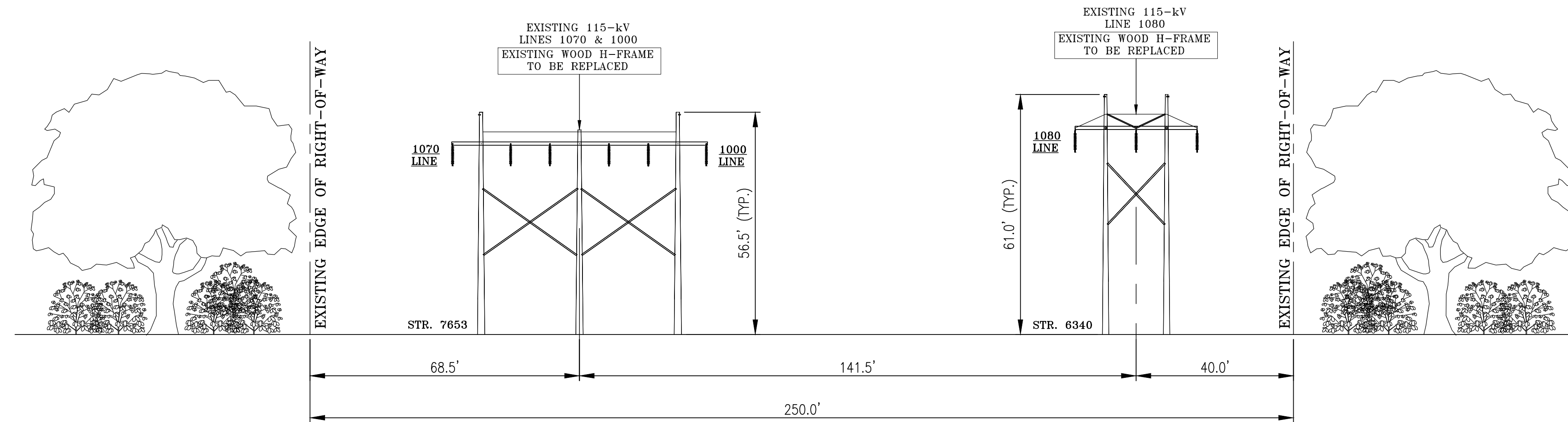
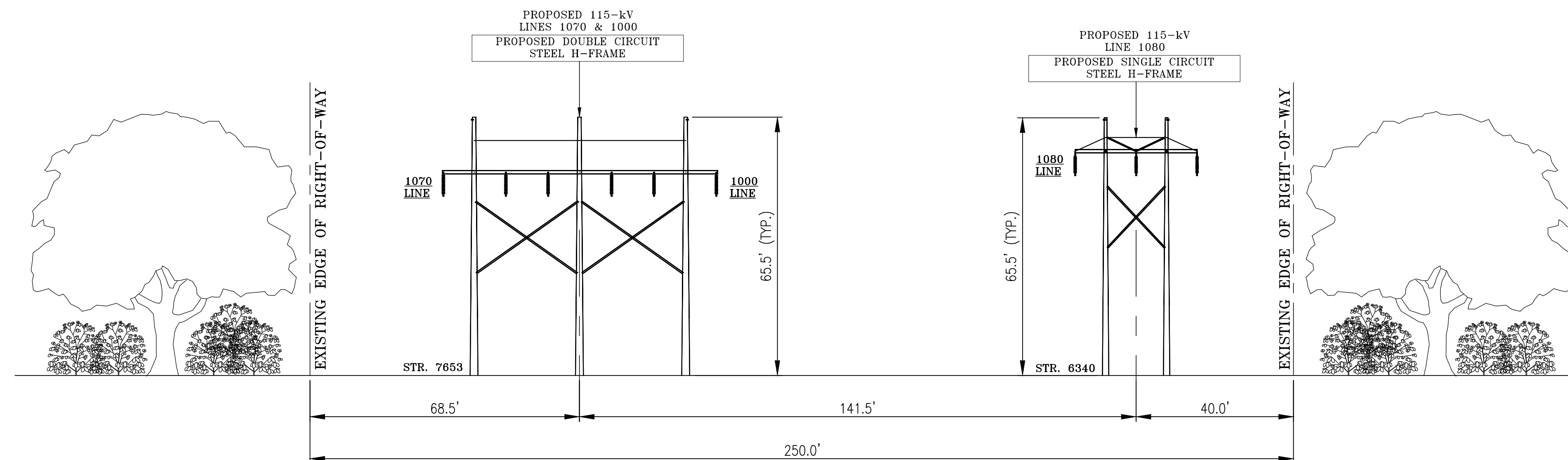


Attachment B:

Cross Sections



**EXISTING R.O.W. CONFIGURATION
 DOUBLE & SINGLE CIRCUIT WOOD H-FRAME DESIGN
 LOOKING FROM FORT HILLS FARMS SUBSTATION TO WAWECUS JUNCTION
 IN THE TOWN OF MONTVILLE, CT
 STRS. #7653 & #6340**

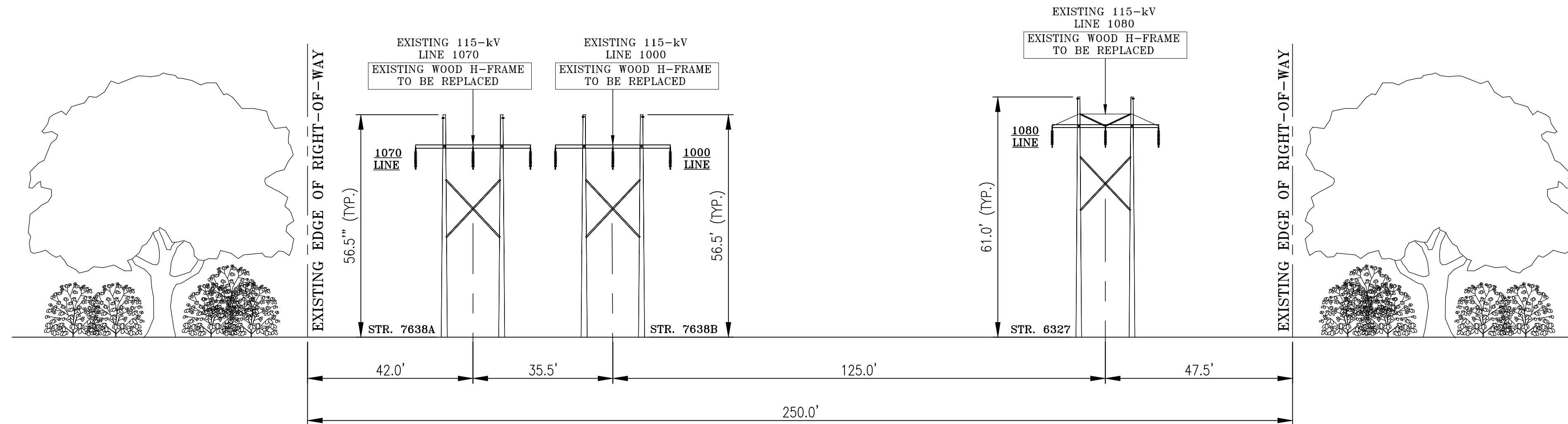


**PROPOSED R.O.W. CONFIGURATION
 NO ADDITIONAL RIGHT-OF-WAY REQUIRED
 DOUBLE & SINGLE CIRCUIT STEEL H-FRAME DESIGN
 LOOKING FROM FORT HILLS FARMS SUBSTATION TO WAWECUS JUNCTION
 IN THE TOWN OF MONTVILLE, CT
 STRS. #7653 & #6340**

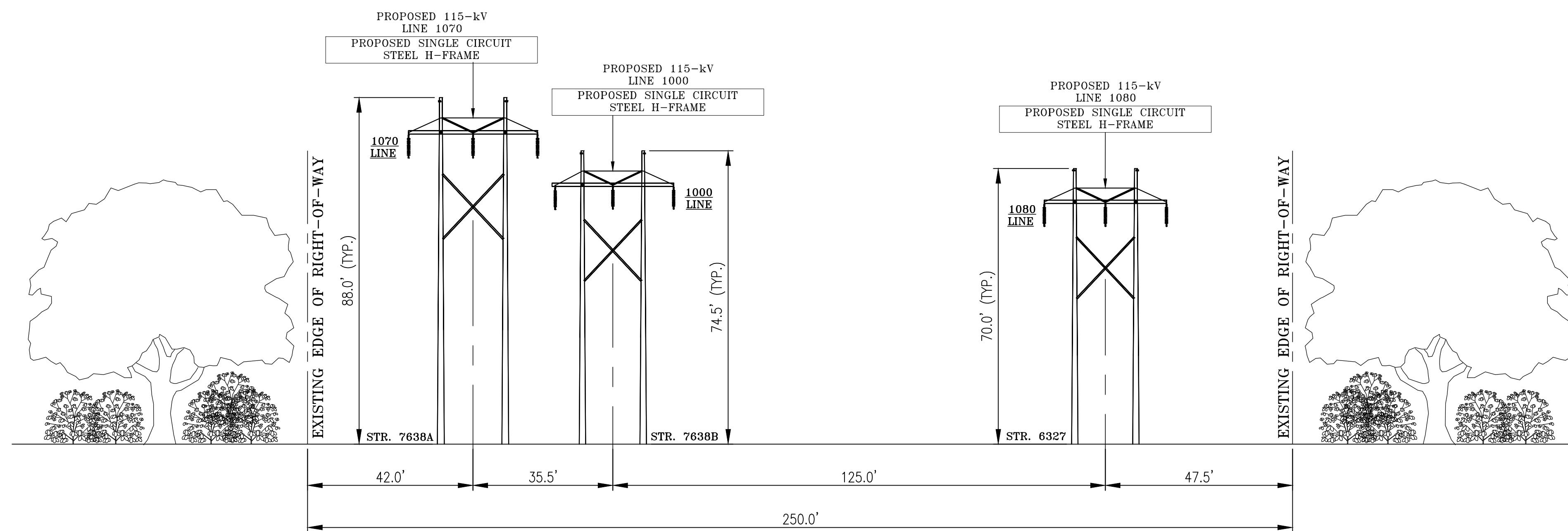
NOTE:
 LINE ARRESTERS TO BE
 ADDED AS REQUIRED

XS-1

EVERSOURCE ENERGY					
TITLE WAWECUS JCT. - MONTVILLE JCT. 115-kV TRANSMISSION LINE 1000/1070/1080/1090 RIGHT OF WAY CROSS SECTION MONTVILLE, CONNECTICUT					
BY	GJG	CRD	JFAP	APP	JFAP
DATE	10/05/22	DATE	10/05/22	DATE	10/05/22
H-SCALE	N.T.S.	SIZE	D	FIELD BOOK & PAGES	
V-SCALE	N.T.S.	V.S.		R.E. DWG	
R.E. PROJ. NUMBER	80053717 / 80053627		DWG NO.	01105-85002p001	



**EXISTING R.O.W. CONFIGURATION
SINGLE CIRCUIT WOOD H-FRAME DESIGN
LOOKING FROM FORT HILLS FARMS SUBSTATION TO WAWECUS JUNCTION
IN THE TOWN OF MONTVILLE, CT
STRS. #7638A & #7638B & #6327**

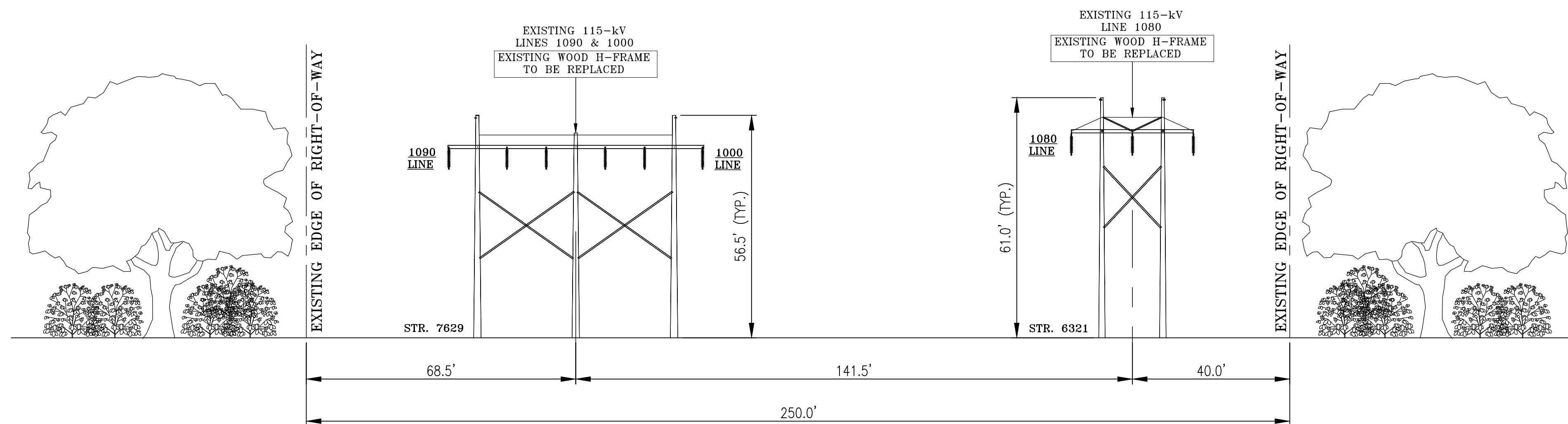


**PROPOSED R.O.W. CONFIGURATION
NO ADDITIONAL RIGHT-OF-WAY REQUIRED
SINGLE CIRCUIT STEEL H-FRAME DESIGN
LOOKING FROM FORT HILLS FARMS SUBSTATION TO WAWECUS JUNCTION
IN THE TOWN OF MONTVILLE, CT
STRS. #7638A & #7638B & #6327**

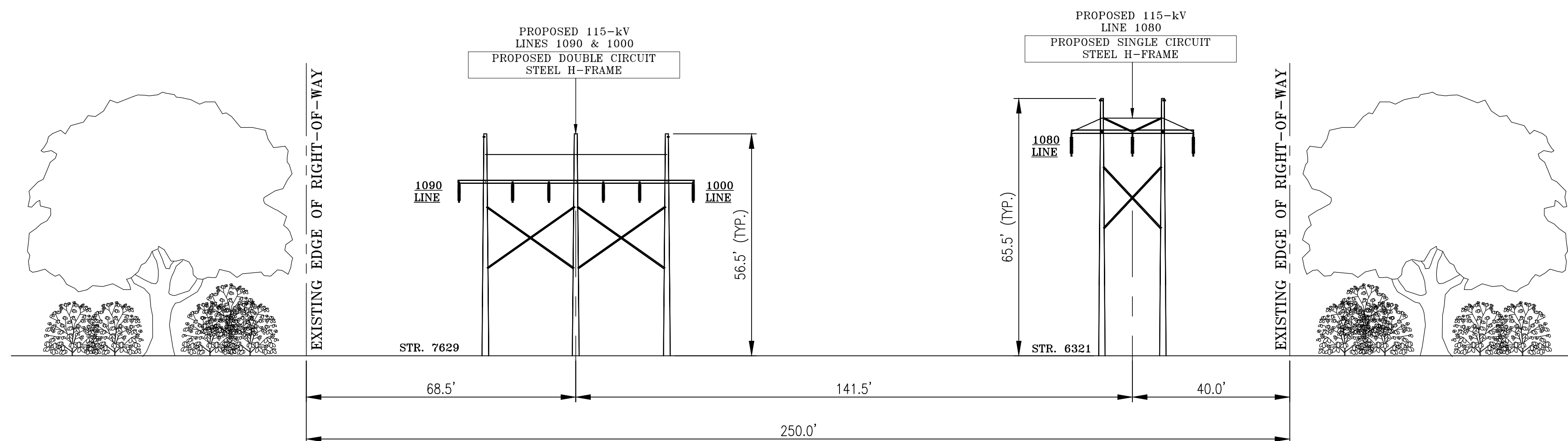
NOTE:
LINE ARRESTERS TO BE
ADDED AS REQUIRED

XS-2

EVERSOURCE ENERGY					
TITLE WAWECUS JCT. - MONTVILLE JCT. 115-kV TRANSMISSION LINE 1000/1070/1080/1090 RIGHT OF WAY CROSS SECTION MONTVILLE, CONNECTICUT					
BY	GJG	CRD	JFAP	APP	JFAP
DATE	10/05/22	DATE	10/05/22	DATE	10/05/22
H-SCALE	N.T.S.	SIZE	D	FIELD BOOK & PAGES	
V-SCALE	N.T.S.	V.S.		R.E. DWG	
R.E. PROJ. NUMBER	80053717 / 80053627		DWG NO. 01105-85002p002		



**EXISTING R.O.W. CONFIGURATION
DOUBLE & SINGLE CIRCUIT WOOD H-FRAME DESIGN
LOOKING FROM MONTVILLE JUNCTION TO FORT HILLS FARMS SUBSTATION
IN THE TOWN OF MONTVILLE, CT
STRS. #7629 & #6321**

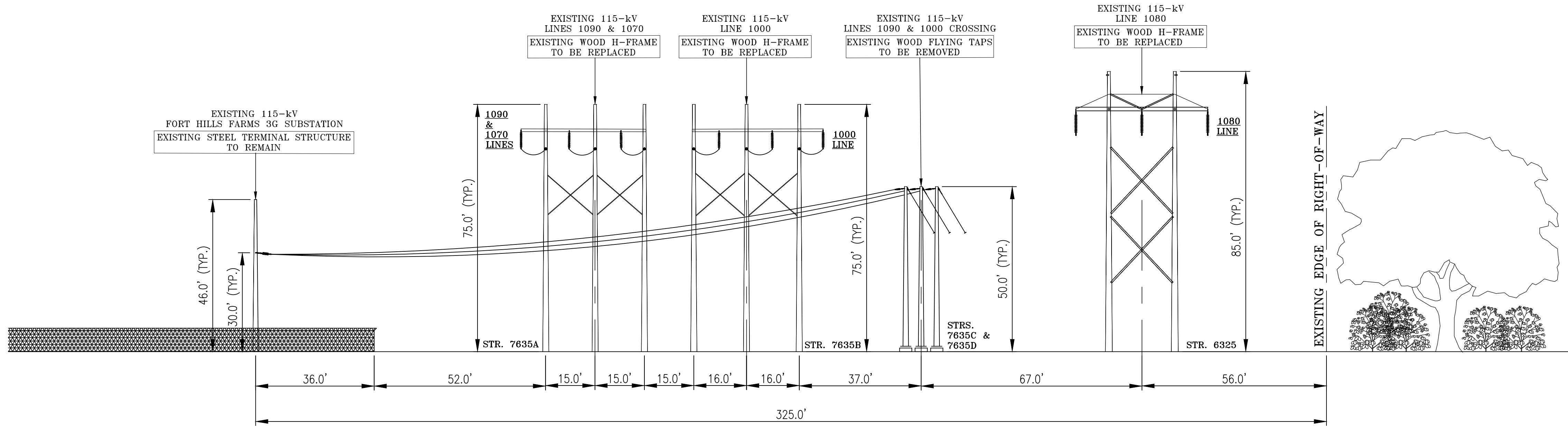


**PROPOSED R.O.W. CONFIGURATION
NO ADDITIONAL RIGHT-OF-WAY REQUIRED
DOUBLE & SINGLE CIRCUIT STEEL H-FRAME DESIGN
LOOKING FROM MONTVILLE JUNCTION TO FORT HILLS FARMS SUBSTATION
IN THE TOWN OF MONTVILLE, CT
STRS. #7629 & #6321**

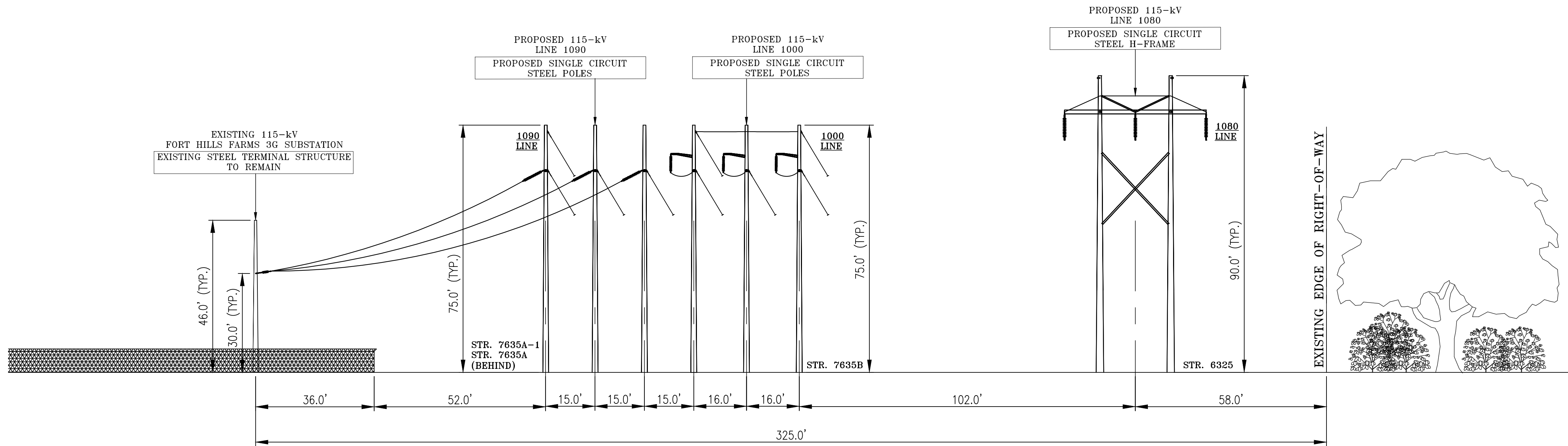
NOTE:
LINE ARRESTERS TO BE
ADDED AS REQUIRED

XS-3

EVERSOURCE ENERGY					
TITLE: WAWECUS JCT. - MONTVILLE JCT. 115-kV TRANSMISSION LINE 1000/1070/1080/1090 RIGHT OF WAY CROSS SECTION MONTVILLE, CONNECTICUT					
BY: GJG	CRD: JFAP	APP: JFAP	APP: JFAP	APP: JFAP	APP: JFAP
DATE: 10/05/22	DATE: 10/05/22	DATE: 10/05/22	DATE: 10/05/22	DATE: 10/05/22	DATE: 10/05/22
H-SCALE: N.T.S.	SIZE: D	FIELD BOOK & PAGES			
V-SCALE: N.T.S.	R.E. DWG				
R.E. PROJ. NUMBER: 80053717 / 80053627	DWG NO.: 01105-85002p003				



**EXISTING R.O.W. CONFIGURATION
SINGLE CIRCUIT WOOD H-FRAME & FLYING TAP STRUCTURE DESIGN
LOOKING FROM MONTVILLE JUNCTION TO FORT HILLS FARMS SUBSTATION
IN THE TOWN OF MONTVILLE, CT
STRS. #7635A & #7635B & #7635C & #7635D & #6325**

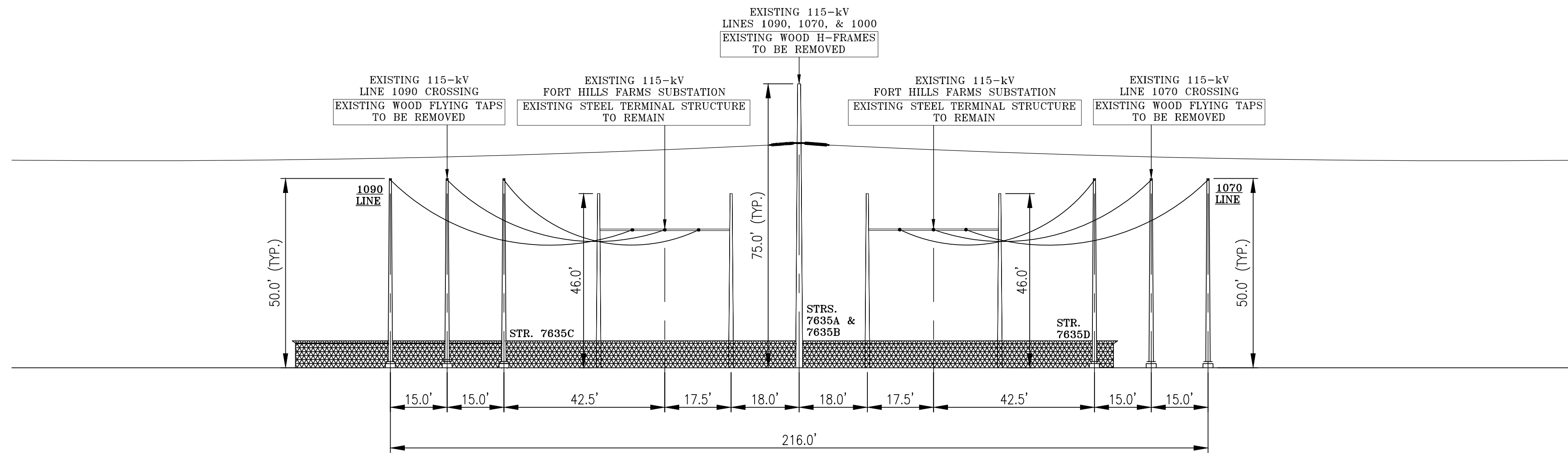


**PROPOSED R.O.W. CONFIGURATION
NO ADDITIONAL RIGHT-OF-WAY REQUIRED
SINGLE CIRCUIT STEEL H-FRAME & STEEL POLE STRUCTURE DESIGN
LOOKING FROM MONTVILLE JUNCTION TO FORT HILLS FARMS SUBSTATION
IN THE TOWN OF MONTVILLE, CT
STRS. #7635A & #7635A-1 & #7635B & #6325**

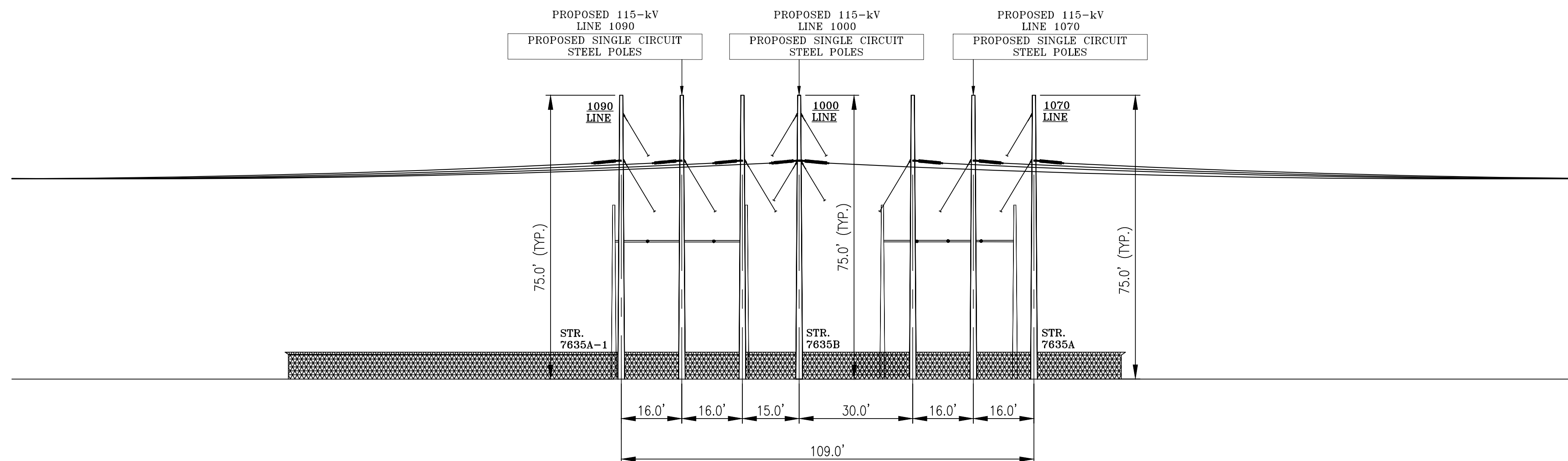
NOTE:
LINE ARRESTERS TO BE
ADDED AS REQUIRED

XS-4

EVERSOURCE ENERGY					
TITLE: WAWECUS JCT. - MONTVILLE JCT. 115-kV TRANSMISSION LINE 1000/1070/1080/1090 RIGHT OF WAY CROSS SECTION MONTVILLE, CONNECTICUT					
BY: GJG	CRD: JFAP	APP: JFAP	APP: JFAP	DATE: 10/05/22	DATE: 10/05/22
DATE: 10/05/22	DATE: 10/05/22	DATE: 10/05/22	DATE: 10/05/22	DATE: 10/05/22	DATE: 10/05/22
H-SCALE: N.T.S.	SIZE: D	FIELD BOOK & PAGES			
V-SCALE: N.T.S.	R.E. DWG				
R.E. PROJ. NUMBER: 80053717 / 80053627	DWG NO.: 01105-85002p004				



EXISTING R.O.W. CONFIGURATION
SINGLE CIRCUIT WOOD H-FRAME & FLYING TAP STRUCTURE DESIGN
LOOKING WEST TOWARD FORT HILLS FARMS SUBSTATION
IN THE TOWN OF MONTVILLE, CT
STRS. #7635A & #7635B & #7635C & #7635D



PROPOSED R.O.W. CONFIGURATION
NO ADDITIONAL RIGHT-OF-WAY REQUIRED
SINGLE CIRCUIT STEEL H-FRAME & STEEL POLE STRUCTURE DESIGN
LOOKING WEST TOWARD FORT HILLS FARMS SUBSTATION
IN THE TOWN OF MONTVILLE, CT
STRS. #7635A-1 & #7635A & #7635B

NOTE:
 LINE ARRESTERS TO BE
 ADDED AS REQUIRED

XS-5

EVERSOURCE ENERGY					
TITLE: WAWECUS JCT. - MONTVILLE JCT. 115-kV TRANSMISSION LINE 1000/1070/1080/1090 RIGHT OF WAY CROSS SECTION MONTVILLE, CONNECTICUT					
BY: GJG	CHKD: JFAP	APP: JFAP	APP: JFAP	DATE: 10/05/22	DATE: 10/05/22
DATE: 10/05/22	DATE: 10/05/22	DATE: 10/05/22	DATE: 10/05/22	DATE: 10/05/22	DATE: 10/05/22
H-SCALE: N.T.S.	SIZE: D	FIELD BOOK & PAGES			
V-SCALE: N.T.S.	R.E. DWG				
R.E. PROJ. NUMBER: 80053717 / 80053627	DWG NO.:		01105-85002p005		

Attachment C:

List of Structure Replacements

Line #	Structure #	Existing		Proposed		
		Structure Type	Above Ground Height (ft)	Structure Type	Above Ground Height (ft)	Structure Height Change Above Ground (ft)
Wawecus Junction to Montville Junction						
1080	6371	Single-Circuit Wood H-Frame	61	Single-Circuit Weathering Steel H-Frame	70	9
	6370	Single-Circuit Wood H-Frame	61	Single-Circuit Weathering Steel H-Frame	65.5	4.5
	6368	Single-Circuit Wood Three-Pole	74.5	Single-Circuit Weathering Steel Three-Pole	74.5	0
	6367	Single-Circuit Wood H-Frame	56.5	Single-Circuit Weathering Steel H-Frame	61	4.5
	6358		79		83.5	4.5
	6347.5		90		90	0
	6345		47.5		56.5	9
	6344		47.5		56.5	9
	6343		79		92.5	13.5
	6342		74.5		79	4.5
	6341		Single-Circuit Wood Three-Pole		47.5	Single-Circuit Weathering Steel Three-Pole
	6340	Single-Circuit Wood H-Frame	61	Single-Circuit Weathering Steel H-Frame	65.5	4.5
	6338		65.5		70	4.5
	6333		65.5		70	4.5
	6331		88		83.5	-4.5
	6330		92.5		92.5	0
	6327		61		70	9
	6326		70		74.5	4.5
	6325		74.5		83.5	9
	6324		74.5		83.5	9
	6323		74.5		83.5	9
	6321		61		65.5	4.5
	6320	Single-Circuit Wood Three-Pole	74.5	Single-Circuit Weathering Steel Three-Pole	83.5	9
	6318	Single-Circuit Wood H-Frame	70	Single-Circuit Weathering Steel H-Frame	70	0
	6313		61		65.5	4.5
	6311		83.5		88	4.5

Line #	Structure #	Existing		Proposed		
		Structure Type	Above Ground Height (ft)	Structure Type	Above Ground Height (ft)	Structure Height Change Above Ground (ft)
Wawecus Junction to Fort Hills Farms Substation						
1000/1070	7692.5	Single-Circuit Wood Three-Pole	43	Single-Circuit Weathering Steel Three-Pole	43	0
	7691	Double-Circuit Wood H-Frame	56.5	Double-Circuit Weathering Steel H-Frame	61	4.5
	7686		56.5		61	4.5
	7681		56.5		65.5	9
	7680B	Single-Circuit Wood H-Frame	56.5	Single-Circuit Weathering Steel H-Frame	70	13.5
	7679	Double-Circuit Wood H-Frame	52	Double-Circuit Weathering Steel H-Frame	65.5	13.5
	7678		61		61	0
	7674		56.5		56.5	0
	7672		52		61	9
	7666		56.5		56.5	0
	7659		56.5		56.5	0
	7657		56.5		61	4.5
	7656		56.5		70	13.5
	7653		56.5		65.5	9
	7652		56.5		65.5	9
	7651		56.5		61	4.5
	7646		70		70	0
	7645		56.5		61	4.5
	7644		56.5		61	4.5
	7642		61		65.5	4.5
	7640		61		65.5	4.5
	7639		56.5		61	4.5
	7638B	Single-Circuit Wood H-Frame	56.5	Single-Circuit Weathering Steel H-Frame	74.5	18
	7638A	Wood H-Frame	56.5	Weathering Steel H-Frame	88	31.5
	7637	Double-Circuit Wood H-Frame	56.5	Double-Circuit Weathering Steel H-Frame	79	22.5
	7636	Wood H-Frame	56.5	Weathering Steel H-Frame	65.5	9
	7635A	Single-Circuit Wood Three-Pole	65.5	Single-Circuit Weathering Steel Three-Pole	65.5	0

Line #	Structure #	Existing		Proposed		
		Structure Type	Above Ground Height (ft)	Structure Type	Above Ground Height (ft)	Structure Height Change Above Ground (ft)
Fort Hills Farms Substation to Montville Junction						
1000/1090	7635B	Single-Circuit Wood Three-Pole	65.5	Single-Circuit Weathering Steel Three-Pole	65.5	0
	7635A-1	N/A - New Structure	NA	Single-Circuit Weathering Steel Three-Pole	65.5	0
	7634	Double-Circuit Wood H-Frame	56.5	Double-Circuit Weathering Steel H-Frame	56.5	0
	7633		56.5		56.5	0
	7632		56.5		61	4.5
	7631		56.5		56.5	0
	7630		56.5		61	4.5
	7629		56.5		56.5	0
	7628		52		56.5	4.5
	7627		52		56.5	4.5
	7626B		Single-Circuit Wood Two- Pole		56.5	Single-Circuit Weathering Steel Two -Pole
	7626A	56.5	70	13.5		
	7625	Double-Circuit Wood H-Frame	52	Double-Circuit Weathering Steel H-Frame	56.5	4.5
	7624		61		70	9
	7623		56.5		61	4.5
	7621		52		74.5	22.5
	7620		56.5		70	13.5
	7619		56.5		56.5	0
	7617		56.5		61	4.5
	7616		56.5		61	4.5
	7614A	Single-Circuit Wood H-Frame	56.5	Single-Circuit Weathering Steel Three-Pole	61	4.5
	7613	Double-Circuit Wood H-Frame	56.5	Double-Circuit Weathering Steel H-Frame	61	4.5
	7612	56.5	61	4.5		
	7611A	Single-Circuit Wood H-Frame	56.5	Single-Circuit Weathering Steel Three-Pole	56.5	0

Attachment D:

Wetlands and Watercourses Report



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

Wetlands and Watercourses Delineation Report Wawecus Junction to Montville Junction Upgrade Project

Prepared For: Eversource Energy
56 Prospect Street
Hartford, CT 06103
Attn: Mark Pappalardo

Project Location: Norwich and Montville, Connecticut

Date(s) of Investigations: Fall 2021 to Summer 2022

Wetland/Watercourse Delineation Methodology:

- Connecticut Inland Wetlands and Watercourses
- Connecticut Tidal Wetlands
- Massachusetts Wetlands
- U.S. Army Corps of Engineers

The wetlands inspection was performed by:

Davison Environmental, LLC

A handwritten signature in blue ink that reads "Matthew Davison".

Matthew Davison
Professional Soil Scientist
Professional Wetland Scientist

ATTACHMENTS

1. Wetland Characteristic Summary Forms
2. Wetland Photographs

Introduction

Davison Environmental Connecticut Registered Soil Scientists and a Certified Professional Wetland Scientists Eric Davison and Matthew Davison delineated the Connecticut and Federal jurisdictional wetlands from Fall 2021 to Summer 2022. The limits of the delineation area consisted of the 1080, 1000, 1070, and 1090 Transmission Line right-of-way (ROW), referred to hereafter as the “Project area”. The Project area is located in the Towns of Norwich and Montville. The Project originates at Wawecus Junction in Norwich and continues southeast to the Montville Junction in Montville.

The Project area is located within The Long Island Sound Coastal Lowland ecoregion (source: U.S. Environmental Protection Agency). This region is the coastal strip occurring in southern Connecticut and Rhode Island that borders Long Island Sound and Block Island Sound. It includes low-elevation rolling coastal plain, tidal marshes, estuaries, sandy dunes and beaches, and rocky headlands. This ecoregion has one of the mildest climates of New England. The coastal hardwood forests contain black, red, and white oaks, hickories, and black cherry. Dense thickets of vines and shrubs such as catbrier, greenbrier, and poison ivy are common. Some Southeastern flora and fauna species of the Piedmont and coastal plain reach their northern limit in this ecoregion, including holly, post oak, sweetgum, and persimmon. On coastal headlands, pitch pine and post oak occur, while some scarlet oak and sassafras stand on stabilized dunes. Parts of the ecoregion are highly urbanized, especially from New Haven westward.

Regulatory Requirements

The regulations governing the delineation of wetlands and watercourses at the site include Connecticut inland wetlands and Federal wetlands regulated by the U.S. Army Corp of Engineers (USACE). A summary of the regulatory language for each jurisdictional body are described below:

The Connecticut jurisdictional wetlands and watercourses delineation was conducted by a soil scientist according to the requirements of the Connecticut Inland Wetlands and Watercourses Act (P.A. 155). Inland wetlands include soil types designated as poorly drained, very poorly drained, alluvial, and floodplain by the National Cooperative Soils Survey as may be amended from time to time, of the National Resources Conservation Service (NRCS). Watercourses means rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs and all other bodies of water, natural or artificial, vernal or intermittent. Intermittent watercourses shall be delineated by a defined permanent channel and bank and the occurrence of two or more of the following

*Wetland and Watercourses Delineation Report
Wawecus Junction to Montville Junction Upgrade Project*

characteristics: (A) Evidence of scour or deposits of recent alluvium or detritus, (B) the presence of standing or flowing water for a duration longer than a particular storm incident, and (C) the presence of hydrophytic vegetation.

Federal wetlands were delineated in accordance with the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0, January 2012). According to this method, three parameters must be satisfied for an area to be mapped as a wetland. These are wetland soils, hydrophytic vegetation, and wetland hydrology.

Methods

Soils, vegetation and hydrology were examined per the aforementioned regulatory requirements. Along each wetland boundary, a hand auger was used to investigate the soil profiles to a minimum depth of 20 inches. This was necessary to determine the U.S. Department of Agriculture drainage class (per State requirements) as well as the presence of hydric soil indicators per the USACE requirements (e.g., reduced matrix, redoximorphic features). Soil profiles were reviewed approximately every 15-30 feet along the boundary, typically digging one hole on either side of the defining boundary to confirm the wetland limit. This information was coupled with observed hydrology (or the presence of hydrologic indicators) as well as the presence of hydrophytic vegetation to determine the final location of the placement of each wetland flag. As is typically the case with most Connecticut wetlands, the boundary of State and Federal jurisdictional wetlands was identical. Wetland boundaries were field demarcated with pink plastic flagging tape labeled "Wetland Delineation". The wetland flag locations were field located using a Trimble R1 GNSS Receiver capable of sub-meter accuracy and depicted on the Petition Mapping.

Results and Wetland Descriptions

In total, 34 wetlands and 10 watercourses were delineated in the Project area as summarized in Table 1 and illustrated on the Project mapping. Table 1 indicates the Map Sheet location, as well as the wetland vegetation type and hydrology observed.

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Table 1: Delineated Wetlands and Watercourses within the
Wawecus Junction to Montville Junction Upgrade Project

Aerial Map Sheet No.	Wetland No.¹	Dominant NWI Class²	Other NWI Classes	Dominant Water Regime	Associated Watercourse³	Associated Potential Vernal Pool⁴
1	42	PEM	PSS	Seasonally Flooded	S24 (Intermittent)	---
1	43	PEM	PSS	Seasonally Saturated-seepage	---	---
2	44	PEM	PSS	Seasonally Saturated-seepage	---	---
2	45	PEM	PSS	Seasonally Saturated-seepage	---	---
2	46	PEM	PSS	Permanently Saturated	Goldmine Brook (S25)	---
3	47	PEM	PSS	Permanently Saturated	Goldmine Brook (S25)	---
3	48	PSS	PEM	Seasonally Flooded	---	VP7
4	49	PSS	PEM	Seasonally Flooded	---	VP8
4	50	PSS	PEM	Seasonally Flooded	---	VP9 and VP10
5	51	PSS	PEM	Permanently Flooded	S26 (Intermittent)	VP11
5	52	PSS	PEM	Seasonally Flooded	---	VP12
5	53	PSS	PEM	Seasonally Flooded	---	VP13
5	54	PSS	PEM	Seasonally Flooded	---	---
5	55	PSS	PEM	Seasonally Saturated-seepage	---	---
5	56	PSS	PEM	Seasonally Saturated - Seepage	---	---
6	57	PSS	PEM	Seasonally Flooded	---	---

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Wawecus Junction to Montville Junction Upgrade Project*

Aerial Map Sheet No.	Wetland No.¹	Dominant NWI Class²	Other NWI Classes	Dominant Water Regime	Associated Watercourse³	Associated Potential Vernal Pool⁴
6	58	PSS	PEM	Permanently Saturated	Trading Cove Brook (S27)	---
7	59	PSS	PEM	Seasonally Flooded	S28 (Intermittent)	---
7	60	PSS	PEM	Seasonally Flooded	---	VP14
8	61	PSS	PEM	Seasonally Saturated - Seepage	---	---
8	62	PSS	PEM	Seasonally Saturated-seepage	---	---
8	63	PSS	PEM	Seasonally Flooded	---	VP15
9	64	PSS	PEM	Seasonally Flooded	S29 (Stony Brook)	---
9	65	PSS	PEM	Seasonally Saturated-seepage	---	---
10	66	PSS	PEM	Seasonally Saturated - Seepage	---	---
10	67	PSS	PEM	Seasonally Saturated-seepage	S30 and S31 (Intermittent)	---
11	68	PSS	PEM	Seasonally Flooded	---	---
11	69	PSS	PEM	Seasonally Flooded	---	---
12	70	PSS	PEM	Seasonally Saturated-seepage	S32A (Intermittent)	---
12	71	PSS	PEM	Seasonally Flooded	S32 (Mohegan Brook) & S32A (Intermittent)	---
12	72	PSS	PEM	Seasonally Saturated-seepage	---	---
13	73	PSS	PEM	Seasonally flooded	S33 (Intermittent)	---

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Aerial Map Sheet No.	Wetland No. ¹	Dominant NWI Class ²	Other NWI Classes	Dominant Water Regime	Associated Watercourse ³	Associated Potential Vernal Pool ⁴
13	74	PSS	PEM	Seasonally Saturated - Seepage	---	---
14	75	PEM	PSS	Permanently flooded	Horton Cove (Thames River)	---

¹Wetland No. refers to the number generated during the 2021-22 field surveys. This Wetland No. is keyed to those depicted on the 200 scale Aerial Maps (Attached to the Petition).

²Wetlands classified according to Cowardin et al 1979; PEM = Palustrine Emergent Wetland; PFO = Palustrine Forested Wetland; PSS = Palustrine Scrub-Shrub Wetland; POW = Palustrine Open Water.

³Associated Watercourse refers to the identification number assigned during the 2021 field surveys to identify watercourses.

⁴Vernal pools were identified in spring of 2022 by Davison Environmental

Wetlands consist predominantly of *groundwater slope wetlands* and *groundwater depression wetlands* situated in glacial till. The predominate wetland hydrology observed was *seasonally saturated*. Wetlands with a *seasonally saturated* hydrology have a substrate that is saturated for extended periods during the growing season, but standing water is rarely present. Wetlands with vernal pools have a *seasonally flooded* hydrology. Wetlands with a *seasonally flooded* hydrology are flooded for extended periods during the growing season, but usually no surface water by the end of the growing season

The dominant vegetative cover type is *palustrine scrub-shrub* (PSS), due to the fact that the ROW is maintained to exclude trees in favor of low woody shrubs and herbaceous vegetation. Most wetlands continue beyond the maintained ROW, where they are typically *palustrine forested* (PFO) communities. Due to the biogeography of the Project area along the northerly limits of the *Coastal Zone*, wetlands are predominantly headwater wetlands, many of which include 1st order perennial streams draining to coastal streams and rivers. The remainder of the wetlands are small locally isolated *groundwater depression* wetlands.

Wetland soil types observed consist of the Ridgebury, Leicester, and Whitman complex, Timakwa and Natchaug complex, and Westbrook mucky peat (tidal). The Ridgebury, Leicester and Whitman complex, is an undifferentiated mapping unit consisting of two poorly drained (Ridgebury and Leicester) and one very poorly drained (Whitman) soil developed on glacial till in depressions and drainageways in uplands and valleys. Their use interpretations are very similar, and they typically are so intermingled on the landscape that separation is not practical. The Ridgebury and Leicester series have a seasonal high water table at or near the surface (0-6") from fall through spring. They differ in that the Leicester soil has a more friable compact layer or hardpan, while

*Wetland and Watercourses Delineation Report
Wawecus Junction to Montville Junction Upgrade Project*

the Ridgebury soils have a dense to very dense compact layer. The Whitman soil has a high water table for much of the year and may frequently be ponded.

The Timakwa series consists of very deep, very poorly drained soils formed in woody and herbaceous organic materials over sandy deposits in depressions on lake plains, outwash plains, till plains, moraines, and flood plains. These soils have moderate to very rapid permeability in the organic material and rapid to very rapid permeability in the sandy material.

The Natchaug series consists of very deep, very poorly drained soils formed in woody and herbaceous organic materials overlying loamy deposits in depressions on lake plains, outwash plains, till plains, moraines, and flood plains. These soils have moderate to very rapid permeability in the organic material and moderately slow to moderately rapid permeability in the loamy material.

The Westbrook series consists of very deep, very poorly drained soils formed in organic deposits over loamy mineral material. They are in tidal marshes subject to inundation by salt water twice daily. Westbrook soils developed in partially decomposed organic material from salt tolerate herbaceous plants over loamy sediments. These soils are tidal wetlands subject to the exclusive jurisdiction of the CT DEP Office of Long Island Sound Programs.

WETLAND CHARACTERISTIC SUMMARY FORMS

Wetland Characteristics Summary Form

Wetland I.D.:	42
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WETLAND HYDROLOGY:

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: None		

WETLAND TYPE:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

WATERCOURSE TYPE:

Perennial <input type="checkbox"/>	Intermittent <input checked="" type="checkbox"/>	Ephemeral <input type="checkbox"/>
Watercourse Name: S24		
Comments: Drains east through ROW		

SPECIAL AQUATIC HABITAT:

Vernal Pool : Yes <input type="checkbox"/> No <input type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments:	

WETLAND SOIL TYPE (s):

Soil Types: Ridgebury, Leicester, and Whitman

DOMINANT PLANTS:

Fox Grape (<i>Vitis labrusca</i>)	
Goldenrod (<i>Solidago</i>)	
Multiflora Rose* (<i>Rosa multiflora</i>)	
Tussock Sedge (<i>Carex stricta</i>)	
Skunk Cabbage (<i>Symplocarpus foetidus</i>)	
Sensitive Fern (<i>Onoclea sensibilis</i>)	

* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

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Wetland Characteristics Summary Form

Wetland I.D.:	43
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WETLAND HYDROLOGY:

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input checked="" type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: None		

WETLAND TYPE:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

WATERCOURSE TYPE:

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Ephemeral <input type="checkbox"/>
Watercourse Name:		
Comments:		

SPECIAL AQUATIC HABITAT:

Vernal Pool : Yes <input type="checkbox"/> No <input type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments:	

WETLAND SOIL TYPE (s):

Soil Types: Ridgebury, Leicester, and Whitman

DOMINANT PLANTS:

Reed Canarygrass* (Phalaris arundinacea)	
Goldenrod (Solidago)	
Common Reed* (Phragmites australis)	
Common Cattail (Typha latifolia)	
Skunk Cabbage (Symplocarpus foetidus)	
Red Maple (Acer rubrum)	

* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

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Wetland Characteristics Summary Form

Wetland I.D.:	44
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WETLAND HYDROLOGY:

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input checked="" type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: None		

WETLAND TYPE:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

WATERCOURSE TYPE:

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Ephemeral <input type="checkbox"/>
Watercourse Name:		
Comments:		

SPECIAL AQUATIC HABITAT:

Vernal Pool : Yes <input type="checkbox"/> No <input type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments:	

WETLAND SOIL TYPE (s):

Soil Types: Ridgebury, Leicester, and Whitman

DOMINANT PLANTS:

Wool Grass (<i>Scirpus cyperinus</i>)	
Joe Pye Weed (<i>Eupatorium maculatum</i>)	
Goldenrod (<i>Solidago</i>)	
Fox Grape (<i>Vitis labrusca</i>)	
Skunk Cabbage (<i>Symplocarpus foetidus</i>)	

** denotes Connecticut Invasive Species Council invasive plant species*

GENERAL COMMENTS:

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Wetland Characteristics Summary Form

Wetland I.D.:	45
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WETLAND HYDROLOGY:

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input checked="" type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: None		

WETLAND TYPE:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

WATERCOURSE TYPE:

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Ephemeral <input type="checkbox"/>
Watercourse Name:		
Comments:		

SPECIAL AQUATIC HABITAT:

Vernal Pool : Yes <input type="checkbox"/> No <input type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments:	

WETLAND SOIL TYPE (s):

Soil Types: Ridgebury, Leicester, and Whitman

DOMINANT PLANTS:

Sensitive Fern (<i>Onoclea sensibilis</i>)	
Soft Rush (<i>Juncus effuses</i>)	
Goldenrod (<i>Solidago</i>)	
Fox Grape (<i>Vitis labrusca</i>)	
Skunk Cabbage (<i>Symplocarpus foetidus</i>)	

** denotes Connecticut Invasive Species Council invasive plant species*

GENERAL COMMENTS:

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Wetland Characteristics Summary Form

Wetland I.D.:	46
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WETLAND HYDROLOGY:

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input checked="" type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input checked="" type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: None		

WETLAND TYPE:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

WATERCOURSE TYPE:

Perennial <input checked="" type="checkbox"/>	Intermittent <input type="checkbox"/>	Ephemeral <input type="checkbox"/>
Watercourse Name: Goldmine Brook		
Comments: S25		

SPECIAL AQUATIC HABITAT:

Vernal Pool : Yes <input type="checkbox"/> No <input type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments:	

WETLAND SOIL TYPE (s):

Soil Types: Ridgebury, Leicester, and Whitman

DOMINANT PLANTS:

Sweet Pepperbush (<i>Clethra alnifolia</i>)	
Highbush Blueberry (<i>Vaccinium corymbosum</i>)	
Multiflora Rose* (<i>Rosa multiflora</i>)	
Buttonbush (<i>Cephalanthus occidentalis</i>)	
Sensitive Fern (<i>Onoclea sensibilis</i>)	
Sassafras (<i>Sassafras albidum</i>)	

* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

Wetland Characteristics Summary Form

Wetland I.D.:	47
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WETLAND HYDROLOGY:

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input checked="" type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input checked="" type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: None		

WETLAND TYPE:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

WATERCOURSE TYPE:

Perennial <input checked="" type="checkbox"/>	Intermittent <input type="checkbox"/>	Ephemeral <input type="checkbox"/>
Watercourse Name: Goldmine Brook		
Comments: S25		

SPECIAL AQUATIC HABITAT:

Vernal Pool : Yes <input type="checkbox"/> No <input type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments:	

WETLAND SOIL TYPE (s):

Soil Types: Timakwa and Natchaug

DOMINANT PLANTS:

Sweet Pepperbush (<i>Clethra alnifolia</i>)	
Highbush Blueberry (<i>Vaccinium corymbosum</i>)	
Reed Canarygrass* (<i>Phalaris arundinacea</i>)	
Buttonbush (<i>Cephalanthus occidentalis</i>)	
Sensitive Fern (<i>Onoclea sensibilis</i>)	
Fox Grape (<i>Vitis labrusca</i>)	

* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

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Wetland Characteristics Summary Form

Wetland I.D.:	48
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WETLAND HYDROLOGY:

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input checked="" type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: None		

WETLAND TYPE:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

WATERCOURSE TYPE:

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Ephemeral <input type="checkbox"/>
Watercourse Name:		
Comments:		

SPECIAL AQUATIC HABITAT:

Vernal Pool : Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: 'Classic'	
Comments:VP7	

WETLAND SOIL TYPE (s):

Soil Types: Ridgebury, Leicester, and Whitman

DOMINANT PLANTS:

Sweet Pepperbush (Clethera alnifolia)	
Highbush Blueberry (Vaccinium corymbosum)	
Wool Grass (Scirpus cyperinus)	
Buttonbush (Cephalanthus occidentalis)	
Common Reed* (Phragmites australis)	
Fox Grape (Vitis labrusca)	

* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

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Wetland Characteristics Summary Form

Wetland I.D.:	49
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WETLAND HYDROLOGY:

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input checked="" type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: None		

WETLAND TYPE:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

WATERCOURSE TYPE:

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Ephemeral <input type="checkbox"/>
Watercourse Name:		
Comments:		

SPECIAL AQUATIC HABITAT:

Vernal Pool : Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: 'Classic'	
Comments: VP8	

WETLAND SOIL TYPE (s):

Soil Types: Ridgebury, Leicester, and Whitman

DOMINANT PLANTS:

Sweet Pepperbush (Clethera alnifolia)	
Multiflora Rose* (Rosa multiflora)	
Reed Canarygrass* (Phalaris arundinacea)	
Buttonbush (Cephalanthus occidentalis)	
Sensitive Fern (Onoclea sensibilis)	
Fox Grape (Vitis labrusca)	

* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

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Wetland Characteristics Summary Form

Wetland I.D.:	50
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WETLAND HYDROLOGY:

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: None		

WETLAND TYPE:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

WATERCOURSE TYPE:

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Ephemeral <input type="checkbox"/>
Watercourse Name:		
Comments:		

SPECIAL AQUATIC HABITAT:

Vernal Pool : Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: 'Classic'	
Comments: VP9 and VP10	

WETLAND SOIL TYPE (s):

Soil Types: Ridgebury, Leicester, and Whitman

DOMINANT PLANTS:

Sweet Pepperbush (Clethera alnifolia)	
Multiflora Rose* (Rosa multiflora)	
Highbush Blueberry (Vaccinium corymbosum)	
Buttonbush (Cephalanthus occidentalis)	
Goldenrod (Solidago)	
Soft Rush (Juncus effuses)	

* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

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Wetland Characteristics Summary Form

Wetland I.D.:	51
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WETLAND HYDROLOGY:

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input checked="" type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input checked="" type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: None		

WETLAND TYPE:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

WATERCOURSE TYPE:

Perennial <input type="checkbox"/>	Intermittent <input checked="" type="checkbox"/>	Ephemeral <input type="checkbox"/>
Watercourse Name: None		
Comments: S26		

SPECIAL AQUATIC HABITAT:

Vernal Pool : Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: 'Classic'	
Comments: VP11	

WETLAND SOIL TYPE (s):

Soil Types: Ridgebury, Leicester, and Whitman

DOMINANT PLANTS:

Skunk Cabbage (<i>Symplocarpus foetidus</i>)	
Multiflora Rose* (<i>Rosa multiflora</i>)	
Highbush Blueberry (<i>Vaccinium corymbosum</i>)	
Common Reed* (<i>Phragmites australis</i>)	
Goldenrod (<i>Solidago</i>)	
Cinnamon Fern (<i>Osmunda cinnamomea</i>)	

* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

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Wetland Characteristics Summary Form

Wetland I.D.:	52
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WETLAND HYDROLOGY:

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input checked="" type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: None		

WETLAND TYPE:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

WATERCOURSE TYPE:

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Ephemeral <input type="checkbox"/>
Watercourse Name: None		
Comments:		

SPECIAL AQUATIC HABITAT:

Vernal Pool : Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: 'Classic'	
Comments: VP12	

WETLAND SOIL TYPE (s):

Soil Types: Brayton

DOMINANT PLANTS:

Buttonbush (<i>Cephalanthus occidentalis</i>)	
Multiflora Rose* (<i>Rosa multiflora</i>)	
Winterberry (<i>Ilex verticillata</i>)	
Sensitive Fern (<i>Onoclea sensibilis</i>)	
Goldenrod (<i>Solidago</i>)	
Cinnamon Fern (<i>Osmunda cinnamomea</i>)	

* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

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Wetland Characteristics Summary Form

Wetland I.D.:	53
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WETLAND HYDROLOGY:

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input checked="" type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: None		

WETLAND TYPE:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

WATERCOURSE TYPE:

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Ephemeral <input type="checkbox"/>
Watercourse Name: None		
Comments:		

SPECIAL AQUATIC HABITAT:

Vernal Pool : Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: 'Classic'	
Comments: VP13	

WETLAND SOIL TYPE (s):

Soil Types: Ridgebury, Leicester, and Whitman

DOMINANT PLANTS:

Buttonbush (<i>Cephalanthus occidentalis</i>)	
Multiflora Rose* (<i>Rosa multiflora</i>)	
Winterberry (<i>Ilex verticillata</i>)	
Common Buckthorn* (<i>Rhamnus cathartica</i>)	
Goldenrod (<i>Solidago</i>)	
Red Maple (<i>Acer rubrum</i>)	

* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

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Wetland Characteristics Summary Form

Wetland I.D.:	54
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WETLAND HYDROLOGY:

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input checked="" type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: None		

WETLAND TYPE:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

WATERCOURSE TYPE:

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Ephemeral <input type="checkbox"/>
Watercourse Name: None		
Comments:		

SPECIAL AQUATIC HABITAT:

Vernal Pool : Yes <input type="checkbox"/> No <input type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

WETLAND SOIL TYPE (s):

Soil Types: Brayton

DOMINANT PLANTS:

Common Reed* (Phragmites australis)	
Common Cattail (Typha latifolia)	
Winterberry (Ilex verticillata)	
Common Buckthorn* (Rhamnus cathartica)	
Goldenrod (Solidago)	
Fox Grape (Vitis labrusca)	

* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

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Wetland Characteristics Summary Form

Wetland I.D.:	55
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WETLAND HYDROLOGY:

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: None		

WETLAND TYPE:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

WATERCOURSE TYPE:

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Ephemeral <input type="checkbox"/>
Watercourse Name: None		
Comments:		

SPECIAL AQUATIC HABITAT:

Vernal Pool : Yes <input type="checkbox"/> No <input type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

WETLAND SOIL TYPE (s):

Soil Types: Brayton

DOMINANT PLANTS:

Common Reed* (Phragmites australis)	
Common Cattail (Typha latifolia)	
Purple Loosestrife* (Lythrum salicaria)	
Common Buckthorn* (Rhamnus cathartica)	
Goldenrod (Solidago)	
Fox Grape (Vitis labrusca)	

* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

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Wetland Characteristics Summary Form

Wetland I.D.:	56
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WETLAND HYDROLOGY:

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: None		

WETLAND TYPE:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

WATERCOURSE TYPE:

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Ephemeral <input type="checkbox"/>
Watercourse Name: None		
Comments:		

SPECIAL AQUATIC HABITAT:

Vernal Pool : Yes <input type="checkbox"/> No <input type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

WETLAND SOIL TYPE (s):

Soil Types: Brayton

DOMINANT PLANTS:

Common Reed* (Phragmites australis)	Skunk Cabbage (Symplocarpus foetidus)
Common Cattail (Typha latifolia)	
Purple Loosestrife* (Lythrum salicaria)	
Common Buckthorn* (Rhamnus cathartica)	
Sweet Pepperbush (Clethra alnifolia)	
Fox Grape (Vitis labrusca)	

** denotes Connecticut Invasive Species Council invasive plant species*

GENERAL COMMENTS:

Wetland Characteristics Summary Form

Wetland I.D.:	57
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WETLAND HYDROLOGY:

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: None		

WETLAND TYPE:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

WATERCOURSE TYPE:

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Ephemeral <input type="checkbox"/>
Watercourse Name: None		
Comments:		

SPECIAL AQUATIC HABITAT:

Vernal Pool : Yes <input type="checkbox"/> No <input type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

WETLAND SOIL TYPE (s):

Soil Types: Catden and Freetown

DOMINANT PLANTS:

Common Reed* (Phragmites australis)	Soft Rush (Juncus effuses)
Goldenrod (Solidago)	
Red Maple (Acer rubrum)	
Common Buckthorn* (Rhamnus cathartica)	
Sweet Pepperbush (Clethera alnifolia)	
Fox Grape (Vitis labrusca)	

** denotes Connecticut Invasive Species Council invasive plant species*

GENERAL COMMENTS:

Wetland Characteristics Summary Form

Wetland I.D.:	58
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WETLAND HYDROLOGY:

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input checked="" type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input checked="" type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: None		

WETLAND TYPE:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

WATERCOURSE TYPE:

Perennial <input checked="" type="checkbox"/>	Intermittent <input type="checkbox"/>	Ephemeral <input type="checkbox"/>
Watercourse Name: Trading Cove Brook		
Comments: S27		

SPECIAL AQUATIC HABITAT:

Vernal Pool : Yes <input type="checkbox"/> No <input type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

WETLAND SOIL TYPE (s):

Soil Types: Timakwa and Natchaug

DOMINANT PLANTS:

Highbush Blueberry (<i>Vaccinium corymbosum</i>)	Soft Rush (<i>Juncus effuses</i>)
Goldenrod (<i>Solidago</i>)	
Red Maple (<i>Acer rubrum</i>)	
Reed Canarygrass* (<i>Phalaris arundinacea</i>)	
Sweet Pepperbush (<i>Clethra alnifolia</i>)	
Fox Grape (<i>Vitis labrusca</i>)	

* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

Wetland Characteristics Summary Form

Wetland I.D.:	59
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WETLAND HYDROLOGY:

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Sempermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input checked="" type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: None		

WETLAND TYPE:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

WATERCOURSE TYPE:

Perennial <input type="checkbox"/>	Intermittent <input checked="" type="checkbox"/>	Ephemeral <input type="checkbox"/>
Watercourse Name: None		
Comments: S28		

SPECIAL AQUATIC HABITAT:

Vernal Pool : Yes <input type="checkbox"/> No <input type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

WETLAND SOIL TYPE (s):

Soil Types: Ridgebury, Leicester, and Whitman

DOMINANT PLANTS:

Multiflora Rose* (Rosa multiflora)	
Goldenrod (Solidago)	
Common Buckthorn* (Rhamnus cathartica)	
Sensitive Fern (Onoclea sensibilis)	
Lurid Sedge (Carex lurida)	
Fox Grape (Vitis labrusca)	

* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

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Wetland Characteristics Summary Form

Wetland I.D.:	60
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WETLAND HYDROLOGY:

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input checked="" type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: None		

WETLAND TYPE:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

WATERCOURSE TYPE:

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Ephemeral <input type="checkbox"/>
Watercourse Name: None		
Comments:		

SPECIAL AQUATIC HABITAT:

Vernal Pool : Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: 'Classic'	
Comments: VP14	

WETLAND SOIL TYPE (s):

Soil Types: Timakwa and Natchaug

DOMINANT PLANTS:

Sweet Pepperbush (Clethera alnifolia)	
Highbush Blueberry (Vaccinium corymbosum)	
Wool Grass (Scirpus cyperinus)	
Sensitive Fern (Onoclea sensibilis)	
Soft Rush (Juncus effuses)	
Fox Grape (Vitis labrusca)	

** denotes Connecticut Invasive Species Council invasive plant species*

GENERAL COMMENTS:

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Wetland Characteristics Summary Form

Wetland I.D.:	61
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WETLAND HYDROLOGY:

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: None		

WETLAND TYPE:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

WATERCOURSE TYPE:

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Ephemeral <input type="checkbox"/>
Watercourse Name: None		
Comments:		

SPECIAL AQUATIC HABITAT:

Vernal Pool : Yes <input type="checkbox"/> No <input type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

WETLAND SOIL TYPE (s):

Soil Types: Ridgebury, Leicester, and Whitman

DOMINANT PLANTS:

Common Reed* (Phragmites australis)	
Highbush Blueberry (Vaccinium corymbosum)	
Mugwort* (Artemisia vulgaris)	
Sensitive Fern (Onoclea sensibilis)	
Poison Ivy (Toxicodendron radicans)	
Fox Grape (Vitis labrusca)	

* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

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Wetland Characteristics Summary Form

Wetland I.D.:	62
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WETLAND HYDROLOGY:

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: None		

WETLAND TYPE:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

WATERCOURSE TYPE:

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Ephemeral <input type="checkbox"/>
Watercourse Name: None		
Comments:		

SPECIAL AQUATIC HABITAT:

Vernal Pool : Yes <input type="checkbox"/> No <input type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

WETLAND SOIL TYPE (s):

Soil Types: Ridgebury, Leicester, and Whitman

DOMINANT PLANTS:

Common Reed* (Phragmites australis)	
Goldenrod (Solidago)	
Skunk Cabbage (Symplocarpus foetidus)	
Sensitive Fern (Onoclea sensibilis)	
Multiflora Rose* (Rosa multiflora)	

* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

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Wetland Characteristics Summary Form

Wetland I.D.:	63
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WETLAND HYDROLOGY:

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input checked="" type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: None		

WETLAND TYPE:

Emergent <input type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input checked="" type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

WATERCOURSE TYPE:

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Ephemeral <input type="checkbox"/>
Watercourse Name: None		
Comments:		

SPECIAL AQUATIC HABITAT:

Vernal Pool : Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: 'Classic'	
Comments: VP15	

WETLAND SOIL TYPE (s):

Soil Types: Ridgebury, Leicester, and Whitman

DOMINANT PLANTS:

Common Reed* (Phragmites australis)	
Greenbrier (Smilax rotundifolia)	
Skunk Cabbage (Symplocarpus foetidus)	
Black Cherry (Prunus serotina)	
Red Maple (Acer rubrum)	
Fox Grape (Vitis labrusca)	

* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

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Wetland Characteristics Summary Form

Wetland I.D.:	64
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WETLAND HYDROLOGY:

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input checked="" type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: None		

WETLAND TYPE:

Emergent <input type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input checked="" type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

WATERCOURSE TYPE:

Perennial <input checked="" type="checkbox"/>	Intermittent <input type="checkbox"/>	Ephemeral <input type="checkbox"/>
Watercourse Name: Stony Brook		
Comments: S29		

SPECIAL AQUATIC HABITAT:

Vernal Pool : Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

WETLAND SOIL TYPE (s):

Soil Types: Ridgebury, Leicester, and Whitman

DOMINANT PLANTS:

Common Reed* (Phragmites australis)	
Greenbrier (Smilax rotundifolia)	
Skunk Cabbage (Symplocarpus foetidus)	
Black Cherry (Prunus serotina)	
Red Maple (Acer rubrum)	
Fox Grape (Vitis labrusca)	

* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

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Wetland Characteristics Summary Form

Wetland I.D.:	65
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WETLAND HYDROLOGY:

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: None		

WETLAND TYPE:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

WATERCOURSE TYPE:

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Ephemeral <input type="checkbox"/>
Watercourse Name: None		
Comments:		

SPECIAL AQUATIC HABITAT:

Vernal Pool : Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

WETLAND SOIL TYPE (s):

Soil Types: Ridgebury, Leicester, and Whitman

DOMINANT PLANTS:

Common Reed* (Phragmites australis)	
Sensitive Fern (Onoclea sensibilis)	
Skunk Cabbage (Symplocarpus foetidus)	
Highbush Blueberry (Vaccinium corymbosum)	
Red Maple (Acer rubrum)	
Soft Rush (Juncus effuses)	

* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

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Wetland Characteristics Summary Form

Wetland I.D.:	66
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WETLAND HYDROLOGY:

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: None		

WETLAND TYPE:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

WATERCOURSE TYPE:

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Ephemeral <input type="checkbox"/>
Watercourse Name: None		
Comments:		

SPECIAL AQUATIC HABITAT:

Vernal Pool : Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

WETLAND SOIL TYPE (s):

Soil Types: Ridgebury, Leicester, and Whitman

DOMINANT PLANTS:

Highbush Blueberry (<i>Vaccinium corymbosum</i>)	
Sensitive Fern (<i>Onoclea sensibilis</i>)	
Skunk Cabbage (<i>Symplocarpus foetidus</i>)	
Multiflora Rose* (<i>Rosa multiflora</i>)	
Red Maple (<i>Acer rubrum</i>)	
Meadowsweet (<i>Spiraea latifolia</i>)	

* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

Wetland Characteristics Summary Form

Wetland I.D.:	67
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WETLAND HYDROLOGY:

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: None		

WETLAND TYPE:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

WATERCOURSE TYPE:

Perennial <input type="checkbox"/>	Intermittent <input checked="" type="checkbox"/>	Ephemeral <input type="checkbox"/>
Watercourse Name: None		
Comments: S30 and S31		

SPECIAL AQUATIC HABITAT:

Vernal Pool : Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

WETLAND SOIL TYPE (s):

Soil Types: Ridgebury, Leicester, and Whitman

DOMINANT PLANTS:

Highbush Blueberry (<i>Vaccinium corymbosum</i>)	
Fox Grape (<i>Vitis labrusca</i>)	
Skunk Cabbage (<i>Symplocarpus foetidus</i>)	
Multiflora Rose* (<i>Rosa multiflora</i>)	
Goldenrod (<i>Solidago</i>)	
Mugwort* (<i>Artemisia vulgaris</i>)	

* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

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Wetland Characteristics Summary Form

Wetland I.D.:	68
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WETLAND HYDROLOGY:

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input checked="" type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: None		

WETLAND TYPE:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

WATERCOURSE TYPE:

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Ephemeral <input type="checkbox"/>
Watercourse Name: None		
Comments:		

SPECIAL AQUATIC HABITAT:

Vernal Pool : Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

WETLAND SOIL TYPE (s):

Soil Types: Ridgebury, Leicester, and Whitman

DOMINANT PLANTS:

Highbush Blueberry (<i>Vaccinium corymbosum</i>)	
Fox Grape (<i>Vitis labrusca</i>)	
Skunk Cabbage (<i>Symplocarpus foetidus</i>)	
Sensitive Fern (<i>Onoclea sensibilis</i>)	
Goldenrod (<i>Solidago</i>)	
Soft Rush (<i>Juncus effuses</i>)	

** denotes Connecticut Invasive Species Council invasive plant species*

GENERAL COMMENTS:

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Wetland Characteristics Summary Form

Wetland I.D.:	69
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WETLAND HYDROLOGY:

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input checked="" type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: None		

WETLAND TYPE:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

WATERCOURSE TYPE:

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Ephemeral <input type="checkbox"/>
Watercourse Name: None		
Comments:		

SPECIAL AQUATIC HABITAT:

Vernal Pool : Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: 'Classic'	
Comments: VP16	

WETLAND SOIL TYPE (s):

Soil Types: Raypol

DOMINANT PLANTS:

Highbush Blueberry (<i>Vaccinium corymbosum</i>)	
Fox Grape (<i>Vitis labrusca</i>)	
Tussock Sedge (<i>Carex stricta</i>)	
Sensitive Fern (<i>Onoclea sensibilis</i>)	
Goldenrod (<i>Solidago</i>)	
Bur-reed (<i>Sparganium eurycarpum</i>)	

* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

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Wetland Characteristics Summary Form

Wetland I.D.:	70
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WETLAND HYDROLOGY:

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Sempermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input checked="" type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: None		

WETLAND TYPE:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

WATERCOURSE TYPE:

Perennial <input type="checkbox"/>	Intermittent <input checked="" type="checkbox"/>	Ephemeral <input type="checkbox"/>
Watercourse Name:		
Comments: S32A		

SPECIAL AQUATIC HABITAT:

Vernal Pool : Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments:	

WETLAND SOIL TYPE (s):

Soil Types: Walpole

DOMINANT PLANTS:

Multiflora Rose* (Rosa multiflora)	
Fox Grape (Vitis labrusca)	
Greenbrier (Smilax rotundifolia)	
Sensitive Fern (Onoclea sensibilis)	
Goldenrod (Solidago)	
Silky Dogwood (Cornus amomum)	

* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

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Wetland Characteristics Summary Form

Wetland I.D.:	71
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WETLAND HYDROLOGY:

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input checked="" type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: None		

WETLAND TYPE:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

WATERCOURSE TYPE:

Perennial <input checked="" type="checkbox"/>	Intermittent <input type="checkbox"/>	Ephemeral <input type="checkbox"/>
Watercourse Name: Mohegan Brook		
Comments: S32		

SPECIAL AQUATIC HABITAT:

Vernal Pool : Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments:	

WETLAND SOIL TYPE (s):

Soil Types: Ridgebury, Leicester, and Whitman

DOMINANT PLANTS:

Red Maple (<i>Acer rubrum</i>)	
Fox Grape (<i>Vitis labrusca</i>)	
Skunk Cabbage (<i>Symplocarpus foetidus</i>)	
Sensitive Fern (<i>Onoclea sensibilis</i>)	
Goldenrod (<i>Solidago</i>)	
Silky Dogwood (<i>Cornus amomum</i>)	

* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

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Wetland Characteristics Summary Form

Wetland I.D.:	72
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WETLAND HYDROLOGY:

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: None		

WETLAND TYPE:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

WATERCOURSE TYPE:

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Ephemeral <input type="checkbox"/>
Watercourse Name: None		
Comments:		

SPECIAL AQUATIC HABITAT:

Vernal Pool : Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments:	

WETLAND SOIL TYPE (s):

Soil Types: Ridgebury, Leicester, and Whitman

DOMINANT PLANTS:

Sensitive Fern (<i>Onoclea sensibilis</i>)	
Fox Grape (<i>Vitis labrusca</i>)	
Skunk Cabbage (<i>Symplocarpus foetidus</i>)	
Reed Canarygrass* (<i>Phalaris arundinacea</i>)	
Goldenrod (<i>Solidago</i>)	
Virginia Creeper (<i>Parthenosisis quinquefolia</i>)	

* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

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Wetland Characteristics Summary Form

Wetland I.D.:	73
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WETLAND HYDROLOGY:

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input checked="" type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: None		

WETLAND TYPE:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

WATERCOURSE TYPE:

Perennial <input type="checkbox"/>	Intermittent <input checked="" type="checkbox"/>	Ephemeral <input type="checkbox"/>
Watercourse Name: None		
Comments: S33		

SPECIAL AQUATIC HABITAT:

Vernal Pool : Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments:	

WETLAND SOIL TYPE (s):

Soil Types: Ridgebury, Leicester, and Whitman

DOMINANT PLANTS:

Sensitive Fern (<i>Onoclea sensibilis</i>)	
Fox Grape (<i>Vitis labrusca</i>)	
Hayscented Fern (<i>Dennstaedtia punctilobula</i>)	
Cinnamon Fern (<i>Osmunda cinnamomea</i>)	
Goldenrod (<i>Solidago</i>)	
Greenbrier (<i>Smilax rotundifolia</i>)	

** denotes Connecticut Invasive Species Council invasive plant species*

GENERAL COMMENTS:

--

Wetland Characteristics Summary Form

Wetland I.D.:	74
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WETLAND HYDROLOGY:

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: None		

WETLAND TYPE:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

WATERCOURSE TYPE:

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Ephemeral <input type="checkbox"/>
Watercourse Name: None		
Comments:		

SPECIAL AQUATIC HABITAT:

Vernal Pool : Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments:	

WETLAND SOIL TYPE (s):

Soil Types: Ridgebury, Leicester, and Whitman

DOMINANT PLANTS:

Sensitive Fern (<i>Onoclea sensibilis</i>)	
Fox Grape (<i>Vitis labrusca</i>)	
Silky Dogwood (<i>Cornus amomum</i>)	
Cinnamon Fern (<i>Osmunda cinnamomea</i>)	
Goldenrod (<i>Solidago</i>)	
Skunk Cabbage (<i>Symplocarpus foetidus</i>)	

* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

--

Wetland Characteristics Summary Form

Wetland I.D.:	75
---------------	----

WETLAND HYDROLOGY:

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input checked="" type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: None		

WETLAND TYPE:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

WATERCOURSE TYPE:

Perennial <input checked="" type="checkbox"/>	Intermittent <input type="checkbox"/>	Ephemeral <input type="checkbox"/>
Watercourse Name: Horton Cove (Thames River)		
Comments:		

SPECIAL AQUATIC HABITAT:

Vernal Pool : Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments:	

WETLAND SOIL TYPE (s):

Soil Types: Westbrook Mucky Peat (proximate)
--

DOMINANT PLANTS:

High-tide bush (<i>Iva frutescens</i>)	
Groundsel tree (<i>Baccharis halimifolia</i>)	
Smooth cordgrass (<i>Spartina alterniflora</i>)	

** denotes Connecticut Invasive Species Council invasive plant species*

GENERAL COMMENTS:

Tidal wetlands along the fringe of Horton Cove (Thames River)

WETLAND PHOTOGRAPHS



Photo 1: Wetland 42



Photo 2: Wetland 43.



Photo 3: Wetland 44.



Photo 4: Wetland 45.



Photo 5: Wetland 46.



Photo 6: Wetland 47.



Photo 7: Wetland 48.



Photo 8: Wetland 49.



Photo 9: Wetland 50.



Photo 10: Wetland 51.



Photo 11: Wetland 52.



Photo 12: Wetland 53.



Photo 13: Wetland 54.



Photo 14: Wetland 55.



Photo 15: Wetland 56.



Photo 16: Wetland 57.



Photo 17: Wetland 58.



Photo 18: Wetland 59.



Photo 19: Wetland 60.



Photo 20: Wetland 61.



Photo 21: Wetland 62.



Photo 22: Wetland 63.



Photo 23: Wetland 64.



Photo 24: Wetland 65.



Photo 25: Wetland 66.



Photo 26: Wetland 67.



Photo 27: Wetland 68.



Photo 28: Wetland 69.



Photo 29: Wetland 70.



Photo 30: Wetland 71.



Photo 31: Wetland 72.



Photo 32: Wetland 73.



Photo 33: Wetland 74.



Photo 34: Wetland 75.

Attachment E:

Vernal Pool Survey



Wetland Delineation • Wetland Assessment & Permitting • Wildlife Surveys • Fisheries & Aquatics • GIS Mapping • Forestry

Vernal Pool Survey Report

Wawecus Junction to Montville Junction

Structure Replacement and OPGW Project

Prepared For: Eversource Energy
56 Prospect Street
Hartford, CT 06103
Attn: Mark Pappalardo

Project Location: Norwich and Montville, Connecticut

Prepared By:



Eric Davison
Wildlife Biologist
Certified Professional Wetland Scientist
eric@davisonenvironmental.com
www.davisonenvironmental.com

Date: 9/1/2022

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1.0 INTRODUCTION..... 1
2.0 GEOGRAPHICAL SETTING..... 1
3.0 VERNAL POOLS DEFINED..... 1
4.0 VERNAL POOL INDICATOR SPECIES 3
5.0 SEASONAL ACTIVITY PERIODS OF INDICATOR SPECIES 4
6.0 TERRESTRIAL (NON-BREEDING) HABITAT 4
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Appendix A: Vernal Pool Photographs

1.0 INTRODUCTION

Davison Environmental Wildlife Biologist and Certified Professional Wetland Scientists Eric Davison and Fisheries/Aquatic Biologist Alex Malvezzi conducted vernal pool surveys on April 21, 22, 24 and 25 of 2022. The limits of the survey area consisted of delineated wetlands on the 1080, 1000, 1070, and 1090 Transmission Line right-of-way (ROW), referred to hereafter as the “Project area”. The Project area is located within the Towns of Waterford, Montville, and Norwich. The Project originates at Wawecus Junction on the northwestern end of the Project area and runs southeast to the Montville Junction in Montville.

2.0 GEOGRAPHICAL SETTING

The Project area is located within The Long Island Sound Coastal Lowland ecoregion (source: U.S. Environmental Protection Agency). This region is the coastal strip occurring in southern Connecticut and Rhode Island that borders Long Island Sound and Block Island Sound. It includes low-elevation rolling coastal plain, tidal marshes, estuaries, sandy dunes and beaches, and rocky headlands. This ecoregion has one of the mildest climates of New England. The coastal hardwood forests contain black, red, and white oaks, hickories, and black cherry. Dense thickets of vines and shrubs such as catbrier, greenbrier, and poison ivy are common. Some Southeastern flora and fauna species of the Piedmont and coastal plain reach their northern limit in this ecoregion, including holly, post oak, sweetgum, and persimmon. On coastal headlands, pitch pine and post oak occur, while some scarlet oak and sassafras stand on stabilized dunes. Parts of the ecoregion are highly urbanized, especially from New Haven westward.

3.0 VERNAL POOLS DEFINED

Vernal pools are ephemeral waterbodies that provide critical breeding habitat for forest-dwelling amphibians, particularly mole salamanders (*Ambystoma spp.*) and wood frog (*Lithobates sylvaticus*) as well as a variety of aquatic insects.

Many vernal pool definitions have been developed by both regulatory agencies as well as conservation organizations. While these definitions vary slightly, they all include the same common critical characteristics.

In Northeastern U.S., a recognized source utilized by both the Connecticut Department of Energy and Environmental Protection, as well as the U.S. Army Corp of Engineers New England District (ACOE) regarding the classification and protection of vernal pools is a document developed by

Calhoun and Klemens (2002), entitled: *Best development practices: Conserving pool-breeding amphibians in residential and commercial developments in the northeastern United States* (the “BDP Manual”, hereinafter). The BDP Manual provides the following operational definition of vernal pools:

*“Vernal pools are seasonal bodies of water that attain maximum depths in the spring or fall, and lack permanent surface water connections with other wetlands or water bodies. Pools fill with snowmelt or runoff in the spring, although some may be fed primarily by groundwater sources. The duration of surface flooding, known as hydroperiod, varies depending upon the pool and the year; vernal pool hydroperiods range along a continuum from less than 30 days to more than one year. Pools are generally small in size (<2 acres), with the extent of vegetation varying widely. They lack established fish populations, usually as a result of periodic drying, and support communities dominated by animals adapted to living in temporary, fishless pools. In the region, they provide essential breeding habitat for one or more wildlife species including Ambystomid salamanders (*Ambystoma* spp.), called “mole salamanders” because they live in burrows), wood frogs (*Rana sylvatica*), and fairy shrimp (*Eubbranchipus* spp.).”*

The ACOE Connecticut General Permit (effective December 15, 2021) defines vernal pools as follows: Vernal pools are depressional wetland basins that typically go dry in most years and may contain inlets or outlets, typically of intermittent flow. Vernal pools range in both size and depth depending upon landscape position and parent material(s). In most years, Vernal pools support one or more of the following obligate indicator species: wood frog, spotted salamander, blue-spotted salamander, marbled salamander, Jefferson’s salamander and fairy shrimp. However, they should preclude sustainable populations of predatory fish.

The physical characteristics of a vernal pool (e.g., landform, hydrology, vegetation) can vary widely, but can generally be classified into two types - “classic” or “cryptic”. Classic vernal pools are natural isolated depressions in forested uplands with no hydrologic connection to other wetland systems. They are generally well-defined (i.e., have an abrupt wetland-upland boundary) and are typically concentric or oblong in shape.

Cryptic vernal pools are depressions or impoundments embedded within larger wetlands. Cryptic vernal pools are the most common type of pool in Connecticut, and often occur within seasonally flooded portions of red maple (*Acer rubrum*) dominated forested wetlands.

4.0 VERNAL POOL INDICATOR SPECIES

Several species of amphibians depend on vernal pools for reproduction and development. These species are referred to as “indicator species” (Calhoun and Klemens, 2002). In Connecticut, indicator species include:

Mole Salamanders

- Blue-spotted salamander (*Ambystoma laterale*)
- Spotted salamander (*Ambystoma maculatum*)
- Jefferson salamander (*Ambystoma jeffersonianum*)
- Marbled salamander (*Ambystoma opacum*)

Frogs

- Wood frog (*Lithobates sylvaticus*)

Invertebrates

- Fairy shrimp (*Branchiopoda anostraca*)

The wood frog and the spotted salamander are the two most common indicator species in Connecticut, occurring statewide. Fairy shrimp also occur statewide but are relatively uncommon.

The marbled salamander is relatively common statewide but is rare or absent from higher elevation areas of the state found within the northwest uplands and highlands as well as the northeast hills ecoregions. Marbled salamanders are known to occur in the vicinity of the Project area (Klemens, et. al. 2021).

Less common indicator species include three State-listed species: the blue-spotted salamander (complex and pure diploid) and Jefferson salamander. These species are habitat specialists that have a more limited distribution in the State than other mole salamanders as described in Klemens et. al. 2021. These species do not occur in the vicinity Project area.

In addition to indicator species, vernal pools also support what are referred to as “facultative vernal pool species.” These are species that utilize but do not necessarily require vernal pools for reproductive success. Examples of facultative species include spotted turtle (*Clemmys guttata*) and four-toed salamander (*Hemidactylium scutatum*). These species may breed or feed in vernal pools but are also capable of carrying out all phases of their life cycle in other types of wetlands or waterbodies. Evidence of breeding by facultative species alone is not considered indicative of a vernal pool.

5.0 SEASONAL ACTIVITY PERIODS OF INDICATOR SPECIES

Table 1 summarizes the seasonal activity of vernal pool amphibian indicator species. Most vernal pool indicator species breed in the late winter or early spring (March-April), with newly metamorphosed amphibians emerging from pools in June-July, with dispersal into the adjacent forest continuing into October. The exception to this is the marbled salamander which breeds in late summer and early fall (August-September), with metamorph emergence occurring from May – July. Table 1 also notes the seasonal periods in which vernal pools and vernal pool wildlife are particularly susceptible to impact from construction related activities that occur within or near (i.e., within approximately 100') vernal pools. These seasonal periods, noted as periods of “high sensitivity”, include the migration/breeding period and the metamorph emergence/early dispersal periods. During these times, amphibians occur at higher density within or immediately adjacent to the pool. Thus, the risk of impact either via direct mortality or disruption of migration and breeding is greater during the high sensitivity periods.

Table 1: Seasonal activity periods for vernal pool indicator species

SPRING BREEDERS		
Wood Frog, Spotted Salamander, Jefferson Salamander, and Blue-spotted Salamander Complex		
	NOVEMBER - FEBRUARY	Pools are dormant
	MARCH - APRIL	Migration, breeding and egg deposition
	APRIL - JUNE	Egg hatching and larval development
	JUNE - OCTOBER	Metamorphosis and juvenile dispersal
HIGH SENSITIVITY PERIOD 0-100FT	MARCH - APRIL	High densities of adults migrating to and from breeding pools
	JUNE - JULY	High densities of metamorphs disperse from breeding pools into the adjacent forest
FALL BREEDERS		
Marbled Salamander		
	AUGUST - SEPTEMBER	Migration, breeding and egg deposition
	NOVEMBER - MAY	Egg hatching and larval development
	MAY - JULY	Metamorphosis and juvenile dispersal
HIGH SENSITIVITY PERIOD 0-100FT	AUGUST-SEPTEMBER	Adults migrate to breeding pools
	MAY - JULY	High densities of metamorphs disperse from breeding pools into the adjacent forest

6.0 TERRESTRIAL (NON-BREEDING) HABITAT

Vernal pool wildlife favor terrestrial forested habitat adjacent to vernal pools during the non-breeding period (Colburn, 2004). These habitats are where they shelter and feed beneath surficial cover objects (e.g., rocks, logs) or in fossorial small mammal burrows.

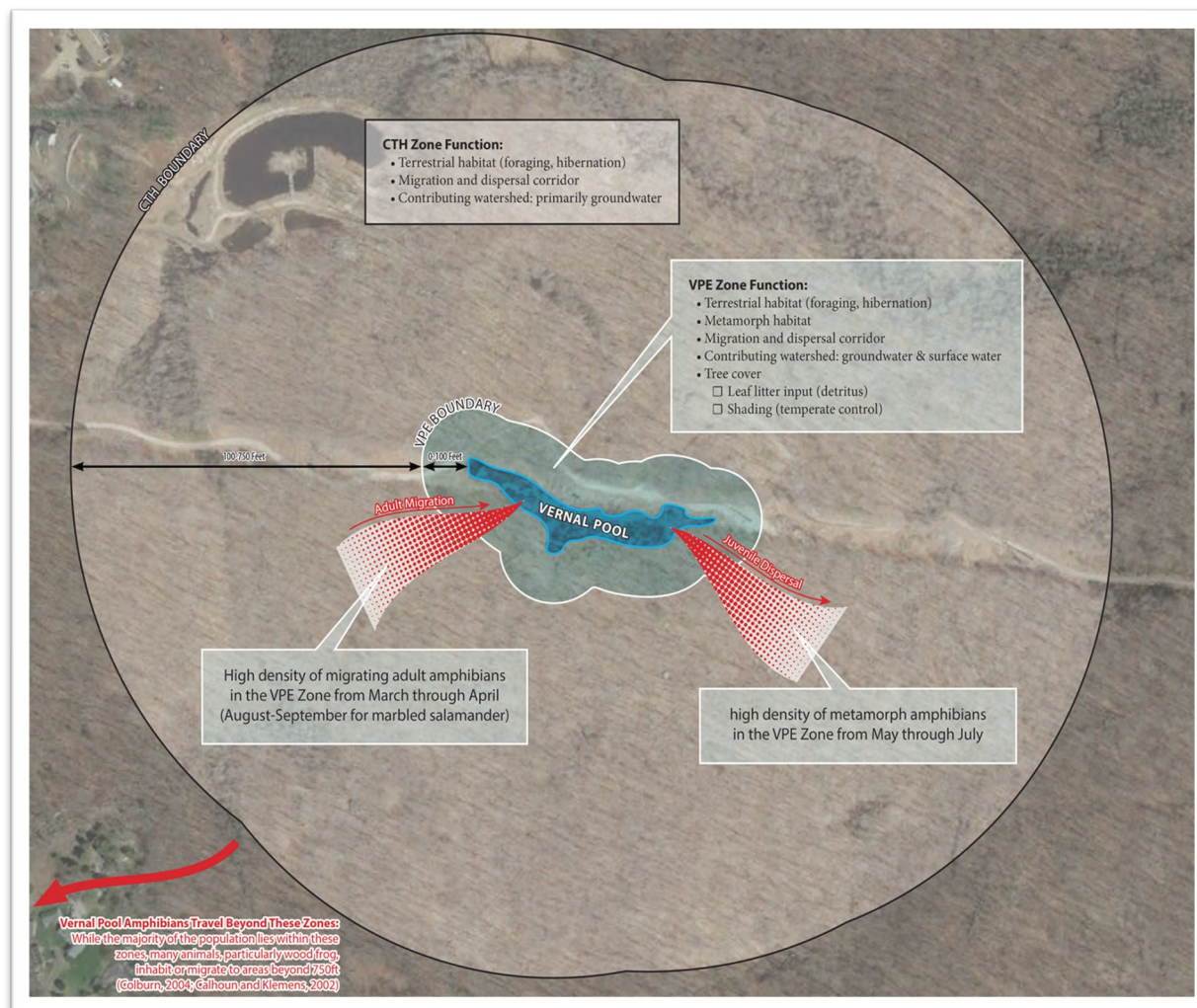
Forests not only provide habitat, but the trees adjacent to vernal pools are critical to vernal pool ecology as they contribute to the food web (via detritus inputs), help maintain cool water temperatures, and affect pool hydrology (Colburn, 2004).

Vernal pool amphibians disperse a significant distance into terrestrial forests surrounding the pool. A number of studies have documented dispersal distances of indicator species (Colburn 2004, Windmiller 1996, Semlitsch 1998). The BDP Manual utilized data from these and other sources to develop a two-zoned management area extending a total distance of 750' surrounding from the vernal pool. These zones are illustrated on Figure 1. The first zone, referred to as the Vernal Pool Envelope includes lands within 100' of the pool's spring high water mark. The spring high water mark is the limit of peak flooding during the late winter or early spring. The second zone, referred to as the Critical Terrestrial Habitat encompasses an area 100'-750' from the pool's spring high water mark.

These management zones provide several ecosystem support functions for vernal pools as illustrated on Figure 1. These include:

- Terrestrial habitat for amphibians
- Juvenile (i.e., newly metamorphosed) dispersal and staging habitat
- Migration and dispersal corridor
- Tree cover which provides
 - Leaf litter inputs as a source for detritus-based food web
 - Shading and hydroperiod influence
 - Contributing watershed (groundwater and surface water input)

Figure 1: Illustration of vernal pool management zones



7.0 SURVEY METHODS

Survey methods were designed to document breeding by amphibian indicator species. The simplest method to accomplish this is to locate and inventory egg masses in the case of spring breeders (e.g., wood frog), and larvae for the fall breeding marbled salamander. This work was done via visual and audial observations, and inventory of organisms inhabiting the water column and benthic habitat using a fine mesh (<1/4 inch) dipnet. Work was conducting under sunny skies wearing polarized sunglasses to maximize detection of egg masses and larvae. Capture and identification of breeding adults was not deemed necessary at this Site, as definitive identification of the breeding species by egg mass was straightforward based on the species that are known to occur in this region. Physical capture of breeding adults is a critical survey method for certain regions of the State where the potential exists for the presence of blue-spotted salamander complex or Jefferson salamander complex, as differentiation of egg masses of these species from

the common spotted salamander is not definitive. At such sites, the capture of breeding adults is warranted. As noted, these rare species do not occur in this region of Connecticut.

Examine of the physical characteristics of the pools included mapping the extent of the pool, characterizing pool hydrology (maximum depth and hydroperiod) and documenting the vegetative characteristics. The extent of the pool, or vernal pool basin boundary, is determined in the late winter-early spring during maximum flooding. This is determined by field locating the “spring high water mark” (Calhoun and Klemens 2002), which consists of demarcated the seasonally flooded portions of the wetland that are directly connected to observed egg masses. This boundary is mapped in the field using a Trimble GPS Unit capable of sub-meter accuracy, then plotted in ArcGIS as illustrated on the Map Set.

8.0 RESULTS

All wetlands were inspected for their potential to provide vernal pool habitat. Wetlands with a hydrology ranging from seasonally flooded to semi-permanently flooded were the focus of detailed investigation, as they would have the potential to support full development of amphibian larvae.

In total, ten vernal pools were observed within the Project area. They are labeled Vernal Pools 7 through 16 on the Project mapping. Vernal pool physical and biological characteristics are summarized in Table 2. Two vernal pool indicator species were observed, the spotted salamander (*Amybystoma maculatum*) and wood frog (*Lithobates sylvaticus*). Spotted salamander were confirmed in 9 of the 10 pools and wood frog were confirmed in 7 of the 10 pools.

Other amphibian and reptile species observed during survey work included one State-listed spotted turtle (*Clemmys guttata*), along with common species including spring peeper (*Pseudacris cruficer*) adults, green frog (*Rana clamitans*) adults and larvae, red spotted newt (*Notophthalmus viridescens*), gray treefrog (*Hyla versicolor*) adult and snapping turtle (*Chelydra serpentina*).

Table 2: Summary of vernal pool physical and biological characteristics

Pool #	Map Sheet	Physical Characteristics		Indicator Species			Facultative/ Non-Indicator Species	Cover Type
		Maximum Depth (in)	Type	Total Egg Masses		Tadpole/ Larvae		
				Amac	Lsyl			
7	3	24	cr	7		Lsyl	Lcla	PSS/PFO
8	4	12	cr	20+	11			PSS/ PFO
9	4	8	cr	6		Lsyl		PSS/PEM
10	4	12	cr	14				PSS/PEM
11	5	24	cr	15			Lcla	PSS/ PEM
12	5	10	cr	18		Lsyl		PSS/PEM
13	5	8	cr	5		Lsyl		PSS/PFO
14	7	24	cr	15			Lcla	PSS/PEM
15	8	20	cr	0	150+			PSS/PFO/AQ
16	11	12	cr	48		Lsyl		PSS/PEM

KEY

Type: cryptic (cr), classic (cl), anthropogenic (an)

Species: *Ambystoma maculatum* (Amac); *Lithobates sylvaticus* (Lsyl); *Pseudacris crucifer* (Pcru); *Lithobates clamitans* (Lcla); *Notophthalmus viridescens* (Nvir)

Vegetation: palustrine scrub-shrub (PSS); palustrine forested (PFO); palustrine emergent (PEM); aquatic beds present (AQ)

Note: Egg mass data for vernal pool 15 is based on survey data collected by Davison Environmental in 2017. Due to the presence of thick algae that developed this season, surveys for egg masses were not possible.

Vernal pool hydrology was largely seasonally flooded, but Pool 8 appears to be an historic farm pond with a semi-permanently flooded hydrology. All pools were cryptic pools (i.e., embedded within larger wetlands).

The dominant vegetative cover type is scrub-shrub. Typical component shrub species included buttonbush (*Cephalanthus occidentalis*), winterberry (*Ilex verticillata*) and highbush blueberry (*Vaccinium corymbosum*). Component herbaceous plant species included tussock sedge (*Carex stricta*), skunk cabbage (*Symplocarpus foetidus*) and sensitive fern (*Onoclea sensibilis*). Due to ongoing vegetation management, trees were largely absent from the portions of the pools located within the maintained right-of-way but, where present, were predominately red maple (*Acer rubrum*).

9.0 RECOMMENDED PROTECTION MEASURES

Based on the Project activities proposed in proximity to vernal pools, the following measures are recommended to avoid or minimize impacts on vernal pools during construction:

- A. No direct impacts are proposed within vernal pools. Work is required within the Vernal Pool Envelopes for two pools, VP7 and VP15. Construction within these areas will be conducted using temporary timber matting with no permanent impacts proposed. The installation of gravel within the Vernal Pool Envelope should be avoided.
- B. The installation of matting for VP7 and VP 15 should be conducted between August and February, if possible, outside of the high sensitivity period for observed vernal pool indicator species. High sensitivity periods include the migration/breeding period and the metamorph emergence/early dispersal periods.
- C. If possible, no tree cutting should occur within vernal pool envelopes. If vegetation must be removed, to the maximum extent practicable it should be done selectively either by hand or with equipment that can reach in and cut and remove it. Non-selective mowing of vegetation shall only be used if it is absolutely necessary.
- D. Removal of shrub cover associated with work pad and access road construction within 25' of vernal pools should be minimized to the extent practicable. Cut woody debris (slash) should be left in place to provide amphibian cover and promote the development of coarse woody debris and detritus.
- E. If necessary, erosion and sedimentation controls should be installed and maintained along existing access roads and work pads near vernal pools as necessary to protect water quality and to limit the potential for soil deposition into vernal pools. Erosion control measures should be designed in a manner that allows unencumbered amphibian access to the vernal pool. Such measures may include, but not be limited to; straw wattles, and aligning erosion and sedimentation controls to avoid bifurcating vernal pool habitat.
- F. Plastic netting, which may be found in a variety of erosion control products (e.g., erosion control blankets, straw wattles, and reinforced silt fence), should not be used. Erosion and sedimentation control devices should be promptly removed upon final revegetation and stabilization of the ROW.

10.0 REFERENCES

Calhoun, A.J.K. and M.W. Klemens. 2002. Best development practices: Conserving pool-breeding amphibians in residential and commercial developments in the northeastern United States. MCA Technical Paper No. 5, Metropolitan Conservation Alliance, Wildlife Conservation Society, Bronx, New York.

Colburn, E.A. 2004. Vernal pools, natural history and conservation. The McDonald & Woodward Publishing Company.

Klemens, M.W., Gruner, H.J., Quinn, D.P. and Davison, E.R. 2021. Conservation of Amphibians and Reptiles in Connecticut. Connecticut Department of Energy and Environmental Protection. Revision to State Geological and Natural History Survey Bulletin 112.

Mitsch, W.J. and J.G. Gosselink. 2007. Wetlands, fourth edition. John Wiley and Sons, Inc.

Semlitsch, R.D. 1998. Biological delineation of terrestrial buffer zones for pond-breeding amphibians. *Conservation Biology* 12:1113-1119.

Windmiller, B.S. 1996. The pond, the forest, and the city: Spotted salamander ecology and conservation in a human-dominated landscape. Ph.D dissertation, Tufts, University, Medford, MA.

U.S. Environmental Protection Agency Ecoregions GIS Data. Web link: <https://www.epa.gov/ecoresearch/ecoregion-download-files-state-region-1#pane-27>

APPENDIX A: VERNAL POOL PHOTOGRAPHS



Photo 1: Vernal Pool 7



Photo 2: Vernal Pool 8



Photo 3: Vernal Pool 9



Photo 4: Vernal Pool 10



Photo 5: Vernal Pool 11



Photo 6: Vernal Pool 12



Photo 7: Vernal Pool 13



Photo 8: Vernal Pool 14



Photo 9: Vernal Pool 15



Photo 10: Vernal Pool 16

Attachment F:

Letter to the Abutters and Affidavit



P.O. Box 270
Hartford, CT 06141-0270

November 1, 2022

Dear Neighbor,

At Eversource, we're always working to serve you better. We are submitting a petition to the Connecticut Siting Council (CSC) for a proposed structure replacement project in your area.

Proposed Project Information

The Project, called the Wawecus Junction to Montville Junction Upgrade Project, will be taking place within the right of way on or near your property between Wawecus Junction to Fort Hills Farms Substation to Montville Junction for approximately eight miles. The Proposed modifications include:

- Replacement of various existing wood structures with new steel structures, with a finish that "weathers" or darkens over time. Most of the structure replacements are due to the age and condition of these structures and some structures will be replaced to comply with National Electric Safety Code (NESC) clearance requirements. The existing structure heights range from 43 feet to 93 feet above ground level ("AGL") and the new structures will range in height from 43 feet to 93 feet AGL. The average height increase is approximately six feet AGL.
- Select tree and vegetation trimming within the right of way to comply with updated electrical standards.

In addition, we will replace the shield wire on the structures with communication wire called Optical Ground Wire (OPGW). With these improvements, Eversource will improve electric reliability by enabling communication between substations.

What You Can Expect

Pending all necessary approvals for this proposed work, construction is expected to begin in the first quarter of 2023. We anticipate completing construction, including restoration of affected areas, by December 2023.

For More Information

Eversource is committed to being a good neighbor and doing our work with respect for you and your property. For more information, please call our projects hotline at 1-800-793-2202 or send an email to ProjectInfo@eversource.com.

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

Sincerely,

Heather Hayes

Heather Hayes

Project Manager on Behalf of Eversource Energy Transmission

AFFIDAVIT OF SERVICE OF NOTICE

STATE OF CONNECTICUT)
) ss. Berlin
COUNTY OF HARTFORD)

Sec. 16-50j-40 of the Regulations of Connecticut State Agencies (“RCSA”) provides that proof of notice to the affected municipalities, property owners and abutters shall be submitted with a petition for declaratory ruling to the Connecticut Siting Council (“Council”). In accordance with that RCSA section, I hereby certify that I caused notice of the petition for a declaratory ruling of The Connecticut Light and Power Company doing business as Eversource Energy to be served by mail or courier upon the following municipal officials:

- Peter Albert Nystrom
Mayor
Norwich City Hall
100 Broadway
Norwich, CT 06360

- Ronald K. McDaniel
Mayor
Montville Town Hall
310 Norwich-New London Tpke
Uncasville, CT 06382

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



James Smith
Project Siting Specialist

On this the 1st day of November 2022, before me, the undersigned representative, personally appeared, James Smith, known to me (or satisfactorily proven) to be the person whose name is subscribed to the foregoing instrument and acknowledged that he executed the same for the purposes therein contained.

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

Notary Public/My Commission expires: _____

Officer of the Superior Court/ Juris No.: Andrew W. Sol 413393