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May 6, 2020

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

Re: Horton Cove Circuit Separation Project

Dear Ms. Bachman:

The Connecticut Light and Power Company doing business as Eversource Energy ("Eversource") is requesting a Declaratory Ruling that no Certificate of Environmental Compatibility and Public Need is required for the Horton Cove Circuit Separation Project ("Project") which proposes modifications to the existing 100, 1410, 1280, and 1080 lines, in the Town of Montville, Connecticut ("Petition").

Prior to submitting this Petition, Eversource representatives briefed municipal officials about the Project and provided written notice to all abutters of the proposed work and also of the filing of this Petition with the Council. Maps and line lists identifying the notified property owners are provided in the Petition as Attachment A: Horton Cove Circuit Separation Project – Aerial Maps.

Per the Council's instructions in response to COVID-19, Eversource is submitting this filing electronically and will be providing one hard copy for the Council's records. Eversource further understands that the Council will invoice the Company for the requisite $625 filing fee.

Sincerely,

Kathleen M. Shanley

Attachments

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

THE CONNECTICUT LIGHT AND POWER COMPANY

doing business as

EVERSOURCE ENERGY

PETITION TO THE CONNECTICUT SITING COUNCIL
FOR A DECLARATORY RULING OF
NO SUBSTANTIAL ADVERSE ENVIRONMENTAL EFFECT
FOR THE PROPOSED MODIFICATIONS TO THE EXISTING
100, 1410, 1280 and 1080 LINES IN THE TOWN OF MONTVILLE, CONNECTICUT

1. Introduction

The Connecticut Light and Power Company doing business as Eversource Energy ("Eversource" or the "Company") hereby petitions the Connecticut Siting Council ("Council") for a Declaratory Ruling that no Certificate of Environmental Compatibility and Public Need ("Certificate") is required pursuant to Section 16-50g et seq. of the Connecticut General Statutes for proposed modifications to the following transmission lines: 100, 1410, 1280, and 1080. The 100 Line operates at 69 kilovolts ("kV") and the 1410, 1280 and 1080 lines operate at 115 kV. All lines are located within existing Eversource rights-of-way ("ROWs"). The proposed modification work associated with these lines will be located in the Town of Montville, Connecticut ("Town"), 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

Eversource has determined that, due to the operational history of the four transmission lines currently supported on lattice structures at an aerial crossing of Horton Cove in Montville, this location is highly susceptible to outages associated with lightning strikes and interruptions resulting from other factors affecting the transmission system in the area. As a result, the four transmission lines currently supported on the Horton Cove lattice structures need to be

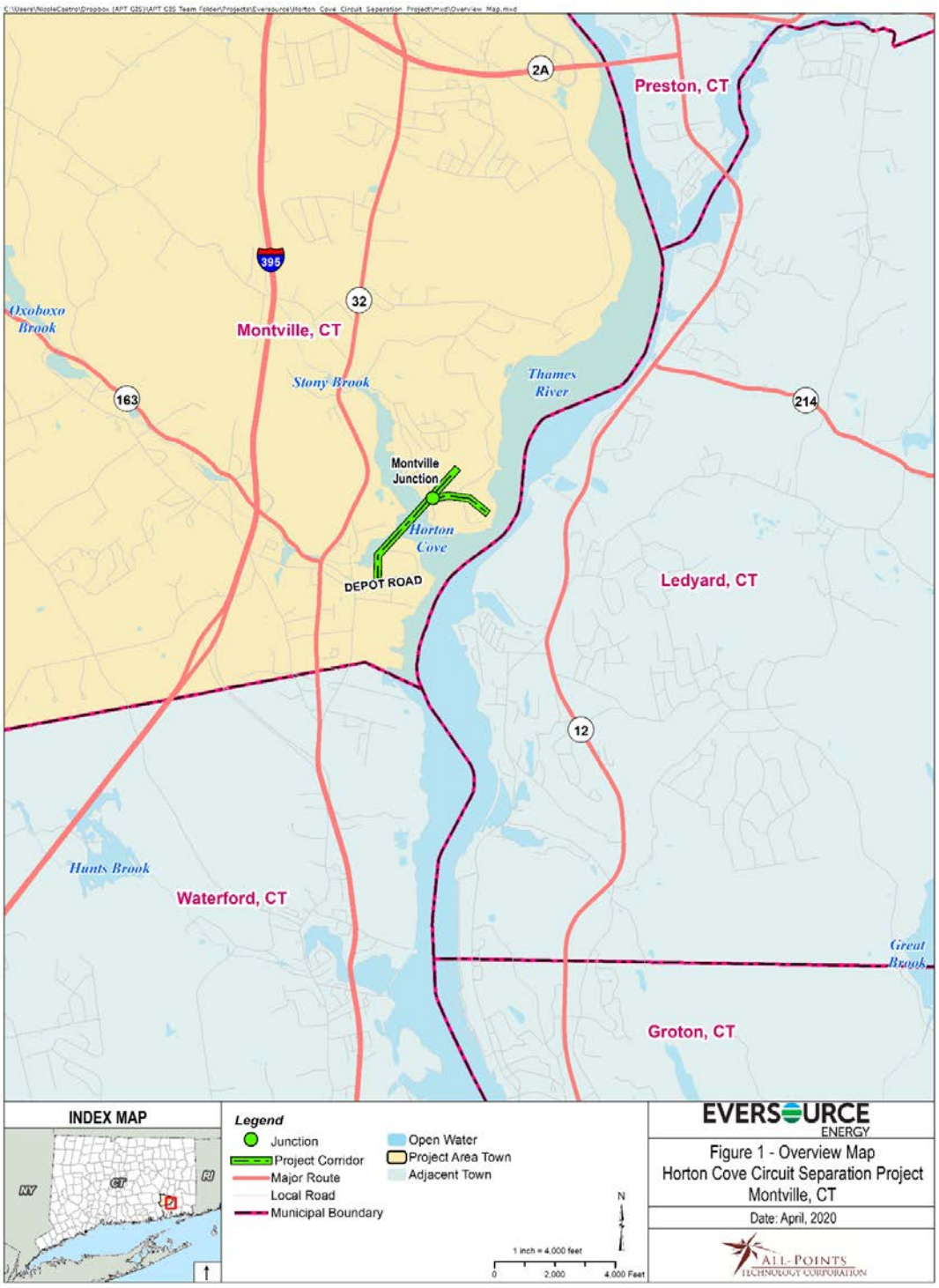
reconfigured to improve system reliability. Except for two double-circuit structures that will replace the quad-circuit structure on the west side of Horton Cove, all remaining structures will support a single circuit. As a result, this reconfiguration eliminates the potential that four circuits could be taken out of service due to a single contingency event, such as a structure failure or disruption caused by lightning strike.

In addition, in association with recent asset condition assessments, Eversource has also determined that four structures on the east side of the Horton Cove crossing[1] need to be replaced due to asset condition. The steel structures were identified as having steel corrosion and section loss in leg members, and the wood structures as having woodpecker damage, rotting, cracks and/or split pole tops. Finally, system reliability will be enhanced by the installation of lightning arrestors and the installation of optical ground wire ("OPGW").

Figure 1 bellow illustrates the area of the proposed Project.

[1] Immediately east of the Horton Cove crossing is Montville Junction where the ROW splits.

Figure 1: Project Overview Map



3. Existing Project Area

As shown on Attachment A, Horton Cover Circuit Separation Project – Aerial Map, the existing Project area is an approximately one-mile portion of Eversource's ROWs from Depot Road, crossing Gay Cemetery Pond and Horton Cove, to Montville Junction and continuing just past the point where the ROW splits with one ROW continuing to the north where the ROW ends at Fort Hill Farms Substation and the other ROW turning to the east (to the Thames River) where the ROW continues to Gales Ferry Substation. The 100 and 1410 lines was originally constructed in the 1920s and the 1080 and 1280 lines were constructed in the early 1960s. The width of the existing ROWs within the Project area varies from 160 feet to 280 feet. The 100, 1080, 1410 and 1280 lines also share portions of the ROW with one or both of two additional transmission lines, the 1000 Line and the 1090 Line, which are both 115-kV lines. The existing structure types supporting the 100, 1080, 1410 and 1280 lines at this location include quad-circuit steel lattice towers, double-circuit steel lattice towers, steel H-Frames and wood H-Frames. Distribution lines also occupy or bisect portions of the Project area.

On the west side of Horton Cove, the 100, 1080, 1410, 1280 lines are supported on double-circuit steel lattice towers to a quad-circuit steel lattice tower for crossing Horton Cove. The transmission lines then connect to a second quad-circuit steel lattice tower on the east side of Horton Cove and continue over Cove Road and Kitemaug Road to Montville Junction.

At Montville Junction, the ROW splits and the 100, 1280 and 1410 lines, supported on wood H-Frames and double-circuit lattice towers, continue east toward the Thames River. The 1080 Line, supported on single-circuit steel H-Frame structures, continues north toward Fort Hill Farms Substation.

4. Project Description

The Project scope consists of a partial rebuild and line separation on the 100, 1410, 1280 and 1080 transmission lines along approximately one mile of the ROWs in Montville, including the crossing of Horton Cove, from east of Depot Road to a point east of Point Breeze Road. The proposed work will involve the following:

- Replace one (1) quad-circuit steel lattice tower structure (Structure 7008) on the west side of Horton Cove with two (2) double-circuit galvanized steel monopole structures (Structure 7008A to support lines 1080 and 1280 and Structure 7008B to support lines 1410 and 100);

- Replace one (1) quad-circuit steel lattice tower structure (Structure 7009) on the east side of Horton Cove with four (4) single-circuit galvanized steel monopole structures (Structures 7009A, B, C and D to support the 1080, 1280, 1410, and 100 lines, respectively);

- Replace four (4) double-circuit steel lattice tower structures (Structures 6306, 7007, 7010, and 7011) with eight (8) single-circuit galvanized steel monopole structures. Each of the new structures will support a single transmission line. West of Horton Cove, Structures 6306A and B will support lines 1080 and 1280, respectively, and Structures 7007A and B will support lines 1410 and 100, respectively. East of Horton Cove, Structures 7010A and B, will support lines 1410 and 100, respectively, and Structures 7011A and B, will support lines 1410 and 100, respectively;

- Replace four (4) single-circuit wood H-Frame structures, due to asset condition, that support the 1280 Line (Structures 8342-8345) with four (4) single-circuit galvanized steel H-Frame structures; and,

- Replace one (1) single-circuit steel H-Frame structure (Structure 6309) with one (1) single-circuit galvanized steel H-Frame structure to support the new 1080 Line configuration.

In addition to the structure replacement work described above, the work will also entail:

- Replacing the existing 556 24/7 kcmil Aluminum Conductor Steel Reinforced (ACSR) and 1272 45/7 kcmil ACSR conductors with 1590 54/19 kcmil Aluminum Conductor Steel Supported (ACSS) conductors [2];
- Replacing/Installing of optical ground wire ("OPGW");
- Installing lightning arresters on proposed Structures 7008A, 7008B, 7009A, 7009B, 7009C, 7009D, 7010A, and 7010B; and,
- Installing new hardware and insulators on all structures and counterpoise, as needed.

The heights of the existing structures range from 45 feet to 75 feet (wood H-frames) and from 65 feet to130 feet (steel structures). The replacement structures would range in height from 75 feet to 85 feet (steel pole H-frames) and from 95 feet to 185 feet (steel monopoles). With the exception of the, the replacement crossing structures on the west side of Horton Cove (Structure 7008), the height increase for the replacement structures would be approximately 25 to 30 feet above the corresponding existing structures to comply with current clearance requirements.

For Structure 7008, height increases e are largely due to the need to provide adequate clearance across Horton Cove. Height increases would be approximately 50 feet for the new replacement Structure 7008A and approximately 65 feet for the replacement Structure 7008B.

All replacement structures would be positioned approximately 9 to 50 feet laterally and 25 to 45 feet longitudinally from the corresponding existing structure locations. Greater lateral distances are the result of the new structure configuration to maintain sufficient separation between lines.

[2] The conductor is not being replaced from Structure 6309 to Structure 6310 on the 1080 Line, only OPGW will be pulled in this span.

Attachment A: also depicts the locations of existing and proposed structures, as well as the approximate location and configuration of work pads and pull pads to be used for the Project, access roads and other Project elements. The cross-section drawings provided in Attachment B: Horton Cove Right of Way Cross Sections depict typical views along the ROW of the existing and proposed structures. Attachment C: List of Structure Replacements provides more specific information on the heights of the existing and proposed structures.

5. Existing Environment, Environmental Effects and Mitigation

The Project is located within Eversource's ROWs and, beginning east of Depot Road, spans across Gay Cemetery Pond, Horton Cove, Cove Road, Kitemaug Road and Point Breeze Road.

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

Land Use

Abutting land uses to the Project Area primarily consist of a mix of residential development and undeveloped areas that include agriculture, forests, successional habitats, Gay Cemetery Pond (impounded portion of Oxoboxo Brook), the Thames River, and Horton Cove. The ROW also abuts/crosses portions of the New England Central Railroad at Point Breeze Road and an inactive spur line located on the western shore of Horton Cove.

Additionally, a municipal water treatment facility is located slightly north of the ROW near Gay Cemetery Pond and Horton Cove, while recreational land uses such as boating and fishing are associated with water resources (Horton Cove and the Thames River) in the Project area.

Though the Project would be traversing through some of these areas, it will not impact adjacent lands or water dependent recreational uses.

Tree and Vegetation Removal

Some limited tree removal and vegetation removal would be required for the Project work and to provide required safety clearances from the conductors. The required amount of tree removal is estimated to result in a total permanent forested conversion of 0.62 acre to scrub-shrub or herbaceous habitat areas. Given the overall limited extent of forest conversion to shrubland, or emergent vegetation, there will be no significant adverse effect to forested habitat. Further, shrubland and early successional habitat (and the preservation of such existing habitat) along the ROW is beneficial for many species of wildlife because shrubland habitat is otherwise declining in New England[3].

Scenic, Recreational and Cultural Resources

The Project is not anticipated to have a substantial adverse effect to scenic, recreational and cultural resources for the reasons explained below.

No portion of the ROW traverses or is located near a locally or state designated scenic roadways[4].

Except for Horton Cove, which the Project spans, there are no designated public recreational use areas crossed by the Project. Boating and other water-based recreational activities occur

[3] 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.

[4] Connecticut Department of Transportation (CTDOT), October 1, 2018 Connecticut State Scenic Roads. Accessed February 12, 2020. Available URL: https://portal.ct.gov/DOT/Programs/Connecticut-Scenic-Roads . The Town of Montville does not have any listed scenic roads.

along this segment of Horton Cove with the nearest known public boat launch facility located approximately 0.5 miles to the southeast from the overall Project location[5].

The Project area neither crosses nor is proximate to any Connecticut Blue-blazed hiking trails or other known trail systems. The nearest mapped trail systems to the Project area, the Decatur Trail, is located approximately 0.82 mile to the southeast in Gales Ferry. The closest public open space to the Project area is Point Breeze Water Access Area. This Water Access Area is on a parcel located immediately south of the Project area, on the southwestern side of Point Breeze Road, east of Horton Cove and west-northwest of the Thames River (see Map Sheet 2 – Line List Number 158 in Attachment A). This undeveloped wooded parcel is owned and managed by Connecticut Department of Energy and Environmental Protection ("CTDEEP") for recreational purposes.

A cultural (archaeological and historical) resources review of the proposed Project was conducted by Heritage Consultants, LLC ("Heritage") in January and February of 2020. This review consisted of an initial desktop archaeological and historical resource review and pedestrian survey ("Phase 1A Cultural Resource Assessment" or "Phase 1A") and a Phase 1B Professional Cultural Resource Reconnaissance Survey ("Phase 1B"), which consisted of shovel testing in select locations. The results are summarized below.

The Phase 1A determined that no National Register of Historic Places ("NRHP"), state or locally listed properties or historic districts are located within 500 feet of the Project ROW. Additionally, the Phase IA identified 13 locations within the Project area as having a moderate

[5] Gales Ferry Marina 55 Chapman Ln, Gales Ferry, CT 06335

to high potential for archaeological sensitivity, prompting further investigation via the execution of a Phase 1B survey.

The Phase IB survey resulted in the identification of three prehistoric cultural resources locations[6]. Two locations were identified as not significant and one location was identified as having intact cultural deposits near the work areas for proposed structures 7008A and 7008B). This location was found to possess intact cultural deposits including a prehistoric cultural feature and was thus determined that it may retain research potential and the qualities of significance as defined by the NRHP criteria for evaluation (36 CFR 60.4 [a-d]). Based on the results of this survey, Heritage has recommended that ground disturbance be avoided in this area during construction. Eversource will utilize temporary matting at this location to avoid ground disturbance. No structure installation is proposed in this area. The results of the Phase 1B survey, and Eversource's proposed protection strategy were provided to the State Historic Preservation Office ("SHPO") and the Tribal Historic Preservation Offices ("THPO") of the Connecticut Tribe of Mohegan Indians and the Mashantucket Pequot Tribal Nation on April 2, 2020.

Water Resource Areas

Eversource conducted delineations of wetlands and water resources in the Project area on December 7, 2019 (see Attachment D: Wetlands Delineations Report). Resources within the Project area include inland and tidal wetlands, a tidal cove, and Federal Emergency Management Agency ("FEMA") Flood Zones. No Project work within these resource areas is proposed. All work proximate to these areas would be conducted in accordance with Eversource's 2016 *Best Management Practices Manual for Massachusetts and Connecticut*

[6] The Phase 1B shovel testing regime included the excavation of 83 test pits throughout these locations

("BMPs") and with the conditions of applicable regulatory permit conditions and approvals. Summaries of each of these resource areas proximate to the Project are provided below.

Wetlands

Wetlands in the Project area were identified and delineated in accordance with industry standard methodology. Field surveys were completed on December 7, 2019 and wetland boundary locations were recorded via GPS. A total of three (3) wetlands were identified and delineated, including one (1) inland wetland and two (2) tidal wetlands located along the west and east shores of Horton Cove.

Watercourses and Waterbodies

Watercourses and waterbodies within the Project area include Gay Cemetery Pond and Horton Cove. Gay Cemetery Pond is an impoundment of Oxoboxo Brook, which drains into Horton Cove, a tidal cove associated with the Thames River.

Vernal Pools

Project area wetlands were inspected for potential vernal pool habitat in December of 2019. Work consisted of investigating wetlands for the presence of physical and hydrologic indicators of vernal pools (depressed wetlands with seasonally flooded hydrology). No such indicators were observed within the Project area wetlands.

Wetland 1 is associated with Gay Cemetery Pond, a large pond which is an impoundment of Oxoboxo Brook. The wetland is permanently flooded, and no backwater or vegetated shallows were observed that could support vernal pools. Wetlands 2 and 3 border Horton Cove, which is tidally influenced, permanently flooded

and brackish. These wetlands do not have a hydrology suitable to support breeding by vernal pool indicator species.

FEMA Flood Zones

Approximately 0.45 mile of the Project area is located within the 100- and 500-year FEMA Flood Zones (including floodway) associated with Gay Cemetery Pond and Horton Cove. However, no work is proposed within the identified FEMA Flood Zones

Water Supply

Based on Aquifer Protection Areas ("APA") mapping maintained by the CTDEEP, the Project area is not located within an APA. The Project area is not within a public water supply watershed and does not cross any public supply reservoirs or public water supply wells. With the exception of Depot Road, public water is not available to homes within the Project area. It is assumed that the residences outside of Depot Road are served by individual private wells.

Wildlife and Habitat

The Project area extends through or over a variety of habitats including managed shrubland, forest edge, pond and riverine (Horton Cove), and agricultural land. Project area habitat is capable of supporting a variety of shrubland birds typical to the managed ROW and, due to the proximity to pond/riverine habitat, may provide nesting habitat for aquatic turtles. Horton Cove provides open water habitat for a variety of waterfowl as well as wading birds, along with brackish wetland species including a variety of fish and other aquatic species.

Eversource has consulted with the CTDEEP Bureau of Natural Resources Wildlife Division's Natural Diversity Database ("NDDB") regarding protection of state-listed species within the

Project area and submitted an NDDB Review Request on March 20, 2020. Eversource received a determination letter from CTDEEP on March 26, 2020 indicating that negative impacts to state-listed species due to the Project are not anticipated.

In addition to coordinating with the NDDB for the protection of state-listed species, Eversource consulted with the U.S. Fish & Wildlife Service's ("USFWS") Information, Planning, and Consultation ("IPaC") service regarding federal-listed species that may be present within the Project area. The IPaC report indicated two federal-listed species; the Northern Long-eared Bat ("NLEB"; *Myotis septentrionalis*), and the Small Whorled Pogonia *(Isotria medeoloides*), which is also a state-listed species, may potentially occur in proximity to the Project area.

NLEB roosts in certain trees in the warmer months of the year and at other times hibernates in caves and mines (bat "hibernacula"). However, according to the NLEB Areas of Concern in Connecticut map (dated February 2016), there are no known roost trees within 150 feet of the Project area while the nearest hibernacula is approximately 33 miles away to the southwest in North Branford. Therefore, no impacts to this species are anticipated.

The Small Whorled Pogonia is a small, perennial orchid of deciduous forests that bloom from late spring to early summer[7]. Habitat requirements for this species include flats or slope bases having a moderate to light shrub layer and a relatively open canopy[8]. No suitable habitat for this species was identified within the Project area.

[7] NatureServe. www.natureserve.org. Isotria medeoloides. (Flora of North America 2002)

[8] National Heritage & Endangered Species Program, Division of Fisheries & Wildlife, Massachusetts Rare and Endangered Plants-Small Whorled Pogonia

Visual Effects

Some limited tree removal, side trimming and vegetation removal are required for the Project in order to accommodate the work. As a result of the structure replacements, the Project will result in change to the visual character of the ROW, though Eversource does not believe that these changes will result in a significant visual effect on views beyond the area of the Project. While taller than the existing structures, the new monopoles would present a more streamlined appearance, mitigating the visual effect as compared to the double- and quad-circuit lattice structures.

The majority of tree removals would occur along the northern portion of Kitemaug Road, near Structures 8342 and 8343, and along the southern portion of Kitemaug Road and Cove Road, near Structures 7009 and 8343. Limited tree removal will also occur on the south side of the ROW near Structures 7007B and 7008B. While some vegetative screening will remain in these areas, the potential increase in visibility due to the vegetation removal activities will be along the eastern shore of Horton Cove and for immediate abutters of the ROW along Depot Road, Kitemaug and Cove Road.

Noise

The Project would result in short-term and localized noise, from construction activities. The temporary increase in noise would likely raise localized ambient sound levels immediately surrounding the work areas due to the operation of standard types of construction equipment.

(e.g., backhoe, bulldozer, crane, trucks, etc.)[9]. Upon completion of construction and during operation, the proposed Project would not have any effect on ambient noise levels.

Air Quality

The potential for short-term, localized effects on air quality may result, primarily from fugitive dust and equipment emissions. To minimize the amount of dust generated by construction activities, the extent of exposed/disturbed areas at any one time would be minimized. Vehicle emissions 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. Temporary gravel tracking pads would be installed at points of construction vehicle ingress/egress to minimize the potential for equipment to track dirt onto local roads. To further minimize dust, water may be used to wet down disturbed soils or work areas with heavy tracking, as needed.

6. Transportation and Traffic Management

The Project ROW extends across local roads, Gay Cemetery Pond, Horton Cove and rail lines owned by the New England Central Railroad Company.

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 area described in the following Construction Sequence section. Due to phasing of

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

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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 the ROW while minimizing disruptions to vehicular traffic along public roads, Eversource or its Project contractor would work with the Town to develop and implement traffic management procedures, and with abutters, as needed. The construction contractor typically would be responsible for posting and maintaining construction warning signs along public roads near work sites and for coordinating the use of flaggers or police personnel to direct traffic, as required.

Eversource and its Project contractor would also work with the New England Central Railroad Company to develop and implement any required operational and safety procedures for the line work that would occur over the railroad tracks. The Project is not anticipated to interfere with boat traffic in Horton Cove.

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

7. Construction Sequence

Project construction would include the following activities:

Establishing Staging Area

Eversource and/or its contractors would locate temporary staging areas from available parcels in the vicinity of or within the Project area that would be used to store construction

equipment and materials including, but not limited to tools, supplies, conductor, insulators, OPGW, hardware, poles, construction mats and other supplies. Office trailers may also be located at a staging area, and components removed during the work (structures, conductor, hardware, steel and insulators) may be temporarily accumulated and stored at a staging area prior to removal off-site for salvage and/or disposal. The staging areas may also be used by construction crew members for parking personal vehicles as well as for construction vehicles, and for performing minor maintenance, when needed, on construction equipment. An environmental review of each potential staging area location would be completed and erosion and sedimentation ("E&S") controls would be installed and maintained, as needed, until Project completion in accordance with Eversource's BMPs.

Tree and Vegetation Removal

Tree and vegetation removal would be accomplished using mechanical methods and 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.

Soil Erosion and Sediment Control Installation

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

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

Temporary E&S control measures would be maintained and inspected for the duration of the Project to ensure their integrity and effectiveness and for compliance with the General Permit. SWPCP inspections would be performed in accordance with the General Permit requirements. Following the construction, seeding and/or mulching would occur to permanently stabilize the areas disturbed by the construction activities. The temporary E&S control measures would remain in place until the Project work is complete and all disturbed areas are stabilized.

Access Roads and Work Pads

Access to each existing and proposed structure location would be required during Project construction. As a result of the operation and maintenance of the existing lines within this ROW, some access roads are already established and Eversource would utilize these existing access roads to the extent possible. However, some new access roads would be required. The access roads expected to be used for the Project are illustrated on the maps in Attachment A. No new access roads or work pads are proposed in water resource areas.

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. Typically, a maximum travel surface of an access road is approximately 16 feet wide (additional width may be needed at turning or passing locations). Access roads

would normally be graveled. 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 location, 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. Work pads for the Project would range from approximately 125 feet by 125 feet to approximately 235 feet by 180 feet and may be used for both installation of new structures and removal of existing structures. Pull pads would generally range from approximately 200 feet by 80 feet to approximately 265 feet by 125 feet. Most work pads will be graveled, though some will use temporary matting to protect sensitive resource areas (i.e. lawn, meadow and identified cultural resource areas).

To facilitate future transmission line maintenance, gravel access roads, work pads and pull pads would be left in place. If an individual property owner requests their removal, the Project will work with the property owner on mitigation options[10].

The proximate locations and configuration of the work pads, as determined based on the environmental field studies and constructability reviews, are shown on Attachment A.

Foundation Installation

All proposed structures would have drilled (caisson) foundations. This work would require the use of equipment such as mechanical excavator (drill rigs), pneumatic hammers, augers, drill rigs, dump trucks, concrete trucks, grapple trucks and light duty trucks. If groundwater is encountered, pumping (vacuum) trucks or other suitable equipment would be used to pump

[10] Work pads and pull pads will be removed in NDDB areas then top-soiled and seeded.

water from the excavated areas. The water would then be discharged in accordance with applicable local, state and federal requirements.

Excavated soils that are generated during construction activities would be stored or spread in an upland area within the ROW, to the extent practicable. Materials that cannot be utilized as back fill would be disposed in accordance with applicable regulations.

Structure Installation

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

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

Conductor and OPGW Installation

The installation of the new conductors and OPGW would occur after the new structures have been erected. The equipment required for these activities would include conductor reels, conductor pulling and tensioning rigs, guard trucks or structures and bucket trucks. No helicopters are anticipated to be used for conductor pulling.

Structure, Conductor and Static Wire Removal

The removal of the existing conductor and shield wire would take place during the active installation of the new conductor and OPGW as the existing conductor and static wire would be used as pulling lines, if possible.

The existing structures would be removed after the new conductor and OPGW is installed.

Restoration

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

Eversource would perform ROW restoration in accordance with the protocols specified in Eversource's BMPs and in consultation with affected property owners.

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. As described above, excess soils would be managed in accordance with applicable regulations and disposal facility policies. Dewatering during construction activities would be conducted in accordance with the *Connecticut Guidelines,* Eversource's BMPs and applicable regulations.

8. Construction Schedule and Work Hours

Eversource proposes to begin construction in October 2020. Normal work hours would be Monday through Saturday from 7:00 AM to 7:00 PM. On occasion, Sunday work hours are anticipated to be required from 9 AM to 6 PM and evening works hours after 7:00 PM due to

outage constraints during the line work. The Town of Montville and abutters will be provided notice of the proposed Sunday and evening work hours.

9. Electric and Magnetic Fields

Electric and magnetic fields ("EMF") are forms of energy that surround and electrical device. An electric field ("EF") is produced within the area surrounding a conducting object (e.g., a wire) when a voltage is applied to it and is measured in units of kilovolts per meter ("kV/m"). The level of an EF near an energized power line depends on the applied voltage, the distance between the conductors, and the distance to the measurement location.

Magnetic fields are produced within the area surrounding a conductor or device that is carrying an electric current and are measured in units of milliGauss ("mG"). The level of the magnetic field near line conductors carrying current depends on the magnitude of the current, the distance between the conductors, and the distance from the conductors to the measurement location.

Both electric and magnetic fields decrease rapidly as the distance from the source increases, and even more rapidly from electric equipment in comparison to line conductors. Electric field levels are further weakened by obstructions such as trees, structures, buildings, or walls, while magnetic fields can pass through most materials. In the case of parallel lines of circuit conductors, the levels of electric and magnetic fields are also dependent on the phasings of the circuits.

The Project will change the electric and magnetic fields along the transmission corridor. Changes to the electric fields arise from changes to the line geometry and conductor size within the ROW, while changes to the magnetic fields arise from both the changes to the line

geometry within the ROW and the change in line loads based on future state for post-construction calculations (year 2023 vs. 2018).

To calculate the electric and magnetic fields, the rebuild section of the ROW has been broken into two sub-sections:

- Section 1 between proposed Structures 6306A and B, 7007A and 7007B and Montville Junction; and
- Section 2 between Montville Junction and proposed Structures 7011A and 7011B.

Due to the minimal changes in geometry and location, differences between existing and post-construction electric and magnetic fields in the ROW from Structure 6309 towards Fort Hill Farms would be negligible.

These calculations are shown in Table E.1. Graphical representations for electrical and magnetic field calculations can be found in Figures E-1 through E-6 in Attachment E: EMF Graphs.

The electric and magnetic fields in the vicinity of the Project would not significantly change as a result of this work. Within the ROW, there will be small increases and decreases to the electric and magnetic fields in different locations along the line. At and beyond the ROW edges, the differences would be negligible.

Table E-1. Tabulated Electrical and Magnetic Field Calculations at ROW Edges

Magnetic Field Calculations (mG - AAL)	North Edge of ROW		Max in ROW		South Edge of ROW	
	Existing	Proposed	Existing	Proposed	Existing	Proposed
Strs. 6306A/B & 7007A/B to Montville Jct	5.4	6.4	18.2	10.8	5.3	3.7
Montville Jct to Strs. 7011A/B	10.7	8.9	77.2	37.1	20.0	15.3
Electric Field Calculations (kV/m)	**North Edge of ROW**		**Max in ROW**		**South Edge of ROW**	
	Existing	Proposed	Existing	Proposed	Existing	Proposed
Strs. 6306A/B & 7007A/B to Montville Jct	0.02	0.03	1.05	0.79	0.50	0.50
Montville Jct to Strs. 7011A/B	0.10	0.26	1.64	0.85	0.66	0.53

There are no state or federal limits for electric or magnetic field levels at the edge of a transmission line ROW. However, the International Council on Electromagnetic Safety ("ICES") and the International Commission on Non-ionizing Radiation Protection ("ICNIRP") have issued guideline limits for long-term public exposures to these fields.

All of the modeled values at the edge of the ROW are well below these international guidelines which are summarized in Table E-2:

Table E-2: Reference Levels for Whole Body Exposure to 60-Hz Fields: General Public

Organization Recommending Limit	**Magnetic Fields (mG)**	**Electric Fields (kV/m)**
ICNIRP Restriction Level	2,000	4.2
ICES Maximum Permissible Exposure	9,040	5 10*

*This is an exception within transmission line ROWs because people do not spend a substantial amount of time at these locations and very specific conditions are needed before a response is likely to occur (i.e. a person must be well-insulated from ground and must contact a grounded conductor) (ICES, 2002, p/ 27).

10. Municipal and Property Owner Outreach

In March 2020, Eversource consulted with the Town of Montville and provided a briefing on the proposed Project along with a written notice of the Petition filing in April 2020. From the late winter through early Spring 2020, 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 to be in 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.

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: Horton Cover Circuit Separation– Aerial Maps
Attachment B: Horton Cover Circuit Separation– Right-of-Way Cross Sections
Attachment C: List of Structure Replacements
Attachment D: Wetlands Delineation Report
Attachment E: EMF Graphs and Tables
Attachment F: Letter to the Abutters and Affidavit

Attachment A: Horton Cove Circuit Separation Aerial Maps

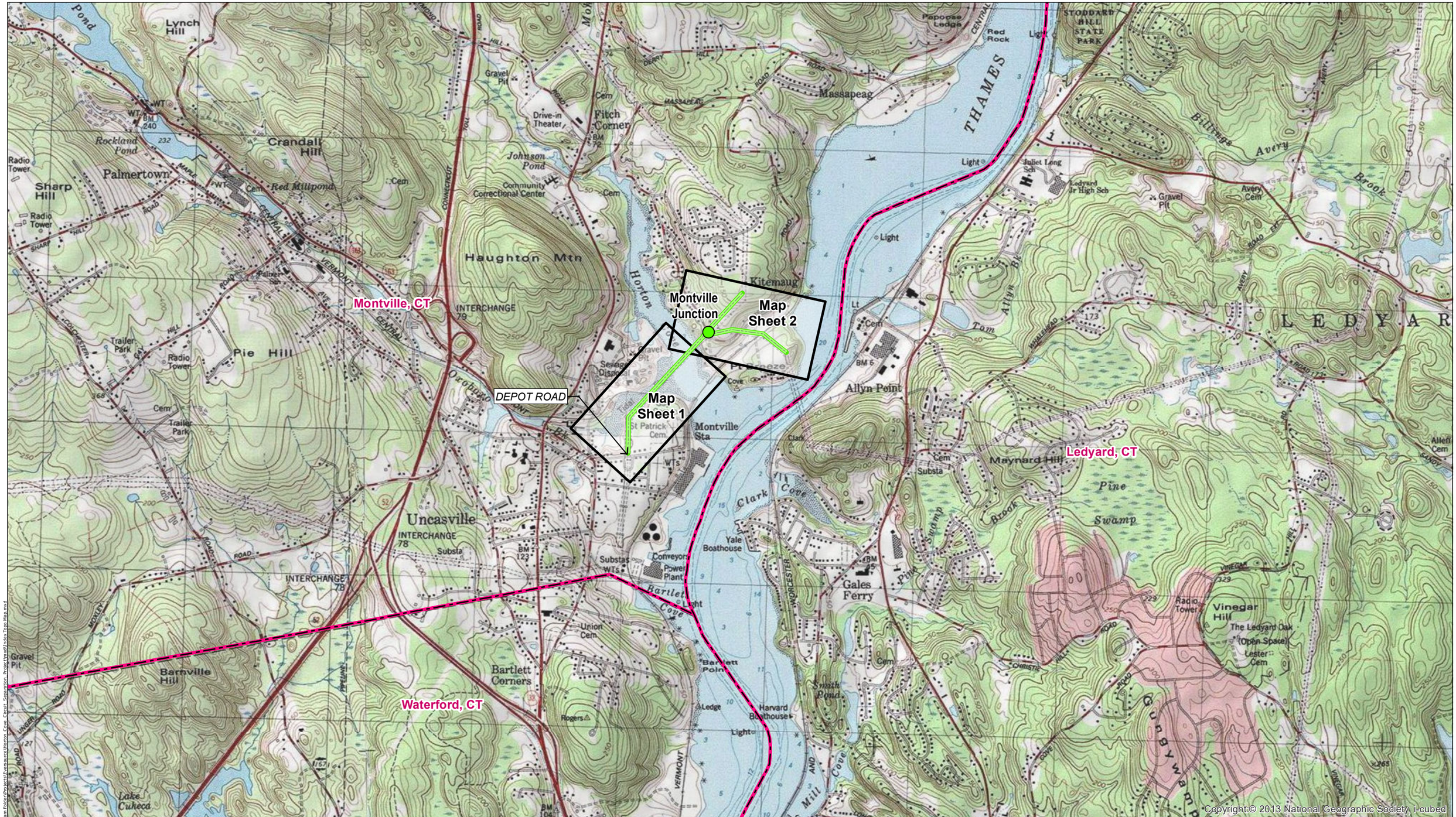
Horton Cove Circuit Separation Project

Project Mapping

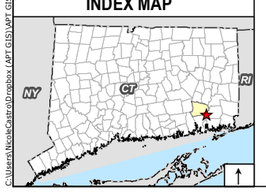
Montville, CT

April 23, 2020

Note: This page intentionally left blank



INDEX MAP



Legend

- Junction
- Project Corridor
- Map Sheet
- Municipal Boundary

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

Index Map
Horton Cove Circuit Separation Project

Montville, CT

Date: April, 2020

Map Author: N. Castro

ALL-POINTS TECHNOLOGY CORPORATION

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MAPSHEET 1 of 2
HORTON COVE CIRCUIT SEPARATION PROJECT
Existing Structures 6306 to 7008
Town of Montville, Connecticut

AREA DESCRIPTION

Existing Land Use & Resource Areas
- Horton Cove
- Gay Cemetery Pond
- 100-year Flood Zone
- 500-year Flood Zone
- Natural Diversity Database Area
- Residential
- Municipal (Wastewater Treatment Plant)
- Eversource-owned property

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use & Resource Areas
- Maintained ROW
- Natural Diversity Database Area
- Gay Cemetery Pond between structures 6306 and 7008
- Horton Cove east of structure 7008
- 100-year Flood Zone east of structure 7008
- 500-year Flood Zone east of structure 7008
- Inactive rail spur east of structure 7008

Water Resources
- Wetlands – W2 (tidal)
- Wetland Cover Types – POW, PEM
- Watercourses – W1 (Gay Cemetery Pond), S1 (Horton Cove)
- 100-year Flood Zone – S1 (Horton Cove)

Wetland and Watercourse Crossings
- None

Right-of-Way Vegetation
- Scrub-shrub

Access
- Structure 6306 to 7008: From existing access road originating off Depot Road.

Road Crossings
- Depot Road

Existing Maintained Right-of-Way Width / Proposed Right-of-Way Clearing
- 280-feet / 0-feet

LLN	Parcel Address	City	State	Owner Name
106	87 DEPOT ROAD	MONTVILLE	CT	UNCASVILLE, LLC (SUBSIDIARY OF COMMERCIAL DEVELOPMENT CO INC)
115	92 DEPOT ROAD	MONTVILLE	CT	FEDERAL HOME LOAN MORTAGE CORPORATION
120	82 DEPOT ROAD	MONTVILLE	CT	UNCASVILLE, LLC (SUBSIDIARY OF COMMERCIAL DEVELOPMENT CO INC)
121	82 DEPOT ROAD	MONTVILLE	CT	UNCASVILLE, LLC (SUBSIDIARY OF COMMERCIAL DEVELOPMENT CO INC)
132	183 DEPOT ROAD EXT	MONTVILLE	CT	ST PATRICK CEMETERY CO, C/O DIOCESE OF NORWICH CEMETERY CORP
133	NONE AVAILABLE	MONTVILLE	CT	RAILROAD SPUR (FORMERLY CENTRAL VERMONT RR)
136	NONE AVAILABLE	MONTVILLE	CT	HORTON COVE
137	NONE AVAILABLE	MONTVILLE	CT	NEW ENGLAND CENTRAL RAILROAD
142	21 COVE ROAD	MONTVILLE	CT	COLLEEN C BRADLEY
158	POINT BREEZE ROAD	MONTVILLE	CT	STATE OF CONNECTICUT

PINK ROW

LL133

Gay Cemetery Pond

500 Year Flood Zone

S1
Horton Cove

W1

W2

7606

6306A

6306

6306B

7007A

7007

7007B

7607

7008A

7008

7008B

1090 Line

1000 Line

1080 Line

1280 Line

100 Line

1410 Line

NDDB Area

100 Year Flood Zone

LL121

LL120

LL136

LL132

Montville

LL142

7605

6305

7006

LL120

DEPOT ROAD

LL115

LL106

GAIR COURT

COVE ROAD

LL137

NEW ENGLAND CENTRAL RAILROAD

EDWARD RD

PETER AVENUE

LL158

FOLLOWING CONSTRUCTION WORK AND PULL PADS WILL BE COVERED WITH 2-4" OF TOPSOIL (PREFERABLY NATIVE STOCKPILED MATERIAL), SEEDED WITH AN EVERSOURCE APPROVED NATIVE SEED MIXTURE, AND MULCHED.

Map Sheet 2

Map Sheet 1

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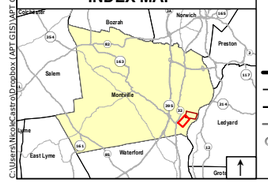
INDEX MAP



Legend

- Proposed Structure
- Existing Structure
- Existing Structure to be Removed
- Existing Right-of-Way (ROW)
- Overhead Eversource Line
- Railroad
- 5' Contour Line
- Stonewall
- Gate
- Existing Access
- Proposed Access
- Proposed Alternate Access
- Access Road to be Improved
- Stone Work Pad
- Stone Pull Pad
- Area of Limited Tree Removal
- Delineated Wetland Boundary Outline
- Field Delineated Wetland
- Field Delineated Tidal Wetland
- Temporary Construction Matting
- Natural Diversity Database Area (12/2019)
- FEMA 100-Year Flood Zone
- FEMA 500-Year Flood Zone
- Floodway
- Parcel Boundary
- Eversource Owned Property
- State-Owned Property
- Map Sheet Matchline

Base Map Source:
CTECO 2019 Aerial Imagery

1 inch = 200 feet
0 50 100 200 Feet

Map Notes:
Not for Construction.
Parcel and ROW boundaries are approximate (NOT survey).
Repairs to existing access roads within wetlands with permanent fills are exempt discharges under 323.4(a)(2) provided that the limit of fill does not exceed the footprint of the existing fill through wetlands areas. Maintenance repairs do not include modifications that change the character, scope, and size of the original fill design. Temporary impacts associated with construction mats in previously disturbed wetland and upland areas either within vernal pool (VP) depressions or management area (100' of VP's edge) are eligible under the Army Corps of Engineers CT General Permit as a Self-Verification eligible activity.

NO.	DATE	REVISIONS	BY	CHK	APP	APP

EVERSOURCE ENERGY

Horton Cove Circuit Separation Project
Montville, CT

Map Sheet 1 of 2

April, 2020

ALL-POINTS TECHNOLOGY CORPORATION

MAPSHEET 2 of 2
HORTON COVE CIRCUIT SEPARATION PROJECT
Existing Structures 6310 to 8346
Town of Montville, Connecticut

AREA DESCRIPTION

Existing Land Use & Resource Areas
- Horton Cove
- Thames River
- 100-year Flood Zone
- 500-year Flood Zone
- Natural Diversity Database Area
- Residential
- Undeveloped, forest
- State-owned property (Point Breeze Water Access)
- Railroad (New England Central)

RIGHT-OF-WAY DESCRIPTION

Right-of-Way Land Use & Resource Areas
- Maintained ROW
- Maintained meadow/lawn from structures 6309 to 6310, and 7011/8345 to 7012/8346
- Residential adjacent to structures 7009, 8342, and 6309
- Railroad (New England Central) adjacent to structures 7011/8345
- Natural Diversity Database Area at structure 7009
- Horton Cove west of structure 7009
- 100-year Flood Zone west of structure 7009

Water Resources
- Wetlands – W2 (tidal)
- Wetland Cover Types – POW, PEM
- Watercourses – S1 (Horton Cove)

Wetland and Watercourse Crossings
- None

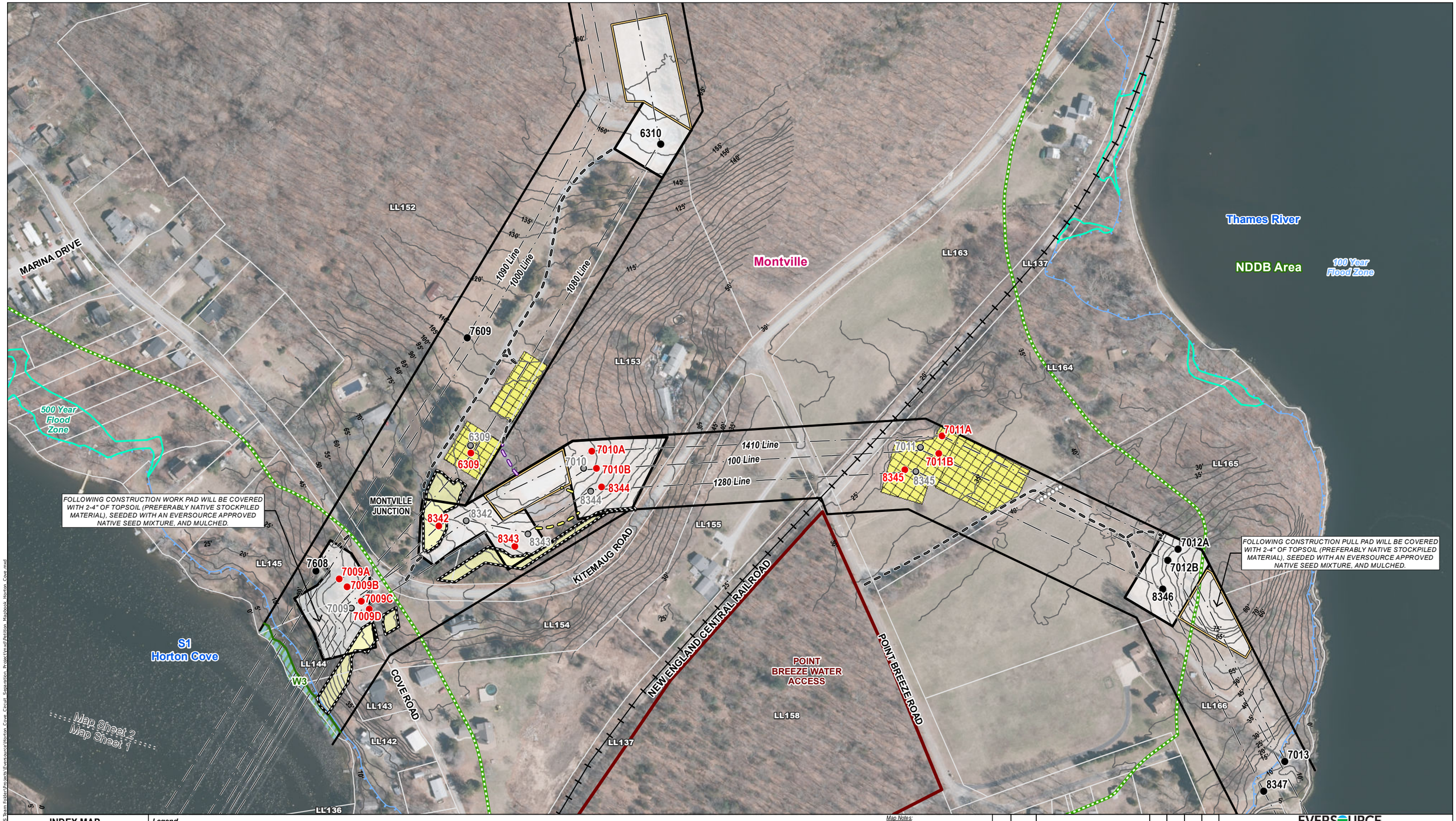
Right-of-Way Vegetation
- Scrub-shrub
- House/yard

Access
- Structure 6310 to 8344: From existing access roads originating off Kitemaug Road and Cove Road.
- Structure 7011 to 8346: From existing access road originating off Point Breeze Road.

Road Crossings
- Cove Road
- Kitemaug Road
- Point Breeze Road

Existing Maintained Right-of-Way Width / Proposed Right-of-Way Clearing
- 280-feet / 40-feet (Structure 7009)
- 250-feet / 0-feet (Structure 6309)
- 118-feet / 42-feet (Structures 7010 and 8342 to 7011 and 8345)

LLN	Parcel Address	City	State	Owner Name
136	NONE AVAILABLE	MONTVILLE	CT	HORTON COVE
137	NONE AVAILABLE	MONTVILLE	CT	NEW ENGLAND CENTRAL RAILROAD
142	21 COVE ROAD	MONTVILLE	CT	COLLEEN C BRADLEY
143	13 COVE ROAD	MONTVILLE	CT	SEAN PAUL METCALFE
144	203 KITEMAUG ROAD	MONTVILLE	CT	PHILLIP A & CHELSEA R FRANCINE
145	193 KITEMAUG ROAD	MONTVILLE	CT	MARY ANN GOGUEY
152	192 KITEMAUG ROAD	MONTVILLE	CT	BRANDON J & NOELE M MORSE
153	248 KITEMAUG ROAD	MONTVILLE	CT	ROBIN MEYER
154	207 KITEMAUG ROAD	MONTVILLE	CT	THEODORE L & MELANIE D MORRISSETTE
155	9 POINT BREEZE ROAD	MONTVILLE	CT	THOMAS D & TINA M GROVE
158	POINT BREEZE ROAD	MONTVILLE	CT	STATE OF CONNECTICUT
163	285 KITEMAUG ROAD	MONTVILLE	CT	THOMAS F & DEBORAH JP SAVOY
164	2 POINT BREEZE ROAD	MONTVILLE	CT	STANLEY R GORTON
165	6 POINT BREEZE ROAD	MONTVILLE	CT	LOLA ANN & JACK A D ELIA
166	10 POINT BREEZE ROAD	MONTVILLE	CT	COREY B TONDREAU & SAMANTHA G CHOLEWA



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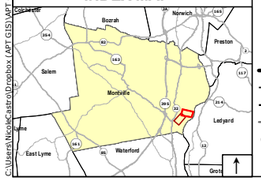
INDEX MAP



Legend

- Proposed Structure
- Existing Structure
- Existing Structure to be Removed
- Existing Right-of-Way (ROW)
- Overhead Eversource Line
- Railroad
- 5' Contour Line
- Stonewall
- Gate
- Existing Access
- Proposed Access
- Proposed Alternate Access
- Access Road to be Improved
- Stone Work Pad
- Stone Pull Pad
- Area of Limited Tree Removal
- Delineated Wetland Boundary Outline
- Field Delineated Wetland
- Field Delineated Tidal Wetland
- Temporary Construction Matting
- Natural Diversity Database Area (12/2019)
- FEMA 100-Year Flood Zone
- FEMA 500-Year Flood Zone
- Floodway
- Parcel Boundary
- Eversource Owned Property
- State-Owned Property
- Map Sheet Matchline

Base Map Source:
CTECO 2019 Aerial Imagery

N

Map Notes:
Not for Construction.
Parcel and ROW boundaries are approximate (NOT survey).
Repairs to existing access roads within wetlands with permanent fills are exempt discharges under 323.4(a)(2) provided that the limit of fill does not exceed the footprint of the existing fill through wetlands areas. Maintenance repairs do not include modifications that change the character, scope, and size of the original fill design. Temporary impacts associated with construction mats in previously disturbed wetland and upland areas either within vernal pool (VP) depressions or management area (100' of VP's edge) are eligible under the Army Corps of Engineers CT General Permit as a Self-Verification eligible activity.

1 inch = 200 feet
0 50 100 200 Feet

NO.	DATE	REVISIONS	BY	CHK	APP	APP

EVERSOURCE ENERGY

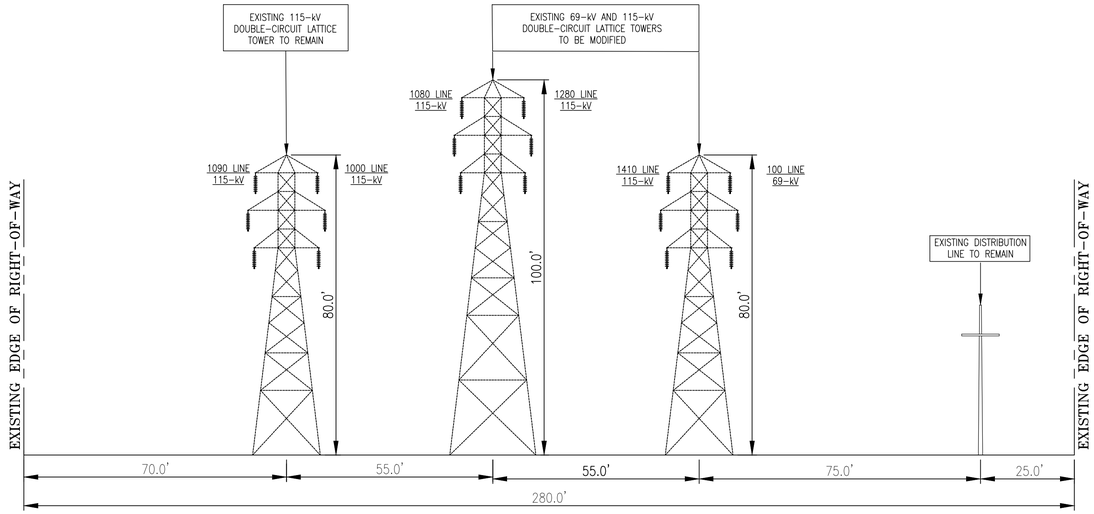
Horton Cove Circuit Separation Project
Montville, CT

Map Sheet 2 of 2

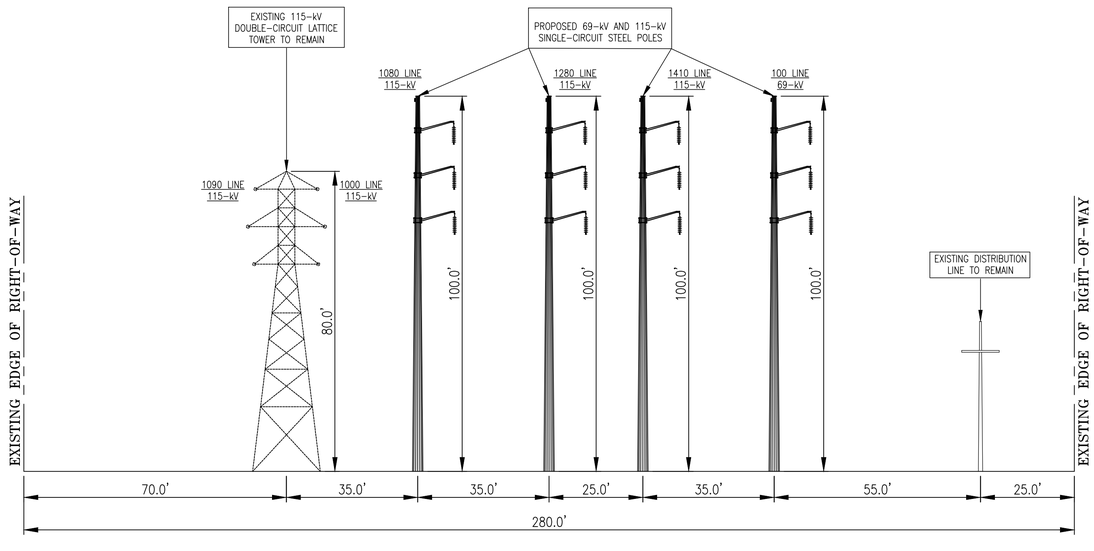
April, 2020

ALL-POINTS TECHNOLOGY CORPORATION

Attachment B: 100, 1410, 1280 and 1080 Line Rebuild Project – Right-of-Way Cross Sections



EXISTING R.O.W. CONFIGURATION
DOUBLE-CIRCUIT STEEL LATTICE TOWER DESIGN
LOOKING FROM MONTVILLE SUBSTATION TO MONTVILLE JUNCTION
IN THE TOWN OF MONTVILLE, CT
STRS. 6306 AND 7007

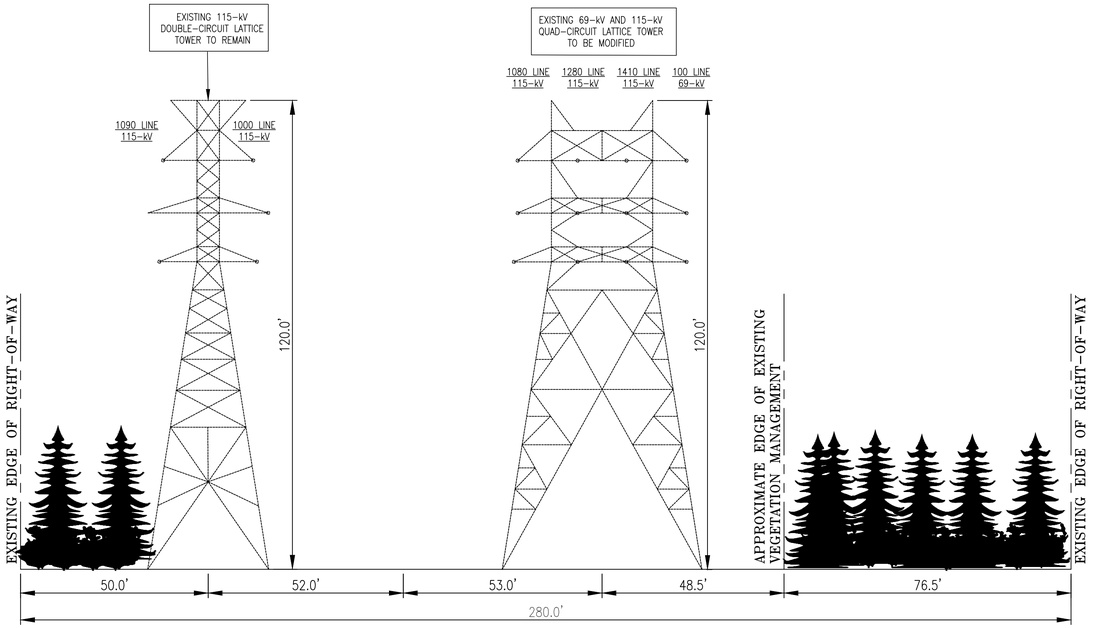


PROPOSED R.O.W. CONFIGURATION
SINGLE-CIRCUIT STEEL MONOPOLE DESIGN
LOOKING FROM MONTVILLE SUBSTATION TO MONTVILLE JUNCTION
IN THE TOWN OF MONTVILLE, CT
STRS. 6306A, 6306B, 7007A AND 7007B

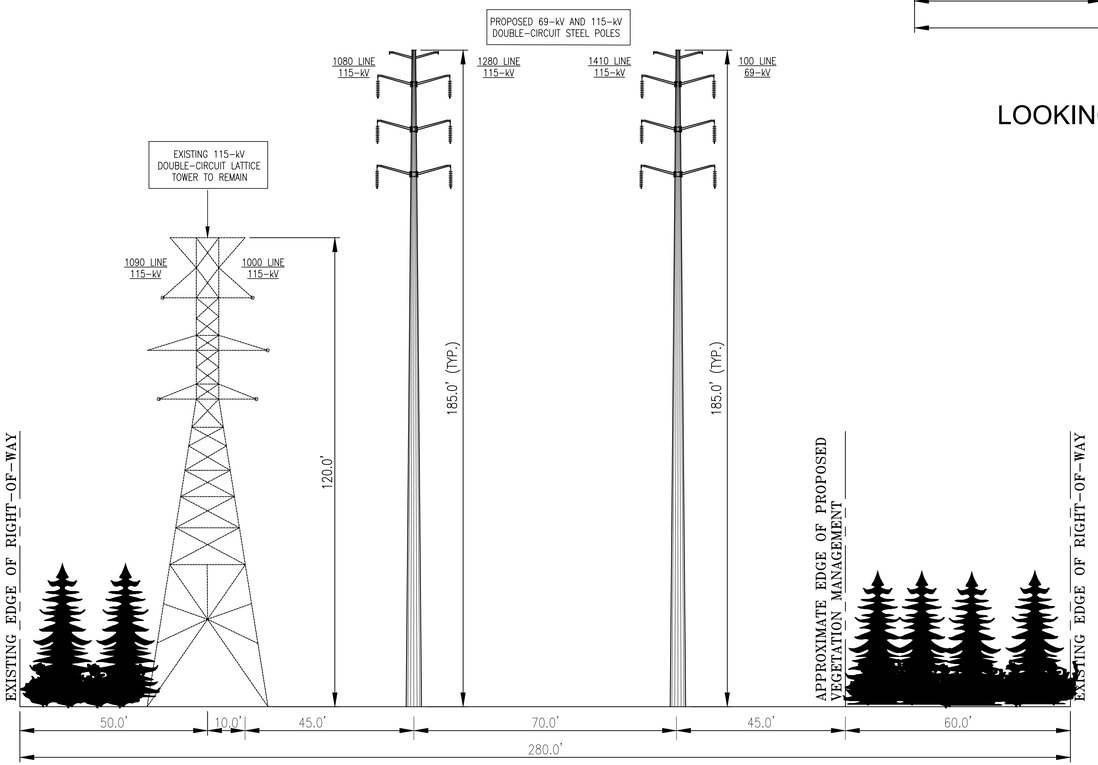
XS-1

EVERSOURCE ENERGY

TITLE: HORTON COVE CIRCUIT SEPARATION LINES 100, 1410, 1080 & 1280 RIGHT OF WAY CROSS SECTION MONTVILLE, CONNECTICUT			
BY: TNG	CHKD: SAM	APP:	APP:
DATE: 02/13/20	DATE: 02/13/20	DATE:	DATE:
H-SCALE: N.T.S.	SIZE: D	FIELD BOOK & PAGES:	
V-SCALE: N.T.S.	V.S.:	R.E. DWG:	
R.E. PROJ. NUMBER: 40495101		DWG NO.: 01062-85004p001	



EXISTING R.O.W. CONFIGURATION
QUAD-CIRCUIT STEEL LATTICE TOWER DESIGN
LOOKING FROM MONTVILLE SUBSTATION TO MONTVILLE JUNCTION
IN THE TOWN OF MONTVILLE, CT
STR. 7008



PROPOSED R.O.W. CONFIGURATION
DOUBLE-CIRCUIT STEEL MONOPOLE DESIGN
LOOKING FROM MONTVILLE SUBSTATION TO MONTVILLE JUNCTION
IN THE TOWN OF MONTVILLE, CT
STRS. 7008A AND 7008B

XS-2

EVERSOURCE ENERGY

TITLE: HORTON COVE CIRCUIT SEPARATION LINES 100, 1410, 1080 & 1280 RIGHT OF WAY CROSS SECTION MONTVILLE, CONNECTICUT			
BY: TNG	CHKD: SAM	APP:	APP:
DATE: 02/13/20	DATE: 02/13/20	DATE:	DATE:
H-SCALE: N.T.S.	SIZE: D	FIELD BOOK & PAGES:	
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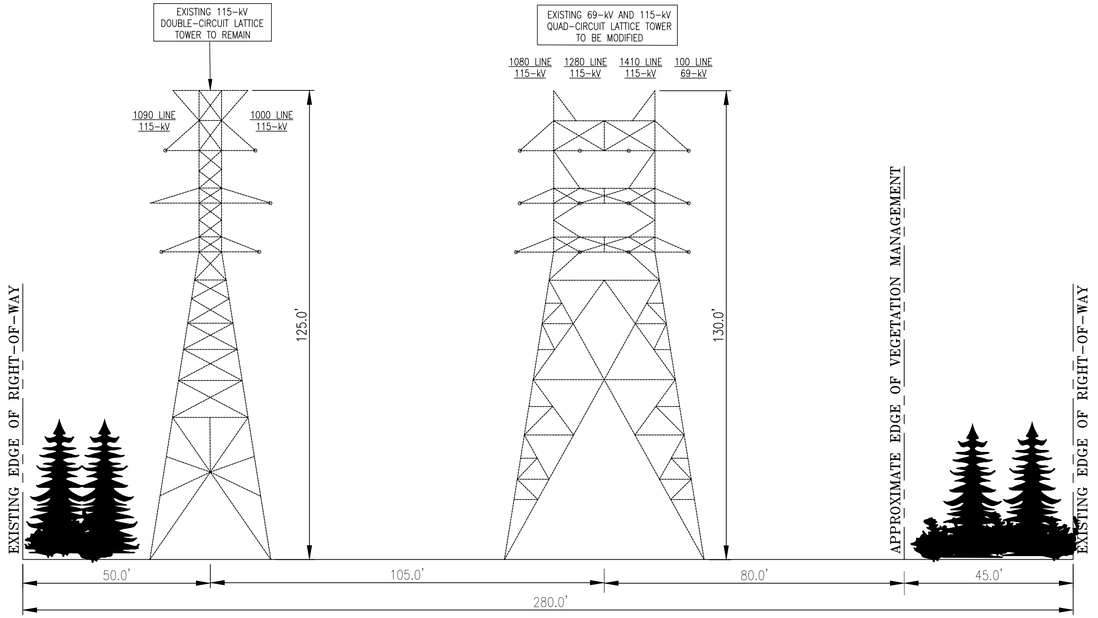
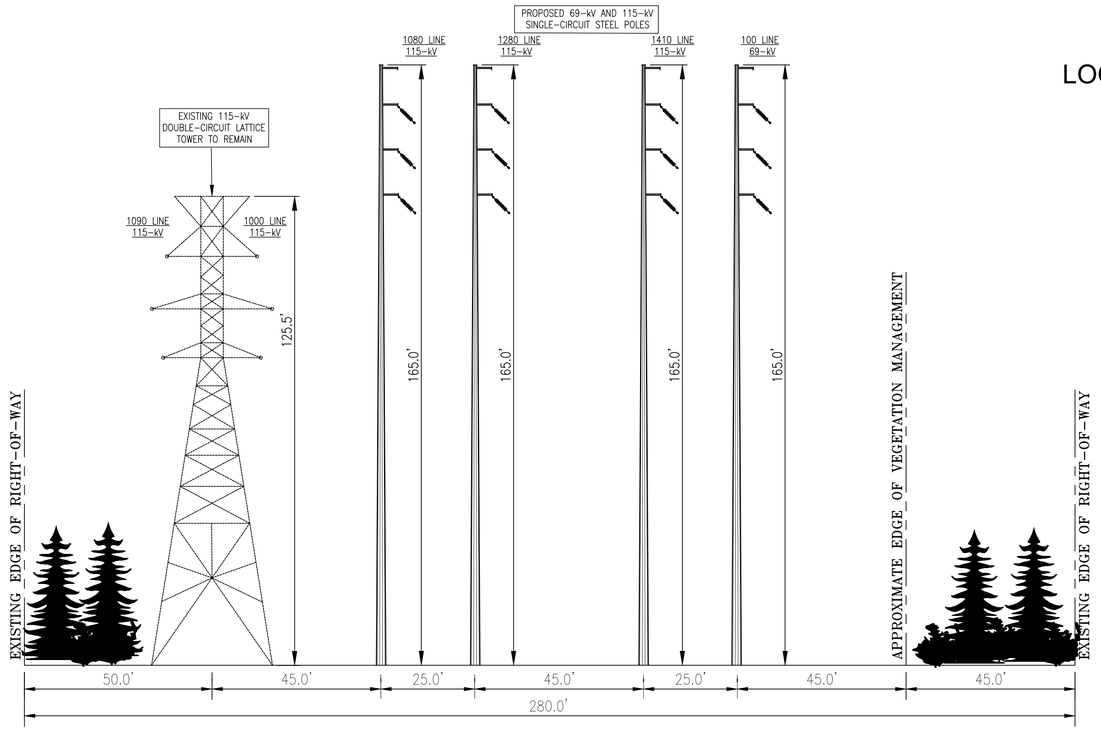


EXISTING R.O.W. CONFIGURATION
QUAD-CIRCUIT STEEL LATTICE TOWER DESIGN
LOOKING FROM MONTVILLE SUBSTATION TO MONTVILLE JUNCTION
IN THE TOWN OF MONTVILLE, CT
STR. 7009



PROPOSED R.O.W. CONFIGURATION
SINGLE-CIRCUIT STEEL MONOPOLE DESIGN
LOOKING FROM MONTVILLE SUBSTATION TO MONTVILLE JUNCTION
IN THE TOWN OF MONTVILLE, CT
STRS. 7009A, 7009B, 7009C AND 7009D

XS-3

EVERSOURCE ENERGY

TITLE
HORTON COVE CIRCUIT SEPARATION
LINES 100, 1410, 1080 & 1280
RIGHT OF WAY CROSS SECTION
MONTVILLE, CONNECTICUT

BY TNG	CHKD SAM	APP	APP
DATE 02/13/20	DATE 02/13/20	DATE	DATE
H-SCALE N.T.S.	SIZE D	FIELD BOOK & PAGES	
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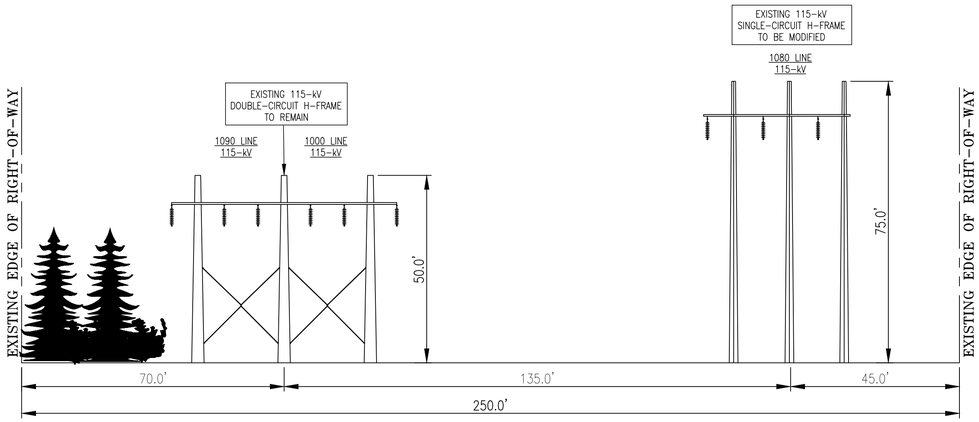
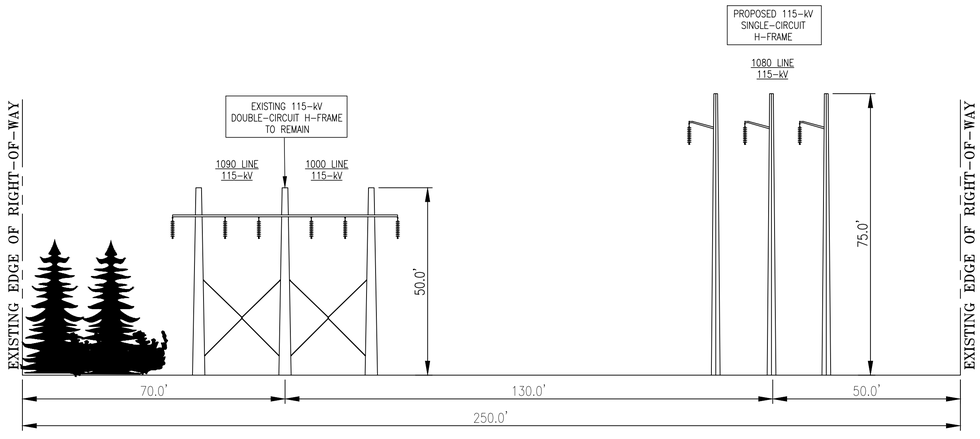


EXISTING R.O.W. CONFIGURATION
SINGLE-CIRCUIT H-FRAME DESIGN
LOOKING FROM MONTVILLE JUNCTION TO FORT HILL FARMS SUBSTATION
IN THE TOWN OF MONTVILLE, CT
STR. 6309



PROPOSED R.O.W. CONFIGURATION
SINGLE-CIRCUIT STEEL H-FRAME DESIGN
LOOKING FROM MONTVILLE JUNCTION TO FORT HILL FARMS SUBSTATION
IN THE TOWN OF MONTVILLE, CT
STR. 6309

XS-4

EVERSOURCE ENERGY

TITLE: HORTON COVE CIRCUIT SEPARATION LINES 100, 1410, 1080 & 1280 RIGHT OF WAY CROSS SECTION MONTVILLE, CONNECTICUT			
BY: TNG	CHKD: SAM	APP:	APP:
DATE: 02/13/20	DATE: 02/13/20	DATE:	DATE:
H-SCALE: N.T.S.	SIZE: D	FIELD BOOK & PAGES:	
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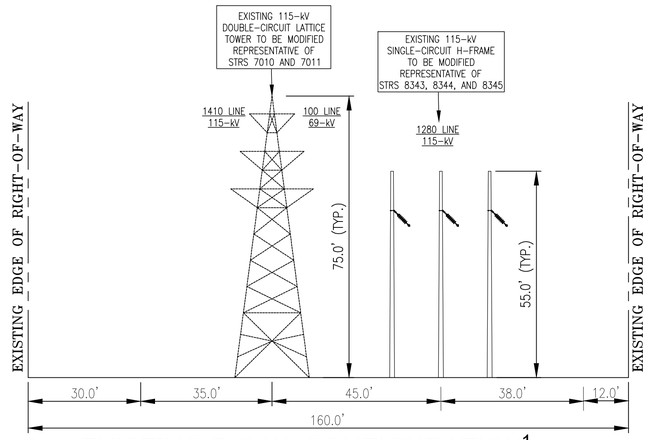
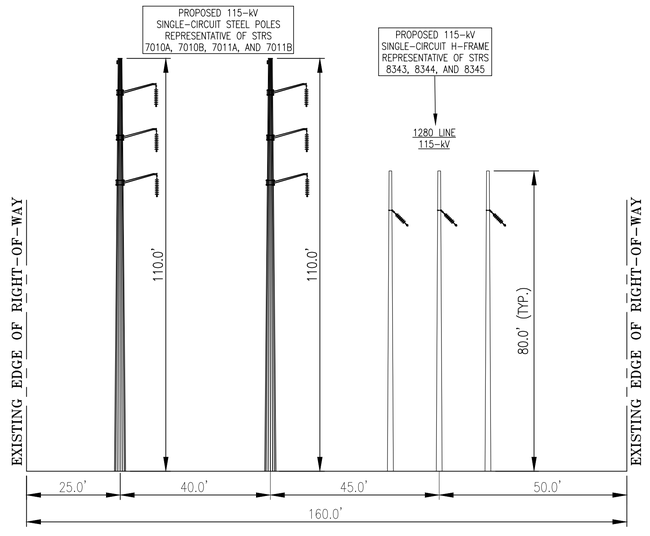


EXISTING R.O.W. CONFIGURATION[1]
DOUBLE-CIRCUIT LATTICE TOWER AND SINGLE-CIRCUIT H-FRAME
LOOKING FROM MONTVILLE JUNCTION TO GALES FERRY SUBSTATION
IN THE TOWN OF MONTVILLE, CT
STRUCTURES 7010, 7011, 8343, 8344, AND 8345



PROPOSED R.O.W. CONFIGURATION
SINGLE-CIRCUIT STEEL MONOPOLES AND H-FRAME
LOOKING FROM MONTVILLE JUNCTION TO GALES FERRY SUBSTATION
IN THE TOWN OF MONTVILLE, CT
STRUCTURES 7010A, 7010B, 7011A, 7011B, 8343[2], 8344, AND 8345

[1] Note: structure 8343 does not have an adjacent lattice tower structure.
[2] Note: limited tree removal at the edge of the R.O.W. to the south of this structure.

XS-5

EVERSOURCE ENERGY

TITLE: HORTON COVE CIRCUIT SEPARATION LINES 100, 1410, 1080 & 1280 RIGHT OF WAY CROSS SECTION MONTVILLE, CONNECTICUT			
BY: TNG	CHKD: SAM	APP:	APP:
DATE: 02/13/20	DATE: 02/13/20	DATE:	DATE:
H-SCALE: N.T.S.	SIZE: D	FIELD BOOK & PAGES:	
V-SCALE: N.T.S.	V.S.:	R.E. DWG:	
R.E. PROJ. NUMBER: 40495101		DWG NO.: 01062-85004p005	

Attachment C: List of Structure Replacements

	EXISTING			PROPOSED		
Line	***Str No.***	***Type***	***AGL****	***Str No.***	***Type***	***AGL***
1080	6306	Double-Circuit Lattice Tower	100	6306A	Single- Circuit Steel Pole	100
1280				6306B	Single-Circuit Steel Pole	100
1410	7007	Double-Circuit Lattice Tower	80	7007A	Single-Circuit Steel Pole	100
100				7007B	Single-Circuit Steel Pole	100
1080	7008	Quad Circuit Lattice Tower	120	7008A	Double-Circuit Steel Pole	185
1280						
1410				7008B	Double-Circuit Steel Pole	170
100						
1080	7009	Quad-Circuit Lattice Tower	130	7009A	Single-Circuit Steel Pole	165
1280				7009B	Single-Circuit Steel Pole	165
1410				7009C	Single-Circuit Steel Pole	160
100				7009D	Single-Circuit Steel Pole	160
1410	7010	Double-Circuit Lattice Tower	85	7010A	Single-Circuit Steel Pole	110
100				7010B	Single-Circuit Steel Pole	110
1410	7011	Double-Circuit Lattice Tower	65	7011A	Single-Circuit Steel Pole	95
100				7011B	Single-Circuit Steel Pole	95
1280	8342	Wood H-Frame	45	8342	Steel H-Frame	75
1280	8343	Wood H-Frame	50	8343	Steel H-Frame	75
1280	8344	Wood H-Frame	55	8344	Steel H-Frame	80
1280	8345	Wood H-Frame	75	8345	Steel H-Frame	85
1080	6309	Steel H-Frame	75	6309	Steel H-Frame	75

**Height above ground level*

Attachment D: Wetlands Delineation Report

DAVISON ENVIRONMENTAL

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

Wetland Delineation

February 11, 2020 **DE Project No.: 2019-99**

Prepared For:	Eversource Energy 56 Prospect Street Hartford, CT 06103 Attn: Ian Cole
Eversource Project Name:	Horton Cove Circuit Separation Project
Project Location:	Montville, Connecticut
Date of Investigations:	December 7, 2019
Field Conditions:	Weather: partly sunny, 30s Soil Moisture: 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[2]:

Davison Environmental, LLC

Matthew Davison
Professional Soil Scientist
Professional Wetland Scientist

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

[2]*Wetlands were delinetead by Davison Environmental Professional Soil Scientists Eric and Matthew Davison on December 7, 2019. All established wetlands boundary lines are subject to change until officially adopted by local, state, or federal regulatory agencies.*

Attachments

- Table 1: Delineated Wetlands and Watercourses within the Horton Cove Circuit Separation Project Area
- Wetland Delineation Field Forms

Table 1: Delineated Wetlands and Watercourses within the Horton Cove Circuit Separation Project Area

Aerial Map Sheet No.	Wetland No.[1]	Dominant NWI Class[2]	Other NWI Classes	Dominant Water Regime	Associated Watercourse[3]	Associated Vernal Pool[4]
1	W1	POW	PSS	Permanently Flooded	---	---
1	W2	R1US	---	Regularly Flooded (Tidal)	S1 (Horton Cove)	---
1,2	W3	R1US	---	Regularly Flooded (Tidal)	S1 (Horton Cove)	---

[1]Wetland No. refers to the number generated during the 2019 field survey within the Horton Cove Circuit Separation Project area. This Wetland No. is keyed to those depicted on the 200 scale Aerial Maps (Attached to the Petition).

[2]Wetlands classified according to Cowardin et al 1979; PSS = Palustrine Scrub-Shrub; POW = Palustrine Open Water; R1US = Riverine Tidal Unconsolidated Bottom

[3]Associated Watercourse refers to the identification number assigned during the 2019 field survey to identify watercourses within the Horton Cove Circuit Separation Project area.

[4] Potential vernal pool inspections were conducted in 2019 by Davison Environmental

Wetland Delineation Field Form

Wetland I.D.:	W1 (WF 1-8)	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: Gay Cemetery Pond is an impounded portion of Oxoboxo Brook		

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: Open water is dominant		

WATERCOURSE TYPE:

Perennial ☒	Intermittent ☐	Tidal ☐
Watercourse Name: Oxoboxo Brook		
Comments: Gay Cemetery Pond is an impounded portion of Oxoboxo Brook		

SPECIAL AQUATIC HABITAT:

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

SOILS:

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

DOMINANT PLANTS:

Specked Alder (Alnus rugosa)	
Primarily unvegetated open water	

* denotes Connecticut Invasive Species Council invasive plant species

Wetland Delineation Field Form

Wetland I.D.:	W2 (TWF 1-28)	Stream I.D.:	S1 (Horton Cove)
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: None		

TIDAL ☒

Subtidal ☐	Regularly Flooded ☒	Irregularly Flooded ☐
Irregularly Flooded ☐		
Comments: Tidal wetland bordering the west side of Horton Cove		

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: Horton Cove is a tidal cove associated with the Thames River		

SPECIAL AQUATIC HABITAT:

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

SOILS:

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

DOMINANT PLANTS:

High-tide Bush *(Iva frutescens)*	
Groundsel tree *(Baccharis halimifolia)*	
Smooth cordgrass *(Spartina alterniflora)*	

* denotes Connecticut Invasive Species Council invasive plant species

Wetland Delineation Field Form

Wetland I.D.:	W2 (TWF 1-15)	Stream I.D.:	S1 (Horton Cove)
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: None		

TIDAL ☒

Subtidal ☐	Regularly Flooded ☒	Irregularly Flooded ☐
Irregularly Flooded ☐		
Comments: Tidal wetland bordering the east side of Horton Cove		

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: Horton Cove is a tidal cove associated with the Thames River		

SPECIAL AQUATIC HABITAT:

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

SOILS:

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

DOMINANT PLANTS:

High-tide Bush *(Iva frutescens)*	
Groundsel tree *(Baccharis halimifolia)*	
Smooth cordgrass *(Spartina alterniflora)*	

* denotes Connecticut Invasive Species Council invasive plant species

Attachment E: EMF Graphs and Tables

Figure E-1

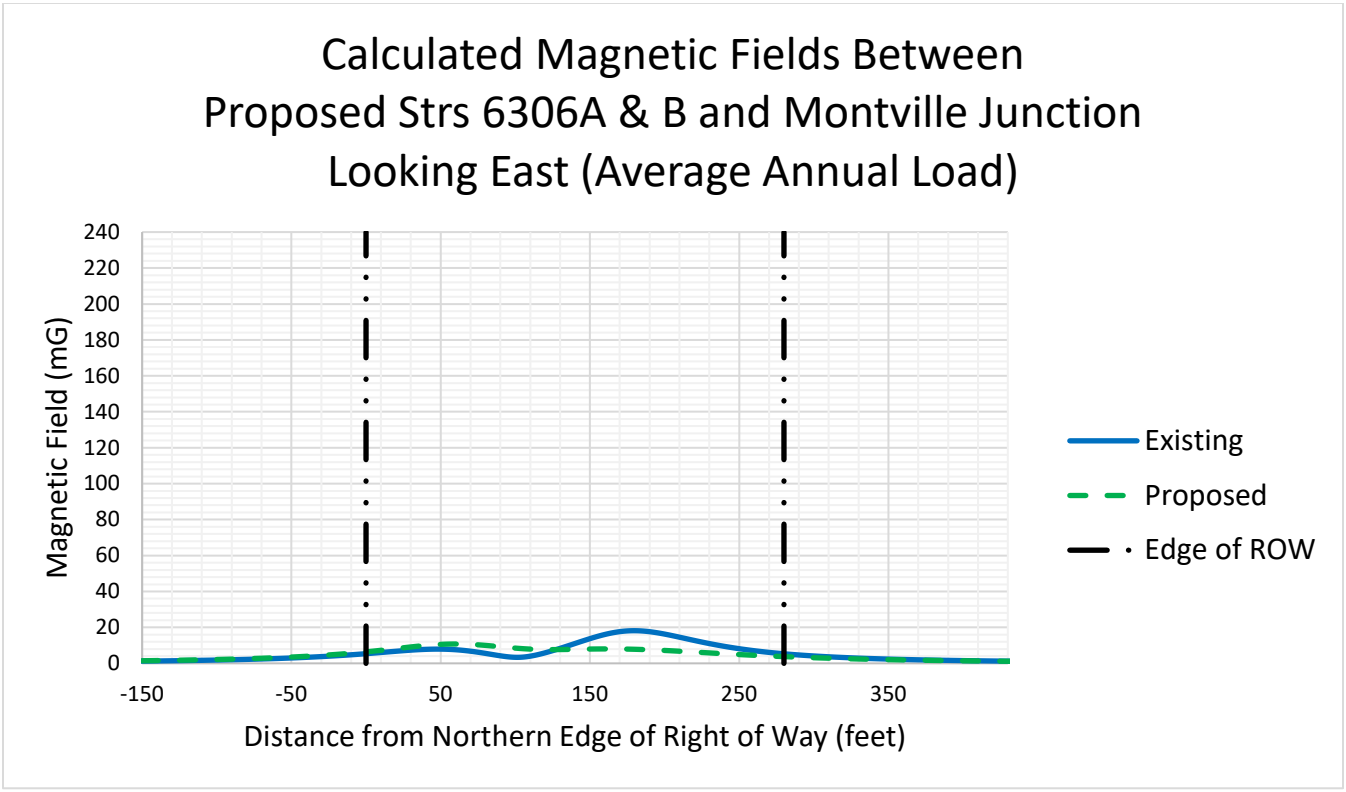


Figure E-2

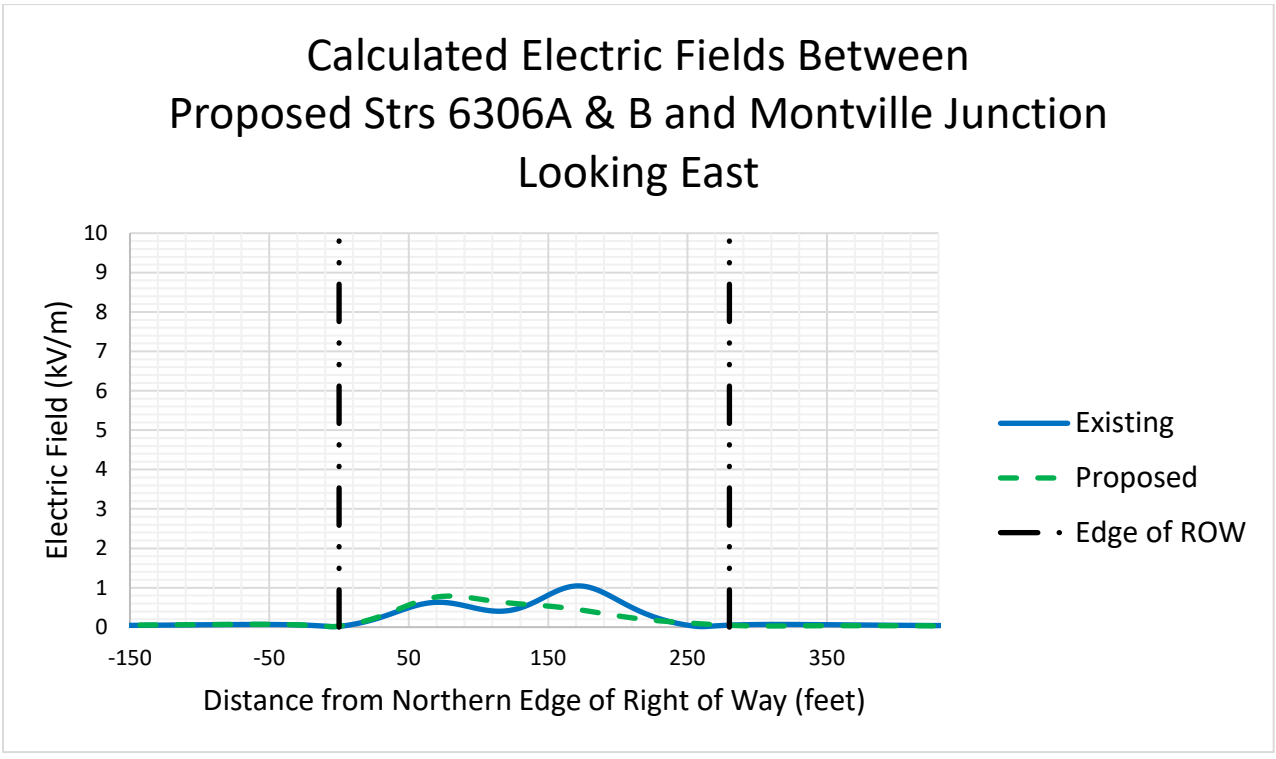


Figure E-3

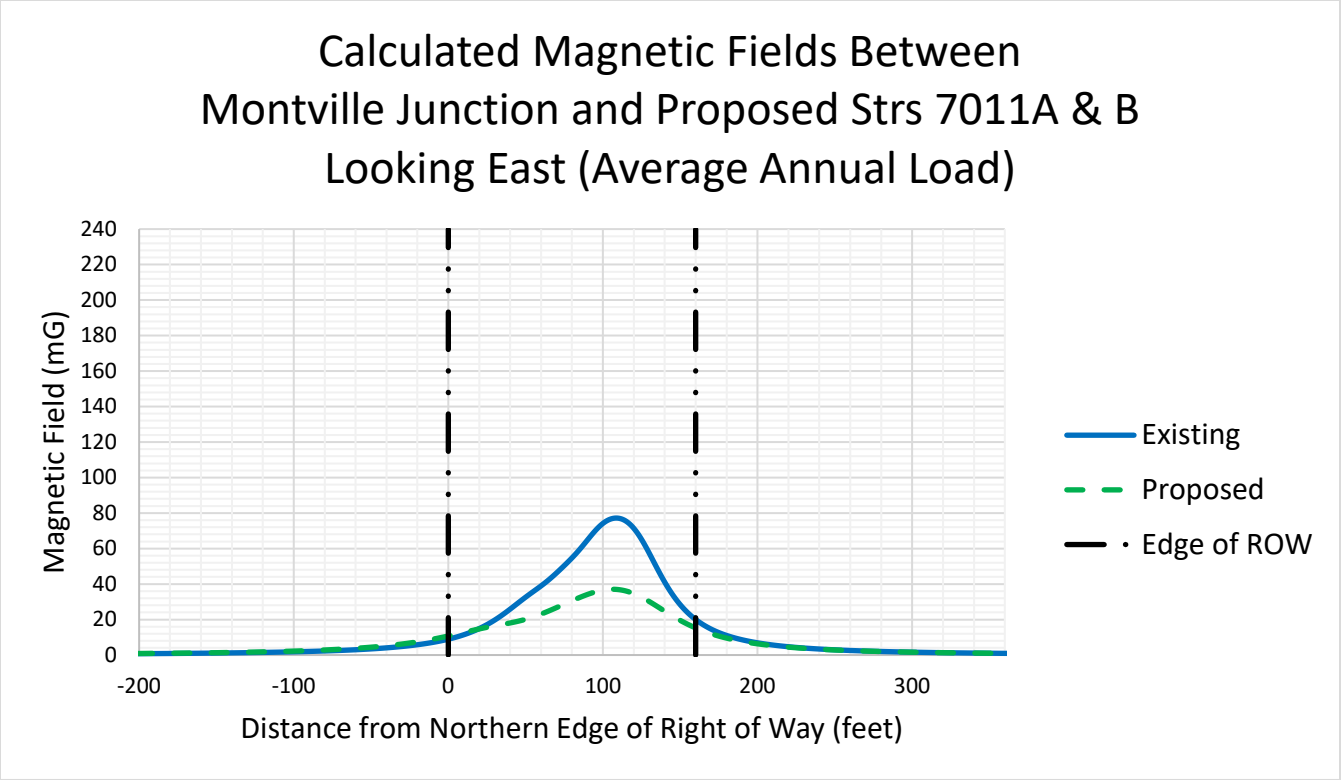
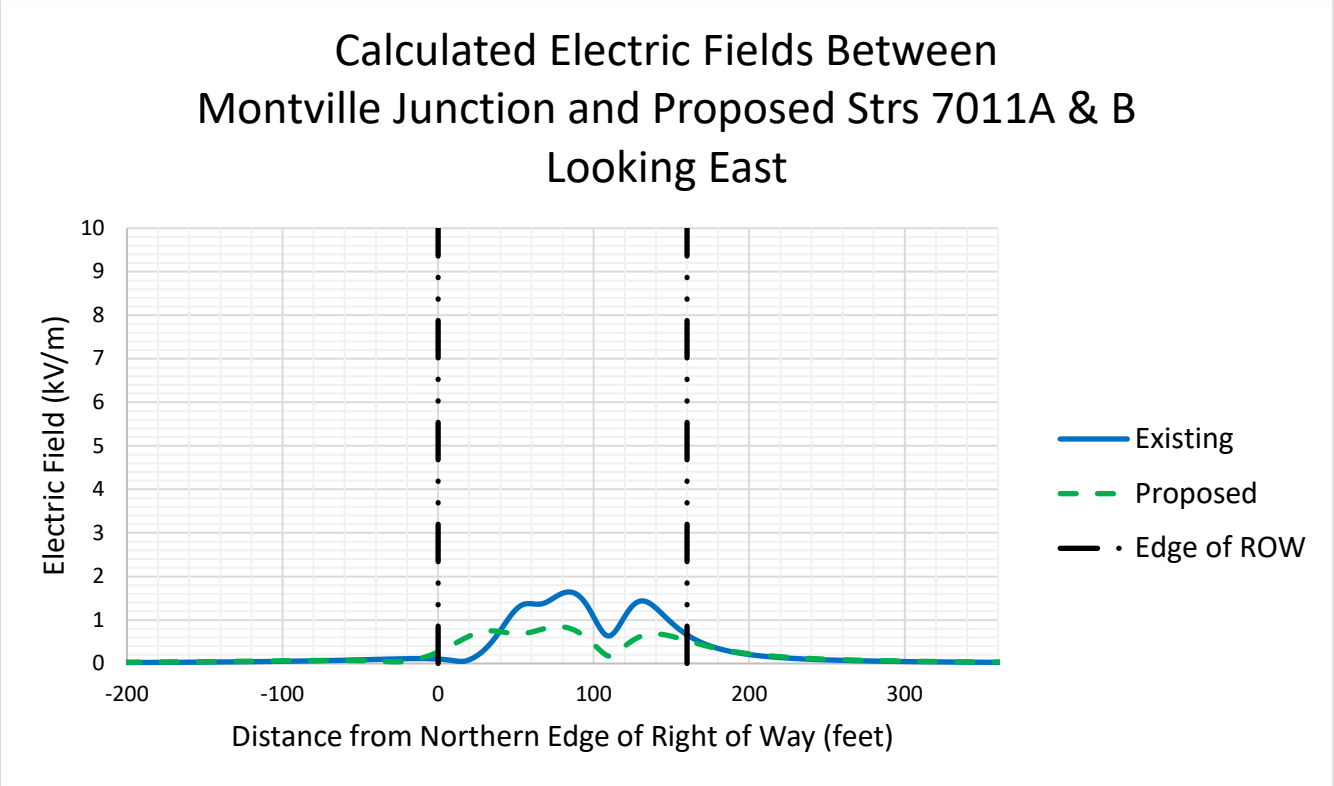


Figure E-4



Attachment F: Letter to the Abutters and Affidavit

EVERSOURCE ENERGY

56 Prospect Street
Hartford, CT 06103

April 30, 2020

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 line (circuit) separation project in your area.

Proposed Project Information
The project, called the Horton Cove Circuit Separation Project, is necessary to ensure the continued reliability and maintainability of the 100/1410 and 1280/1080 transmission lines. The Project includes separating approximately one mile of existing 115kv and 69kV transmission lines within the right-of-way (powerline corridor) between Depot Road and Point Breeze Road in Montville, Conn.

In order to separate the lines and address some deteriorating structures, Eversource would replace select existing steel lattice structures with new galvanized steel monopole structures and select existing wood H-frame structures with new galvanized steel H-frame structures due to age and condition of these structures. Portions of the existing lines would then be removed from the existing structures and placed on the new structures. Many of the replacement structures would increase in height in order to conform with current mandatory system reliability standards.

In addition, new fiber optic communication wire (called OPGW) would be installed on the structures to improve electric reliability by enabling communication between substations.

If the CSC approves this proposed work, construction is expected to begin in late 2020. We anticipate restoration of any affected areas will be completed by fall 2021.

The safety of our employees, our customers, and the public is our top priority during the ongoing coronavirus public health crisis. Our commitment to safety, first and always, is continuous.

At the same time, Eversource must fulfill its foundational mission to deliver safe, reliable services to our customers. We continue to call on our employees and contractors to perform essential work, such as this proposed project, that maintains and improves the reliability of our networks, while also adapting our work practices to incorporate social distancing, heightened hygiene, and other best practices to protect their, and the public's, health.

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 ProjectInfo@eversource.com.

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

Thank you.

Sincerely,

Roxanne Huff

Roxanne Huff
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. In accordance with that RCSA section, I hereby certify that I caused notice of proposed modifications of The Connecticut Light and Power Company doing business as Eversource Energy to be served by mail upon the following municipal official:

Municipal Official:

Honorable Ronald McDaniel, Jr., Mayor
Town of Montville
Montville Town Hall, 2nd Floor
310 Norwich-New London Turnpike
Uncasville, CT 06382

I also certify that I caused notice of the proposed modifications to be served by mail upon 18 owners of abutting properties shown on the maps in Attachment A to the Petition.

Helen M. Taylor
Transmission Siting Specialist

On this the__th day of May, 2020, before me, the undersigned representative, personally appeared, Helen M. Taylor, known to me (or satisfactorily proven) to be the person whose name is subscribed to the foregoing instrument and acknowledged that she executed the same for the purposes therein contained.

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

_____

Notary Public
My Commission expires: