

LEGEND:

- 0154 LINE:
- 0154 STR:

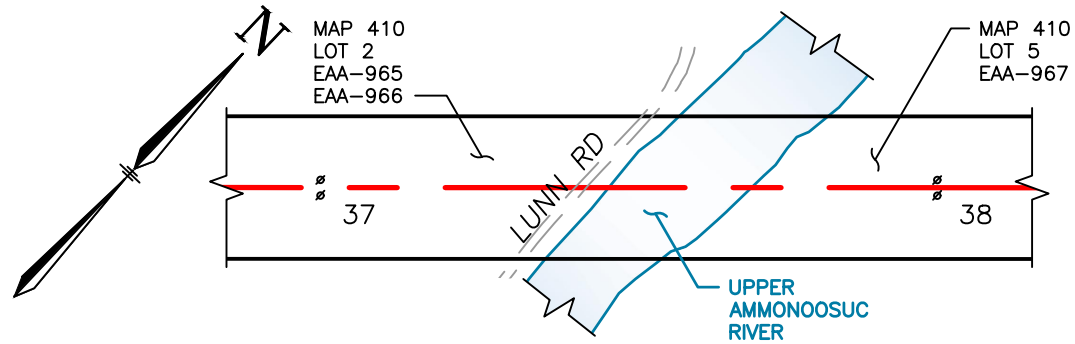
DWG REV	EPN/DESCRIPTION	CONT/PE#	DATE	DRN	CHKD	APPR
1	SUBMITTED TO PUC		11/21	GBS	JRS	JRS

EVERSOURCE ENERGY

0154 115kV LINE
STATE LAND AND PUBLIC WATERBODY CROSSING, LOCATION PLAN
STARK, NEW HAMPSHIRE
EXHIBIT 1

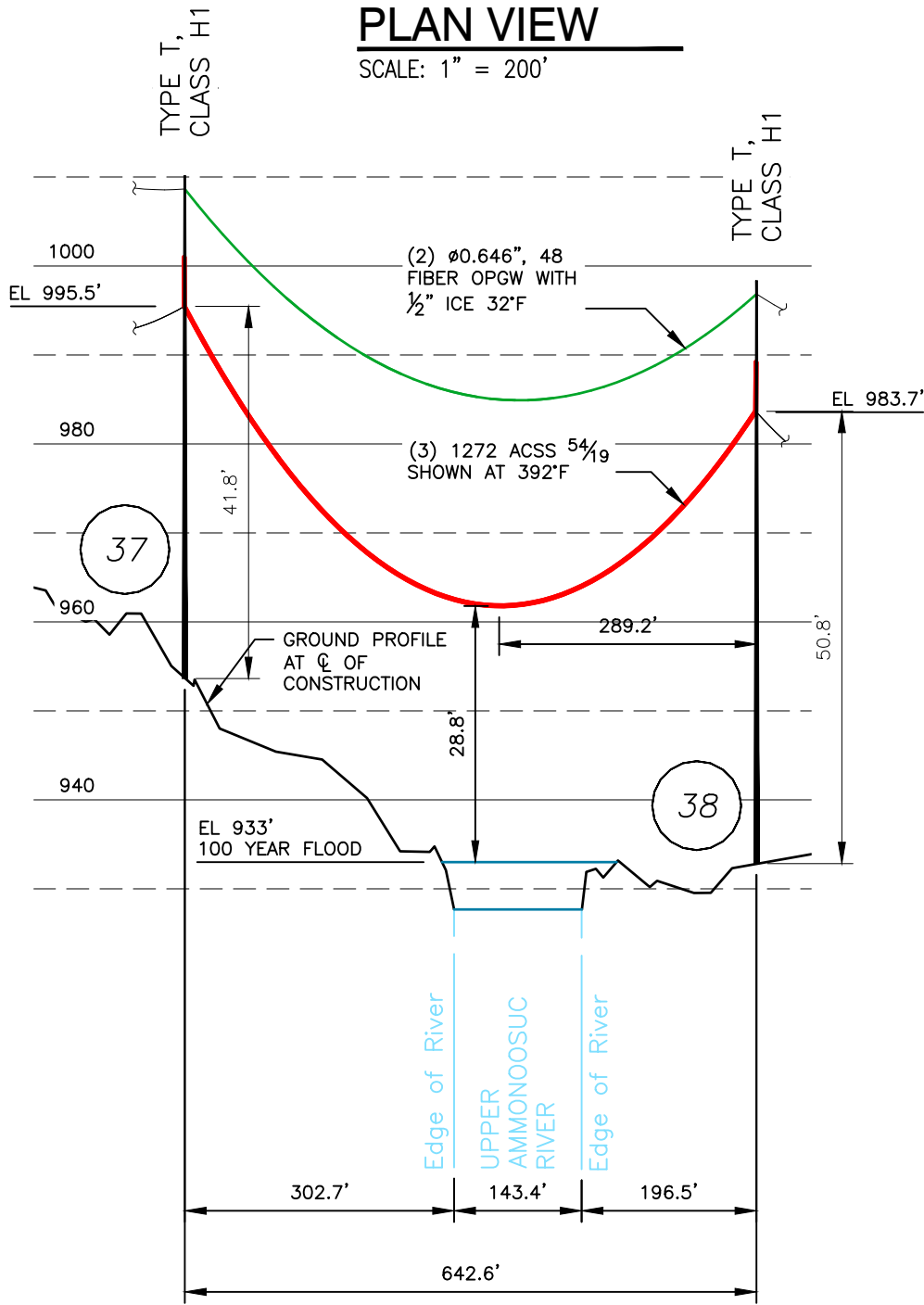
T	1
DRAWN GBS	
ENGINEER JRS	
CHECKED DSD	
APPROVED JRS	
DATE 09/28/21	

SCALE 1" = 5000'	FILE: 015443901.DWG IMAGE:	DRAWING NO. 015443901
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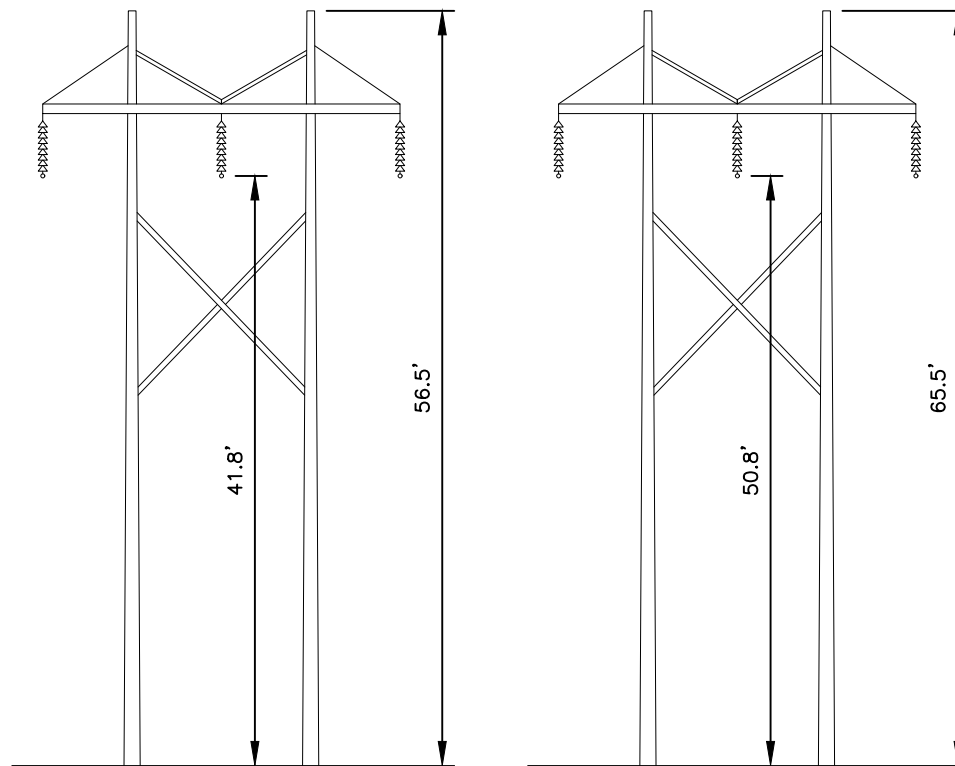
PLAN VIEW

SCALE: 1" = 200'



PROFILE VIEW

SCALE: HORZ 1" = 200'
VERT 1" = 20'



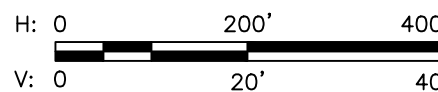
STRUCTURE 37
TYPE T

STRUCTURE 38
TYPE T

TYPE T, SINGLE CIRCUIT STEEL POLE
H-FRAME, HORIZONTAL CONFIG.

STRUCTURE DETAIL

SCALE: NTS



LEGEND:

- STRUCTURE
- LINE, ϕ OF CONSTRUCTION
- LIMITS OF EVERSOURCE RIGHT OF WAY
- WATERBODY

STRUCTURE LOCATION		
STRUCTURE	LONGITUDE	LATITUDE
37	-71.43562244	44.61527011
38	-71.43381175	44.61646755

NESC VERTICAL CLEARANCE (FT) FROM TABLE 232.1, C2-2012	
NATURE OF SURFACE UNDERNEATH WIRES, CONDUCTORS OR CABLES	115kV
WATER AREAS NOT SUITABLE FOR SAIL BOATING OR WHERE SAIL BOATING IS PROHIBITED	18.6

CABLE SCHEDULE						
WIRE	QTY OF CABLES	DESCRIPTION	DESIGN CONDITIONS			
			MAX DESIGN TENSION (lb)	TEMP (°F)	ICE (in)	WIND (psf)
CONDUCTOR	3	ACSS, 1272 kcmil 54/19, PHEASANT	10000	0	0.5	4
OPGW	2	48F ϕ 0.646 INCAB OPGW-S-48G.652D-16	5000	0	0.5	4

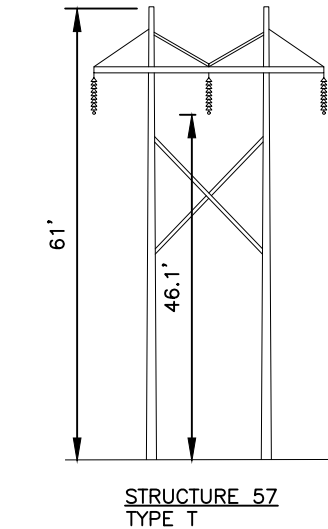
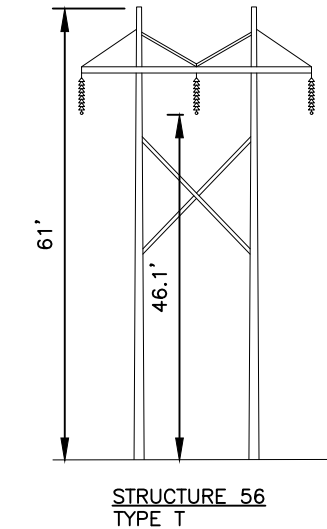
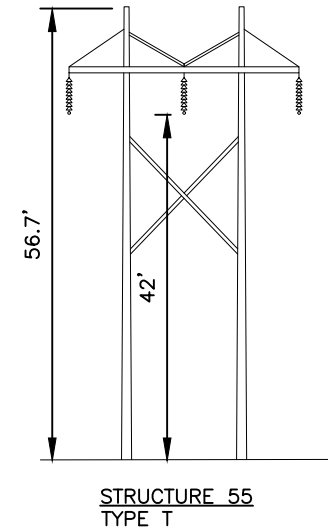
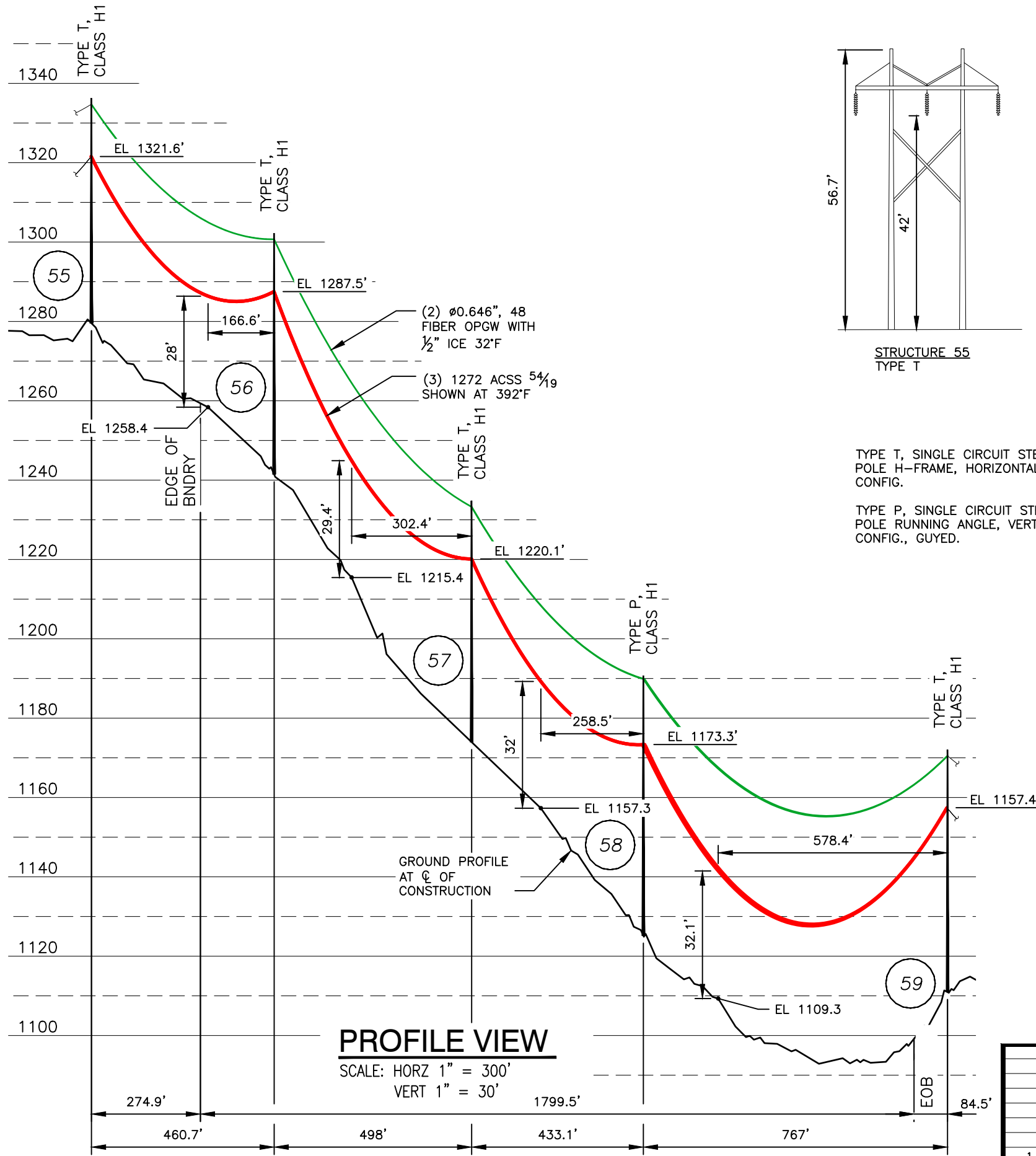
NOTES:

- PARCEL INFORMATION PROVIDED BY NH GRANIT.
- ELEVATIONS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988.
- THE 100 YEAR FLOOD ELEVATION FROM THE FEMA FLOOD MAP SERVICE CENTER, NATIONAL FLOOD HAZARD LAYER FIRMETTE, 08/19/2021 IS A ZONE A. THE ELEVATION WAS DEVELOPED THROUGH CONTOUR INTERPOLATION AS DEFINED IN THE FEMA APPROXIMATE ZONE A AREAS, A GUIDE FOR OBTAINING AND DEVELOPING BASE (100 YEAR) FLOOD ELEVATIONS, SECTION V. DEVELOPING BASE (100 YEAR) FLOOD ELEVATIONS.

<p>0154, 115kV LINE UPPER AMMONOOSUC RIVER, PUBLIC WATER CROSSING STARK, NEW HAMPSHIRE EXHIBIT 2</p>	T 1
	DRAWN GBS
	ENGINEER JRS
	CHECKED DSD
	APPROVED JRS
DATE 09/28/21	DRAWING NO. 015443901

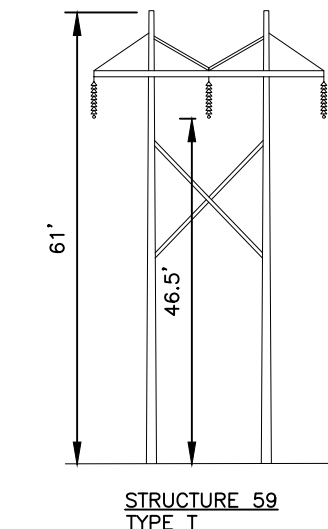
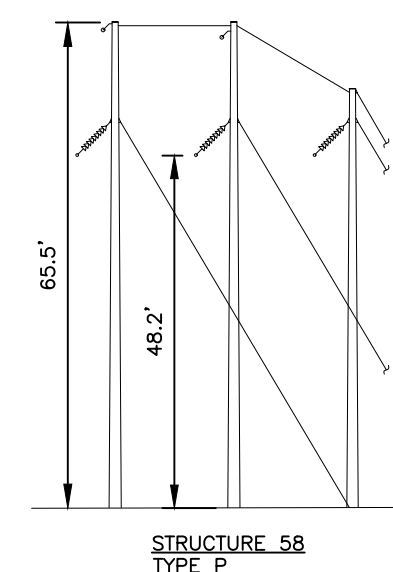
DWG REV	EPN/DESCRIPTION	CONT/PE#	DATE	DRN	CHKD	APPR
1	SUBMITTED TO PUC		11/21	GBS	JRS	JRS

SCALE AS SHOWN FILE: 015443901.DWG DRAWING NO. 015443901



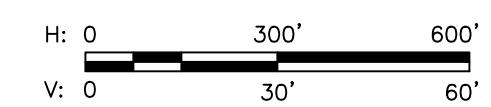
TYPE T, SINGLE CIRCUIT STEEL POLE H-FRAME, HORIZONTAL CONFIG.

TYPE P, SINGLE CIRCUIT STEEL POLE RUNNING ANGLE, VERTICAL CONFIG., GUYED.



STRUCTURE DETAIL
SCALE: NTS

NOTES:
1. ELEVATIONS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988.



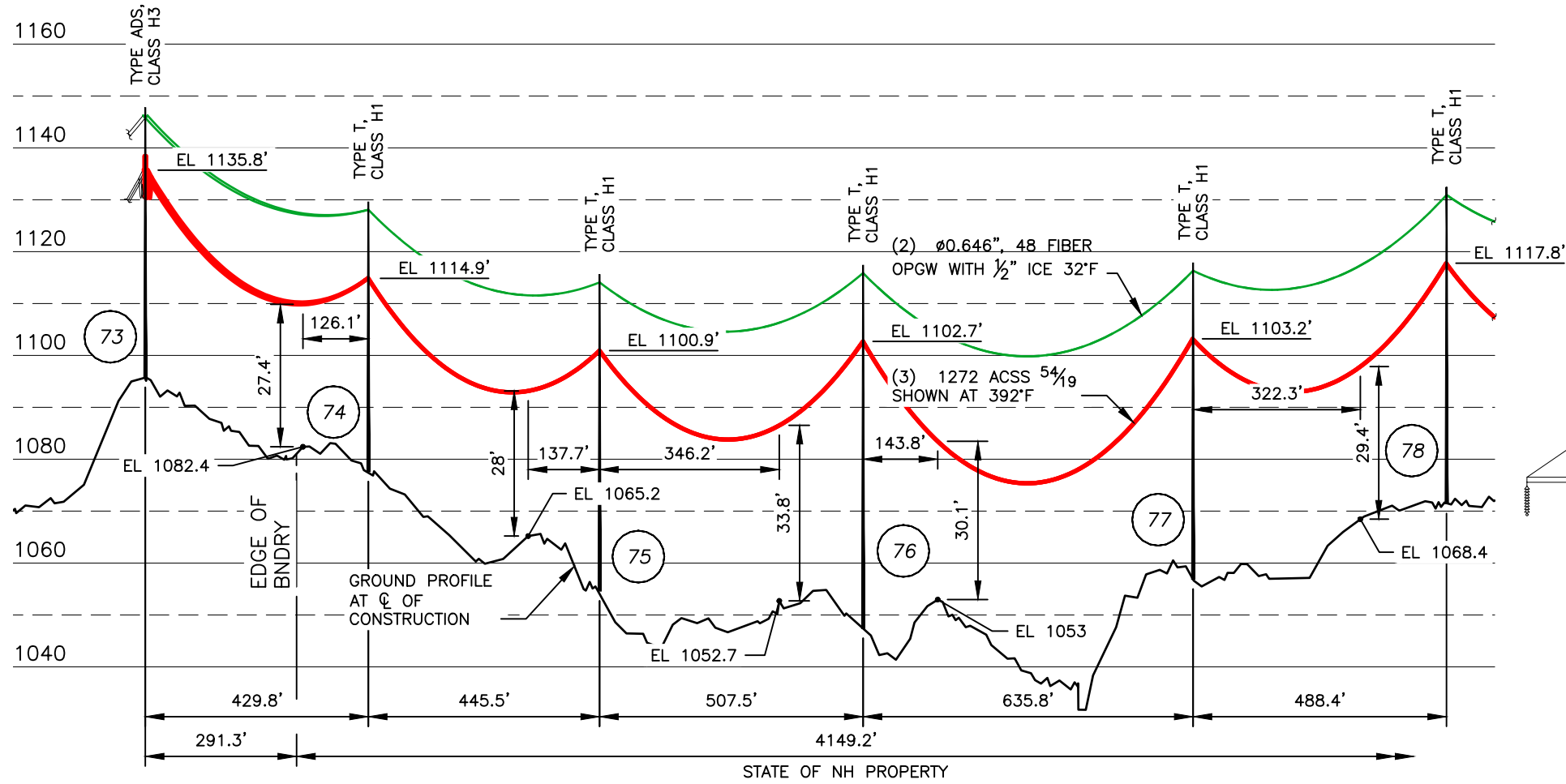
EVERSOURCE ENERGY

0154, 115kV LINE
STATE OWNED LAND CROSSING
STARK, NEW HAMPSHIRE
EXHIBIT 3

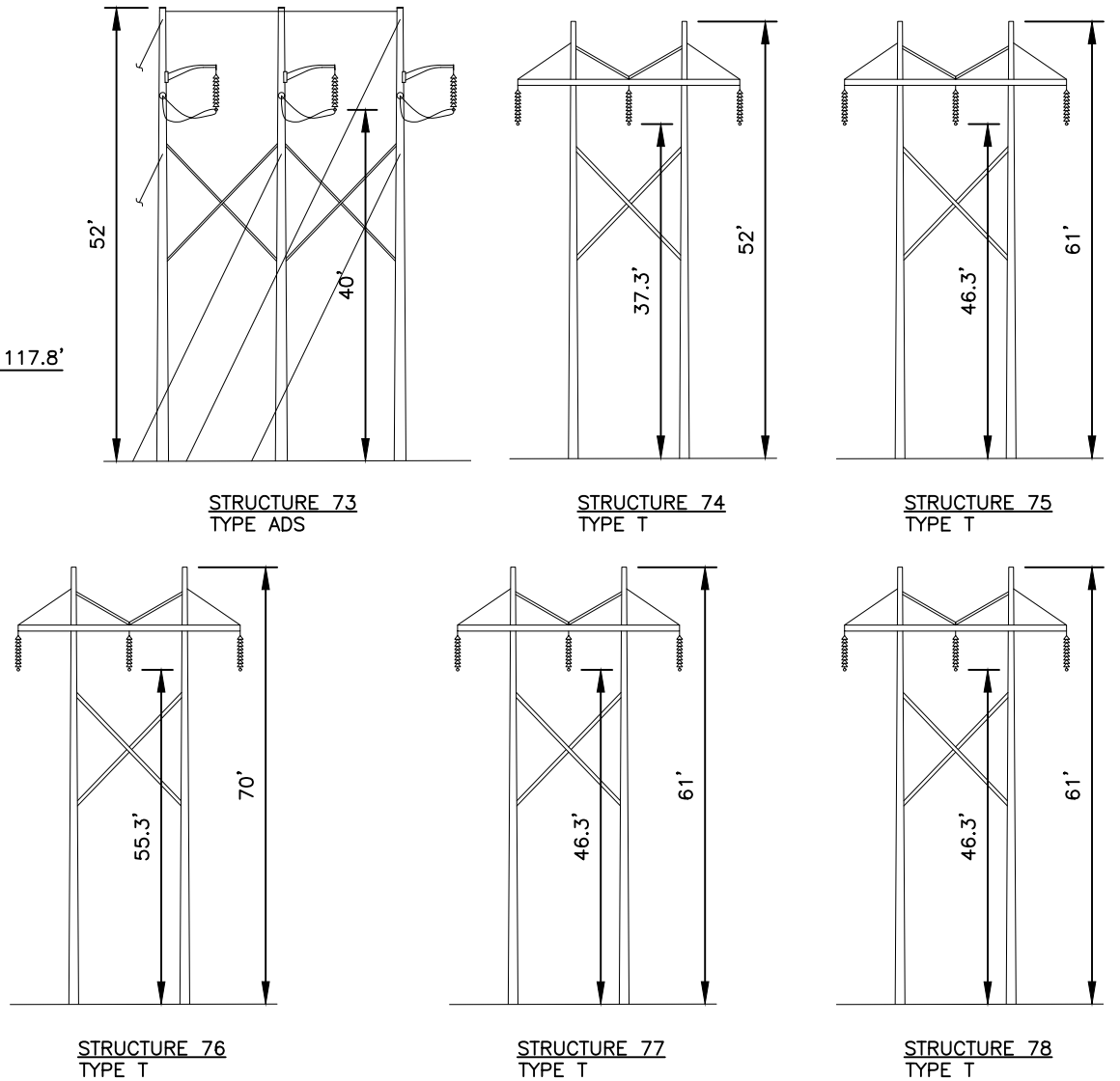
T	1
DRAWN	GBS
ENGINEER	JRS
CHECKED	DSD
APPROVED	JRS
DATE	09/28/21

SCALE: AS SHOWN
FILE: 015443501.DWG
DRAWING NO.: 015443501

DWG REV	ISSUED TO PUC	EPN/DESCRIPTION	CONT/PE#	DATE	DRN	CHKD	APPR
1	ISSUED TO PUC			11/21	GBS	JRS	JRS



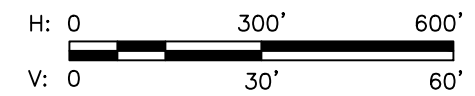
PROFILE VIEW
 SCALE: HORZ 1" = 300'
 VERT 1" = 30'



TYPE T, SINGLE CIRCUIT STEEL POLE H-FRAME, HORIZONTAL CONFIG.
 TYPE ADS, SINGLE CIRCUIT STEEL POLE DEAD END ANGLE, VERTICAL CONFIG., GUYED.

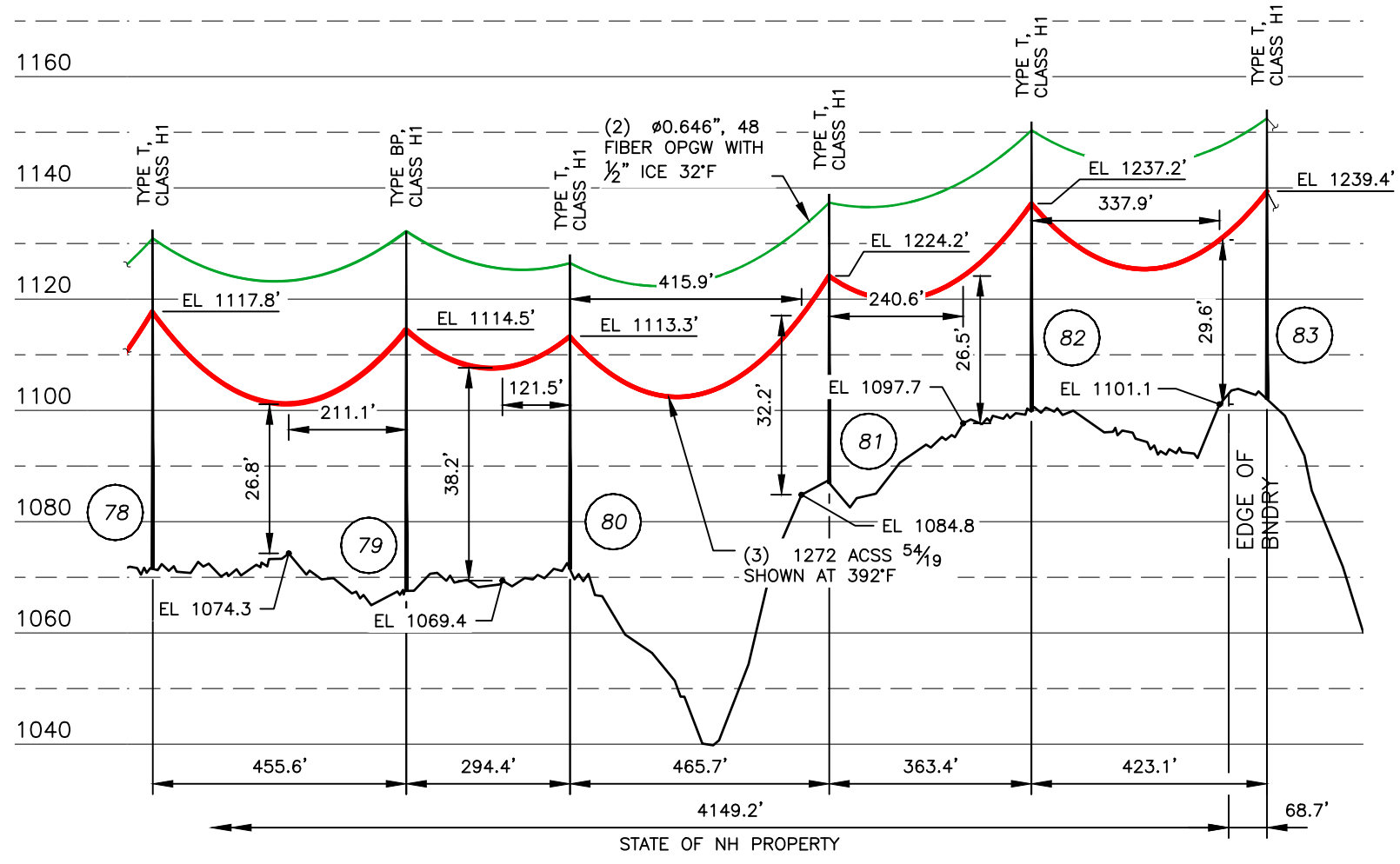
STRUCTURE DETAIL
 SCALE: NTS

NOTES:
 1. ELEVATIONS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988.

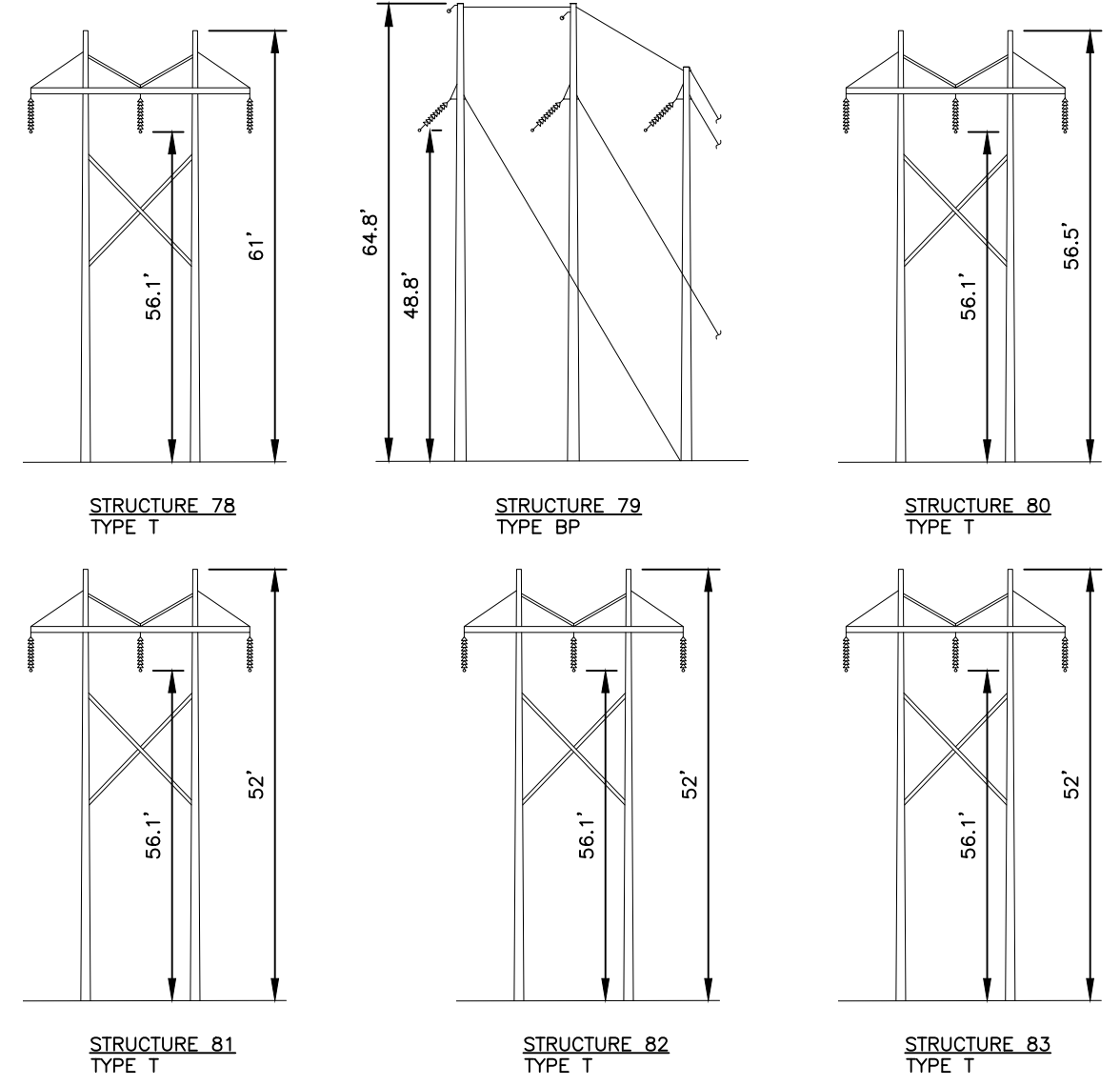


1	ISSUED TO PUC	11/21	GBS	JRS	JRS
DWG REV	EPN/DESCRIPTION	CONT/PE#	DATE	DRN	CHKD

EVERSOURCE ENERGY		T	1
		DRAWN	GBS
0154, 115kV LINE STATE OWNED LAND CROSSING STARK, NEW HAMPSHIRE EXHIBIT 4		ENGINEER	JRS
		CHECKED	DSD
SCALE AS SHOWN		APPROVED	JRS
		DATE	09/28/21
FILE: 015443501.DWG		DRAWING NO. 015443501	



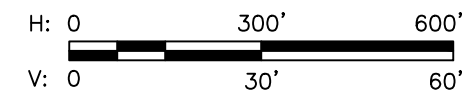
PROFILE VIEW
 SCALE: HORZ 1" = 300'
 VERT 1" = 30'



TYPE T, SINGLE CIRCUIT STEEL POLE H-FRAME, HORIZONTAL CONFIG.
 TYPE BP, SINGLE CIRCUIT STEEL POLE RUNNING ANGLE, VERTICAL CONFIG., GUYED.

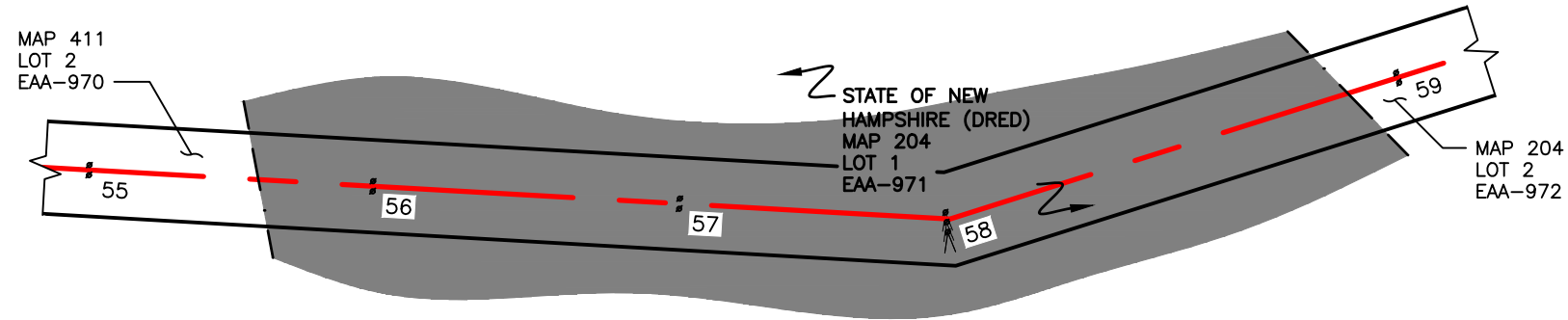
STRUCTURE DETAIL
 SCALE: NTS

NOTES:
 1. ELEVATIONS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988.



EVERSOURCE ENERGY		T	1
		DRAWN	GBS
0154, 115kV LINE STATE OWNED LAND CROSSING STARK, NEW HAMPSHIRE EXHIBIT 5		ENGINEER	JRS
		CHECKED	DSD
SCALE AS SHOWN		APPROVED	JRS
		DATE	09/28/21
DRAWING NO. 015443501		FILE: 015443501.DWG	

DWG REV	ISSUED TO PUC	EPN/DESCRIPTION	CONT/PE#	DATE	DRN	CHKD	APPR
1	ISSUED TO PUC			11/21	GBS	JRS	JRS



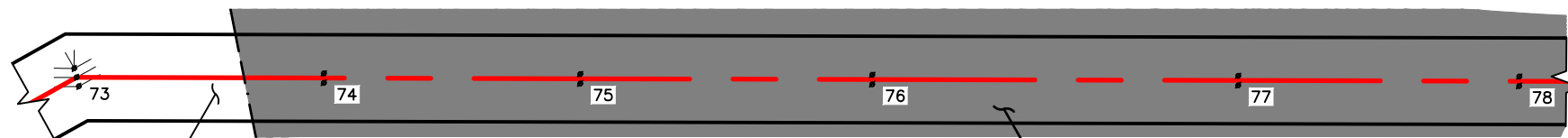
PLAN VIEW

SCALE: 1" = 300'

LEGEND:

- STRUCTURE (WITH GUYS)
- STATE OF NEW HAMPSHIRE PROPERTY
- 0154 LINE 115KV LINE, ϕ OF CONSTRUCTION
- LIMITS OF EVERSOURCE RIGHT OF WAY

STRUCTURE LOCATION		
STRUCTURE	LONGITUDE	LATITUDE
55	-71.40613993	44.62288388
56	-71.40437361	44.62280801
57	-71.40246451	44.62272599
58	-71.40080400	44.62265462
59	-71.39799085	44.62327554
73	-71.37179918	44.62910954
74	-71.37018420	44.62886553
75	-71.36850989	44.62861254
76	-71.36660266	44.62832431
77	-71.36421355	44.62796322
78	-71.36237808	44.62768576

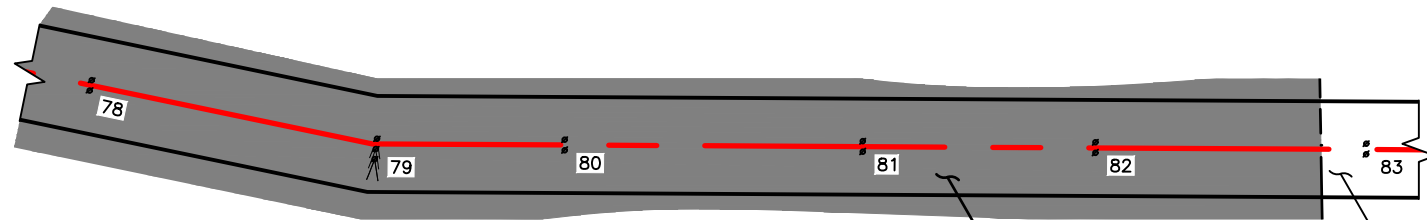


PLAN VIEW

SCALE: 1" = 300'

STATE OF NEW HAMPSHIRE (DRED)
MAP 406
LOT 4
EAA-1303

NESC VERTICAL CLEARANCE (FT) FROM TABLE 232.1	
NATURE OF SURFACE UNDERNEATH WIRES, CONDUCTORS OR CABLES	115kV
OTHER AREAS TRANSVERSED BY VEHICLES, SUCH AS CULTIVATED, GRAZING, FOREST, AND ORCHARD LANDS, INDUSTRIAL SITES, COMERCIAL SITES, ETC	20.1



PLAN VIEW

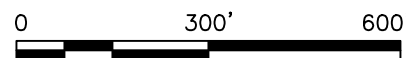
SCALE: 1" = 300'

STATE OF NEW HAMPSHIRE (DRED)
MAP 406
LOT 4
EAA-1303

NOTES:

1. PARCEL INFORMATION PROVIDED BY NH GRANIT.
2. ELEVATIONS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988.

CABLE SCHEDULE						
WIRE	QTY OF CABLES	DESCRIPTION	DESIGN CONDITIONS			
			MAX DESIGN TENSION (lb)	TEMP (°F)	ICE (in)	WIND (psf)
CONDUCTOR	3	ACSS, 1272 kcmil 54/19, PHEASANT	10000	0	0.5	4
OPGW	2	48F ϕ 0.646 INCAB OPGW-S-48G.652D-16	5000	0	0.5	4



1	ISSUED TO PUC	11/21	GBS	JRS	JRS
DWG REV	EPN/DESCRIPTION	CONT/PE#	DATE	DRN	CHKD

EVERSOURCE ENERGY

0154, 115kV LINE
STATE OWNED LAND CROSSING
STARK, NEW HAMPSHIRE
EXHIBIT 6

SCALE AS SHOWN	FILE: 015443501.DWG	DRAWING NO. 015443501
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T	1
DRAWN GBS	
ENGINEER JRS	
CHECKED DSD	
APPROVED JRS	
DATE 09/28/21	

O154 115kV LINE STATE LAND AND PUBLIC WATERBODY CROSSING STRUCTURE TABLE

EXHIBIT 7

Eversource O154 Line Rebuild - DOE State Land and Waterbody Crossing Details								
Existing Structure #	New Structure #	Structure Type	Height Change (feet)	Span (Pole to Pole)	Span Distance (feet)	Minimum NESC Table 232-1 Clearance (ft.)	ES Vertical Design Clearance (ft.)	Complies with NESC Table 232-1 (Y/N)
268	37	56.5' steel 2 pole, T, CLH1	15	37-38	642.6	18.6	28.8	Y
267	38	65.5' steel 2 pole, T, CLH1	10					
250	55	56.7' steel 2 pole, T, CLH1	15	55-56	460.7	20.1	28	Y
249	56	61.0' steel 2 pole, TG, CLH1	20					
248	57	61.0' steel 2 pole, T, CLH1	20	56-57	498	20.1	29.4	Y
247	58	65.5' steel 3 pole, P, CLH1	20	57-58	433.1	20.1	32.0	Y
246	59	61.0' steel 2 pole, T, CLH1	10	58-59	767	20.1	32.1	Y
232	73	52.0' steel 3 pole, ADS, CLH3	5	73-74	429.8	20.1	27.4	Y
231	74	52.0' steel 2 pole, T, CLH1	10					
230	75	61.0 steel 2 pole, T, CLH1	15	74-75	445.5	20.1	28.0	Y
229	76	70.0' steel 2 pole, T, CLH1	20	75-76	507.5	20.1	33.8	Y
228	77	61.0' steel 2 pole, T, CLH1	20	76-77	635.8	20.1	30.1	Y
227	78	61.0' steel 2 pole, T, CLH1	20	77-78	488.4	20.1	29.4	Y
226	79	64.8' steel 3 pole, BP, CLH1	25	78-79	455.6	20.1	26.8	Y
225	80	56.5' steel 2 pole, T, CLH1	15	79-80	294.4	20.1	38.2	Y
224	81	52.0' steel 2 pole, T, CLH1	10	80-81	465.7	20.1	32.2	Y
223	82	52.0' steel 2 pole, T, CLH1	10	81-82	363.4	20.1	26.5	Y
222	83	52.0' steel 2 pole, T, CLH1	10	82-83	423.1	20.1	29.6	Y