EVERS URCE

MUNICIPAL CONSULTATION FILING

FOR THE

SOUTHWEST CONNECTICUT RELIABILITY PROJECT

BY

THE CONNECTICUT LIGHT AND POWER COMPANY

DOING BUSINESS AS EVERSOURCE ENERGY

VOLUME 5: PROJECT MAPPING AND DRAWINGS

APRIL 2016

VOLUME 5: PROJECT DRAWINGS AND MAPPING

EXHIBIT 1: 400-SCALE MAPS: PROPOSED PROJECT

APPENDIX 1A: OVERVIEW OF PROJECT ON USGS MAP – 2,000-SCALE APPENDIX 1B: PROPOSED PROJECT AERIAL MAPS – 400-SCALE APPENDIX 1C: PROPOSED PROJECT AERIAL MAPS – FEMA FLOODPLAINS – 400-SCALE

EXHIBIT 2: 100-SCALE MAPS: PROPOSED PROJECT

APPENDIX 2A: PROJECT OVERVIEW MAP – 2,000-SCALE APPENDIX 2B: PROPOSED PROJECT AERIAL MAPS – 100-SCALE

EXHIBIT 3: SUBSTATION DRAWINGS

APPENDIX 3A: PROPOSED PLUMTREE SUBSTATION MODIFICATIONS APPENDIX 3B: PROPOSED STONY HILL SUBSTATION MODIFICATIONS

EXHIBIT 4: PROPOSED PROJECT CROSS SECTIONS AND PLAN AND PROFILE DRAWINGS

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APPENDIX 4B: PLAN AND PROFILE

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INTRODUCTION

This Exhibit provides maps that identify both the regional setting and the land use / environmental characteristics of the approximately 3.4-mile Proposed Route that The Connecticut Light and Power Company doing business as Eversource Energy (Eversource) has identified for the new 115-kV transmission line and related facilities comprising the SWCT Reliability Project (Project).

Eversource's Proposed Route, along which the new 115-kV transmission line would be constructed and operated in overhead configurations, would be located entirely within Eversource's existing right-of-way (ROW) extending between Eversource's existing Plumtree Substation in the Town of Bethel and Brookfield Junction in the Town of Brookfield. In conjunction with the development of the new 115-kV transmission line, Eversource would modify the existing Plumtree Substation and Stony Hill Substation. Refer to Volume 1 for the details regarding the Proposed Route and associated transmission facilities.

The following maps are included within this exhibit:

- Appendix 1A: U.S. Geologic Survey Map. This topographic map (at a scale of 1"=2,000") illustrates the general locations of the proposed Project facilities.
- Appendix 1B: Proposed Project Maps. These aerial photography-based maps (at a scale of 1"=400'1) identify the location of the Proposed Route of the new 115-kV transmission line along Eversource's existing ROW, as well as the Stony Hill Substation area; depict existing and proposed transmission line structures; and illustrate environmental, social, and land use features (e.g. municipal boundaries, zoning, water resources, vegetative cover types, forests, parks, other recreational areas, historic areas, and settled areas). All access routes shown are proposed and subject to review. Each aerial map is accompanied by explanatory data (on the facing page) that summarizes the primary environmental and land use characteristics of the ROW and surrounding region within the map viewing area. The page facing the map also includes a cross-section illustrating the configuration of the existing and proposed transmission lines within the ROW, as typical to the map segment. Similar information is provided for the Stony Hill Substation. (Note: Cross-section drawings are also included in Volume 1, Section 3 and Volume 5, Exhibit 4).
- Appendix 1C: FEMA Floodplain Maps. These aerial photography-based maps (at a scale of 1"=400' ¹) illustrate the general location of the proposed Project facilities in the vicinity of Federal Emergency Management Agency (FEMA) mapped 100-year floodplains, 500-year floodplains, and the regulatory floodway. These maps include the locations of the new 115-kV transmission line structures along Eversource's existing ROW, as well as the Stony Hill Substation. Areas along the Proposed Route that are not proximate to mapped floodplains (100-year, 500-year, and the regulatory floodway) are not presented.

Aerial photographs were derived from 2012 aerial imagery; environmental and land use features are mapped based on the most recent available Geographic Information System (GIS) data obtained from federal and state agencies (such as the Connecticut Department of Energy and Environmental Protection (CT DEEP) and the Federal Emergency Management Agency (FEMA), as well as the results of environmental and engineering field surveys. Location information for ROW / transmission lines were obtained from Eversource.

APPENDIX 1A

OVERVIEW OF PROJECT ON USGS MAP – 2,000-SCALE

BATHYMETRIC FEATURES

BATHYMETRIC FEATURES		
Area exposed at mean low tide; soundin datum line***	lg	-
Channel***	====:	_
Sunken rock***	+	
BOUNDARIES		
National		
State or territorial		
County or equivalent		
Civil township or equivalent		_
Incorporated city or equivalent		
Federally administered park, reservation, or monument (external)		
Federally administered park, reservation, or monument (internal)		-
State forest, park, reservation, or monument and large county park		-
Forest Service administrative area*		
Forest Service ranger district*		-
National Forest System land status, Forest Service lands*		
National Forest System land status, non-Forest Service lands*		
Small park (county or city)		
BUILDINGS AND RELATED FEATURES		
Building	•-	2
School; house of worship	1	
Athletic field		_
Built-up area		
Forest headquarters*		1013.1
Ranger district office*	1	1
Guard station or work center*	:	
Racetrack or raceway)
Airport, paved landing strip, runway, taxiway, or apron		>
Unpaved landing strip	l	_
Well (other than water), windmill or wind	d generator oo	7
Tanks	·••	2
Covered reservoir	0 10	
Gaging station		4
Located or landmark object (feature as l	abeled)	¢
Boat ramp or boat access*		
Roadside park or rest area		,

Picnic area

Campground

Cemetery

Winter recreation area*

Foreshore flat		-	68
Foreshore hat		<u></u>	Tud
	£3.	200 C 120	JTEL CO
Coral or rock reef	Data Co	< <u>ม่ปรับ</u>	eel
Rock, bare or awash; dangerous		<u> </u>	
to navigation		¥	(*)
Group of rocks, bare or awash	(* * *	× × ×
Exposed wreck		->=	÷1
Depth curve; sounding		1	8 2
Breakwater, pier, jetty, or wharf			ГГ
Seawall			
Oil or gas well; platform		0	•
ÓNTÓURS			
opographic			
Index	-	-6000	
Approximate or indefinite			
Intermediate			
Approximate or indefinite			
Supplementary			
Depression		Ć	Ð
Cut			
Fill		_	
Continental divide			
athymetric			
Index***			
Intermediate***			
Index primary***	/		
Primary***	/		
Supplementary***			
ONTROL DATA AND MONUMENTS			
Principal point**		~	3-20
U.S. mineral or location monument River mileage marker		USM	Mile
oundary monument			69
Third-order or better elevation,	BM _{⊐ 9134} ট	3M _	+ 07
with tablet Third-order or better elevation,	- 9134		+ 27
recoverable mark, no tablet			3 562
With number and elevation		67	⊡ 450
orizontal control Third-order or better, permanent mark	∆ Neace	- - - - -	lear
With third-order or better elevation	BMA 52	_⋆ Pi	ke
	52	· 5	M39 △ 10
With checked spot elevation			
Coincident with found section corner	Cactus 7	lactu	- A

ertical control	
Third-order or better elevation, with tabl	et $^{\rm BM} imes _{\rm 5280}$
Third-order or better elevation, recoverable mark, no tablet	imes 528
Bench mark coincident with found section corner	BM + 5280
Spot elevation	× 7523
LACIERS AND PERMANENT SNOWFIELDS	
Contours and limits	El de El de
Formlines	
Glacial advance	
Glacial retreat	
AND SURVEYS	
ublic land survey system	
Range or Township line	
Location approximate	
Location doubtful	
Protracted	
Protracted (AK 1:63,360-scale)	
Range or Township labels	R1E T2N R3W T4S
Section line	
Location approximate	
Location doubtful	
Protracted	
Protracted (AK 1:63,360-scale)	
Section numbers	1 - 36 1 - 36
Found section corner	
Found closing corner	
Witness corner	
Meander corner	MC
Weak corner*	
ther land surveys	
Range or Township line	
Section line	
and grant, mining claim, donation land laim, or tract	
and grant, homestead, mineral, or ther special survey monument	
ence or field lines	
ARINE SHORELINES	
Shoreline	
Apparent (edge of vegetation)***	\sim
Indefinite or unsurveyed	
AINES AND CAVES	
Quarry or open pit mine	*
Gravel, sand, clay, or borrow pit	X
Mine tunnel or cave entrance	<
Mine shaft	Ľ
Prospect	X
Tailings	(forlings)
Mine dump	

Former	disposal	site or	mine

Neatline	39 90°37′30
Graticule tick	
Graticule intersection	_
Datum shift tick	-
State plane coordinate systems	
Primary zone tick	640 000 FEET
Secondary zone tick	247 500 MET
Tertiary zone tick	260 000 FEET
Quaternary zone tick	98 500 METE
Quintary zone tick	320 000 FEET
Universal transverse metcator grid	
UTM grid (full grid)	
UTM grid ticks*	26
RAILROADS AND RELATED FEATURES	
Standard guage railroad, single track	+
Standard guage railroad, multiple track	
Narrow guage railroad, single track	
Narrow guage railroad, multiple track	
Railroad siding	
Railroad in highway Railroad in road	
Railroad in light duty road*	
Railroad underpass; overpass	+
Railroad bridge; drawbridge	
Railroad tunnel	+
	+
Railroad yard	
	+~~
Railroad turntable; roundhouse	+
RIVERS, LAKES, AND CANALS	
Perennial stream	$\sim \sim$
Perennial river	\sim
Intermittent stream	
Intermittent river	
Disappearing stream	
Falls, small	
Falls, large	
Rapids, small	
	The second second
Rapids, large	
Masonry dam	
Dam with lock	

Perennial lake/pond	Marsh or swamp	
Intermittent lake/pond	Submerged marsh or swamp	<u>لاتیالاتیالاتیالاتیالاتیالاتیالاتیالاتیالاتیالاتیالاتیالاتی</u>
Dry lake/pond	Wooded marsh or swamp	- <u>- مالت</u>
Narrow wash	Submargad woodad margh ar	
Wide wash 🛁	Submerged wooded marsh or	Swallip w
Canal, flume, or aqueduct with lock —		
Elevated aqueduct, flume, or conduit 🚽	Land subject to inundation	
Aqueduct tunnel	\rightarrow $- \rightarrow$ $ \leftarrow$ Land subject to inundation	
Water well, geyser, fumarole, or mud pot	0 c	Max Pool 4.
Spring or seep	• ? SURFACE FEATURES	
ROADS AND RELATED FEATURES		
Please note: Roads on Provisional-edition maps are n		<u>Levee</u>
as primary, secondary, or light duty. These roads are improved roads and are symbolized the same as light 		Sand
Primary highway —	Disturbed surface	
Secondary highway		1988)
Light duty road Light duty road, paved*	Gravel beach or glacial morai	ne Grave
Light duty road, gravel* Light duty road, dirt*	Tailings pond	Tarling: Fond
Light duty road, unspecified*	TRANSMISSION LINES AND PIF	PELINES
Unimproved road Unimproved road* === 4WD road	Power transmission line;	• •• • •
4WD road* ===	Telephone line	
Trail	·'	<u>relephor</u>
Highway or road with median strip	Aboveground pipeline	
Highway or road under construction	Under Underground pipeline	Pipelini
	Const VEGETATION	
Highway or road underpass; overpass	Woodland	
Highway or road bridge; drawbridge	Shrubland	
Highway or road tunnel	===== Orchard	
Road block, berm, or barrier*		
Gate on road*	Vineyard	
Trailhead*	Mangrove	Mangrov.
* USGS-USDA Forest Service Single-E Quadrangle maps only. In August 1993, the U.S. Geological Survey U.S. Department of Acrimultura's Forest Ser	Provisional-edition maps wer completion of the remaining	e established to expedite large-scale topographic

U.S. Department of Agriculture's Forest Service signed an Interagency Agreement to begin a single-edition joint mapping program. This agreement established the coordination for producing and maintaining single-edition primary series topographic maps for quadrangles containing National Forest System lands. The joint mapping program eliminates duplication of effort by the agencies and results in a more frequent revision cycle for quadrangles containing National Forests. Maps are revised on the basis of jointly developed standards and contain normal features mapped by the USGS, as well as additional features required for efficient management of National Forest System lands. Singleedition maps look slightly different but meet the content, accuracy, and quality criteria of other USGS products.

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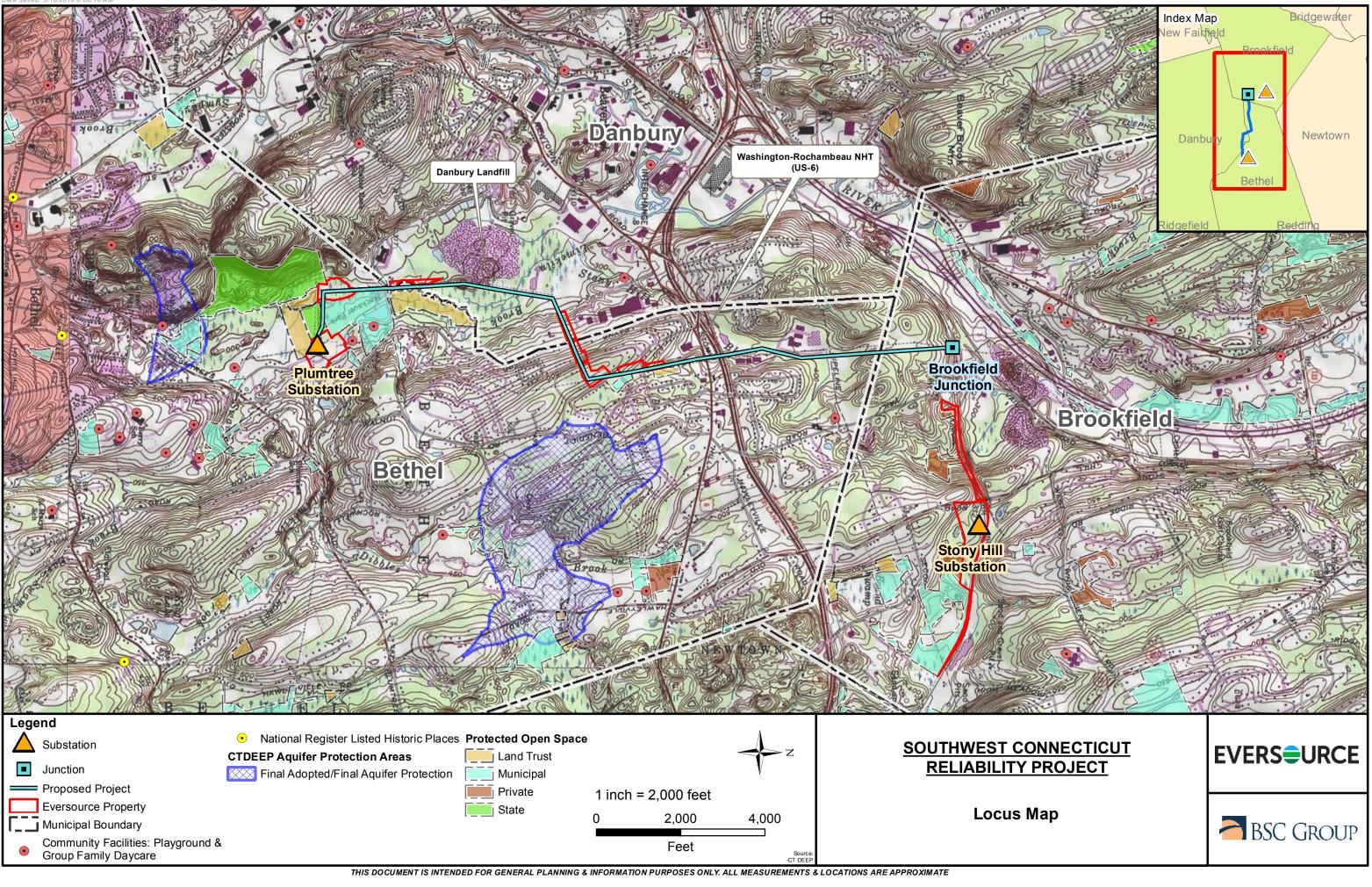
Marsh or swamp	
Submerged marsh or swamp	<u></u>
Wooded marsh or swamp	<u>عنائد منائد</u> به ماند
Submerged wooded marsh or swamp	<u>بلد.</u> مند. مند. مند. مند. مند. مند. مند.
Land subject to inundation	

quadrangles of the conterminous United States. They contain essentially the same level of information as the standard series maps. This series can be easily recognized by the title "Provisional Edition" in the lower right-hand corner.

*** Topographic Bathymetric maps only.

Topographic Map Information

For more information about topographic maps produced by the USGS, please call: 1-888-ASK-USGS or visit us at http://ask.usgs.gov/



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APPENDIX 1B

PROPOSED PROJECT AERIAL MAPS – 400-SCALE

INDEX

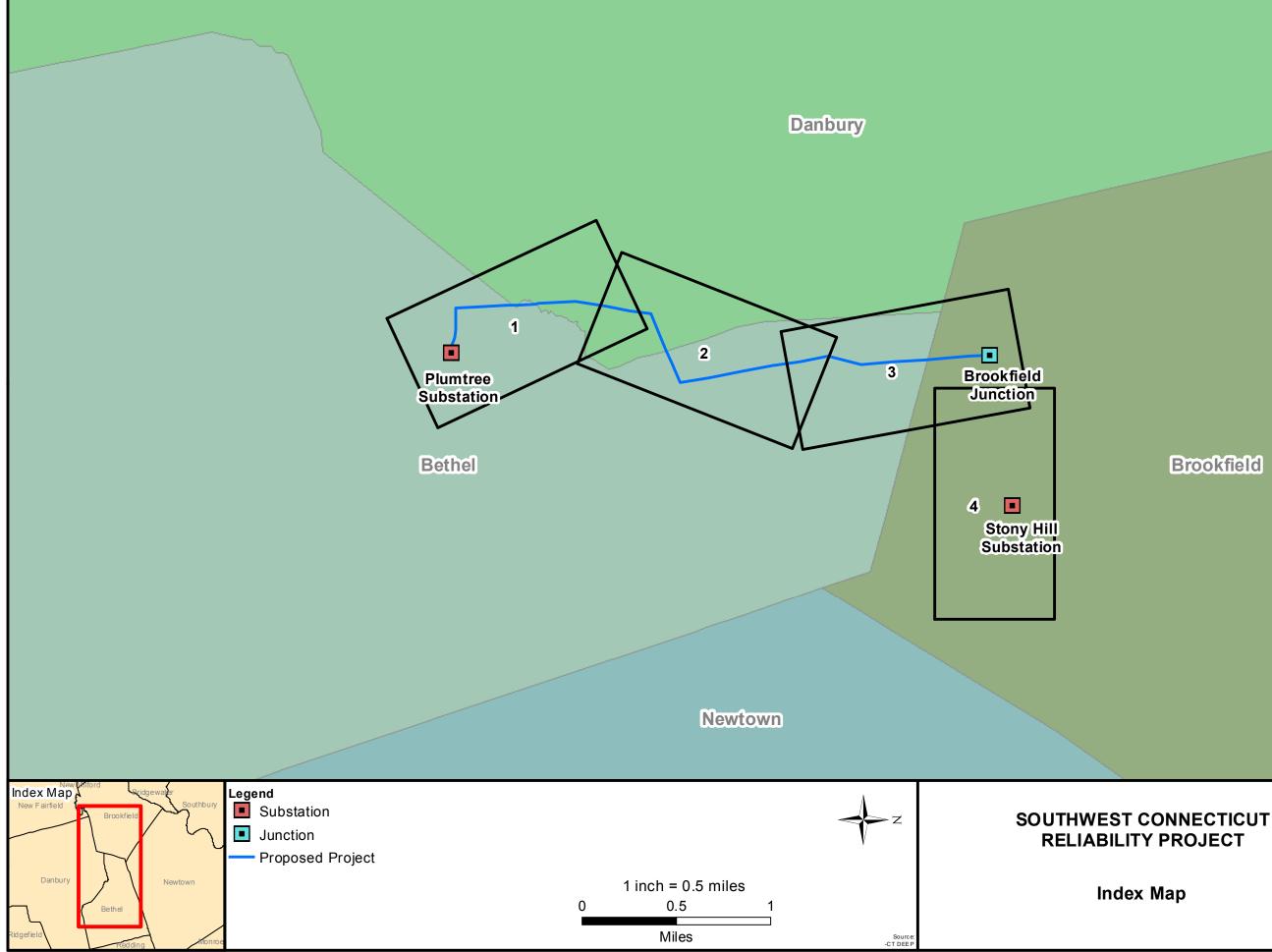
SWCT RELIABILITY PROJECT PROPOSED PROJECT

Mapsheet	Municipalities	Existing 321/1770 Line Structure #s or Facility
1 of 4	Bethel, Danbury	Plumtree Substation, 1000 to 10262
2 of 4	Danbury, Bethel	10261 to 10253
3 of 4	Bethel, Brookfield	10252 to 10246, Brookfield Junction
4 of 4	Brookfield	Stony Hill Substation, 4648A*, 4647A*, and 4647B*

*1770 Line structures only







THIS DOCUMENT IS INTENDED FOR GENERAL PLANNING & INFORMATION PURPOSES ONLY. ALL MEASUREMENTS & LOCATIONS ARE APPROXIMATE

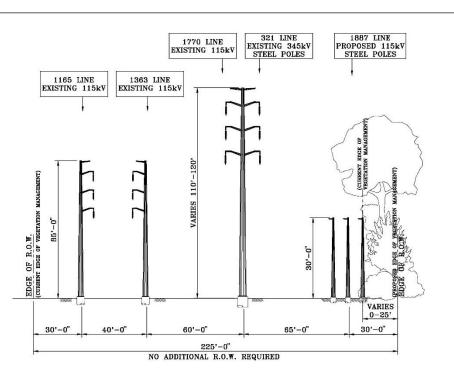
RELIABILITY PROJECT



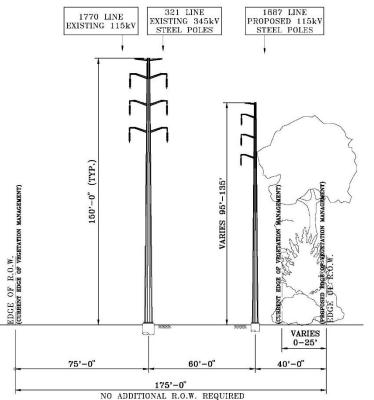
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Brookfield

SWCT RELIABILITY PROJECT **Proposed Project Plumtree Substation to Existing Structure 10262** Walnut Hill Road to North of Shelter Rock Road Town of Bethel and City of Danbury



Note: XS-1 (depicted) applies to the Proposed Route from existing Structure 10269 to 10267.



Area Description

Existing Land Use

- Forested Residential ٠
- Commercial/Industrial (Plumtree Substation, Danbury Landfill, and gravel pit)
- Recreational (Bennet Memorial Park and Meckauer Park)
- CT DEEP Hunting Area and open space (East Swamp Wildlife Management Area)
- Town and Private Open Space (Bethel Land Trust & Town of Bethel)
- Other (Plumtree Substation, parks, and transportation corridors)

Zoning

- Town of Bethel
 - Residential (R-20, R-40)
- City of Danbury
 - Single Family Residence (RA-40)
 - General Industrial (IG-80)
 - Multifamily Residential (RMF-10)

Natural Systems

- Mixed hardwood forest of varying size and age
- State and federal jurisdictional wetlands and watercourses
- East Swamp Brook, Limekiln Brook, and associated tributaries
- 100-year Flood Zone (East Swamp Brook and Limekiln Brook)
- Regulatory Floodway (East Swamp Brook and Limekiln Brook)
- Open water (ponds)
- Natural Diversity Database Area
- Connecticut Critical Habitat (Floodplain Forest)

Visual Character

Mixed residential, recreational. Palustrine Emergent (PEM) and Palustrine Forested (PFO) dominated undeveloped areas. Topography generally flat within the 100-year floodplain and hilly elsewhere.

Land Use

- ٠

Terrain

•

- Wetlands: W1

Right-of-Way Vegetation

- •

Potential Access

- Walnut Hill Road
- •

Existing Right-of-Way Width/ Proposed Expansion Right-of-Way Width

• 175 to 225 feet / 0 feet

Existing Cleared/Maintained Right-of-Way Width/ Proposed Additional Cleared Right-of-Way Width • 175-225 feet / 0 to 50 feet

Road Crossings/ Major Utility Crossings

Shelter Rock Road

Right-Of-Way Description

Upland or wetland forest scattered along margins of ROW Commercial/Industrial (Plumtree Substation)

CT DEEP Hunting Area and open space (East Swamp Wildlife Management Area) portion overlaps with proposed structures 1000-1004

Protected open space (Bethel Land Trust) north of Shelter Rock Road between proposed structures 1008 and 1009

Protected open space/recreational (Town of Bethel) includes an unnamed parcel and the Meckauer Park parcel by proposed structure 1008

Eversource properties surrounding Plumtree Substation, proposed structures 1006-7, and between/adjacent to Shelter Rock Road and proposed structure 1009

Generally flat, riparian floodplain.

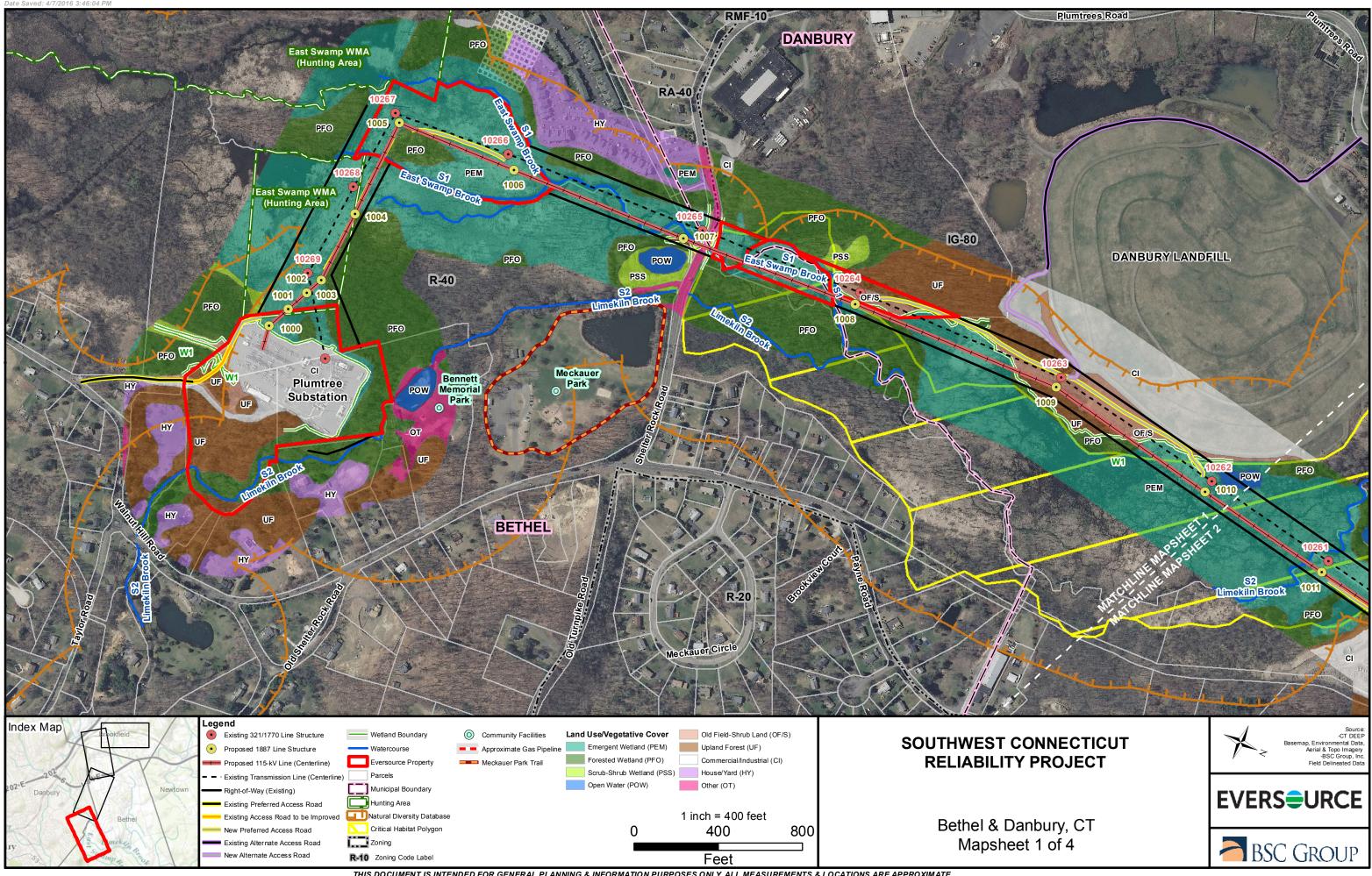
Wetlands, Watercourses and Waterbodies

Wetland Cover Types: PEM, PFO, PSS, POW Streams: S1 (East Swamp Brook), S2 (Limekiln Brook)

Emergent Wetland (PEM) Upland and Wetland Forest Old/Field Shrub Land

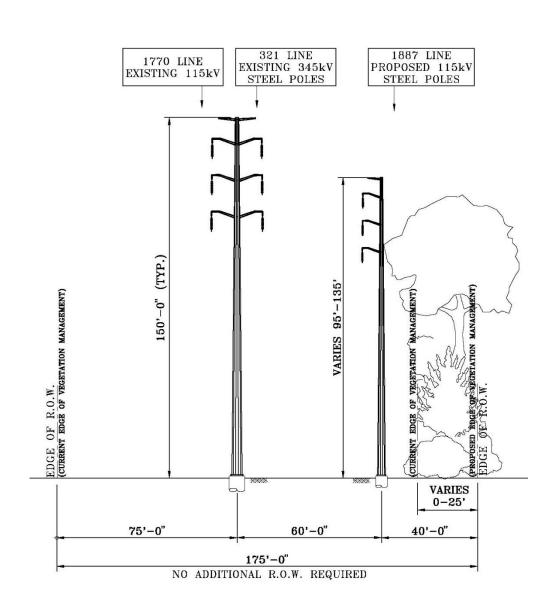
Plumtree Substation and proposed structures 1000-1007 can be accessed from Proposed structure 1008 can be accessed from Shelter Rock Road Proposed structures 1009-11 can be accessed from the Danbury Landfill (Plumtrees Road) Proposed structure 1012 can be accessed from Old Sherman Turnpike

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SWCT RELIABILITY PROJECT **Proposed Project** Existing Structure 10261 to 10253 Southeast of Payne Road to North of Yankee Expressway (I-84) **City of Danbury and Town of Bethel**



Note: XS-2 (depicted) applies to the Proposed Route from existing Structure 10266 to 10247.

Area Description Existing Land Use

Forest •

- Residential ٠
- Commercial/Industrial (Danbury Landfill, gravel pit, various commercial facilities, and Berkshire Corporate Park)
- Town and Private Open Space (Town of Bethel, unnamed; Bethel Land Trust, Sky Edge Preserve)

Zoning

- Town of Bethel
 - Residential (R-20, R-30, R-80)
 - Industrial Park (IP)
 - Route 6 Business Zone (RT6)
- City of Danbury
 - General Industrial (IG-80)
 - General Commercial (CG-20)

Natural Systems

- Mixed hardwood forests of varying size and age
- State/federal jurisdictional wetlands and watercourses
- Limekiln Brook and associated tributaries
- 100-year Flood Zone (Limekiln Brook)
- Regulatory Floodway (Limekiln Brook)
- Open water (ponds)
- Natural Diversity Database Area
- Connecticut Critical Habitat (Floodplain Forest)

Visual Character

- Flat, floodplain south of proposed structure 1013; Flat, managed lawns north of I-84; Hilly topography from Old Sherman Turnpike to Stony Hill Road (US-6)
- Dense rural from Payne Road to Stony Hill Road (US-6); Urban development between Old Sherman Turnpike to Payne Road and areas north of Sky Edge Drive.

Visual Character

Washington-Rochambeau National Historic Trail (NHT)

Land Use

- Residential
- structure 1018.

Terrain

Right-of-Way Vegetation

- •

Potential Access

Width

• 150 to 175 feet / 0 feet

Existing Cleared/Maintained Right-of-Way Width/ Proposed Additional Cleared Right-of-Way Width • 150-175 feet / 0 to 100 feet

Road Crossings/ Major Utility Crossings

Right-Of-Way Description

Upland or wetland forest along margins of ROW

Town and Private Open Space (Town of Bethel, unnamed)

Commercial/Industrial (gravel pit, Berkshire Cooperate Park, Target)

Eversource properties present between Old Sherman Turnpike to proposed

Flat, floodplain south of proposed structure 1013; Flat, managed lawns north of I-84; Hilly topography from Old Sherman Turnpike to Stony Hill Road (US-6)

Wetlands, Watercourses and Waterbodies

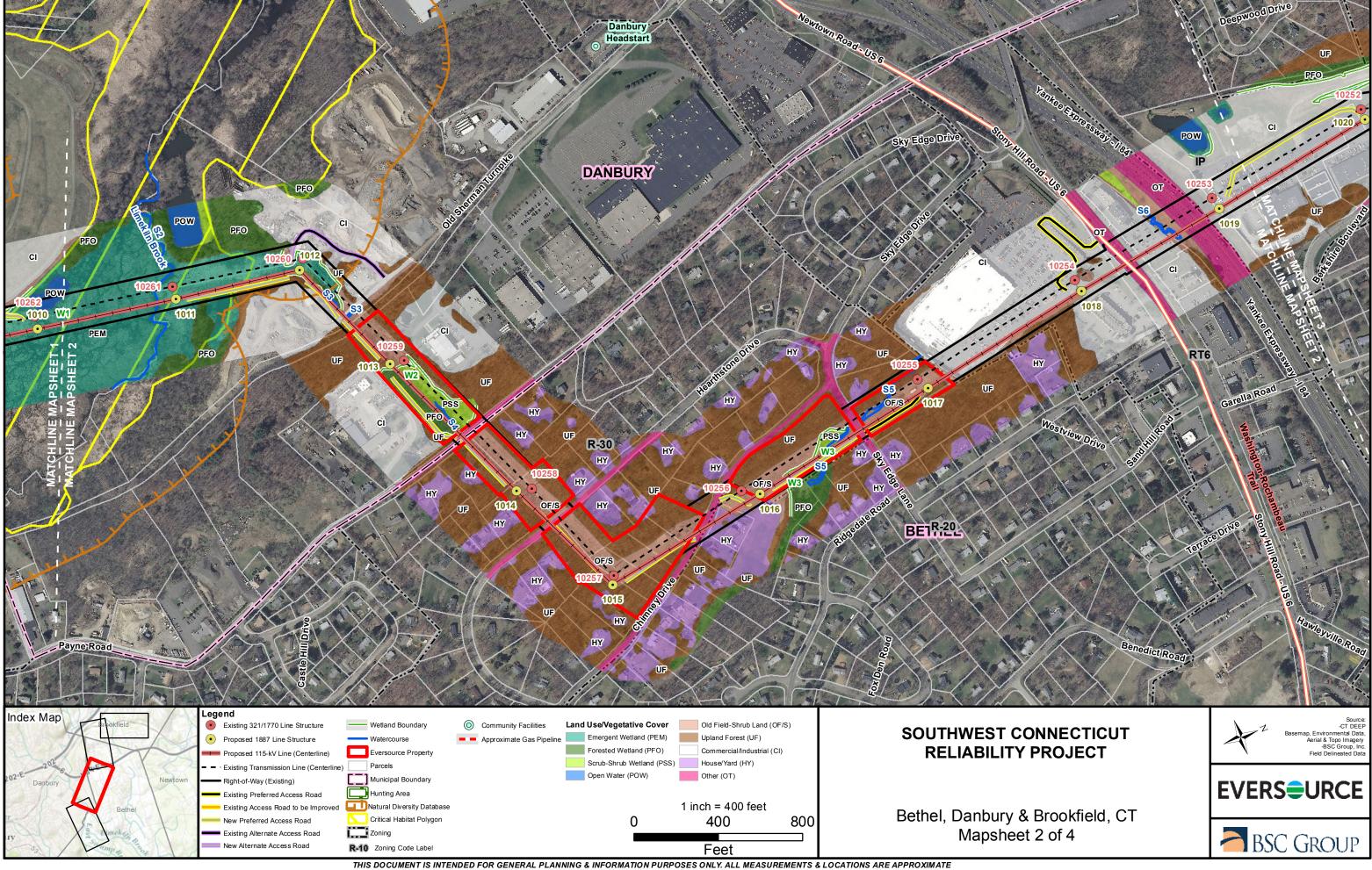
Wetlands: W1, W2, W3 Wetland Cover Types: PEM, PSS, PFO Streams: S2 (Limekiln Brook), S3, S4, S5, S6

Upland and Wetland Forest Old Field/Shrub Land Scrub-Shrub Wetland (PSS) Emergent Wetland (PEM)

Proposed structures1011 can be accessed from the Plumtrees Rd Proposed structures 1012-14 can be accessed from Old Sherman Tpk Proposed structures 1014-15 can be access from Payne Rd Proposed structures 1015-16 can be accessed from Hearthstone Dr Proposed structures 1016-17 can be access from Chimney Dr Proposed structure 1018 can be accessed from Sky Edge Dr Proposed structure 1019 can be accessed from Stony Hill Rd (US-6) Proposed structure 1020 can be accessed from Berkshire Blvd

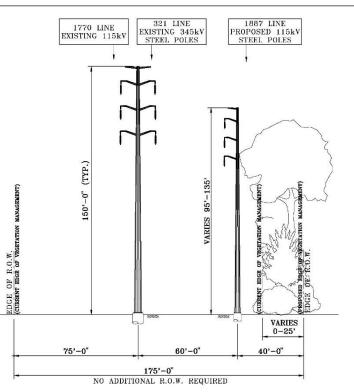
Existing Right-of-Way Width/ Proposed Expansion Right-of-Way

 Old Sherman Turnpike, Payne Road, Hearthstone Drive, Chimney Drive, Sky Edge Drive, Stony Hill Road (US-6), and Yankee Expressway (I-84)

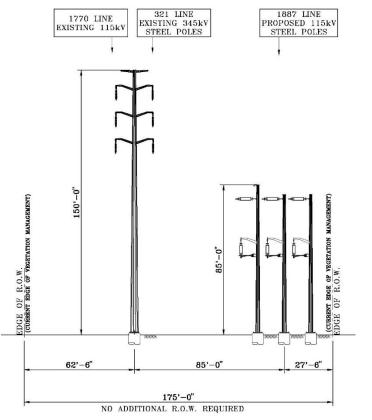


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SWCT RELIABILITY PROJECT **Proposed Project** Existing Structure 10252 to 10246 (Brookfield Junction) Yankee Expressway (I-84) to North of Park Ridge Road **Town of Bethel and Brookfield**







Note: XS-3 (depicted) applies to the Proposed Route at Brookfield Junction (existing Structure 10246).

Area Description

Existing Land Use

- Commercial/Industrial (Berkshire Corporate Park)
- Residential •
- Forest •

Zoning

- Town of Bethel
 - Industrial Park (IP)
 - Route 6 Business Zone (RT6)
 - Residential (R-20)
- City of Danbury
 - Light Industrial (IL-40)
- Town of Brookfield
 - Industrial Limited/Commercial Southeast (ILC-80SE)
 - Residential (R-40)
 - Limited Industrial (IL-80)

Natural Systems

- Mixed hardwood forests of varying size and age
- State/federal jurisdictional wetlands and watercourses

Visual Character

Dense commercial and industrial development. Flat to rolling topography north of I-84

Right-Of-Way Description

Land Use

Terrain

•

Wetlands, Watercourses and Waterbodies

- Wetlands: W4, W5
- Streams: S6, S7

Right-of-Way Vegetation

Potential Access

- •

Existing Right-of-Way Width/ Proposed Expansion Right-of-Way Width

• 175 feet / 0 feet

Existing Cleared/Maintained Right-of-Way Width/ Proposed Additional Cleared Right-of-Way Width

• 175 ft / 0 to 50 feet

Road Crossings/ Major Utility Crossings

- Ridge Road

Commercial/Industrial (Berkshire Corporate Park) Upland or wetland forest

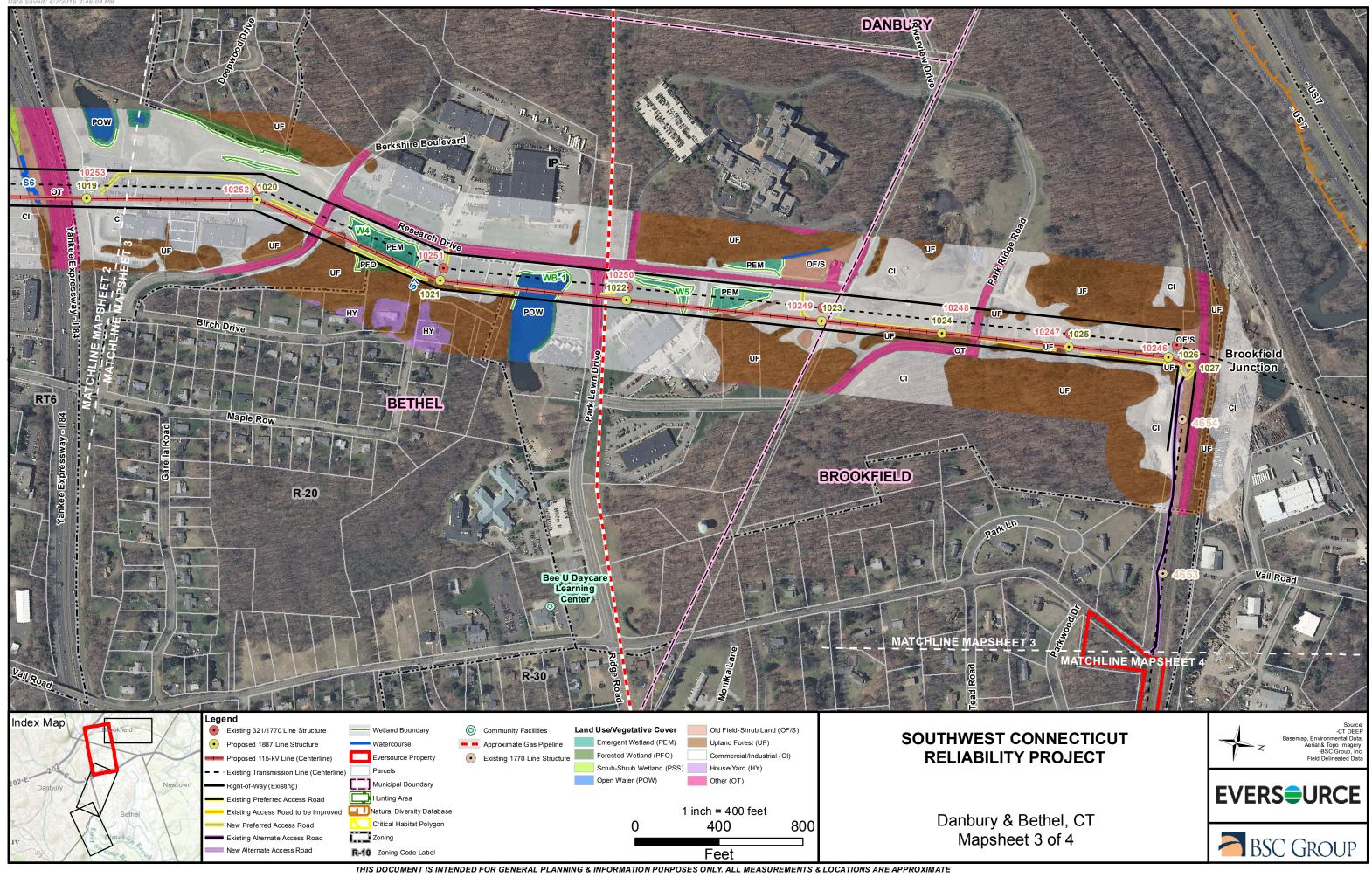
Flat, maintained lawns and parking lots. Slight, rolling topography present north of the Bethel Line

Wetland Cover Types: PEM, POW Waterbodies: WB-1 (pond)

Maintained lawn or parking lot/driveways **Emergent Wetlands (PEM)** Upland and Wetland Forest

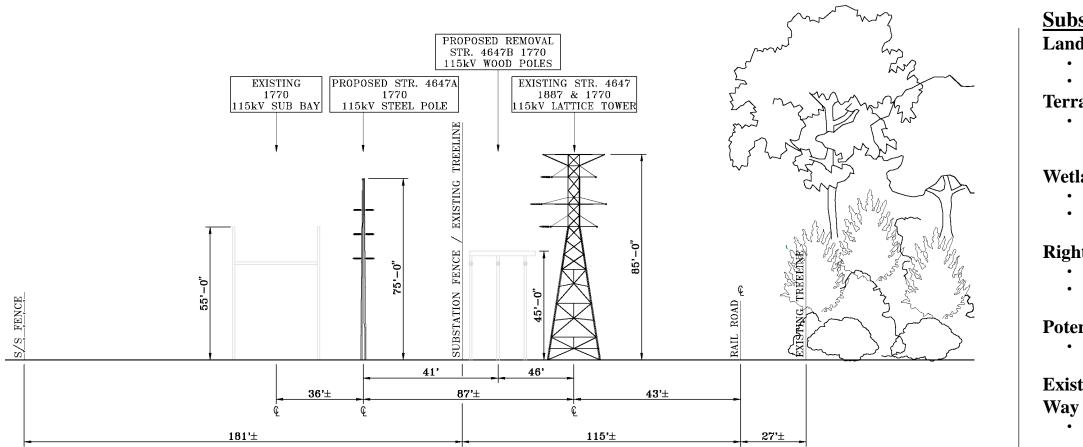
Proposed structures 1020-1021 can be accessed from Berkshire Boulevard Proposed structure 1022 can be accessed from Research Drive Proposed structures 1024-1027 can be accessed from Research Drive, Park Ridge Road, or Vail Road • Proposed structure 1023 can be accessed from Park Lawn Drive

Yankee Expressway (I-84), Berkshire Boulevard, Research Drive, Park Gas pipeline (Park Lawn Drive)



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SWCT RELIABILITY PROJECT Stony Hill Substation and Existing Structures 4648A, 4647A, and 4647B **Stony Hill Road East to Stony Hill Substation** Town of Brookfield



Note: XS-4 (depicted) applies to 1770 Line Structures 4647, 4647A, and 4647B located to the east of Stony Hill Substation, facing northwest.

Area Description

Existing Land Use

- Commercial Industrial (Stony Hill Substation) ٠
- Residential
- Forest •

Zoning

- Town of Brookfield
 - Residential (R-40, R-80)
 - Limited Industrial (IL-80)
 - Restricted Industrial/Commercial (IRC-80/40)

Natural Systems

- Mixed hardwood forest of varying size and age
- State/federal jurisdictional wetlands and watercourses
- Brookfield Aquifer Protection District (not shown) •
- 500-year Floodplain

Visual Character

Residential, rolling forested topography

Substation Area Description

Land Use

Terrain

Wetlands, Watercourses and Waterbodies

- Wetlands: W6, W7

Right-of-Way and Substation Area Vegetation

- Old/Field Shrub

Potential Access

• Stony Hill Substation can be accessed from Stony Hill Road

Way Width • n/a

• n/a

Commercial/Industrial (Stony Hill Substation) • Upland or wetland forest

Rolling topography, heavily disturbed surface soils from commercial/industrial use

Wetland Cover Types: PSS, PFO

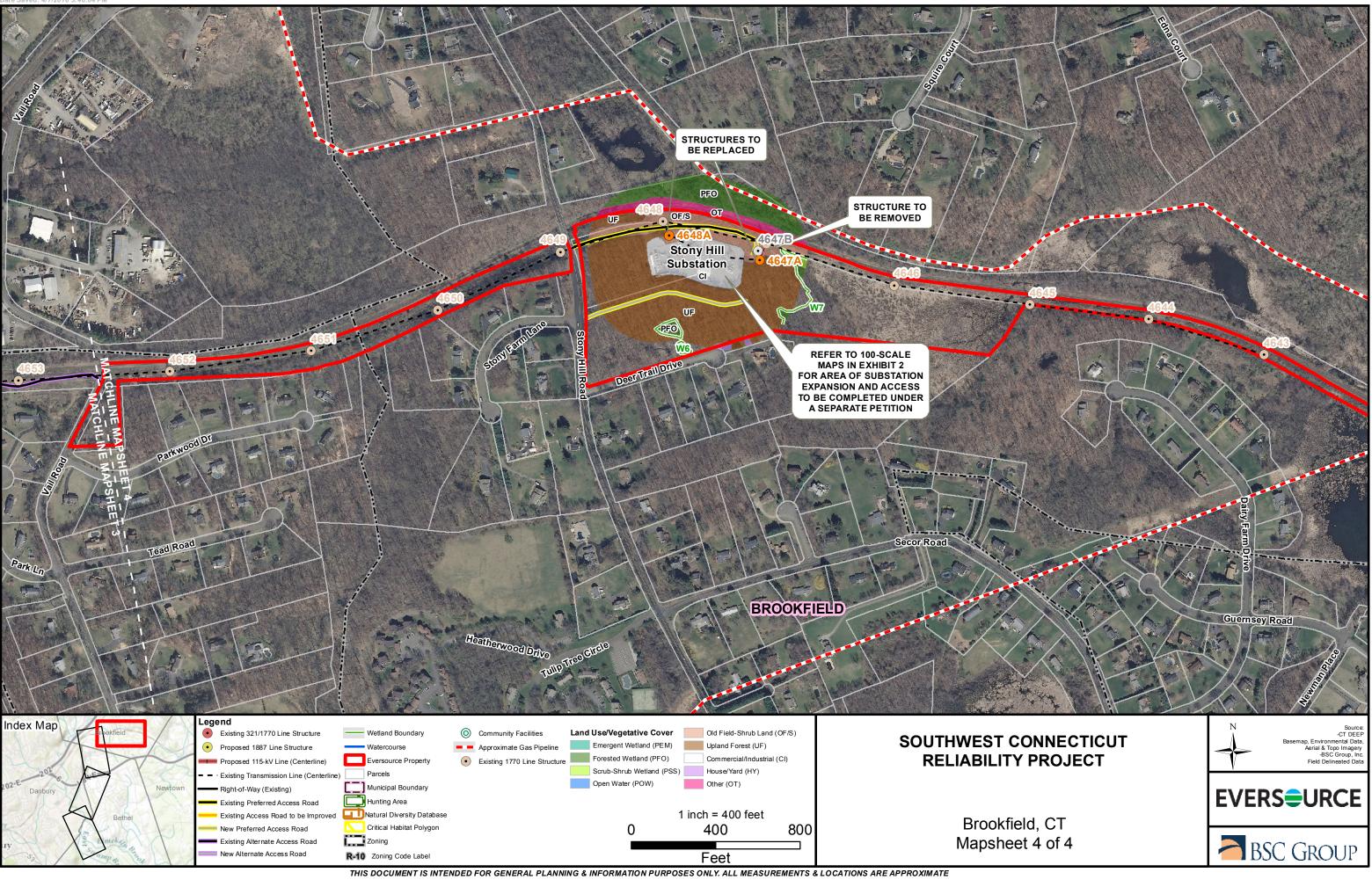
Upland and Wetland Forest

Existing Right-of-Way Width/ Proposed Expansion Right-of-

Existing Cleared/Maintained Right-of-Way Width/ Proposed Additional Cleared Right-of-Way Width

Road Crossings/ Major Utility Crossings

None, all work is present to the east of Stony Hill Road.

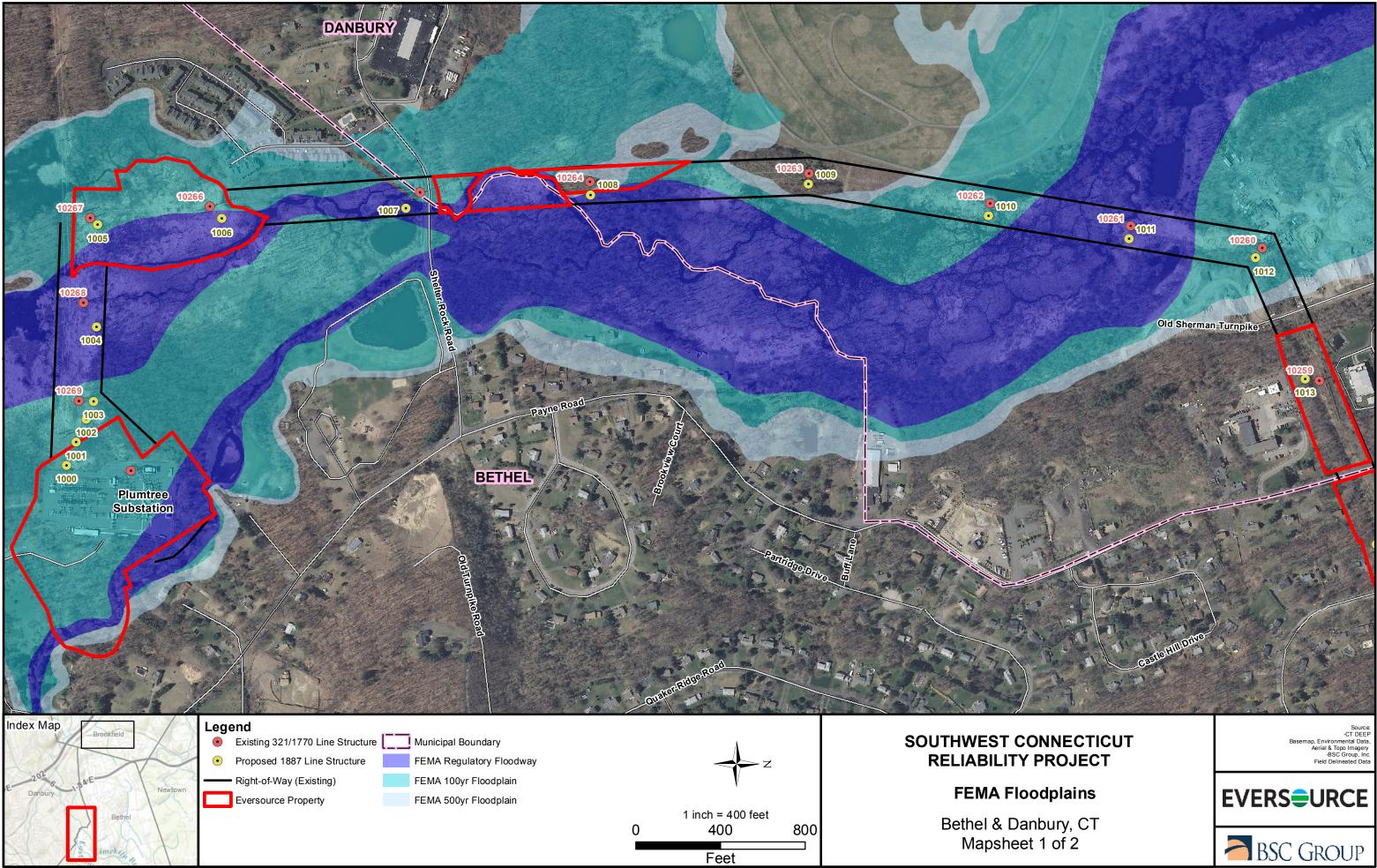


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APPENDIX 1C

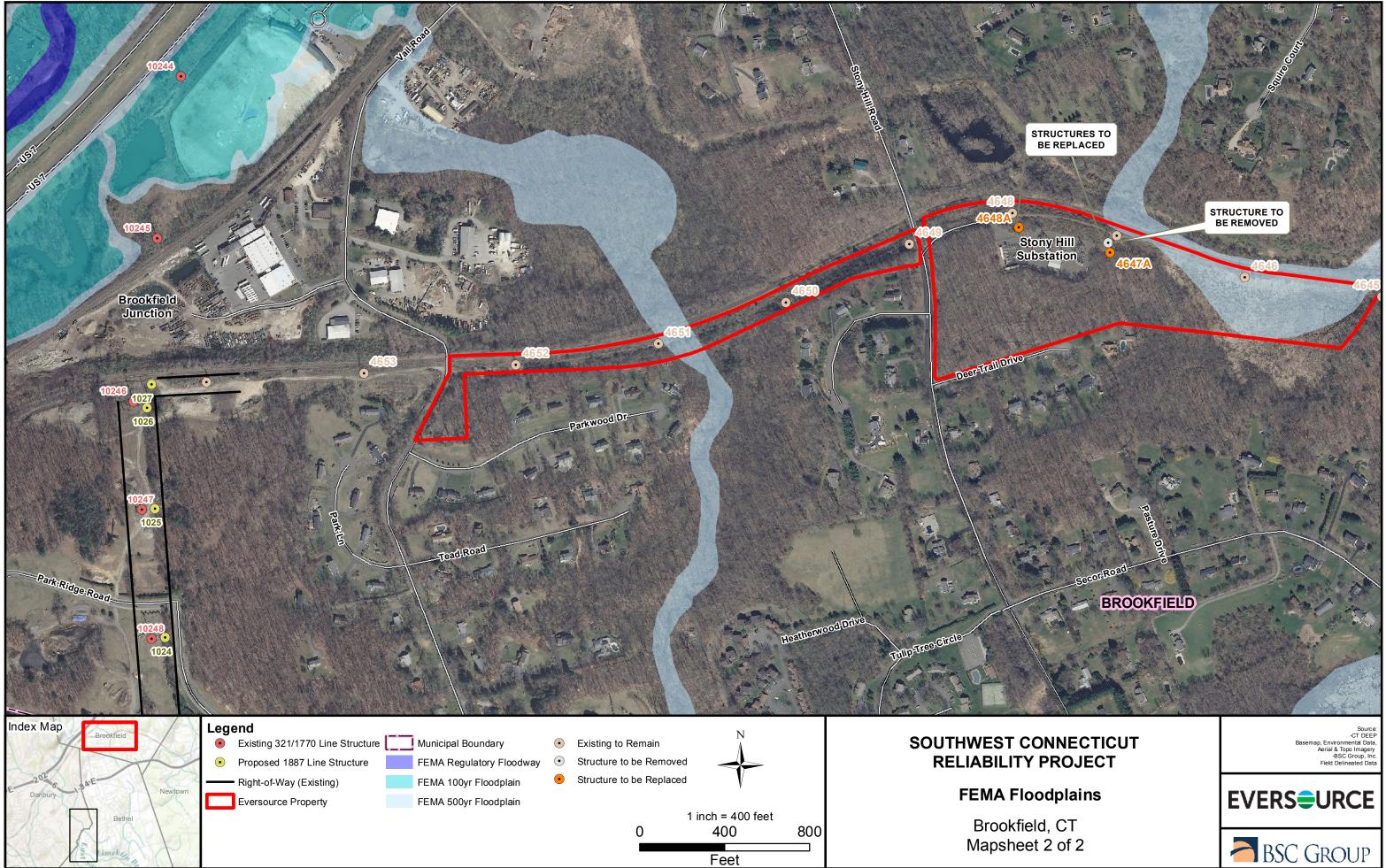
PROPOSED PROJECT AERIAL MAPS – FEMA FLOODPLAINS – 400-SCALE





THIS DOCUMENT IS INTENDED FOR GENERAL PLANNING & INFORMATION PURPOSES ONLY. ALL MEASUREMENTS & LOCATIONS ARE APPROXIMATE

Feet



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THIS DOCUMENT IS INTENDED FOR GENERAL PLANNING & INFORMATION PURPOSES ONLY. ALL MEASUREMENTS & LOCATIONS ARE APPROXIMATE

EXHIBIT 2: 100-SCALE MAPS: PROPOSED PROJECT

APPENDIX 2A: PROJECT OVERVIEW MAP – 2,000-SCALE

APPENDIX 2B: PROPOSED PROJECT AERIAL MAPS – 100-SCALE

INTRODUCTION

This exhibit provides aerial photography-based maps, at a scale of 1"=100', that illustrate the 3.4-Mile Proposed Route that The Connecticut Light and Power Company doing business as Eversource Energy (Eversource) has identified for the new 115-kV transmission line and the modifications to Stony Hill Substation and vicinity that comprise the SWCT Reliability Project (the "Project").¹ The maps identify both environmental features along the Proposed Route and Project design information, as follows:

Project Design Information

- Right-of-Way (ROW) boundaries
- Property lines, including Eversource-owned lands
- Existing tree line and proposed limits of vegetation removal²
- Existing transmission line centerline and structure locations (by number)
- Proposed 115-kV transmission line centerline and structure locations (by number)³ ٠
- Work pad locations⁴
- Existing and new (proposed) access roads⁴
- Existing culverts and proposed watercourse crossings ٠
- 10-foot topographic contours

Environmental Features

- Land use and vegetation type (as illustrated by the aerial photographs)
- Municipal boundaries
- Wetlands, state and federal jurisdictional areas (by alpha-numeric identifier)⁵
- Watercourses and water bodies (by alpha-numeric identifier)
- FEMA 500- and 100-year floodplains and FEMA Regulatory Floodway⁶ ٠
- Public recreational areas (including parks, trails, and CTDEEP hunting areas)
- Zoning designations
- Public Roads

Eversource's Proposed Route, along which the new 115-kV transmission line would be constructed and operated in an overhead configuration, would extend between Eversource's existing Plumtree Substation in the Town of Bethel and Brookfield Junction in the Town of Brookfield. The entire Proposed Route would be accommodated within an existing Eversource ROW. In conjunction with the development of the new 115-kV transmission line, Eversource would modify the existing Stony Hill Substation in the Town of Brookfield. Refer to Volume 1 for Project details.

The Index provides a key to the Project maps by municipality.

Aerial photographs were derived from 2012 aerial imagery; environmental and land use features are mapped based on the most recently available Geographic Information System (GIS) data obtained from federal and state agencies (such as the Connecticut Department of Energy and Environmental Protection (CT DEEP) and the Federal Emergency Management Agency (FEMA), as well as the results of environmental and engineering field surveys. Location information for ROW / transmission lines were obtained from Eversource.

² The proposed limits of vegetation removal depicted on the maps illustrate the general areas along the new 115-kV transmission line where vegetation must be cleared for construction and/or during the life of the Project, and managed for low-growing species compatible with overhead transmission line operation. Such vegetation management is required, pursuant to the mandatory North American Electric Reliability Corporation standards, to maintain appropriate clearance between tall-growing vegetation and the new 115-kV transmission line conductors. During construction, additional vegetation clearing outside the removal limits depicted on the maps will be required. For example, vegetation will have to be cleared along construction access roads that extends outside the limits of vegetation removal limits for conductor clearance. Danger trees located outside the managed ROW limits also will have to be removed.

Eversource has sited the proposed new 115-kV structures based on current design information, as identified on the maps. During final Project design, the structure locations shown may shift slightly.

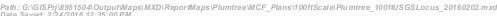
Work pads depicted on the maps illustrate the approximate work area necessary to facilitate construction for each proposed new structure or pulling site. All work areas and access shown in wetlands will be temporary.

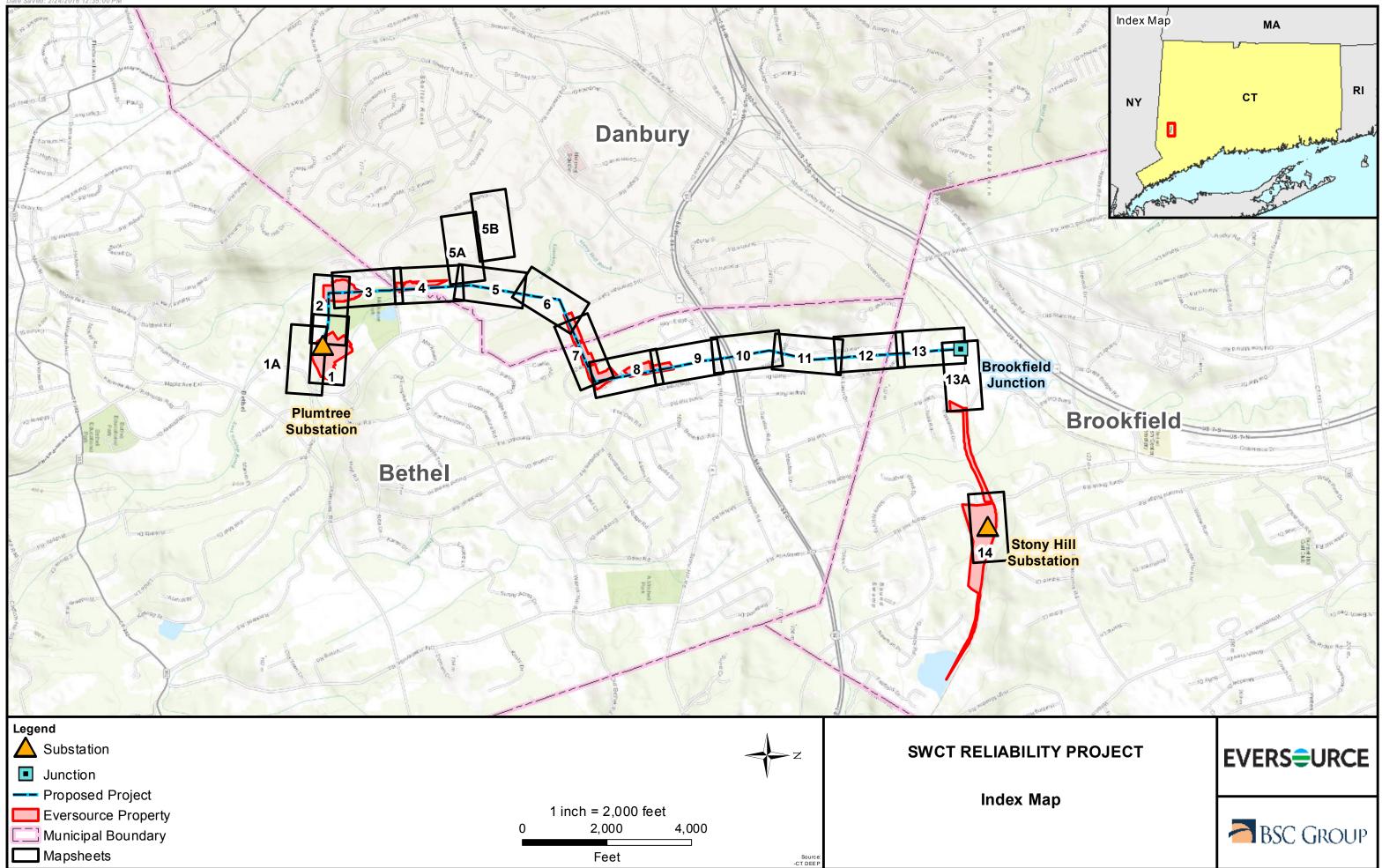
No vernal pools were identified along the Proposed Route or in the vicinity of Stony Hill Substation.

The outlines of FEMA mapped 500- and 100- year floodplains and the regulatory floodway are depicted on the maps. These layers are also represented in Appendix 1C in Exhibit 1 as a standalone on 1"=400' scale maps to better illustrate the locations of existing and proposed transmission line structures and proposed work in or near these resource areas.

APPENDIX 2A

PROJECT OVERVIEW MAP – 2,000-SCALE





APPENDIX 2B

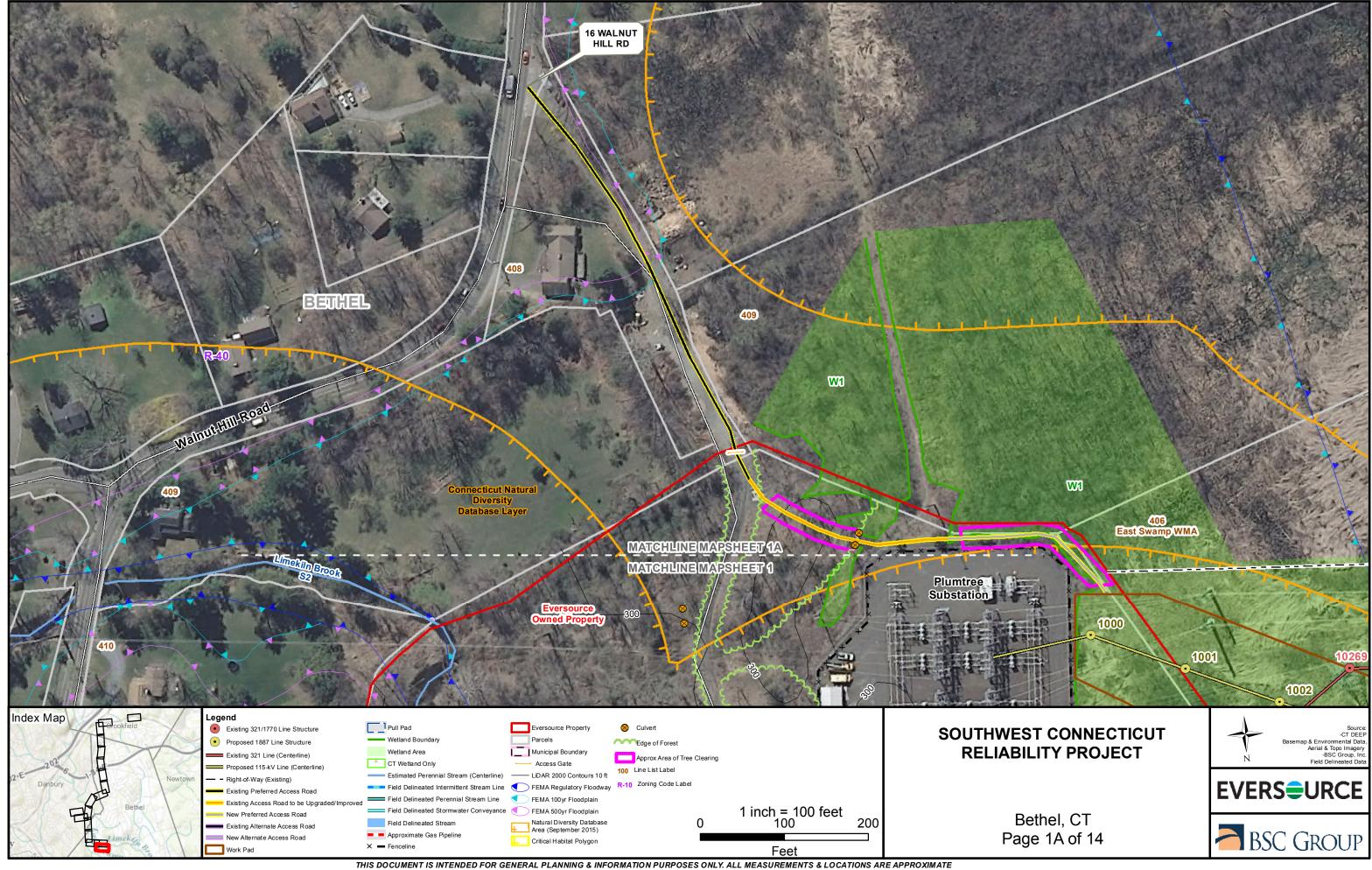
PROPOSED PROJECT AERIAL MAPS – 100-SCALE

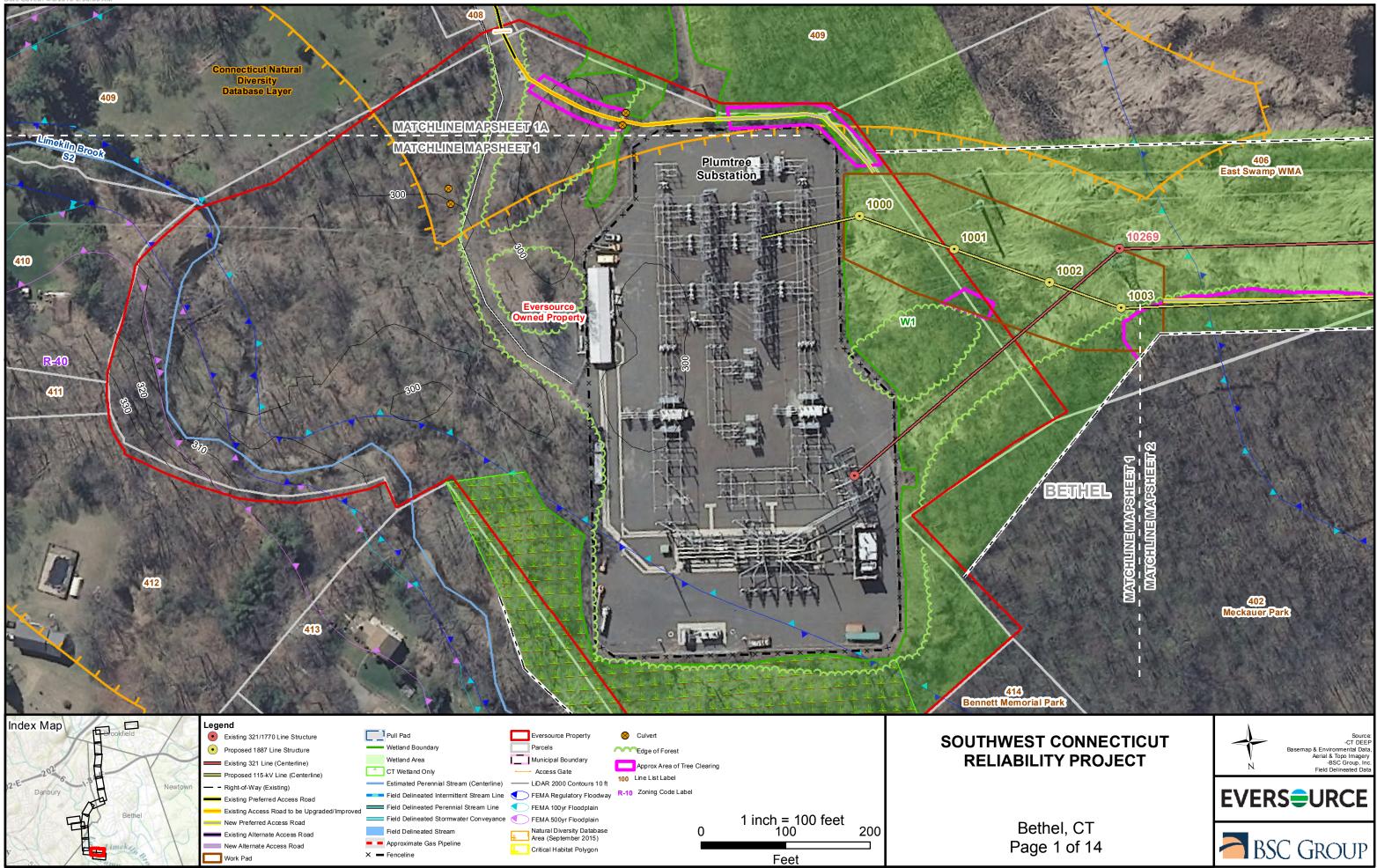
Index

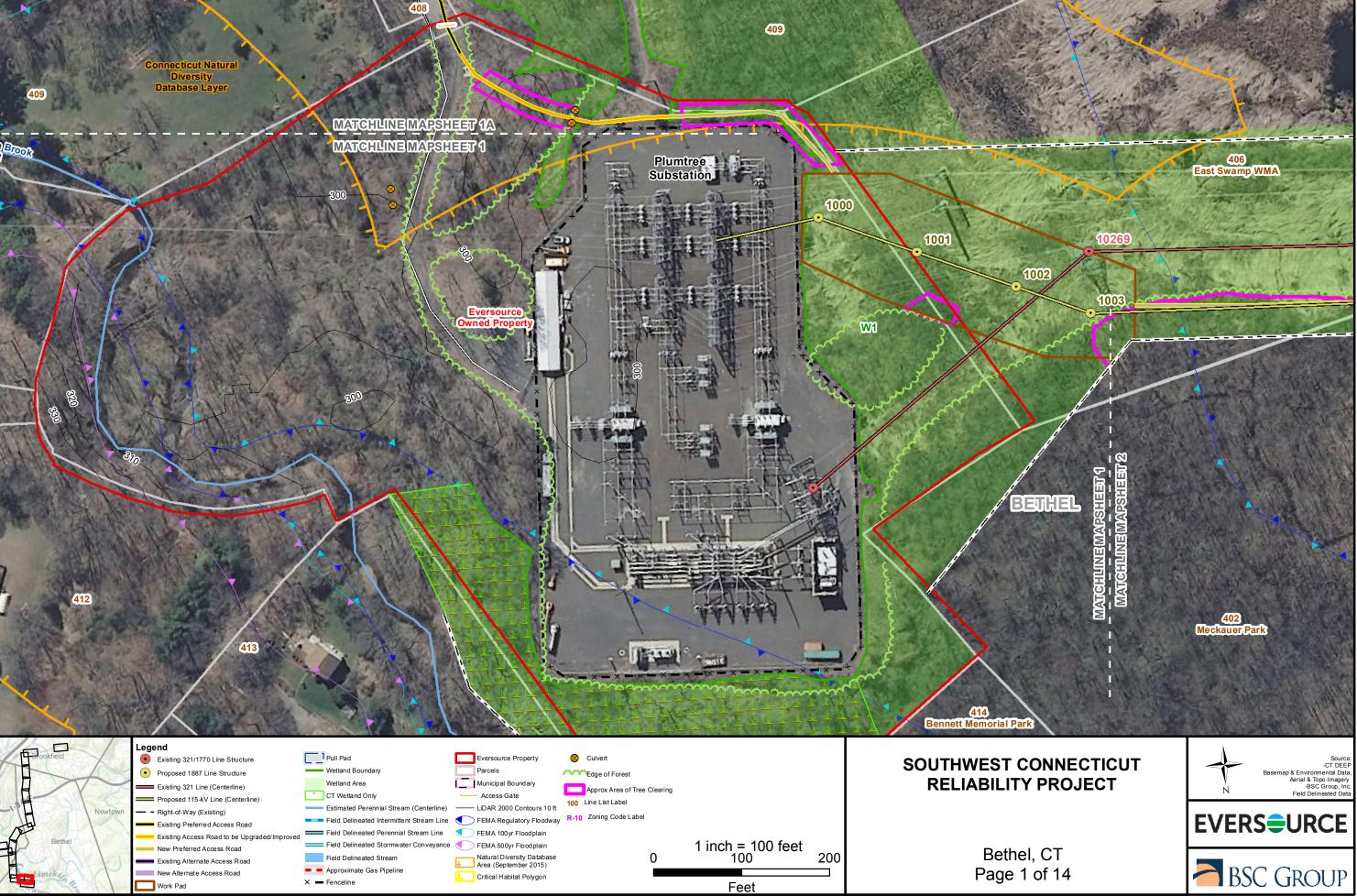
Mapsheet	Municipalities	Existing 321/1770 Line Structure #s or FacilityWalnut Hill Road to Plumtree Substation				
1A of 14	Bethel					
1 of 14	Bethel	Plumtree Substation, 1000 to 10269				
2 of 14	Bethel	10268 to 10267				
3 of 14	Bethel, Danbury	10266 to 10265				
4 of 14	Bethel, Danbury	10264				
5 of 14	Danbury	10263 to 10262				
5A of 14	Danbury	Danbury Landfill (access from Plumtrees Road to 10263)				
5B of 14	Danbury	Plumtrees Road to Danbury Landfill (access from Plumtrees Road to 10263)				
6 of 14	Danbury	10261 to 10260				
7 of 14	Danbury, Bethel	10259 to 10257				
8 of 14	Bethel	10256				
9 of 14	Bethel	10255 to 10254				
10 of 14	Bethel	10253 to 10252				
11 of 14	Bethel	10251				
12 of 14	Bethel, Brookfield	10250 to 10249				
13 of 14	Brookfield	10248 to 10246				
13A of 14	Brookfield	Vale Road (access to 10246)				
14	Brookfield	Stony Hill Substation, 4648A*, 4647A*, and 4647B*				

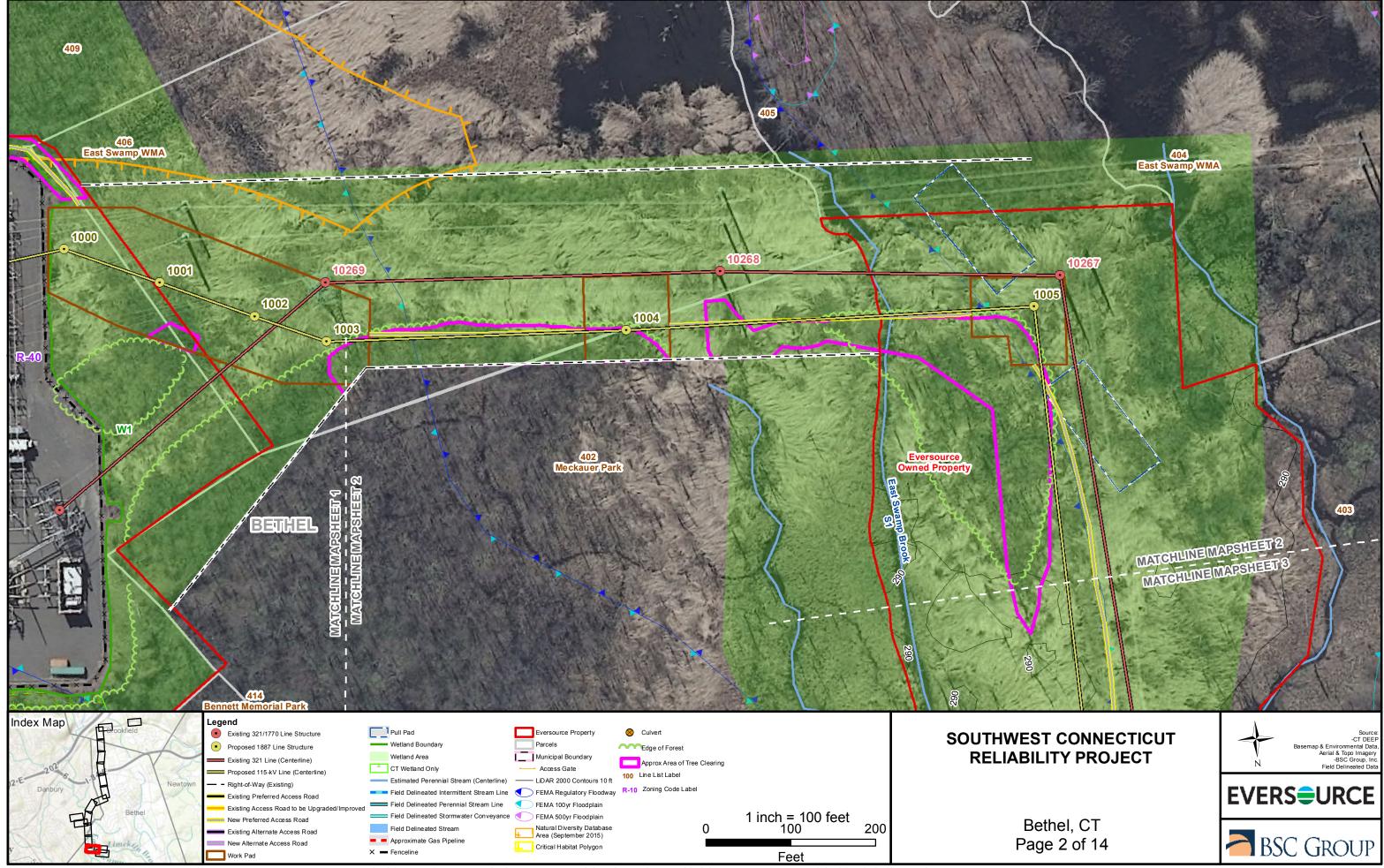
*1770 Line structures only

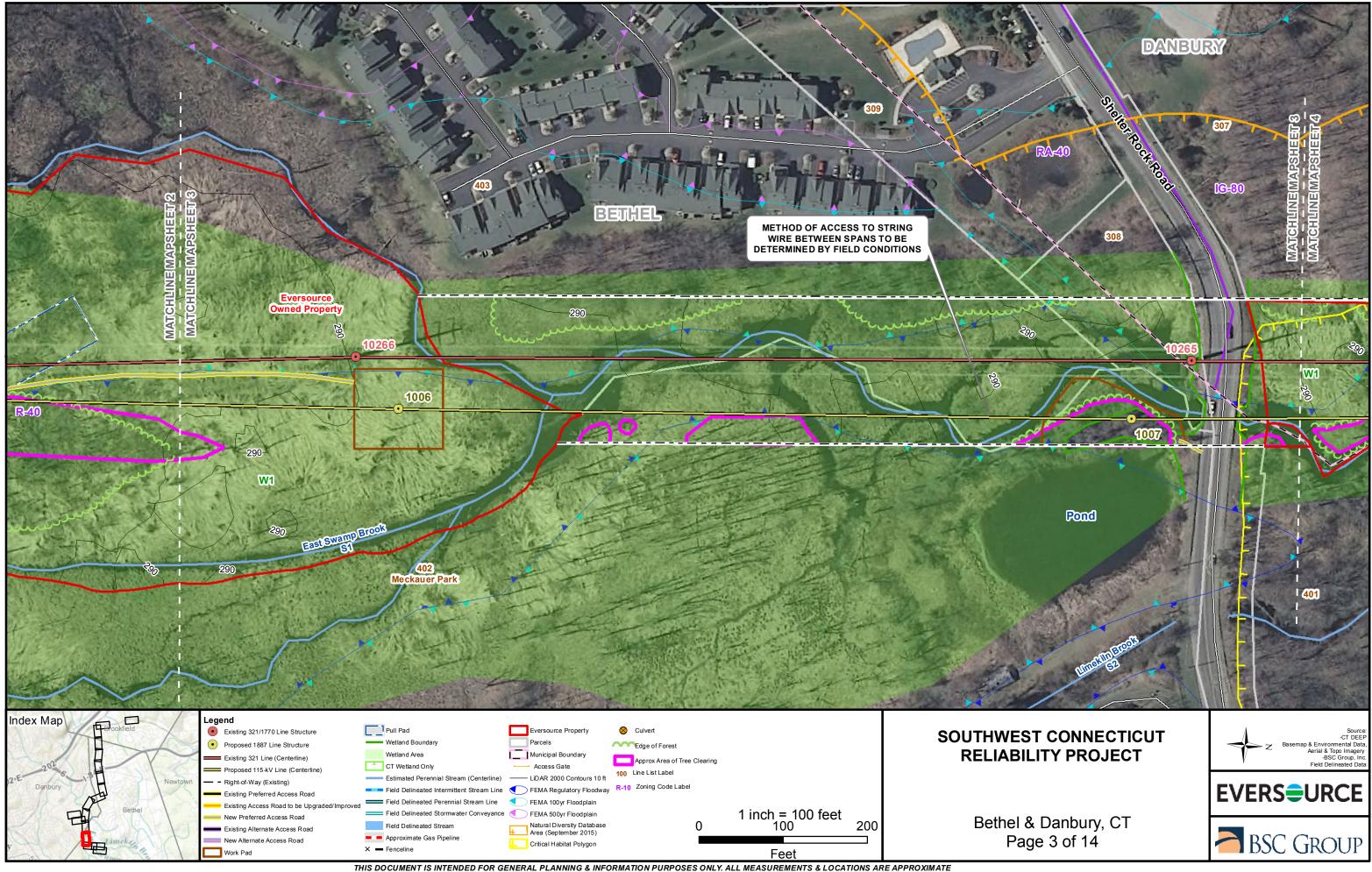


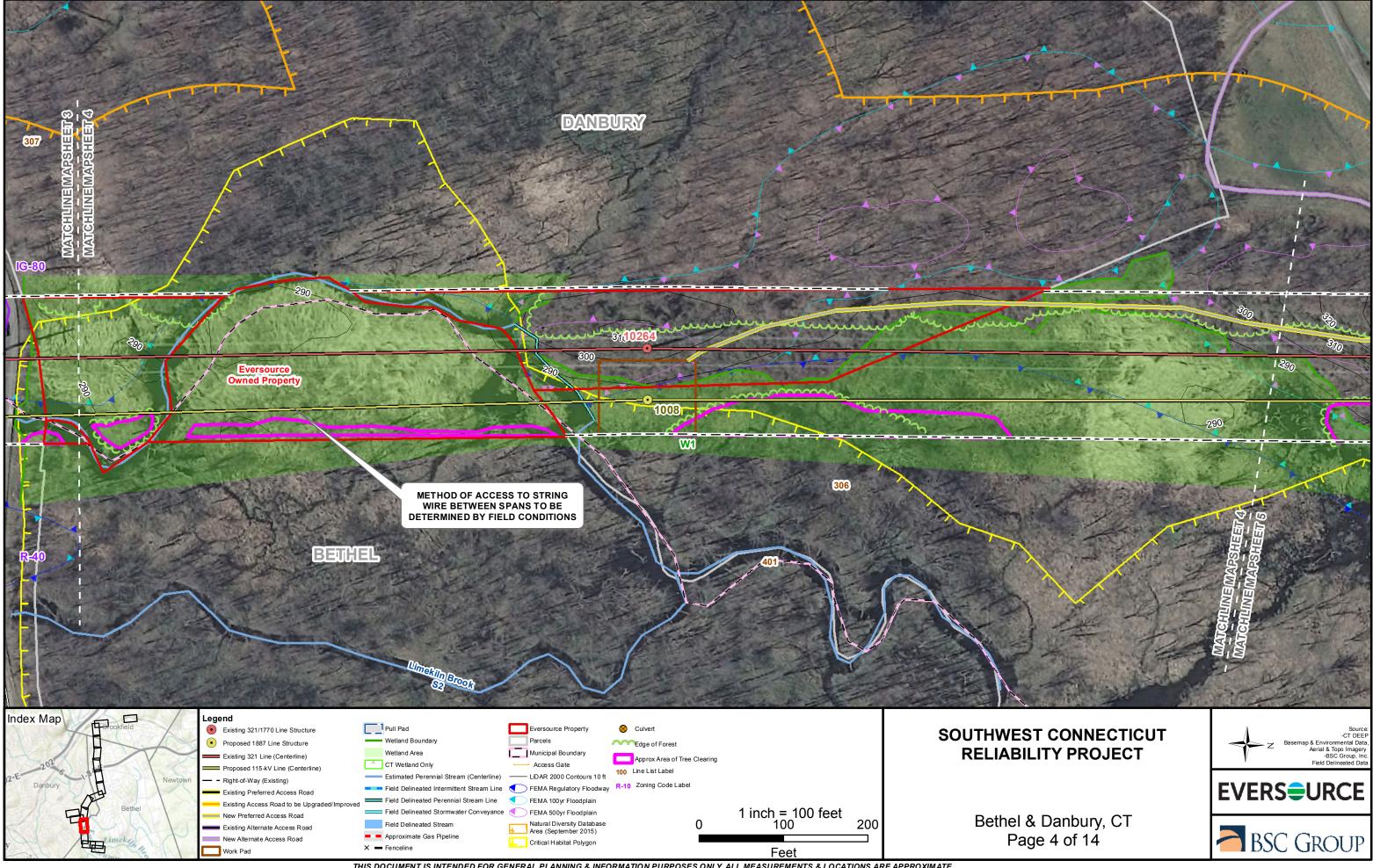


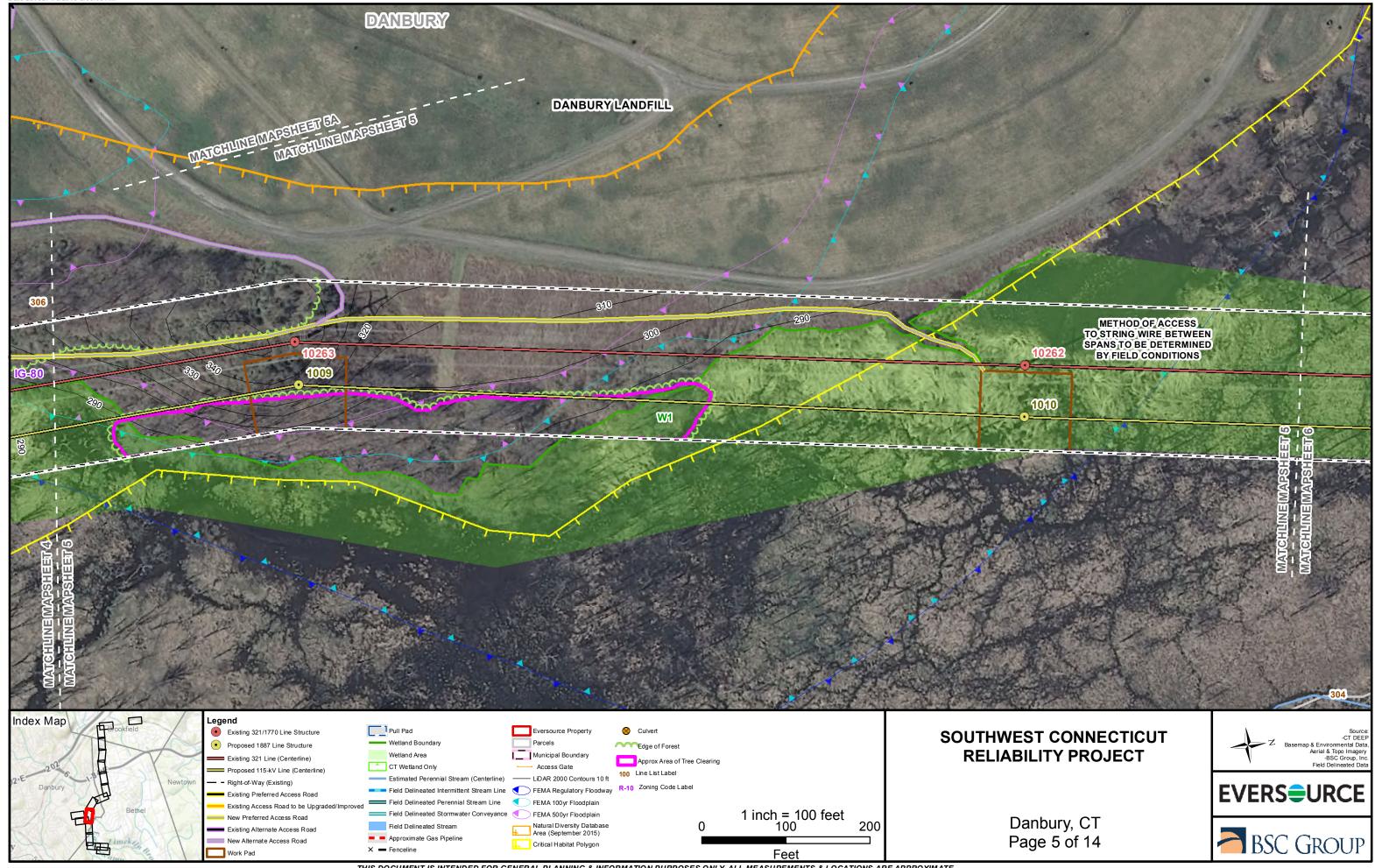




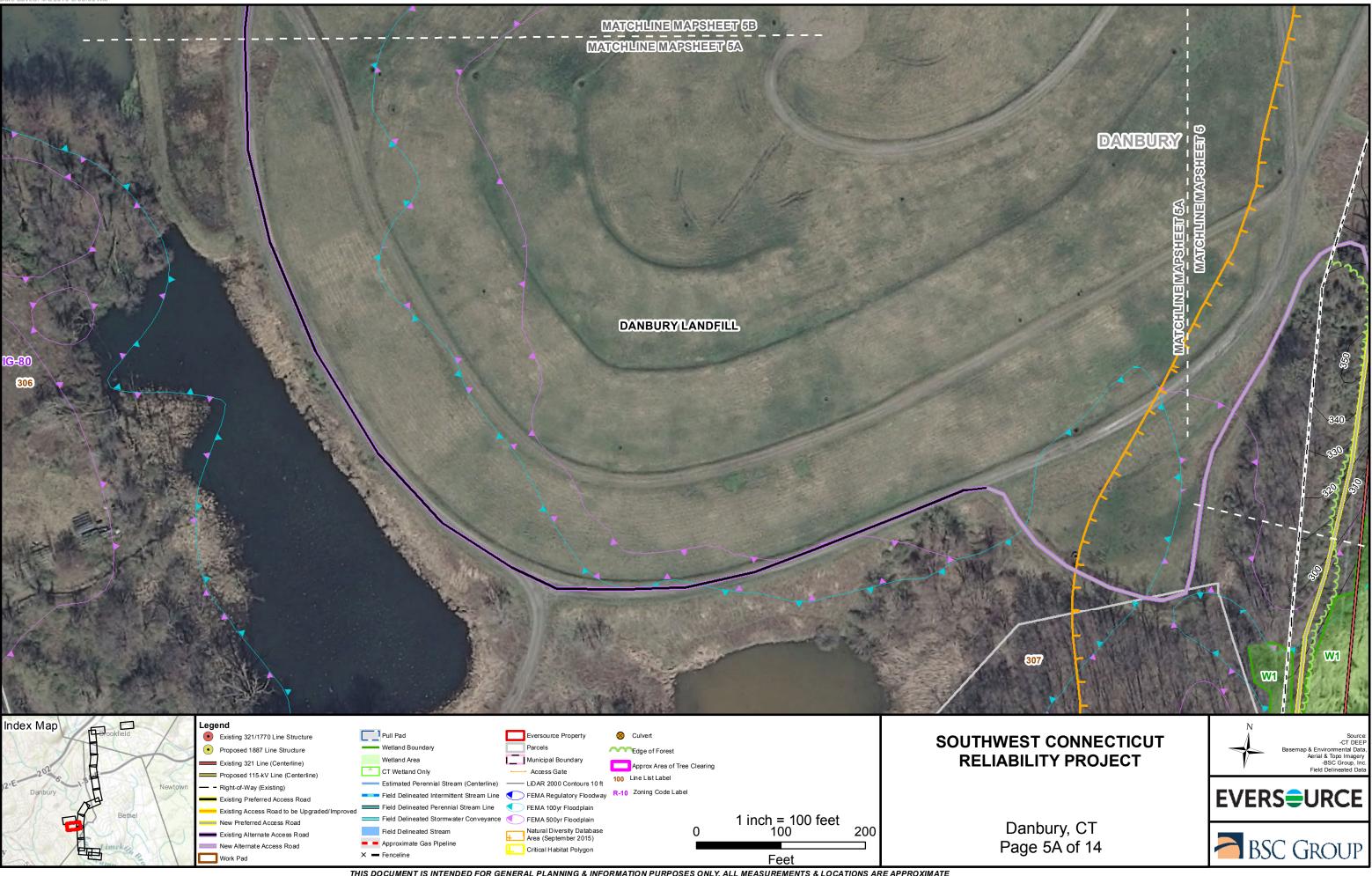


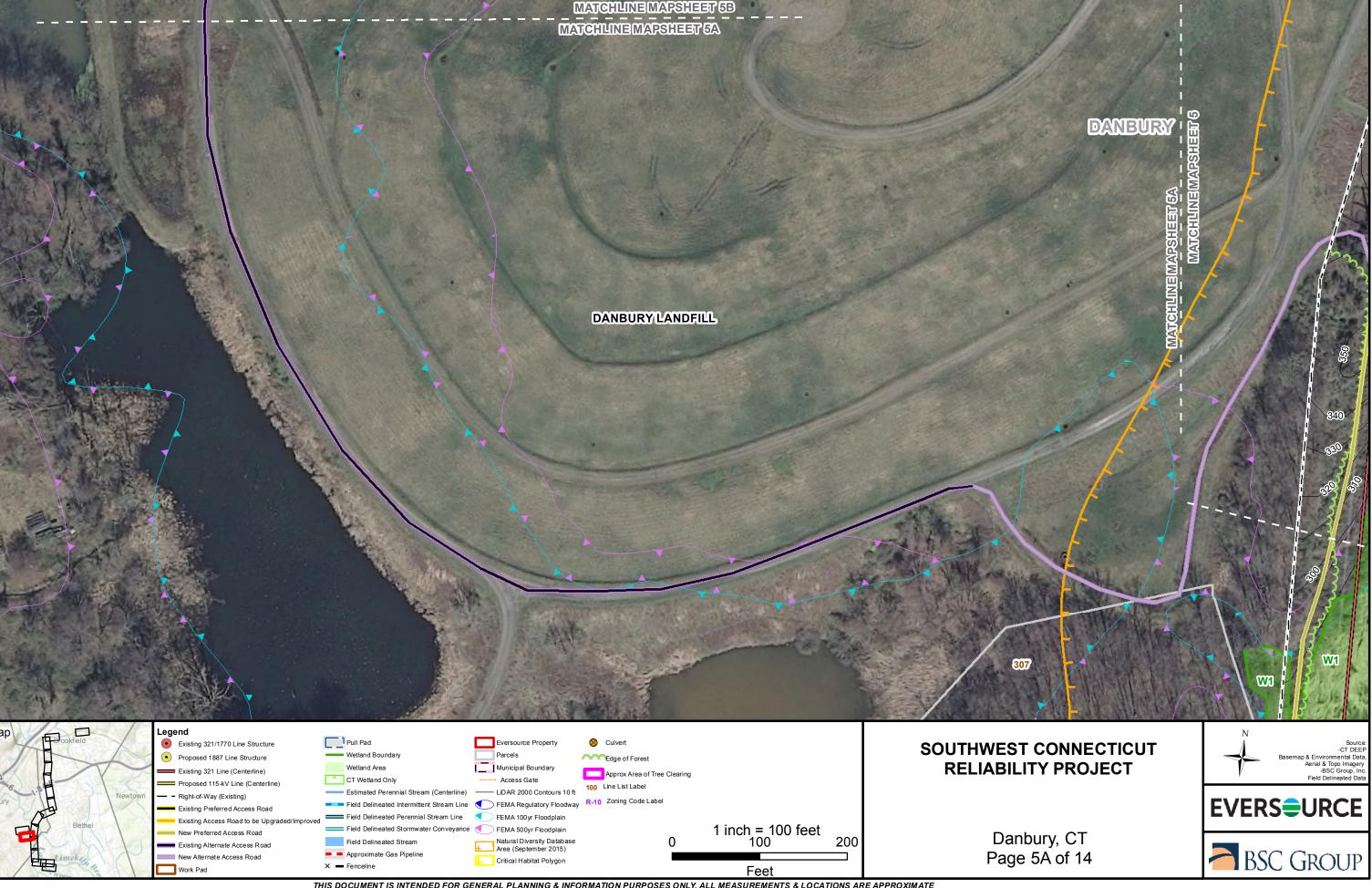














Estimated Perennial Stream (Centerline)

Field Delineated Perennial Stream Line

Field Delineated Stormwater Conveyance

Field Delineated Stream

× — Fenceline

Approximate Gas Pipeline

- Right-of-Way (Existing)

Existing Preferred Access Road

New Preferred Access Road

Existing Alternate Access Road

New Alternate Access Road

Work Pad

四日

Existing Access Road to be Upgraded/Impro

Feet THIS DOCUMENT IS INTENDED FOR GENERAL PLANNING & INFORMATION PURPOSES ONLY. ALL MEASUREMENTS & LOCATIONS ARE APPROXIMATE

1 inch = 100 feet 100

200

- LiDAR 2000 Contours 10 ft

FEMA 100 yr Flood plain

FEMA 500yr Floodplain

Natural Diversity Database Area (September 2015)

Critical Habitat Polygon

Field Delineated Intermittent Stream Line TEMA Regulatory Floodway R-10 Zoning Code Label

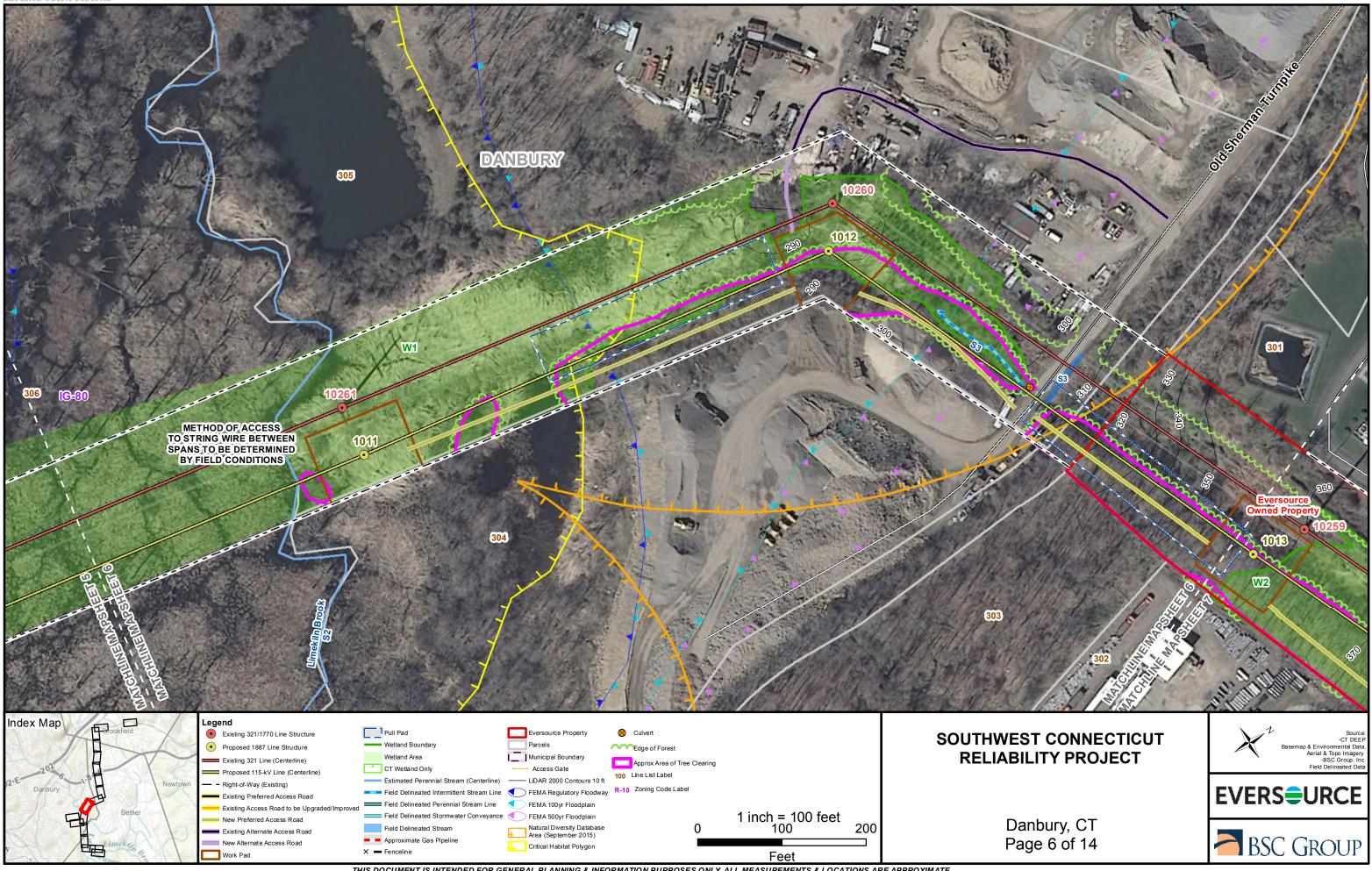
Danbury, CT Page 5B of 14

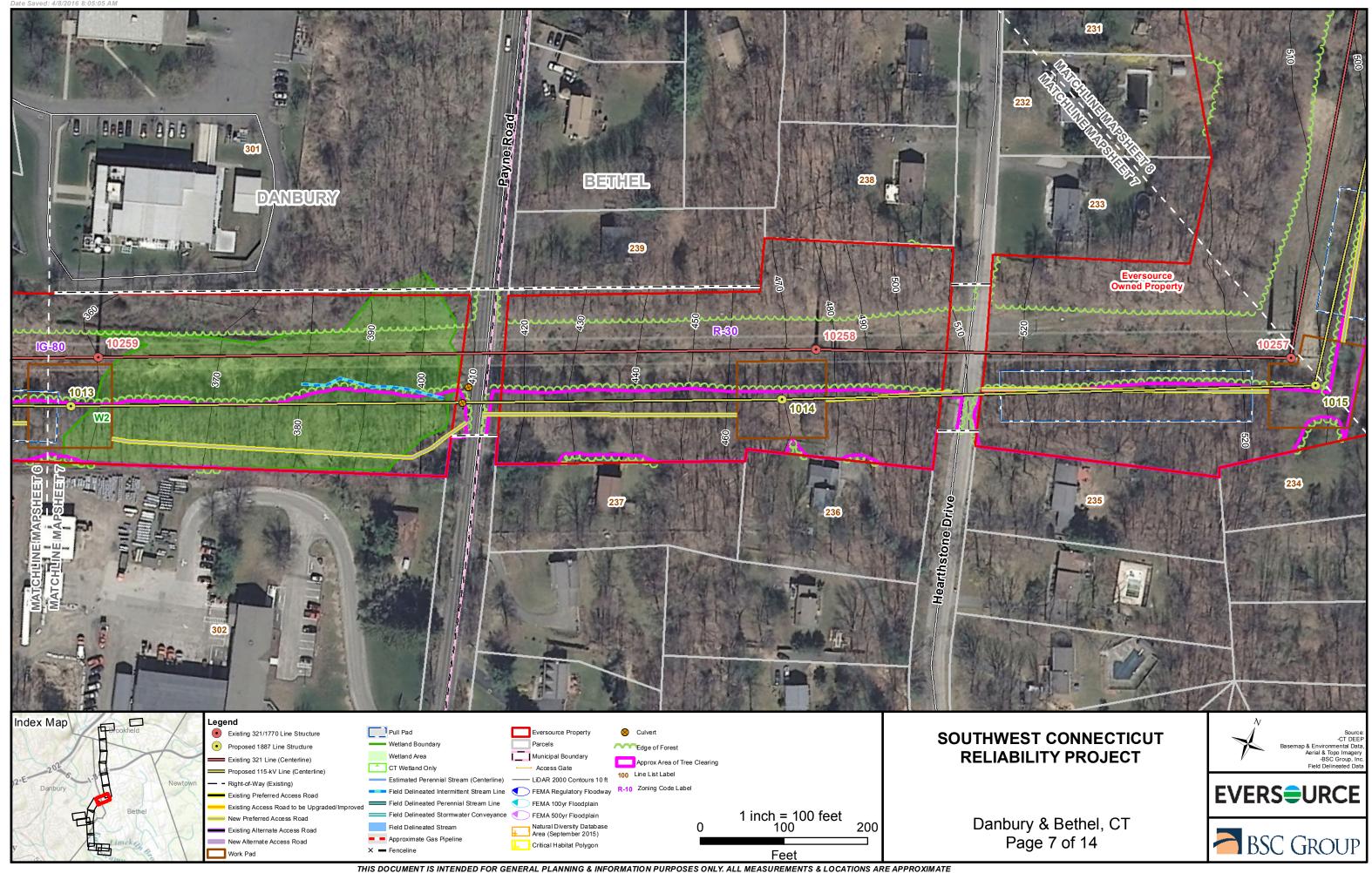
EVERSURCE BSC GROUP

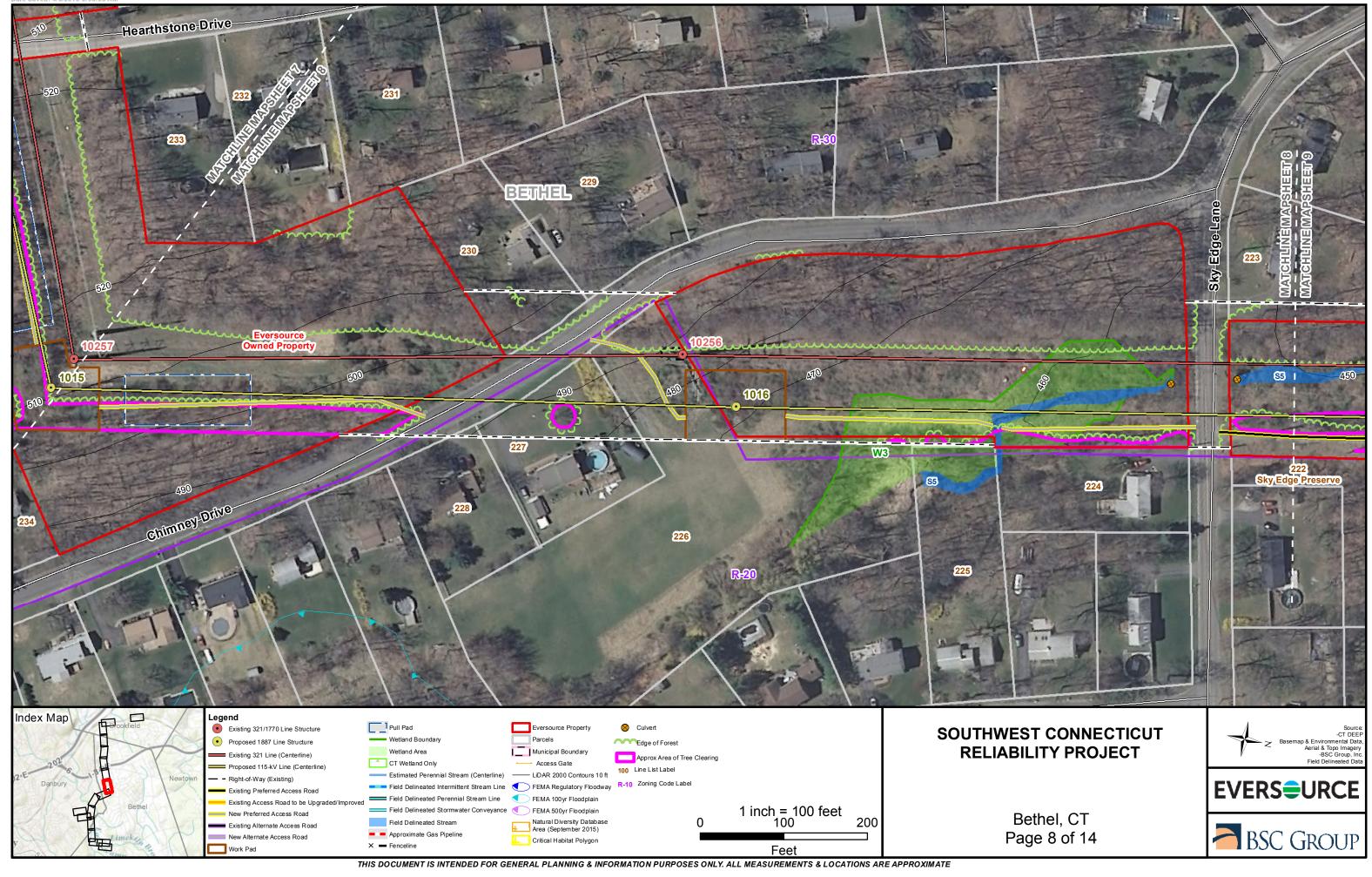
SOUTHWEST CONNECTICUT **RELIABILITY PROJECT**

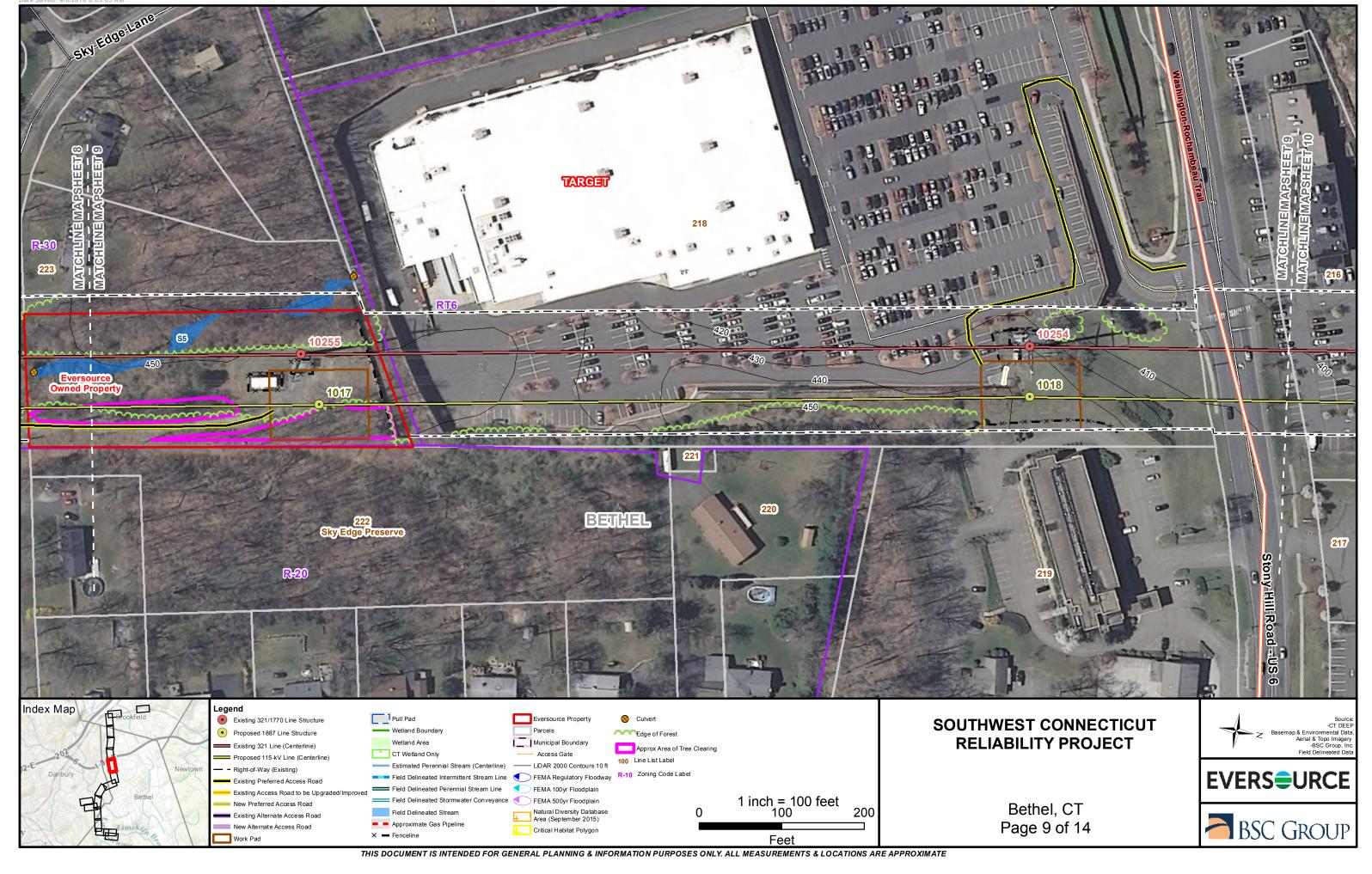
-CT DEEF ap & Environmental Data Aerial & Topo Imagery -BSC Group, Inc. Field Delineated Data

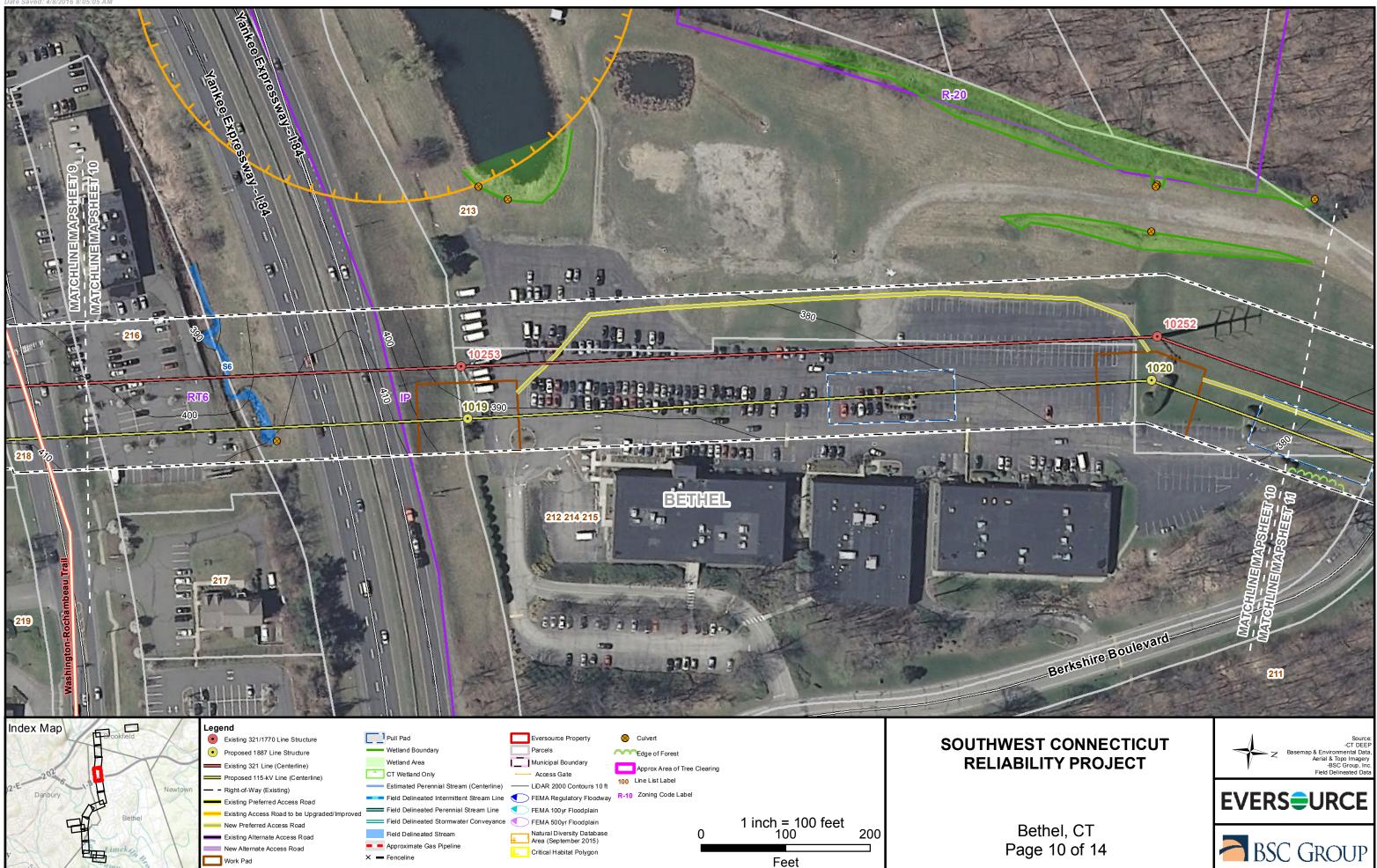
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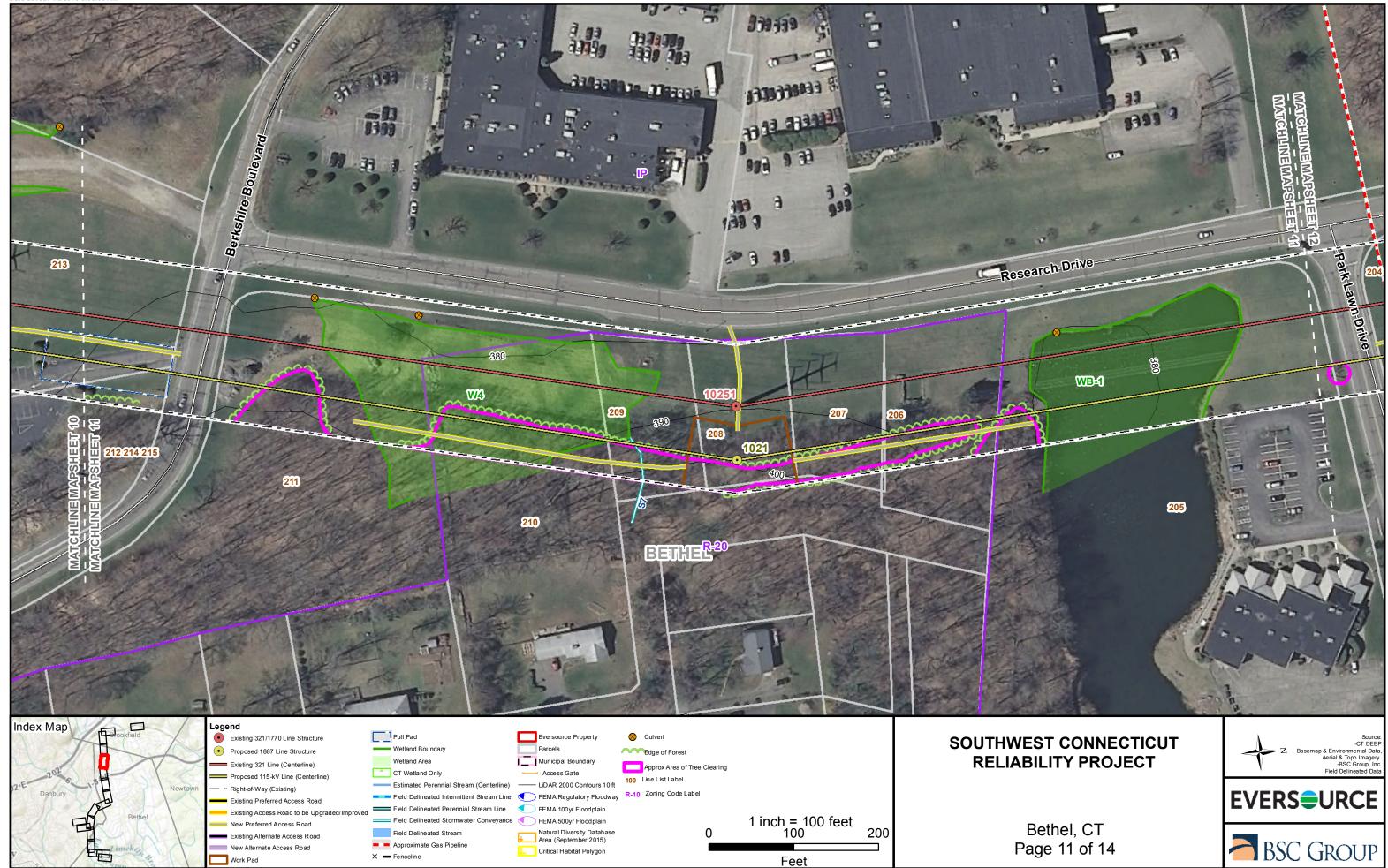


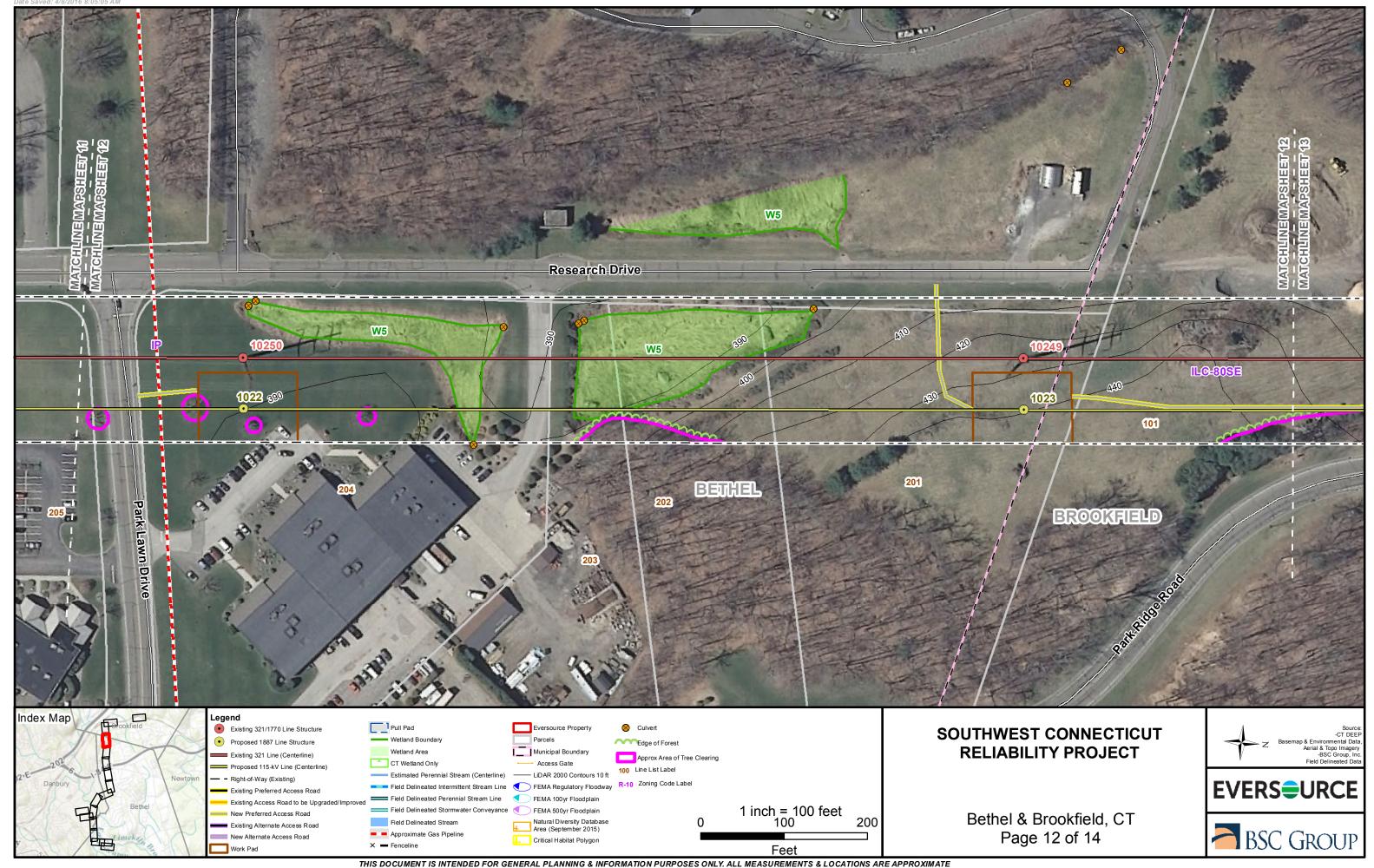


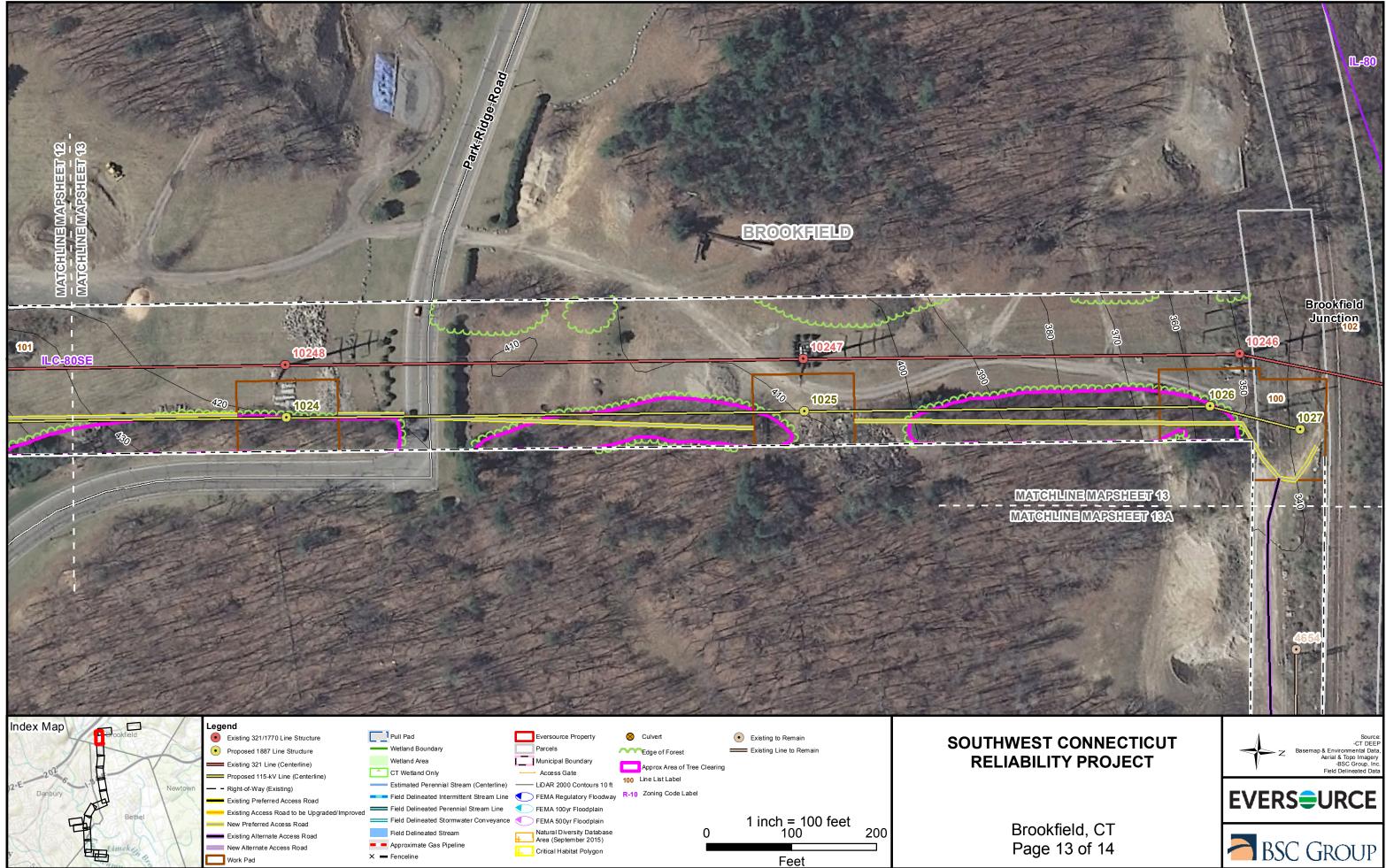


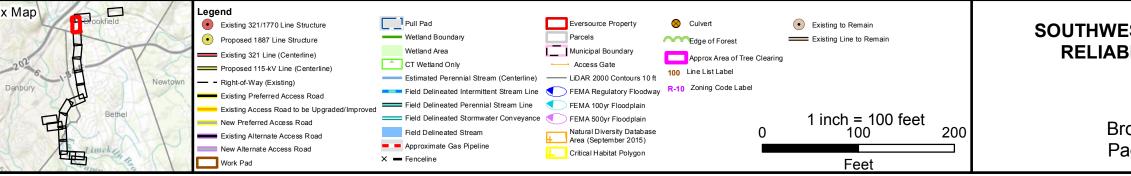


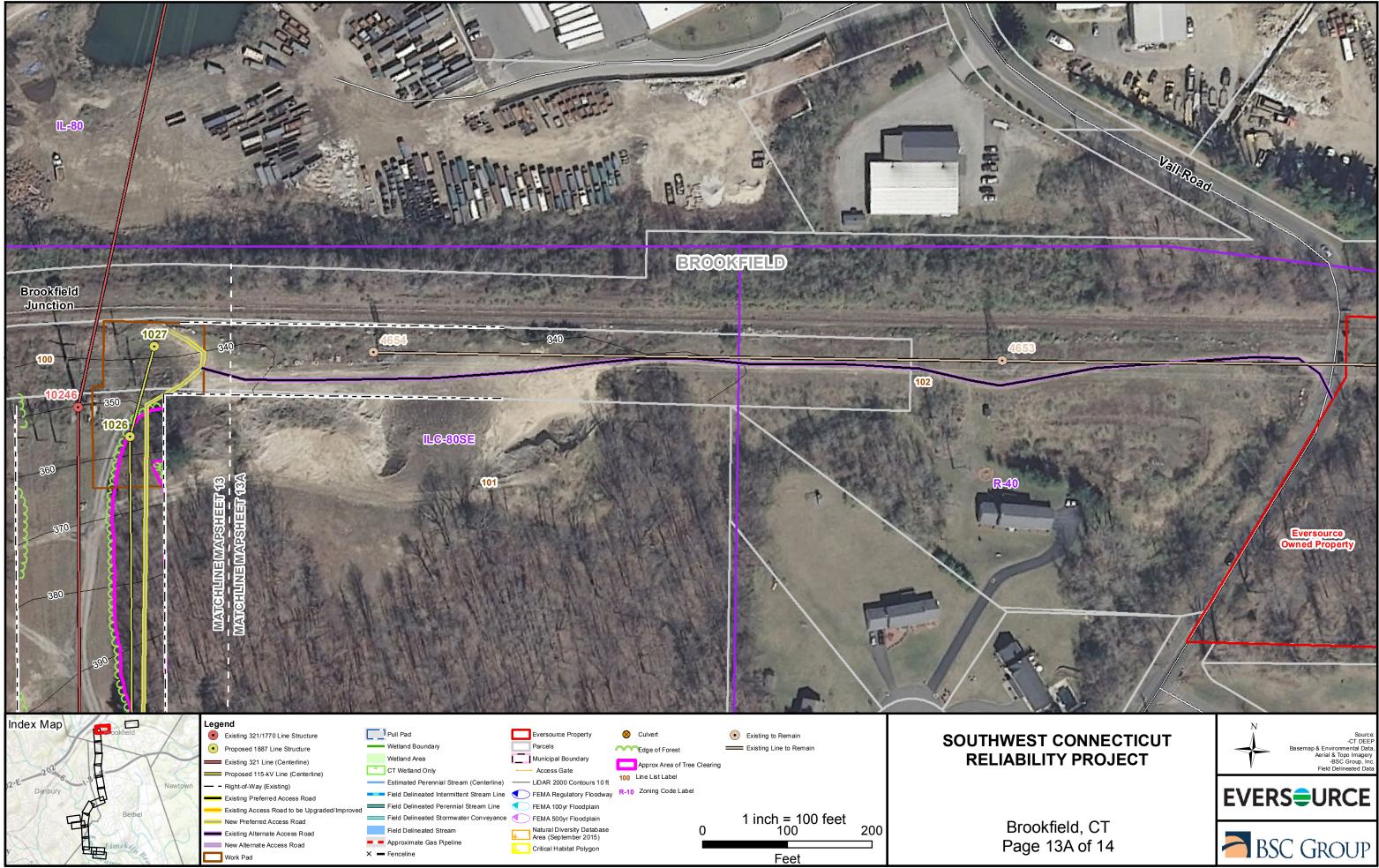












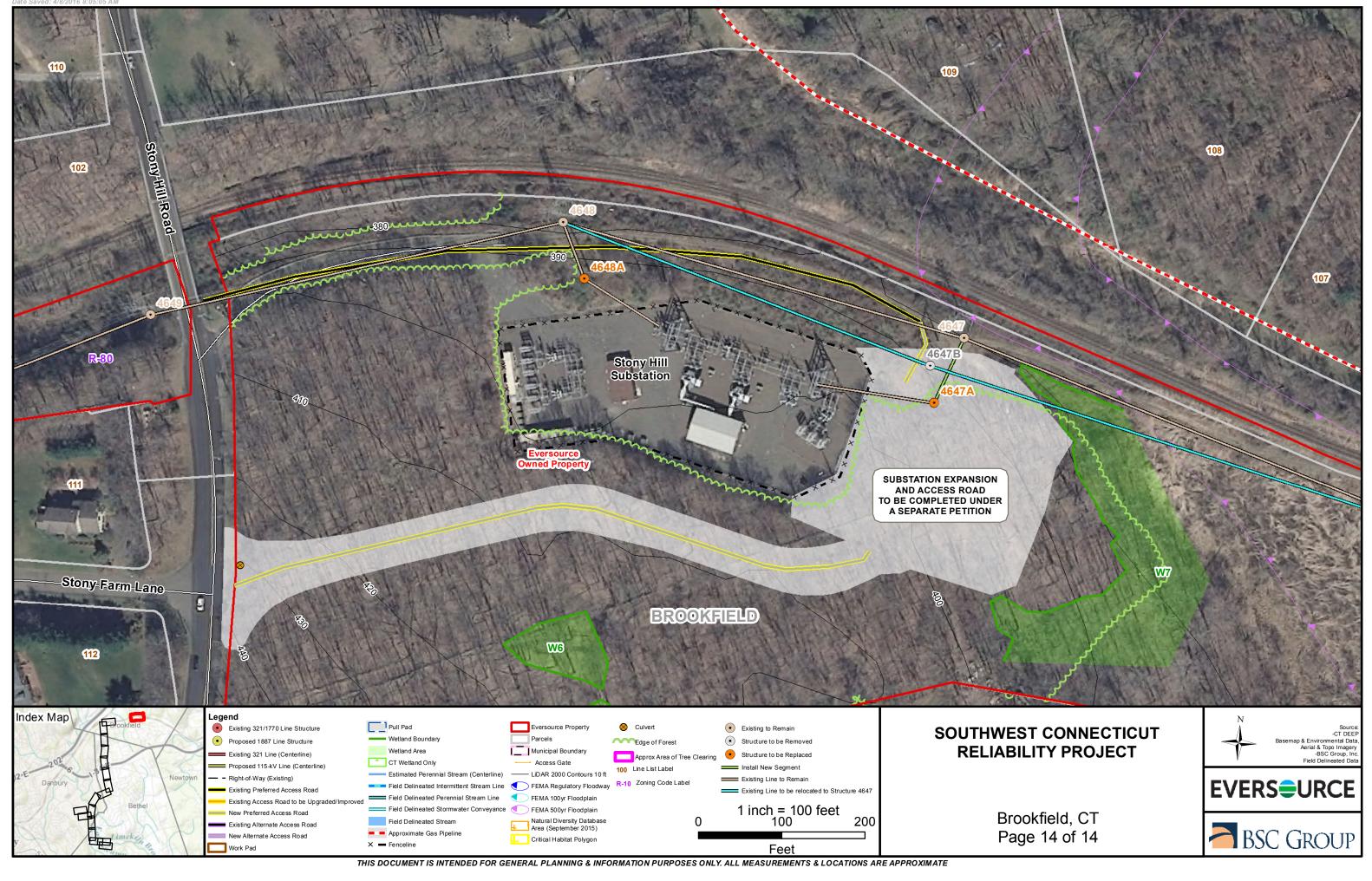
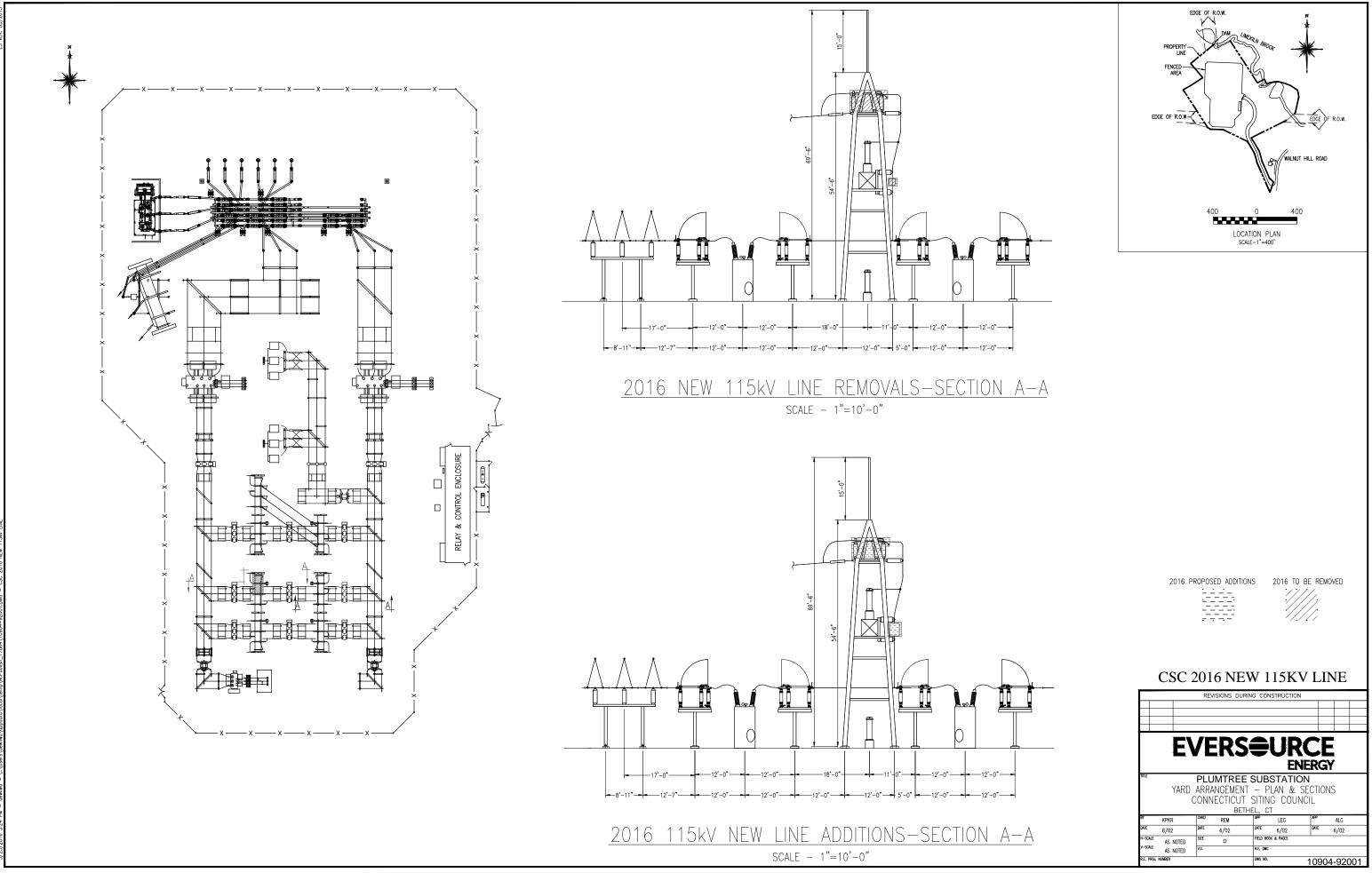


EXHIBIT 3: SUBSTATION DRAWINGS

APPENDIX 3A: PROPOSED PLUMTREE SUBSTATION MODIFICATIONS APPENDIX 3B: PROPOSED STONY HILL SUBSTATION MODIFICATIONS

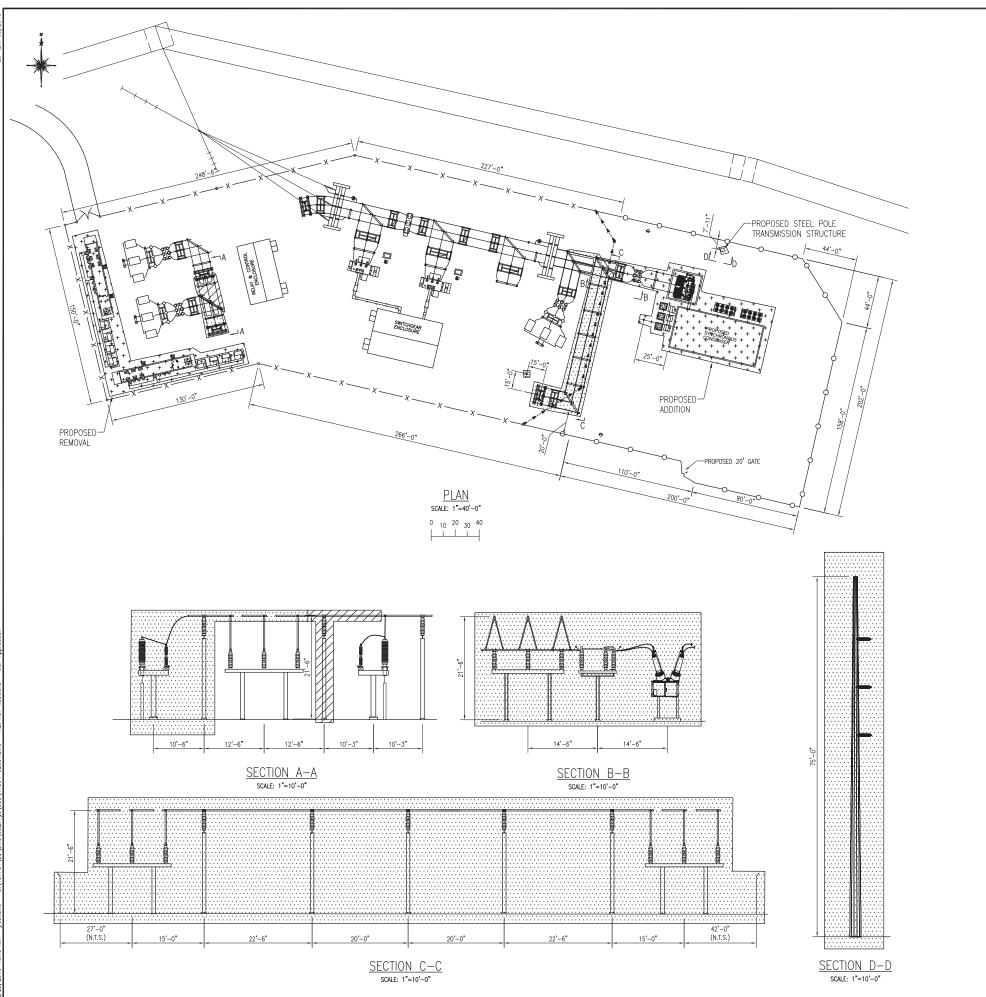
APPENDIX 3A

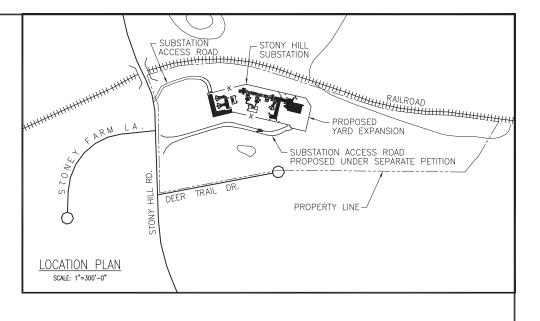
PROPOSED PLUMTREE SUBSTATION MODIFICATIONS



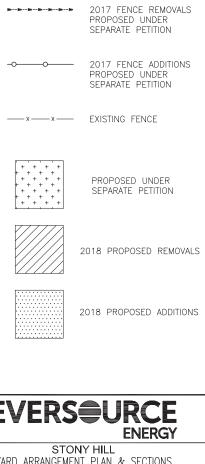
APPENDIX 3B

PROPOSED STONY HILL SUBSTATION MODIFICATIONS





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EXHIBIT 4: PROPOSED PROJECT CROSS SECTIONS AND PLAN AND PROFILE DRAWINGS

APPENDIX 4A: TYPICAL CROSS SECTIONS

APPENDIX 4B: PLAN AND PROFILE DRAWINGS

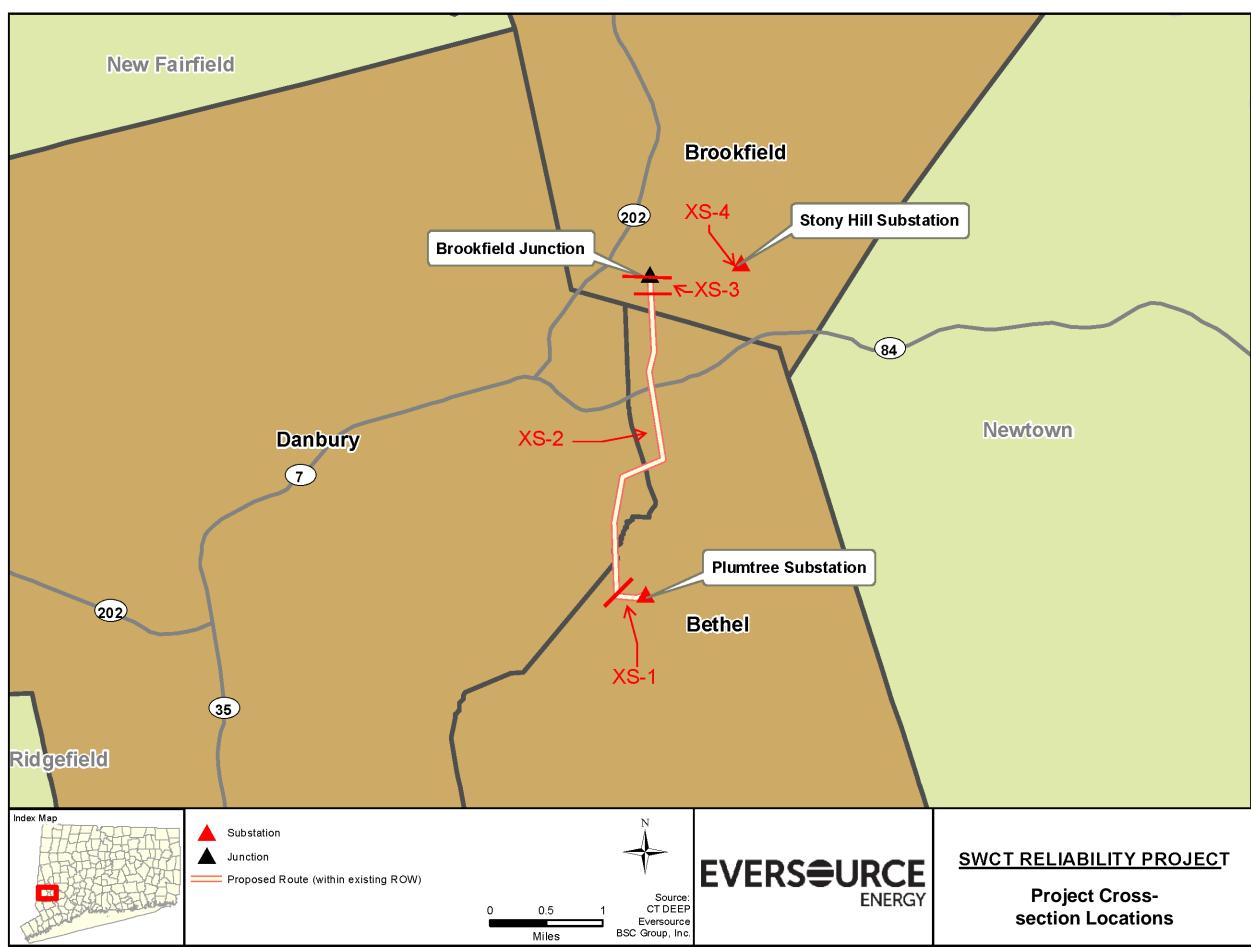
APPENDIX 4A

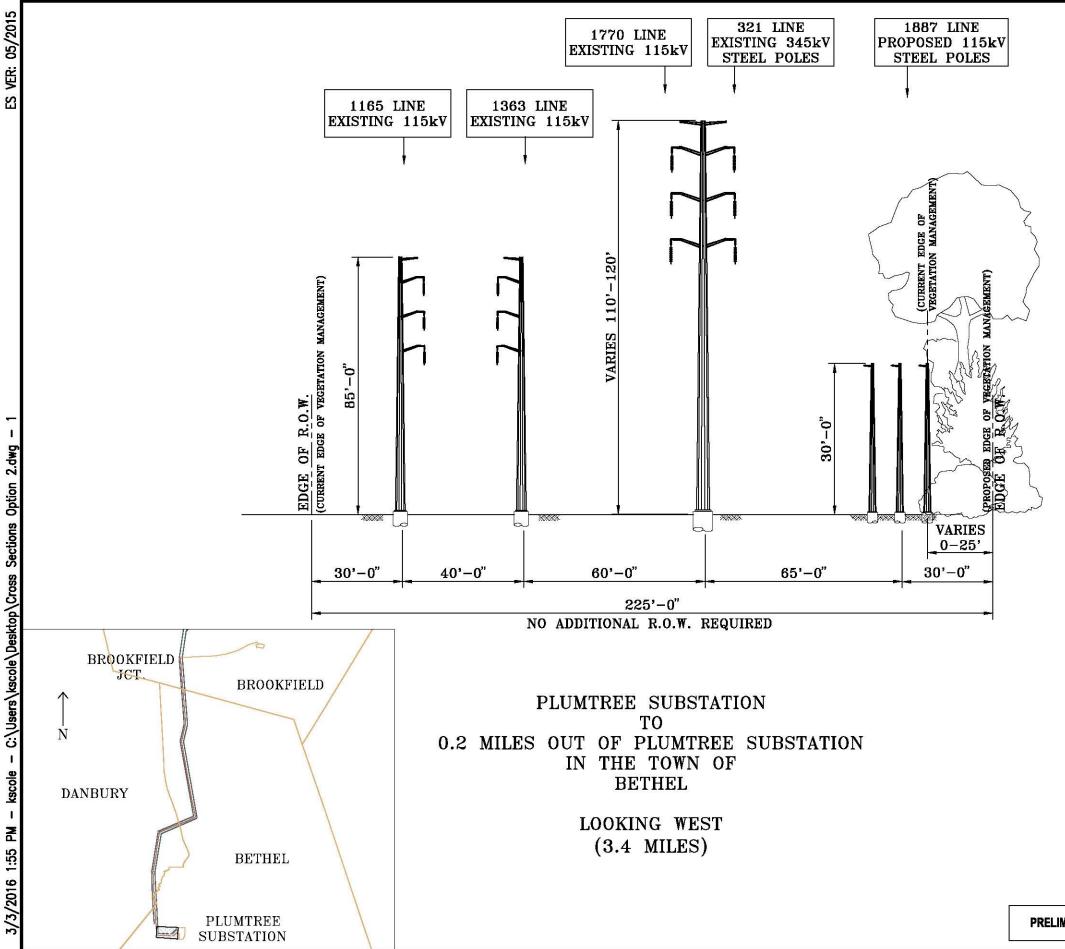
TYPICAL CROSS SECTIONS

INTRODUCTION

This Exhibit provides representative cross-section drawings for each of the three different right-of-way (ROW) segments along the Proposed Route of the SWCT Reliability Project's new 115-kV 1887 line between Plumtree Substation and Brookfield Junction, as well as the cross section of the work at Stony Hill Substation. The Project Location Map located at the beginning of this exhibit illustrates the locations of each cross-section.

For each of the four cross-sections, a representative drawing that illustrates the current configuration of the proposed and existing transmission line structures and the vegetation along the ROW is provided.





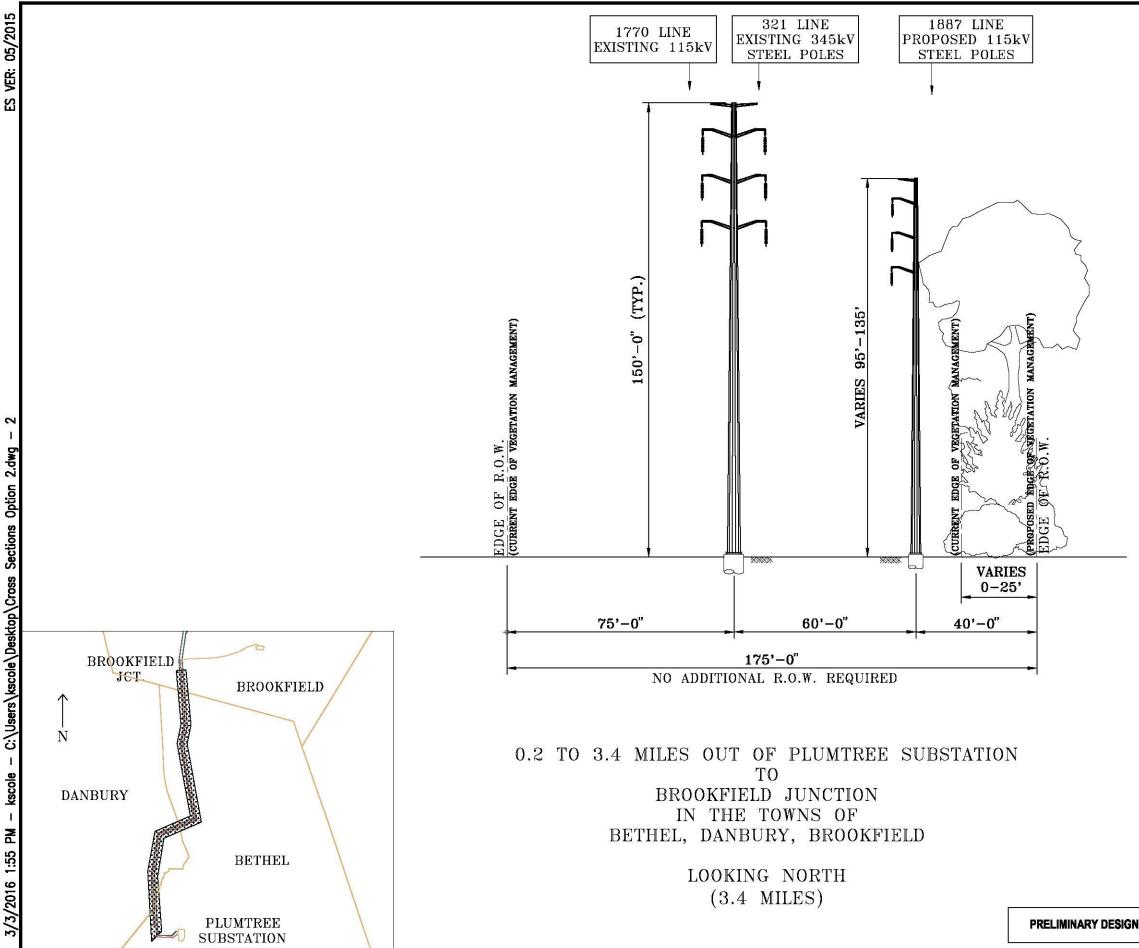
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PRELIMINARY DESIGN

NOTES:

- 1. THE EXISTING 1770 LINE WILL BE RENAMED TO THE 1268 LINE, BETWEEN PLUMTREE SUBSTATION AND STONY HILL SUBSTATION.
- 2. ALL VEGETATION MANAGEMENT LOCATIONS AND CLEARING **REQUIREMENTS ARE APPROXIMATE**

SWCT RELIABILITY PROJECT PLUMTREE-BROOKFIELD JCT. 115kV TRANSMISSION LINE PROPOSED R.O.W. CROSS SECTIONS BETHEL/DANBURY/BROOKFIELD, CT.							
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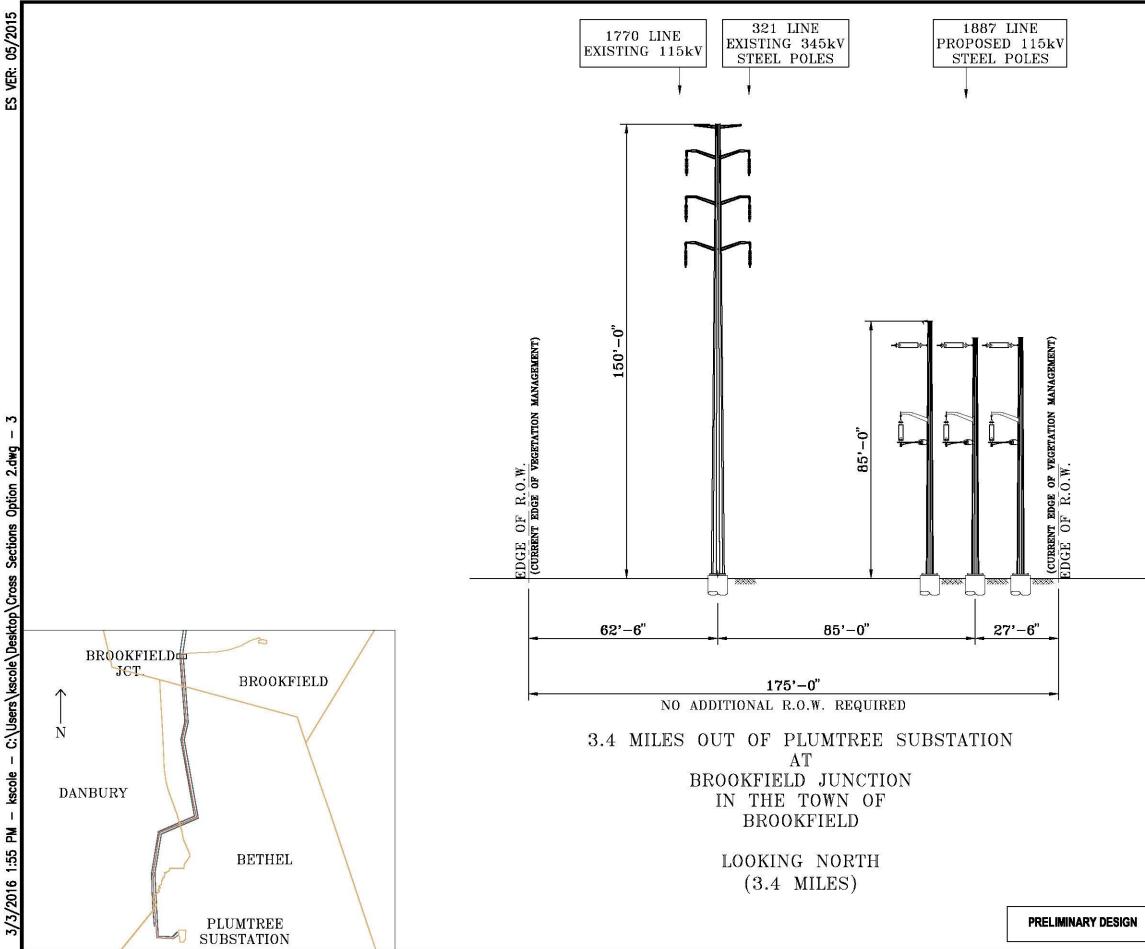
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NOTES:

- 1. THE EXISTING 1770 LINE WILL BE RENAMED TO THE 1268 LINE, BETWEEN PLUMTREE SUBSTATION AND STONY HILL SUBSTATION.
- 2. ALL VEGETATION MANAGEMENT LOCATIONS AND CLEARING REQUIREMENTS ARE APPROXIMATE

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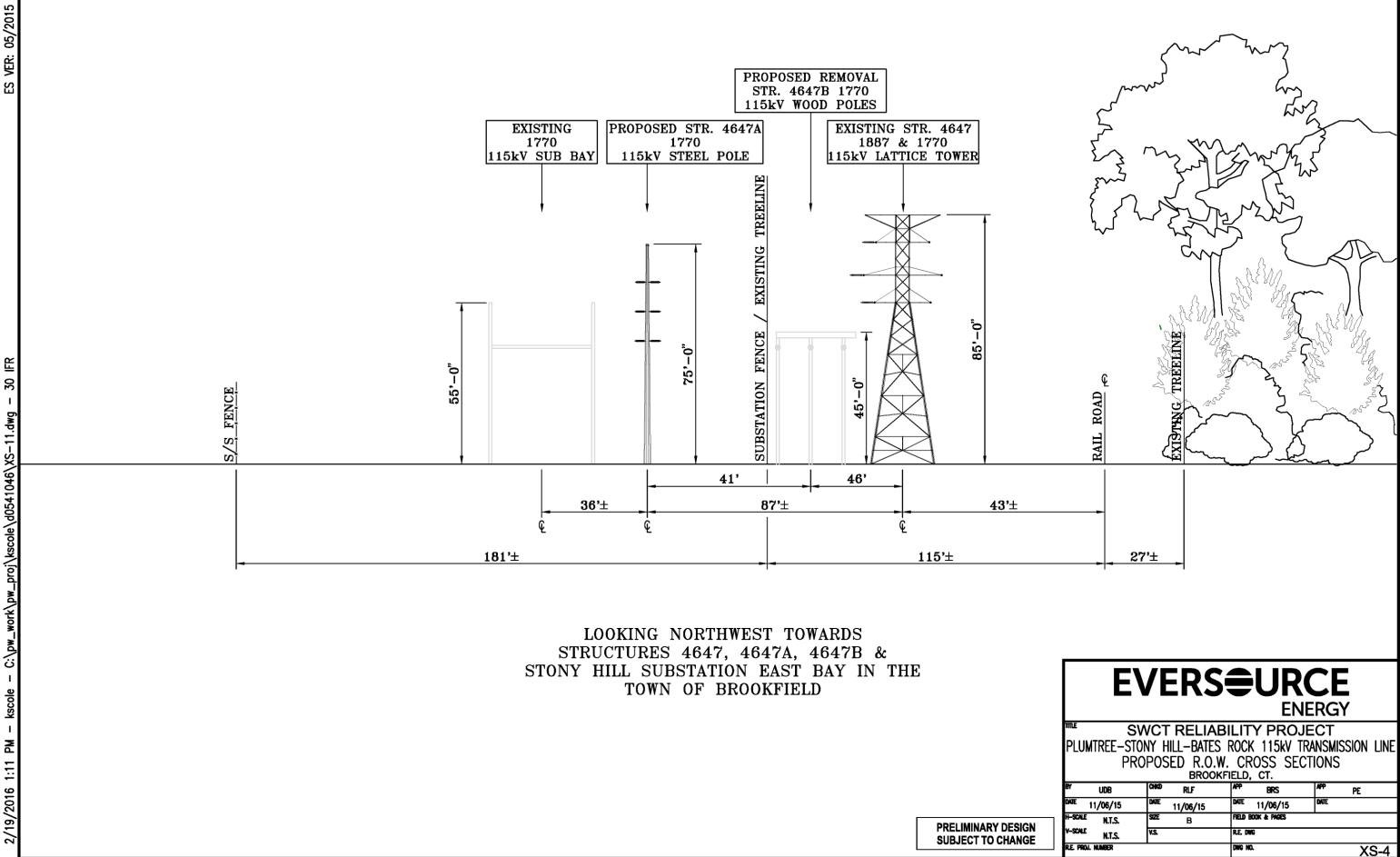
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NOTES:

- 1. THE EXISTING 1770 LINE WILL BE RENAMED TO THE 1268 LINE, BETWEEN PLUMTREE SUBSTATION AND STONY HILL SUBSTATION.
- 2. ALL VEGETATION MANAGEMENT LOCATIONS AND CLEARING REQUIREMENTS ARE APPROXIMATE

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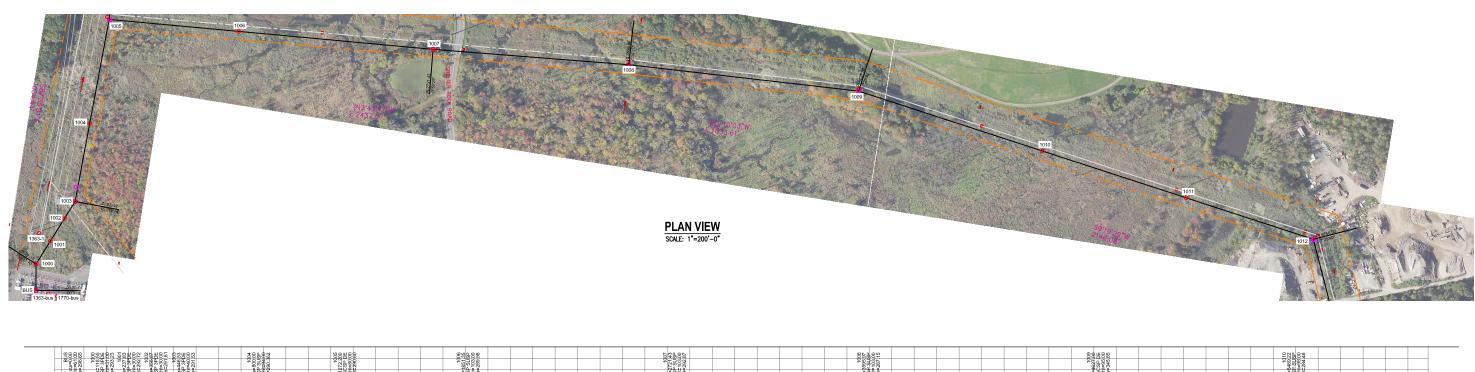
APPENDIX 4B

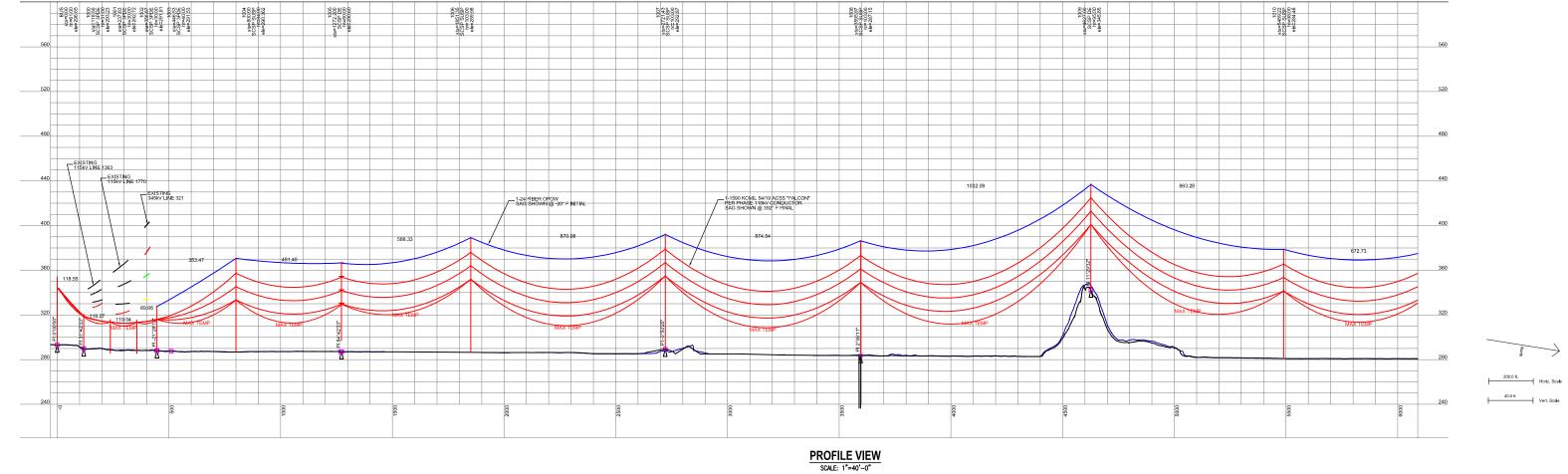
PLAN AND PROFILE DRAWINGS

INTRODUCTION

The Plan and Profile drawings presented in this Exhibit show an overhead view (plan) and an elevation view (profile) of the Plumtree to Brookfield Junction Project. The Plan and Profile drawings were produced using 2011 aerial photography, 2012 aerial survey data, and PLS-CADD (a trademarked software product), a widely used computer program for designing transmission lines. Plan and Profile drawings are provided for the Proposed Route, as identified by Eversource in Volume 10 of this Application to the Connecticut Siting Council for a Certificate of Environmental Compatibility and Public Need.

The Plan views are drawn at an approximate scale of one-inch equal to 400 feet. The Profile views provide both the vertical elevation of the structures and the horizontal distance along the Proposed Route. The Profiles are drawn at a dual scale of one-inch equal to 80 feet in the vertical direction and one-inch equal to 400 feet in the horizontal direction. This dual scale distorts the true scale of the structure heights, making them appear taller. This is done to purposefully exaggerate the details of the transmission structures and ground elevations.



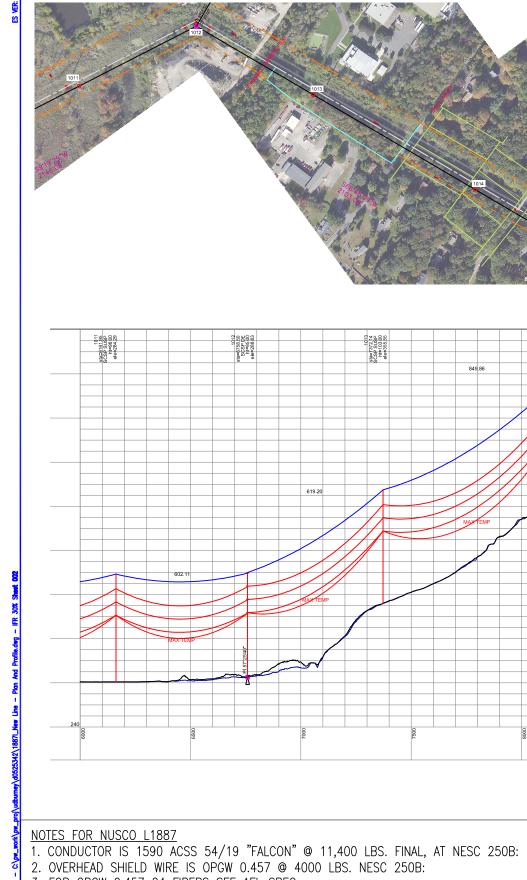


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- NOTES FOR NUSCO L1887 1. CONDUCTOR IS 1590 ACSS 54/19 "FALCON" @ 11,400 LBS. FINAL, AT NESC 250B: 2. OVERHEAD SHIELD WIRE IS OPGW 0.457 @ 4000 LBS. NESC 250B: 3. FOR OPGW 0.457 24 FIBERS SEE AFL SPEC.

PRELIMINARY DESIGN

TTLE	PLUMTREE - BROOKFIELD JCT. 115kV TRANSMISSION LINE PLAN & PROFILE BETHEL & DANBURY, CT.					
BY	RLF	CHILD	BRS	APP		NPP
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3. FOR OPGW 0.457 24 FIBERS SEE AFL SPEC.

1-1590 KCMIL 54/19 ACSS "FALCON" PER PHASE 115kV CONDUCTOR SAG SHOWN @ 392" F FINAL

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PLAN VIEW SCALE: 1"=200'-0"

-1-24 FIBER OPGW SAG SHOWN @ -20* F INITIA

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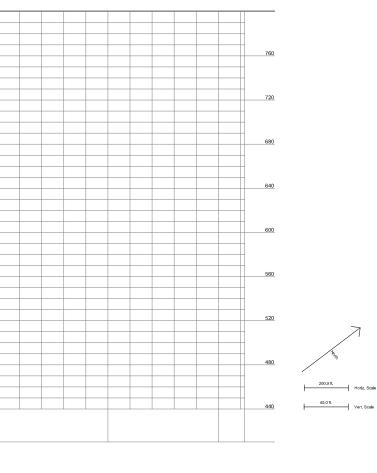
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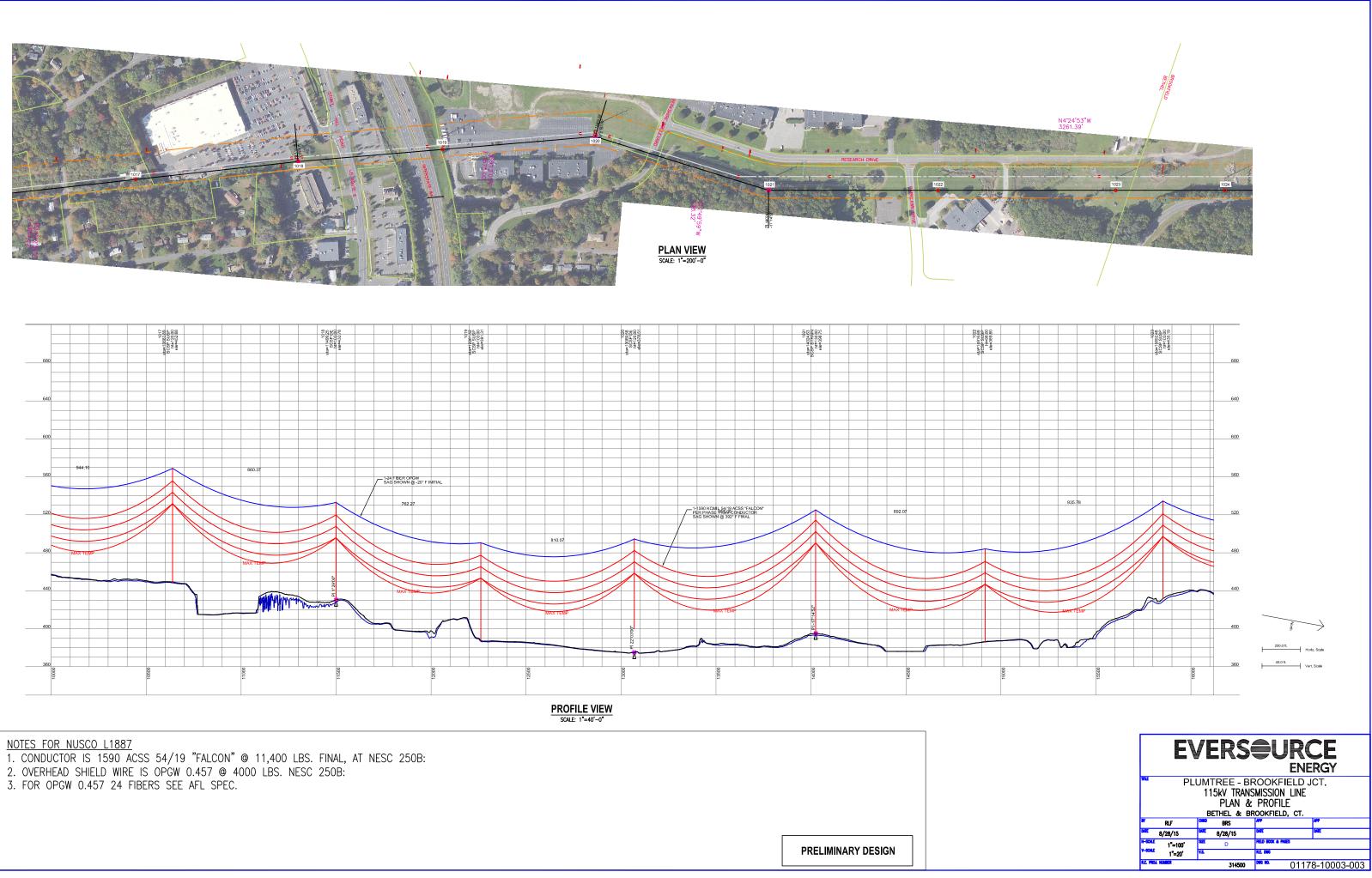
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PROFILE VIEW SCALE: 1"=40'-0"

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