

LEGEND:

- M108 LINE:
- M108 STR:

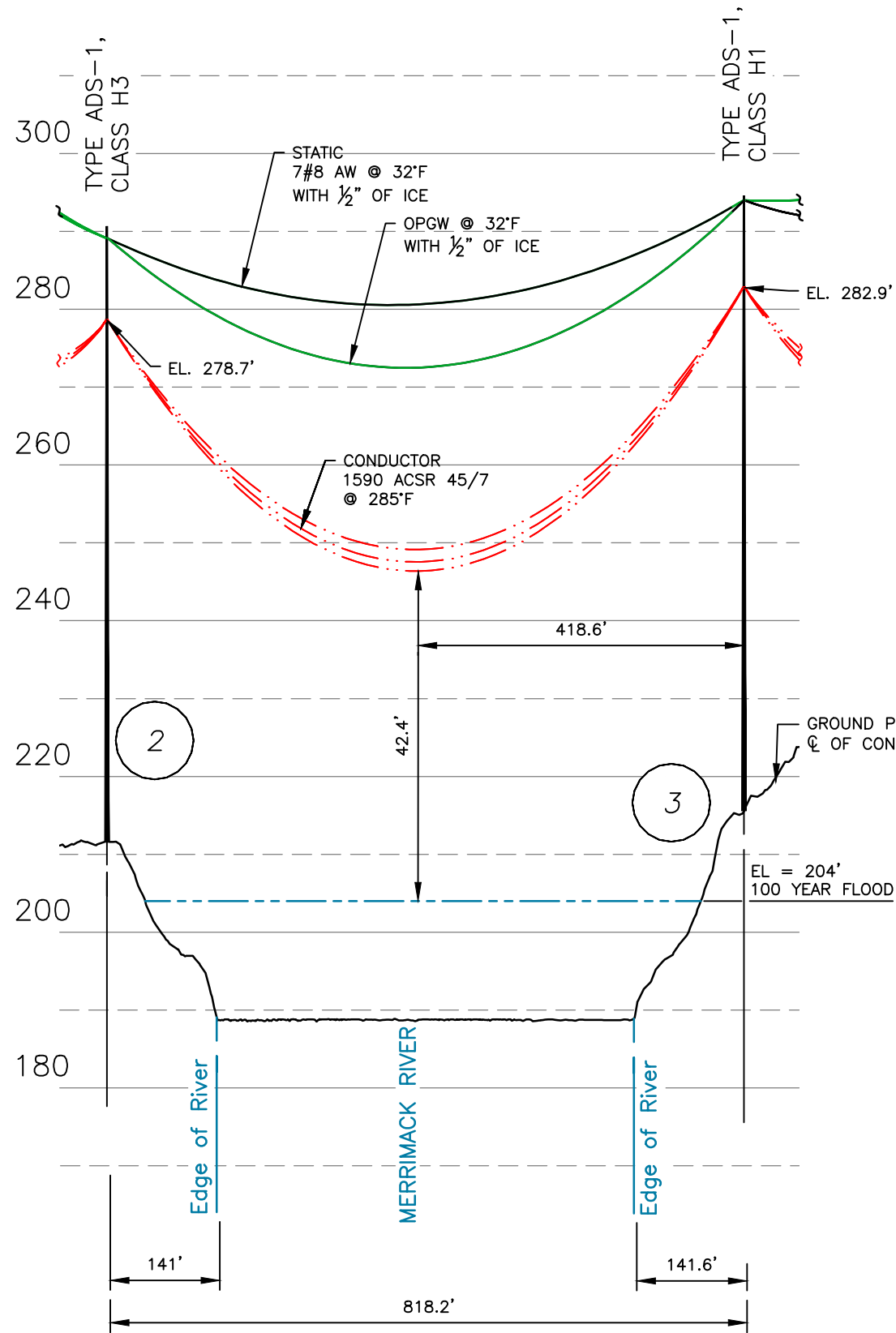


M108, 115kV LINE
 STATE OWNED LAND & PUBLIC WATER CROSSING
 BOW, CONCORD, PEMBROKE, NEW HAMPSHIRE
 EXHIBIT 1

T	1
DRAWN	NEB
ENGINEER	CRP
CHECKED	JJD
APPROVED	CRP
DATE	6/29/22

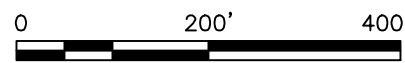
DWG REV	ISSUED TO	EPN/DESCRIPTION	CONT/PE#	DATE	DRN	CHKD	APPR
1	ISSUED TO DOE			2/10/23	NEB	JJD	CRP

SCALE	FILE: M10843900.DWG	DRAWING NO.
1" = 2000'	IMAGE:	M10843900



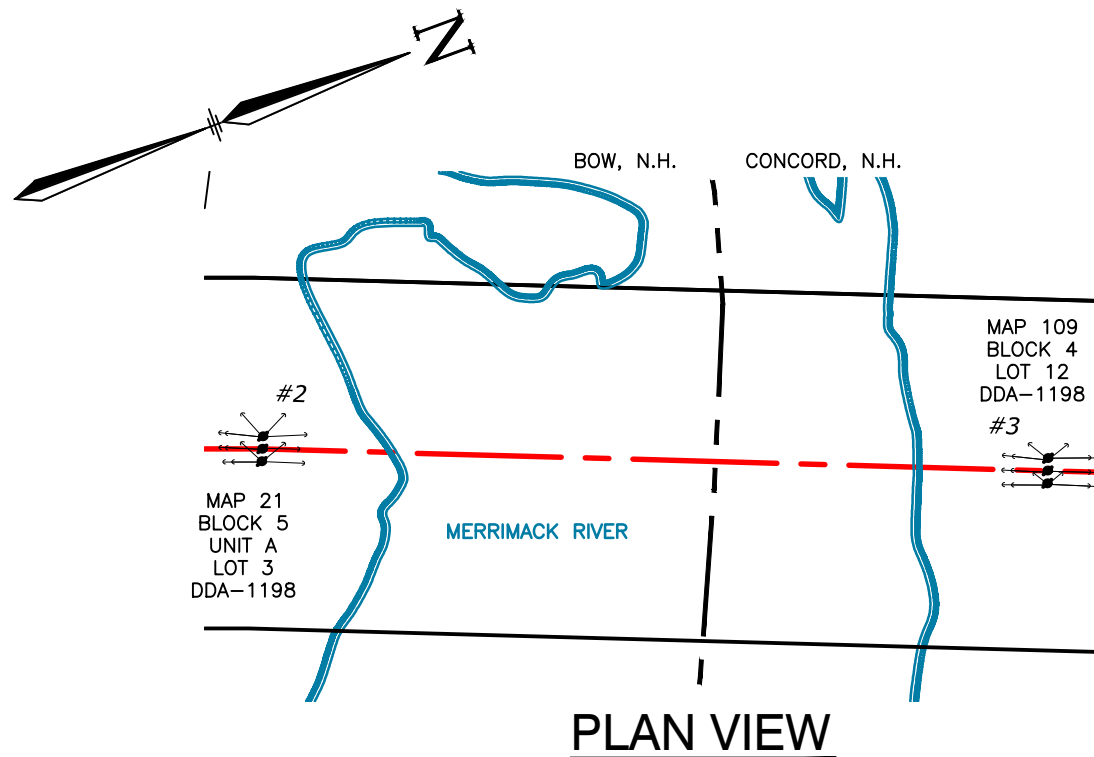
PROFILE VIEW

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



NOTES:

1. PARCEL INFORMATION PROVIDED BY NH GRANIT.
2. ELEVATIONS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988.
3. 100 YEAR FLOOD ELEVATION FROM THE FEMA FLOOD MAP SERVICE CENTER, NATIONAL FLOOD HAZARD LAYER FIRMETTE, 04/19/2010.



PLAN VIEW

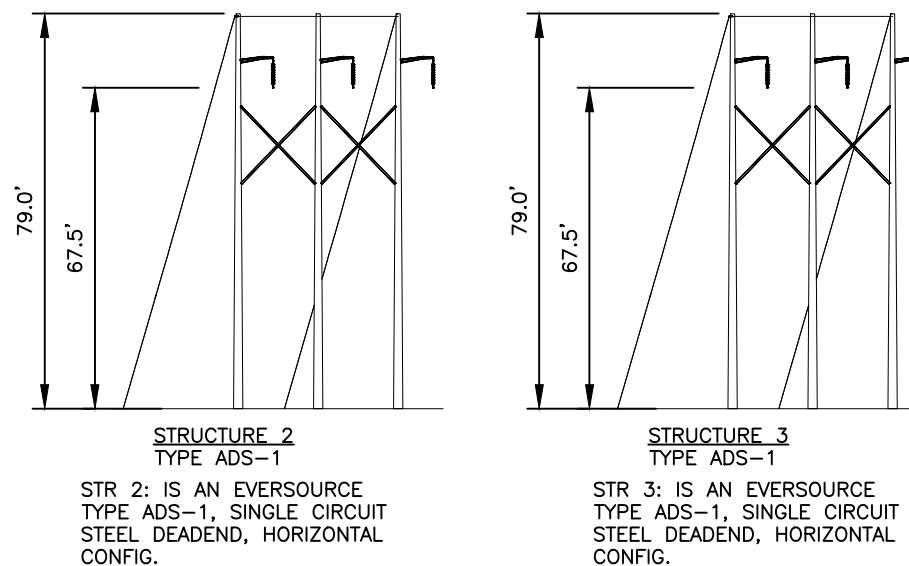
SCALE: 1" = 200'

LEGEND:

- #3 STRUCTURE
- M108 LINE 115KV LINE, C OF CONSTRUCTION
- LIMITS OF EVERSOURCE RIGHT OF WAY
- EDGE OF WATERBODY
- TOWN LINE

STRUCTURE LOCATION		
STRUCTURE	LONGITUDE	LATITUDE
2	-71.50672792	43.16409497
3	-71.50550689	43.16615432

NESC VERTICAL CLEARANCE (FT) FROM TABLE 232.1, C2-2017	
NATURE OF SURFACE UNDERNEATH WIRES, CONDUCTORS OR CABLES	115kV
WATER AREAS NOT SUITABLE FOR SAIL BOATING OR WHERE SAIL BOATING IS PROHIBITED	18.6



STRUCTURE DETAIL

SCALE: NTS

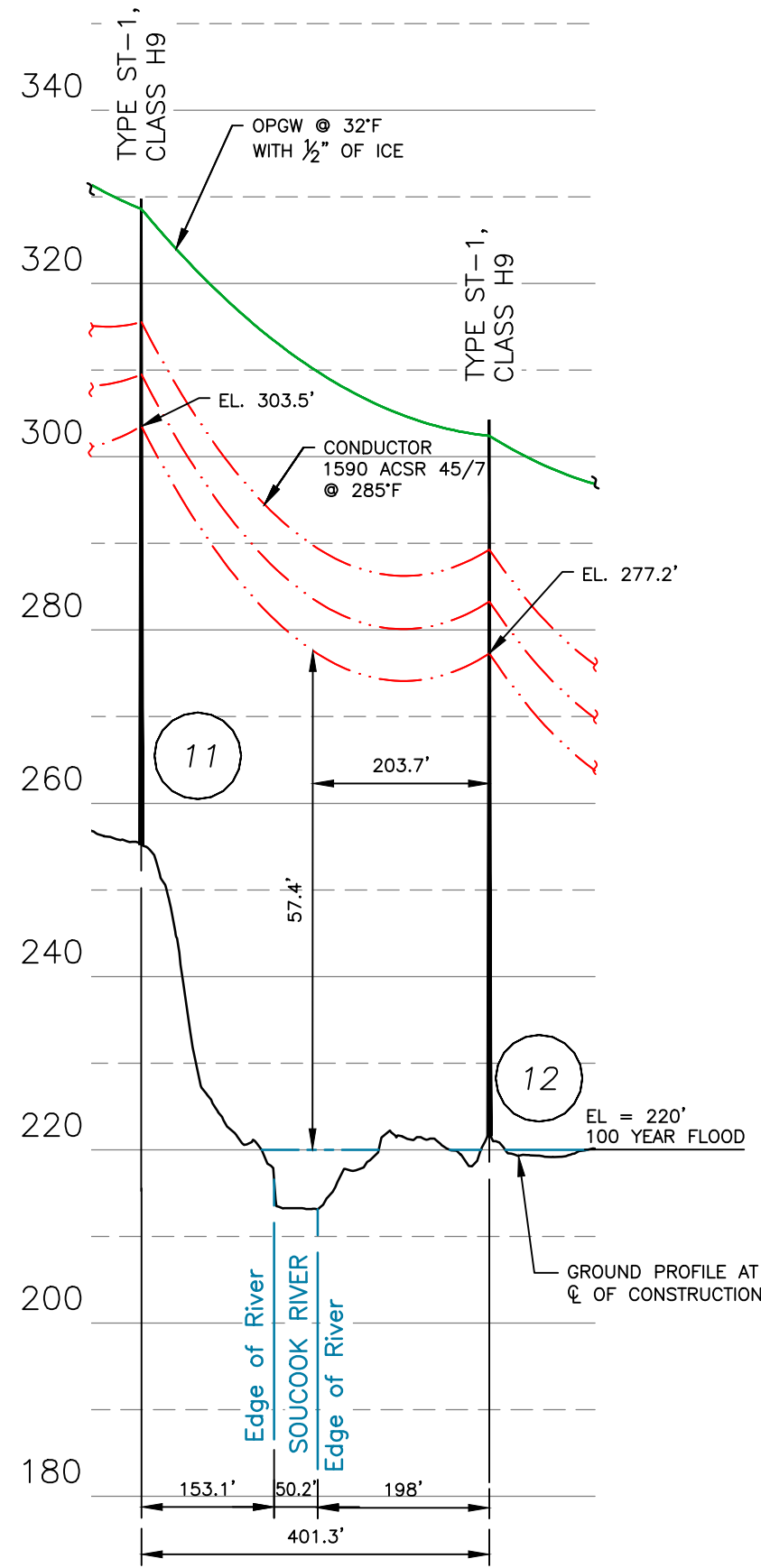
CABLE SCHEDULE						
WIRE	QTY OF CABLES	DESCRIPTION	DESIGN CONDITIONS			
			MAX DESIGN TENSION (lb)	TEMP (°F)	ICE (in)	WIND (psf)
CONDUCTOR	3	ACSR, 1590 kcmil 45/7, LAPWING	15500	0	0.5	4
OPGW	1	24F 0.646" BRUGG 93AY68ACS	6800	0	0.5	4
STATIC	1	7#8 ALUMOWELD	4800	0	0.5	4

EVERSOURCE ENERGY

M108, 115kV LINE
MERRIMACK RIVER CROSSING
BOW & CONCORD, NEW HAMPSHIRE
EXHIBIT 2

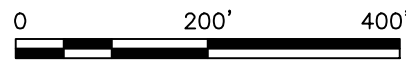
DRAWN NEB	T 1
ENGINEER CRP	
CHECKED JJD	
APPROVED CRP	
DATE 6/29/22	

DWG REV	ISSUED TO	EPN/DESCRIPTION	CONT/PE#	DATE	DRN	CHKD	CRP	APPR
1	DOE			2/10/23	NEB	JJD	CRP	



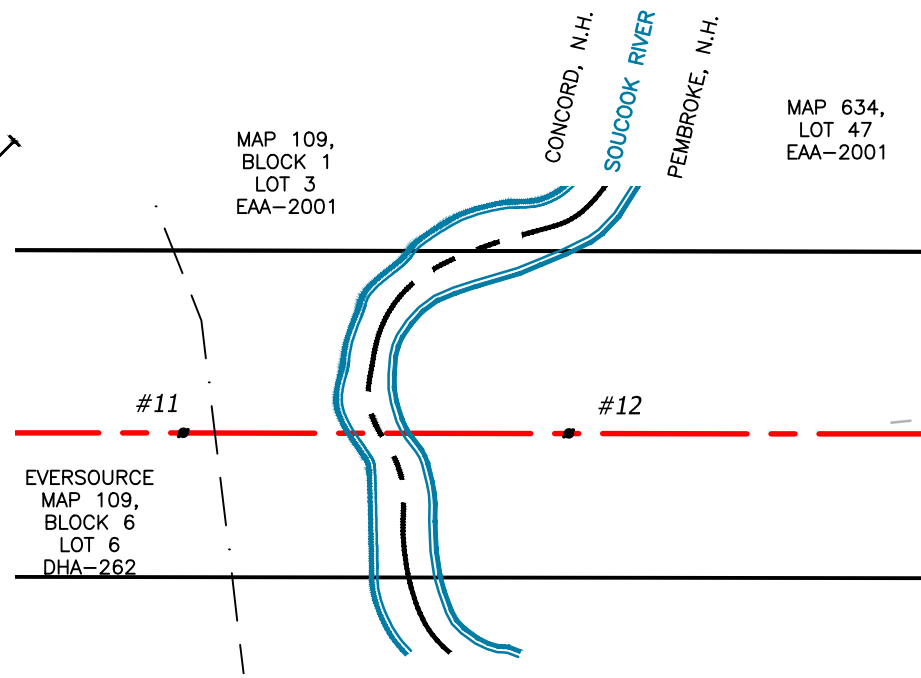
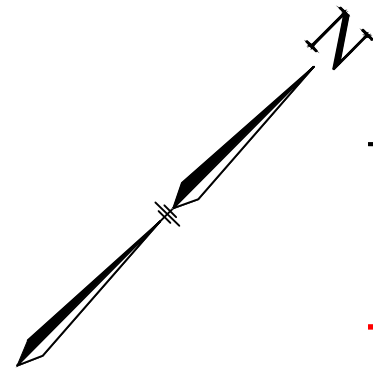
PROFILE VIEW

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



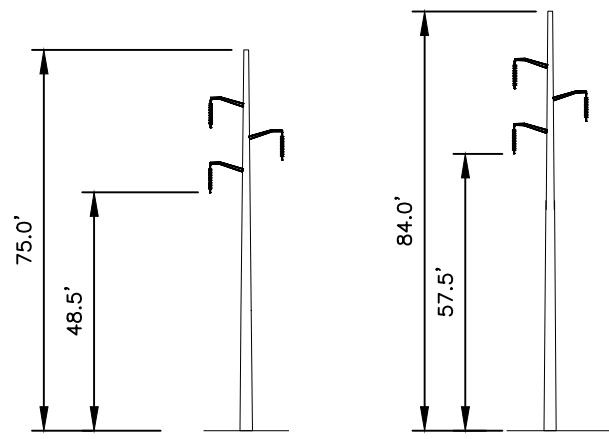
NOTES:

1. PARCEL INFORMATION PROVIDED BY NH GRANIT.
2. ELEVATIONS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988.
3. 100 YEAR FLOOD ELEVATION FROM THE FEMA FLOOD MAP SERVICE CENTER, NATIONAL FLOOD HAZARD LAYER FIRMETTE, 04/19/2010.



PLAN VIEW

SCALE: 1" = 200'



STRUCTURE 11
TYPE ST-1
STR 11: IS AN EVERSOURCE TYPE ST-1, SINGLE CIRCUIT STEEL TANGENT, DELTA CONFIG.

STRUCTURE 12
TYPE ST-1
STR 12: IS AN EVERSOURCE TYPE ST-1, SINGLE CIRCUIT STEEL TANGENT, DELTA CONFIG.

STRUCTURE DETAIL

SCALE: NTS

LEGEND:

- #11 STRUCTURE
- M108 LINE 115KV LINE, C OF CONSTRUCTION
- LIMITS OF EVERSOURCE RIGHT OF WAY
- TOWN LINE
- EDGE OF WATERBODY
- PROPERTY LINE

STRUCTURE LOCATION		
STRUCTURE	LONGITUDE	LATITUDE
11	-71.50006339	43.17446431
12	-71.49899214	43.17523762

NESC VERTICAL CLEARANCE (FT) FROM TABLE 232.1, C2-2017	
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	ACSR, 1590 kcmil 45/7, LAPWING	11400	0	0.5	4
OPGW	1	24F 0.646" BRUGG 93AY68ACS	5800	0	0.5	4

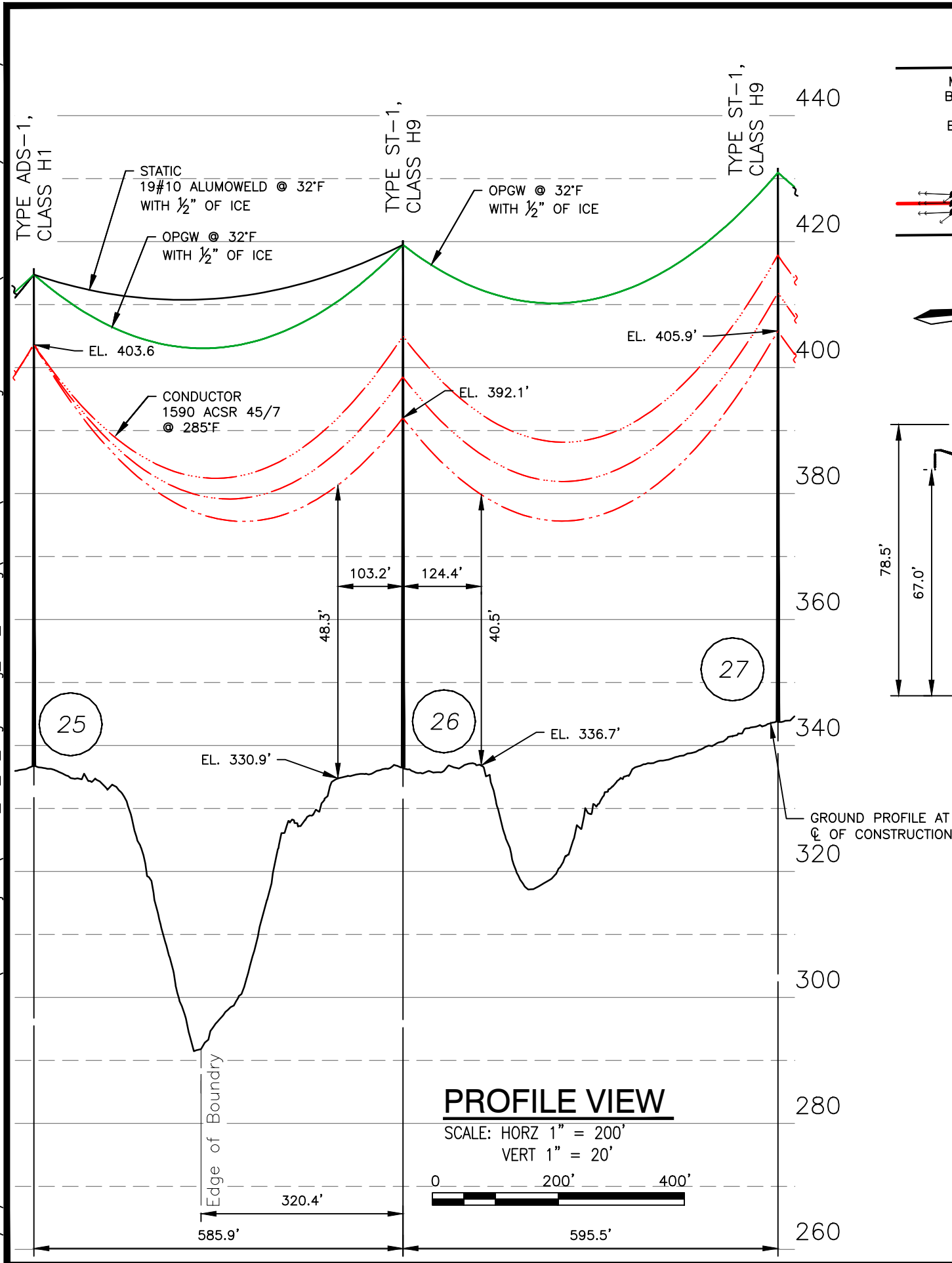
1	ISSUED TO DOE	2/10/23	NEB	JJD	CRP
DWG REV	EPN/DESCRIPTION	CONT/PE#	DATE	DRN	CHKD

EVERSOURCE ENERGY

M108, 115kV LINE
SUOOCOOK RIVER CROSSING
CONCORD & PEMBROKE, NEW HAMPSHIRE
EXHIBIT 3

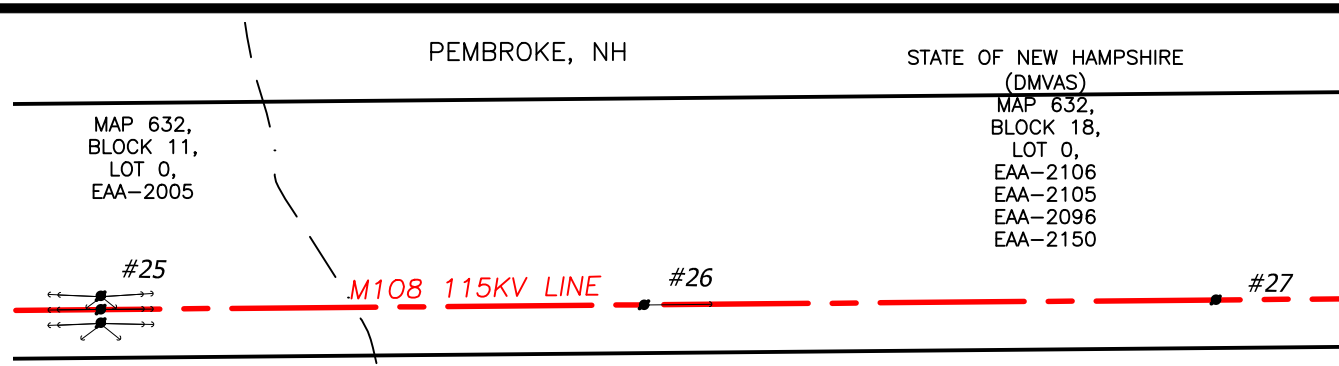
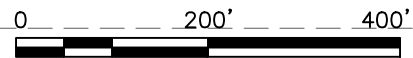
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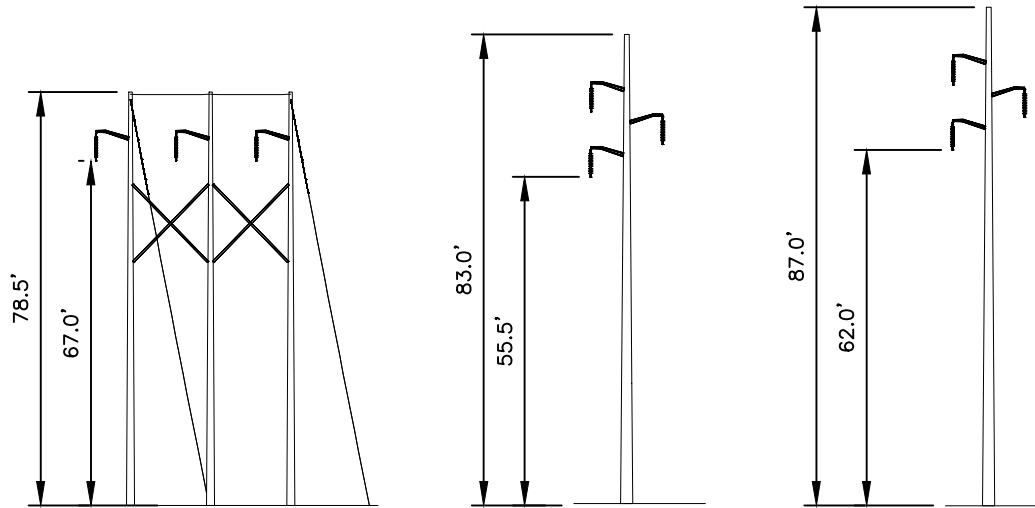
PROFILE VIEW

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



PLAN VIEW

SCALE: 1" = 200'



STRUCTURE DETAIL

SCALE: NTS

STR 25: IS AN EVERSOURCE TYPE ADS-1, SINGLE CIRCUIT STEEL POLE DEAD END ANGLE, HORIZONTAL CONFIG., GUYED.
STR 26: IS AN EVERSOURCE TYPE ST-1, SINGLE CIRCUIT STEEL TANGENT, DELTA CONFIG. STEEL TANGENT, DELTA CONFIG.
STR 27: IS AN EVERSOURCE TYPE ST-1, SINGLE CIRCUIT STEEL TANGENT, DELTA CONFIG.

NOTES:

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

DWG REV	ISSUED TO DOE	EPN/DESCRIPTION	CONT/PE#	DATE	DRN	NEB	JJD	CRP
1				2/10/23				

PEMBROKE, NH STATE OF NEW HAMPSHIRE

(DMVAS)
MAP 632,
BLOCK 18,
LOT 0,
EAA-2106
EAA-2105
EAA-2096
EAA-2150

LEGEND:

- #25 STRUCTURE
- M108 LINE 115KV LINE, C OF CONSTRUCTION
- LIMITS OF EVERSOURCE RIGHT OF WAY
- PROPERTY LINE

STRUCTURE LOCATION		
STRUCTURE	LONGITUDE	LATITUDE
25	-71.48751321	43.18954426
26	-71.48734098	43.19114675
27	-71.48716590	43.19277557

NESC VERTICAL CLEARANCE (FT) FROM TABLE 232.1, C2-2017	
NATURE OF SURFACE UNDERNEATH WIRES, CONDUCTORS OR CABLES	115kV
OTHER AREAS TRAVERSED BY VEHICLES SUCH AS CULTIVED, GRAZING, FOREST AND ORCHARD LANDS, INDUSTRIAL SITES, COMMERCIAL SITES, ECT.	20.1

CABLE SCHEDULE						
WIRE	QTY OF CABLES	DESCRIPTION	DESIGN CONDITIONS			
			MAX DESIGN TENSION (lb)	TEMP (°F)	ICE (in)	WIND (psf)
CONDUCTOR	3	ACSR, 1590 kcmil 45/7, LAPWING	16000	0	0.5	4
OPGW	1	24F 0.646" BRUGG 93AY6BACS	5600	0	0.5	4
STATIC	1	19#10 ALUMOWELD	5500	0	0.5	4

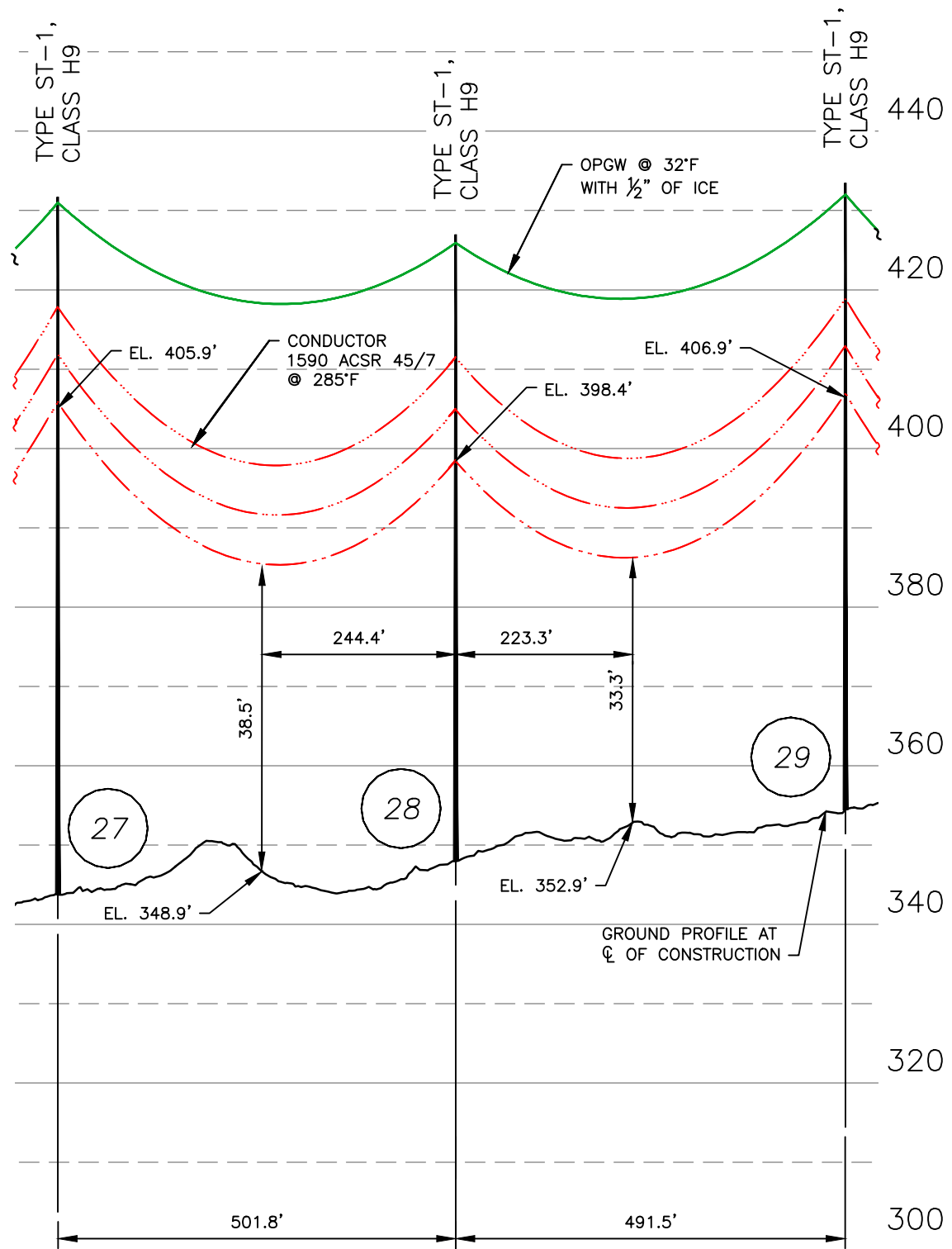
EVERSOURCE ENERGY

M108, 115kV LINE
STATE OWNED LAND CROSSING
PEMBROKE, NEW HAMPSHIRE
EXHIBIT 4

T	1
DRAWN	NEB
ENGINEER	CRP
CHECKED	JJD
APPROVED	CRP
DATE	6/29/22

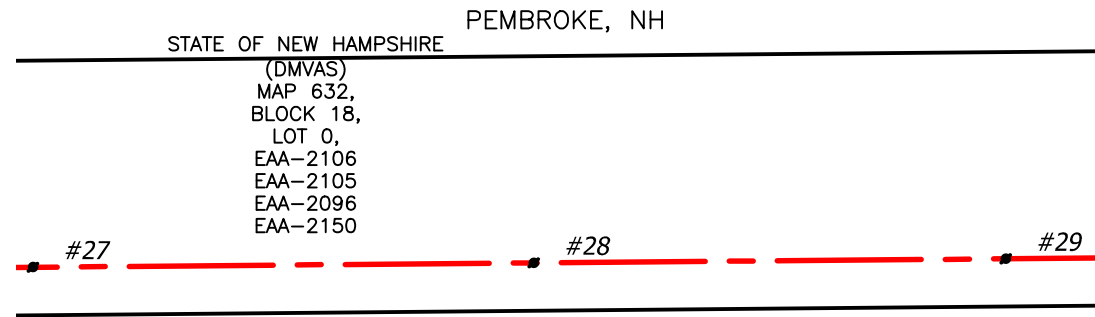
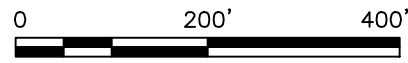
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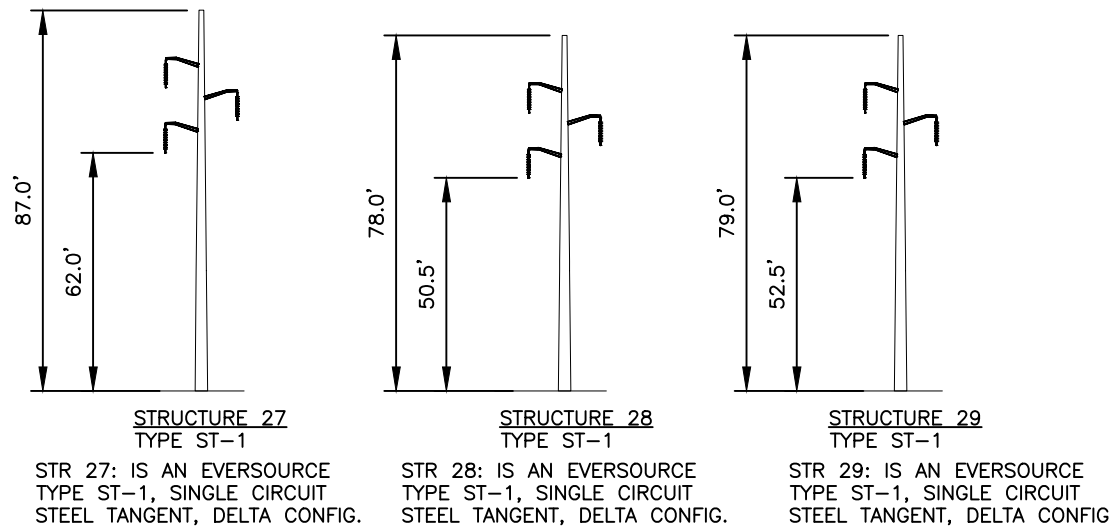
PROFILE VIEW

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



PLAN VIEW

SCALE: 1" = 200'



STRUCTURE DETAIL

SCALE: NTS

LEGEND:

- #29 STRUCTURE
- M108 LINE 115KV LINE, ☐ OF CONSTRUCTION
- LIMITS OF EVERSOURCE RIGHT OF WAY



STRUCTURE LOCATION		
STRUCTURE	LONGITUDE	LATITUDE
27	-71.48716590	43.19277557
28	-71.48701838	43.19414796
29	-71.48687387	43.19549231

NESC VERTICAL CLEARANCE (FT) FROM TABLE 232.1, C2-2017	
NATURE OF SURFACE UNDERNEATH WIRES, CONDUCTORS OR CABLES	115kV
OTHER AREAS TRAVERSED BY VEHICLES SUCH AS CULTIVED, GRAZING, FOREST AND ORCHARD LANDS, INDUSTRIAL SITES, COMMERCIAL SITES, ECT.	20.1

CABLE SCHEDULE						
WIRE	QTY OF CABLES	DESCRIPTION	DESIGN CONDITIONS			
			MAX DESIGN TENSION (lb)	TEMP (°F)	ICE (in)	WIND (psf)
CONDUCTOR	3	ACSR, 1590 kcmil 45/7, LAPWING	16000	0	0.5	4
OPGW	1	24F 0.646" BRUGG 93AY68ACS	5600	0	0.5	4

NOTES:

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

1	ISSUED TO DOE	2/10/23	NEB	JJD	CRP
DWG REV	EPN/DESCRIPTION	CONT/PE#	DATE	DRN	CHKD

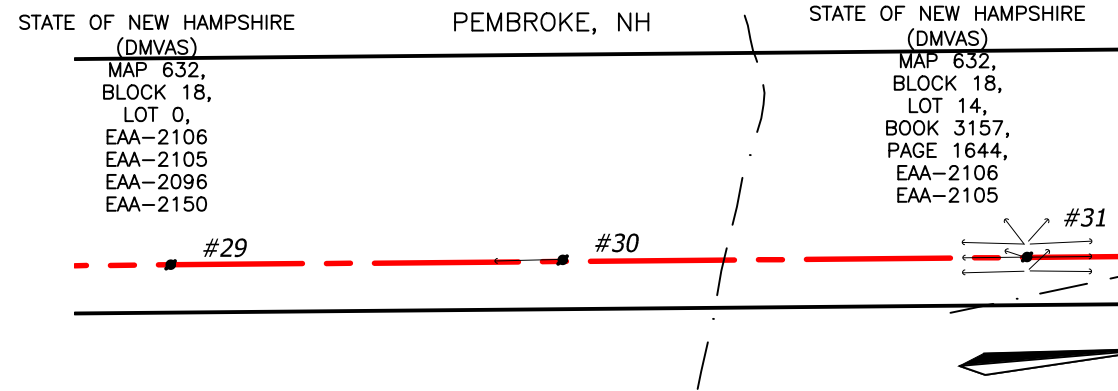
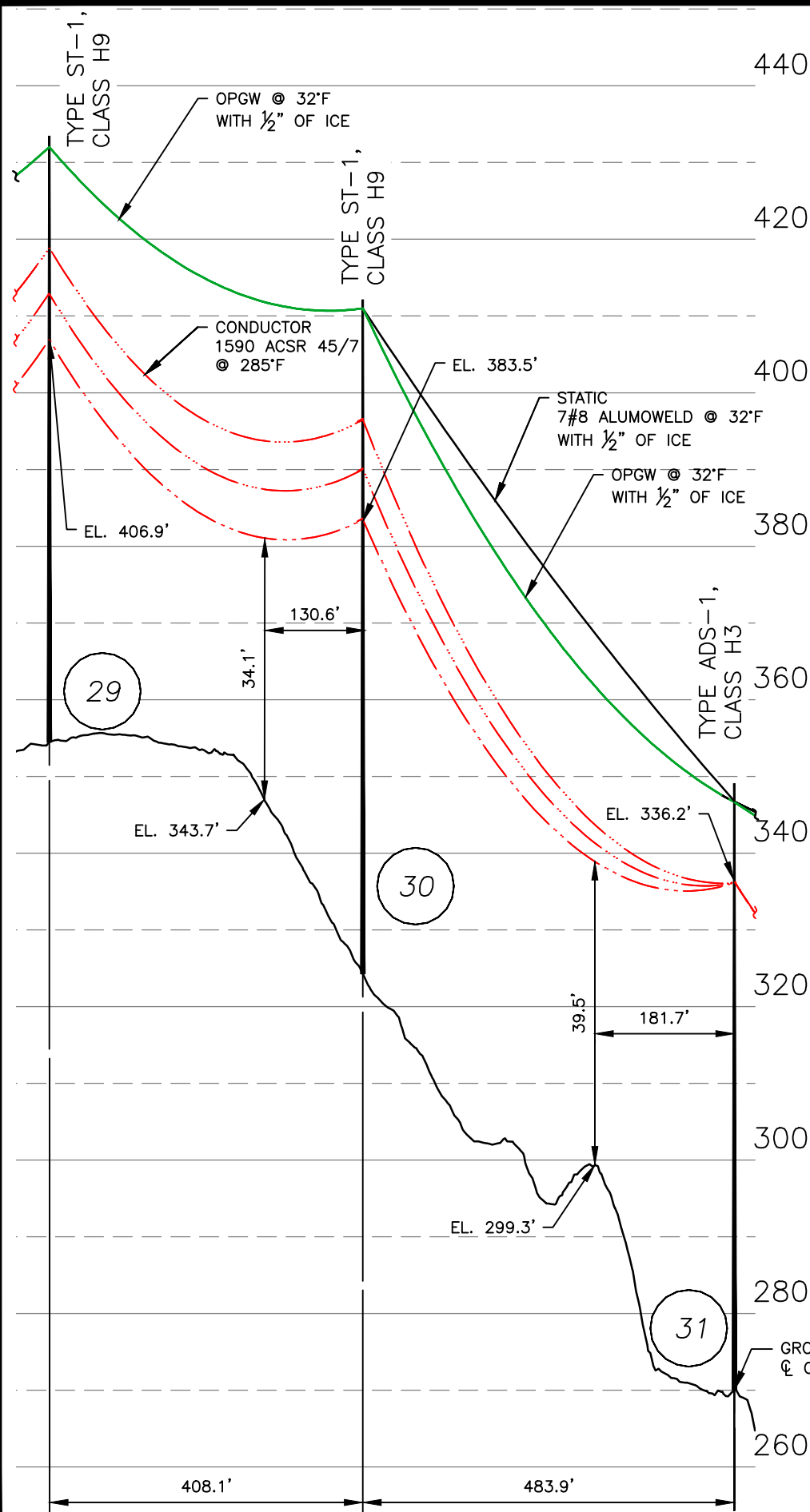
EVERSOURCE ENERGY

M108, 115kV LINE
STATE OWNED LAND CROSSING
PEMBROKE, NEW HAMPSHIRE
EXHIBIT 5

SCALE AS SHOWN	DRAWING NO. M10843500
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T	1
DRAWN	NEB
ENGINEER	CRP
CHECKED	JJD
APPROVED	CRP
DATE	6/29/22

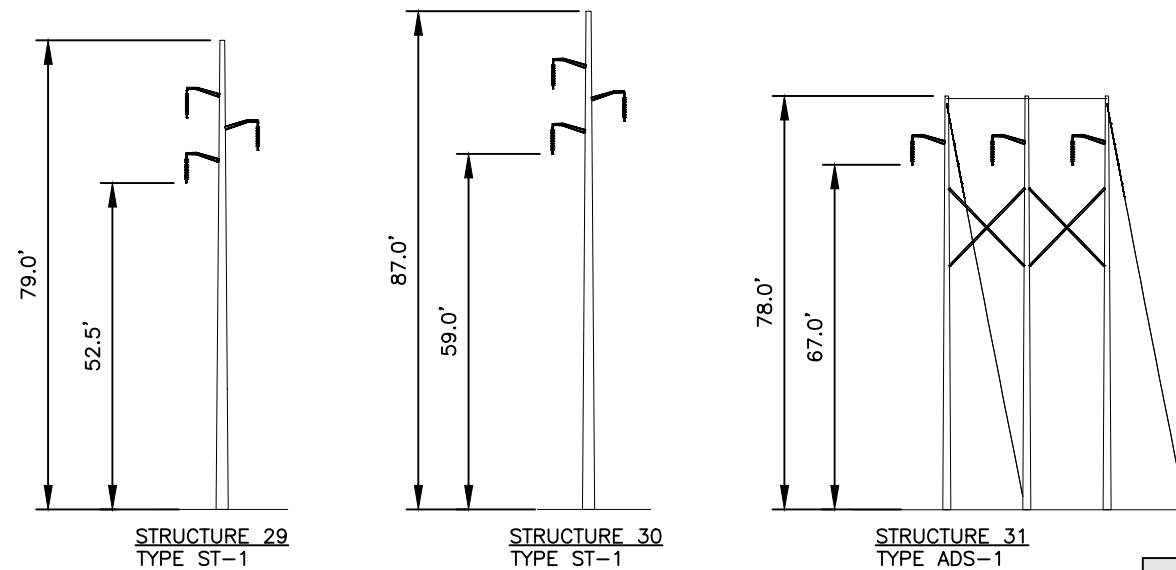
2/10/2023 9:51 AM - JoshD - N:\Active Projects\02497_ES_TL_Engineering_and_Drafting\06-D...M10843500.dwg - EXHIBIT 6 (LAND CROSSING) ES VER: 12/2016



PLAN VIEW
SCALE: 1" = 200'

LEGEND:

- #25 STRUCTURE
- M108 LINE 115KV LINE, ϕ OF CONSTRUCTION
- LIMITS OF EVERSOURCE RIGHT OF WAY
- PROPERTY LINE



STRUCTURE DETAIL
SCALE: NTS

STRUCTURE 29
TYPE ST-1
STR 29: IS AN EVERSOURCE TYPE ST-1, SINGLE CIRCUIT STEEL TANGENT, DELTA CONFIG.

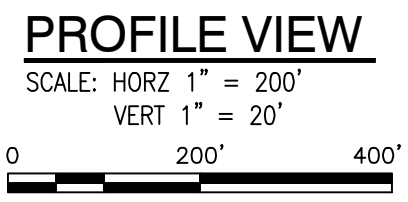
STRUCTURE 30
TYPE ST-1
STR 30: IS AN EVERSOURCE TYPE ST-1, SINGLE CIRCUIT STEEL TANGENT, DELTA CONFIG.

STRUCTURE 31
TYPE ADS-1
STR 31: IS AN EVERSOURCE TYPE ADS-1, SINGLE CIRCUIT STEEL TANGENT, HORIZONTAL CONFIG.

STRUCTURE LOCATION		
STRUCTURE	LONGITUDE	LATITUDE
29	-71.48687387	43.19549231
30	-71.48675944	43.19660928
31	-71.48661308	43.19793220

NESC VERTICAL CLEARANCE (FT) FROM TABLE 232.1, C2-2017	
NATURE OF SURFACE UNDERNEATH WIRES, CONDUCTORS OR CABLES	115kV
OTHER AREAS TRAVERSED BY VEHICLES SUCH AS CULTIVED, GRAZING, FOREST AND ORCHARD LANDS, INDUSTRIAL SITES, COMMERCIAL SITES, ECT.	20.1

CABLE SCHEDULE						
WIRE	QTY OF CABLES	DESCRIPTION	DESIGN CONDITIONS			
			MAX DESIGN TENSION (lb)	TEMP (°F)	ICE (in)	WIND (psf)
CONDUCTOR	3	ACSR, 1590 kcmil 45/7, LAPWING	16000	0	0.5	4
OPGW	1	24F 0.646" BRUGG 93AY68ACS	5600	0	0.5	4
STATIC	1	7#8 ALUMOWELD	4800	0	0.5	4



NOTES:

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

1	ISSUED TO DOE	2/10/23	NEB	JJD	CRP
DWG REV	EPN/DESCRIPTION	CONT/PE#	DATE	DRN	CHKD

EVERSOURCE ENERGY

M108, 115kV LINE
STATE OWNED LAND CROSSING
PEMBROKE, NEW HAMPSHIRE
EXHIBIT 6

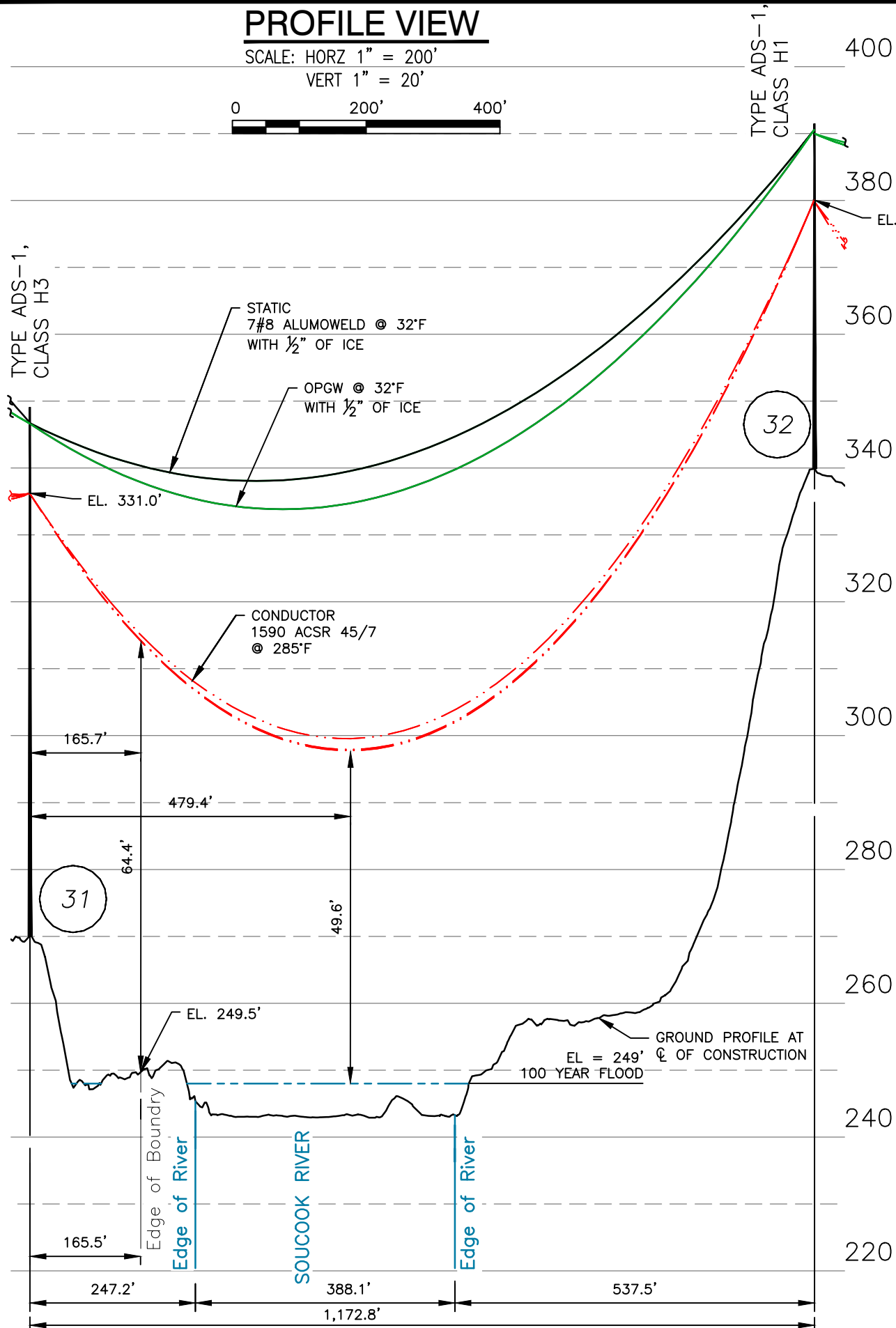
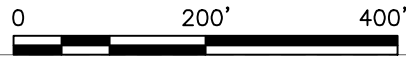
T	1
DRAWN	NEB
ENGINEER	CRP
CHECKED	JJD
APPROVED	CRP
DATE	6/29/22

SCALE: AS SHOWN
FILE: M10843500.DWG
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2/10/2023 8:41 AM - JoshD - N:\Active Projects\02497_ES_TL_Engineering_and_Drafting\06-D...M10843901.dwg - EXHIBIT 7 (WATER CROSSING) ES VER: 12/2016

PROFILE VIEW

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



STATE OF NEW HAMPSHIRE
(DMVAS)
MAP 632,
BLOCK 18,
LOT 14,
EAA-2105
EAA-2106

PEMBROKE, N.H.

CONCORD, N.H.
MAP 633,
BLOCK Z,
LOT 3,
EAA-2006



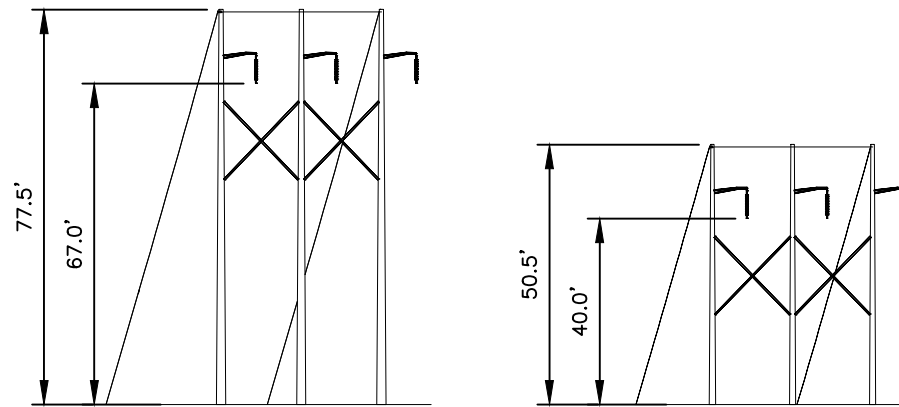
PLAN VIEW

SCALE: 1" = 200'



LEGEND:

- #31 STRUCTURE
- M108 LINE 115KV LINE, Q OF CONSTRUCTION
- LIMITS OF EVERSOURCE RIGHT OF WAY
- TOWN LINE
- EDGE OF WATERBODY
- PROPERTY LINE



STRUCTURE 31
TYPE ADS-1

STR 31: IS AN EVERSOURCE TYPE ADS-1, SINGLE CIRCUIT STEEL POLE DEADEND, HORIZONTAL CONFIG.

STRUCTURE 32
TYPE ADS-1

STR 32: IS AN EVERSOURCE TYPE ADS-1, SINGLE CIRCUIT STEEL POLE DEADEND, HORIZONTAL CONFIG.

STRUCTURE DETAIL

SCALE: NTS

NOTES:

1. PARCEL INFORMATION PROVIDED BY NH GRANIT.
2. ELEVATIONS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988.
3. 100 YEAR FLOOD ELEVATION FROM THE FEMA FLOOD MAP SERVICE CENTER, NATIONAL FLOOD HAZARD LAYER FIRMETTE, 04/19/2010.

STRUCTURE LOCATION		
STRUCTURE	LONGITUDE	LATITUDE
31	-71.48661308	43.19793220
32	-71.48626725	43.20114019

NESC VERTICAL CLEARANCE (FT) FROM TABLE 232.1, C2-2017	
NATURE OF SURFACE UNDERNEATH WIRES, CONDUCTORS OR CABLES	115kV
WATER AREAS NOT SUITABLE FOR SAIL BOATING OR WHERE SAIL BOATING IS PROHIBITED	18.6
OTHER AREAS TRAVERSED BY VEHICLES SUCH AS CULTIVATED, GRAZING, FOREST AND ORCHARD LANDS, INDUSTRIAL SITES, COMMERCIAL SITES, ECT.	20.1

CABLE SCHEDULE						
WIRE	QTY OF CABLES	DESCRIPTION	DESIGN CONDITIONS			
			MAX DESIGN TENSION (lb)	TEMP (°F)	ICE (in)	WIND (psf)
CONDUCTOR	3	ACSR, 1590 kcmil 45/7, LAPWING	15000	0	0.5	4
OPGW	1	24F 0.646" BRUGG 93AY68ACS	8400	0	0.5	4
STATIC	1	7#8 ALUMOWELD	5400	0	0.5	4

EVERSOURCE ENERGY

M108, 115kV LINE
STATE OWNED LAND & SUOCCOOK RIVER CROSSING
CONCORD & PEMBROKE, NEW HAMPSHIRE
EXHIBIT 7

T	1
DRAWN	NEB
ENGINEER	CRP
CHECKED	JJD
APPROVED	CRP
DATE	6/29/22

1	ISSUED TO DOE	2/10/23	NEB	JJD	CRP	
DWG REV	EPN/DESCRIPTION	CONT/PE#	DATE	DRN	CHKD	APPR

SCALE AS SHOWN
FILE: M10843901.DWG
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