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June 26, 2023

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

RE: The Connecticut Light and Power Company's Notice of Exempt Modification Pursuant to RCSA § 16-50j-57(a) to Existing Energy Facility Site at 49 Bokum Road, Old Saybrook, Connecticut ("Notice of Exempt Modification"): Transformer Replacements and Additions.

Dear Ms. Bachman:

The Connecticut Light and Power Company dba Eversource Energy ("Eversource") hereby gives notice to the Connecticut Siting Council of its intent to undertake an exempt modification in accordance with Section 16-50j-57(a) of the Regulations of Connecticut State Agencies ("RCSA") for the modification to Eversource's Bokum Substation ("Substation"), located on Eversource property at 49 Bokum Road, Old Saybrook to meet electric supply needs and improve reliability as described herein ("Project").

### **Existing Energy Facility**

The Substation is a bulk substation with two 115- to 27.6-kilovolt ("kV") 50-megavolt ampere ("MVA") transformers, one 27.6- to 23-kV 29-MVA transformer, one 27.6- to 13.8-kV 25-MVA transformer, three 115-kV transmission lines, four 27.6-kV distribution circuits, one 23-kV distribution circuit and two 13.8-kV distribution circuits. The three 115-kV three transmission lines include the 1342 Line from Green Hill Substation and the 1261/1598 lines from Haddam Substation.

### **Proposed Modifications**

The proposed modification would take place within the existing fenced area at the Substation.

Eversource proposes the following modification to the Substation:

Replacement of:

- One 115-kV motor-operated disconnect switch.
- Two 115- to 27.6-kV 50-MVA transformers with two 115- to 23-kV 62-MVA transformers.

- One 27.6- to 13.8-kV 25-MVA transformer with one 23-13.8-kV 25-MVA transformer in a new location.
- Eight sets of two each 27.6-kV potential transformers with eight sets of three each 23-kV potential transformers.
- The Substation fence will be replaced with a new fence that is six feet high with three strands of barbed wire for an overall height of seven feet (set in the same location).

Installation of:

- Three 115-kV circuit breakers.
- Seven 115-kV manual disconnect switches.
- Two 115-kV cable riser structures
- One 115-kV strain bus structure.
- One 115-kV motor-operated disconnect switch.
- Three sets of three each coupling capacitor voltage transformers.
- Three 115-kV circuit switchers.
- Five lightning protection masts, each 65 feet in height (a height that is no taller than existing infrastructure inside the fenced Substation).
- One 23-kV double-bus switchgear enclosure.
- Manual-operated lights on the switchgear enclosure: one light above each of the two gate entries and one light at each of the four corners of the fenced Substation.
- Three 23-kV neutral reactors.
- Three station service pad mount transformers.
- Foundation pads, bus support, underground conduits, cable trench, duct bank, grounding, relay/control cables, and interface cabinets to accommodate the new equipment protection scheme.

In addition to the above, the work will include the removal of an existing storage building (approximately 16 feet by 20 feet), currently located at the southeast area of the fenced Substation and one 27.6- to 23-kV 29-MVA transformer.

The existing Substation arrangement with the proposed modification is shown on Attachment A, Drawing No. 20602-92001 – General Arrangement Plan – CSC.

The proposed modification would not have a substantial adverse environmental effect or cause a significant adverse change or alteration in the physical or environmental characteristics of the Substation because:

- The modification would be made within the Substation's existing fenced area.
- The replacement and new equipment would be shorter than (or equal in height to) the tallest existing structure (the height of the existing lightning mast is approximately 65 feet in height) within the Substation.

- The work would not affect wetlands or waterways. The Substation is not located within a flood zone.
- Eversource's review of the Department of Energy and Environmental Protection's Natural Diversity Data Base identified no state-listed endangered, threatened, or special concern species in the vicinity of the Substation.
- There would be no television or radio interference resulting from the modification.
- Sound-pressure levels due to replacement and new Substation equipment would continue to meet State noise regulations following the modification at all points along the property line.
- Electric and magnetic field levels at the Substation boundary would not change as the result of the modification inside the fenced Substation.

Eversource proposes to commence Project construction in August 2023. Work is scheduled to be completed by June 2025.

Enclosed please find the original and two copies of this Notice, along with a check in the amount of \$625 for the required filing fee.

A notice of this exempt modification filing has been provided to the First Selectman of Old Saybrook.

Communications regarding this Notice of Exempt Modification should be directed to Deborah Denfeld at (860) 728-4654.



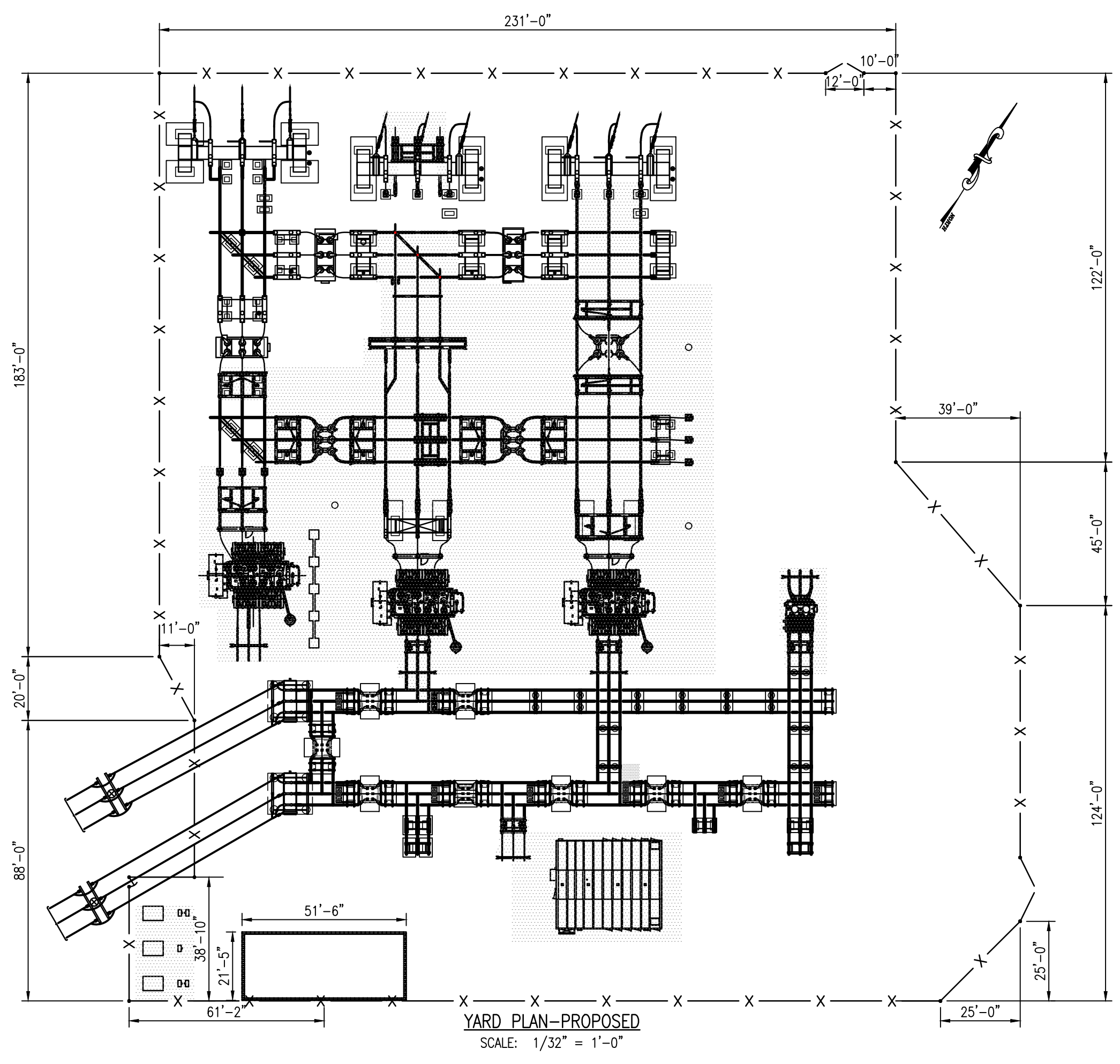
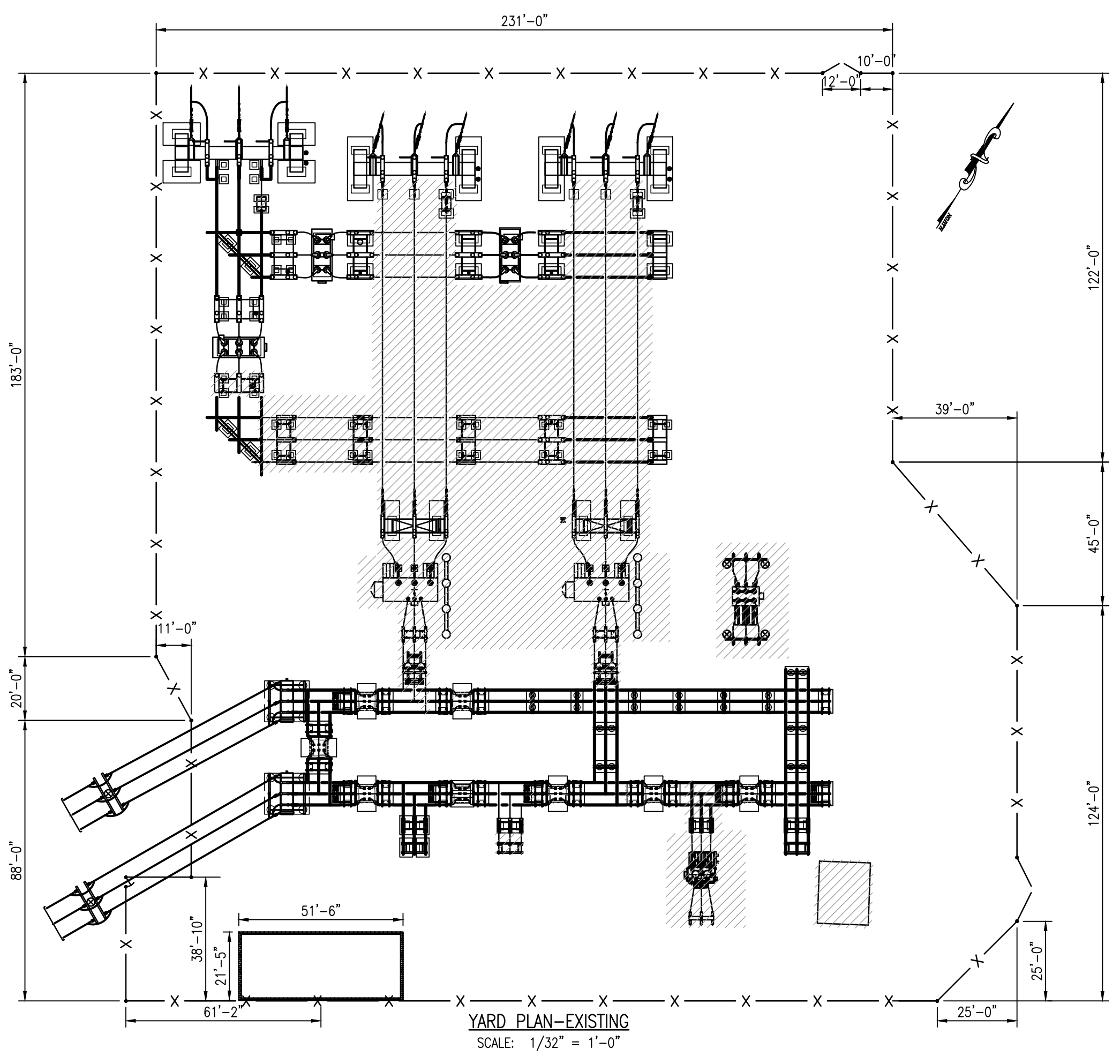
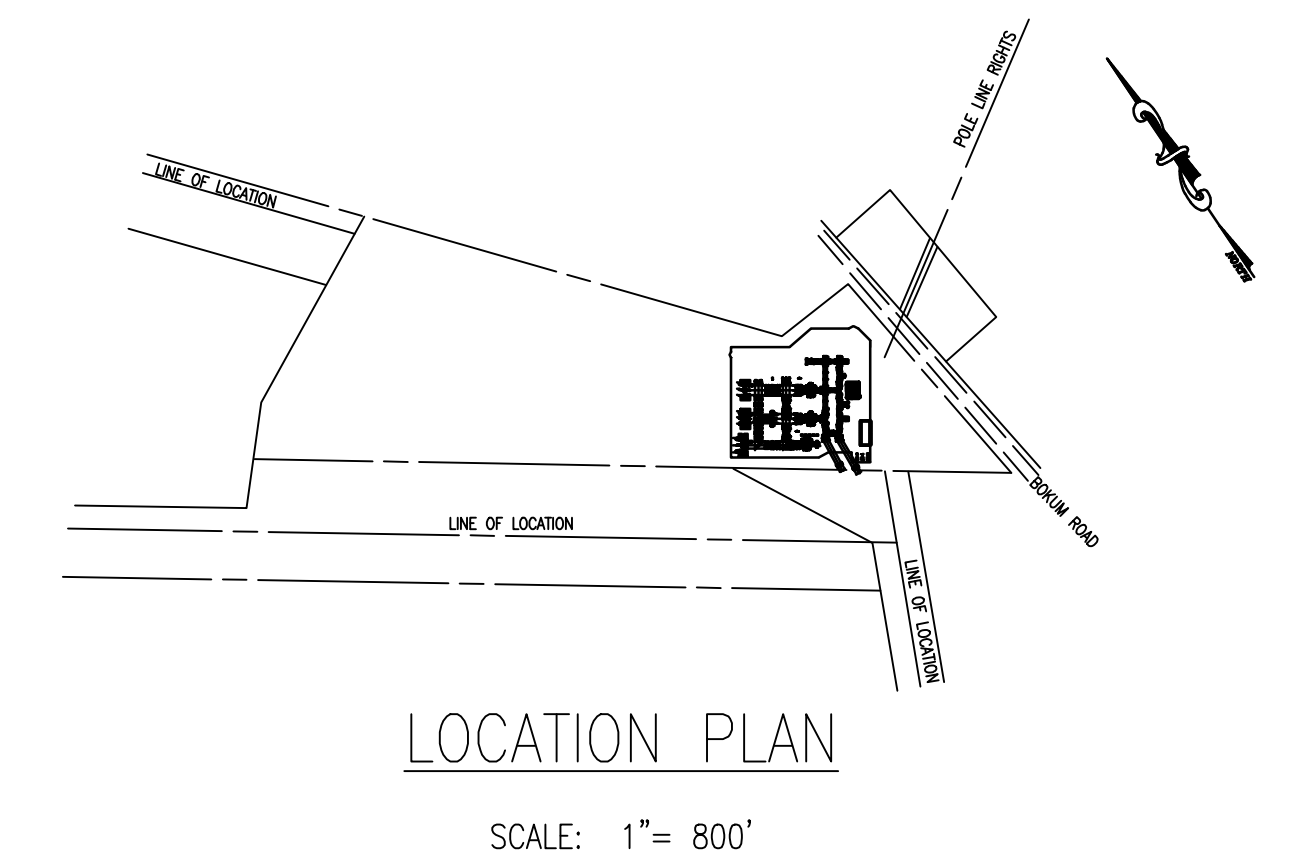
By:

Deborah Denfeld  
Team Lead– Transmission Siting

Attachment

cc: Mr. Carl Fortuna, First Selectman, Town of Old Saybrook

6/22/2023 10:26 AM - JohnR - N:\Active Projects\2496\_ES\_Bokum\_151\_SS\_Additions-Eng\_C1\06-Drafting\Working Drawings\Electrical\Bokum\20602-92001.DWG - REV AS AT ADDITIONS ES VER. 05/2015



PROPOSED ADDITION  
 PROPOSED REMOVAL

- REFERENCE DRAWINGS**
- 20602-33003p002 YARD ARRANGEMENT SECTION VIEW
  - 20602-33003p003 YARD ARRANGEMENT SECTION VIEW
  - 20602-33003p004 27.6 KV P.T CONNECTION TO BUS PLAN & SECTION VIEW
  - 20602-33004 YARD ARRGT SECT R-R, S-S & T-T PLAN & SECTION VIEW
  - 20602-33021 YARD ARRANGEMENT - LIGHTING PLOT
  - 20602-33022 YARD ARRANGEMENT - DIRECT STROKE PROTECTION PLOT
  - 20602-92002 KEY MAP

**PRELIMINARY**  
NOT FOR CONSTRUCTION

**REV AS AT ADDITIONS**

REVISIONS DURING CONSTRUCTION						
AS	06/23	ADD CAPACITY AND CONVERT TO 23KV - WO #CS003651 (RLC)	RDO	BGH	JDM	
AT	06/23	RECONFIGURE 115KV RING BUS - WO #80040137 (RLC)	RDO	BGH	JDM	

**EVERSOURCE ENERGY**

<b>BOKUM</b>						
GENERAL ARRANGEMENT PLAN - CSC						
PLAN VIEW						
OLD SAYBROOK, CT						
BY	MPM	CHKD	ACM	APP	CIR	APP
DATE	3/07	DATE	3/07	DATE	3/07	DATE
H-SCALE	1/8"=1'-0"	SIZE	D	FIELD BOOK & PAGES		
V-SCALE	1/8"=1'-0"	V.S.		R.E. DWG		
R.E. PROJ. NUMBER						DWG NO.
						20602-92001

**RLC ENGINEERING**  
267 Whitten Road  
Hallowell, ME 04347  
Phone 207-621-1077  
Fax 207-621-1177  
www.rlc-eng.com

REV.	DESCRIPTION	DATE	DRWG.	CHKD.	JDM
E	SITING COUNCIL RESUBMITTAL	06/22/23	JPR	JDM	
D	SITING COUNCIL RESUBMITTAL	06/16/23	KCD	JDM	
C	ISSUE FOR 100% IFR	03/31/23	RDO	JDM	
B	ISSUE FOR DETAILED DESIGN	12/08/22	RDO	JDM	
A	ISSUE FOR PRELIMINARY DESIGN	04/20/22	RDO	JDM	

NO.	DATE	DESCRIPTION	BY	CHK	APP	APP
1	10/15	REPLACED 52/2T & 52/3T OCB WO# 4040601 BY HDR AS BUILT REVISIONS	AV	NAK	PGB	PGB