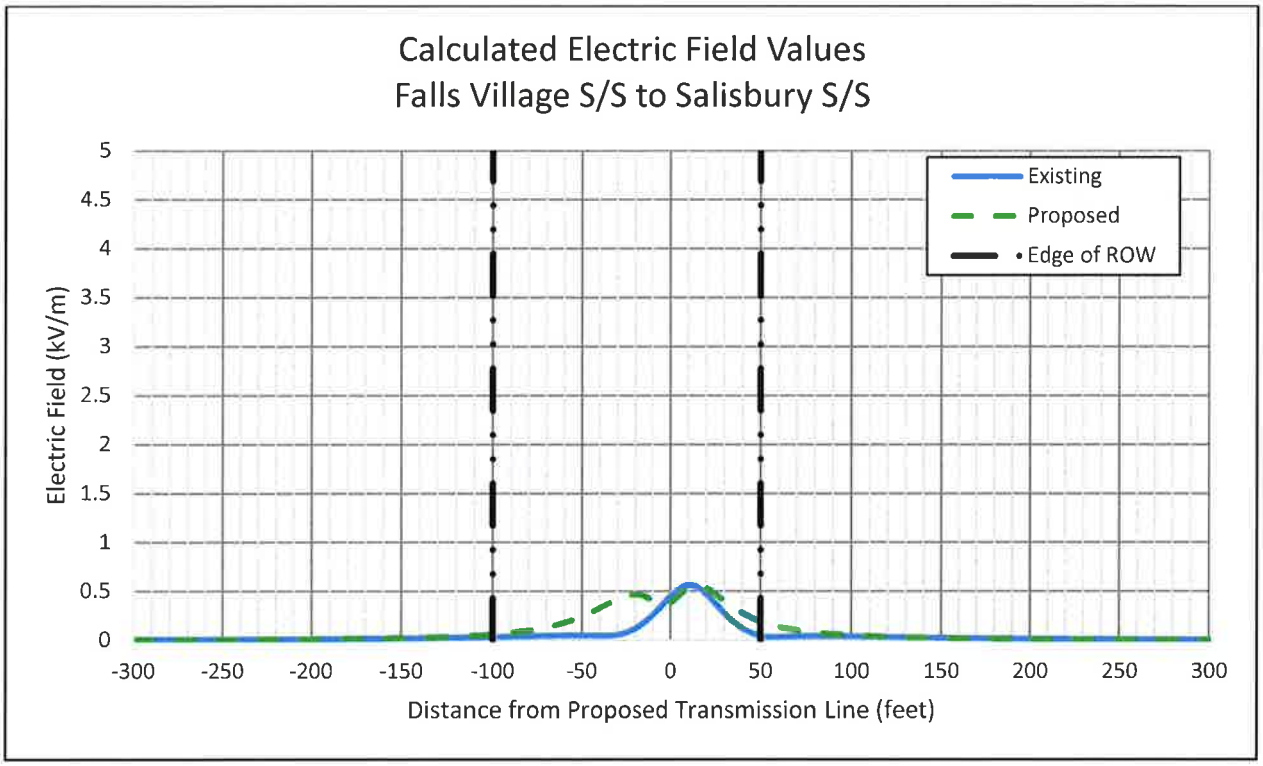
transitional and therefore have a saturated hydrology not capable of supporting amphibian breeding. However, wood frog chorusing was heard in the southern portions of the wetland off ROW.

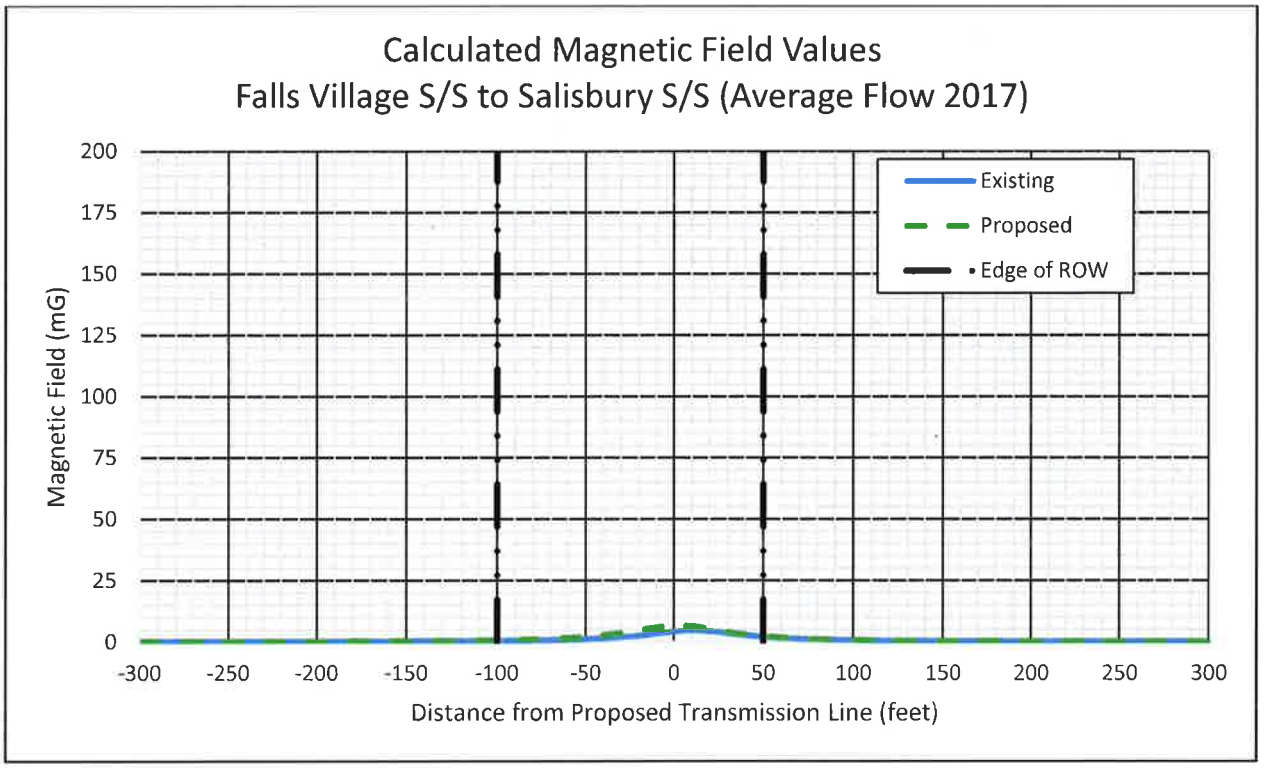
Vernal Pool 1

(photos taken 4-21-18)

Attachment F: EMF Graphs

Attachment G: EMF Graphs





Distance from Line (feet)	Magnetic Field (mG)		Electric Field (kV/m)	
	Existing	Proposed	Existing	Proposed
-300	0.1	0.1	0.01	0.01
-275	0.1	0.1	0.01	0.01
-250	0.1	0.1	0.01	0.01
-225	0.1	0.1	0.01	0.01
-200	0.1	0.2	0.01	0.01
-175	0.2	0.2	0.02	0.02
-150	0.2	0.3	0.02	0.02
-125	0.3	0.4	0.03	0.04
-100	0.4	0.7	0.03	0.06
-75	0.7	1.1	0.04	0.12
-50	1.1	2.0	0.05	0.24
-25	2.2	4.2	0.08	0.46
0	4.2	6.6	0.46	0.39
25	4.0	4.6	0.37	0.47
50	2.0	2.2	0.04	0.19
75	1.1	1.2	0.04	0.09
100	0.6	0.7	0.04	0.05
125	0.4	0.5	0.03	0.03
150	0.3	0.3	0.02	0.02
175	0.2	0.2	0.02	0.02
200	0.2	0.2	0.01	0.01
225	0.1	0.1	0.01	0.01
250	0.1	0.1	0.01	0.01
275	0.1	0.1	0.01	0.01
300	0.1	0.1	0.01	0.01

Attachment G: Letter to the Abutters and Affidavit

EVERSOURCE ENERGY

56 Prospect Street
Hartford, CT 06103

May 7, 2019

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 transmission upgrade project in your area.

Proposed Project Information
The upgrade, called the 667 Line Rebuild Project, involves replacing the existing steel structures on the 667 Line with weathering steel structures. These are steel poles with a finish that "weathers" or darkens over time. We are also installing conductor wire and upgrading the communication/ground wire associated with each structure. Due to the age and condition of the existing structures, they need to be replaced to provide continued reliability of the transmission line and maintain the integrity of the transmission system.

The project construction will be located entirely within existing rights of way (power line corridors) between the Salisbury Substation (Indian Mountain Road) and the Falls Village Substation (Water Street). The right of way traverses' parts of Sharon, Salisbury, and Canaan (Falls Village).

If the CSC approves this proposed work, construction is expected to begin in July 2019. We anticipate restoration of any affected areas will be completed by spring 2020.

Contact Information
Eversource is committed to being a good neighbor and doing our work with respect for you and your community. For more information please call 1-800-793-2202 or send an email to TransmissionInfo@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

Thank you.

Sincerely,

Ciara Stage
Eversource Project Manager

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:

- Henry Todd, First Selectman
  Town of Canaan (Falls Village)
  Falls Village Town Hall
  108 Main Street
  P.O. Box 47
  Falls Village, CT 06031

- Brent M. Colley, First Selectman
  Town of Sharon
  Sharon Town Hall
  63 Main Street
  P.O. Box 385
  Sharon, CT 06069

- Curtis Rand, First Selectman
  Town of Salisbury
  Town Hall
  27 Main Street
  P.O. Box 548
  Salisbury, CT 06068

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 maps in Attachment A to the Petition.

Andrew W. Lord
Transmission Siting Specialist

On this the 8th day of May 2019, before me, the undersigned representative, personally appeared, Andrew Lord, 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.

JOAN M. CIZEK
NOTARY PUBLIC - CT 173654
MY COMMISSION EXPIRES MAR. 31, 2022

Notary Public
My Commission expires: