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Hartford, CT 06141-0270

**Deborah Denfeld**  
Team Lead – Transmission  
Siting

June 24, 2024

Melanie A. Bachman, Esq.  
Executive Director  
Connecticut Siting Council  
10 Franklin Square  
New Britain, CT 06051

RE: Notice of Exempt Modification – The Connecticut Light and Power Company’s Notice of Exempt Modification Pursuant to RCSA § 16-50j-57(b) to the 1142/1580 Transmission Line Structures from South Naugatuck Substation to Beacon Falls Junction – Structure Modifications

Dear Attorney Bachman:

The Connecticut Light and Power Company dba Eversource Energy (“Eversource”) hereby gives notice (“Notice”) to the Connecticut Siting Council (“Council”) of its intent to undertake modifications to support Eversource’s 1580 Line Bulk Power System requirements resulting in the need to make minor structure reinforcement modifications to Eversource’s existing wood structures supporting the 1142/1580 lines between South Naugatuck Substation, located on Eversource-owned property at 435 Cherry Street Extension, Naugatuck, Connecticut and Beacon Falls Junction, located near 360 Chestnut Tree Hill Road, in Oxford, Connecticut (the “Project”).

The purpose of the proposed work is to improve the structural integrity of ten existing transmission line double circuit H-frame wood structures, with the addition of wood bracing to support the proposed replacement of the shield wire on the 1580 Line with Optical Ground Wire (“OPGW”). Additionally, the Project will include the installation of one temporary pole in the Christian Street Junction area to support All-dielectric self-supporting (“ADSS”) cable to be installed back to Beacon Falls Junction. Refer to *Attachment A – Map Sheets- Cover Page* (“Project Area”).

### **Existing Conditions**

The existing 1142/1580 lines are carried on a combination of double-circuit H-frame wood structures and single-circuit 3-pole wood structures from South Naugatuck Substation to Beacon Falls Junction, over approximately 2.7 miles, though the Towns of Naugatuck, Beacon Falls and Oxford. The structures in the Project Area carry 3/8-inch copperweld shield wire on the 1580 Line.

The 32 existing structures in the Project Area are numbered as 1540 through 1566; of which 21 are double-circuit H-frame (“DCHF”) wood structures, ten are single-circuit 3-pole wood<sup>1</sup> structures (five paired sets each, for the 1142 Line and for the 1580 Line), and one double-circuit lattice tower structure.

Some of the DCHF structures are already equipped with wood ‘cross’ and/or ‘knee’ bracing<sup>2</sup>. (Refer to *Attachment B – Existing and Proposed Structure Configurations*)<sup>3</sup>.

### Proposed Modifications

The proposed modifications would take place within the Eversource ROW at 10 DCHF structure locations, where bracing is required to accommodate the replacement of the existing shield wire with OPGW on the 1580 Line. The specific proposed modifications per each of the ten structures is indicated in the table below.

<b>Summary Table of Proposed 1142/1580 DCHF Structure Modifications</b>		
<b>No. of Structures</b>	<b>Structure Modification</b>	<b>Structure Designation</b>
1	Add cross bracing & side guying	1562
5	Add cross bracing only	1565, 1564, 1563, 1558, 1555
4	Add cross bracing & knee bracing	1551, 1548, 1545, 1543

Additionally, one temporary structure will be added at Christian Street Junction, between existing Structure 301 and Structure 11146, to support the installation of ADSS fiber optic cable from the new pole to Structure 11146.<sup>4</sup> At a height of 40 feet, the temporary light duty steel structure will be shorter than either adjacent structure.

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<sup>1</sup> One set of SC pole structures was replaced in 2022 on the 1142 Line; Structure 1546 was replaced with a light duty weathering 3-pole steel, as part of Sub-Petition 1293-OX-02. Additionally, Structure 1540 is identified as a lattice tap tower carrying the 1319, 1808, 1142, and 1580 lines.

<sup>2</sup> Cross bracing is constructed about mid-height with wood cross bars secured and forming an ‘X’ across both sides of the H-frame structure; with knee bracing constructed at the top of the horizontal bar of the H-frame structure with wood sections secured in a triangular fashion to the vertical extension of the pole above the crossarm supporting the cables.

<sup>3</sup> Some structures have or will be equipped with side guying. Side guying consists of guy wiring, typically starting just below the pole’s cross arm extended, at an angle landing some distance from the base of the pole to an in-ground (or on-ground) securing anchor.

<sup>4</sup> The ADSS will be tied into existing OPGW at Christian Street Junction that was never spliced and connected to the greater Eversource telecommunications network. The temporary structure will be removed when the construction at Christian Road Junction is completed and a fiber path can be supported on permanent structures. The temporary structure is estimated to be in place for approximately one year.

## No Substantial Adverse Environmental Effect

The proposed modification will have no adverse environmental effect or cause a significant change or alteration in the physical or environmental characteristics of the ROW because:

- The structure modifications would not result in a substantial change to the visual character of the transmission line, since the modifications are limited to the addition of wood bracing attached with metal brackets, to the existing wood structures and the structures are similar in appearance to other DCHF structures in the Project Area which are already equipped with similar bracing.
- The proposed modification will not result in changes to existing structure heights.
- There would be no change in noise levels following installation of the cross-bracing modifications.
- Electric and magnetic field levels at and along the outer edges of the transmission line ROW would not change as a result of the structure modifications.
- Access to the structures being modified would utilize existing access roads within the ROW, as well as off ROW access ways located both outside of and within Naugatuck State Forest.<sup>5</sup> Access within Naugatuck State Forest will be limited to the use of existing gravel and hard-pack earthen access roads, and will utilize existing gravel work pads at the structure locations.
- No widening or improvement of existing structure work pads is required to facilitate this work.
- Tree clearing would not be required; however, Eversource may need to undertake minor tree trimming and or vegetation mowing within the managed ROW corridor and/or of the off-ROW access to improve access to the structure locations.
- The work will not result in any permanent impacts to water resources. Temporary matting will be used to cross two wetlands (W45 and W44), and span an intermittent stream (S22), resulting in approximately 2,032 square feet of temporary wetland impacts within the ROW. Following completion of the work, matting will be removed and disturbed areas roads will be mulched with straw to protect the ground surface during revegetation.
- According to Eversource's review of the Department of Energy and Environmental Protections ("CTDEEP") Natural Diversity Data Base ("NDDB") portions of the proposed work activities will be located within NDDB buffered areas. A NDDB review request has been submitted to CTDEEP for work in Naugatuck State Forest and regulated wetland crossings. Eversource has not yet received a response. Eversource will comply with any requirements for the protection of state listed species and/or critical habitats detailed in the NDDB determination.

Work activities would be conducted in accordance with Eversource's Best Management Practice Manual for Massachusetts and Connecticut, April 2022, and the Connecticut Soil Erosion and Sediment Control Guidelines, effective March 30, 2024.

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<sup>5</sup> Eversource has submitted a State Land Notification ("SLN") to the CT Department of Energy and Environmental Protection ("DEEP") for work in Naugatuck State Forest and use of existing off-ROW access roads of the existing access roads, including where trails are co-located. Eversource will be required to obtain a Special Use License (SUL) through the SLN process prior to access the ROW from the existing off-ROW roads.

Eversource proposes to commence construction as early as September 2024. Work is scheduled to be completed no later than June 2025.

Eversource consulted with the Towns of Naugatuck, Beacon Falls, and Oxford in April 2024 to provide an initial briefing of the proposed Project. An in-person presentation was offered to review Project details.

A copy of the exempt modification filing has been provided to the municipal official of the Towns of Naugatuck, Beacon Falls, and Oxford.

Eversource is submitting this filing electronically and will be providing an original and two hard copies of this Notice of Exempt Modification along with the requisite filing fee of \$625.00.

Please do not hesitate to contact me if you have any questions regarding this submittal.



By: \_\_\_\_\_

Deborah Denfeld

Team Lead – Transmission Siting

[deborah.denfeld@eversource.com](mailto:deborah.denfeld@eversource.com)

cc: N. Warren "Pete" Hess III, Mayor, Town of Naugatuck  
Gerard Smith, First Selectman, Town of Beacon Falls  
George R. Temple, First Selectman, Town of Oxford

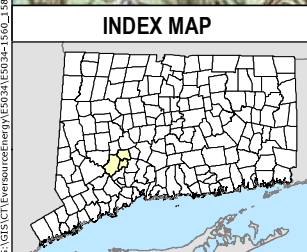
Attachments:

Attachment A – Map Sheets

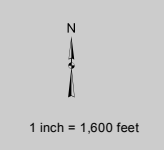
Attachment B – Existing and Proposed Structure Configurations – Photos

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**Attachment A**  
**Map Sheets**



Legend	
<span style="color: orange;">●</span>	Existing Structure to be Modified
<span style="border: 1px solid black; border-radius: 50%; padding: 2px;">●</span>	Junction
<span style="background-color: #90EE90; border: 1px solid black; padding: 2px;">SUB</span>	Substation
<span style="border-bottom: 2px solid green; width: 20px; display: inline-block;"></span>	Project Corridor
<span style="border-bottom: 2px dashed pink; width: 20px; display: inline-block;"></span>	Municipal Boundary
<span style="border: 1px solid black; width: 20px; height: 10px; display: inline-block;"></span>	Map Sheet



Base Map Source: ESRI USA Topographic Maps

NO.	DATE	REVISIONS	BY	CHK	APP	APP

**EVERSOURCE**

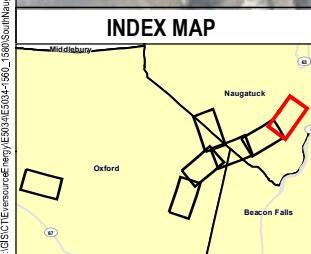
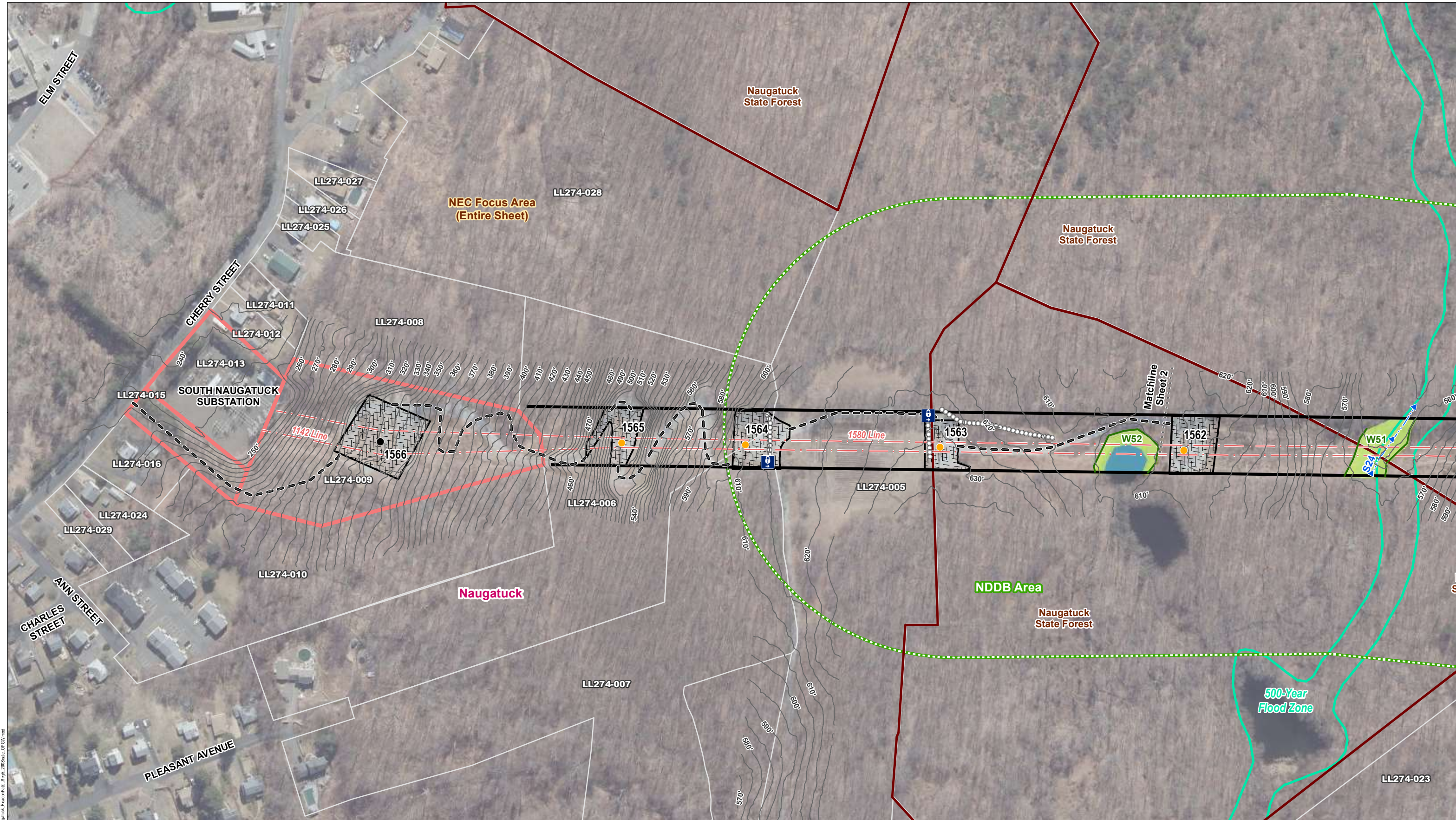
**South Naugatuck to Beacon Falls Junction  
Structure Modifications**

Oxford, Naugatuck, Beacon Falls, Connecticut

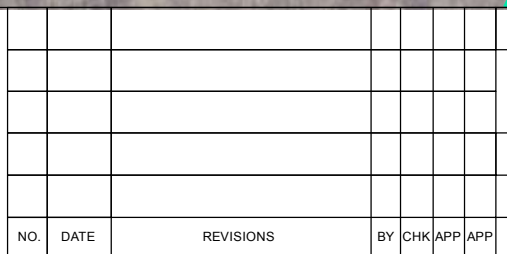
Date: June 12, 2024

**Tighe & Bond**

© 2024 Eversource Energy, E0303A, E0303A-1566, 1566 South Naugatuck, Beacon Falls, Naugatuck, Oxford, Connecticut, IndexMap.mxd



Legend		Legend		Legend	
● Temporary Pole Location	○ Proposed	▨ Potential Vernal Pool Extent	▭ State-Owned Property (CTDEEP)	▭ Mapping uses structure staking data from 6/14/2023 and guy anchor staking data from 3/12/2024	
● Existing Structure	○ Off-ROW Access Pending	▨ Existing Gravel	▭ Parcel Boundary		
● Existing Structure to be Modified	▬ Access Road to be Improved	▨ Temporary Construction Matting	▭ Municipal Boundary		
○ Culvert	○ Hiking Trail	▨ Natural Diversity Database Area (May 2024)	○ Scrub Oak (field mapped host plant)		
Ⓜ Gate	▬ Delineated Watercourse	▨ Critical Habitat	▨ Acidic Rocky Summit Outcrop (field mapped critical habitat)		
○ Stonewall	▬ 100' Vernal Pool Envelope	▨ CT NE Cottontail Focus			
▬ Overhead Eversource Line	▬ Field Delineated Wetland Boundary Outline	▨ FEMA 100-Year Flood Zone			
▬ Existing	▬ Field Delineated Wetland	▨ FEMA 500-Year Flood Zone			
	▬ Open Water	▨ Eversource Owned Property			



**EVERSOURCE**

**South Naugatuck to  
Beacon Falls Junction  
Structure Modifications**

Naugatuck,  
Connecticut

Date: June, 12, 2024

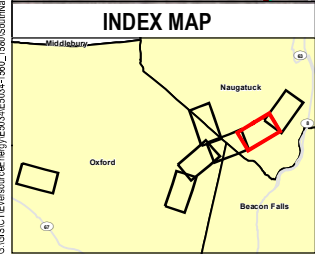
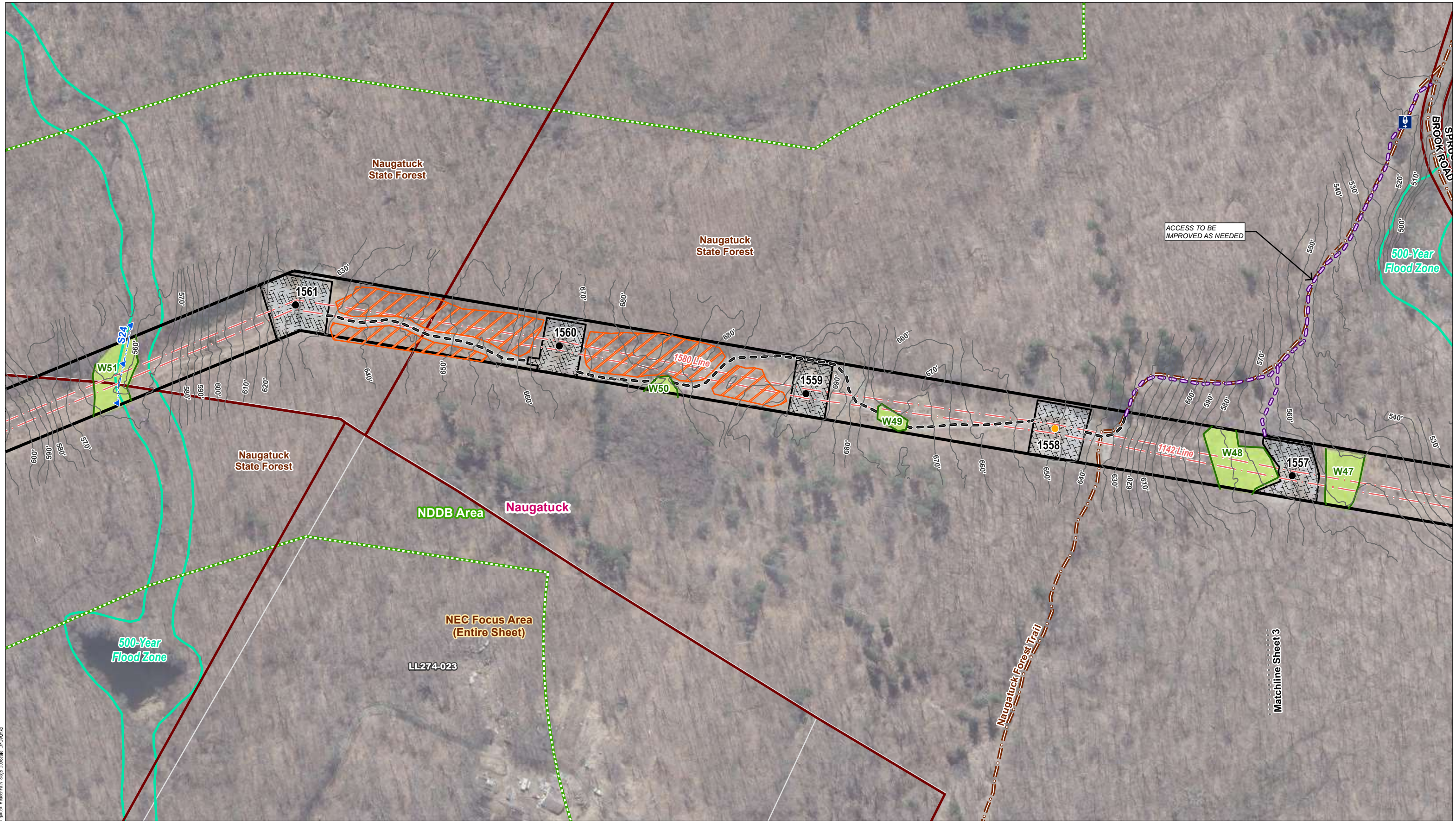
Map Sheet 1 of 7

**Tighe & Bond**

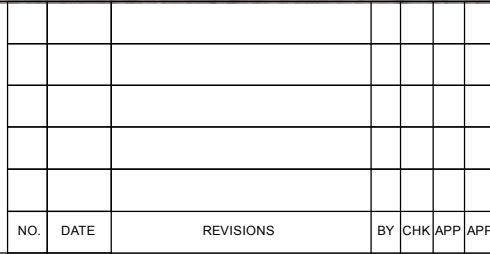
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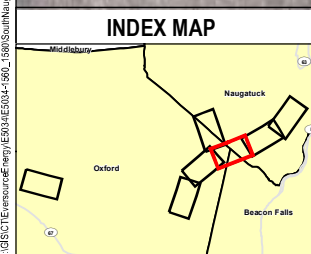
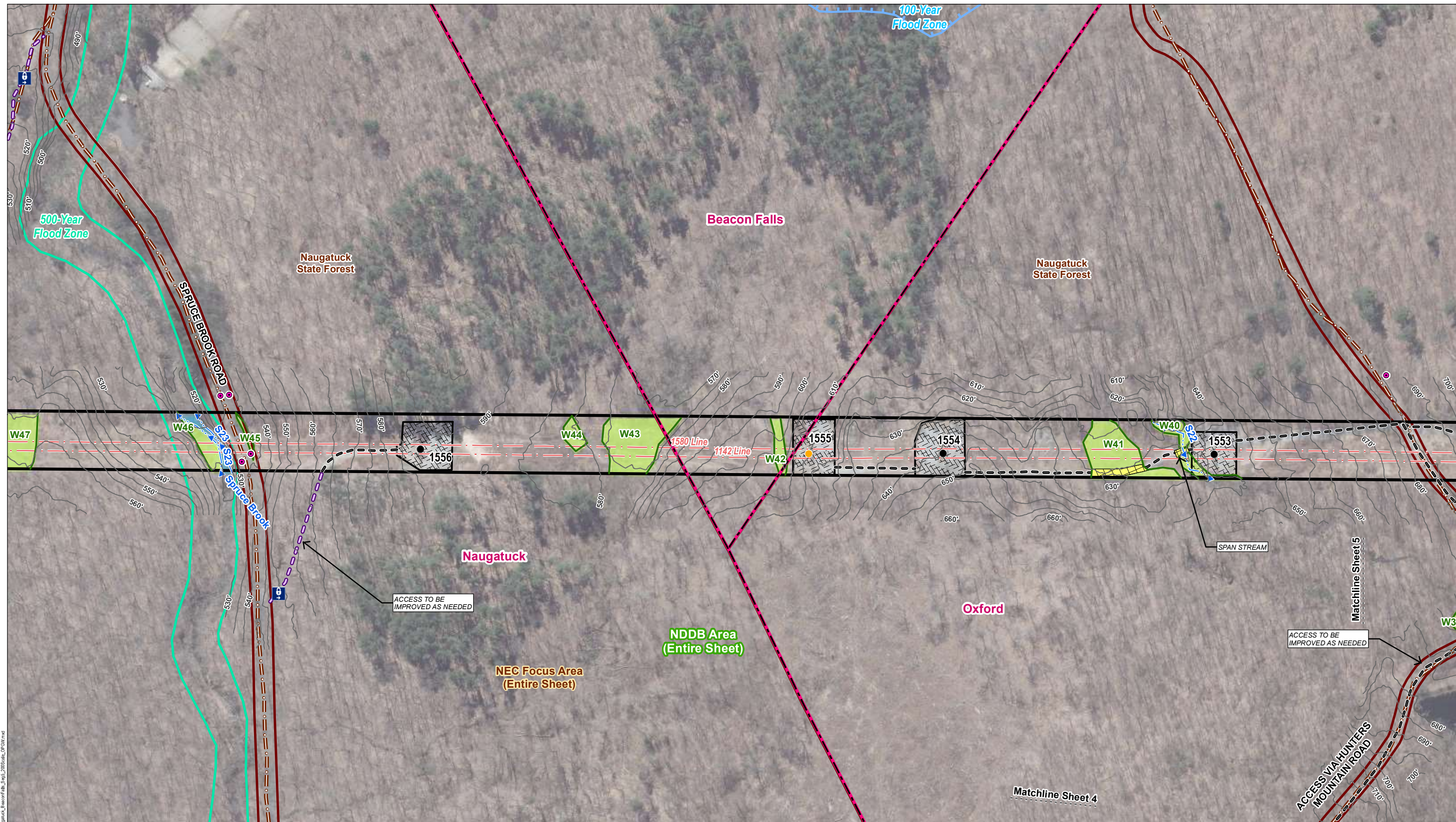
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	▬ Open Water	▬ Eversource Owned Property			



<b>EVERSOURCE</b>					
<b>South Naugatuck to Beacon Falls Junction Structure Modifications</b>					
Naugatuck, Connecticut			Map Sheet 2 of 7		
Date: June, 12, 2024					
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Legend	
● Temporary Pole Location	○ Proposed
● Existing Structure	○ Off-ROW Access Pending
● Existing Structure to be Modified	— Access Road to be Improved
● Culvert	○ Hiking Trail
⊕ Gate	— Delineated Watercourse
○ Stonewall	— 100' Vernal Pool Envelope
— Overhead Eversource Line	— Field Delineated Wetland Boundary Outline
— Existing	— Field Delineated Wetland
	— Open Water
▭ Potential Vernal Pool Extent	▭ Existing Gravel
▭ Temporary Construction Matting	▭ Natural Diversity Database Area (May 2024)
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▭ FEMA 100-Year Flood Zone	▭ FEMA 500-Year Flood Zone
▭ Eversource Owned Property	▭ State-Owned Property (CTDEEP)
	▭ Parcel Boundary
	▭ Municipal Boundary
	● Scrub Oak (field mapped host plant)
	▭ Acidic Rocky Summit Outcrop (field mapped critical habitat)

Mapping uses structure staking data from 6/14/2023 and guy anchor staking data from 3/12/2024

1 inch = 200 feet

0 50 100 200 Feet

**EVERSOURCE**

**South Naugatuck to Beacon Falls Junction Structure Modifications**

Oxford, Beacon Falls, Naugatuck, Connecticut

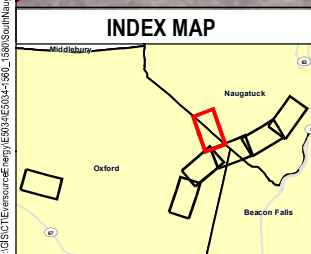
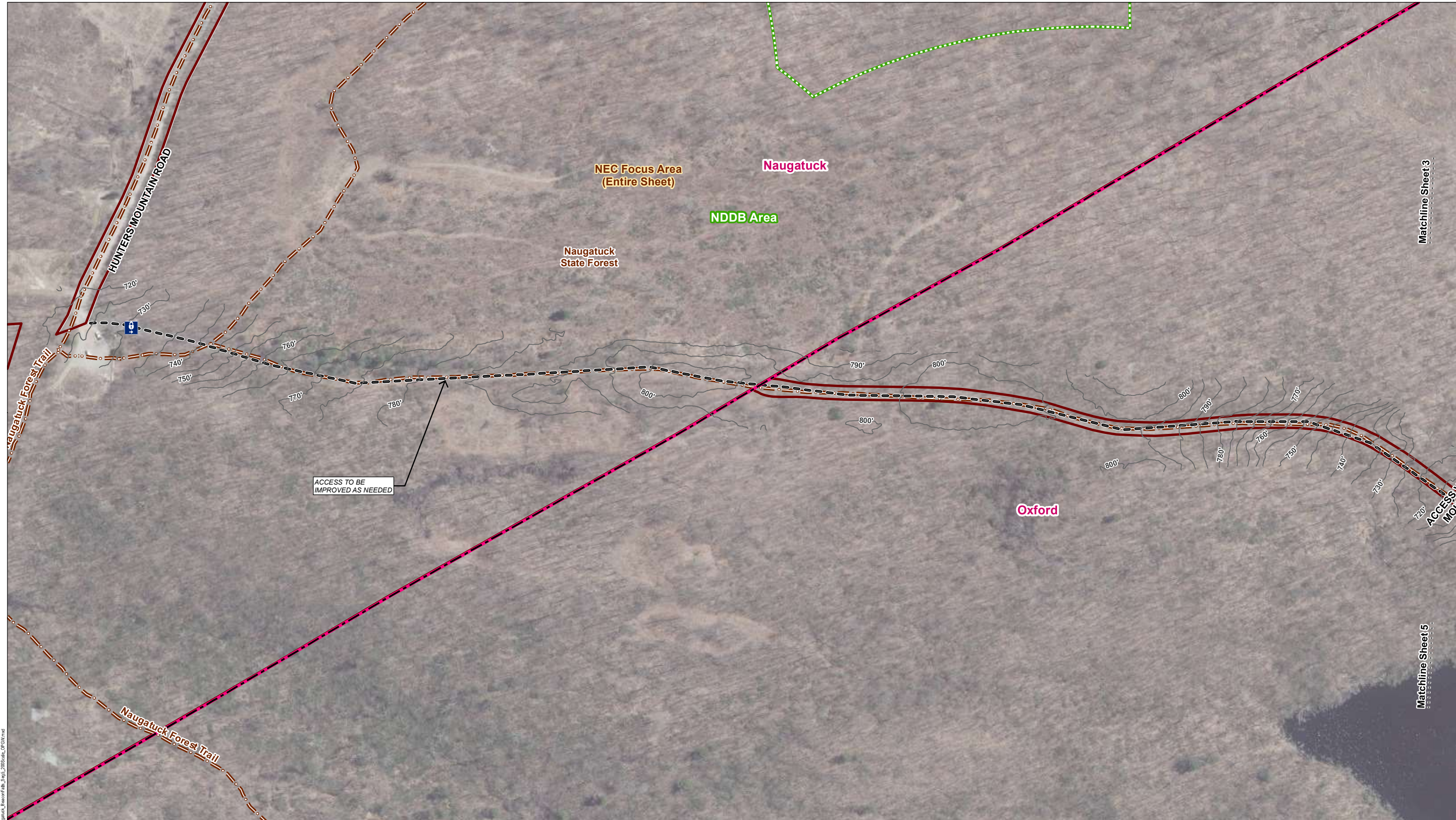
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Map Sheet 3 of 7

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Legend	
● Temporary Pole Location	○ Proposed
● Existing Structure	○ Off-ROW Access Pending
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▭ Existing Gravel	▭ Parcel Boundary
▭ Temporary Construction Matting	▭ Municipal Boundary
▭ Natural Diversity Database Area (May 2024)	● Scrub Oak (field mapped host plant)
▭ Critical Habitat	▭ Acidic Rocky Summit Outcrop (field mapped critical habitat)
▭ CT NE Cottontail Focus	
▭ FEMA 100-Year Flood Zone	
▭ FEMA 500-Year Flood Zone	
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1 inch = 200 feet

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**EVERSOURCE**

**South Naugatuck to Beacon Falls Junction Structure Modifications**

Oxford, Beacon Falls, Naugatuck, Connecticut

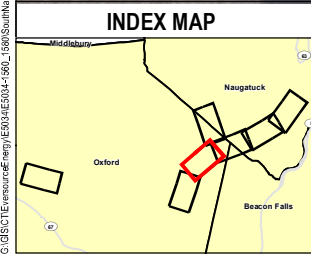
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Map Sheet 4 of 7

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**South Naugatuck to  
Beacon Falls Junction  
Structure Modifications**

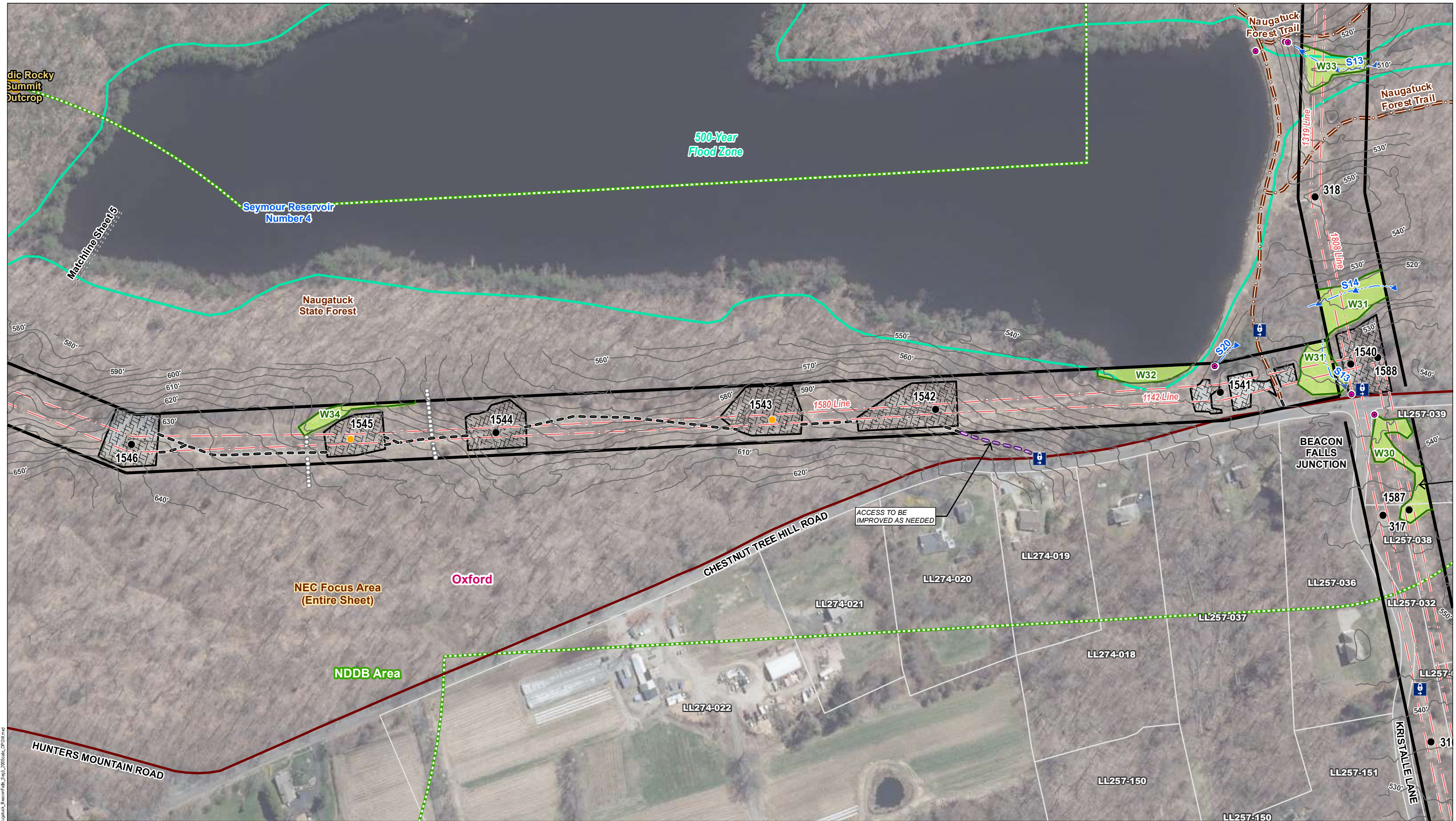
Oxford,  
Connecticut

Map Sheet 5 of 7

Date: June, 12, 2024

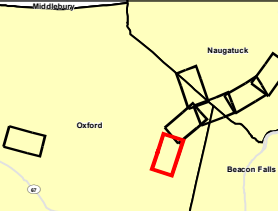
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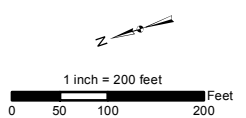
**INDEX MAP**



**Legend**

- Temporary Pole Location
- Existing Structure
- Existing Structure to be Modified
- Culvert
- Ⓜ Gate
- Stonewall
- Overhead Eversource Line
- Existing
- Proposed
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- ⊙ Scrub Oak (field mapped host plant)
- Acidic Rocky Summit Outcrop (field mapped critical habitat)

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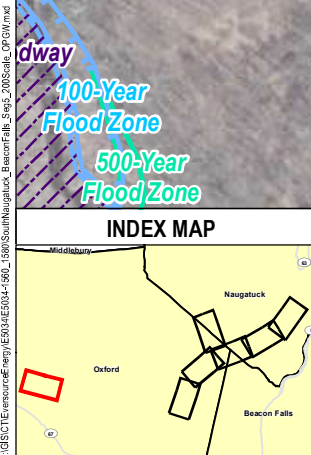
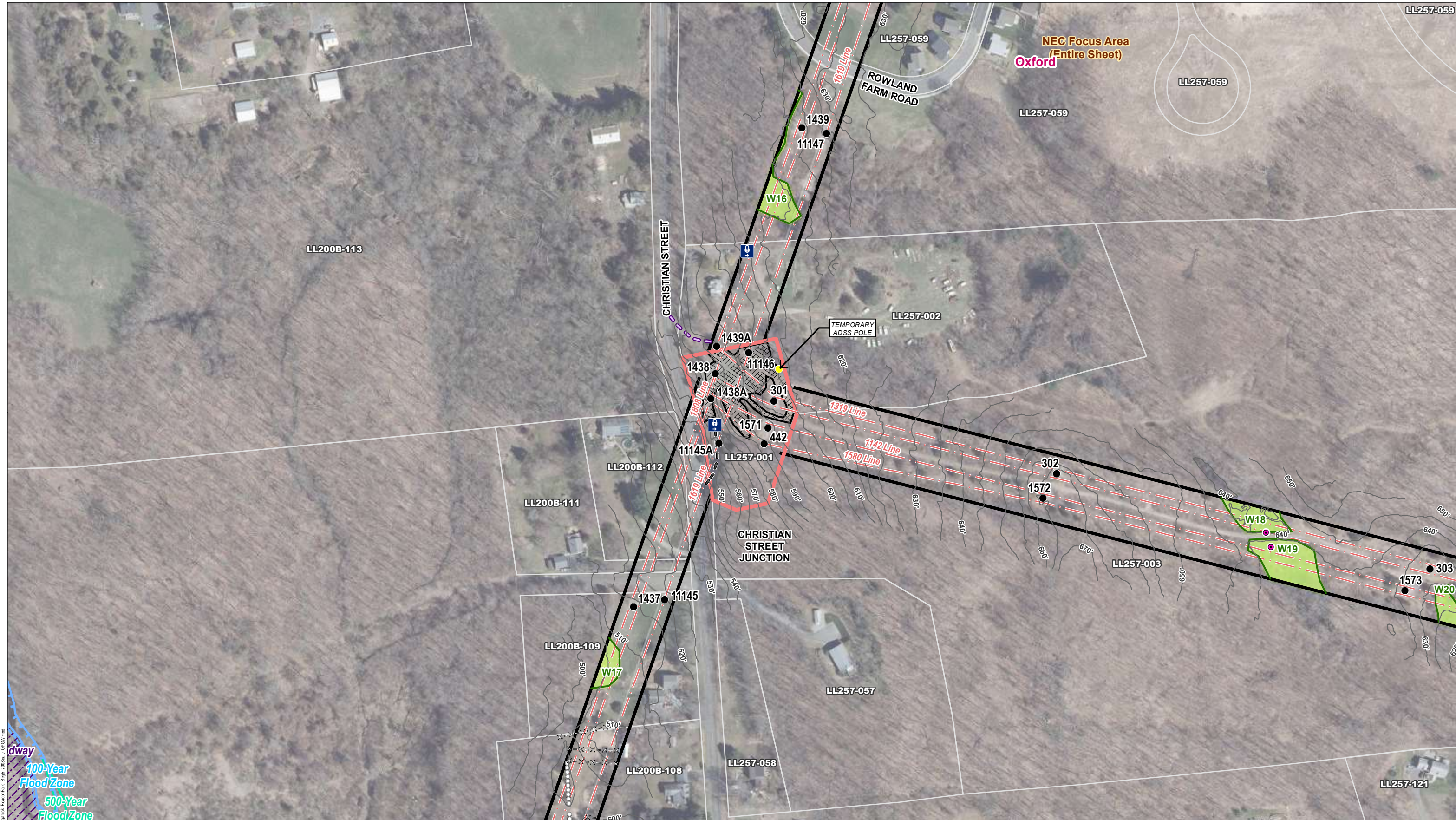
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**South Naugatuck to Beacon Falls Junction Structure Modifications**

Oxford, Connecticut  
Date: June, 12, 2024

Map Sheet 6 of 7





Legend		Legend		Legend	
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**South Naugatuck to  
Beacon Falls Junction  
Structure Modifications**

Oxford,  
Connecticut

Date: June, 12, 2024

Map Sheet 7 of 7

**Tighe&Bond**

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## Attachment B

### Existing and Proposed Structure Configurations

DCHF Structure *with* Cross and Knee Bracing



DCHF Structure *without* Cross or Knee Bracing

