STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL
Ten Franklin Square, New Britain, CT 06051
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VIA ELECTRONIC MAIL & CERTIFIED MAIL
RETURN RECEIPT REQUESTED

September 1, 2023

Deborah Denfeld
Team Lead – Transmission Siting
Eversource Energy
P.O. Box 270
Hartford, CT 06141
deborah.denfeld@eversource.com

RE: **PETITION NO. 1577** - The Connecticut Light and Power Company d/b/a Eversource Energy petition for a declaratory ruling, pursuant to Connecticut General Statutes §4-176 and §16-50k, for the proposed Frost Bridge to Noera Rebuild Project consisting of the replacement and reconductoring of electric transmission line structures along approximately 5 miles of its existing electric transmission line right-of-way shared by its existing 115-kilovolt (kV) 1163 and 1550 Lines between Frost Bridge Substation in Watertown to Noera Substation in Waterbury, traversing the municipalities of Watertown, Thomaston, Plymouth and Waterbury, Connecticut, and related electric transmission line and substation improvements.

Dear Deborah Denfeld:

At a public meeting held on August 31, 2023, the Connecticut Siting Council (Council) considered and ruled that the above-referenced proposal would not have a substantial adverse environmental effect, and pursuant to Connecticut General Statutes § 16-50k, would not require a Certificate of Environmental Compatibility and Public Need with the following conditions:

1. Approval of any project changes be delegated to Council staff;

2. Identification of staging areas and provisions for erosion and sedimentation (E&S) controls, if necessary, at the staging area locations prior to the commencement of construction;

3. Submit a copy of the DEEP Stormwater Permit prior to commencement of construction;

4. Submit a copy of the DEEP Land Management Division Special Use License for off-ROW access, if applicable, prior to commencement of construction;

5. Submit a copy of the DEEP NDDB determination letter prior to commencement of construction;

6. Submit a copy of FAA obstruction evaluations for structures and spans between Structures 6/6A and 7/7A and any required marking/lighting plans;

7. Incorporate pollinator habitat in the restoration of disturbed areas consistent with CGS §16-50hh, where feasible;

8. Submit a copy of the Vernal Pool Protection Plan;

9. Unless otherwise approved by the Council, if the facility authorized herein is not fully constructed within three years from the date of the mailing of the Council's decision, this decision shall be void, and the facility owner/operator shall dismantle the facility and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made. The time between the filing and resolution of any appeals of the Council's decision shall not be counted in calculating this deadline. Authority to monitor and modify this schedule, as necessary, is delegated to the Executive Director. The facility owner/operator shall provide written notice to the Executive Director of any schedule changes as soon as is practicable;

10. The Council shall be notified in writing at least two weeks prior to the commencement of site construction activities;

11. Any request for extension of the time period to fully construct the facility shall be filed with the Council not later than 60 days prior to the expiration date of this decision and shall be served on all parties and intervenors, if applicable, and the Towns of Watertown, Thomaston, Plymouth and the City of Waterbury.

12. Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed **along with a representative photograph of the project;**

13. The facility owner/operator shall remit timely payments associated with annual assessments and invoices submitted by the Council for expenses attributable to the facility under Conn. Gen. Stat. §16-50v; and

14. This Declaratory Ruling may be transferred or partially transferred, provided both the facility owner/operator/transferor and the transferee are current with payments to the Council for their respective annual assessments and invoices under Conn. Gen. Stat. §16-50v. The Council shall be notified of such sale and/or transfer and of any change in contact information for the individual or representative responsible for management and operations of the facility within 30 days of the sale and/or transfer. Both the facility owner/operator/transferor and the transferee shall provide the Council with a written agreement as to the entity responsible for any quarterly assessment charges under Conn. Gen. Stat. §16-50v(b)(2) that may be associated with this facility, including contact information for the individual acting on behalf of the transferee.

This decision is under the exclusive jurisdiction of the Council and is not applicable to any other modification or construction. All work is to be implemented as specified in the petition dated June 1, 2023, and additional information dated July 20, 2023.

Enclosed for your information is a copy of the staff report on this project.

Sincerely,

Melanie A. Bachman
Executive Director

MAB/MP/dll

Enclosure: Staff Report dated August 31, 2023

c: The Honorable Jonathan Ramsay, Chairperson, Town of Watertown (towncouncil@watertownct.org)
Town Manager, Mark A. Raimo, Town Manager, Town of Watertown (raimo@watertownct.org)
The Honorable Edmond V. Mone, First Selectperson, Town of Thomaston (emone@thomastonct.org)
The Honorable Joe Kilduff, Mayor, Town of Plymouth (mayor@plymouthct.us)
The Honorable Neil M. O'Leary, Mayor, City of Waterbury (noleary@waterburyct.org)

STATE OF CONNECTICUT)

: ss. Southington, Connecticut September 1, 2023

COUNTY OF HARTFORD)

I hereby certify that the foregoing is a true and correct copy of the Decision and Staff Report in Petition No. 1577 issued by the Connecticut Siting Council, State of Connecticut.

ATTEST:

Melanie A. Bachman
Executive Director
Connecticut Siting Council

STATE OF CONNECTICUT)

: ss. New Britain, Connecticut September 1, 2023

COUNTY OF HARTFORD)

I certify that a copy of the Connecticut Siting Council Decision and Staff Report in Petition No. 1577 has been forwarded by Certified First Class Return Receipt Requested mail, on September 1, 2023, to each party and intervenor, or its authorized representative, as listed on the attached service list, dated June 1, 2023.

ATTEST:

Dakota LaFountain
Clerk Typist
Connecticut Siting Council

LIST OF PARTIES AND INTERVENORS
SERVICE LIST

Status Granted	Document Service	Status Holder (name, address & phone number)	Representative (name, address & phone number)
Petitioner	☒ E-mail	The Connecticut Light and Power Company d/b/a Eversource Energy	Deborah Denfeld Team Lead – Transmission Siting Eversource Energy P.O. Box 270 Hartford, CT 06141 Phone: (860) 728-4654 deborah.denfeld@eversource.com

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Petition No. 1577
The Connecticut Light and Power Company d/b/a Eversource Energy
Frost Bridge to Noera Rebuild Project
Watertown, Thomaston, Plymouth, and Waterbury

Staff Report
August 31, 2023

Introduction

On June 1, 2023, the Connecticut Siting Council (Council) received a petition from The Connecticut Light and Power Company d/b/a Eversource Energy (Eversource) for a declaratory ruling pursuant to Connecticut General Statutes (CGS) §4-176 and §16-50k, for the Frost Bridge to Noera Rebuild Project (Petition or Project) within existing Eversource electric transmission line right-of-way (ROW) in the Towns of Watertown, Thomaston, and Plymouth and the City of Waterbury (municipalities).

The Project consists of the replacement of electric transmission line structures and conductors, and the replacement of shield wire with optical ground wire (OPGW) on the 1163 and 1550 Lines along approximately 5.0 miles of existing ROW between Frost Bridge Substation in Watertown and Noera Junction in Waterbury; and between Noera Junction and Noera Substation in Waterbury; and related electric transmission line and substation improvements.

On May 31, 2023, in compliance with Regulations of Connecticut State Agencies (RCSA) §16-50j-40, Eversource provided notice of the proposed Project to the municipalities and abutting property owners.

On June 5, 2023, the Council sent correspondence to the municipalities stating that the Council has received the Petition and invited the municipalities to contact the Council with any questions or comments by July 1, 2023. No comments were received from any of the municipalities.

Under RCSA §16-50j-40, neither Eversource nor the Council is required to provide notice to the state agencies listed in CGS §16-50j(g) when a petition for a declaratory ruling for modifications to an ***existing facility*** is submitted to the Council. On June 29, 2023, the Council on Environmental Quality submitted comments on the Project.[1]

Under CGS §16-50x, the Council retains exclusive jurisdiction over the existing electric transmission line and substation facility sites. Under RCSA §16-50j-2a(29), "site" means a contiguous parcel of property with specified boundaries, including, but not limited to, the leased area, right-of-way, access and easements on which a facility and associated equipment is located, shall be located or is proposed to be located. The Council cannot delegate its statutory authority to any other entity and it is not required to abide by comments from state agencies.[2]

The Council submitted interrogatories to Eversource on July 3, 2023. Eversource submitted responses to the interrogatories on July 20, 2023.

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[1] https://portal.ct.gov/-/media/CSC/3_Petitions-medialibrary/Petitions_MediaLibrary/MediaPetitionNos1501-1600/PE1577/ProceduralCorrespondence/PE1577-SACRCDPI_CEQ-a.pdf
[2] *Corcoran v. Connecticut Siting Council*, 284 Conn. 455 (2007)

Pursuant to CGS §4-176(e) of the Uniform Administrative Procedure Act, an administrative agency is required to take action on a petition within 60 days of receipt. On July 20, 2023 pursuant to CGS §4-176(e), the Council voted to set the date by which to render a decision on the Petition as no later than November 28, 2023, which is the 180-day statutory deadline for a final decision under CGS §4-176(i).

Notice and Community Outreach

Eversource initiated outreach to the municipalities in January 2023. None of the municipalities commented on the Project.

Eversource initiated outreach to property owners along the Project route in the first quarter of 2022. All abutting property owners were notified of the Project and provided information on how to obtain additional information, as well as how to submit comments to the Council. During the construction phase of the Project, Eversource would maintain contact with the municipalities and abutting property owners to inform them of construction activities. None of the abutting property owners commented on the Project.

Existing Facility Site

The existing facility site includes approximately 5.0 miles of Eversource ROW that extends through rural, residential, recreational, commercial, railroad, and undeveloped lands. It also crosses several wetlands, the Naugatuck River, Spruce Brook, Hancock Brook, and Great Brook Reservoir. Approximately 3.5 miles of the ROW is between Frost Bridge Substation and Noera Junction, and 1.5 mile of the ROW is between Noera Junction and Noera Substation.

The ROW was established in 1923.

Eversource's easements for the existing ROW grant Eversource rights to enter and travel upon and transport materials over and across the right of way and to erect, repair, maintain, replace, relocate, inspect, operate and remove upon, infrastructure related to the conduction of electricity. The easements also grant rights to trim, cut, and remove vegetation within the ROW.

The Project ROW is approximately 115 to 280 feet wide. It is managed to its full width, except for between Frost Bridge Substation and Noera Junction where some clearing would be required.[3] No expansion of the ROW is proposed.

Vegetation management was last performed in portions of the Project ROW in Spring 2023.

Project Development

The purpose of the proposed Project is to improve system reliability on the 1163 and 1550 Lines by replacing electric transmission line structures that are deteriorated as well as aged copper conductors and obsolete copper shield wire and to meet National Electrical Safety Code (NESC) standards. Additionally, the Project entails the installation of two new structures to maintain conductor clearance into Noera Substation.

Prior to submitting this Petition, Eversource performed structure rebuild work in Sub-Petition 1000-WY-01 for Structure 691 in Waterbury that was approved by the Council and was completed in 2014. Structure 691 is proposed to be replaced because of the proposed reconfiguration of the Noera Junction structures and because it is not structurally adequate to support the installation of the 1272 kcmil aluminum conductor steel supported (ACSS) conductor.

[3] According to the Federal Energy Regulatory Commission, "full right-of-way" means the portion of land for which a utility has documented legal rights to build and maintain transmission facilities. Managing a narrower maintained right-of-way, rather than the full right-of-way, is a relatively common industry practice, though not a best practice.

From Frost Bridge Substation to Noera Substation, the 1163 and 1550 Lines are supported on a total of 41 structures. Once the Project is complete, all 41 structures will have been replaced.

The Project is identified in the 2023 Eversource Forecast of Loads and Resources Report and in the June 2023 Independent System Operator New England, Inc. (ISO-NE) Regional System Plan Asset Condition List.[4] There are no generation facilities listed on the ISO-NE interconnection queue associated with the proposed Project.

Cost

The total estimated cost of the Project is approximately $46.3M. Approximately $33.8M of the total Project cost would be eligible for regional cost allocation as it is associated with Pool Transmission Facilities.[5] Pending a final determination from ISO-NE, total costs are expected to be allocated[6] as follows:

Eversource Connecticut ratepayers[7]	40.0%	($18.5M)
Other Connecticut ratepayers[8]	5.4%	($2.5M)
Other New England ratepayers[9]	54.6%	($25.3M)
Cost Total	100%	($46.3M)

Proposed Project

The Project is proposed to address identified asset condition deficiencies by replacement of deteriorated structures and to replace aged copper conductor and obsolete copper shield wire. It includes the replacement of 20 double-circuit steel lattice structures with 20 double-circuit monopoles; replacement of 18 double-circuit steel lattice structures with 36 single-circuit monopoles; replacement of one double-circuit steel lattice tap structure with three single-circuit monopoles; replacement of one double-circuit wood structure with two single-circuit monopoles; and replacement of one double-circuit steel pole structure with one double-circuit monopole.

The Project requires taller structures to meet NESC standards, including, but not limited to, conductor clearance requirements. The NESC is the authoritative code for ensuring the continued practical safeguarding of persons and utility facilities during the installation, operation and maintenance of electric power and communications utility systems, including substations, overhead lines and underground lines.

NESC clearance requirements for conductor sway due to wind (blowout) are based on established horizontal clearance requirements during specific wind events to buildings (9.1 feet of clearance to the ROW edge for 115-kV conductors). Transmission lines are designed with the assumption that a building could be erected at any location along the ROW edge. To provide a buffer for construction tolerance, Eversource typically designs transmission corridors to have 11 feet of clearance to the ROW edge during specific wind events.[10]

[4] Entry #259.
[5] ISO-NE defines Pool Transmission Facilities as facilities rated 69-kV or above owned by the participating transmission owners over which ISO-NE has operating authority in accordance with the terms set forth in the Transmission Operating Agreements.
[6] These allocations are estimates based on 2022 actual loads.
[7] Electrical service customers of Eversource and located within Connecticut.
[8] Electrical service customers located within Connecticut but outside of Eversource's service territory.
[9] Electrical service customers located within New England but outside of Connecticut.
[10] Petition 1527, response to Council interrogatory 19.

NESC clearance requirements for conductor uplift and insulator swing were factored into the transmission line design. Conductor uplift is a condition where wire on a structure pulls up on the hardware instead of hanging down vertically. It typically occurs in spans where structures are located at different ground levels or have different heights. The amount of insulator swing on a transmission line depends on conductor tension, temperature, wind velocity, insulator weight, ratio of weight span to wind span, and line angle. These issues can be mitigated by taller structures in certain locations to increase the load tension of the insulators and the span weight load of the conductors.

1163 and 1550 Lines – Frost Bridge Substation to Noera Substation

The 1163 and 1550 Lines are 115-kV lines supported by mostly double-circuit lattice structures installed beginning in 1949. The 1163 and 1550 Lines consist of 795 kcmil aluminum conductor steel reinforced (ACSR) conductor between Frost Bridge Substation and Noera Junction and 4/0 copper conductor between Noera Junction and Noera Substation.

Project work consists of the following:

a) Replace 18 double-circuit steel lattice structures with 36 single-circuit weathering steel monopoles;
b) Replace 20 double-circuit steel lattice structures with 20 double-circuit weathering steel monopoles;
c) Replace one double-circuit steel lattice tap structure with three single-circuit weathering steel monopoles;
d) Replace one double-circuit wood H-frame structure with two single-circuit weathering steel monopoles;
e) Replace one double-circuit steel pole structure with one double-circuit weathering steel monopole;
f) Install two single-circuit weathering steel monopoles;
g) Replace approximately 3.5 miles of 795 kcmil aluminum conductor steel reinforced (ACSR) conductor with 1272 kcmil ACSS conductor;
h) Replace approximately 1.5 miles of 4/0 copper conductor with 1272 kmcil ACSS conductor;
i) Replace 3/8-inch copperweld shield wire with OPGW; and
j) Install underground all-dielectric self-supporting (ADSS) fiber optic cable between two structures at Noera Junction.

Project Construction

Eversource would establish temporary equipment staging areas near the Project site prior to construction.

Eversource would utilize existing ROW access roads to the extent possible during construction. Where existing access roads are not present, new permanent gravel roads would be established. Multiple access roads are required so that equipment can access various construction zones along the ROW without relying on one point of access for long ROW segments. Construction matting would be utilized to install temporary access roads to protect sensitive areas (e.g. wetlands, watercourses, lawn, agricultural areas) to reach certain structure locations.

Eversource will utilize new permanent off-ROW access roads within the Mattatuck State Forest subject to securing a DEEP Land Management Division Special Use License (SUL). Such access would be located between Spruce Brook Road and Structures 6/6A; between Structures 6/6A and east of Structure 3; and between pull pad areas around Structure 7/7A. This access configuration (with the SUL) would reduce temporary wetland impacts by about 0.03 acre by avoiding Wetland 10.

In the event that Eversource is unable to secure a SUL, Eversource would alternatively utilize in-ROW permanent access. Such access would be located between Spruce Brook Road and Structures 6/6A; between Structures 6/6A and Structures 5/5A; between Structures 5/5A and Structures 4/4A including a temporary crossing of Wetland 10; and between the pull pads and work pad for Structures 7/7A.

Eversource would obtain a Department of Transportation Encroachment Permit to cross Route 262.

Construction areas would be isolated by establishing erosion and sedimentation (E&S) controls in accordance with the *2002 Connecticut Guidelines for Soil Erosion and Sediment Control* and Eversource's April 2022 Best Management Practices Manual for Massachusetts and Connecticut (BMPs).[11] Typical E&S control measures include, but are not limited to, biodegradable blankets, hay bales, silt fencing, gravel anti-tracking pads, soil and slope protection, water bars, check dams, berms, swales, and plunge pools.

A project-specific Stormwater Pollution Control Plan (SWPCP) would be developed for registration under a DEEP Stormwater Permit. The Stormwater Permit requires the designing qualified professional to conduct the SWPCP Implementation Inspection that confirms compliance with the Stormwater Permit and the initial implementation of all SWPCP control measures for the initial phase of construction. The SWPCP also requires a qualified inspector to inspect the work areas at least once per week and within 24-hours after a rain event that meets certain permit criteria.

The Project is eligible for certification through the U.S. Army Corps of Engineers (USACE)/DEEP Self-Verification Notification process in regard to wetland impact. The self-verification notification forms would be submitted to the USACE - New England District and DEEP prior to the start of Project construction, as required by the SWPCP.

At each transmission line structure location, a work pad would be constructed, if necessary, to stage material for final on-site assembly and/or removal of structures, to pull conductors and to provide a safe, level work base for construction equipment. Work pad dimensions would vary based on site specific conditions such as terrain, proximity to the existing and replacement structures, and the type of construction activities.

Work pads for structure replacements would typically range from approximately 135 feet by 110 feet to 225 feet by 150 feet. Pull pads, necessary to accommodate machinery needed for pulling conductors and/or OPGW, would typically be 80 feet by 60 feet. Most of the work pads would be composed of gravel. Temporary work pads would be used in sensitive areas such as wetlands, watercourses, lawns and agricultural lands.

17 proposed structure foundations would be direct-embed foundations, and 47 proposed structure foundations would be drilled shaft concrete foundations. Foundation installation work would require the use of equipment such as drill rigs, pneumatic hammers, augers, dump trucks, concrete trucks, grapple trucks, and light duty trucks. If groundwater is encountered, pumping trucks or other equipment would be utilized. The water would then be discharged in accordance with local, state and federal requirements. New structure sections, components and hardware would be delivered by flatbed truck to the structure locations for assembly using a crane and bucket trucks.

After the new structures are installed, OPGW and new conductor would be installed using conductor reels, pulling and tensioning rigs, guard trucks, and bucket trucks. During crossings of water bodies, new conductor and OPGW would be installed by maintaining appropriate tension and utilizing construction means and methods such as a series of pulleys and ropes to avoid contact with water beneath the span.

The one existing wood H-frame structure would be removed and properly disposed at an off-site location. The replacement structure is not located in a wetland.

[11] 2022 Eversource Best Management Practices MA_CT

After the new structures/conductors/OPGW are installed and the existing structures are removed, ROW restoration activities would commence. Restoration work would include the removal of construction debris, signage, flagging, temporary fencing, and construction mats and work pads that are designated for removal or mitigation. Affected areas would be re-graded as practical and stabilized via revegetation or other measures before removing temporary E&S controls. ROW restoration would be performed in accordance with Eversource BMPs and in consultation with affected property owners.

Upon completion of the Project, access roads and work pads located in uplands would be left in place to facilitate future transmission line maintenance. If a property owner requests their removal, Eversource would discuss mitigation options with the landowner.

Except for concrete trucks, no construction equipment or vehicle washing would be allowed in the ROW. In accordance with Eversource's BMPs, concrete truck wash-out would occur only in upland areas of the ROW (a minimum of 50 feet from wetlands) to avoid or minimize the potential for impacts to water resources. All wash-out areas would include measures to control and contain wash-water and collect the cement wash-off for off-site disposal.

Project-related traffic would be expected to be temporary and highly localized in the vicinity of ROW access points along public roads and at the staging area. Due to the phasing of construction work, Project-related traffic is not expected to significantly affect transportation patterns or levels of service on public roads. Construction warning signs along public roads would be installed near work sites and flaggers or police personnel would be used to direct traffic, if necessary.

Environmental Effects and Mitigation Measures

The majority of the work would occur within a maintained ROW. Approximately 2.5 acres of tree clearing would be performed to meet NESC and Eversource conductor clearance standards. Such tree clearing would convert forestland to shrubland.

Vegetation removal/tree trimming would be accomplished using primarily mechanical methods using tracked mowers and bucket trucks or manually using chain saws in areas more difficult to access. No tree clearing is expected to be necessary in wetlands. Vegetation removal activities would be performed in accordance with Eversource BMPs.

A total of 36 wetland areas and 20 watercourses occur along the ROW or in adjacent off-ROW areas. The Project would result in 50 square feet of permanent wetland impacts associated with the installation of proposed Structure 690 within a wetland area on Eversource property at Noera Junction. This structure is proposed within the wetlands in accordance with the overall Project design and structure alignment. Its location within wetlands cannot be reasonably avoided.

Temporary wetland impacts related to Project construction matting would total approximately 1.5 acres.[12] The Project would require 12 temporary watercourse crossings, using wood matting, for work pads and access roads. Construction activities within wetlands and across watercourses would be conducted in accordance with Eversource's BMPs.

A total of 7 vernal pools (VP) were identified in the Project ROW, but none of the VPs would be directly affected by construction activities. Work would occur within the VP envelope (100 feet from the VP edge) of 4 VPs to facilitate access to the structures and/or new structures. Three proposed structures would be located within VP envelopes.

[12] This 65,808 square feet (1.51 acres) of temporary wetland impact would reduce to 64,625 square feet (1.48 acres) if Eversource is able to secure the SUL and avoid a temporary crossing of Wetland 10.

Eversource would conduct work in this area in accordance with Eversource's BMPs and Project specific VP protective measures, which include, but are not limited to, selective tree/shrub vegetation clearing with hand tools where necessary, avoidance of clearing (as practicable) during periods of peak VP species breeding, establishment of E&S controls, use of temporary matting, and avoidance of permanent disturbance that could cause permanent habitat alteration or changes in local drainage patterns.

The DEEP-approved SWPCP would contain details regarding the E&S control measures that would be implemented to protect wetlands and vernal pools. E&S controls would also be inspected weekly by a qualified inspector, as required by the SWPCP. The Project would comply with the SWPCP, USACE self-verification procedures, and Eversource's BMPs. In addition, the qualified inspector would be on-site to monitor environmental resource protections as established in Eversource's BMP's and within the DEEP Natural Diversity Database (NDDB) Determination letter. An Environmental Monitor will conduct weekly inspections of resource areas for the duration of Project construction.

Invasive species mitigation measures would be conducted in accordance with Eversource's BMPs. Measures include the cleaning of temporary mats to prevent the introduction of invasive species into wetlands, the cleaning of vehicles, equipment, materials, gear, footwear or clothing of all visible soil and plant material on site known to contain invasives or as near as practical to the invasive area, prior to leaving the Project site.

The Project ROW extends across 100-year Federal Emergency Management Agency-designated flood zones associated with Naugatuck River, Spruce Brook, Hancock Brook, and Great Brook Reservoir. No proposed monopoles would be located within the 100-year flood zone, and no permanent or temporary fill would be within the FEMA flood zones.

The Project is not within a Public Drinking Water Supply Watershed. There are no DEEP-designated Aquifer Protection Areas within the Project ROW. Notwithstanding, to protect subsurface water quality, Eversource would conduct work in accordance with its BMPs which include provisions for the proper storage, secondary containment, and handling of diesel fuel, motor oil, grease and other lubricants.

A DEEP NDDB Determination was issued for the Project on September 15, 2022. Eversource would implement DEEP recommended species-specific protection measures during construction, which include, but are not limited to, time of year best management practices.

Eversource also consulted with the U.S. Fish & Wildlife Service's (USFWS) Information, Planning and Consultation (IPaC) service regarding federally-listed species that may be present within the Project area. The IPaC report identified the northern long-eared bat (NLEB), a federally-listed and state-listed Endangered Species. Per USFWS NLEB guidance, Eversource performed an analysis using the USFWS NLEB planning tool which determined the Project would have no effect on the NLEB.

A Phase 1A Cultural Resources Assessment (Phase 1A) determined that no properties listed on the National Register of Historic Places are located within 500 feet of the Project ROW. The State Historic Preservation Office issued a letter dated November 22, 2022 that confirmed no historic properties would be affected by the Project.

The Phase 1A identified five locations within 500 feet of the Project ROW possessing a moderate to high potential for archaeological sensitivity. A pedestrian survey was performed, and all five locations reclassified as having no/low archaeological sensitivity. No further archaeological investigation was recommended.

The Project ROW crosses a portion of the Mattatuck State Forest in Waterbury and Thomaston. The Project ROW also crosses portions of the Great Brook Reservoir in Waterbury. Eversource would coordinate with managers of public recreational areas regarding the Project and develop and implement measures to protect public safety during construction and also avoid or minimize short-term impacts to recreational users.

Disturbed areas would be stabilized using temporary E&S controls such as straw mulch, compost filters, and biodegradable erosion control blankets until final stabilization has been achieved. Appropriate seed mixes would be applied in uplands to revegetate disturbed areas, promote shrub land and other low-growth habitat along the ROW to benefit pollinators and other species.

In accordance with the SWPCP, monthly inspections would be conducted to monitor stabilization measures. A qualified inspector or a qualified professional engineer would inspect the areas and confirm compliance with the post-construction stormwater management requirements.

The Project would require increasing the height of many replacement structures to meet NESC clearance requirements within the existing ROW. Existing structures to be replaced on the lines range from 53 to 94 feet above ground level. The new and replacement structures on the lines would range from 79 feet to 122 feet above ground level, with an average height increase of 20.3 feet to meet NESC clearance requirements. Three structures would decrease in height by 2 to 6 feet. Three replacement structures would increase in height by 40 feet or more, and of those, one is within Mattatuck State Forest in Waterbury (increase of 40 feet); one is adjacent to Boyden Street in Waterbury (increase of 40 feet); and one is adjacent to Farmwood Road in Waterbury (increase of 54 feet).

Due to the increase in structure heights to comply with NESC clearance criteria, there would be indirect visual impacts to the surrounding area. The use of weathering steel replacement structures would blend in with the surrounding wooded landscape. Additionally, the replacement of lattice towers with monopoles would reduce the footprint of the structure.

Public Safety

There would be no permanent changes to existing ROW sound levels after completion of the Project. Noise associated with construction activities is exempt from DEEP Noise Control Regulations. Notwithstanding, any construction-related noise would be short-term and localized in the vicinity of work sites.

Eversource utilized the Federal Aviation Administration (FAA) Notice Criteria Tool regarding proposed structures and determined that notification to the FAA is not required and lighting/marking of proposed structures is not required. Notwithstanding, Eversource also evaluated the horizontal spans between Structures 1/1A-2, 6/6A-7/7A, 12/12A, and 13/13A as they could approach or exceed a threshold where FAA marker balls might be required. On July 7, 2023, Eversource filed a 7460 Form with FAA for review. Eversource will comply with any marking/lighting requirements as determined by FAA.

Electric fields (EF) are produced whenever voltage is applied to electrical conductors and equipment. Electric fields are typically measured in units of kilovolts/meter (kV/m). As the weight of scientific evidence indicates that exposure to electric fields, beyond levels traditionally established for safety, does not cause adverse health effects, and as safety concerns for electric fields are sufficiently addressed by adherence to the NESC, as amended, health concerns regarding Electric and Magnetic Fields (EMF) focus on MF rather than EF. The International Commission on Non-Ionizing Radiation Protection (ICNIRP) has established a guideline of 4.2 kV/m.

The Project route contains an existing transmission line that emits magnetic fields (MF). In the United States, no state or federal exposure standards for 60-Hertz MF based on demonstrated health effects have been established, nor are there any such standards established worldwide. However, the ICNIRP has established a level of 2,000 milliGauss (mG), based on extrapolation from scientific experimentation, and the International Committee on Electromagnetic Safety (ICES) has calculated a guideline of 9,040 mG for exposure to workers and the general public, and recognized in the Council's *Electric and Magnetic Field Best Management Practices for the Construction of Electric Transmission Lines in Connecticut.*

MF at and beyond the edges of ROW are expected to increase by a maximum of 2.6 mG. The highest calculated MF level is 31.7 mG at the edge of the ROW, well below the ICNIRP and ICES recommended exposure standards.

Construction Schedule

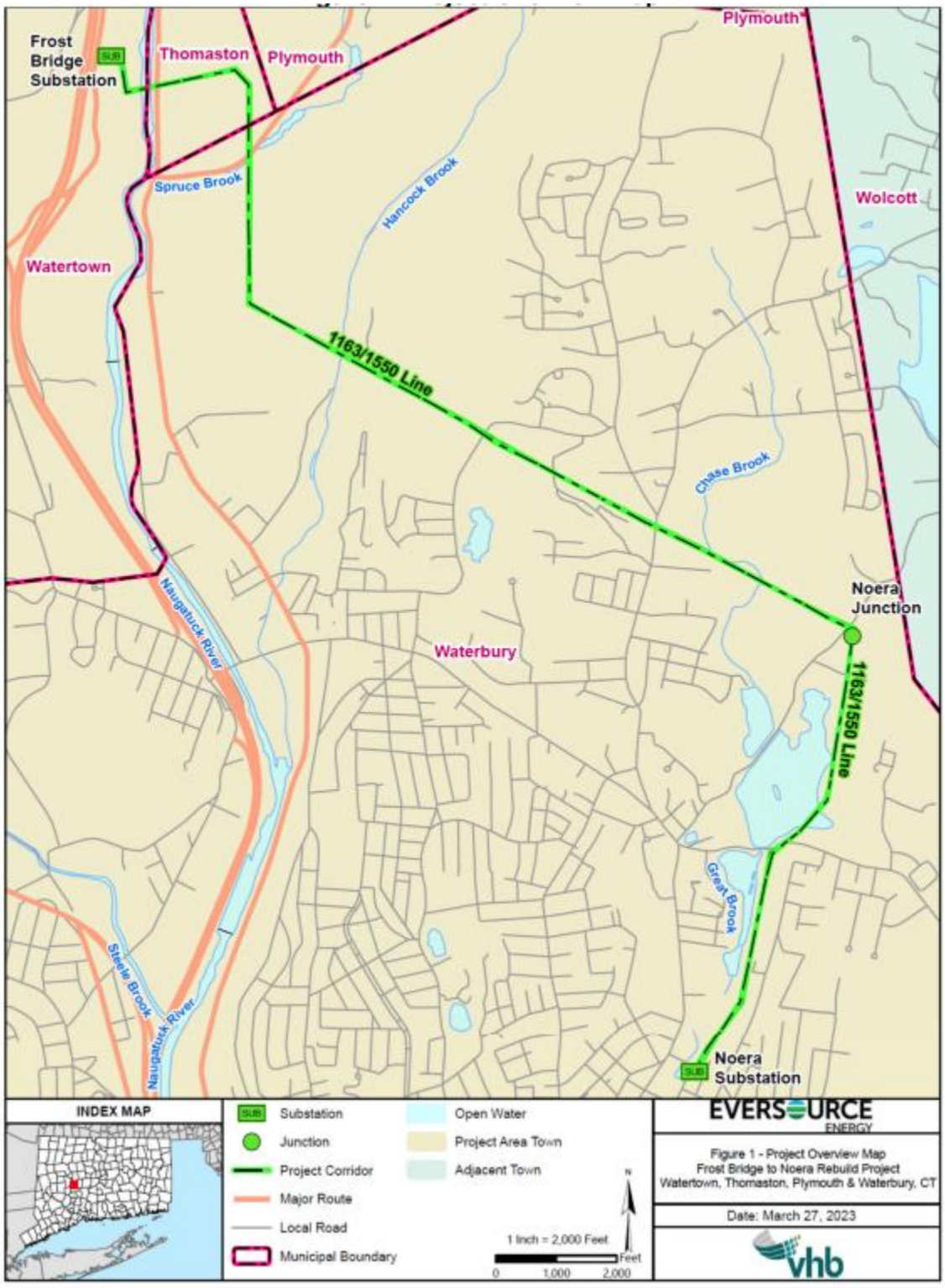
Construction is expected to begin in the fourth quarter of 2023 with anticipated completion by mid-2024. Normal work hours would be Monday through Saturday from 7:00 a.m. to 7:00 p.m. Sunday work hours or evening work (i.e. after 7:00 p.m.) may be necessary due to unforeseen circumstances, delays caused by inclement weather and/or outage constraints.

Conclusion

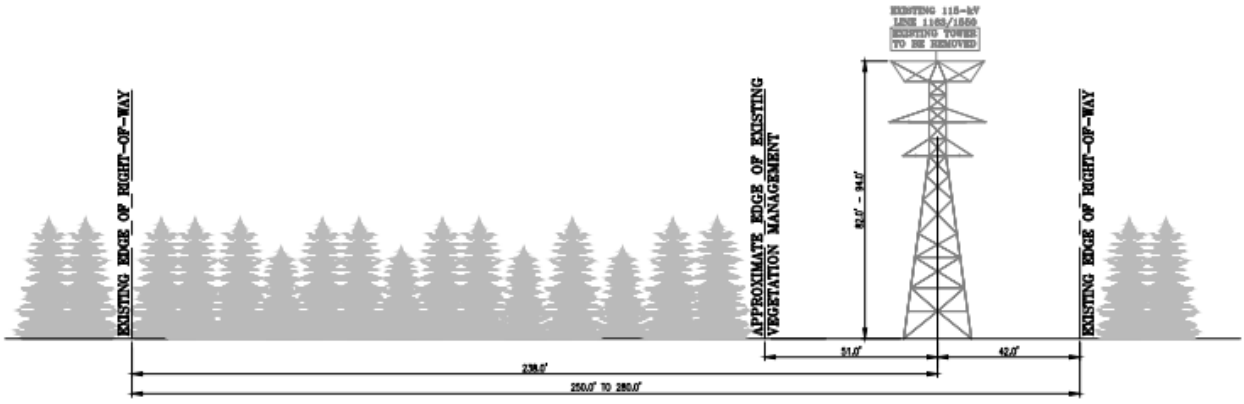
If approved, staff recommends the following conditions:

1. Approval of any project changes be delegated to Council staff;
2. Identification of staging areas and provisions for erosion and sedimentation (E&S) controls, if necessary, at the staging area locations prior to the commencement of construction;
3. Submit a copy of the DEEP Stormwater Permit prior to commencement of construction;
4. Submit a copy of the DEEP Land Management Division Special Use License for off-ROW access, if applicable, prior to commencement of construction;
5. Submit a copy of the DEEP NDDB determination letter prior to commencement of construction;
6. Submit a copy of FAA obstruction evaluations for structures and spans between Structures 6/6A and 7/7A and any required marking/lighting plans; and
7. Incorporate pollinator habitat in the restoration of disturbed areas consistent with CGS §16-50hh, where feasible.

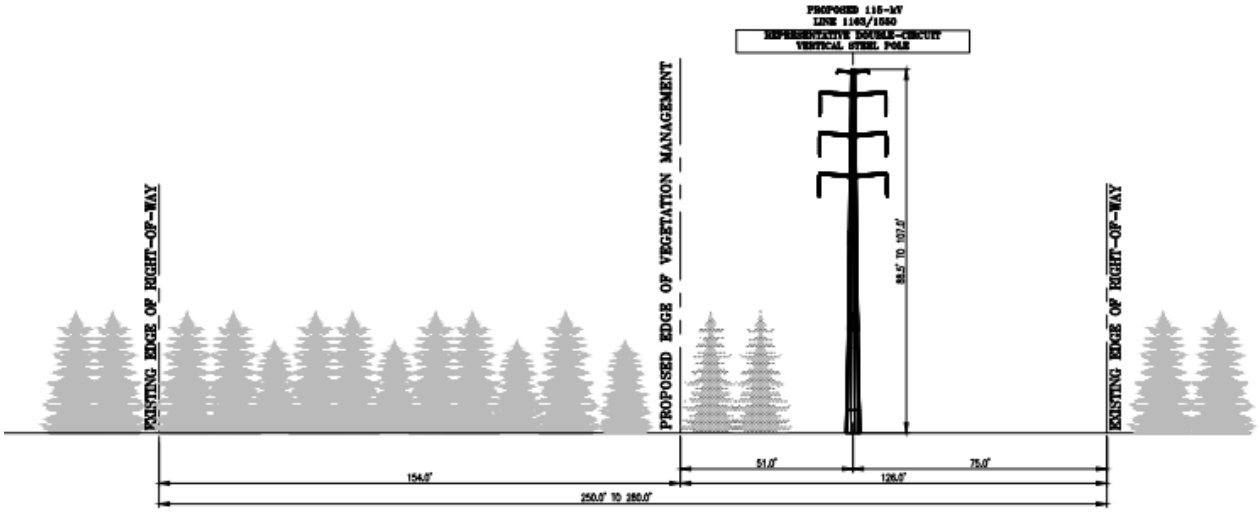
Project Location



Project ROW Profiles



EXISTING R.O.W. CONFIGURATION
DOUBLE-CIRCUIT STEEL LATTICE TOWER
LOOKING FROM FROST BRIDGE SUBSTATION TO NOERA JUNCTION
IN THE TOWNS OF WATERTOWN & THOMASTON, CT



PROPOSED R.O.W. CONFIGURATION
DOUBLE-CIRCUIT STEEL POLE DESIGN
LOOKING FROM FROST BRIDGE SUBSTATION TO NOERA JUNCTION
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DOUBLE-CIRCUIT STEEL LATTICE TOWER
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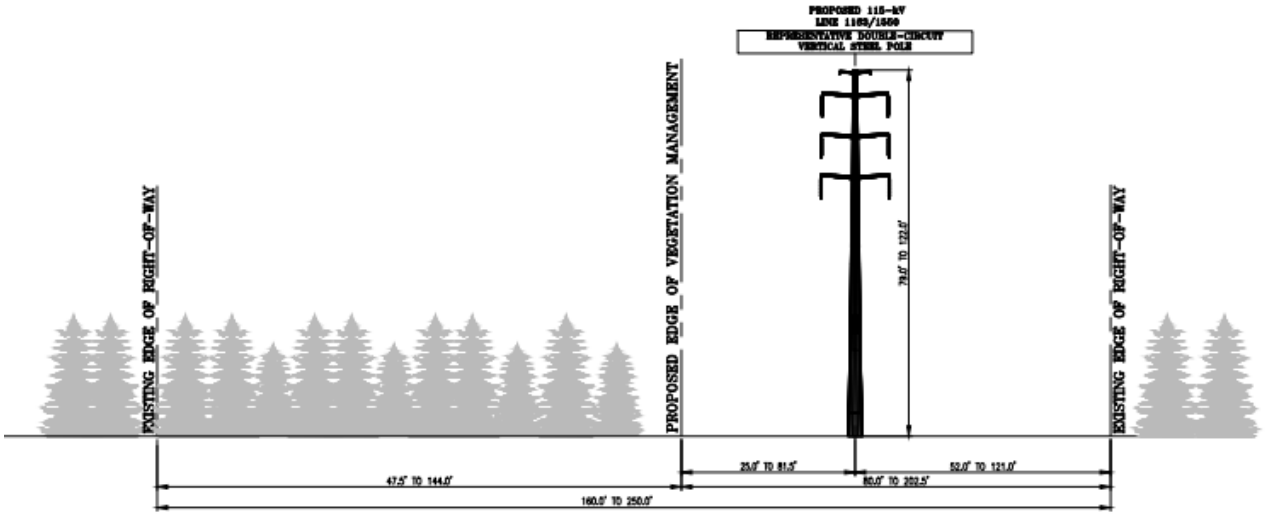

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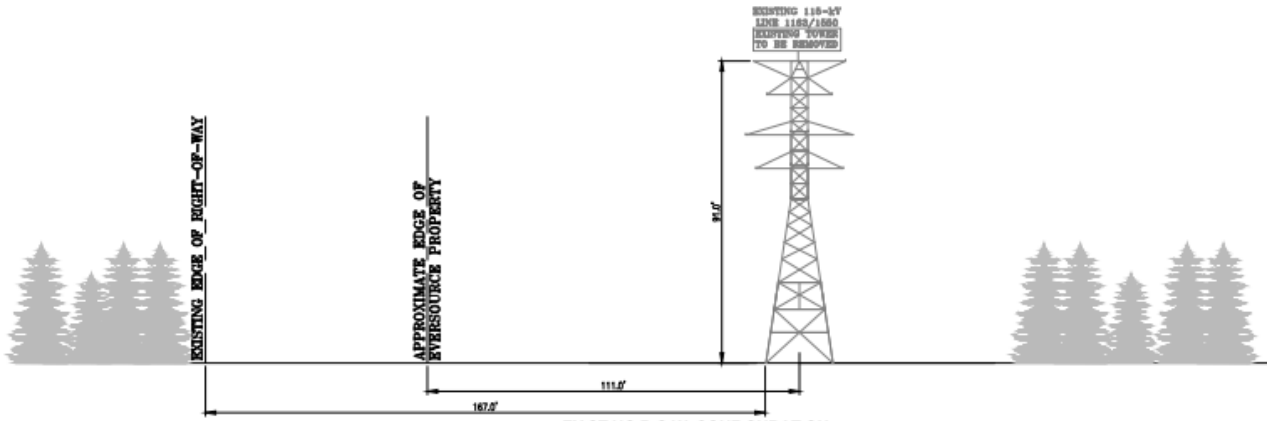

EXISTING R.O.W. CONFIGURATION
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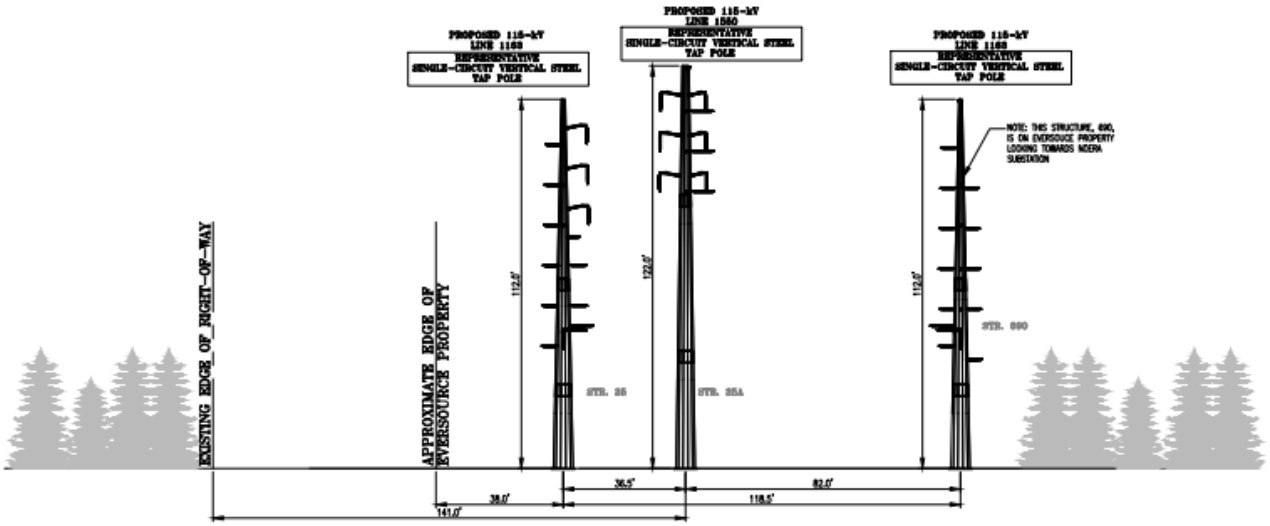
LOOKING FROM FROST BRIDGE SUBSTATION TO NOERA JUNCTION
IN THE CITY OF WATERBURY, CT



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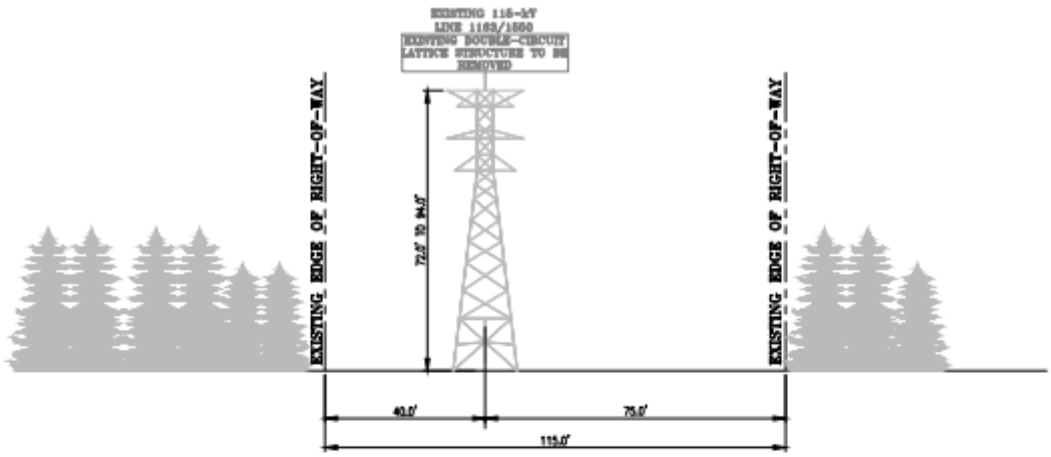

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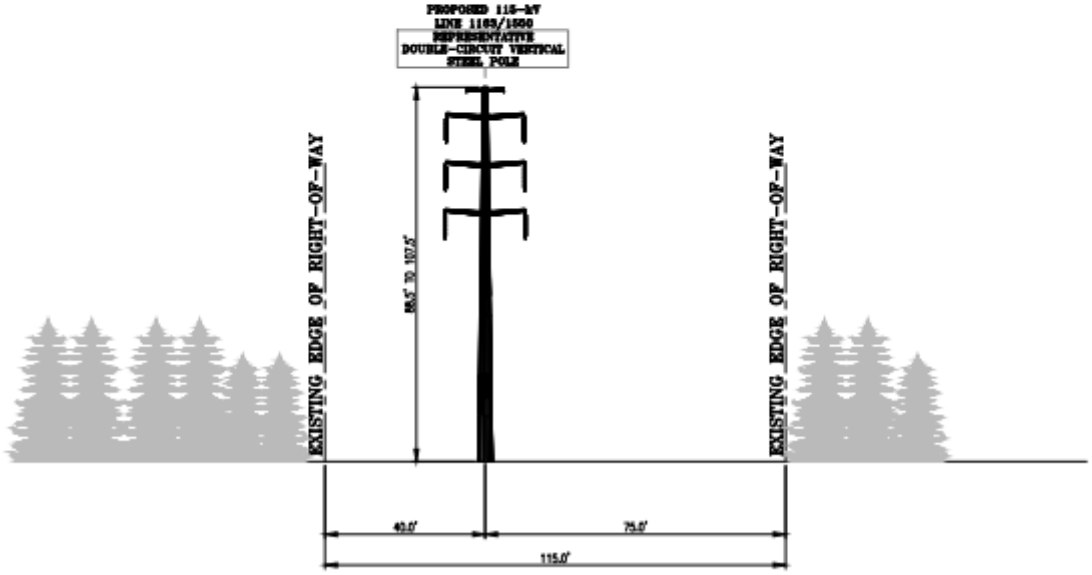

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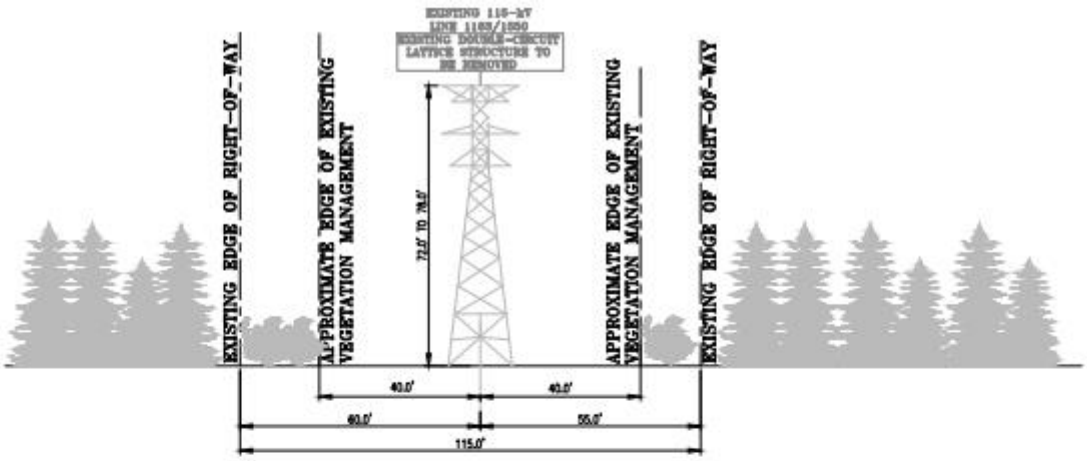

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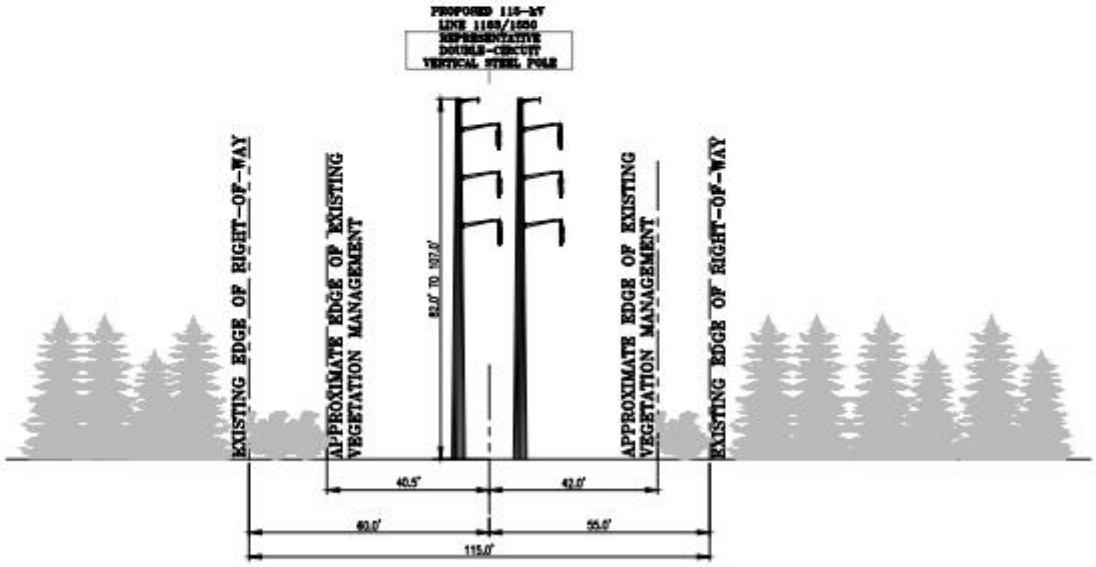

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