



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

John Morissette
Project Manager – Transmission Siting
Tel: (860) 728-4532

April 20, 2015

Robert Stein, Chairman
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

Re: Haddam Substation and 1772 Line and 348 Line Modification Project

Dear Chairman Stein:

Attached are an original and fifteen (15) copies of a petition on behalf of The Connecticut Light and Power Company doing business as Eversource Energy requesting a determination that no Certificate of Environmental Compatibility and Public Need is required for the proposed modifications to the Haddam Substation and associated transmission lines located in the Town of Haddam, Connecticut.

Prior to submitting this petition, written notice was provided to the abutting property owners and the First Selectman Melissa Schlag in the Town of Haddam.

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

Sincerely,

A handwritten signature in blue ink that reads "John Morissette".

John Morissette
Project Manager – Transmission Siting - CT

Attachment: Petition

cc: First Selectman Melissa Schlag, Town of Haddam

**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 AN EXISTING
SUBSTATION, THE 1772 LINE AND 348 LINE IN
THE TOWN OF HADDAM, CONNECTICUT

1. The Connecticut Light and Power Company doing business as Eversource Energy ("Eversource" or the "Company") hereby petitions the Connecticut Siting Council ("Council") for a Declaratory Ruling that no Certificate of Environmental Compatibility and Public Need ("Certificate") is required pursuant to Section 16-50g et seq. of the Connecticut General Statutes for the modifications to Haddam Substation and to a 345-kV and 115-kV transmission lines within an existing right-of-way ("ROW") in Haddam (the "Project") that are described herein. Eversource submits that no such Certificate is required because the proposed modifications would not have a substantial adverse environmental effect.
2. Based on the results of the Greater Hartford and Central Connecticut Area (GHCC) Needs Assessment (dated May 2014) and in accordance with the GHCC Solutions Study (dated February 2015), the purpose of the Project is to eliminate identified potential transmission system thermal and voltage criteria violations caused by the loss of the existing Haddam Substation 345- to 115-kV autotransformer.
3. The Project consists of three components: 1) modifications to the Haddam Substation (Substation), which is located on the Company's property at 1384 Saybrook Road in Haddam, Connecticut; 2) relocation of a portion of the 115-kV 1772 Line, which is located within the ROW. The modifications to the 1772 line would include removal of one (1) double circuit 115-kV lattice structure, the addition of two (2) new single circuit steel monopoles and 3) the reconfiguration of the 345-kV 348 Line, also located within the ROW.

I. **Haddam Substation**

The existing Substation is a 345- to 115-kV bulk power substation with three (3) 345- to 115-kV single-phase autotransformers, one (1) 345-kV transmission line, five (5) 115-kV transmission lines, and six (6) 23-kV distribution circuits. The Substation modifications would include the following:

- a) Removal of one (1) 345-kV motor-operated disconnect switch.
- b) Installation of three (3) new 345- to 115-kV single-phase autotransformers with vibration isolation pads. This installation would include firewalls and oil containment system.
- c) Installation of three (3) 345-kV circuit breakers.
- d) Installation of ten (10) 345-kV disconnect switches.
- e) Installation of two (2) 345-kV motor-operated disconnect switches.
- f) Installation of nine (9) 345-kV coupling capacitor voltage transformers.
- g) Installation of two (2) 115-kV strain-bus structures and strain bus.
- h) Installation of three (3) 115-kV potential transformers.
- i) Installation of four (4) 110 foot tall lightning masts.
- j) Installation of two (2) 345-kV terminal structures.
- k) Installation of one (1) 345-kV galvanized three-pole single-circuit structure.
- l) Installation of underground conduits, wave trap, lightning arrestors, mounting and support beams, relay/controls and cables to accommodate the new equipment.
- m) Installation of foundations for the equipment and structures listed in b through k.

The modifications to be made at the Substation would require a fence extension to the east of the Substation property, to encompass an approximately one (1) acre area. The new fence would be seven (7) feet high with one and a quarter inch mesh and one (1) foot of barbed wire.

None of the new equipment would be taller than the tallest existing equipment within the Substation.

The proposed modifications of the Substation are shown on Attachment A: Drawing No. 16101-92001- Haddam Substation Yard Arrangement - Plan & Sections - CSC

II. **1772 Line Relocation**

The transmission line modifications would include the following:

- a) Removal of existing 115-kV double-circuit lattice structure 3486.

- b) Installation of two (2) 115-kV galvanized steel single-circuit structures on new drilled shaft foundations. The new structures would be located approximately 15 feet and 100 feet north, respectively, from the existing structure 3486. Both structures would be located on Eversource's property with one structure located within the Substation's fenced area and the other one outside of the fence. The height of the new structures would be approximately 20 feet taller than existing structure 3486; the existing structure height is 70 feet.
- c) Replacement of the existing 1272 ACSR conductor and 7#8 shield wire with 1272 ACSS conductor and 19#10 shield wire from the existing substation terminal structure to structure 9815 for approximately 1000 feet.

The proposed modifications are shown on Attachment B: 1772 Line Relocation - Cross Section and Attachment C: Haddam Substation Line Modifications and List of Abutters.

III. **348 Line Loop**

The existing 348 Line would be reconfigured from a tap configuration to a loop configuration. The transmission line modifications would include the following:

- a) Reconfiguring the existing 348 Line which originates out of Millstone Substation (east of the Substation), to be terminated at the new terminal structure within Haddam Substation.
- b) Reconfiguring the existing 348 Line which originates out of Beseck Substation (west of the Substation), to be terminated at the new three-pole single-circuit structure then to the existing terminal structure within Haddam Substation.

The proposed modifications are shown on Attachment C: Haddam Substation - Line Modifications and List of Abutters.

- 4. The proposed modifications would not have a substantial adverse environmental effect because:

- a) **Radio and Television Interference at the Substation and along the ROW**

There would be no measurable change to radio or television interference from the modifications at the Substation or along the ROW.

b) Sound Levels at the Substation and along the ROW

- Substation - Sound levels at all points along property line at the Substation would continue to meet local ordinances and state regulations specified in Regulations of Connecticut State Agencies §§ 22a-69-3.3, -3.5(a), -3.7, -4(g).
- Transmission Line Modifications - There would be no measureable changes to the sound levels along the transmission corridor after completion of the Project.

c) Appearance of Substation

All new equipment would be no taller than the tallest existing equipment within the Substation. The new equipment to be installed in the Substation would be similar in appearance to existing equipment and would not cause significant or adverse changes in the physical or environmental characteristics of the Substation.

The modifications would include an extension of the fence on Company property to the east to accommodate the new equipment. The Substation fence would be extended to enclose approximately one additional acre.

Due to the existing topography that slopes steeply downhill approximately 40 feet to the southeast of the expansion area, a retaining wall would be required to stabilize the subsurface for the Substation expansion. The retaining wall would be along the perimeter of the expansion area and below the ground level of the Substation fence.

d) Lighting

The Substation has existing low level lighting for safety and security purposes. Additional low level lighting may be added in the vicinity of the new equipment installations. Additional lighting may also be installed to allow for work at night under abnormal or emergency conditions.

e) Access Roads and Work Pads

Eversource plans to use existing maintained access roads during construction. Access for the Substation work would be from Old Saybrook Road and access

for the line work would be from Haddam View Heights as shown on Attachment C.

Work around the new proposed structures would consist of placing construction mats or gravel in the upland areas to create a level work pad, covering an approximate area of 10,000 square feet.

f) Clearing

Approximately 0.42 acres of tree clearing within the existing ROW and on Company property would be required to support the Project.

For the majority of the proposed tree removal work, the Project would use methods that are consistent with the Company's vegetation clearing practices along Eversource's transmission ROW in Connecticut. Some additional mowing would be required to remove overgrowth at the base of existing structures for work pad locations, providing unobstructed access for the safe construction of the new structures.

Eversource would minimize vegetation clearing activities to the extent practicable and restore temporarily disturbed areas in accordance with the Company's December 2011 Best Management Practices Manual: Connecticut ("BMPs").

g) Environmental Effects

Construction and operation of the Project would not result in substantial adverse environmental effects. Eversource would avoid and minimize impacts to environmentally sensitive areas to the maximum extent practicable. To avoid adverse effects on wetlands, Eversource has located the new transmission structures in upland areas. However, Project activities will have unavoidable permanent and secondary effects on wetlands. These impacts are summarized in Table 1.

Table 1: Project associated wetland impacts		
Project Activity	Permanent Effect (Square Feet)	Secondary Effect (Square Feet)
Retaining wall	870	
Tree clearing		3654

Wetlands, Watercourses, and FEMA Flood Zones

Water resources in the vicinity of the Project were field delineated in January 2015 and March 2015 by BSC Group and include an unnamed wetland to the south-southeast of the Substation expansion as shown on Attachment C.

The fence expansion in the southeast corner of the Substation property would require the placement of approximately 870 square feet of permanent clean fill within the unnamed wetland for construction of a new retaining wall. All substation activities would be conducted from the upland area and would not require the placement of construction mats in wetlands.

Approximately 3654 square feet of secondary wetland impacts are anticipated as a result of select tree removal. Eversource would only remove trees greater than 15 feet in height and would allow low-maturing tree species and shrubs to remain. Tree removal would be conducted by hand. Stumps and roots would remain in order to minimize disturbance to the wetlands soils.

The Project is located adjacent to a 100-year FEMA flood zone. However, no new structures or temporary impacts associated with construction are proposed within the flood zone.

Any work within or adjacent to the wetland or adjacent to the flood zone would be conducted in accordance with the Company's BMPs and the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control. Specifically, Eversource would install appropriate erosion and sediment ("E&S")

controls to minimize the potential for sediment deposition into wetlands and would remove such controls following final site stabilization.

Endangered Species Review

Eversource's review of the Department of Energy and Environmental Protection's Natural Diversity Data Base identified there are no identified state-listed endangered, threatened, or special concern species or critical habitat within the Project boundaries. In addition, Eversource consulted with the Connecticut Department of Energy and Environmental Protection's Wildlife Division and it was determined that no negative impacts to state-listed endangered species are anticipated as a result of the Project.

Soil Erosion and Sediment Control

Construction of the Project would conform to BMPs for E&S controls. Typical E&S control measures include, but are not limited to hay bales, silt fencing, check dams, berms, swales, and sediment basins. Silt fence would be installed prior to construction to demarcate the line of construction and prevent migration of sediment or construction materials into the wetland. Temporary E&S control measures would be inspected and maintained throughout the Project to ensure their integrity and effectiveness. Following the completion of construction, seeding and mulching would occur to permanently stabilize previously disturbed areas. The temporary E&S control measures would remain in place until the Project work is complete and all disturbed areas have been stabilized.

Archaeological, Historical, Forests, Parks and Trails

A desktop archaeological assessment of the area was conducted by Heritage Consultants, LLC ("Heritage") in February 2015 (see Attachment D). The review determined that "the substation area and its immediate surroundings retain little, if any, potential to yield intact cultural deposits. As a result, no additional archeological research is recommended prior to upgrading the substation facilities."

There are no recreational parks, forests or trails within the vicinity of the Project area. Therefore, the proposed Project would not conflict with existing land uses.

Ground Water and Surface Water

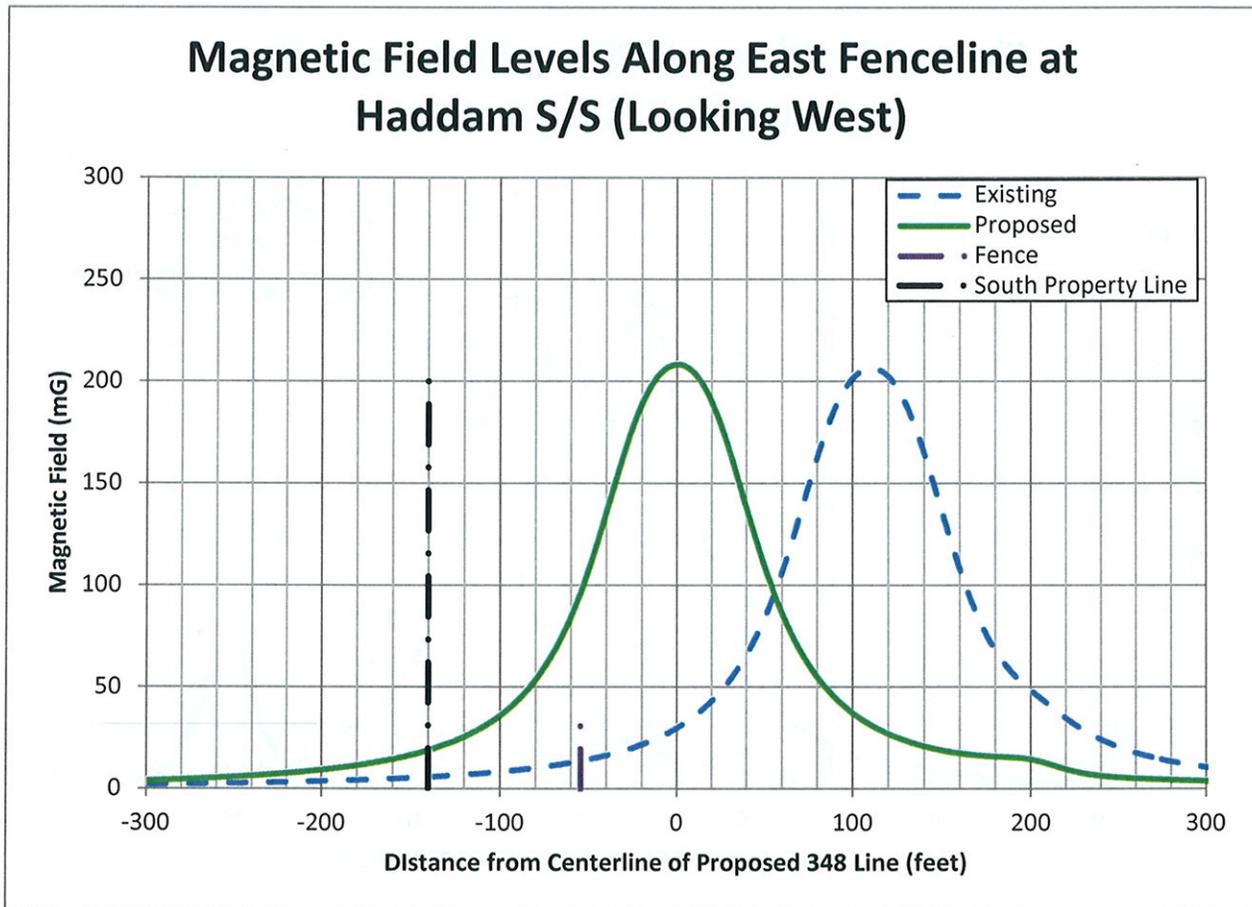
The Project would not affect groundwater or surface water resources and the Project would not cross any aquifer protection areas. No public supply reservoirs are in the vicinity of the Project. Lastly, the Project would not affect public/private water supply wells.

Electric and Magnetic Fields

The highest levels of electric and magnetic fields around the perimeter fence of a substation typically occur where transmission and distribution lines cross over the substation boundary. Field levels from substation equipment are typically concentrated within the substation fence line and decrease rapidly with distance, reaching very low or indiscernible levels at relatively short distances beyond the equipment and would commonly range from less than 1 mG up to 4 mG outside the fence line, the same range as the background magnetic field levels typically found in homes.

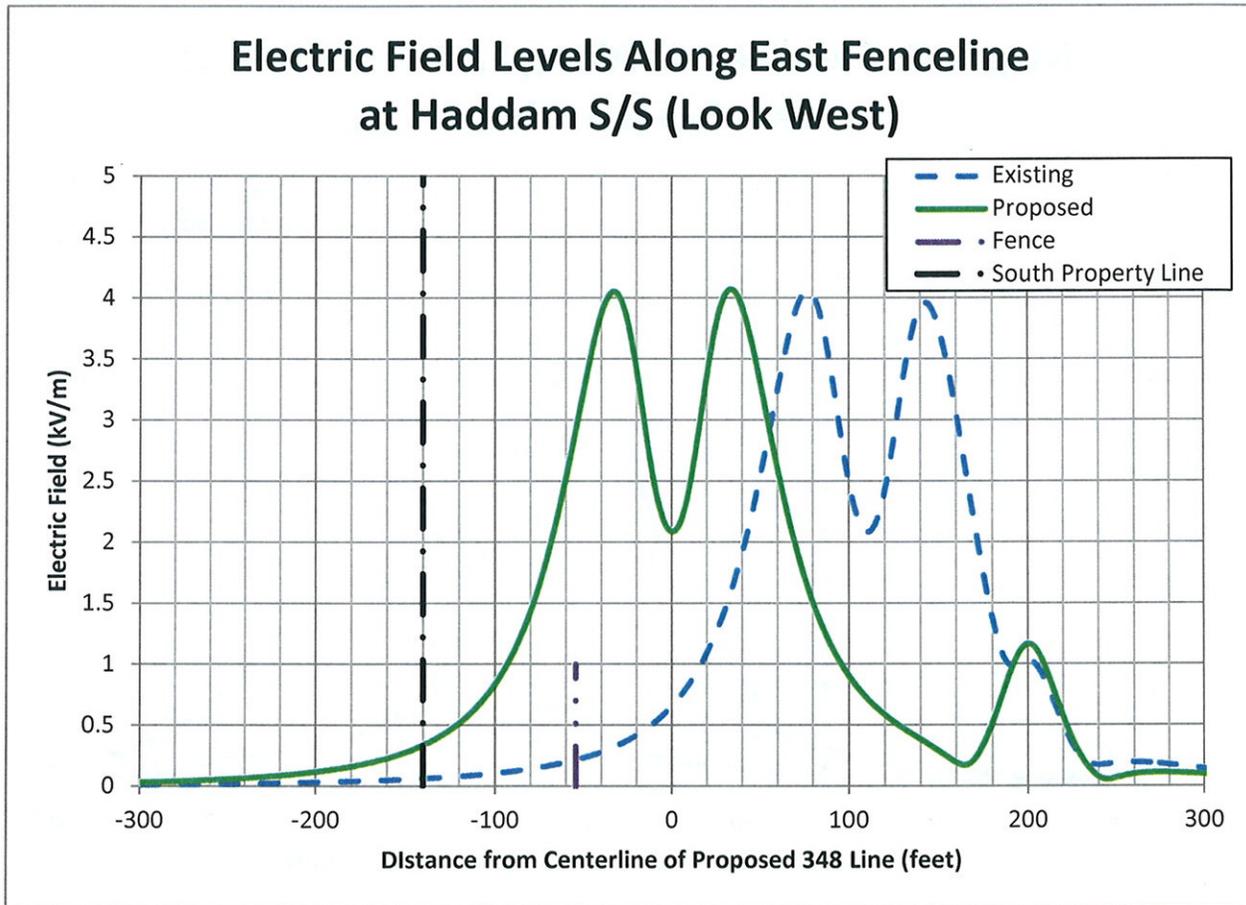
Converting the transmission connection from the 348 Line into a loop configuration entering the Substation would result in an increase in the electric and magnetic fields along the north fence line. These changes would be limited to an area with a border that is approximately 300 feet north and south of the Loop along that section of the fence line and extending along the Loop up to the edge of ROW. At the southern property line, the magnetic fields would increase from 6.1 to 19.3 mG. There are no public playgrounds, schools, licensed youth camps or licensed child day-care facilities in this area of the increased magnetic fields. Calculated magnetic fields underneath the new transmission line loop were based on an average annual load for the year 2017 for the existing system and 2022 for the proposed transmission lines. This is depicted in Figure 1.

Figure 1



The highest magnitude of the electric field of 4.06 kV/m would not change as a result of this project. However, because the 348 Line conductors would be shifted to the south, the electric field would shift south also. At the south property edge, the electric field would increase from 0.07 kV/m to 0.34 kV/m. This is depicted in Figure 2.

Figure 2



Compliance Inspections

Eversource would monitor the construction for the Project on a daily basis.

h) Project Outreach

Eversource has consulted with the First Selectman of the Town of Haddam. Eversource also provided written notice of the Project to the municipal chief elected official of the Town of Haddam and to all owners of properties that abut the ROW or Substation property (see Attachment E).

5. Eversource proposes to begin construction during summer 2015 and expects that the construction would be completed by the end of 2016.
6. Section 16-50k(a) of the Connecticut General Statutes provides that a Certificate of Environmental Compatibility and Public Need is needed for proposed modifications of a

6. Section 16-50k(a) of the Connecticut General Statutes provides that a Certificate of Environmental Compatibility and Public Need is needed for proposed modifications of a facility that the Council determines would have a "substantial adverse environmental effect." Eversource respectfully submits that the proposed modifications would not result in a substantial adverse effect on the environment or ecology, 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 and, therefore, no Certificate is required.
7. Communications regarding this Petition for a Declaratory Ruling should be directed to:

Mr. John R. Morissette
Project Manager - Transmission Siting - CT
Eversource Energy
PO Box 270
Hartford, CT 06141-0270
Telephone: (860) 728-4532

By:

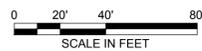
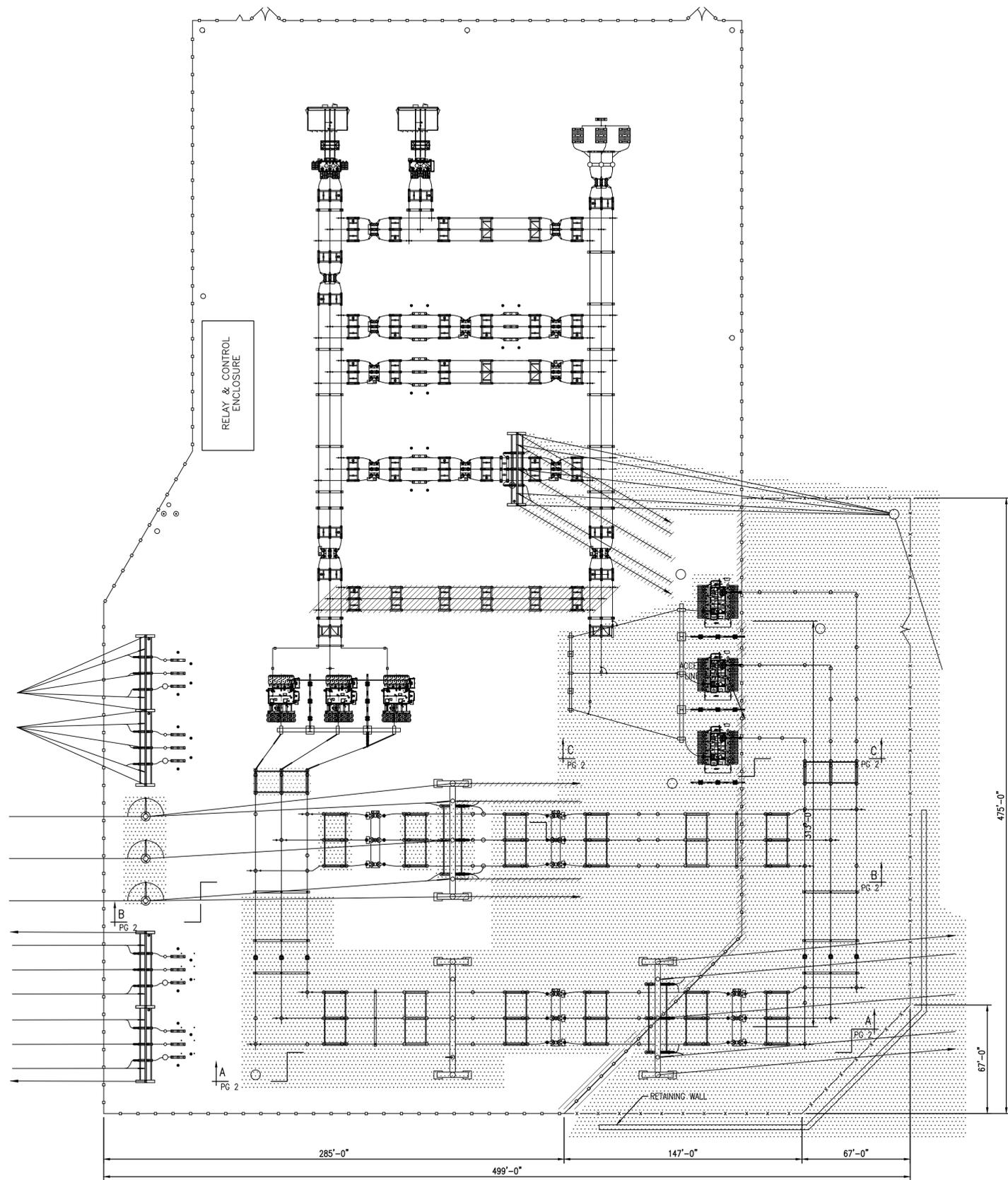


John R. Morissette
Project Manager – Transmission Siting - CT

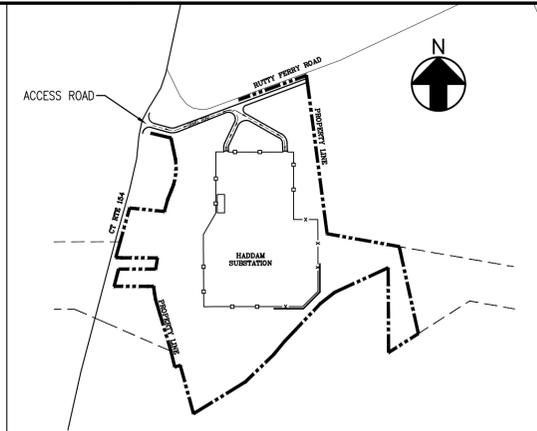
Attachments:

- Attachment A: Drawing No. 16101-92001- Haddam Yard General Arrangement - Plan & Sections
Attachment B: 1772 Line Relocation - Cross Section
Attachment C: Haddam Substation - Line Modifications and List of Abutters
Attachment D: Heritage Cultural Resources Review
Attachment E: Letter to the Abutters and Affidavit

ATTACHMENT A



PLAN VIEW



LOCATION PLAN
SCALE : 1" = 400'

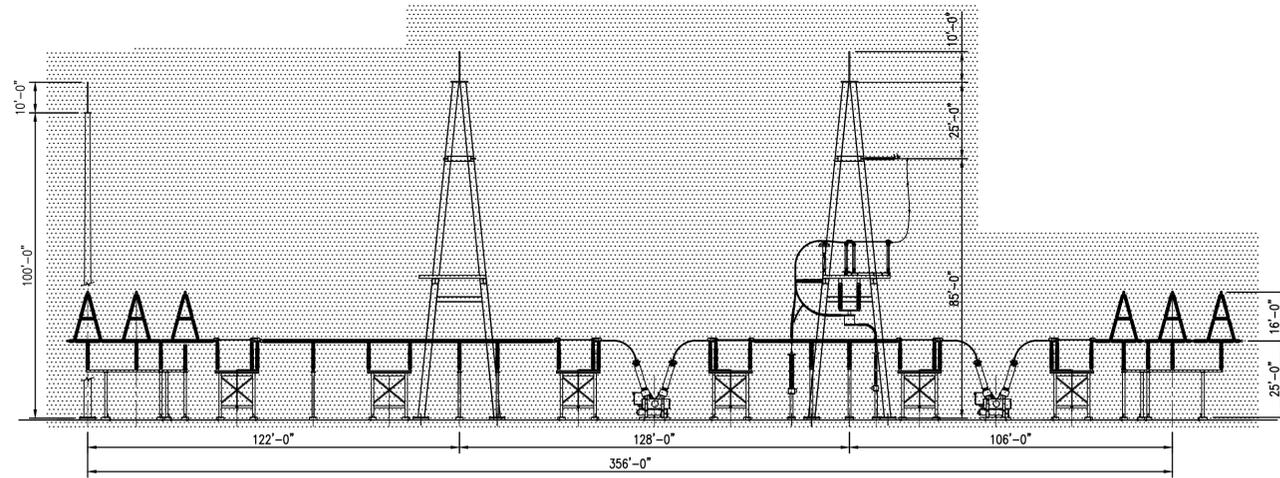
LEGEND

- EXISTING SUBSTATION FENCE
- EXPANDED SUBSTATION FENCE
- 2016 ADDITION
- 2016 REMOVAL

REV. 4 - 3/18/15
SUBSTATION ADDITION

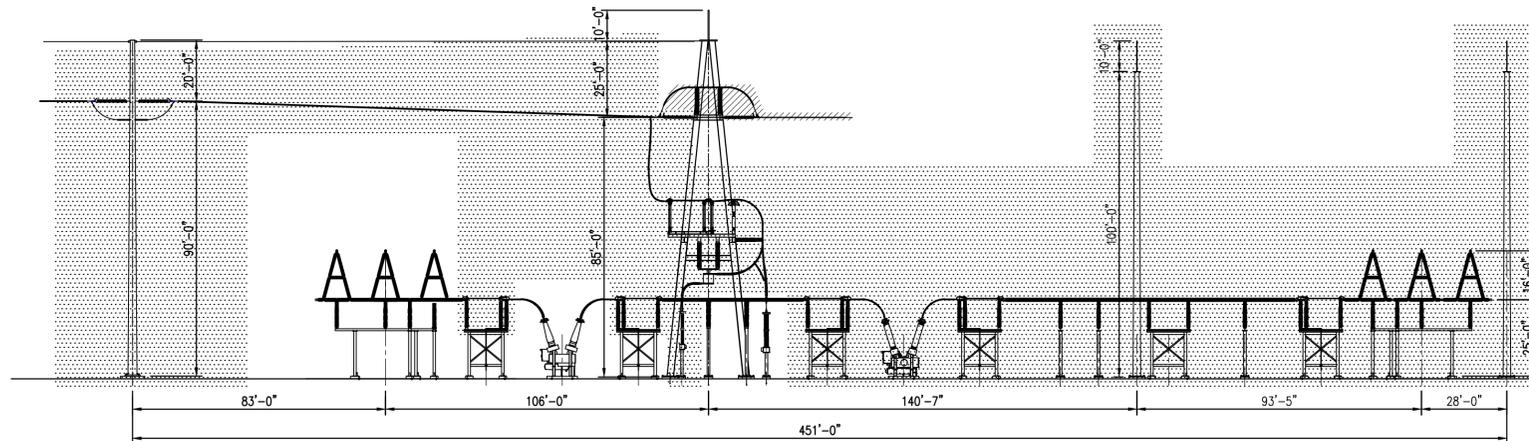
REVISIONS DURING CONSTRUCTION					
NO.	DATE	DESCRIPTION	BY	APP.	DATE

EVERSOURCE ENERGY					
TITLE HADDAM SUBSTATION GENERAL ARRANGEMENT - PLAN VIEW - CSC CONNECTICUT SITING COUNCIL HADDAM, CT.					
BY	RR SHINEMAN	DWG	JWM	APP	Designer or P/C
DATE	3/19/15	DATE		DATE	
H-SCALE	AS NOTED	SIZE	D	FIELD BOOK & PAGES	
V-SCALE	N/A	V.S.		R.E. DWG	
R.E. PROJ. NUMBER	NUSCO			16101-92001 PG 1	



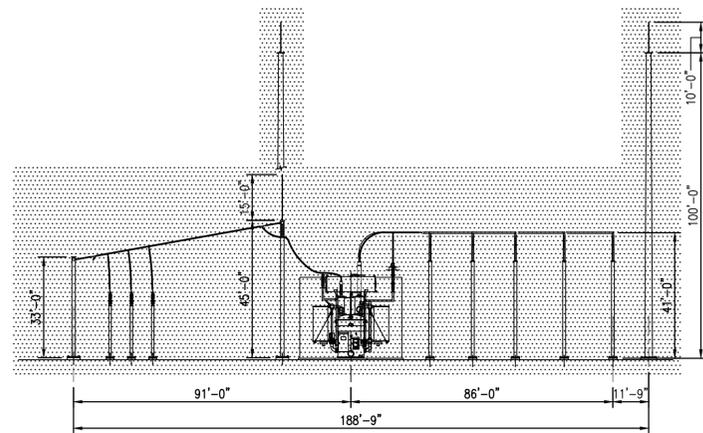
SECTION A-A

0 30' 60'
SCALE IN FEET



SECTION B-B

0 30' 60'
SCALE IN FEET



SECTION C-C

0 30' 60'
SCALE IN FEET

LEGEND

 2016 ADDITION

 2016 REMOVAL

REV. 4 - 3/18/15
SUBSTATION ADDITION

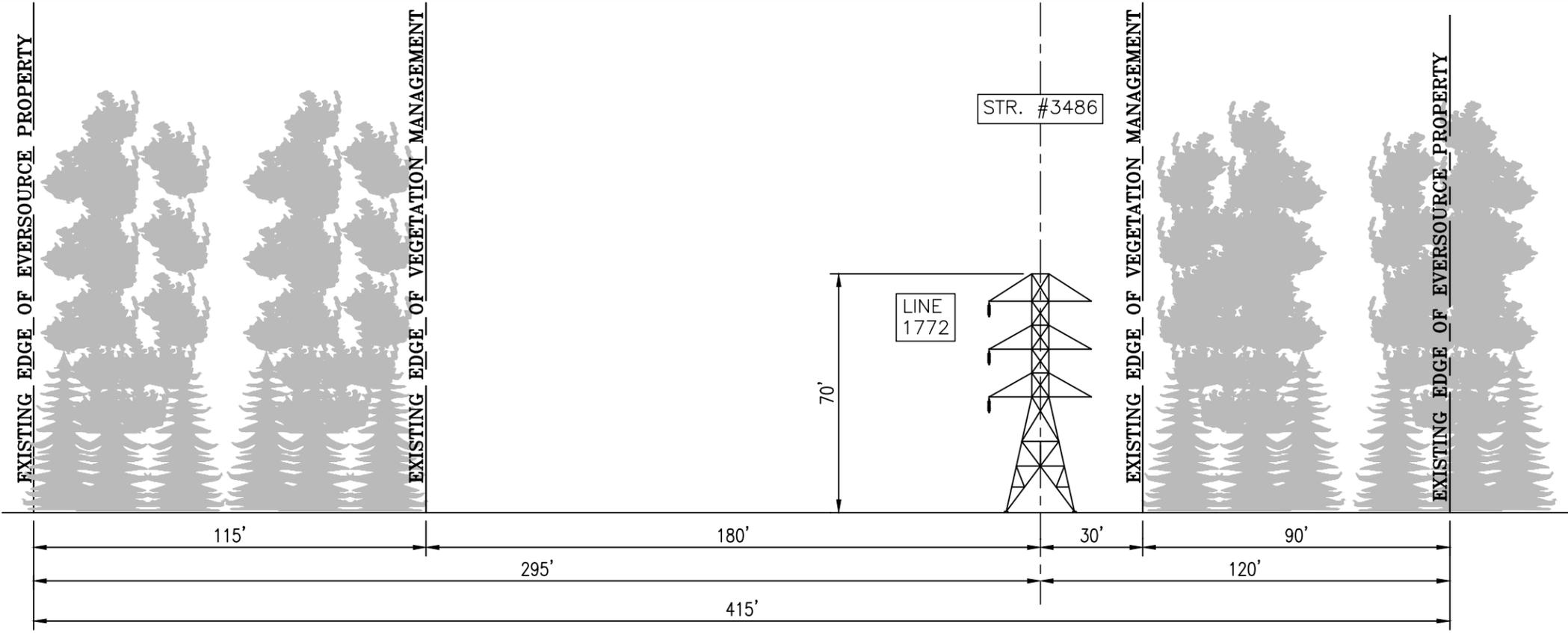
REVISIONS DURING CONSTRUCTION			

EVERSOURCE
ENERGY

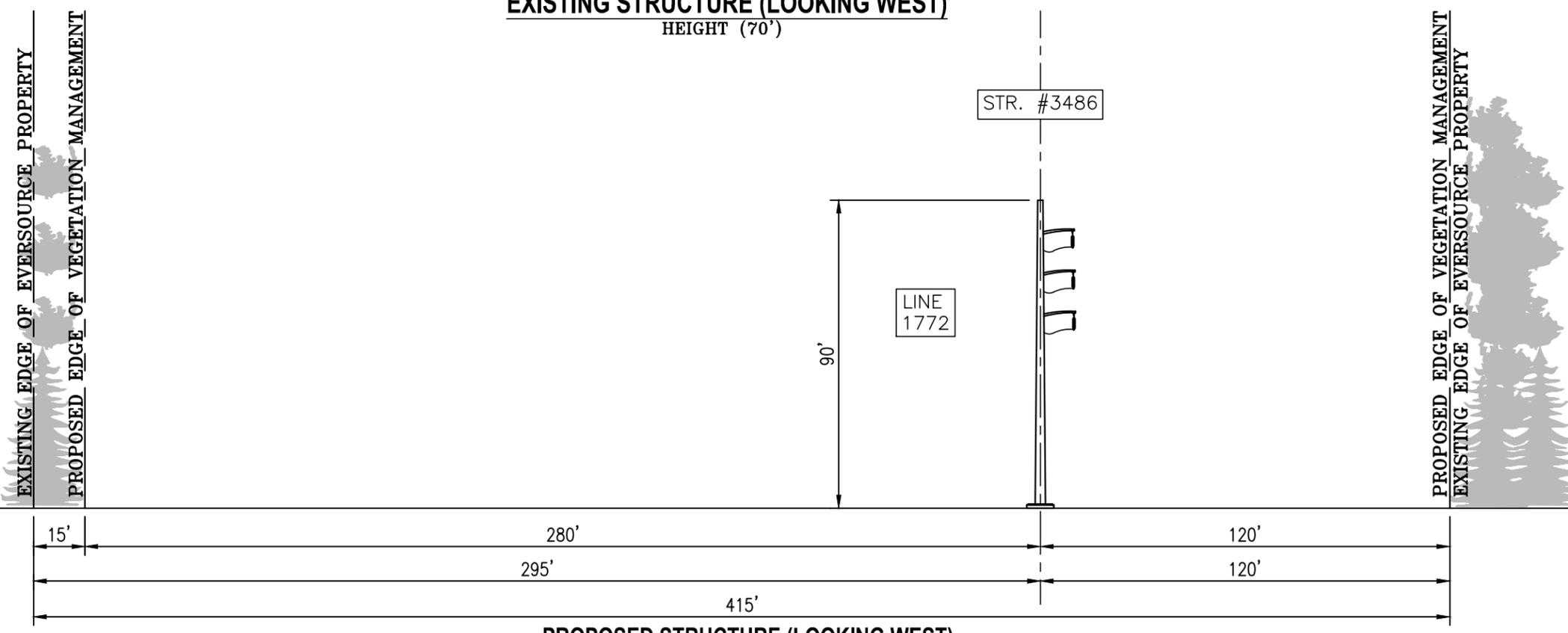
TITLE
HADDAM SUBSTATION
GENERAL ARRANGEMENT - SECTION VIEWS - CSC
CONNECTICUT SITING COUNCIL
HADDAM, CT.

BY	DRW	APP	DATE	DATE
RR SHINEMAN	JWM		3/19/15	
H-SCALE		SIZE	FIELD BOOK & PAGES	
AS NOTED		D		
V-SCALE		V.S.	R.E. DWG	
N/A				
R.E. PROJ. NUMBER	MUSCO	16101-92001 PG 2		

ATTACHMENT B



EXISTING STRUCTURE (LOOKING WEST)
HEIGHT (70')



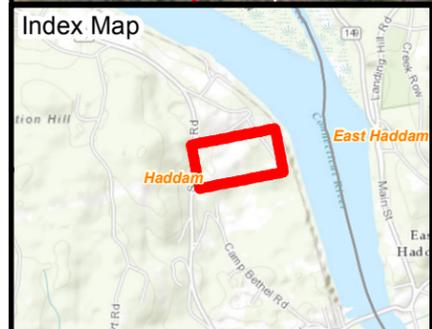
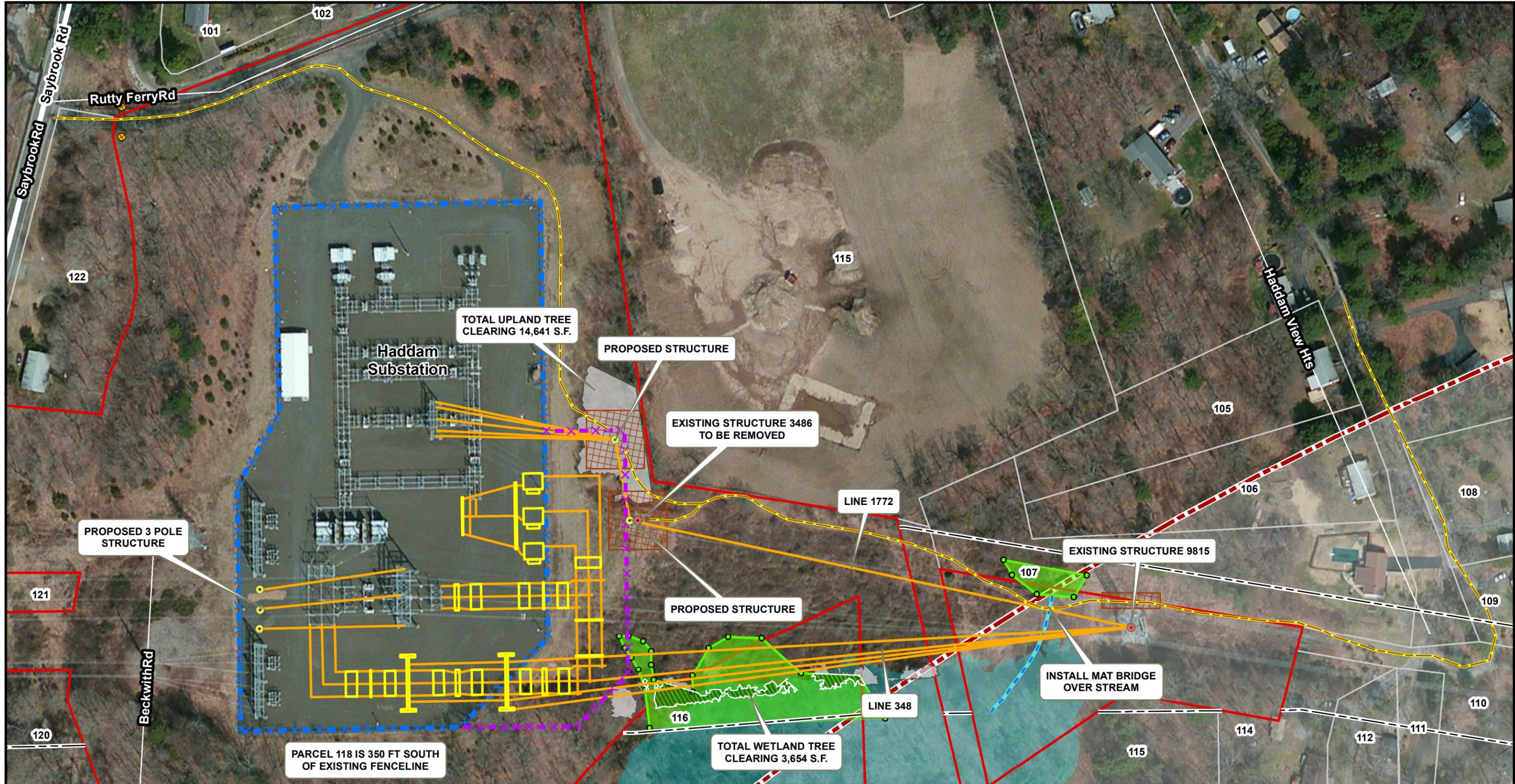
PROPOSED STRUCTURE (LOOKING WEST)
HEIGHT (90')

EVERSOURCE
ENERGY

TITLE: 1772 LINE CROSS SECTION

BY	RRH	CHKD	EQ	APP	APP
DATE	4/15/15	DATE	4/15/15	DATE	DATE
H-SCALE	1"=40'	SIZE	B	FIELD BOOK & PAGES	
V-SCALE	1"=40'	V.S.		R.E. DWG	
R.E. PROJ. NUMBER				NUSCO	ATTACHMENT B

ATTACHMENT C



Legend

- Proposed Transmission Structure
- Existing Transmission Structure
- ✕ Proposed Expansion Area
- ✕ Existing Substation Fenceline
- Proposed Electrical Improvements (Structures)
- Proposed Electrical Improvements (Wire)
- Access Road
- Approx ROW Limits
- ▭ Construction Work Pad
- Intermittent Stream
- ⊗ Culverts
- Field Delineated Wetland Flags
- Field Delineated Wetlands Line
- Field Delineated Wetlands
- FEMA DFIRM Flood Hazard Area
- Upland Tree Clearing
- Wetland Tree Clearing
- Eversource Parcels
- Parcels

NDDB Exclusion

- ▭ Animals

Source: -CT DEEP
 Basemap & Environmental Data
 -Aerial & Topo Imagery
 ESRI, DigitalGlobe, GeoEye, i-cubed,
 DeLorme, NAVTEQ, TomTom, Intermap,
 increment P Corp., AEX, GEBCO, USDA,
 USGS, FAO, NPS, NRCAN, GeoBase,
 Getmapping, Aerogrid, IGP, IGN, Kadaster
 NL, Ordnance Survey, ESRI Japan, METI,
 ESRI China (Hong Kong), swisstopo, & the
 GIS User Community

1 inch = 120 feet

0 120 240
 Feet

HADDAM SUBSTATION

Attachment C: Line Modifications
 April 15, 2015

1384 Saybrook Road
 Haddam, CT

EVERSOURCE
 ENERGY

BSC GROUP

**Haddam Substation
1384 Saybrook Road Haddam, CT
Abutter List**

Property Number	Owner Name (Now or Formerly)
107	DUPONT DAVID A + JOYCE A
114	PERRAS MARC A
115	M & T PROPERTIES LLC
116	DAHLGREN FRITZ A & VAUN G
118	SMIGEL SCOTT W & MICHELLE W
120	MCLEAN BRIAN
121	MCLEAN BRIAN
122	KAVARSKY STANLEY J

Table 1A

**Above information references Attachment C: Line Modifications*

ATTACHMENT D



INTEGRATED HISTORIC PRESERVATION PLANNING

February 1, 2015

Mr. Paul M. Knapik
Project Manager/Wetland Scientist
BSC Group
33 Waldo Street
Worcester, Massachusetts 01608

RE: Cultural Resources Review of Proposed Utility Upgrades Associated with a Substation at 1384 Saybrook Road in Haddam, Connecticut

Mr. Knapik:

Heritage Consultants, LLC, is pleased to have this opportunity to provide BCS Group with the following archeological assessment of proposed upgrades to an existing electrical substation located at 1384 Saybrook Road in Haddam, Connecticut (Figure 1). The upgrades will include the construction of additional electrical structures and wires adjacent to the southeast corner of the existing substation (Figure 2). The current project entailed completion of an existing conditions cultural resources summary based on the examination of data obtained from the Connecticut State Historic Preservation Office, as well as historical data, aerial photographs, and topographic quadrangles maintained by Heritage Consultants, LLC. This investigation did not consider the effects of the proposed construction upon built resources, and it is based upon project location information provided to Heritage Consultants, LLC by BCS Group. The objectives of this study were to gather and present data regarding previously identified cultural resources situated within 0.8 km (0.5 mi) of the existing substation and to investigate the proposed project parcel in terms of its natural and historical characteristics so that the need for completing additional cultural resources investigations could be evaluated.

Figures 3 and 4 show that although there were some roads and residences in the project region by the mid to late nineteenth century, the area surrounding the existing substation remained largely rural in nature, and centers of population were located to the northwest and south of the Area of Potential Effect (APE). Figures 3 and 4 also show that this portion of Haddam was characterized by wetlands and tributaries of the Connecticut River. The economy of this portion of Connecticut at that time was focused on a mixture of commerce and agriculture. The interpretation is confirmed by Figure 5, an aerial image dating from 1934, which shows the region consisted mainly of a combination of agricultural fields and wetlands. Figure 5 also confirms the low population density in the vicinity of the substation, which appears within a heavily disturbed area. Figure 6, an aerial image taken in 1965, also confirms the previous disturbance of the substation area, as well as large portions of land to the northeast. Figure 7, an aerial image captured in 1990, shows the existing substation and a new housing development to the north, as well as large newly disturbed area to the south. Figure 8 indicates that the area immediately adjacent to the northern end of the substation was disturbed in 2004, as bare earth appears in that location. The 2006 aerial image shown in Figure 9 depicts additional earth moving activities to the east of the substation; this image also shows

that areas around the substation also had begun to be covered in secondary forest by that time. Finally, Figure 10, an aerial image dating 2014, shows the APE in its modern state.

In addition, a review of previously recorded cultural resources on file with the Connecticut State Historic Preservation Office revealed that three archaeological sites and a single National Register of Historic Places property exist within the 0.8 km (0.5 mi) of the substation (Figures 11 and 12). The three previously identified archaeological resources include Sites 61-14, 61-35, and 61-102. Site 61-14, also known as the Haddam Sandpits Site, has been described as a Late Archaic through Woodland period occupation that produced quartz flakes and small stemmed projectile points. It was recorded in 1982 by C.S. Kerkorian of the Public Archaeology Survey Teams, Inc., who indicated that it was destroyed by sand mining. Site 61-35 is a Woodland/Contact period campsite that yielded historic ceramics, nails, kaolin pipestem fragments, quartz flakes and chert, quartz, and quartzite debitage. T. Twichell, who recorded the site area in 1981, indicated that Site 61-35 was in good condition at that time. Site 61-102 dates from the nineteenth century and it was identified by the Public Archaeology Survey Team, Inc., during a cultural resources survey aimed at investigating a previous addition to the northwest portion of the existing substation (Litwinionek et al. 2004). This site was identified in 2004 and it was interpreted as a domestic refuse scatter associated with a nineteenth century use of the area. It was determined that Site 61-102 was disturbed; thus, it was assessed as not significant applying the National Register of Historic Places criteria for evaluation (60.4 [a-d]). No additional testing of Site 61-102 was recommended. Neither of the other two sites (61-14 and 61-35) has been assessed applying the National Register of Historic Places criteria for evaluation (36 CFR 60.4) [a-d]).

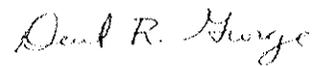
The single National Register of Historic Places property located within 0.8 km (0.5 mi) of the project area is known as Camp Bethel. This cultural resource consists of a historic Christian camp and meeting facility located at 124 Camp Bethel Road in Haddam, Connecticut. It is situated on a bluff overlooking the Connecticut River and it is surrounded by wooded areas. The historic facilities that comprise Camp Bethel include a chapel, memorial hall, boarding houses, a dining hall, and over 40 cabins. The majority of these buildings were constructed between 1889 and ca. 1920. The exception is the dining hall, which was erected in 1992 after the old dining hall burned down. Founded in 1877, Camp Bethel is one of the few surviving camp meeting sites left in New England. It is currently owned by the Camp Bethel Association (CBA), a non-denominational, evangelical organization and it is open for rent. The camp was added to the National Register of Historic Places in 2007, and it is considered significant under Criteria A and C of the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]).

In summary, despite the history of the project region and the presence of three archaeological sites and a single National Register of Historic Places property located within 0.8 km (0.5 mi) of the APE, it is obvious that the proposed project parcel had sustained heavy disturbance in the past. Disturbances to the substation have been ongoing between 1934 and 2014, and includes the initial construction of the substation area and the adjacent power line, as well as additions to the substation and earth moving activities on adjacent parcel of land. In addition, the proposed project parcel was surveyed for cultural resources by the Public Archaeology Survey Team, Inc., in 2004. That survey produced evidence of a single archaeological site, which according to Litwinionek et al. (2004) was badly disturbed and no longer retained research potential or the qualities of significance applying the National Register of Historic Places criteria for evaluation (60.4 [a-d]). Given the amount of disturbance that has taken place on the project parcel, as well as the results of a previous archaeological survey there, it is the professional opinion of Heritage Consultants, LLC that the substation area and its immediate surroundings, retain little, if any, potential to yield intact cultural deposits. As a result, no additional archaeological research is recommended prior to upgrading the existing substation facilities.

Paul Knapik
February 1, 2015
Page 3

If you have any questions regarding this Technical Memorandum, or if we may be of additional assistance with this or any other projects you may have, please do not hesitate to call us at 860-667-3001 or email us dgeorge@heritage-consultants.com. We are at your service.

Sincerely,

A handwritten signature in cursive script that reads "David R. George".

David R. George, M.A., R.P.A.

References Cited

- Litwinionek, L., Clouette, B., Harper, M.
2004 *Phase I Archaeological Reconnaissance Survey, Haddam 11C Electrical Substation Expansion Project, Haddam, Connecticut*. Prepared for Northeast Utilities Systems, Berlin, Connecticut.

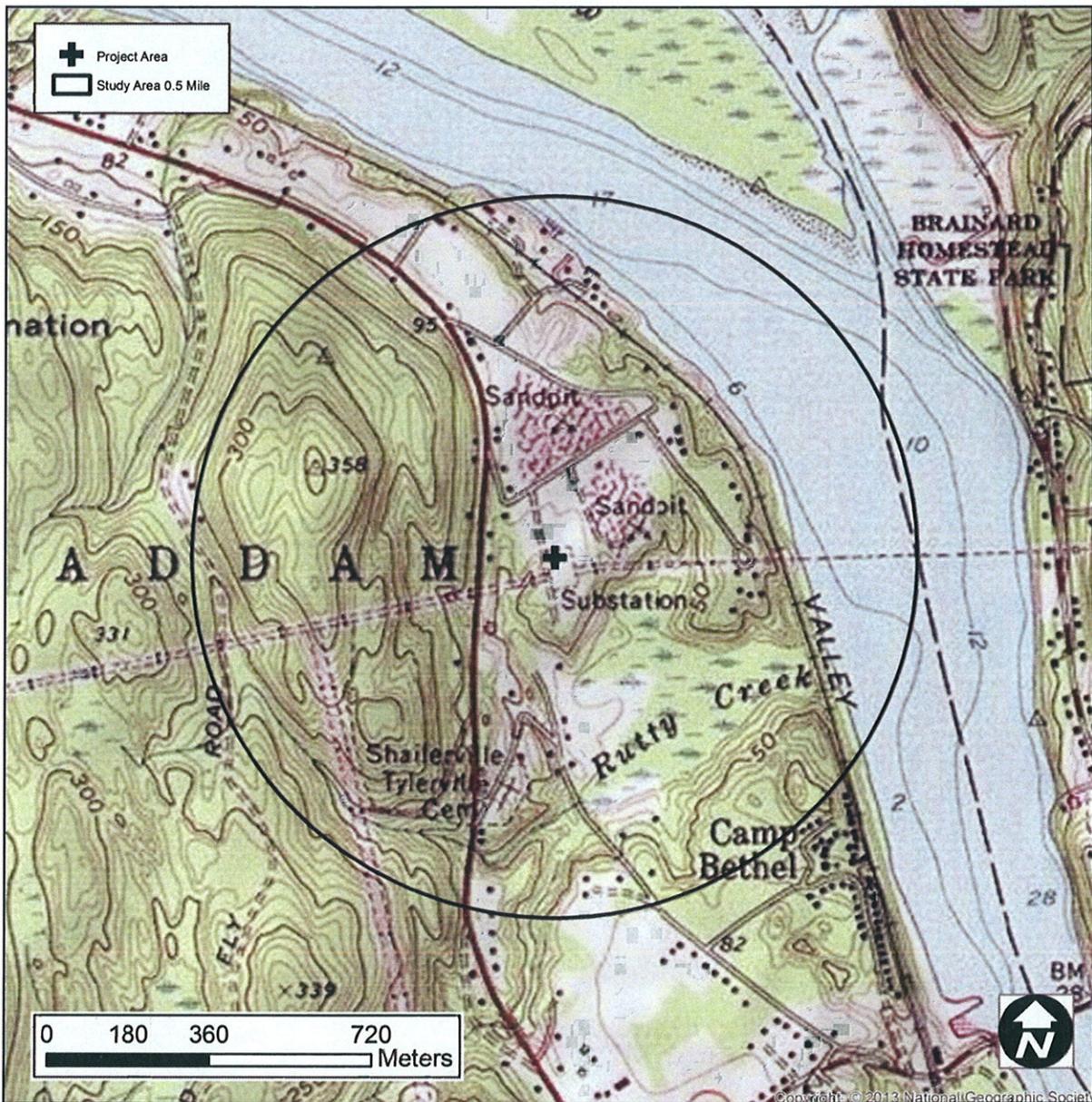


Figure 1. Excerpt from recent USGS topographic quadrangle map depicting the proposed substation upgrade project location in Haddam, Connecticut.

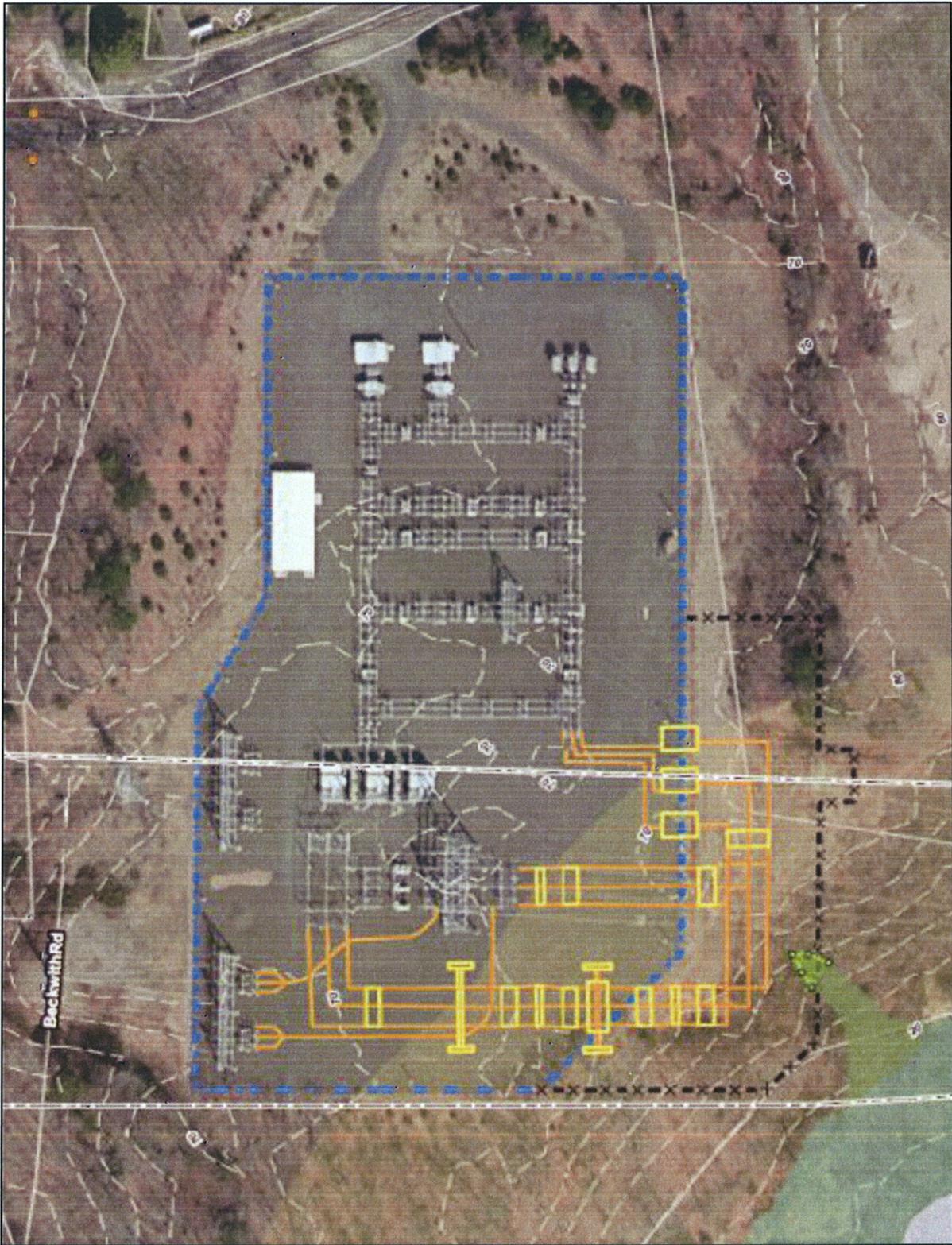


Figure 2. Plan view depicting the proposed substation upgrade project location in Haddam, Connecticut.

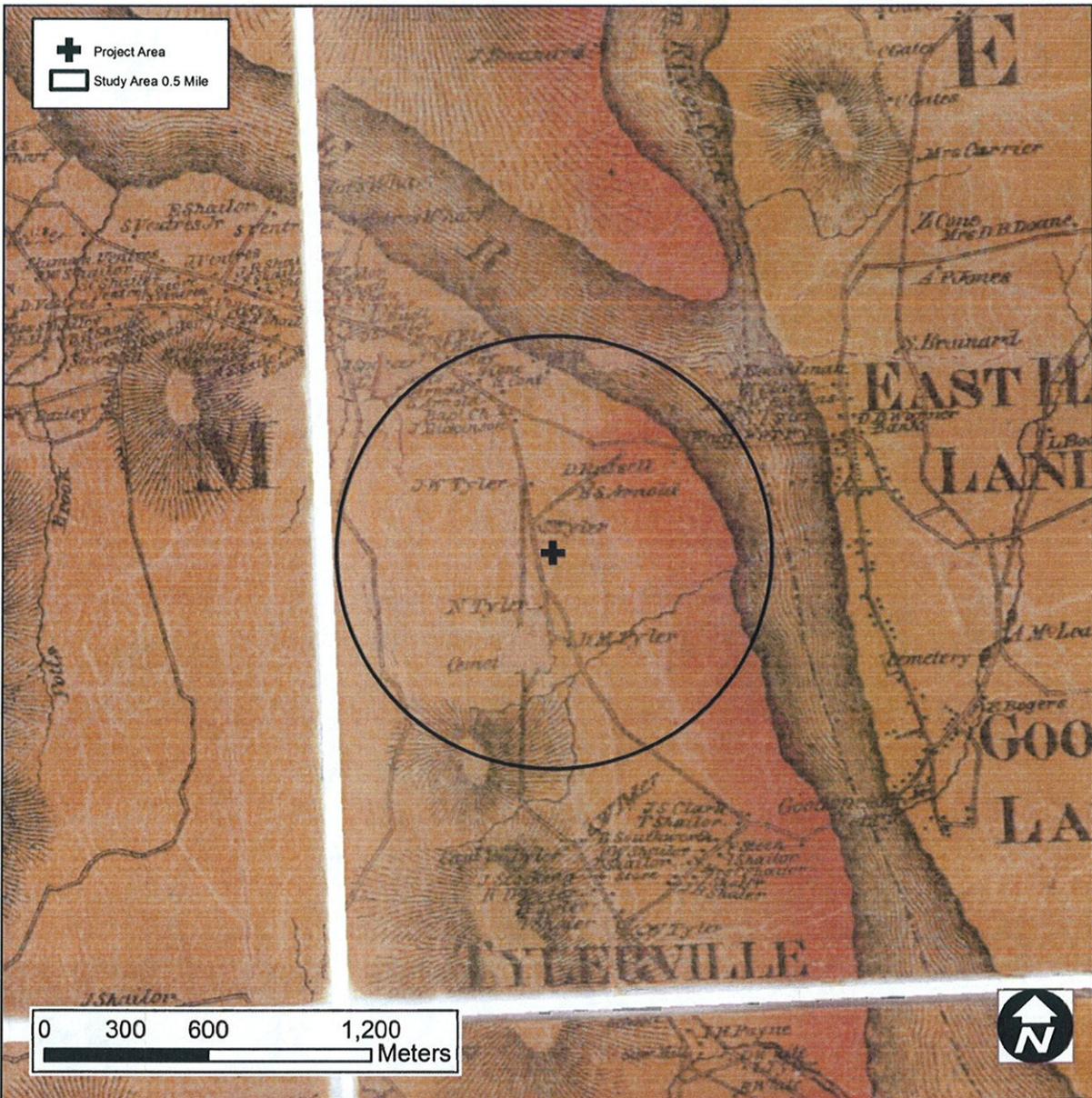


Figure 3. Excerpt from an 1859 historic map depicting the proposed substation upgrade project location in Haddam, Connecticut.

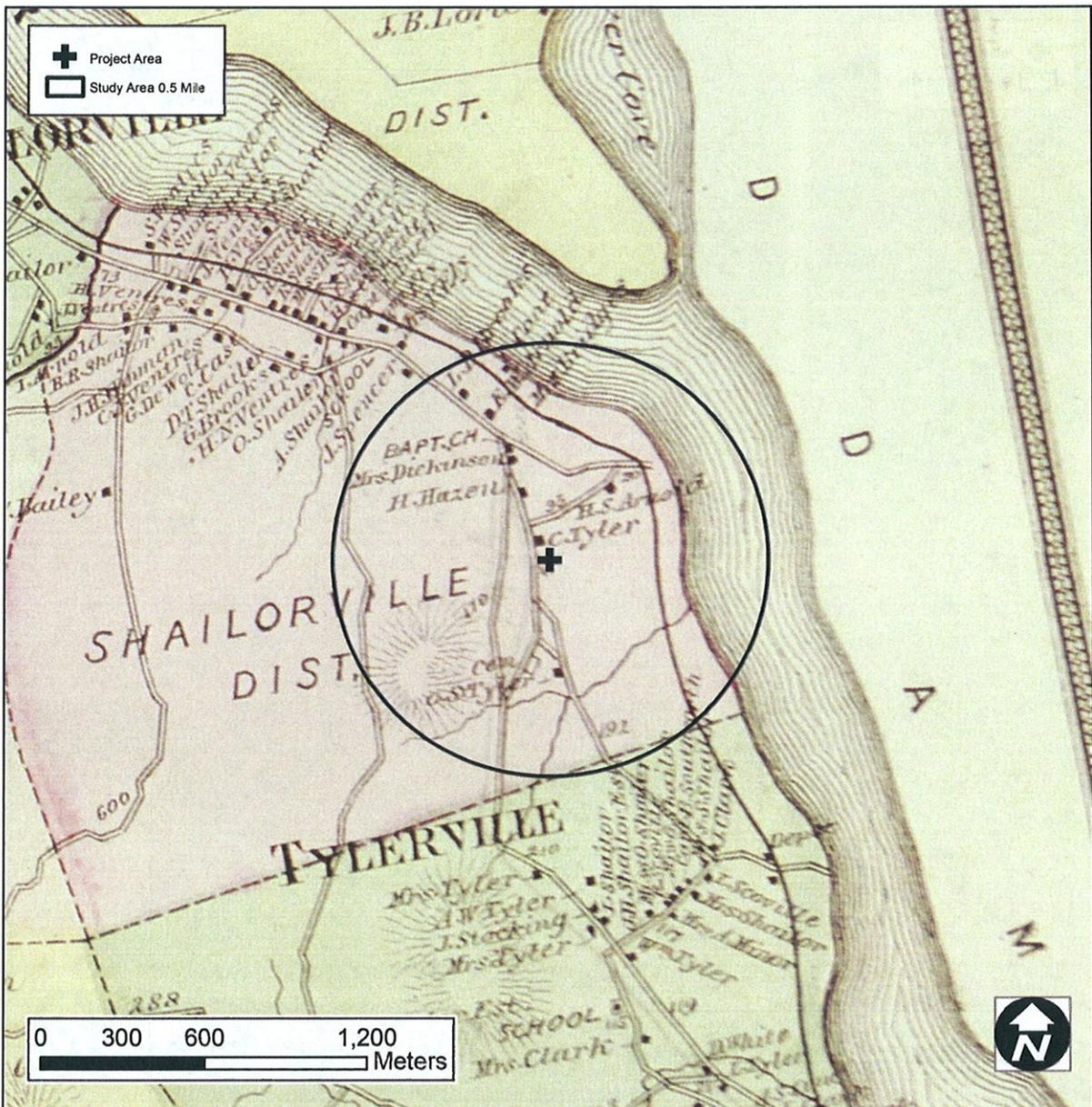


Figure 4. Excerpt from an 1874 historic map depicting the proposed substation upgrade project location in Haddam, Connecticut.

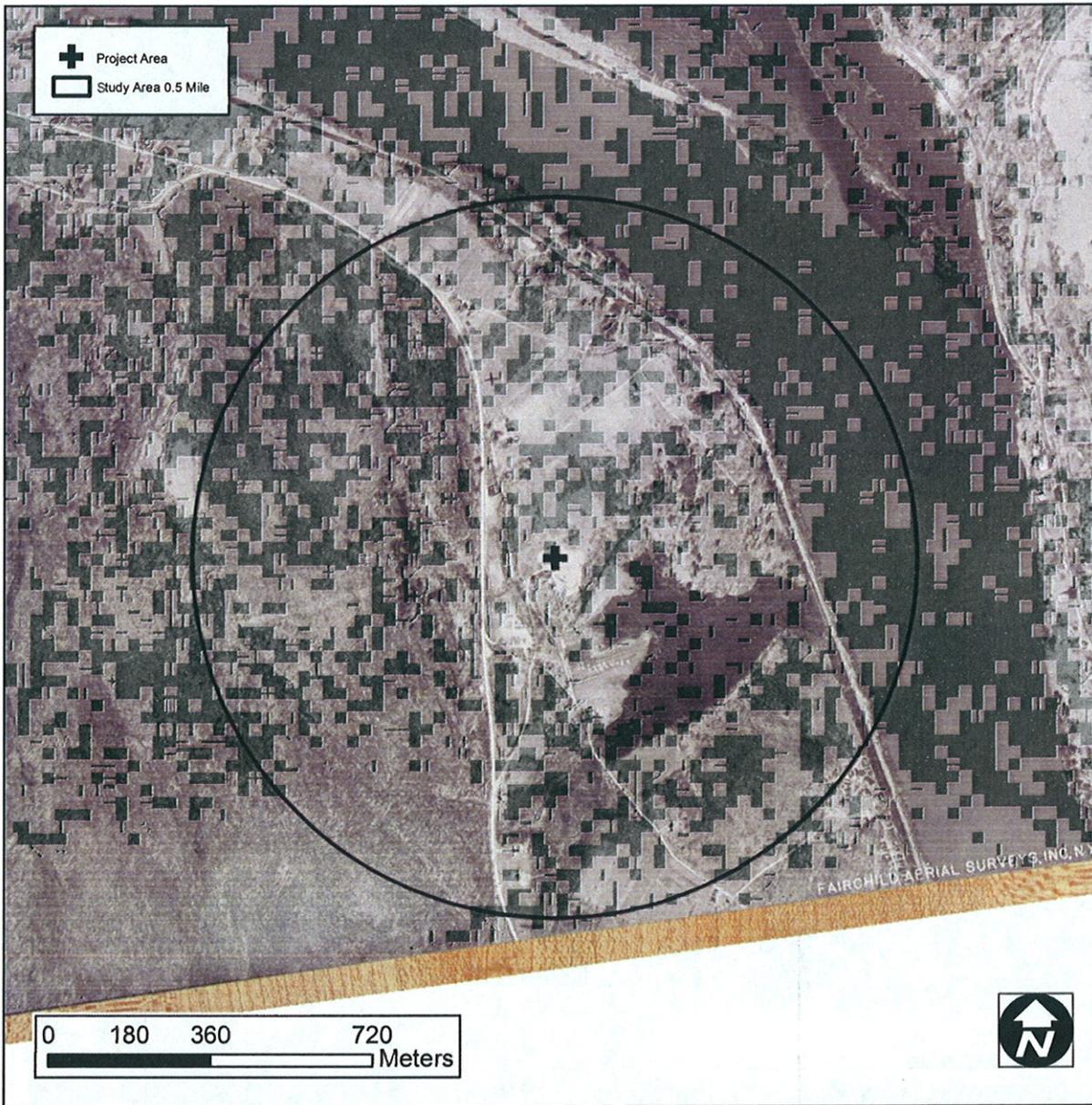


Figure 5. Excerpt from a 1934 aerial image depicting the proposed substation upgrade project location in Haddam, Connecticut (disturbance of the project area can be seen clearly in this image).



Figure 6. Excerpt from a 1965 aerial image depicting the proposed substation upgrade project location in Haddam, Connecticut (the limits of the substation and the disturbed areas around its perimeter, including the project area, can be seen in this image)



Figure 7. Excerpt from a 1990 aerial image depicting the proposed substation upgrade project location in Haddam, Connecticut.



Figure 8. Excerpt from a 2004 aerial image depicting the proposed substation upgrade project location in Haddam, Connecticut.

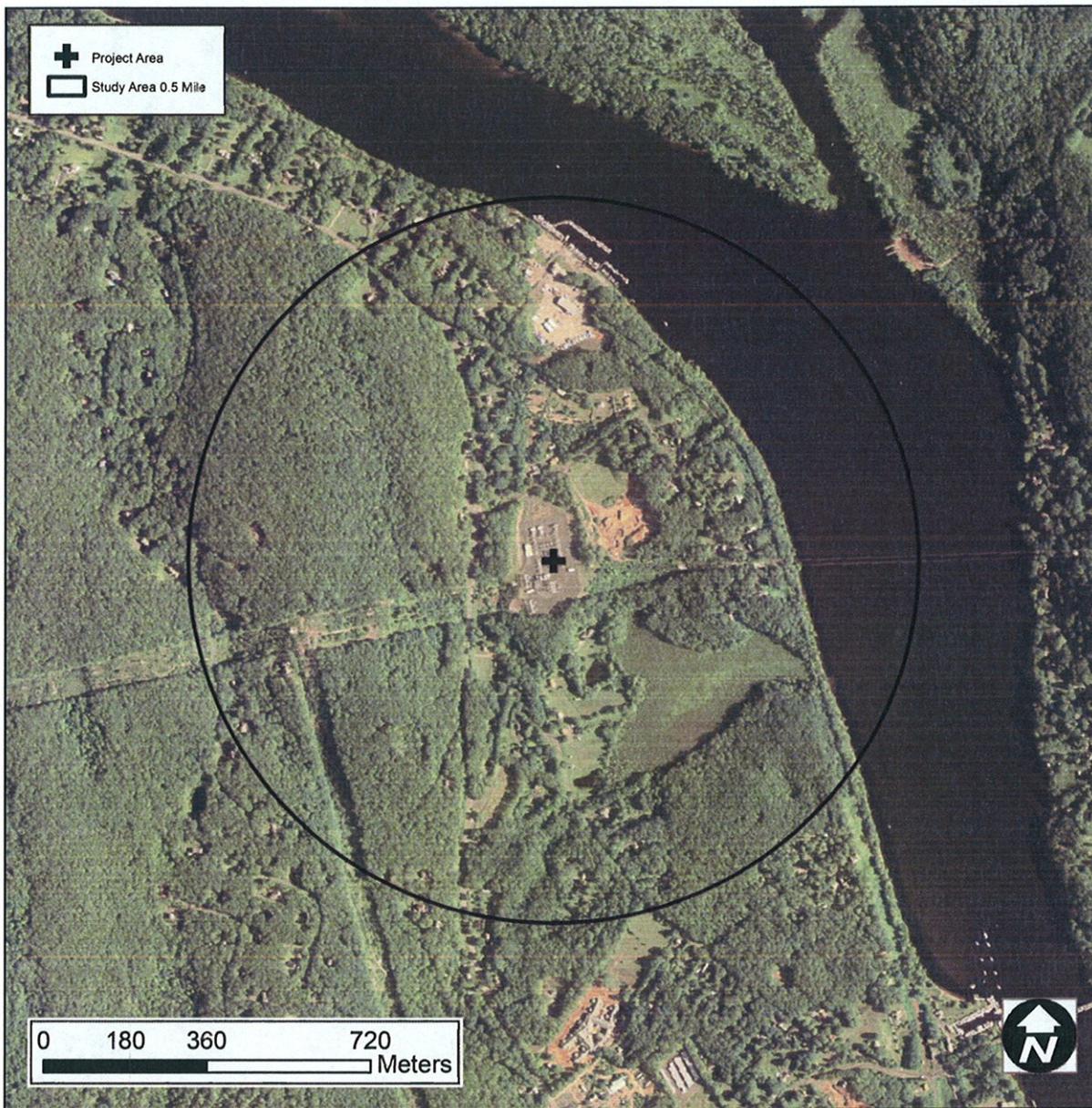


Figure 9. Excerpt from a 2006 aerial image depicting the proposed substation upgrade project location in Haddam, Connecticut.

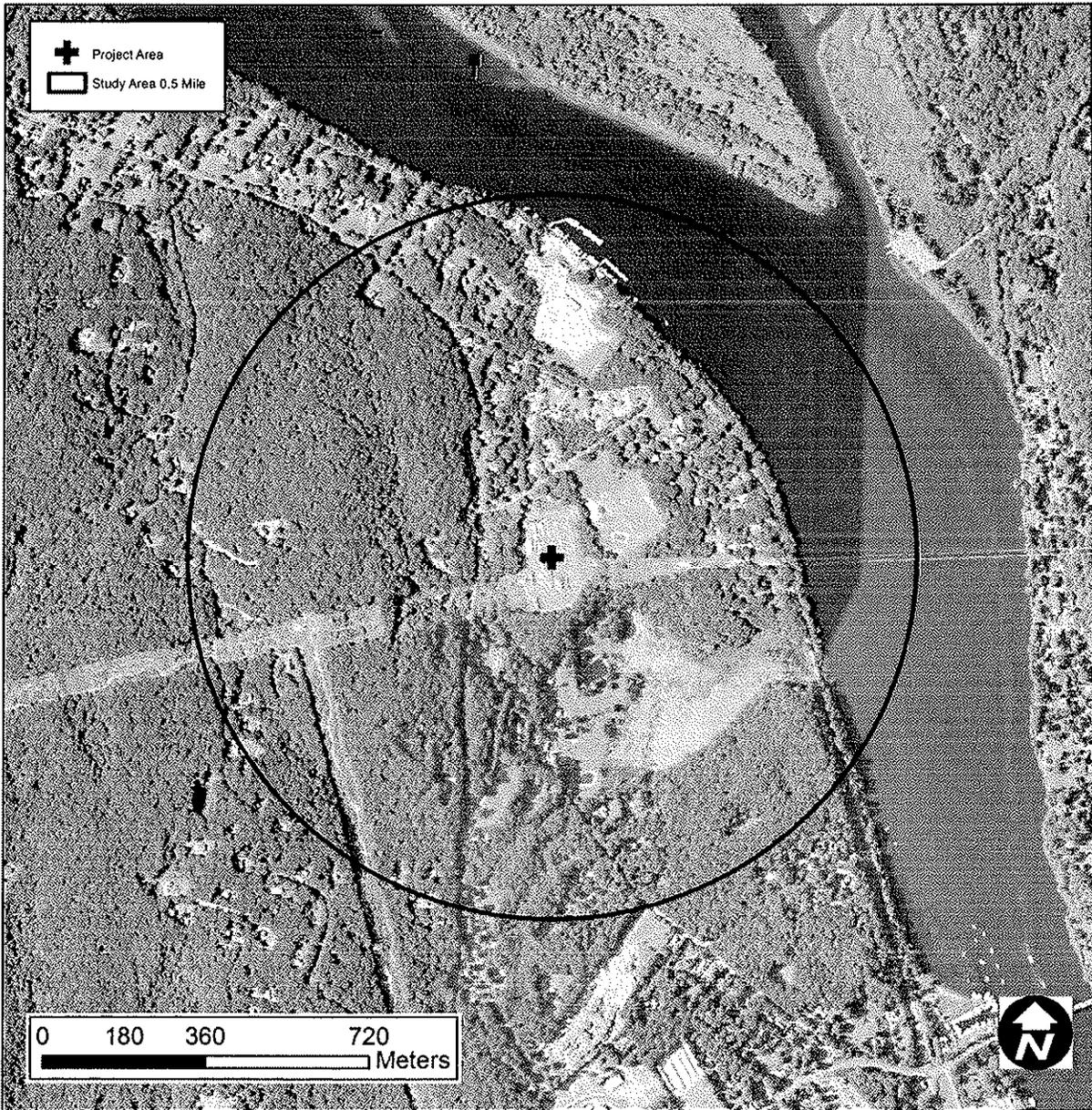


Figure 10. Excerpt from a 2014 aerial image depicting the proposed substation upgrade project location in Haddam, Connecticut.

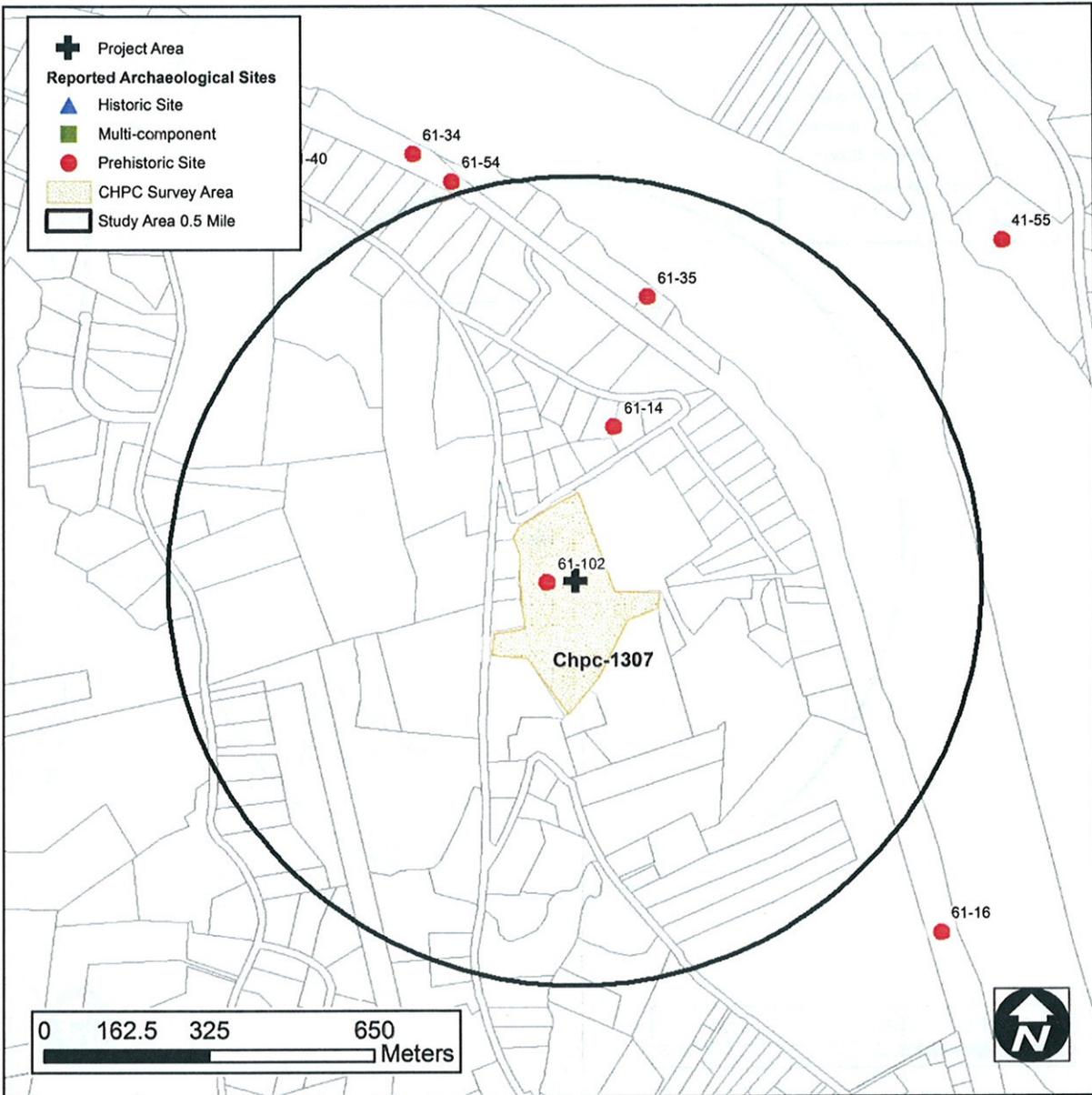


Figure 11. Digital map depicting the locations of previously recorded archaeological sites in the vicinity of the proposed substation upgrade project location in Haddam, Connecticut.

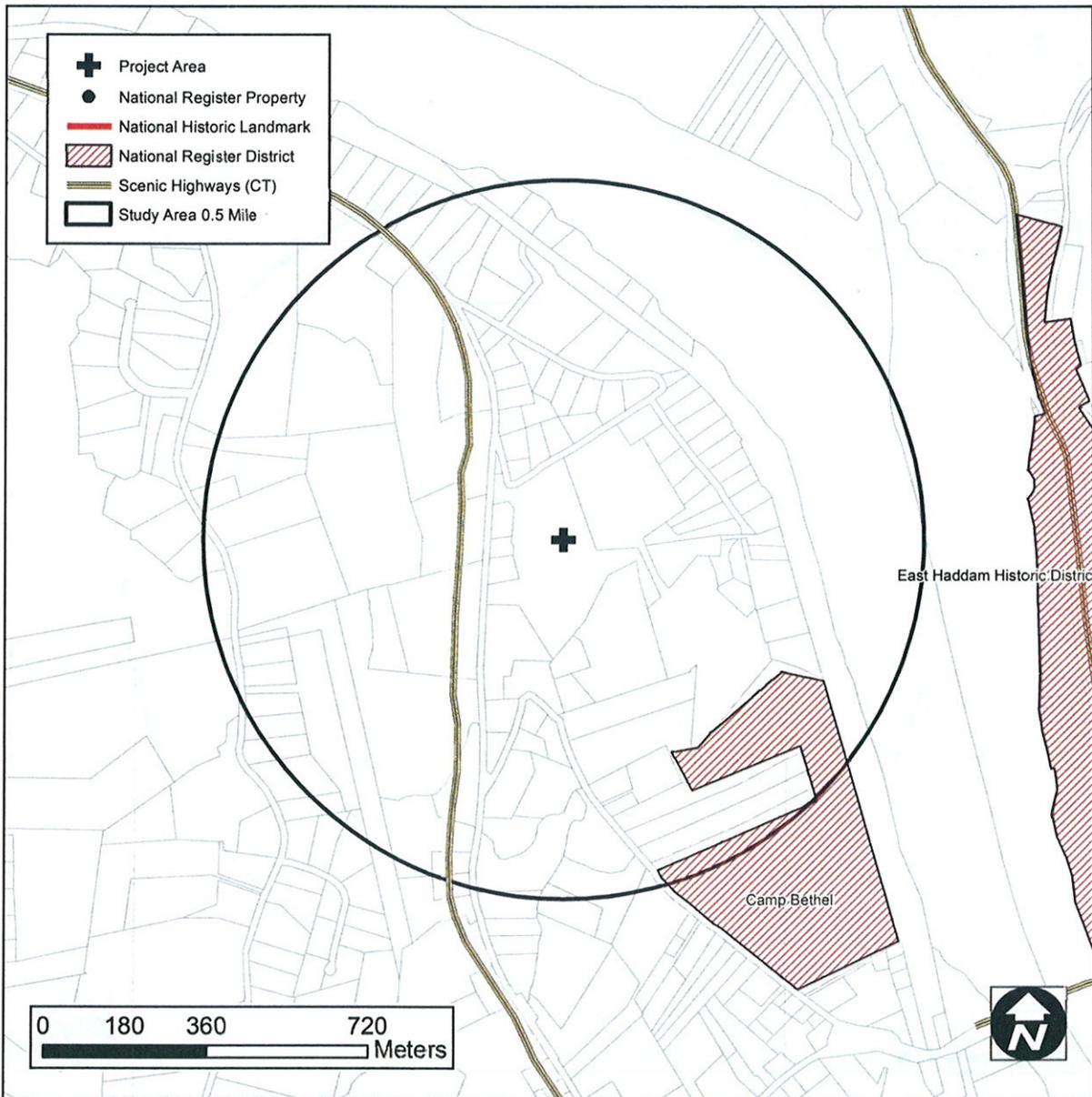


Figure 12. National Register of Historic Places properties in the vicinity of the proposed substation upgrade project location in Haddam, Connecticut

ATTACHMENT E

April 16, 2015

Dear Neighbor,

As part of our everyday effort to deliver reliable energy and superior customer service, Eversource is proposing to do work at the Haddam Substation located on Saybrook Road.

The Haddam Substation Project scope includes expansion of the Haddam substation on existing Eversource property, installation of a new autotransformer and other ancillary equipment, the reconfiguration of existing substation equipment and the reconfiguration of the interconnection of the existing transmission lines coming into the substation. Additionally, new transmission structures will be added outside the fence line of the substation in the existing right-of-way to support the new interconnection of the transmission lines.

Eversource is submitting a petition to the Connecticut Siting Council (CSC). If the work is approved by the CSC, work at the Haddam Substation is planned to begin in the summer of 2015. Completion of the Project and restoration is anticipated in the summer of 2016.

If you would like to send comments or concerns regarding Eversource's petition to the CSC, please send them via e-mail to siting.council@ct.gov or a letter to the following address:

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

For more information about this upgrade work, please call the Eversource Transmission Information Line at 1-800-793-2202, or send an email to TransmissionInfo@eversource.com.

Thank you.

Sincerely,

Ken

Kenneth Roberts
Eversource Project Manager

