

Hoffman Falls Wind Project

Madison County, New York

Substation and Point of Interconnection Switchyard plans

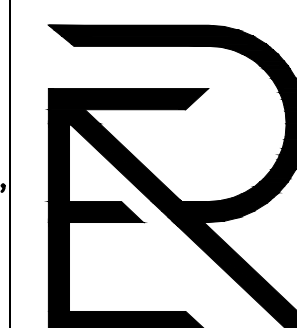
DRAWING INDEX			
Drawing Number	Drawing Title	Revision	Date
HFMF-700-01	Cover Sheet w/Drawing Index	A	01/29/2024
HFMF-720-01	General Arrangement - Plan View - Collector Substation	D	01/04/2024
HFMF-721-01	General Arrangement - Elevation Views - Collector Substation	D	01/04/2024
HFMF-721-02	General Arrangement - Elevation Views - Collector Substation	D	01/04/2024
HFMF-721-03	General Arrangement - Elevation Views - Collector Substation	C	01/04/2024
HFMF-721-04	General Arrangement - Elevation Views - Collector Substation	C	01/04/2024
HFMF-721-05	General Arrangement - Elevation Views - Collector Substation	C	01/04/2024
HFMF-721-06	General Arrangement - Elevation Views - Collector Substation	C	01/04/2024
HFMF-720P-01	General Arrangement - Plan View - Utility POI Substation	D	01/04/2024
HFMF-721P-01	General Arrangement - Elevation View - Utility POI Substation	D	01/04/2024
HFMF-721P-02	General Arrangement - Elevation View - Utility POI Substation	D	01/04/2024
HFMF-721P-03	General Arrangement - Elevation View - Utility POI Substation	D	01/04/2024
HFMF-721P-04	General Arrangement - Elevation Views - Utility POI Substation	C	01/04/2024
HFMF-721P-05	General Arrangement - Elevation Views - Utility POI Substation	C	01/04/2024
HFMF-731-01	Illumination Plan - Collector Substation	C	12/27/2023

NOT FOR
CONSTRUCTION

REV.:	DATE:	DESCRIPTION OF REVISION:	DRAWN:	CHECKED:	APPRV'D:	P.E. STAMP
A	1/29/24	ISSUED FOR PERMITTING	SDD	SR	SR	

PROPRIETARY INFORMATION
REYNOLDS ARCHITECTURE ENGINEERING
CLAIMS PROPRIETARY RIGHTS TO THE
INFORMATION, DESIGN AND LAYOUT
DISCLOSED HEREIN. THIS DRAWING IS
ISSUED FOR INFORMATIONAL PURPOSES
ONLY AND MAY NOT BE REPRODUCED,
DISCLOSED TO OTHERS OR USED TO
DESIGN OR CONSTRUCT ANY OF THE
ITEMS SHOWN HEREIN WITHOUT THE
EXPRESSED WRITTEN CONSENT OF
REYNOLDS ARCHITECTURE ENGINEERING.

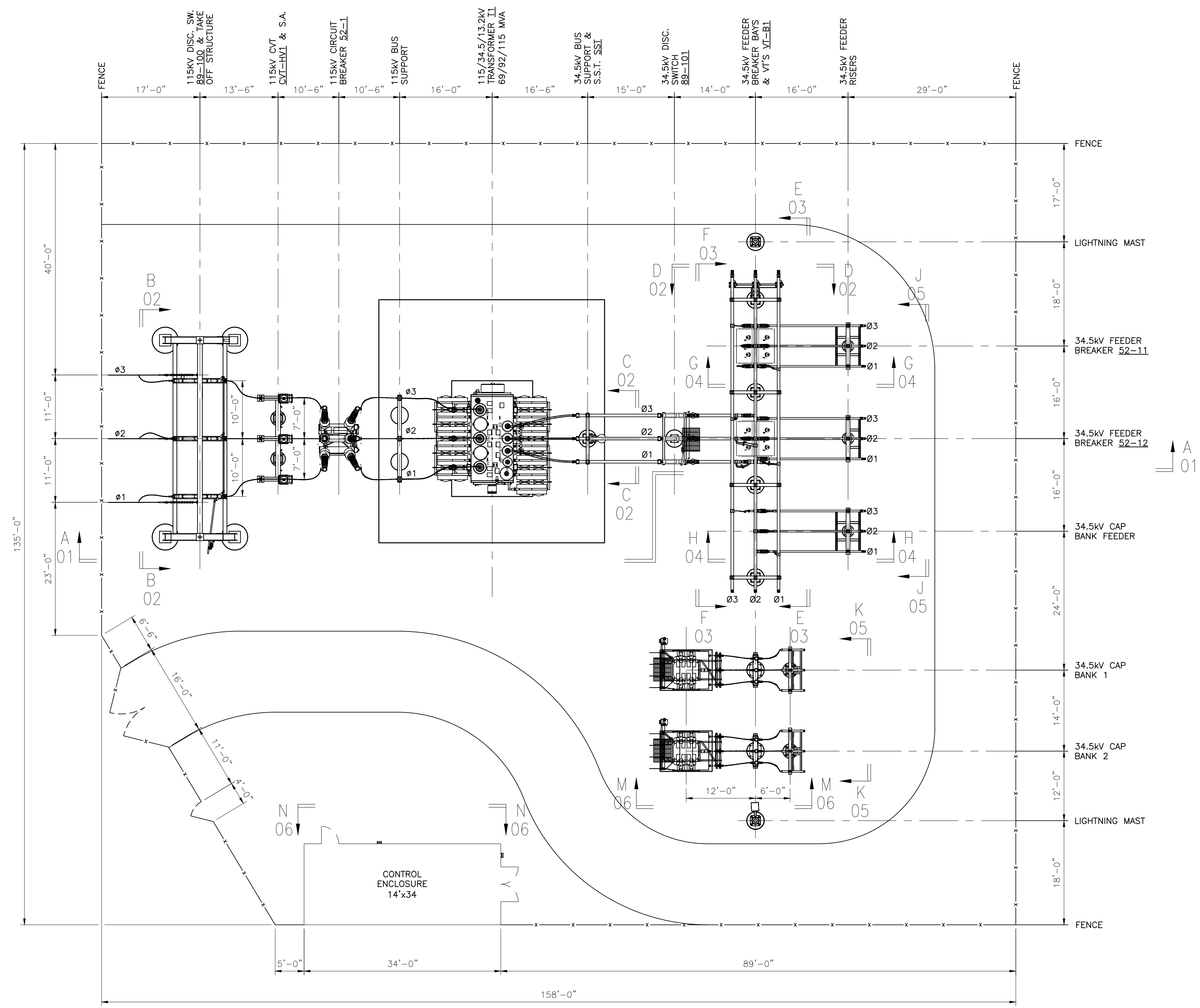
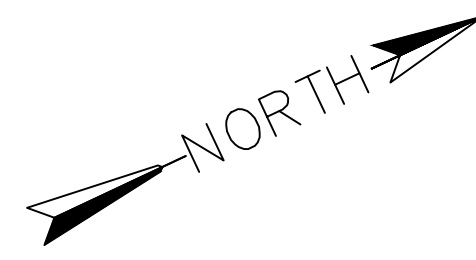
DRAWING CREATED BY
SCOTT REYNOLDS, P.E.,
NEW YORK STATE



**REYNOLDS
ARCHITECTURE
ENGINEERING**
40 TAMARACK LANE
NISKAYUNA, NY 12309
(518) 225-9473

HOFFMAN FALLS WIND PROJECT – 100MWAC
HOFFMAN FALLS WIND LLC
3604 CODY RD., FENNER, NY 13035
COVER SHEET w/ DRAWING INDEX

PROJ. NO.:	HFMF
DWG. NO.:	HFMF-700
SH:	01
REV.:	A
SCALE:	NONE



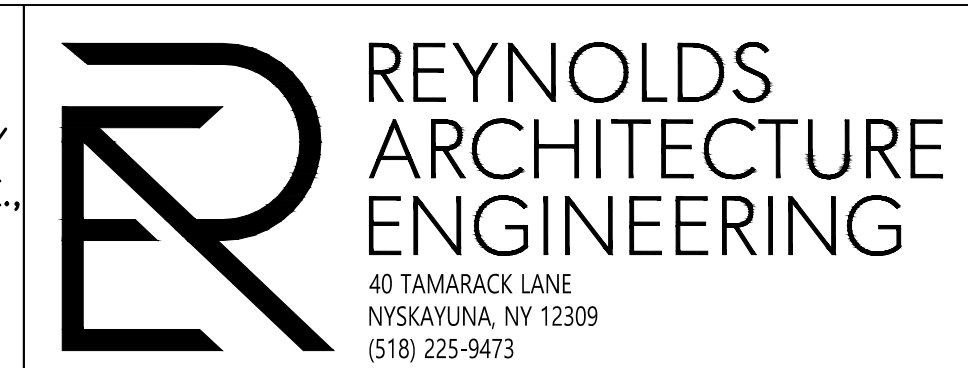
- LEGEND:**
- x — x — x — SUBSTATION FENCE
 - — — — — EQUIPMENT CENTERLINE
 - X ↑ ELEVATION
 - ## # SHEET #
 - (SEE DWG. SERIES 721 FOR ELEVATIONS)

- DESIGN CLEARANCES:**
- 115kV CLEARANCE (550kV BIL):
- PHASE TO PHASE (CENTER TO CENTER) 7'-0"
 - MINIMUM METAL TO METAL (PHASE TO PHASE) 4'-5"
 - PHASE TO GROUND 3'-6"
 - VERTICAL CLEARANCE TO LIVE PARTS FOR PERSONAL ACCESS 12'-0"
 - VERTICAL CLEARANCE TO LIVE PARTS OVER ROADWAY 25'-0"
 - SAFETY CLEARANCE ZONE TO SUBSTATION FENCE 13'-0"
- 34.5kV CLEARANCE (200kV BIL):
- PHASE TO PHASE (CENTER TO CENTER) 3'-0"
 - MINIMUM METAL TO METAL (PHASE TO PHASE) 1'-6"
 - PHASE TO GROUND 1'-1"
 - VERTICAL CLEARANCE TO LIVE PARTS FOR PERSONAL ACCESS 10'-0"
 - VERTICAL CLEARANCE TO LIVE PARTS OVER ROADWAY 22'-0"
 - SAFETY CLEARANCE ZONE TO SUBSTATION FENCE 11'-0"
- GENERAL CLEARANCE:
- VERTICAL CLEARANCE TO INDETERMINATE VOLTAGE 8'-6"
 - (MEASURED FROM TOP OF STRUCTURE BASE PLATE)

NOT FOR
CONSTRUCTION

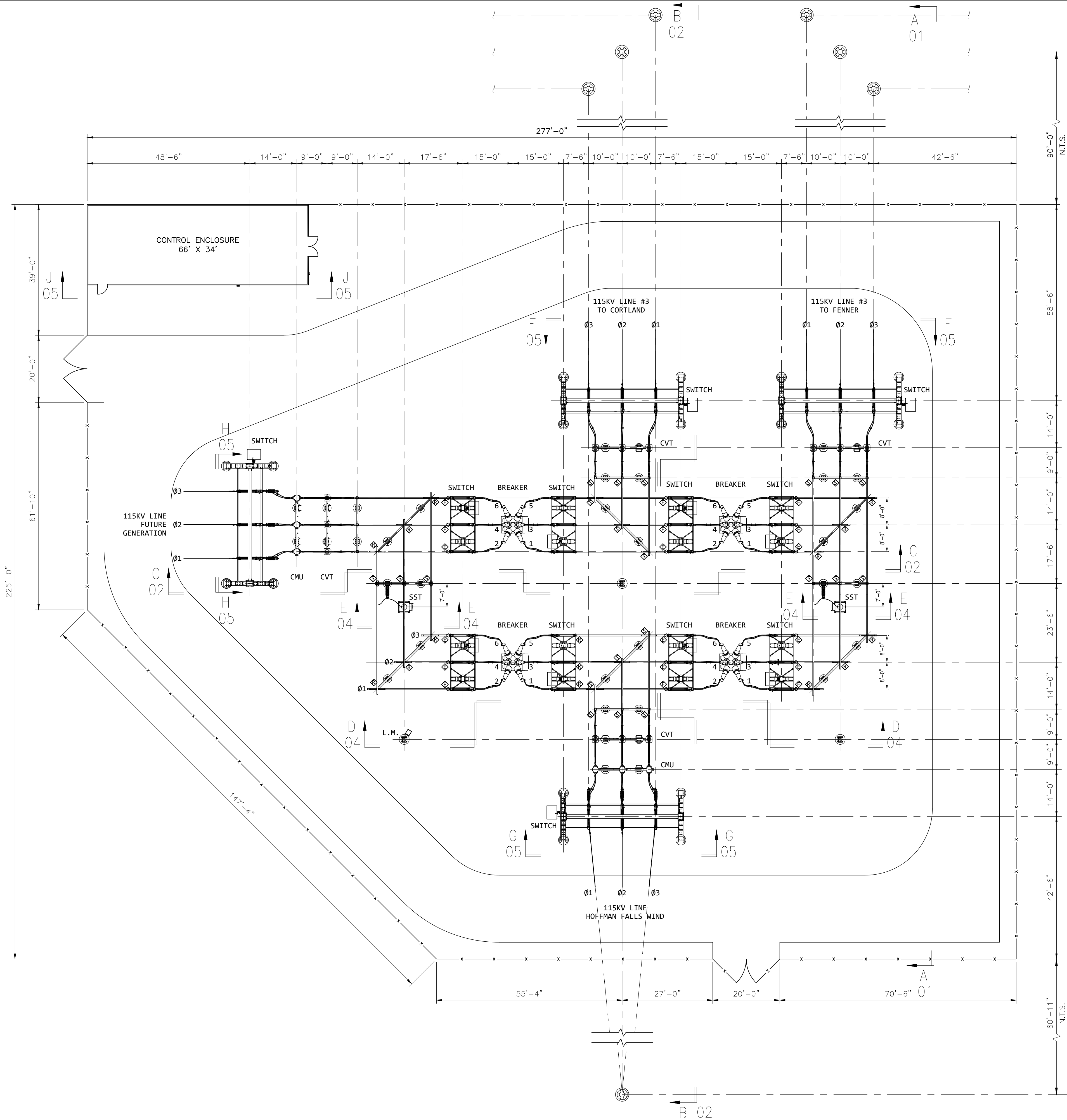
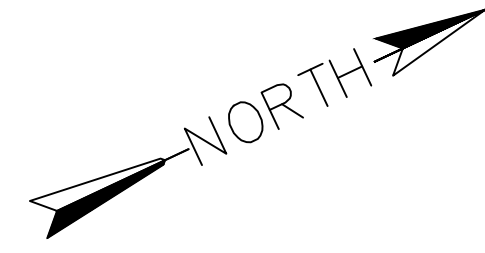
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECKED	APPR'D	P.E. STAMP
D	1/4/24	UPDATED PER ADDITIONAL SURVEY SITE PLAN INFO. FROM WESTWOOD	SDD	SR	SR	
C	11/20/23	ISSUED FOR PERMITTING WITH CUSTOMER COMMENTS	SDD	SR	SR	
B	11/2/23	ISSUED FOR PERMITTING	SDD	SR	SR	
A	1/2/23	ISSUED FOR REVIEW	BB	SR	SR	

DRAWING CREATED BY
SCOTT REYNOLDS, P.E.,
NEW YORK STATE



HOFFMAN FALLS WIND PROJECT - 100MWAC
HOFFMAN FALLS WIND LLC
3604 CODY RD., FENNER, NY 13035
GENERAL ARRANGEMENT - PLAN VIEW
COLLECTOR SUBSTATION

PROJ. NO:	HFMF
DWG. NO:	HFMF-720
SH:	01
REV:	D
SCALE:	3/32" = 1'-0"



LEGEND:

—x—x—x— SUBSTATION FENCE

— — — — — EQUIPMENT CENTERLINE

X ↑ SECTION

≡ SHEET

(SEE DWG. SERIES 721P FOR ELEVATIONS)

DESIGN CRITERIA
SUGGESTED CLEARANCES PER APPLICABLE INDUSTRY STANDARDS

115KV CLEARANCE (550KV BIL):

PHASE TO PHASE: 8'-0"
(CENTER TO CENTER)

MINIMUM METAL TO METAL: 4'-6"
(PHASE TO PHASE)

PHASE TO GROUND: 3'-6"

VERTICAL CLEARANCE TO LIVE PARTS FOR PERSONAL ACCESS: 12'-0"

HORIZONTAL CLEARANCE TO LIVE PARTS FOR PERSONAL ACCESS: 6'-1"

VERTICAL CLEARANCE TO LIVE PARTS OVER ROADWAY: 30'-0"

SAFETY CLEARANCE ZONE TO SUBSTATION FENCE: 14'-0"

GENERAL CLEARANCE:

VERTICAL CLEARANCE TO INDETERMINATE VOLTAGE: 8'-6"
(MEASURED FROM TOP OF STRUCTURE BASE PLATE)

NOT FOR CONSTRUCTION

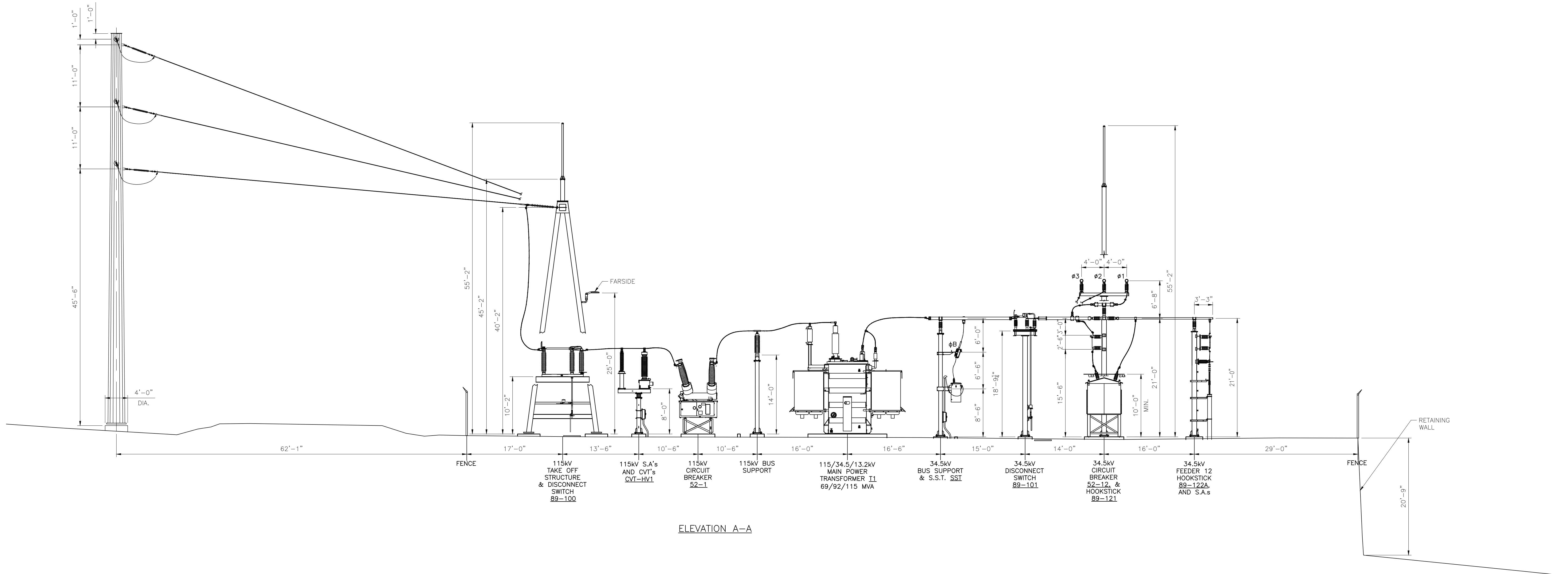
REV.:	DATE:	DESCRIPTION OF REVISION:	DRAWN:	CHECKED:	APPRV'D:	P.E. STAMP
D	1/4/24	UPDATED PER ADDITIONAL SURVEY SITE PLAN INFO. FROM WESTWOOD	SDD	SR	SR	
C	11/20/23	ISSUED FOR PERMITTING WITH CUSTOMER COMMENTS	SDD	SR	SR	
B	11/2/23	ISSUED FOR PERMITTING	SDD	SR	SR	
A	1/3/23	ISSUED FOR REVIEW	BB	SR	SR	

DRAWING CREATED BY
SCOTT REYNOLDS, P.E.,
NEW YORK STATE

REYNOLDS ARCHITECTURE ENGINEERING
40 TAMARACK LANE
NISKAYUNA, NY 12309
(518) 225-9473

HOFFMAN FALLS WIND PROJECT - 100MWAC
HOFFMAN FALLS WIND LLC
3604 CODY RD., FENNER, NY 13035
GENERAL ARRANGEMENT - PLAN VIEW
UTILITY POI SUBSTATION

PROJ. NO.:	HFMF
DWG. NO.:	HFMF-720P
SH:	01
REV.:	D
SCALE:	3/32" = 1'-0"



NOTE:
ALL STEEL STRUCTURES WILL BE GALVANIZED STEEL, AND GRAY METALLIC IN COLOR.

NOT FOR
CONSTRUCTION

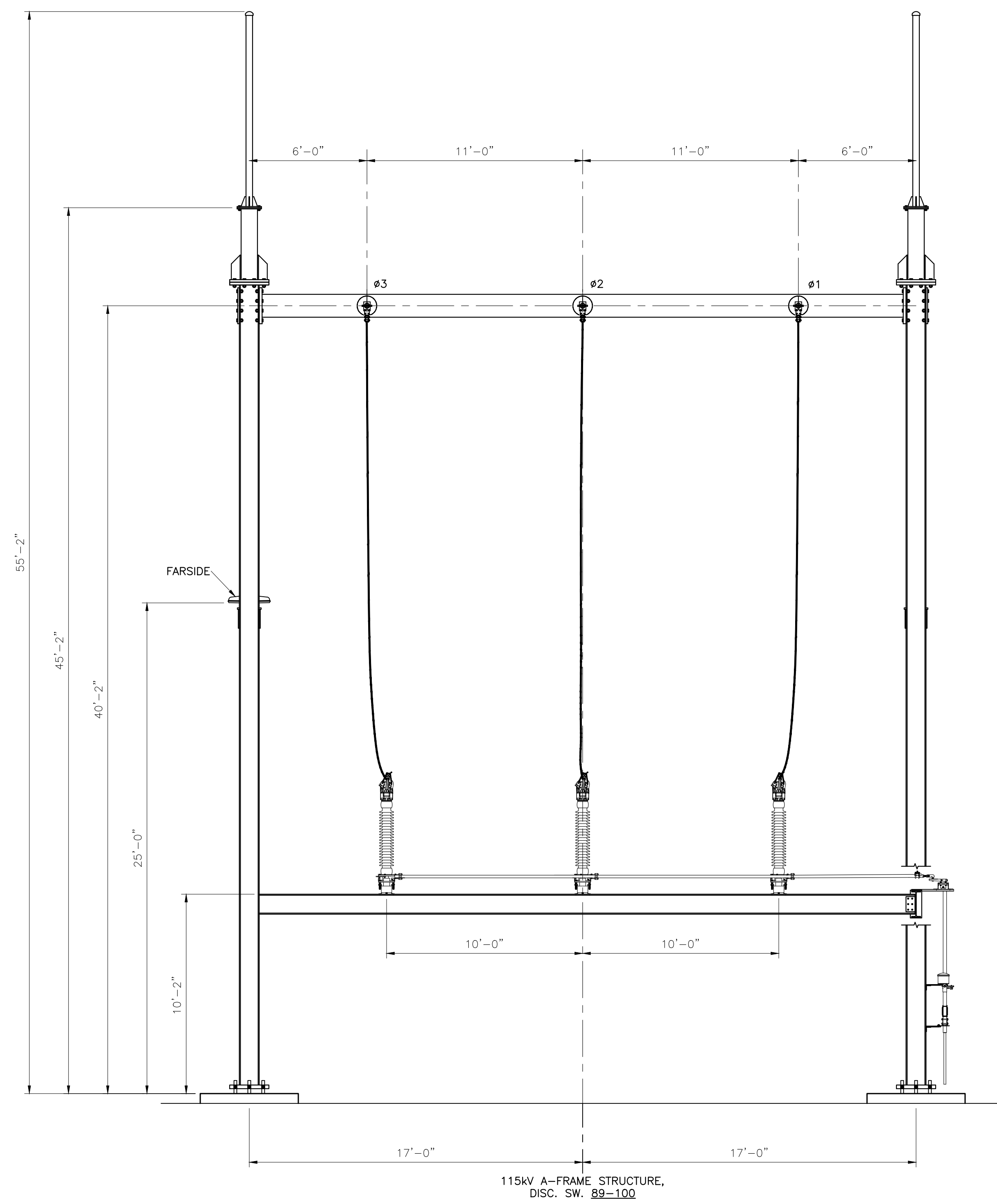
REV.:	DATE:	DESCRIPTION OF REVISION:	DRAWN:	CHECKED:	APPRV'D:	P.E. STAMP
D	1/4/24	UPDATED PER ADDITIONAL SURVEY SITE PLAN INFO. FROM WESTWOOD	SDD	SR	SR	
C	11/20/23	ISSUED FOR PERMITTING WITH CUSTOMER COMMENTS	SDD	SR	SR	
B	11/2/23	ISSUED FOR PERMITTING	SDD	SR	SR	
A	1/3/23	ISSUED FOR REVIEW	BB	SR	SR	

DRAWING CREATED BY
SCOTT REYNOLDS, P.E.,
NEW YORK STATE

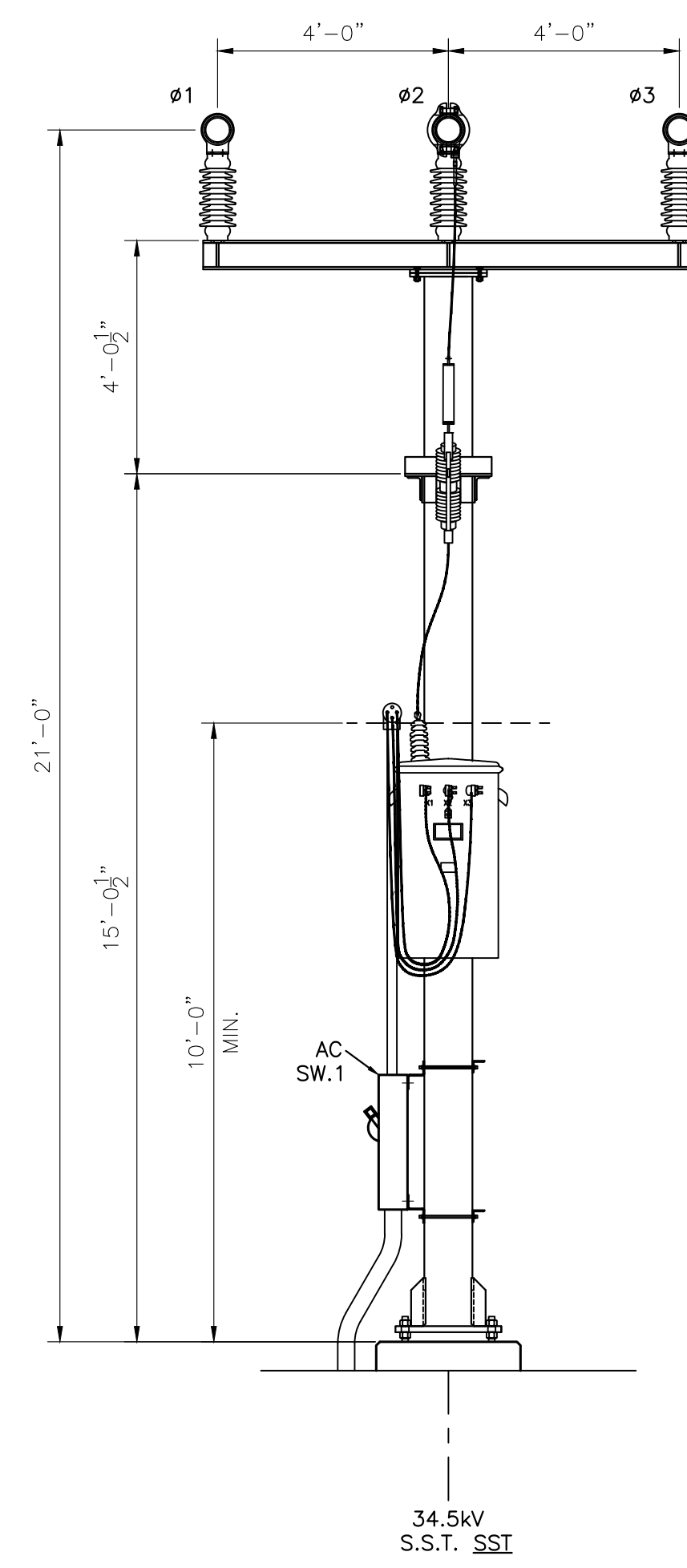
**REYNOLDS
ARCHITECTURE
ENGINEERING**
40 TAMARACK LANE
NISKAYUNA, NY 12309
(518) 225-9473

HOFFMAN FALLS WIND PROJECT - 100MWAC
HOFFMAN FALLS WIND LLC
3604 CODY RD., FENNER, NY 13035
GENERAL ARRANGEMENT - ELEVATION VIEW
COLLECTOR SUBSTATION

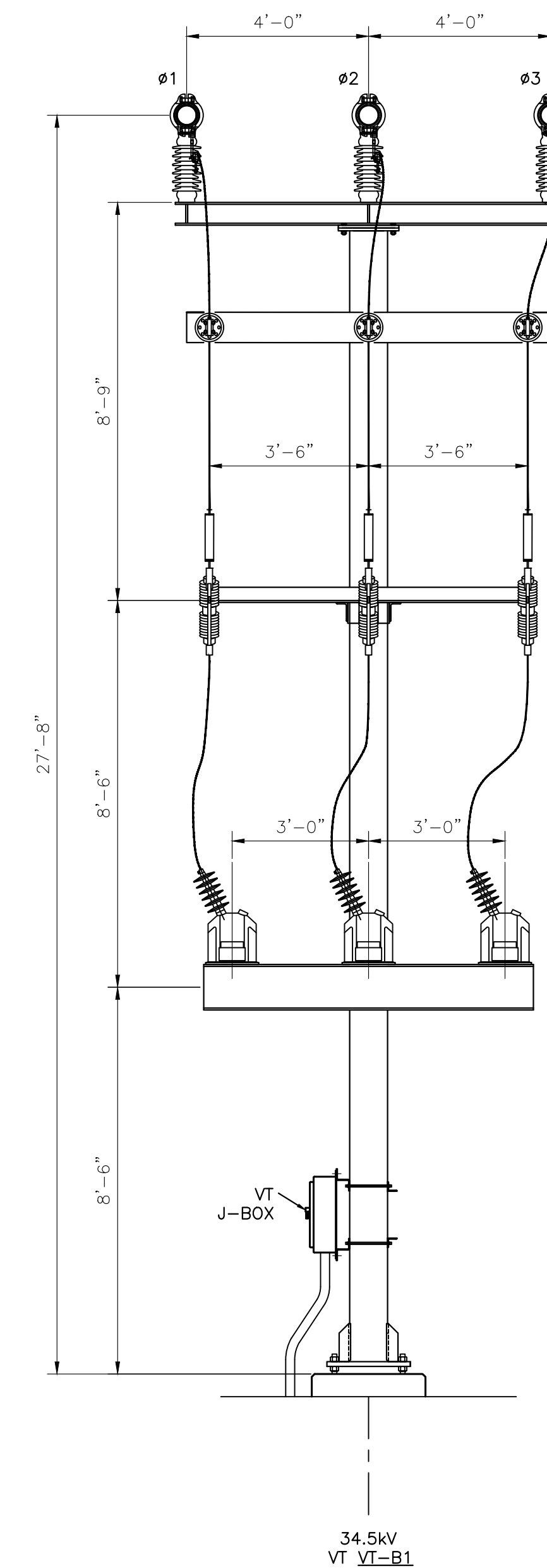
PROJ. NO.:	HFMF
DWG. NO.:	HFMF-721
SH:	01
REV.:	D
SCALE:	1/8" = 1'-0"



ELEVATION B-B
SCALE: 1/4"=1'-0"



ELEVATION C-C



ELEVATION D-D

NOT FOR
CONSTRUCTION

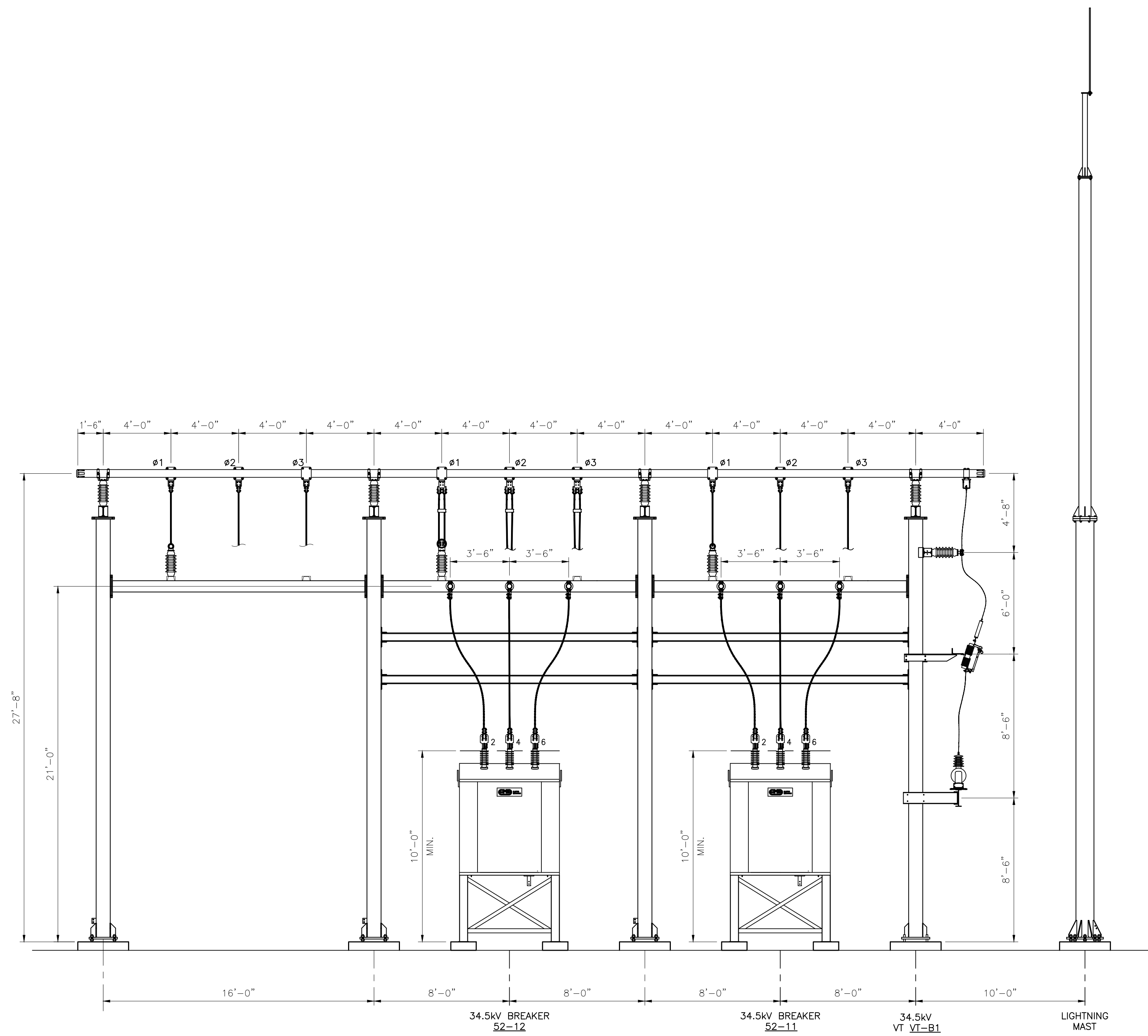
REV.:	DATE:	DESCRIPTION OF REVISION:	DRAWN:	CHECKED:	APPRV'D:	P.E. STAMP
D	1/4/24	UPDATED PER ADDITIONAL SURVEY SITE PLAN INFO. FROM WESTWOOD	SDD	SR	SR	
C	11/20/23	ISSUED FOR PERMITTING WITH CUSTOMER COMMENTS	SR	SR	SR	
B	11/2/23	ISSUED FOR PERMITTING	SDD	SR	SR	
A	1/3/23	ISSUED FOR REVIEW	BB	SR	SR	

DRAWING CREATED BY
SCOTT REYNOLDS, P.E.,
NEW YORK STATE

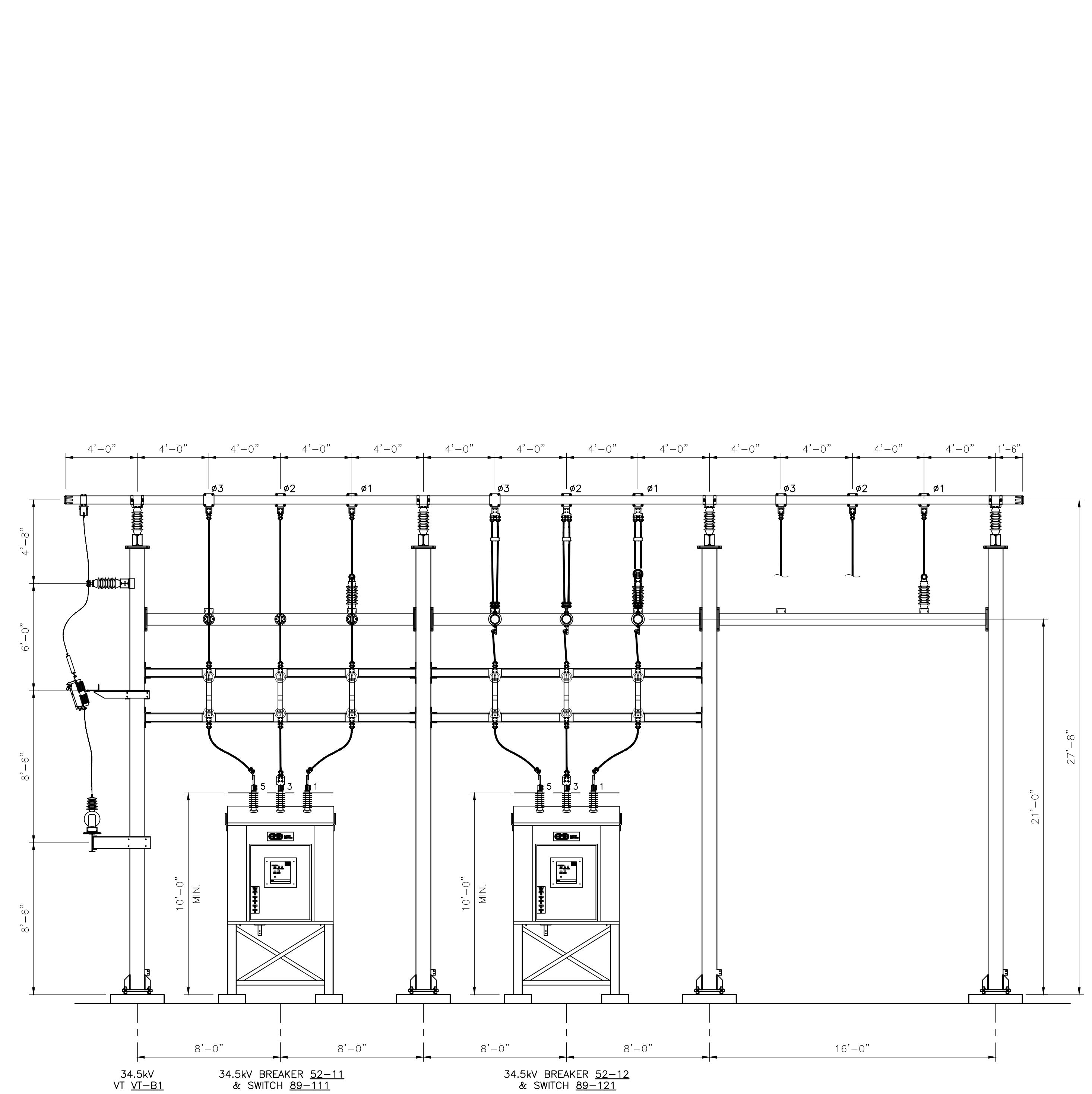
**REYNOLDS
ARCHITECTURE
ENGINEERING**
40 TAMARACK LANE
NISKAYUNA, NY 12309
(518) 225-9473

HOFFMAN FALLS WIND PROJECT – 100MWAC
HOFFMAN FALLS WIND LLC
3604 CODY RD., FENNER, NY 13035
GENERAL ARRANGEMENT – ELEVATION VIEWS
COLLECTOR SUBSTATION

PROJ. NO.:	HFMF
DWG. NO.:	HFMF-721
SH:	02
REV.:	D
SCALE:	3/8"=1'-0" U.N.O.



ELEVATION E-E



ELEVATION F-F
(LIGHTNING MAST NOT SHOWN)

NOT FOR
CONSTRUCTION

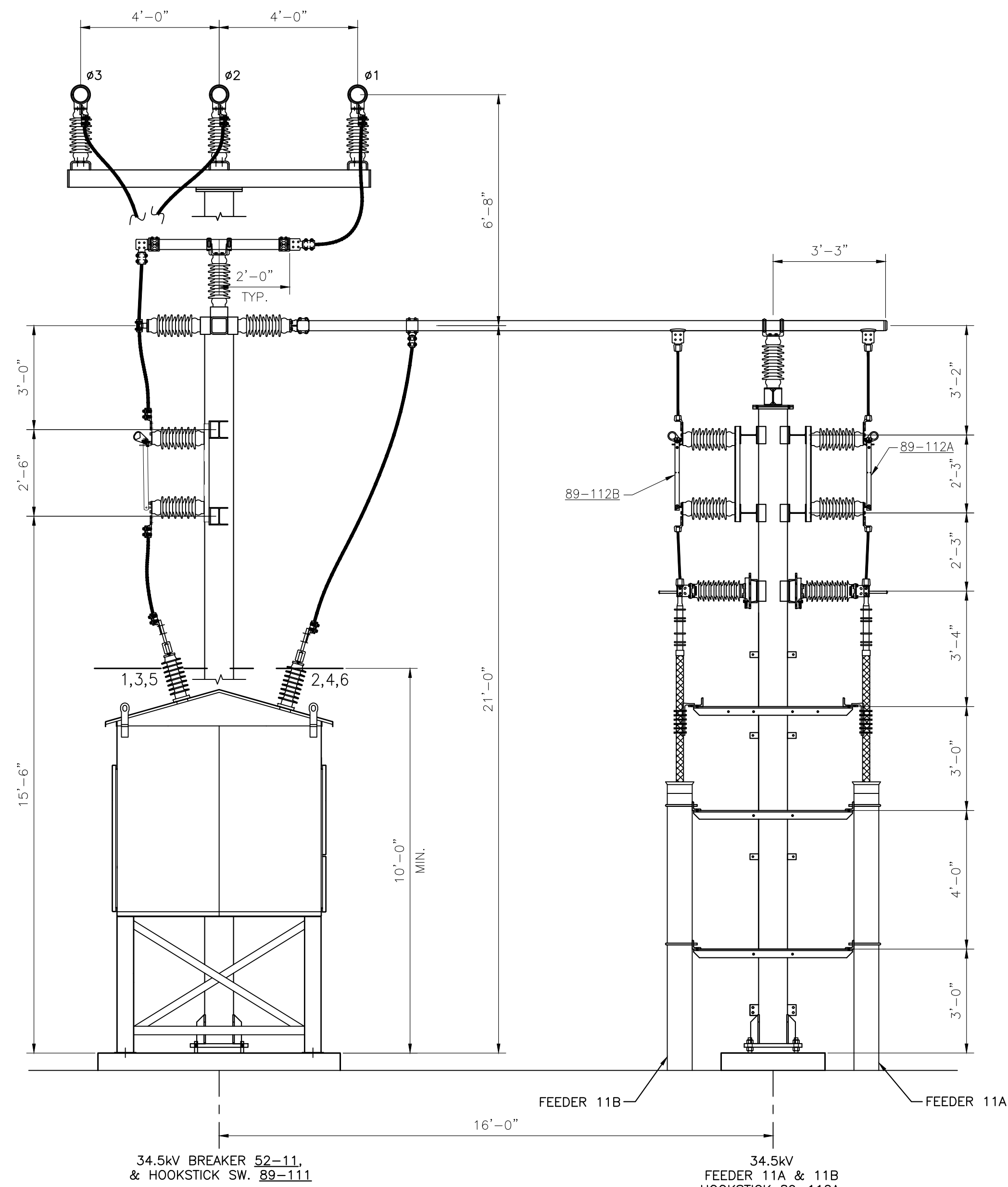
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECKED	APPR'D	P.E. STAMP
C	1/4/24	UPDATED PER ADDITIONAL SURVEY SITE PLAN INFO. FROM WESTWOOD	SDD	SR	SR	
B	11/20/23	ISSUED FOR PERMITTING WITH CUSTOMER COMMENTS	SR	SR	SR	
A	11/2/23	ISSUED FOR PERMITTING	SDD	SR	SR	

DRAWING CREATED BY
SCOTT REYNOLDS, P.E.,
NEW YORK STATE

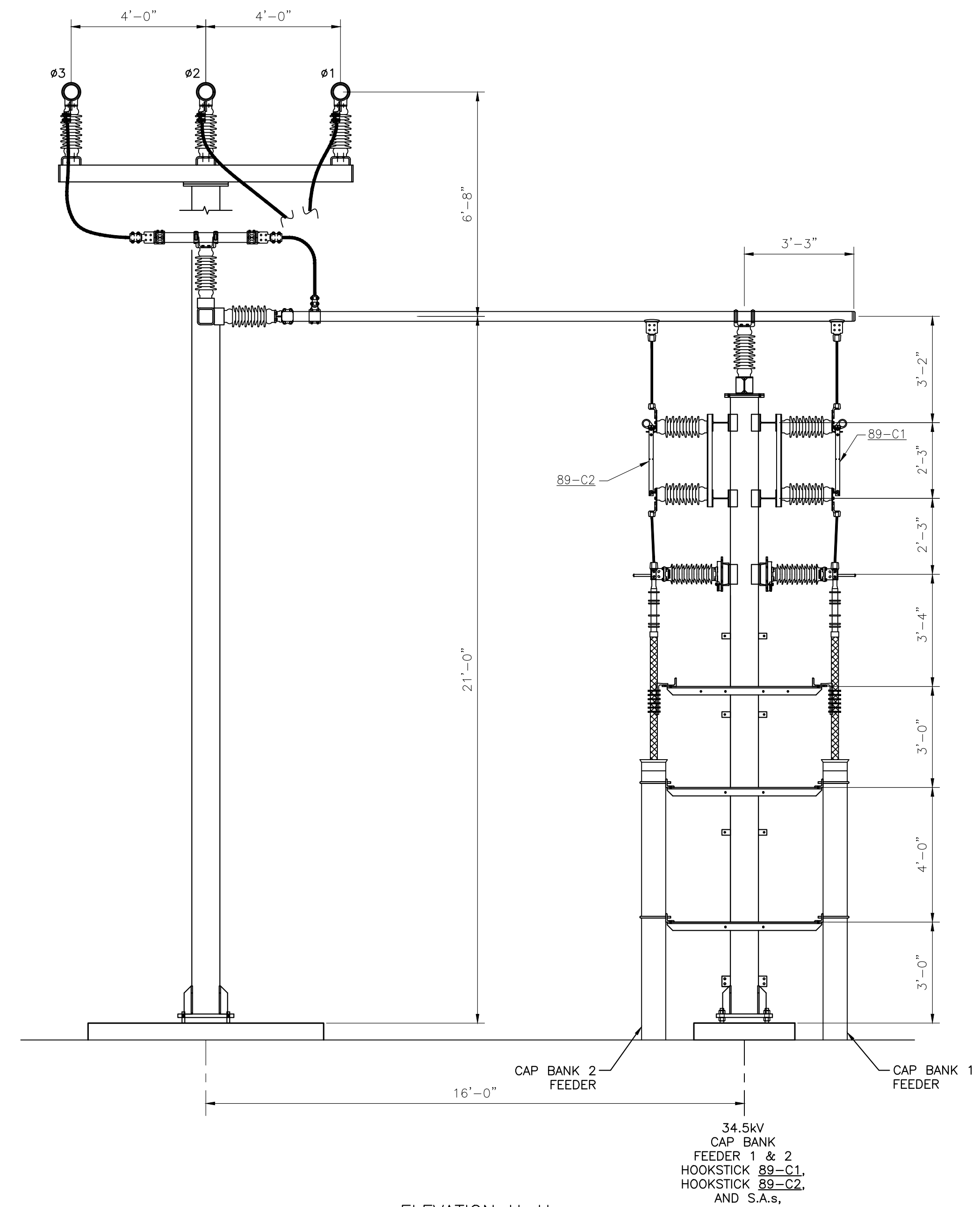
**REYNOLDS
ARCHITECTURE
ENGINEERING**
40 TAMARACK LANE
NISKAYUNA, NY 12309
(518) 225-9473

HOFFMAN FALLS WIND PROJECT – 100MWAC
HOFFMAN FALLS WIND LLC
3604 CODY RD., FENNER, NY 13035
GENERAL ARRANGEMENT – ELEVATION VIEWS
COLLECTOR SUBSTATION

PROJ. NO.:	HFMF
DWG. NO.:	HFMF-721
SH:	03
REV.:	C
SCALE:	1/4"=1'-0"



ELEVATION G-G



ELEVATION H-H

NOT FOR
CONSTRUCTION

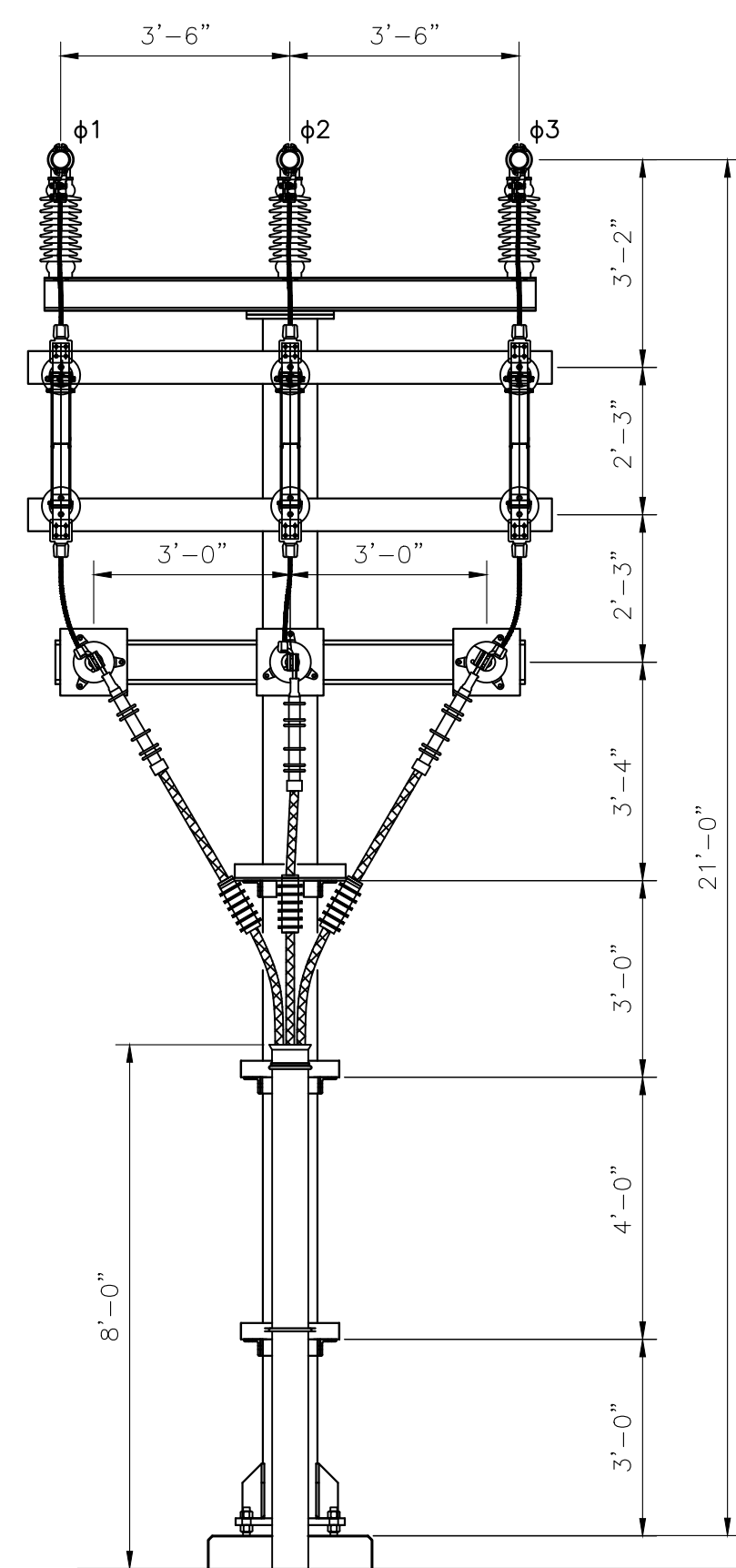
REV.:	DATE:	DESCRIPTION OF REVISION:	DRAWN:	CHECKED:	APPRV'D:	P.E. STAMP
C	1/4/24	UPDATED PER ADDITIONAL SURVEY SITE PLAN INFO. FROM WESTWOOD	SDD	SR	SR	
B	11/20/23	ISSUED FOR PERMITTING WITH CUSTOMER COMMENTS	SR	SR	SR	
A	11/2/23	ISSUED FOR PERMITTING	SDD	SR	SR	

DRAWING CREATED BY
SCOTT REYNOLDS, P.E.,
NEW YORK STATE

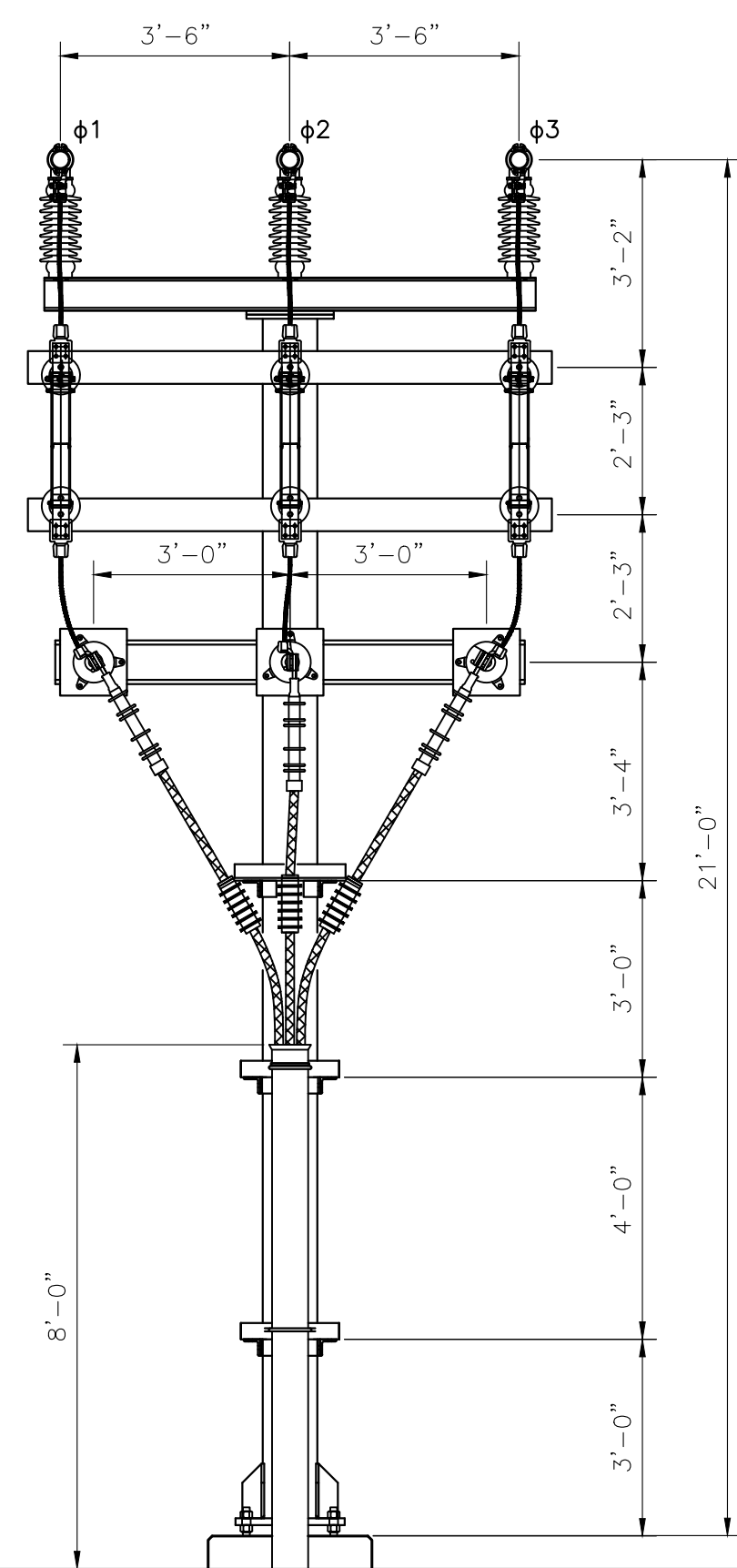
**REYNOLDS
ARCHITECTURE
ENGINEERING**
40 TAMARACK LANE
NISKAYUNA, NY 12309
(518) 225-9473

HOFFMAN FALLS WIND PROJECT – 100MWAC
HOFFMAN FALLS WIND LLC
3604 CODY RD., FENNER, NY 13035
GENERAL ARRANGEMENT – ELEVATION VIEWS
COLLECTOR SUBSTATION

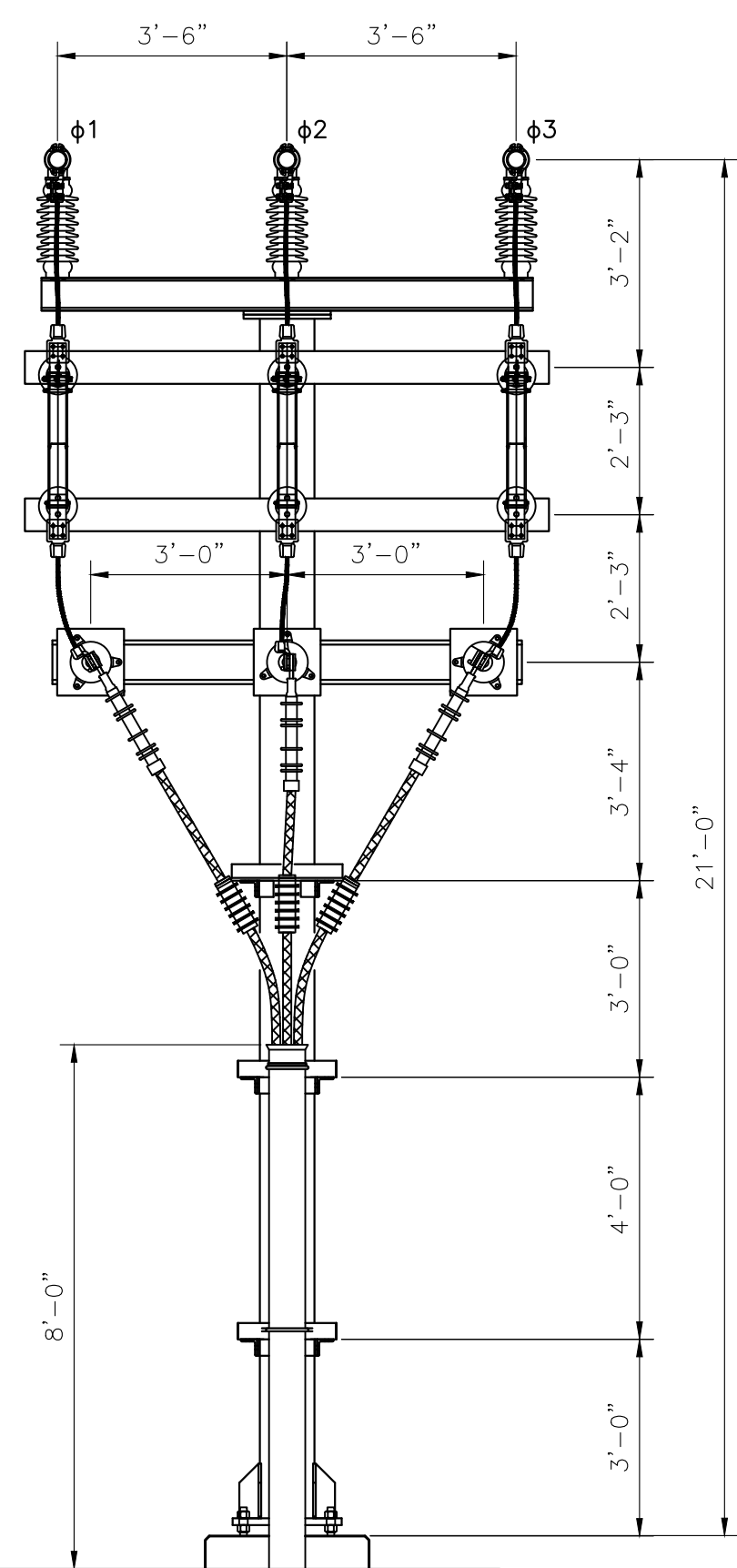
PROJ. NO.:	HFMF
DWG. NO.:	HFMF-721
SH:	04
REV.:	C
SCALE:	3/8" = 1'-0"



34.5kV CAP
BANK 1 FEEDER,
SURGE ARRESTERS &
HOOKSTICK SW. 89-C1

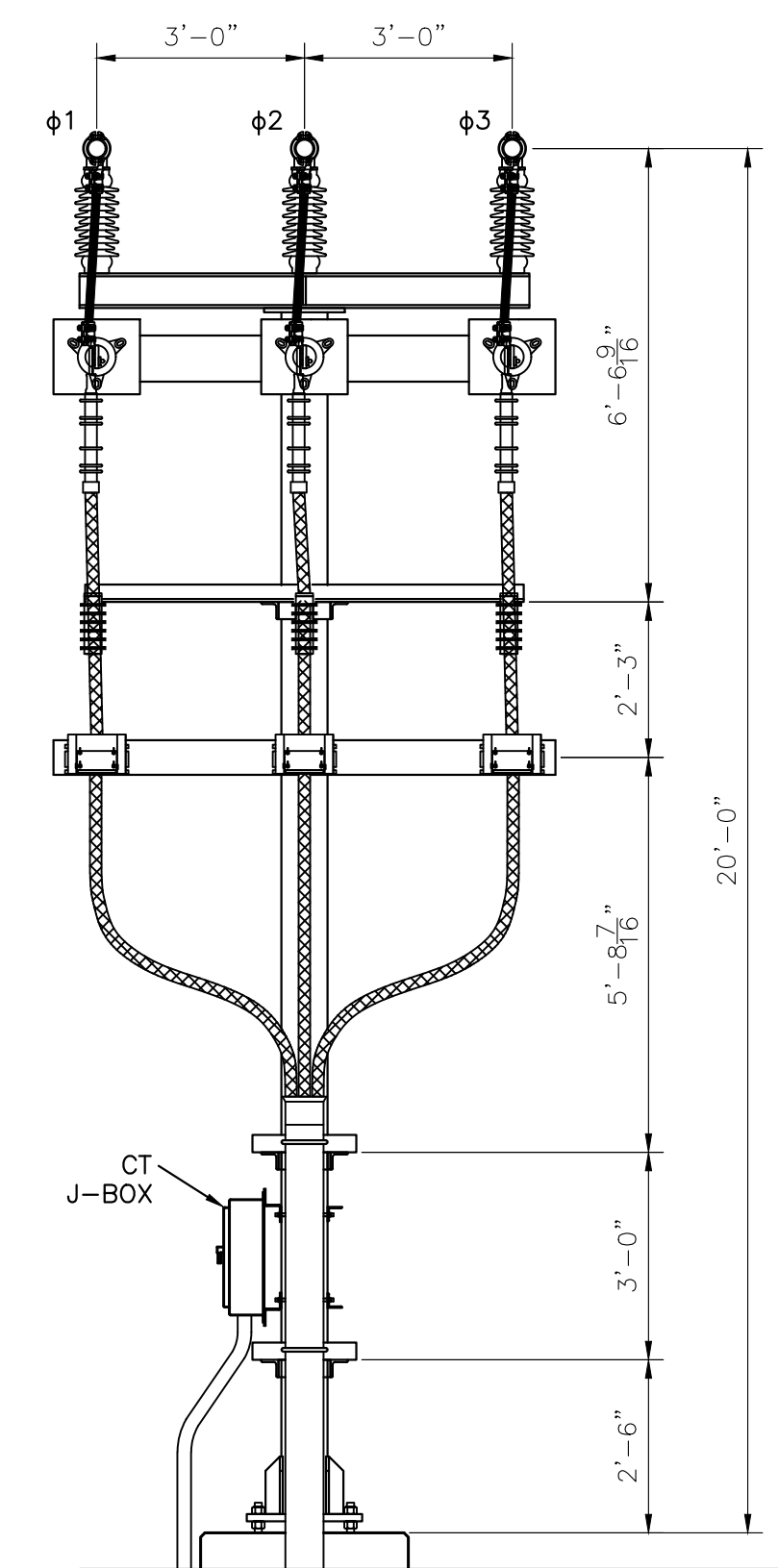


34.5kV FEEDER 12,
SURGE ARRESTERS &
HOOKSTICK SW. 89-122A

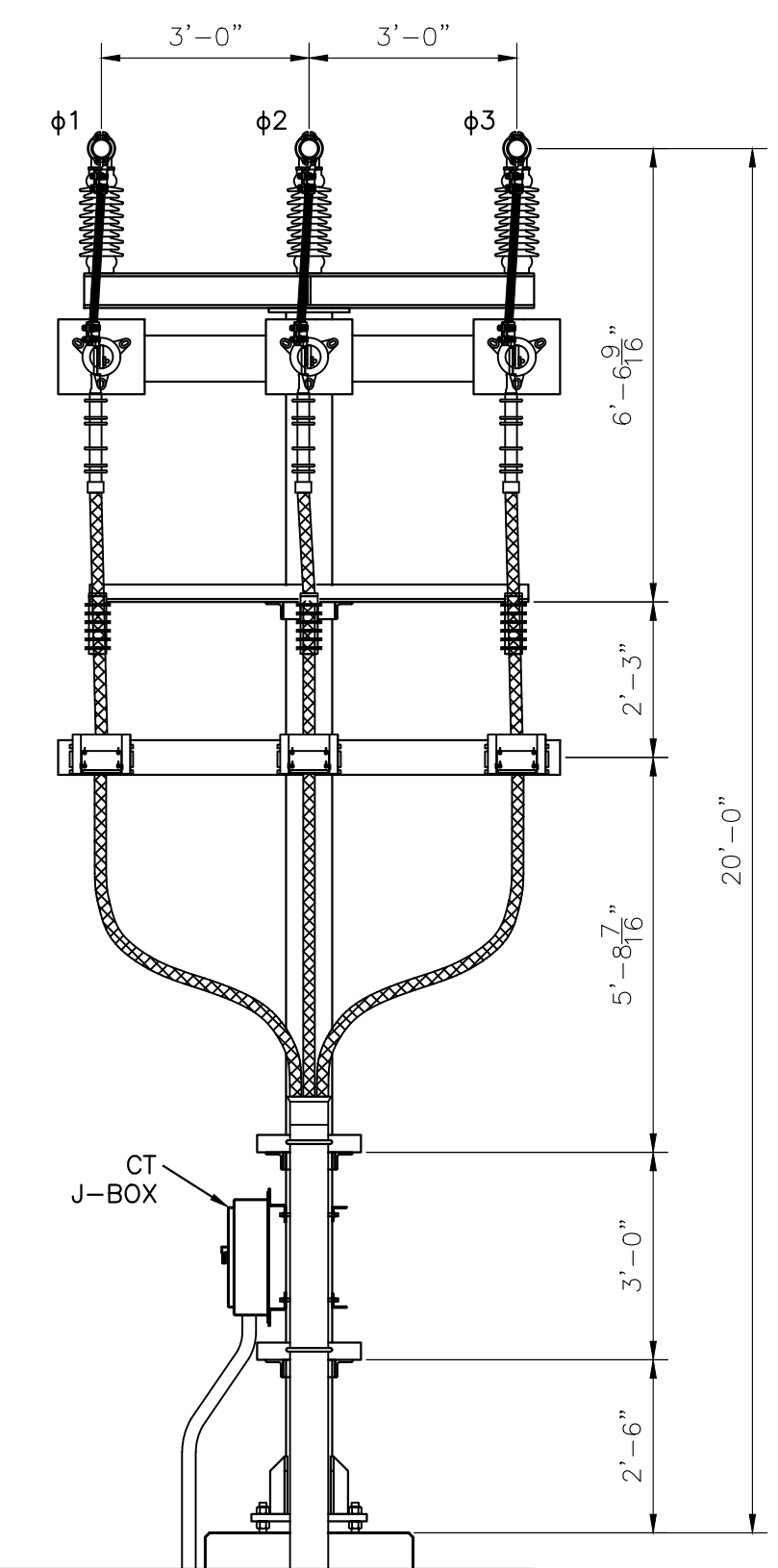


34.5kV FEEDER 11A,
SURGE ARRESTERS &
HOOKSTICK SW. 89-112A

ELEVATION J-J



34.5kV CAP
BANK 2 RISER,
CT's AND
SURGE ARRESTERS



34.5kV CAP
BANK 1 RISER,
CT's AND
SURGE ARRESTERS

ELEVATION K-K

NOT FOR
CONSTRUCTION

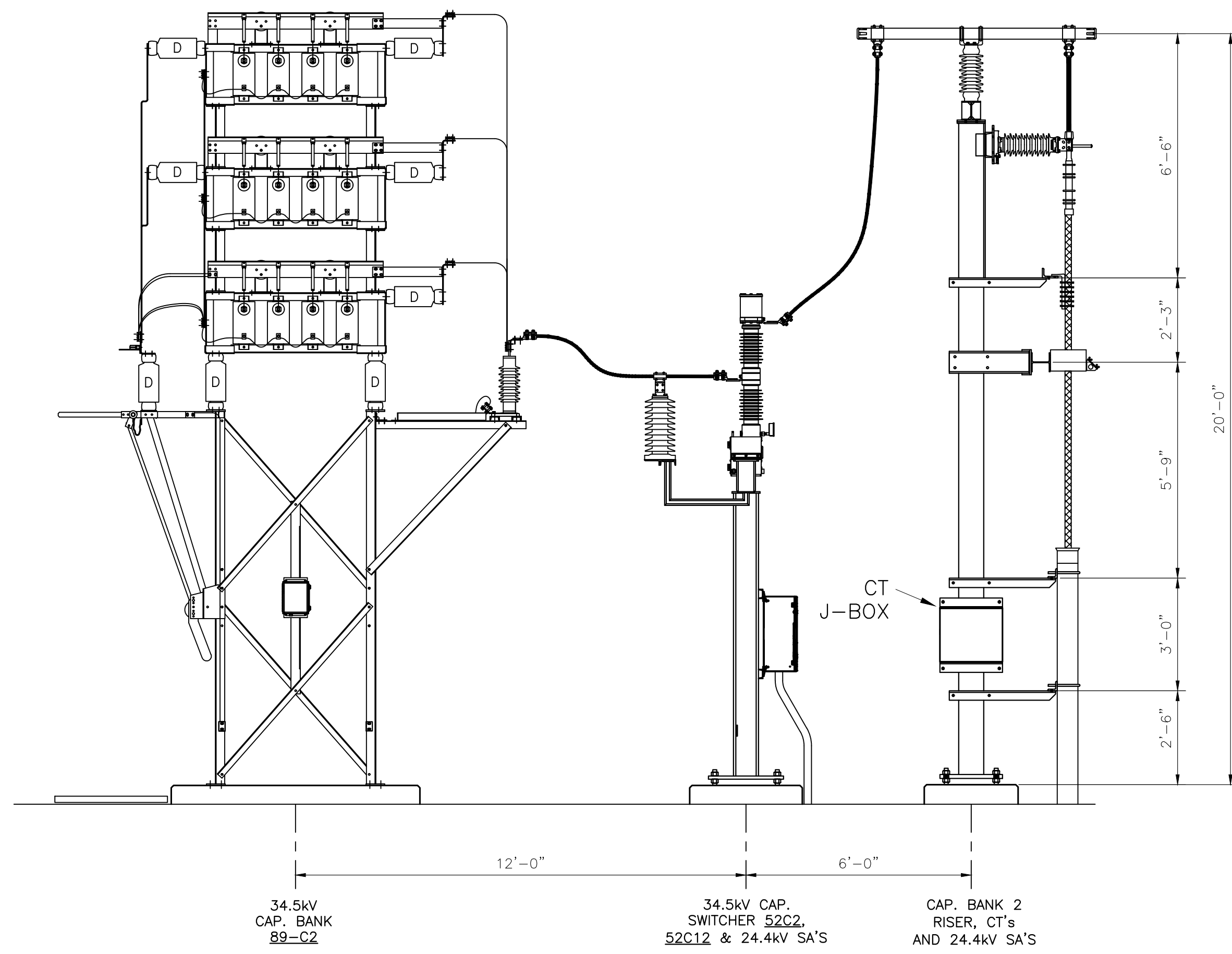
REV.	DATE	DESCRIPTION OF REVISION	DRAWN	CHECKED	APPRV'D	P.E. STAMP
C	1/4/24	UPDATED PER ADDITIONAL SURVEY SITE PLAN INFO. FROM WESTWOOD	SDD	SR	SR	
B	11/20/23	ISSUED FOR PERMITTING WITH CUSTOMER COMMENTS	SR	SR	SR	
A	11/2/23	ISSUED FOR PERMITTING	SDD	SR	SR	

DRAWING CREATED BY
SCOTT REYNOLDS, P.E.,
NEW YORK STATE

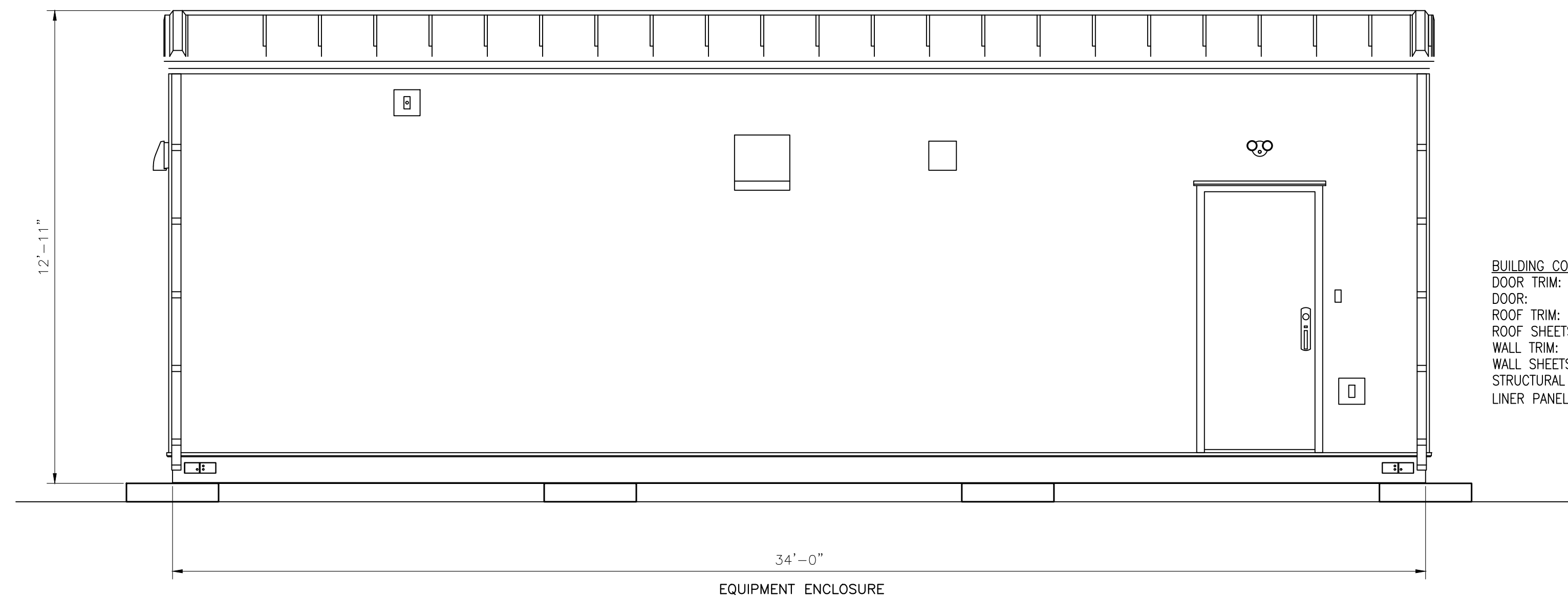
**REYNOLDS
ARCHITECTURE
ENGINEERING**
40 TAMARACK LANE
NISKAYUNA, NY 12309
(518) 225-9473

HOFFMAN FALLS WIND PROJECT - 100MWAC
HOFFMAN FALLS WIND LLC
3604 CODY RD., FENNER, NY 13035
GENERAL ARRANGEMENT - ELEVATION VIEWS
COLLECTOR SUBSTATION

PROJ. NO.:	HFMF
DWG. NO.:	HFMF-721
SH:	05
REV.:	C
SCALE:	3/8" = 1'-0"



ELEVATION M-M



ELEVATION N-N

BUILDING COLOR CHART:
 DOOR TRIM: ASH GRAY
 DOOR: ASH GRAY
 ROOF TRIM: ASH GRAY
 ROOF SHEETS: REGAL WHITE
 WALL TRIM: ASH GRAY
 WALL SHEETS: ASH GRAY
 STRUCTURAL BASE FRAME: STRUCTURAL GRAY
 LINER PANEL AND TRIM (INTERIOR): REGAL WHITE

NOT FOR
CONSTRUCTION

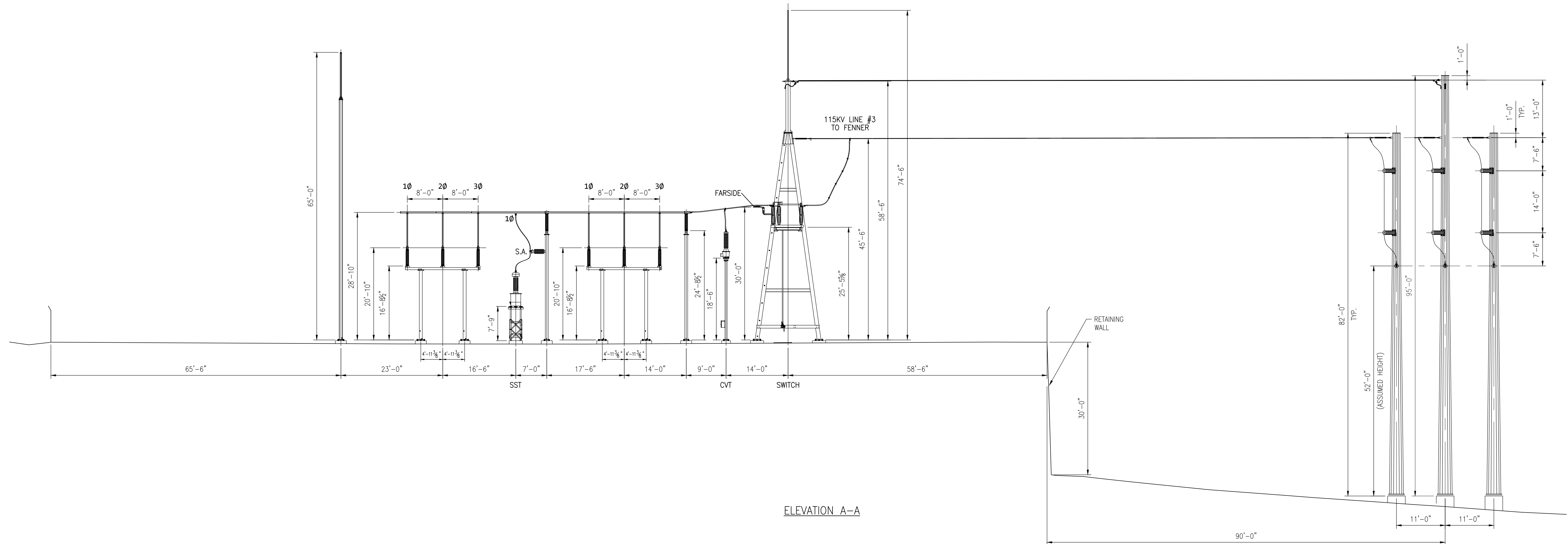
REV.:	DATE:	DESCRIPTION OF REVISION:	DRAWN:	CHECKED:	APPRV'D:	P.E. STAMP
C	1/4/24	UPDATED PER ADDITIONAL SURVEY SITE PLAN INFO. FROM WESTWOOD	SDD	SR	SR	
B	11/20/23	ISSUED FOR PERMITTING WITH CUSTOMER COMMENTS	SDD	SR	SR	
A	11/2/23	ISSUED FOR PERMITTING	SDD	SR	SR	

DRAWING CREATED BY
SCOTT REYNOLDS, P.E.,
NEW YORK STATE

**REYNOLDS
ARCHITECTURE
ENGINEERING**
 40 TAMARACK LANE
 NISKAYUNA, NY 12309
 (518) 225-9473

HOFFMAN FALLS WIND PROJECT – 100MWAC
 HOFFMAN FALLS WIND LLC
 3604 CODY RD., FENNER, NY 13035
 GENERAL ARRANGEMENT – ELEVATION VIEWS
 COLLECTOR SUBSTATION

PROJ. NO.:	HFMF
DWG. NO.:	HFMF-721
SH:	06
REV.:	C
SCALE:	3/8" = 1'-0"



ELEVATION A-A

NOTES:

1. FINAL TRANSMISSION LINE TAP IS BY NATIONAL GRID.
2. ALL STEEL STRUCTURES WILL BE GALVANIZED STEEL, AND GRAY METALLIC IN COLOR.

NOT FOR CONSTRUCTION

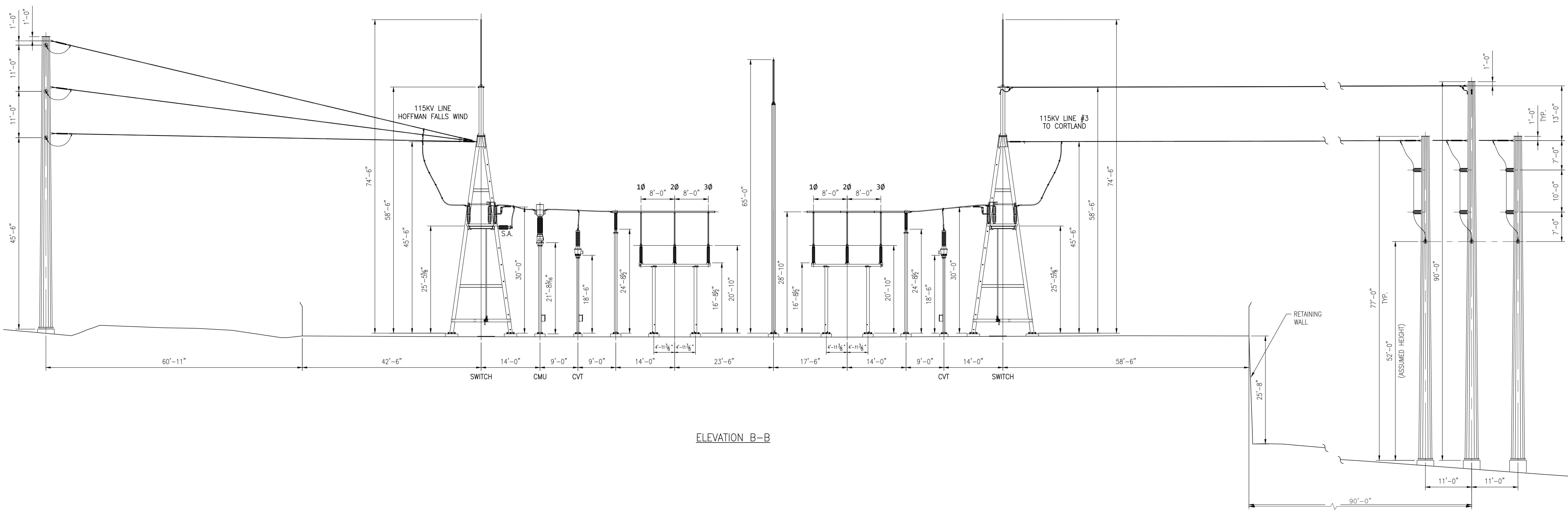
REV.:	DATE:	DESCRIPTION OF REVISION:	DRAWN:	CHECKED:	APPRV'D:	P.E. STAMP
D	1/4/24	UPDATED PER ADDITIONAL SURVEY SITE PLAN INFO. FROM WESTWOOD	SDD	SR	SR	
C	11/20/23	ISSUED FOR PERMITTING WITH CUSTOMER COMMENTS	SDD	SR	SR	
B	11/2/23	ISSUED FOR PERMITTING	SDD	SR	SR	
A	1/3/23	ISSUED FOR REVIEW	BB	SR	SR	

DRAWING CREATED BY
SCOTT REYNOLDS, P.E.,
NEW YORK STATE

REYNOLDS
ARCHITECTURE
ENGINEERING
40 TAMARACK LANE
NISKAYUNA, NY 12309
(518) 225-9473

HOFFMAN FALLS WIND PROJECT - 100MWAC
HOFFMAN FALLS WIND LLC
3604 CODY RD., FENNER, NY 13035
GENERAL ARRANGEMENT - ELEVATION VIEW
UTILITY POI SUBSTATION

PROJ. NO.:	HFMF
DWG. NO.:	HFMF-721P
SH:	01
REV.:	D
SCALE:	3/32" = 1'-0"



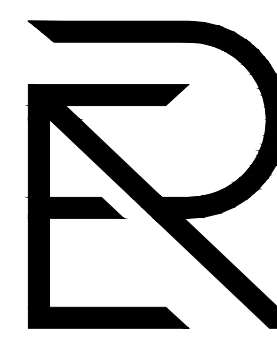
ELEVATION B-B

NOTES:

1. FINAL TRANSMISSION LINE TAP IS BY NATIONAL GRID.
2. ALL STEEL STRUCTURES WILL BE GALVANIZED STEEL, AND GRAY METALLIC IN COLOR.

NOT FOR
CONSTRUCTION

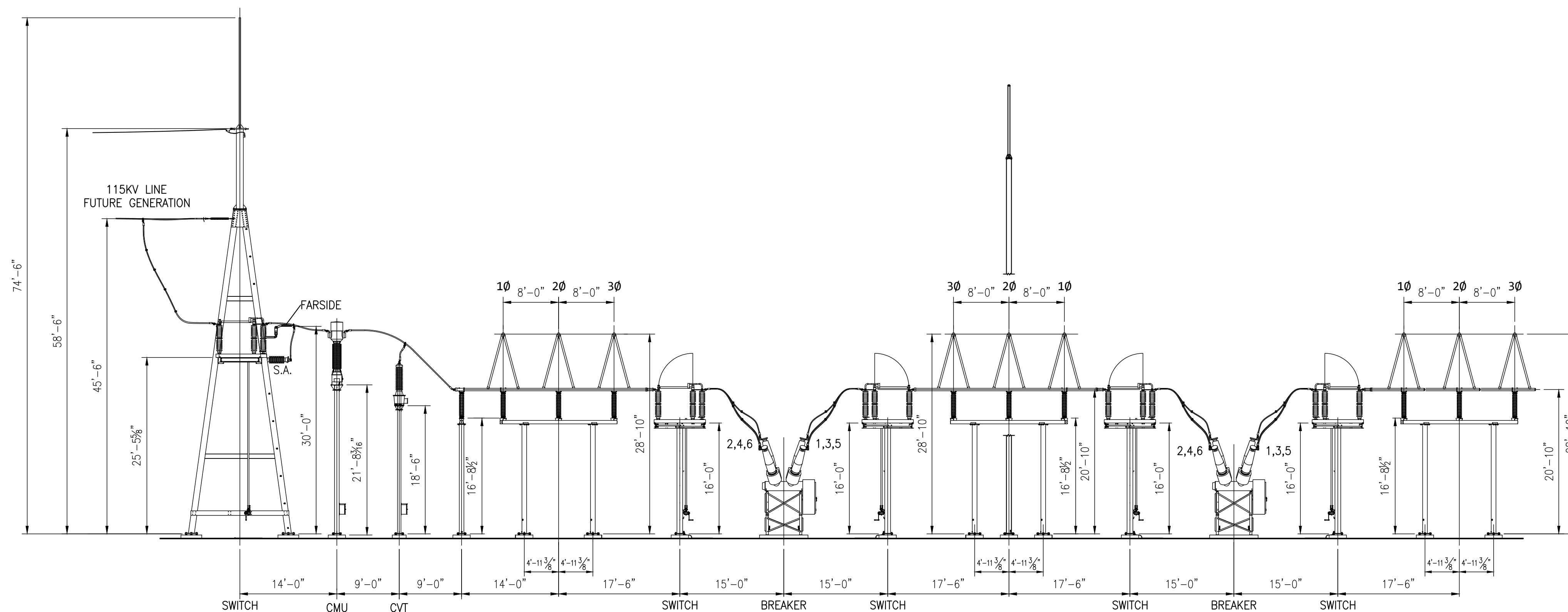
REV.:	DATE:	DESCRIPTION OF REVISION:	DRAWN:	CHECKED:	APPRV'D:	P.E. STAMP
D	1/4/24	UPDATED PER ADDITIONAL SURVEY SITE PLAN INFO. FROM WESTWOOD	SDD	SR	SR	DRAWING CREATED BY SCOTT REYNOLDS, P.E. NEW YORK STATE
C	11/20/23	ISSUED FOR PERMITTING WITH CUSTOMER COMMENTS	SDD	SR	SR	
B	11/2/23	ISSUED FOR PERMITTING	SDD	SR	SR	
A	1/3/23	ISSUED FOR REVIEW	BB	SR	SR	


**REYNOLDS
ARCHITECTURE
ENGINEERING**
40 TAMARACK LANE
NISKAYUNA, NY 12309
(518) 225-9473

HOFFMAN FALLS WIND PROJECT – 100MWAC
 HOFFMAN FALLS WIND LLC
 3604 CODY RD., FENNER, NY 13035
 GENERAL ARRANGEMENT – ELEVATION VIEW
 UTILITY POI SUBSTATION

PROJ. NO.:	HFMF
DWG. NO.:	HFMF-721P
SH:	02
REV.:	D
SCALE:	3/32" = 1'-0"

PROPRIETARY INFORMATION
 REYNOLDS ARCHITECTURE ENGINEERING
 CLAIMS PROPRIETARY RIGHTS TO THE
 INFORMATION, DESIGN AND LAYOUT
 DISCLOSED HEREIN. THIS DRAWING IS
 ISSUED FOR INFORMATIONAL PURPOSES
 ONLY AND MAY NOT BE REPRODUCED,
 DISCLOSED TO OTHERS OR USED TO
 DESIGN OR CONSTRUCT ANY OF THE
 ITEMS SHOWN HEREIN WITHOUT THE
 EXPRESSED WRITTEN CONSENT OF
 REYNOLDS ARCHITECTURE ENGINEERING.



ELEVATION C-C

NOT FOR
CONSTRUCTION

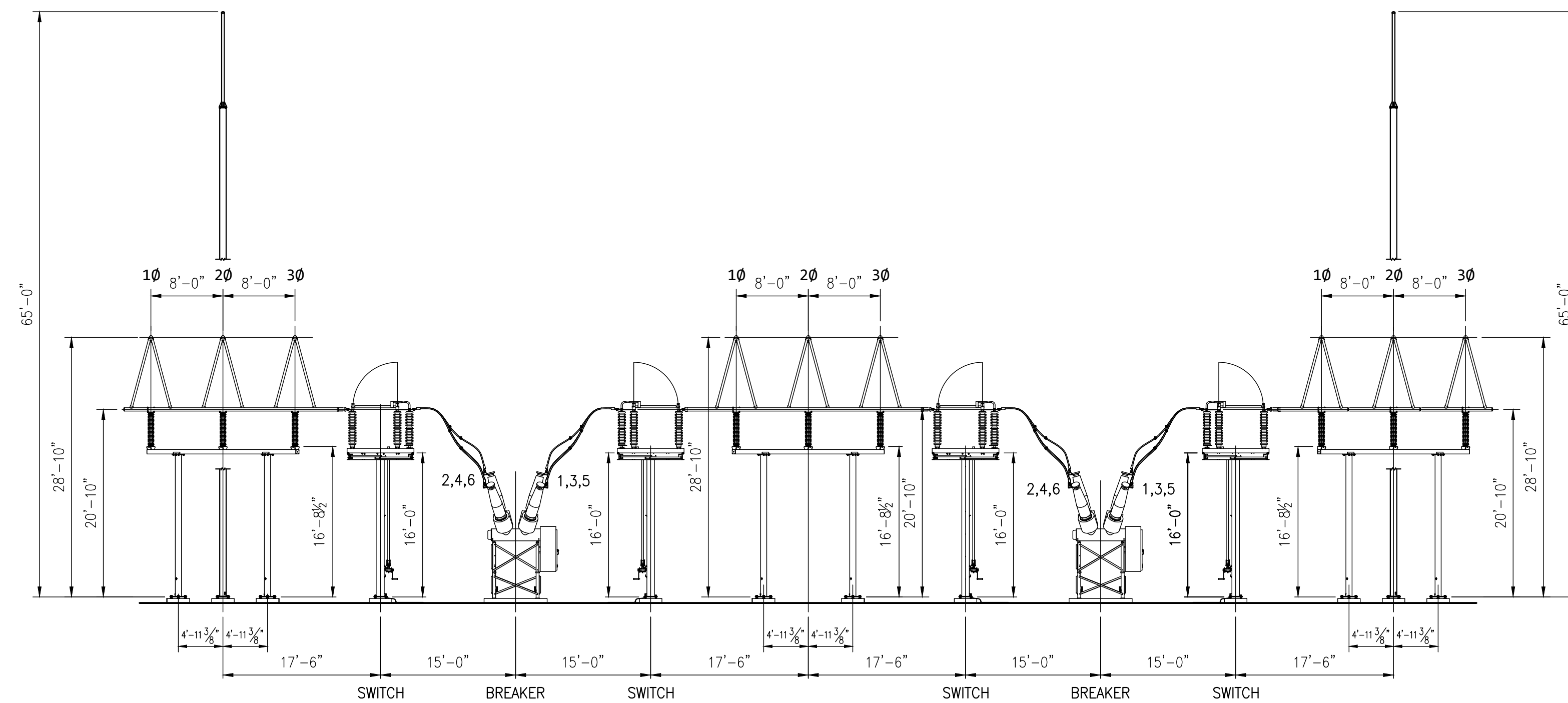
REV.:	DATE:	DESCRIPTION OF REVISION:	DRAWN:	CHECKED:	APPRV'D:	P.E. STAMP
D	1/4/24	UPDATED PER ADDITIONAL SURVEY SITE PLAN INFO. FROM WESTWOOD	SDD	SR	SR	
C	11/20/23	ISSUED FOR PERMITTING WITH CUSTOMER COMMENTS	SR	SR	SR	
B	11/2/23	ISSUED FOR PERMITTING	SDD	SR	SR	
A	1/3/23	ISSUED FOR REVIEW	BB	SR	SR	

DRAWING CREATED BY
SCOTT REYNOLDS, P.E.,
NEW YORK STATE

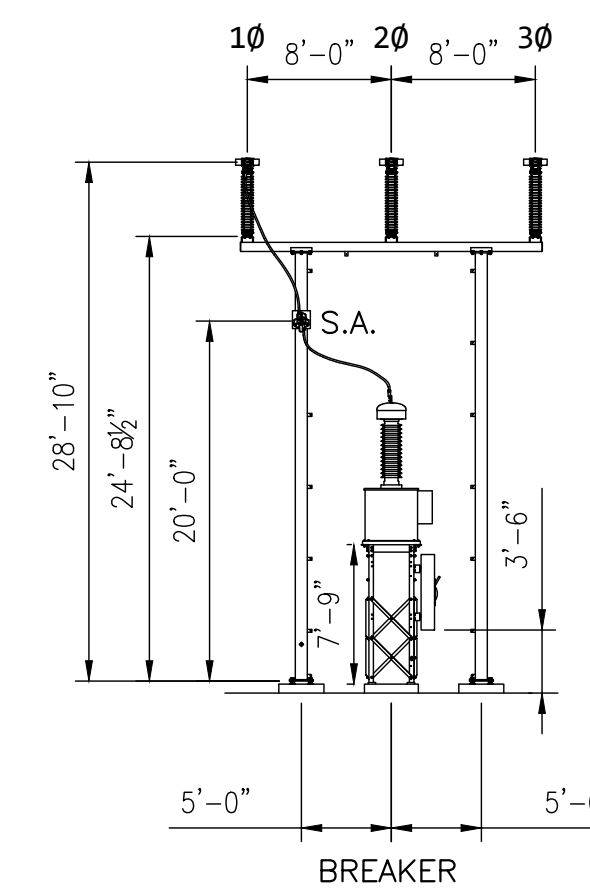
**REYNOLDS
ARCHITECTURE
ENGINEERING**
40 TAMARACK LANE
NISKAYUNA, NY 12309
(518) 225-9473

HOFFMAN FALLS WIND PROJECT - 100MWAC
HOFFMAN FALLS WIND LLC
3604 CODY RD., FENNER, NY 13035
GENERAL ARRANGEMENT - ELEVATION VIEW
UTILITY POI SUBSTATION

PROJ. NO.:	HFMF
DWG. NO.:	HFMF-721P
SH:	03
REV.:	D
SCALE:	3/32" = 1'-0"



ELEVATION D-D



ELEVATION E-E

NOT FOR
CONSTRUCTION

REV.:	DATE:	DESCRIPTION OF REVISION:	DRAWN:	CHECKED:	APPRV'D:	P.E. STAMP
C	1/4/24	UPDATED PER ADDITIONAL SURVEY SITE PLAN INFO. FROM WESTWOOD	SDD	SR	SR	
B	11/20/23	ISSUED FOR PERMITTING WITH CUSTOMER COMMENTS	SR	SR	SR	
A	11/2/23	ISSUED FOR PERMITTING	SDD	SR	SR	

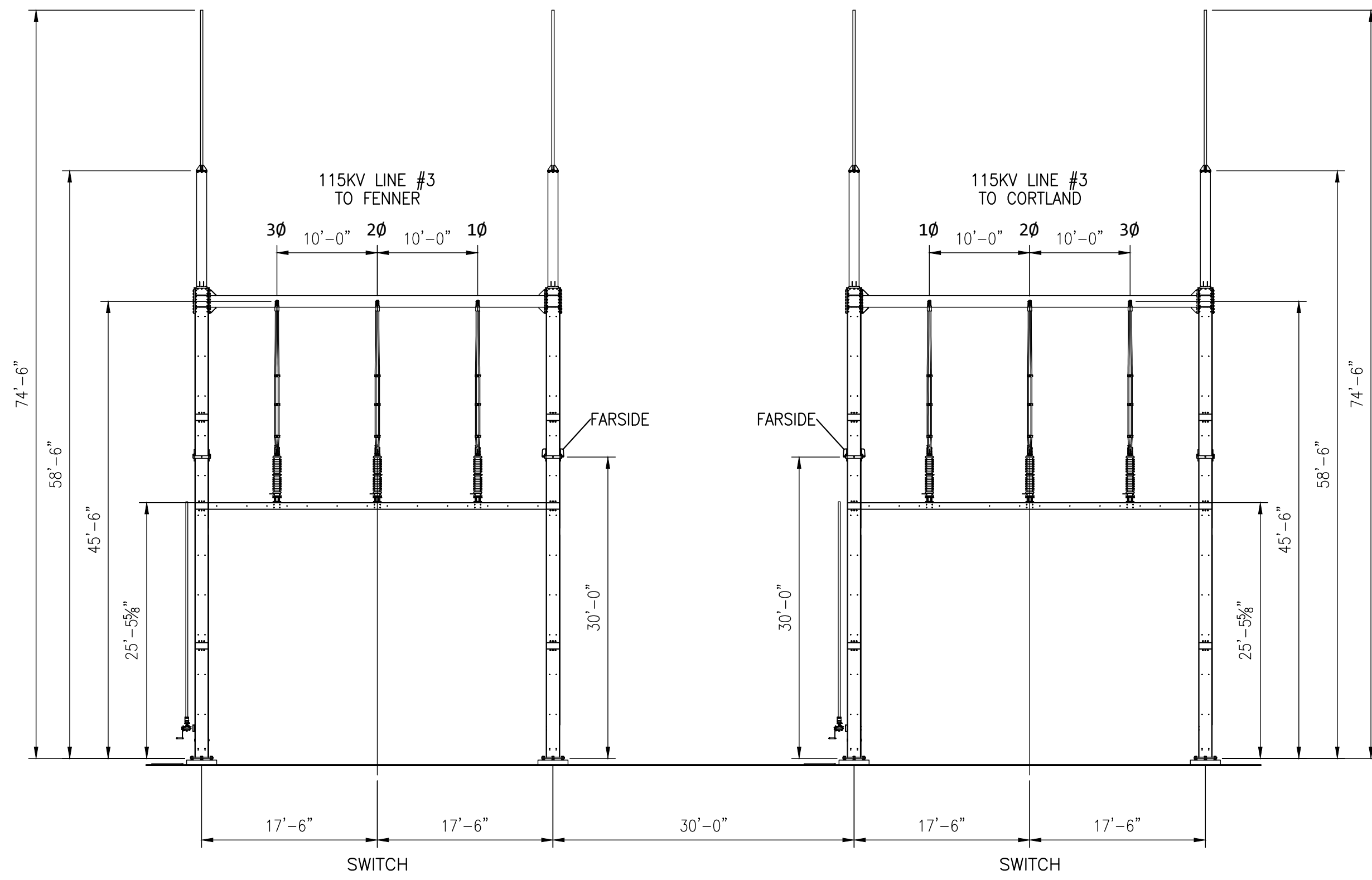
PROPRIETARY INFORMATION
REYNOLDS ARCHITECTURE ENGINEERING CLAIMS PROPRIETARY RIGHTS TO THE INFORMATION, DESIGN AND LAYOUT DISCLOSED HEREIN. THIS DRAWING IS ISSUED FOR INFORMATIONAL PURPOSES ONLY AND MAY NOT BE REPRODUCED, DISCLOSED TO OTHERS OR USED TO DESIGN OR CONSTRUCT ANY OF THE ITEMS SHOWN HEREIN WITHOUT THE EXPRESSED WRITTEN CONSENT OF REYNOLDS ARCHITECTURE ENGINEERING.

DRAWING CREATED BY
SCOTT REYNOLDS, P.E.,
NEW YORK STATE

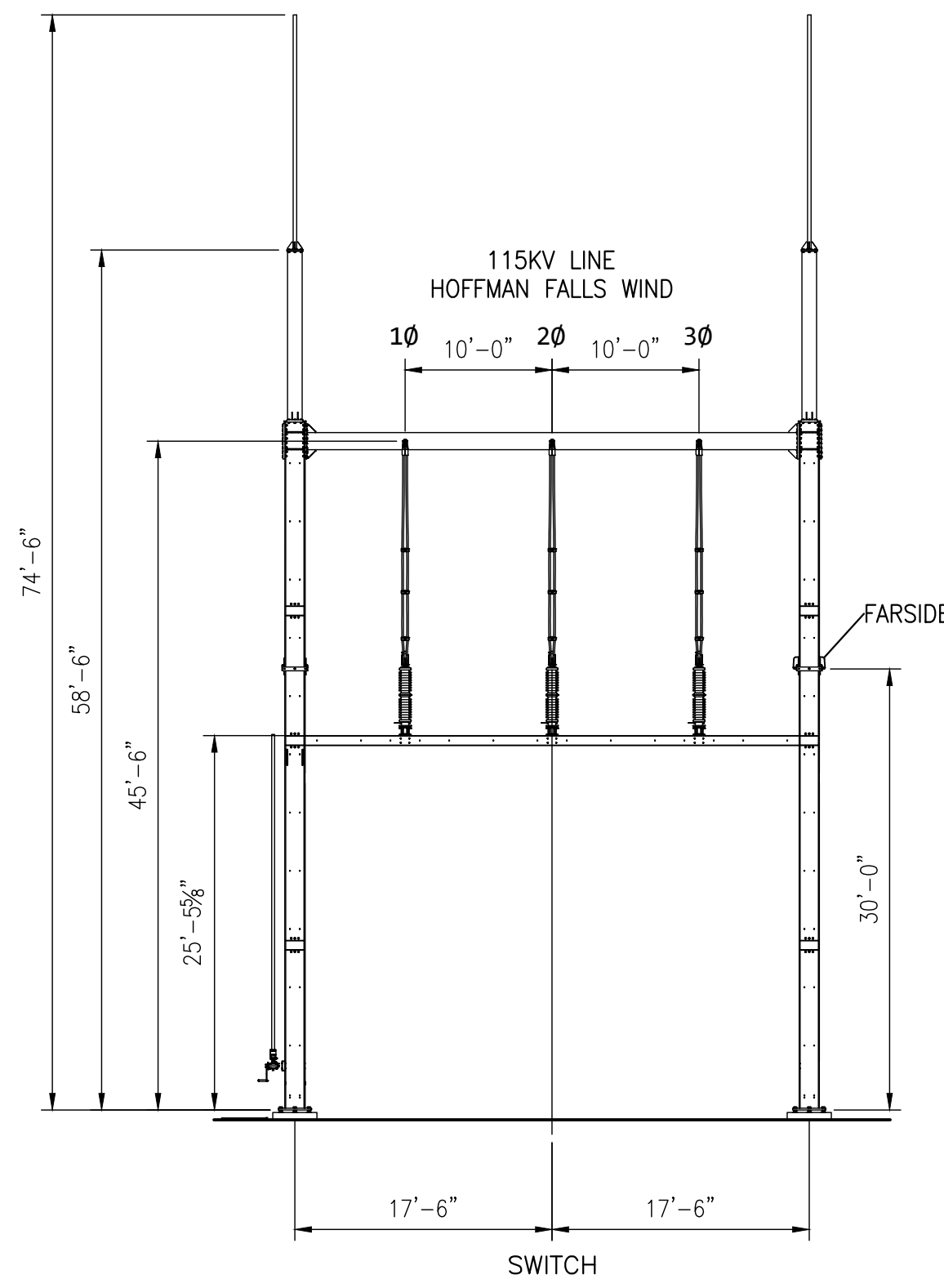
REYNOLDS ARCHITECTURE ENGINEERING
40 TAMARACK LANE
NISKAYUNA, NY 12309
(518) 225-9473

HOFFMAN FALLS WIND PROJECT – 100MWAC
HOFFMAN FALLS WIND LLC
3604 CODY RD., FENNER, NY 13035
GENERAL ARRANGEMENT – ELEVATION VIEWS
UTILITY POI SUBSTATION

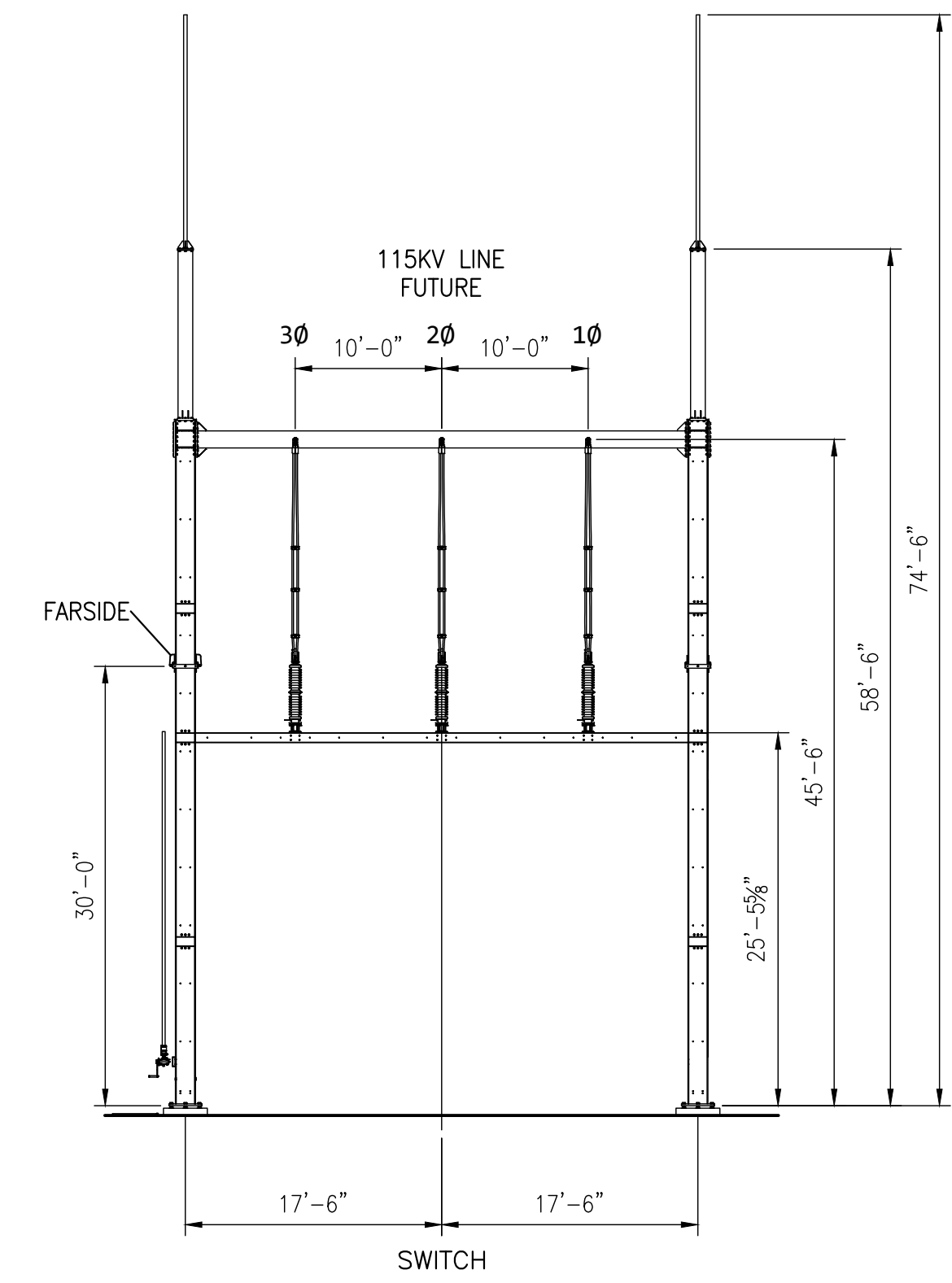
PROJ. NO.:	HFMF
DWG. NO.:	HFMF-721P
SH:	04
REV.:	C
SCALE:	3/32" = 1'-0"



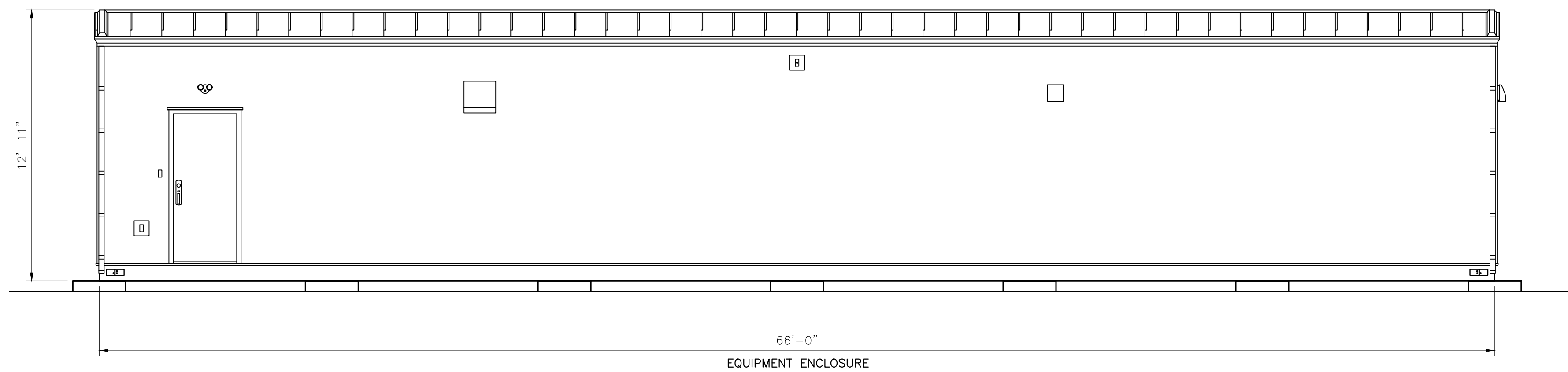
ELEVATION F-F



ELEVATION G-G



ELEVATION H-H



ELEVATION J-J
SCALE: 1/4"=1'-0"

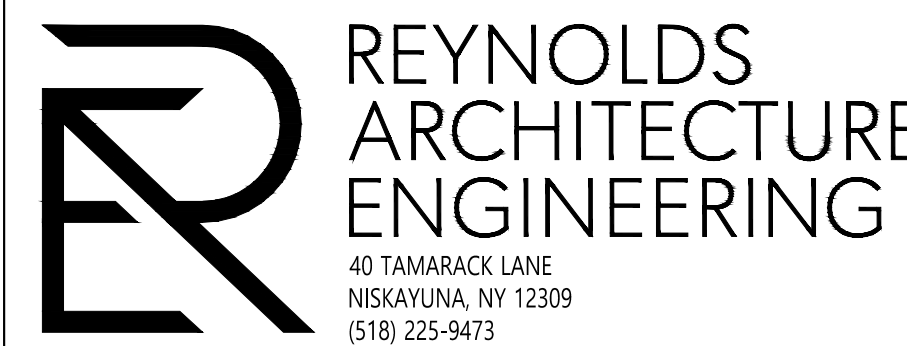
BUILDING COLOR CHART:

DOOR TRIM:	ASH GRAY
DOOR:	ASH GRAY
ROOF TRIM:	ASH GRAY
ROOF SHEETS:	REGAL WHITE
WALL TRIM:	ASH GRAY
WALL SHEETS:	ASH GRAY
STRUCTURAL BASE FRAME:	STRUCTURAL GRAY
LINER PANEL AND TRIM (INTERIOR):	REGAL WHITE

NOT FOR
CONSTRUCTION

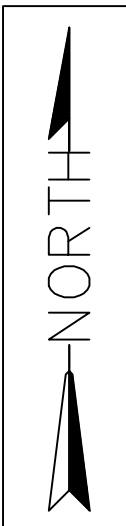
REV.:	DATE:	DESCRIPTION OF REVISION:	DRAWN:	CHECKED:	APPRV'D:	P.E. STAMP
C	1/4/24	UPDATED PER ADDITIONAL SURVEY SITE PLAN INFO. FROM WESTWOOD	SDD	SR	SR	
B	11/20/23	ISSUED FOR PERMITTING WITH CUSTOMER COMMENTS	SDD	SR	SR	
A	11/2/23	ISSUED FOR PERMITTING	SDD	SR	SR	

DRAWING CREATED BY
SCOTT REYNOLDS, P.E.,
NEW YORK STATE

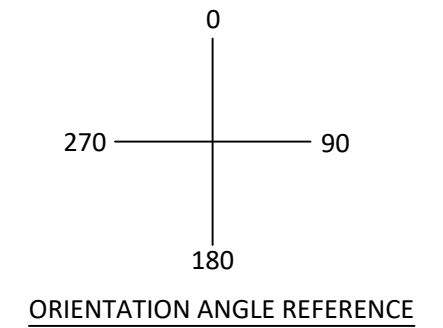
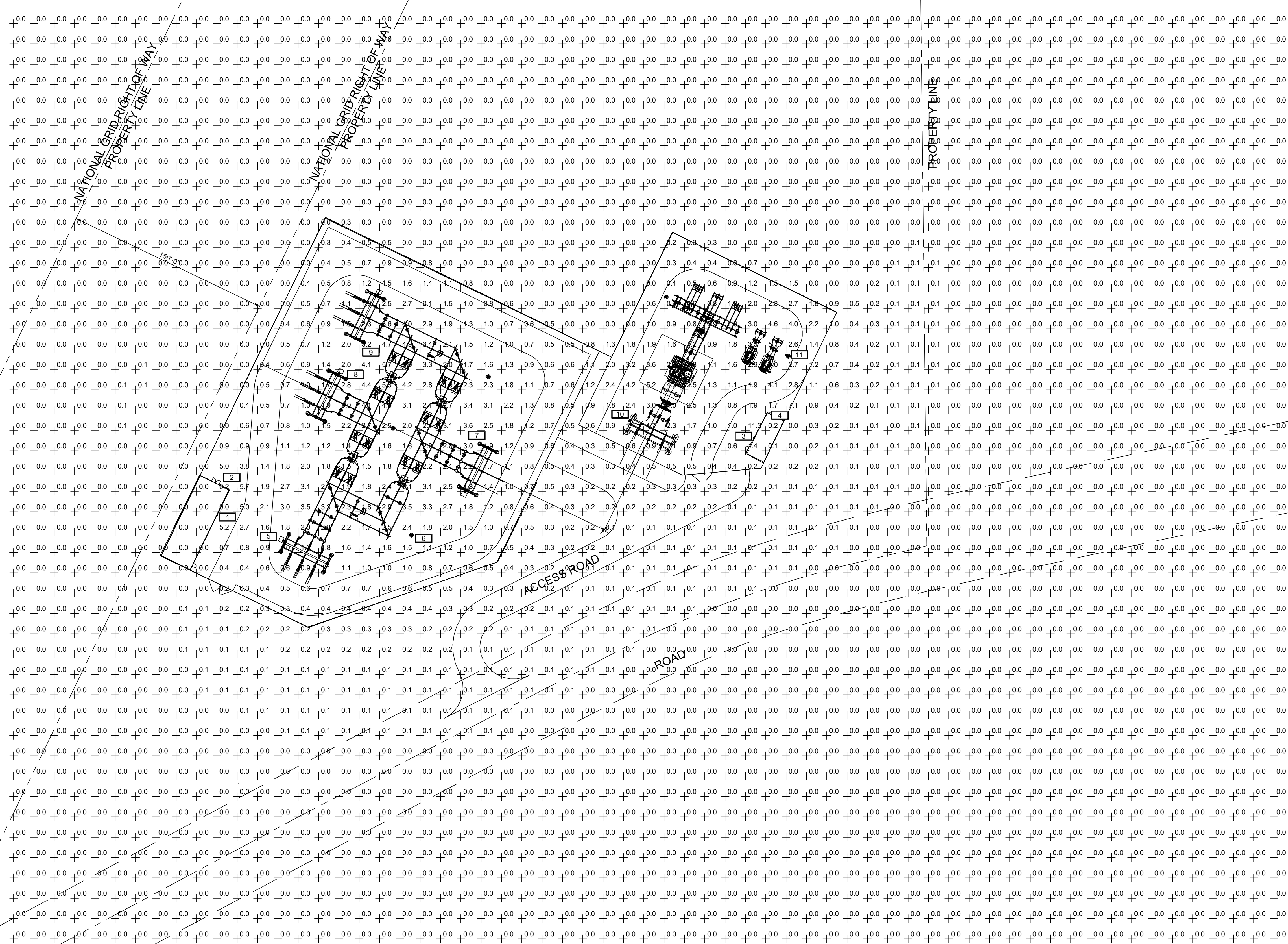


HOFFMAN FALLS WIND PROJECT - 100MWAC
HOFFMAN FALLS WIND LLC
3604 CODY RD., FENNER, NY 13035
GENERAL ARRANGEMENT - ELEVATION VIEWS
UTILITY POI SUBSTATION

PROJ. NO.:	HFMF
DWG. NO.:	HFMF-721P
SH:	05
REV.:	C
SCALE:	3/32"=1'-0" U.N.O.



LUMINAIRE SCHEDULE						
LABEL	QTY	CATALOG NUMBER	DESCRIPTION	LAMP	LUMENS	WATTAGE
AREA LIGHT	7	NAT4-130L730J	TYPE IV, 130 LUMENS, SLIPFITTER MOUNTING, 3000K COLOR TEMP., 0-10V DIMMING	LED	13,237	117,311
CONTROL ENCLOSURE LIGHT	4	SLUMFC37Y (FULL CUT-OFF HOOD)	CAST BROWN PAINTED METAL HOUSING, EXTRUDED 2-PIECE DIFFUSE METAL HEAT SINK, 1 WHITE CIRCUIT BOARD WITH 16 LEDS, MOLDED PLASTIC REFLECTOR WITH SPECULAR FINISH FULL CUTOFF 0 DEGREES, 37W, 3000K COLOR TEMP., 0-10V DIMMING, CLEAR FLAT PRISMATIC GLASS LENS IN CAST BROWN PAINTED METAL LENS FRAME WITH INTEGRAL VISOR. LENS PRISMS DOWN.	LED	209	35.2



LUMINAIRE LOCATIONS				
LIGHT #	LABEL	MTG. HEIGHT	ORIENTATION	TILT ANGLE
1	Control Enclosure Light	9'-0"	117	0
2	Control Enclosure Light	9'-0"	34	0
3	Control Enclosure Light	9'-0"	304	0
4	Control Enclosure Light	9'-0"	27	0
5	Area Light	30'-0"	27	0
6	Area Light	30'-0"	345	0
7	Area Light	30'-0"	301	0
8	Area Light	30'-0"	117	0
9	Area Light	30'-0"	117	0
10	Area Light	25'-0"	27	0
11	Area Light	25'-0"	290	0

LIGHT CONTROL SPECIFICATIONS:

STATION YARD LIGHTS SHALL BE NORMALLY OFF, AND TURNED ON MANUALLY ONLY AS NECESSARY FOR INTERMITTENT OPERATIONS, MAINTENANCE, OR EMERGENCY SITUATIONS.

ILLUMINATION NOTE:

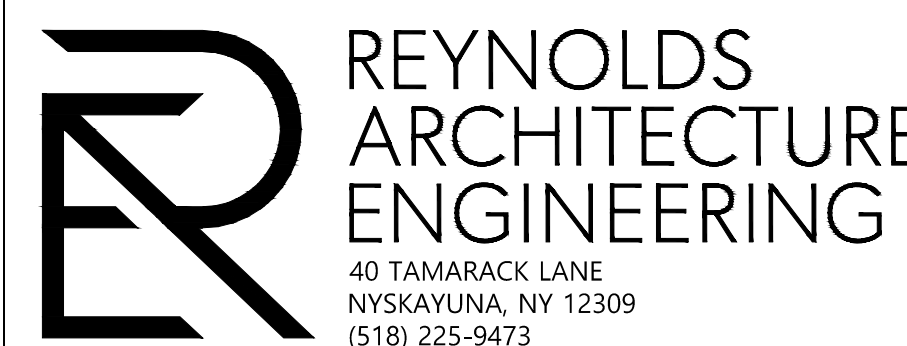
THE ILLUMINATION LEVELS WITHIN THE SUBSTATION WERE ANALYZED TO MEET THE REQUIREMENTS SET FORTH IN THE LATEST EDITION OF THE NATIONAL ELECTRICAL SAFETY CODE (NEC). THE DESIGN WAS ANALYZED AND CONFIRMED TO MEET THE REQUIREMENTS DEFINED IN THE NEC. THE REMOTE AREA HAD A MINIMUM ILLUMINATION VALUE OF 0.2 FOOTCANDLES COMPARED TO THE REQUIREMENTS OF 0.2 FOOTCANDLES. THE SWITCHES HAD A MINIMUM ILLUMINATION VALUE OF 2.0 FOOTCANDLES COMPARED TO THE REQUIREMENT OF 2.0 FOOTCANDLES.

REFERENCE DRAWINGS:

GENERAL ARRANGEMENT PLAN HFMF-720

PROPRIETARY INFORMATION	REV.:	DATE:	DESCRIPTION OF REVISION:	DRAWN:	CHECKED:	APPRVD.:	P.E. STAMP
REYNOLDS ARCHITECTURAL ENGINEERING CLAIMS PROPRIETARY RIGHTS TO THE INFORMATION, DESIGN AND LAYOUT DISCLOSED HEREIN. THIS DRAWING IS ISSUED FOR INFORMATIONAL PURPOSES ONLY AND MAY NOT BE REPRODUCED, DISCLOSED TO OTHERS OR USED TO DESIGN OR CONSTRUCT ANY OF THE ITEMS SHOWN HEREIN WITHOUT THE EXPRESSED WRITTEN CONSENT OF REYNOLDS ARCHITECTURAL ENGINEERING.	C	12/27/2023	RE-ISSUED FOR PERMIT	AE	SR	SR	
	B	11/21/2023	ISSUED FOR PERMIT	AE	SR	SR	
	A	10/27/2023	ISSUED FOR PERMITTING	AE	SR	SR	

DRAWING CREATED BY
SCOTT REYNOLDS, P.E.,
NEW YORK STATE



HOFFMAN FALLS WIND PROJECT - 100MWAC
HOFFMAN FALLS WIND LLC
3604 CODY RD., FENNER, NY 13035
ILLUMINATION PLAN
COLLECTOR SUBSTATION

PROJ. NO.	HFMF
DWG. NO.	HFMF-731
SH.	1
REV.	C
SCALE:	1" = 40'-0"



Low profile, low glare. Edge-lit technology unlike any other.

Color: Bronze

Weight: 18.6 lbs

Project:

Type:

Prepared By:

Date:

Driver Info

Type	Constant Current
120V	1.00A
208V	0.58A
240V	0.50A
277V	0.43A
Input Watts	117.3W

LED Info

Watts	117W
Color Temp	3000K (Warm)
Color Accuracy	80 CRI
L70 Lifespan	100,000 Hours
Lumens	13,232 lm
Efficacy	112.8 lm/W

Technical Specifications

Compliance

UL Listed:

Suitable for wet locations

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80

Title 24 Compliant:

An IVELOT edge-lit area light can be used with a motion sensor or photocell control option to comply with 2016 Title 24 Part 6 Section 130.2 (a,b,v)

IP Rating:

Ingress protection rating of IP66 for dust and water

DLC Listed:

This product is listed by Design Lights Consortium (DLC) as an ultra-efficient premium product that qualifies for the highest tier of rebates from DLC Member Utilities. Designed to meet DLC 5.1 requirements.
DLC Product Code: S-EPBGIT

Electrical

Driver:

Class 2, 50/60Hz, 120-277V, 4kV standard, 10kV optional

Dimming Driver:

Driver includes dimming control wiring for 0-10V dimming systems. Requires separate 0-10V DC dimming circuit. Dims down to 10%.

THD:

3.48% at 120V, 5.48% at 277V

Power Factor:

99.9% at 120V, 97% at 277V

Performance

Lifespan:

100,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations at 25°C

Wattage Equivalency:

Equivalent to 450W Pulse Start Metal Halide

LED Characteristics

LEDs:

Long-life, high-efficacy, surface-mount LEDs

Color Stability:

LED color temperature is warranted to shift no more than 200K in color temperature over a 5-year period

Color Uniformity:

RAB's range of Correlated Color Temperature follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Construction

Cold Weather Starting:

The minimum starting temperature is -40°C (-40°F)

Maximum Ambient Temperature:

Suitable for use in up to 40°C (104°F)

Housing:

Precision die-cast aluminum

IES Classification:

The Type IV distribution is especially suited for mounting on the sides of buildings and walls, and for illuminating the perimeter of parking areas. It produces a semicircular distribution with essentially the same candlepower at lateral angles from 90° to 270°.

Mounting:

Universal pole adapter

Lens:

Diffused Polymethyl Methacrylate (PMMA)

Technical Specifications (continued)

Effective Projected Area:

EPA = 0.61

Finish:

Formulated for high durability and long-lasting color

Green Technology:

Mercury and UV free. RoHS-compliant components.

Optical

BUG Rating:

B3 U0 G3

Other

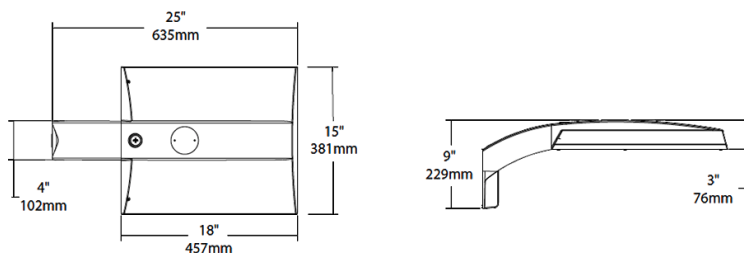
Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.

Buy American Act Compliance:

RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Dimensions



Features

0-10V Dimming, standard

100,000-Hour LED lifespan

Ordering Matrix

Family	Distribution		Lumen Output	Mounting	CRI/Color Temp	Finish	Voltage/Driver	Sensor Options	Lightcloud Option
IVA	T4	-	130L	PA	730	Z	U		
	T2 = Type II [*] T3 = Type III [*] T4 = Type IV [*] T5S = Type V Square [*] FT = Forward Throw [*]		45L = 4,500lm (38W) 75L = 7,500lm (67W) 100L = 10,000lm (94W) 130L = 13,000lm (117W) ¹	PA = Universal Pole Mount WM = Wall mount SF = Slipfitter	750 = 70CRI 5000K 740 = 70CRI 4000K 730 = 70CRI 3000K	Z = Bronze W = White G = Roadway Gray K = Black	U = 120-277V 0-10V Dimming H = 347-480V, 0-10V Dimming	Blank = No Options /WS = 8ft lens Wattstopper /WS2 = 20ft lens Wattstopper /WS4 = 40ft lens Wattstopper /7PR = 7-Pin receptacle	Blank = No Lightcloud® /LC = Lightcloud® Controller ²

¹ Applies to Type IV, V Square

² Applies 120-277V

^{*} All values are nominal with +/- 10% tolerance. See spec sheet for more details.



37, 57 and 62 Watt SLIM Wall packs are designed to cover the footprint of most traditional wall packs. They are suitable for mounting heights from 20' to 30', and replace HID Wattages from 200W MH to 320W MH. These ultra-high efficiency fixtures are available in cutoff or full cutoff models.

Color: Bronze

Weight: 8.5 lbs

Project:	Type:
Prepared By:	Date:

Driver Info		LED Info	
Type	Constant Current	Watts	37W
120V	0.34A	Color Temp	5000K (Cool)
208V	0.20A	Color Accuracy	74 CRI
240V	0.17A	L70 Lifespan	100,000 Hours
277V	0.15A	Lumens	4,512 lm
Input Watts	32.4W	Efficacy	139.3

Technical Specifications

Compliance

UL Listed:

Suitable for Wet Locations. Wall Mount Only.

IP Rating:

Ingress protection rating of IP66 for dust and water

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.

Trade Agreements Act Compliant:

This product is a product of Cambodia and a "designated country" end product that complies with the Trade Agreements Act

Construction

Footprint:

Designed to replace RAB HID WP1 wall packs, both in size and footprint template, so upgrading to LED is easy and seamless

Cold Weather Starting:

The minimum starting temperature is -40°C (-40°F)

Maximum Ambient Temperature:

Suitable for use in up to 40°C (104°F)

Housing:

Precision die-cast aluminum housing and door frame

Mounting:

Die-cast back box with four (4) conduit entry points and knockout pattern for junction box or direct wall mounting. Hinged housing and bubble level for easy installation.

Full Cutoff:

Allows for conformance to the IDA's fully shielding requirement, emitting no light above 90 degrees.

Recommended Mounting Height:

Up to 20 ft

Lens:

Microprismatic diffusion glass lens reduces glare and has smooth and even light distribution

Reflector:

Specular thermoplastic

Gaskets:

The unique design of the tight-lock gasket ensures no water or environmental elements will ever get inside the SLIM

Finish:

Formulated for high durability and long-lasting color

Green Technology:

Mercury and UV free. RoHS-compliant components.

LED Characteristics

LED:

Long-life, high-efficiency, micro-power, surface mount LEDs; binned and mixed for uniform light output and color

Color Stability:

LED color temperature is warranted to shift no more than 200K in color temperature over a 5-year period

Color Consistency:

7-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color

Electrical

Driver:

Constant Current, Class 2, 120-277V, 50-60Hz, 120V: 0.34A, 208V: 0.17A, 240V: 0.17A, 277V: 0.15A

Dimming Driver:

Driver includes dimming control wiring for 0-10V dimming systems. Requires separate 0-10V DC dimming circuit. Dims down to 10%.

THD:

2.84% at 120V, 4.91% at 277V

Technical Specifications (continued)

Power Factor:

99.7% at 120V, 94% at 277V

Performance

Lifespan:

100,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations

Other

Accessories:

Available accessories include polyshield and wire guard. Click [here](#) to see all accessories.

Patents:

The design of the SLIM™ is protected by patents pending in US, Canada, China, Taiwan and Mexico

HID Replacement Range:

Replaces 200W Metal Halide

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.

Buy American Act Compliance:

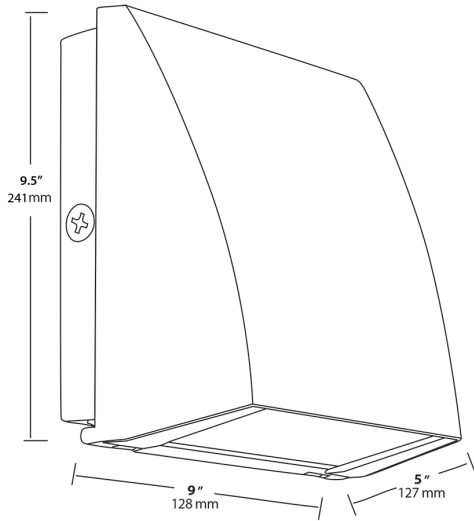
RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Optical

BUG Rating:

B1 U0 G0

Dimensions



Features

- Covers footprint of most traditional wall packs
- Easy installation with hinged access, bubble level and multiple conduit entries
- Tight-lock gasket keeps elements out
- 100,000-hour LED lifespan
- 5-Year, No-Compromise Warranty

Ordering Matrix

Family	Cutoff	Wattage	Color Temp	Finish	Driver Options	Options
SLIM	FC	37				
	Blank = Cutoff (10 degrees) FC = Full Cutoff (0 degrees)	37 = 37W 57 = 57W 62 = 62W	Blank = 5000K Cool N = 4000K Neutral Y = 3000K Warm	Blank = Bronze W = White	Blank = Standard (120-277V) /BL = Bi-Level /D10 = Dimmable /480 = 480V	Blank = No Option /PC = 120V Button Photocell /PC2 = 277V Button Photocell /PCS = 120V Swivel Photocell /PCS2 = 277V Swivel Photocell /LC = Lightcloud® Controller