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March 26, 2019

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

Re: **Petition No. 1061:** Stamford Structure Replacement Project
Amendment to the Petition

Dear Attorney. Bachman:

On June 5, 2013, the Connecticut Siting Council ("Council") considered and ruled that the subject Petition would not have a substantial environmental effect and would not require a Certificate of Environmental Compatibility and Public Need (the "Project"). The Project authorized by the Council's ruling involved replacement of one monopole double-circuit 115-kV transmission line structure with two monopole single-circuit 115-kV transmission structures near Washington Boulevard and Station Place in Stamford, Connecticut.

The Project is to accommodate a request by the Gateway Harbor Point Planned Community Association, Inc., ("HP Gateway" or the "Developer") to allow room for the construction of two new buildings adjacent to the Metro-North railroad right-of-way ("ROW") near Harbor Point in Stamford within Eversource's ROW and on HP Gateway property. Since the Council's ruling, HP Gateway's building design has changed and now requires a reconfiguration of Eversource's transmission facility from the original design of the Project. Due to the Developer's modified building design, the planned modification to Eversource's transmission facility subject to the Council's ruling would not have adequate overhead conductor clearance to the side of the proposed building. The modified building design would also restrict future access to the existing overhead structure No. 1234 location. For these reasons, Eversource has reconfigured the design of the Project.

The proposed reconfiguration of Eversource's transmission facility modification ("Reconfiguration") would change the overhead configuration, incorporate an underground line segment configuration, replace two double-circuit 115-kV structures with four single-circuit 115-kV riser structures and change an existing

access road to the Eversource's ROW (See Attachment A: Aerial Map and Attachment B: Drawing No. 01037-85003p001 - ROW Cross Section). The Reconfiguration includes the following work components:

Underground Cable Installation

The 115-kV underground transmission line will consist of a double-circuit, solid dielectric cross-linked polyethylene ("XLPE") cable installed within polyvinyl chloride conduits, comprised of six 5000 kcmil copper cables (two circuits with three single 5000 kcmil cables each) installed within a concrete duct bank (see Attachment C for the typical XLPE cross section and Underground Duct Bank), that would extend approximately 500 feet between structures 1233 (N and S) and 1234 (N and S) within the Eversource ROW and HP Gateway property (see Attachment A: Aerial Map).

The concrete duct bank would have dimensions of approximately 3.5 feet wide by 3 feet deep and it would be buried approximately 3 feet below grade. Optimal cable phasing will be implemented to minimize magnetic field levels at ground level. The duct bank will also contain conduits for continuous ground cables, fiber optic communication and thermal monitoring cables. A portion of the duct bank will penetrate the existing northwest corner wall of the Developer's parking garage and pass through the parking garage before exiting and paralleling the north wall of the Developer's parking garage (see Attachment B: ROW Cross-Section).

Structure Installation

Changes to the structure design are:

- a) Replacement of the existing 115-kV double-circuit steel structure (No. 1234) with two 115-kV single-circuit galvanized steel riser structures (Nos. 1233N and 1233S)¹.
- b) Replacement of the 115-kV double-circuit steel structure (No. 1234.5) with two 115-kV single-circuit galvanized steel riser structures (Nos. 1234N and 1234S).

¹ The single-circuit steel monopole structures were identified as 1233A and 1233B in the original Petition granted by the Council.

The height of the proposed riser structures would be 110 feet above ground. The height of the existing double-circuit structures is approximately 90 feet above ground. The proposed riser structures will be installed on concrete foundations².

Access

Temporary access on top level of the Developer's parking garage from Washington Boulevard to remove existing structure 1234.

Access to the ROW for structures 1234 (N and S) would be from Pulaski Street along the west side of the existing parking garage structure and from Washington Boulevard along the loading bay of the Developer's parking garage for structures 1233 (N and S).

Staging Area

The proposed staging/laydown ("Staging") area for the Project is at 400-440 Washington Boulevard, Unit 1 and Unit 2. The staging area is approximately 7,900 square feet on the Developer's property. The Staging area would be used to store construction materials, equipment, tools, and supplies (including conductors, cable reels, insulators, hardware, poles and mats) for the Project. An office trailer and Conex storage containers may be located at the Staging area. Components removed during the work (structures, hardware and insulators) may be temporarily accumulated and stored at the Staging area prior to removal off-site for salvage and/or disposal. The Staging area may also be used by construction crew members for parking personal vehicles as well as for construction vehicles and equipment storage, and for performing minor maintenance, when needed. An environmental review of the Staging area location would be completed and erosion and sedimentation ("E&S") controls would be installed and maintained until completion of the work in accordance with Project permits and Eversource's BMPs.

² The foundation for structure 1233 N was previously installed in accordance with the Council's 2013 ruling on the Petition.

Environmental Effects

The proposed Reconfiguration would not have a substantial adverse environmental effect because:

a) Wetlands, Floodplains, and Floodways

The Reconfiguration would not disturb wetlands or require removal of any wetland vegetation. The locations of the structures to be removed and new structures to be erected and the underground cable are outside of any wetlands, floodplains and floodways. There would be no impacts within the 100-year flood zone.

b) Endangered Species Review

A review of the Department of Environmental Protection's Natural Diversity Database ("NDDB") identified no state- or federally-listed endangered species in the vicinity of the Reconfiguration.

c) Archaeological, Historical, Forests and Parks

A field review or field sampling for archaeological or historically significant areas is not required because the area that would be excavated for the Reconfiguration is not a natural land form; the ground was previously disturbed by the construction of the Harbor Point Gateway Garage.

d) Electric and Magnetic Fields

Relocation of the transmission lines underground would result in an increase in magnetic field directly above the proposed cables, but would result in lower magnetic fields at and beyond the edge of the ROW. There would be no external electric field from the proposed underground transmission cables. Preliminary calculations of changes to the magnetic fields are included in Attachment D. These calculations are based on 2018 average historical line flows.

e) Radio and Television Signal Reception

There would be no increase to television or radio interference from the Reconfiguration.

f) Soil Erosion and Sedimentation Control

Eversource would adhere to the soil erosion and sediment control practices as described in the *2002 Connecticut Guidelines for Soil Erosion and Sedimentation Control*. Typical soil erosion and sediment control measures include hay bales and filter-fabric sediment control barriers. Soil erosion and sedimentation controls would be inspected regularly and maintained to ensure their integrity and effectiveness.

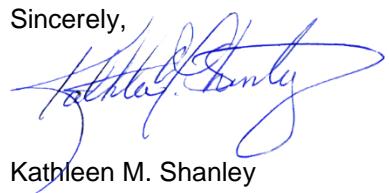
Eversource has notified representatives of the City of Stamford and has been coordinating with the representatives of Metro-North Railroad about the proposed Reconfiguration.

Ms. Bachman
March 26, 2019
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Attached please find this original and 15 copies of this Amendment to Petition No. 1061 for modifications to the Project.

Should you have any questions regarding this submission, please do not hesitate to contact me via e-mail at kathleen.shanley@eversource.com or telephone at (860) 728-4527.

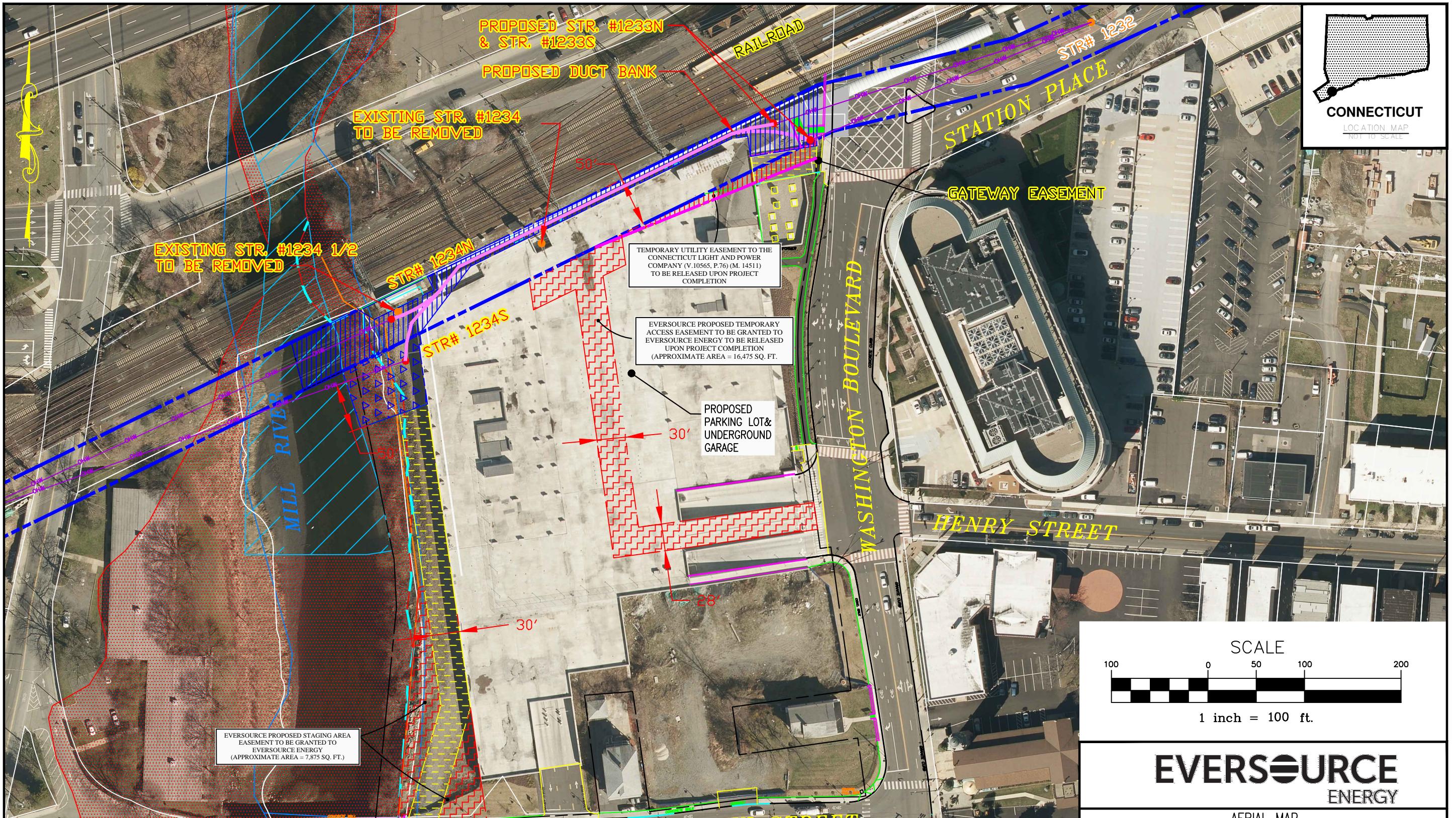
Sincerely,



Kathleen M. Shanley

Enclosures: Attachments

Attachment A: Aerial Map



LEGEND

- STRUCTURE TO BE REPLACED
- EXISTING STRUCTURE
- PROPOSED STRUCTURE
- RARE, THREATENED AND ENDANGERED SPECIES (12/2011)
- ES. RIGHT OF WAY
- FEMA 100 YEAR FLOOD LINE
- CHANNEL ENCROACHMENT LINE

- MUNICIPAL PROPERTY
- ACCESS RD.
- STATE PROPERTY

- STATE WETLANDS
- WATERCOURSES
- ES. PROPERTY

- 100 YEAR FLOOD ZONE
- 500 YEAR FLOOD ZONE
- FLOODWAY ZONE

--- NOTES ---
ENTIRE PARCEL IS WITHIN THE COASTAL JURISDICTION LINE (CUL)

ATTENTION
THIS MAP IS FOR PLANNING PURPOSES ONLY, LINework AND DIMENSIONS SHALL BE CONSIDERED APPROXIMATE.

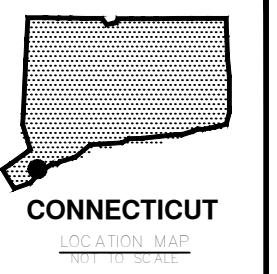
EVERSOURCE
ENERGY

AERIAL MAP

STAMFORD STRUCTURE REPLACEMENT

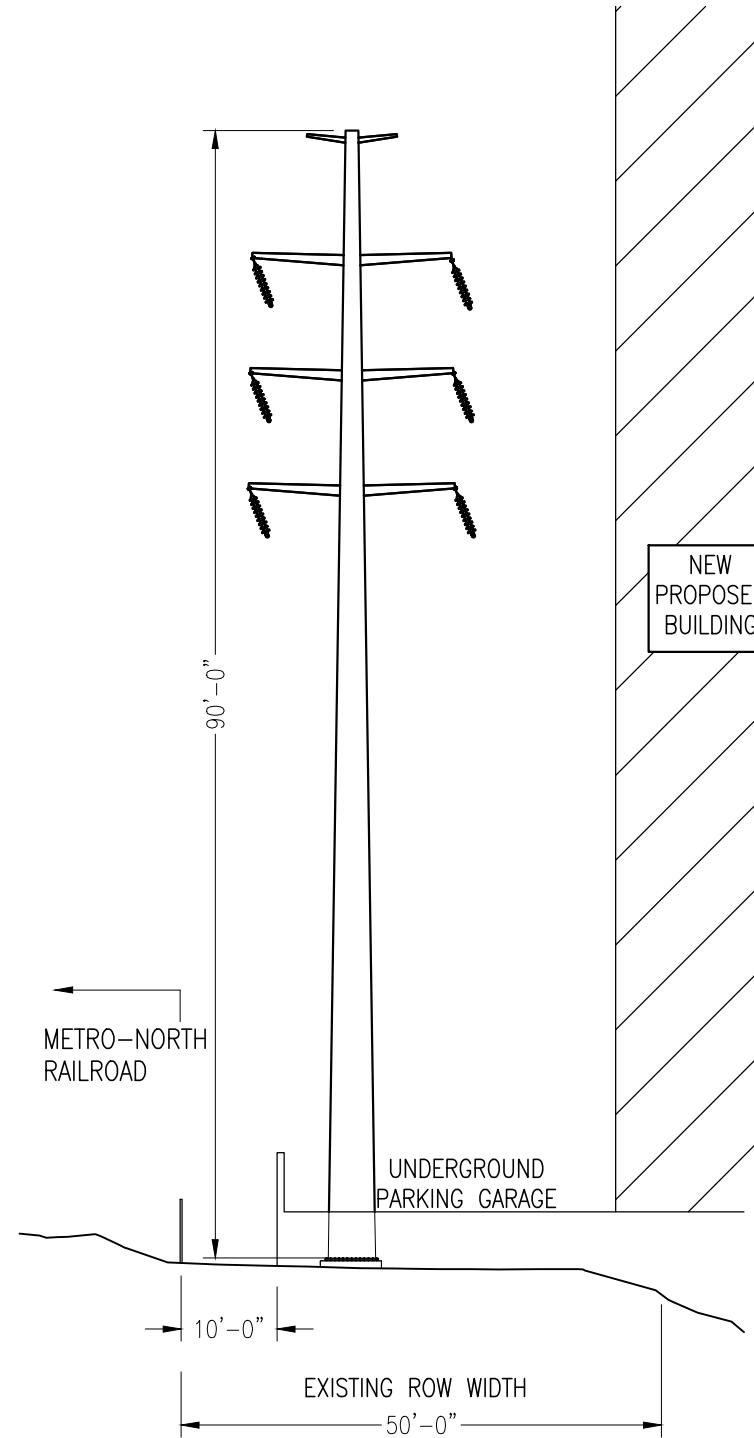
WASHINGTON BLVD., STAMFORD, CT.

BY	CEO	CHKD	SAS	APP	APP
DATE	3-4-2019	DATE	3-4-2019	DATE	DATE
H-SCALE	1"=100'	SIZE	B SIZE	SURVEY JOB#	C14-121
V-SCALE	V.S.	Z-1-5	R.E.DWG.	23976	
R.E. PROJ. NUMBER	000-51.214B	NUSCO	EXHIBIT A		

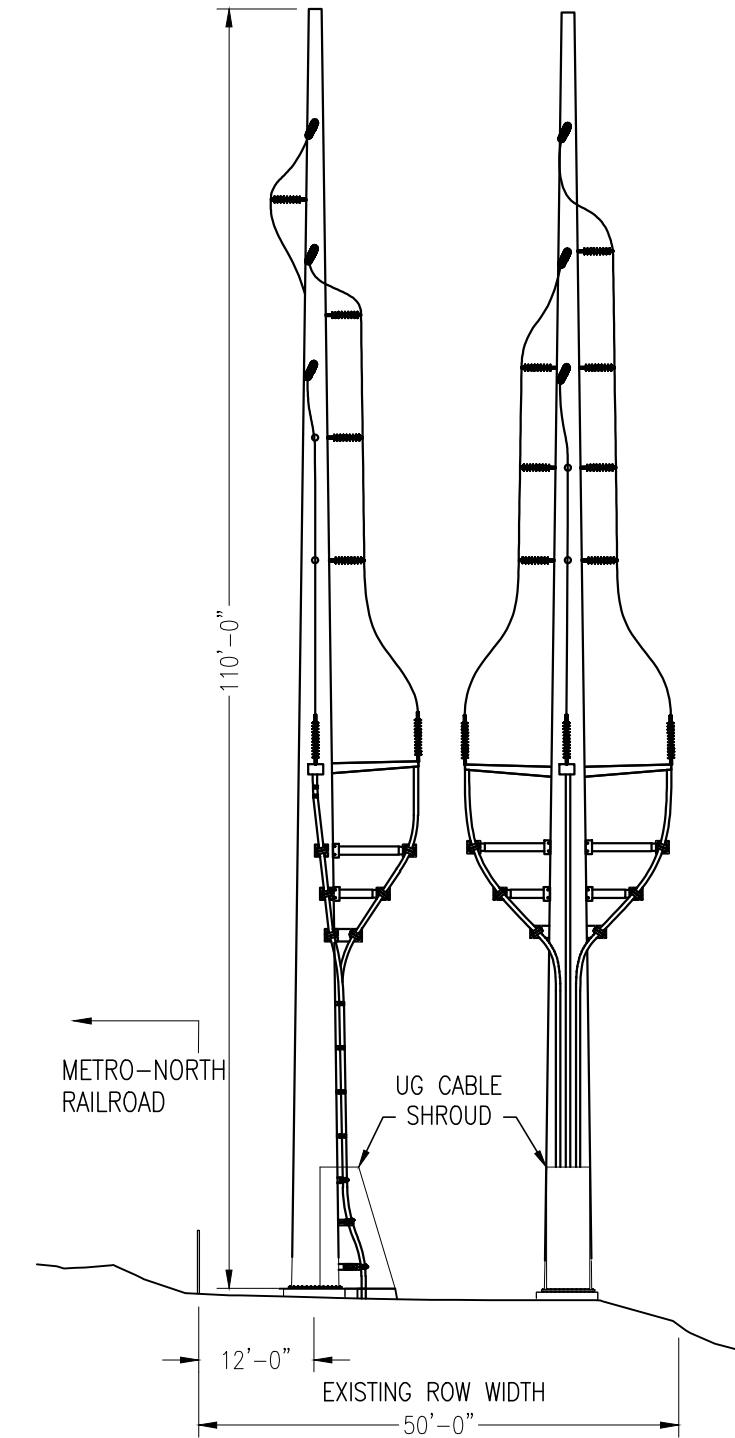


Attachment B: Drawing No. 01037-85003p001 - ROW Cross Section

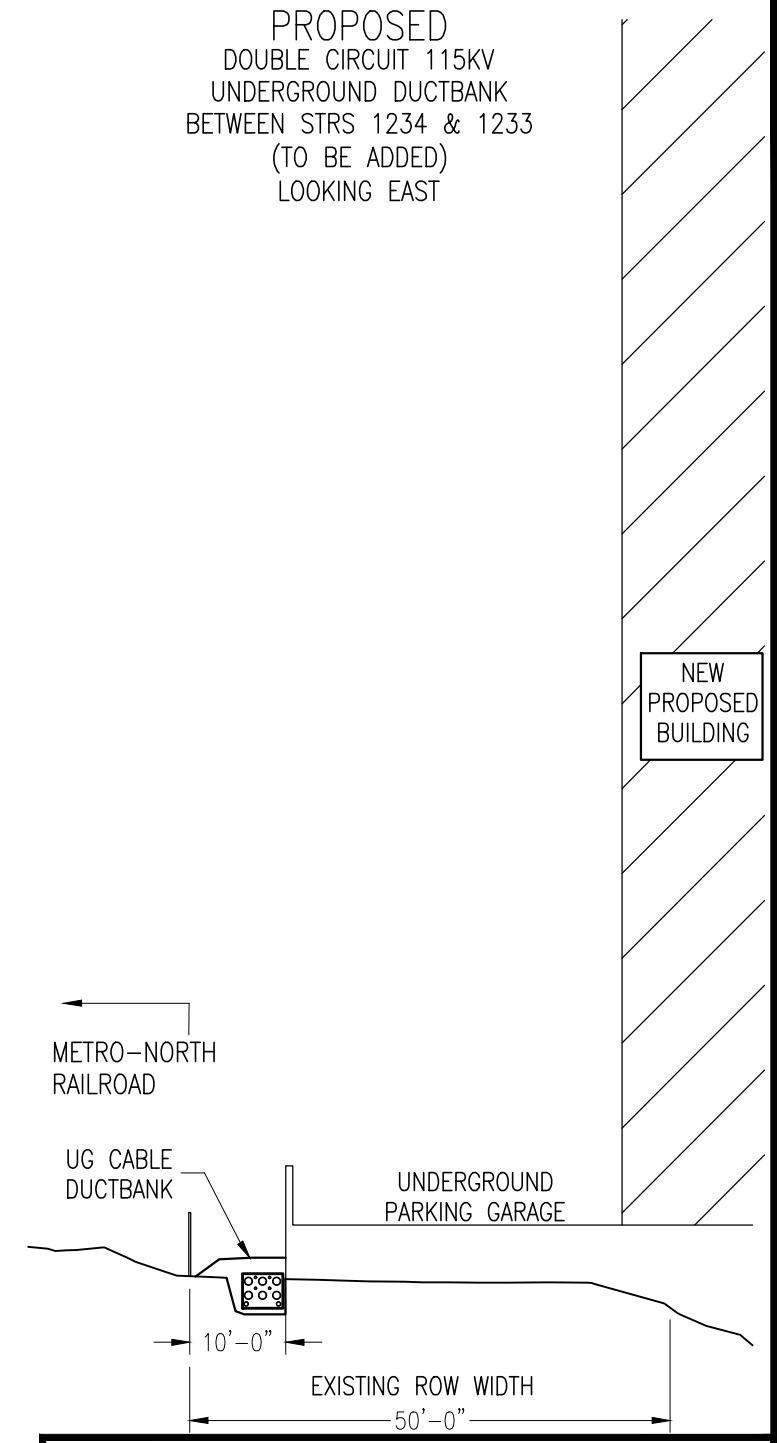
EXISTING
DOUBLE CIRCUIT 115KV OVERHEAD
STRUCTURES 1234 & 1234.5
(TO BE REMOVED)
LOOKING EAST



PROPOSED
115KV RISER STRUCTURES
STRUCTURES 1234N & 1234S
STRUCTURES 1233N & 1233S
(TO BE ADDED)
LOOKING EAST



PROPOSED
DOUBLE CIRCUIT 115KV
UNDERGROUND DUCTBANK
BETWEEN STRS 1234 & 1233
(TO BE ADDED)
LOOKING EAST

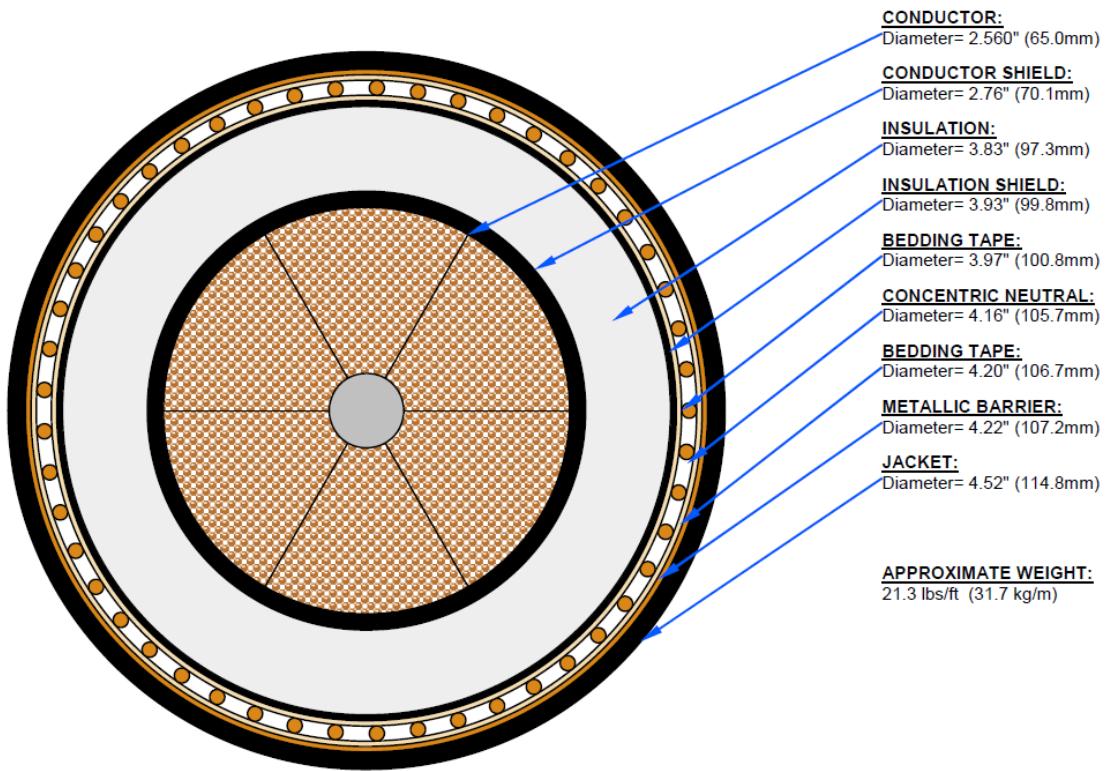


EVERSOURCE
ENERGY

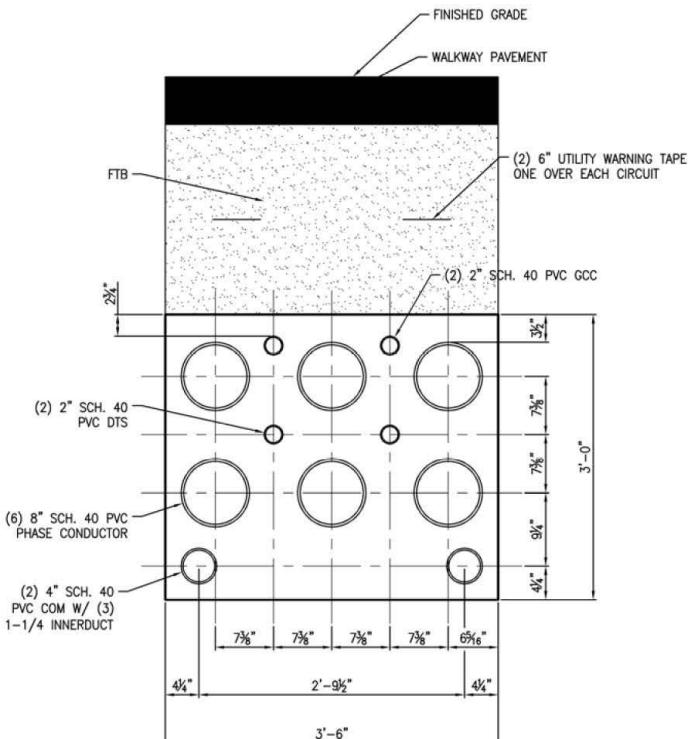
TITLE					
ROW CROSS SECTION 1440/1750 LINES					
PROPOSED STRS 1233N, 1233S, 1234N & 1234S - REPLACEMENT OF STRS 1234 & 1234.5 406 WASHINGTON BLVD, STAMFORD, CONNECTICUT					
BY	JJD/TRC	CHKD	EGS/TRC	APP	JM/ES
DATE	8/10/18	DATE	8/10/18	DATE	8/10/18
H-SCALE	1" = 20'	SIZE	B	FIELD BOOK & PAGES	
V-SCALE	1" = 20'	V.S.		R.E. DWG	
R.E. PROJ. NUMBER			DWG NO.		
			01037-85003p001		

Attachment C: Typical 5000 kcmil Copper Conductor XLPE 115-kV Cable Cross Section

Typical 5000 kcmil Copper Conductor XLPE 115-kV Cable Cross Section



Typical Underground Cable Ductbank Cross Section



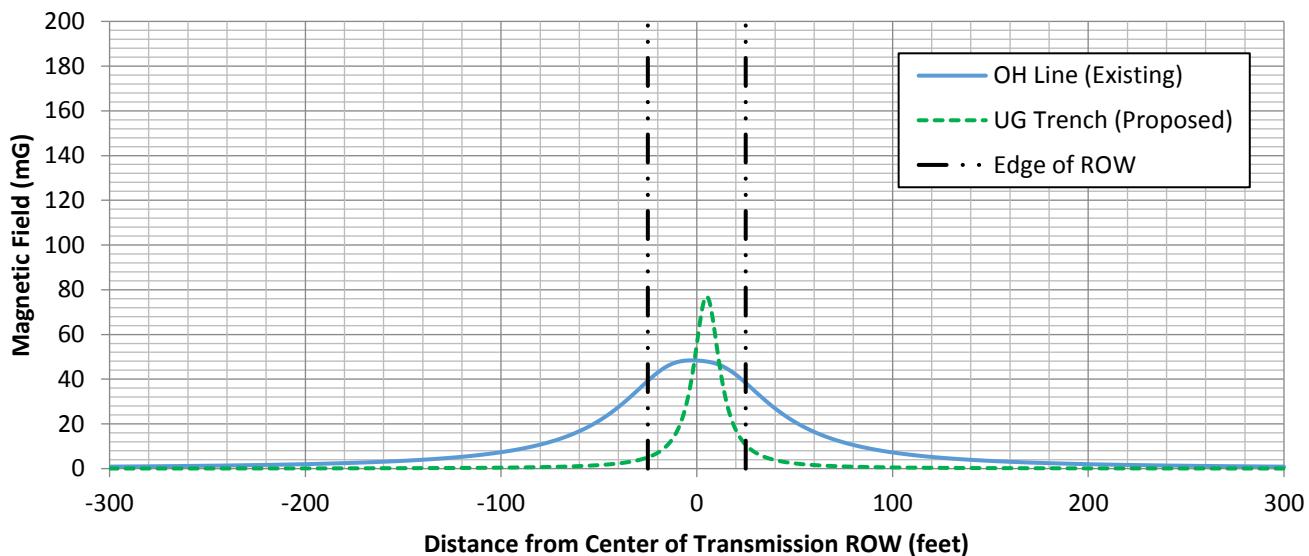
NOTES

1. DIMENSIONS SHOWN ARE NOMINAL. ACTUAL DIMENSIONS MAY BE ADJUSTED IN ACCORDANCE WITH DUCT SPACER MANUFACTURER'S STANDARD DESIGN.
2. CONCRETE COVER OVER OUTER DUCTS SHALL BE 2 INCHES MINIMUM.
3. MEMBRANE (TBD) LAYER TO BE INSTALLED UNDER DUCT BANK.
4. DUCTBANK SIDES SHALL BE FORMED. EARTH FORMS ARE NOT ACCEPTABLE.
5. BACKFILL SIDES OF DUCTBANK WITH THERMAL FLOW FILL (FTB) AFTER FORM REMOVAL.
6. USE BOND BREAKER BETWEEN DUCTBANK AND EXISTING CONCRETE.

 <p>249 WESTERN AVENUE AUGUSTA, ME 04330 PROJECT NO:308546</p>						AMW DESIGNED SDT DRAWN	PROPOSED DUCTBANK SECTION HP GATEWAY LINES 1440/1750		
REV	DESCRIPTION	DATE	DES	CHK	APP	CHECKED	STAMFORD CONNECTICUT		
						APPROVED			
B	RE-ISSUED FOR 10% IFCR	02/14/19	AMW			REVIEW 1	02/06/19 DATE NTS SCALE	SK-01	REV. A
A	ISSUED FOR 10% IFCR	02/08/19	AMW			REVIEW 2			

Attachment D: Calculated magnetic fields from the proposed facilities.

**Calculated Magnetic Fields
UG Trench Configuration (looking West)
2018 Average Line Flows**



**Calculated Magnetic Fields
UG Vertical Configuration
(20-foot separation - Looking West)
2018 Average Line Flows**

