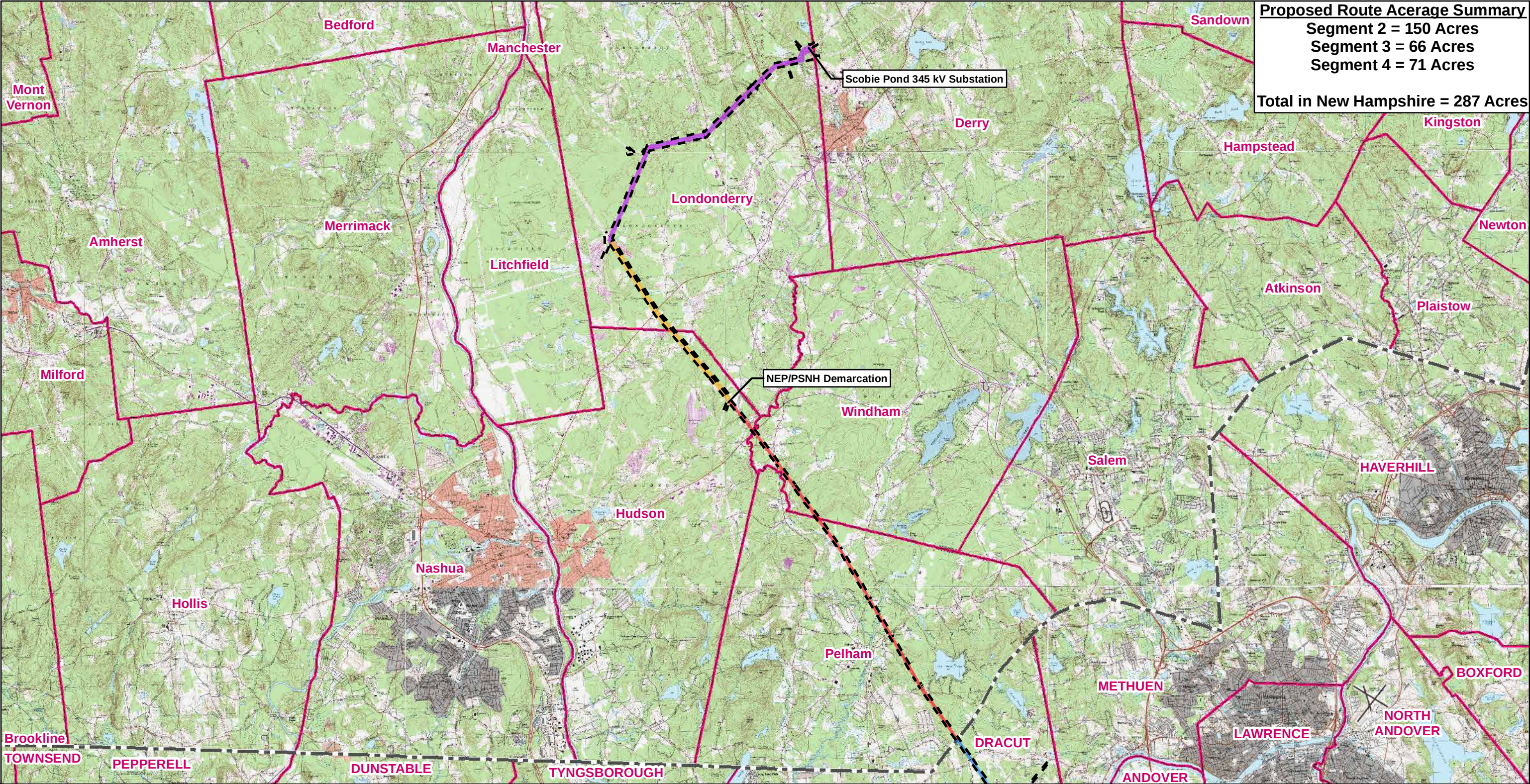




Proposed Route Acreage Summary	
Segment 2	= 150 Acres
Segment 3	= 66 Acres
Segment 4	= 71 Acres
Total in New Hampshire = 287 Acres	



- Surveyed ROW Boundary
- State Boundary
- Town Boundary
- Segment 1
- Segment 2
- Segment 3
- Segment 4

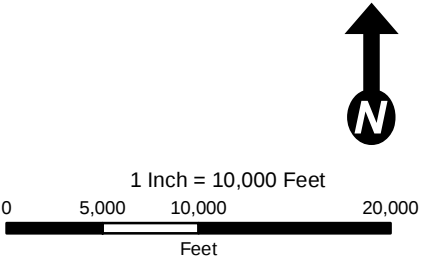


Figure 2 - NH USGS Project Overview
Merrimack Valley Reliability Project
Tewksbury 22A Substation MA to
Scobie Pond 345 kV Substation NH

Source:
NGRID, Black & Veatch, VHB
Beals & Thomas, EVERSOURCE, Normandeau

Date: 6/4/2015

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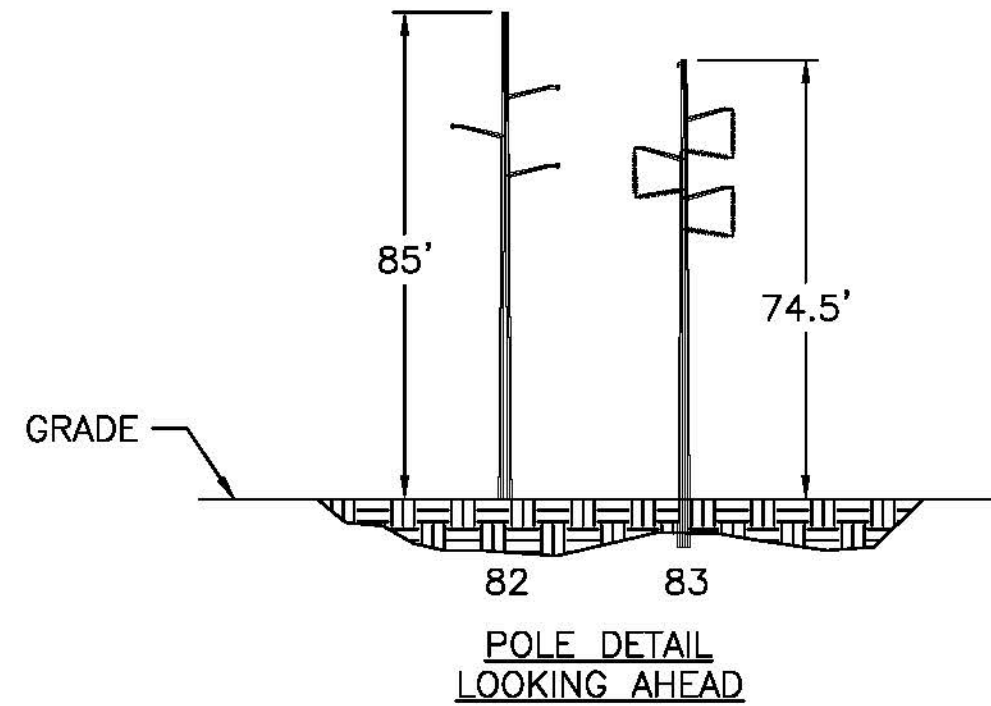
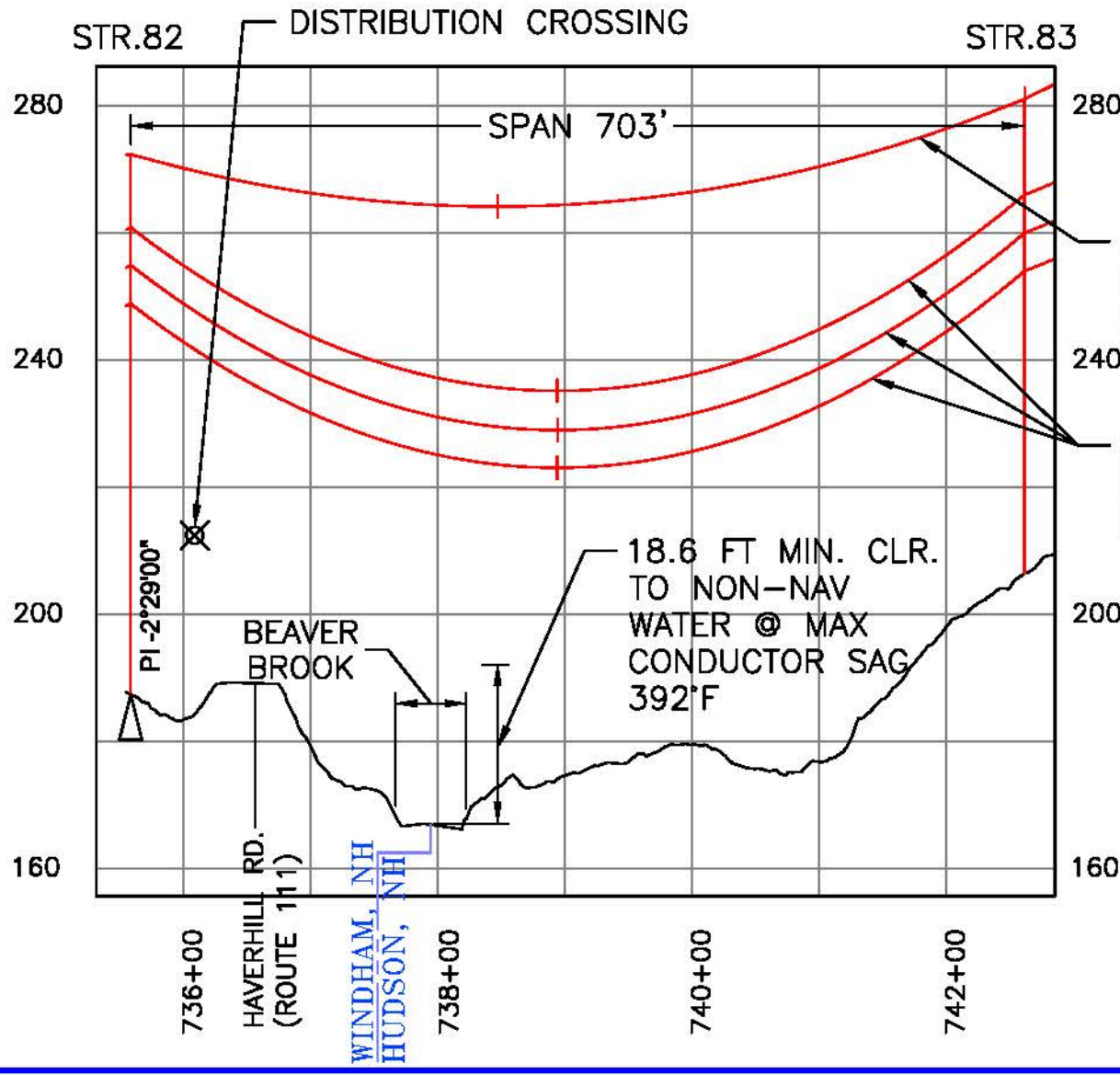
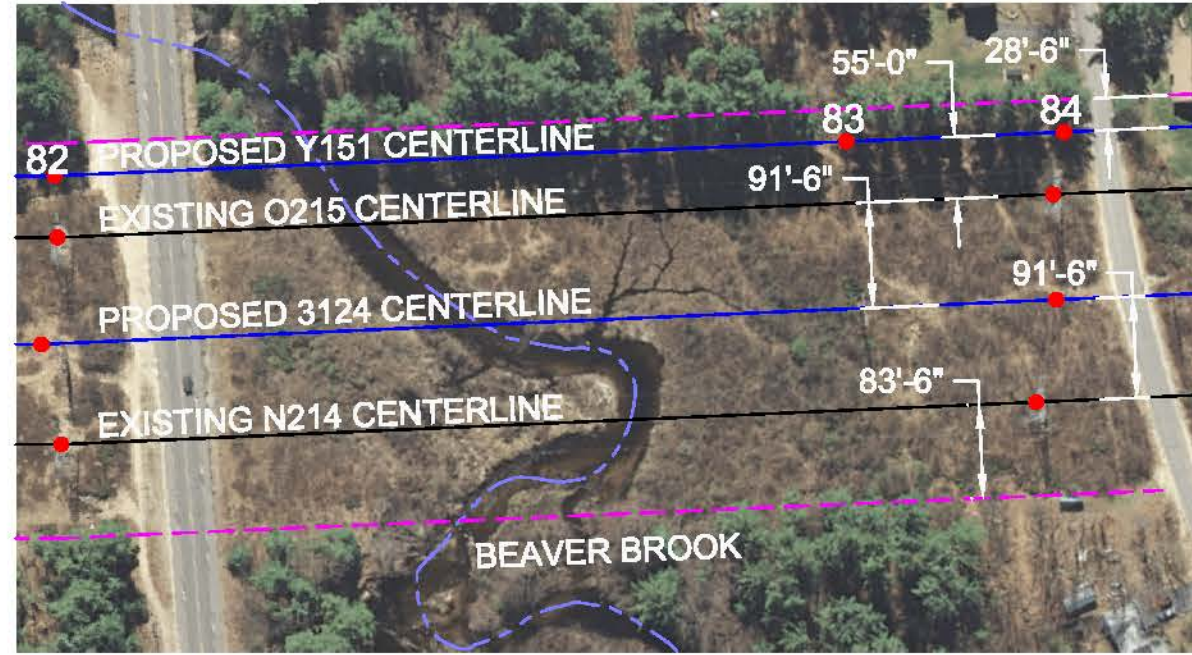
EVERSOURCE
ENERGY

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400298-C-L-02

VERSION DESCRIPTION		VERSION	
VER	DATE	PREPARED	REVIEWED
1	05/08/15	ISSUED FOR PERMITTING	APPROVED
2			
3			
4			

VERSION	
RAM	FTX
NPA	



NOTES:
1. DESIGN CLEARANCE 115KV = 25FT

OPGW (TO BE DETERMINED)
DISPLAYED AT 60°F, MAX. SAG
DESIGNED AT 4,000 LBS NESC HEAVY

DRAKE 795 KCMIL 26/7 ACSR HS285
DISPLAYED AT 392°F, MAX. SAG
DESIGNED AT 8,000 LBS NESC HEAVY

MERRIMACK VALLEY RELIABILITY PROJECT
115KV Y151 TRANSMISSION LINE
BEAVER BROOK
CROSSING SPAN STR.82-83

PREPARED BY	RAM	05/08/15
REVIEWED BY	FTX	05/08/15
APPROVED BY	NPA	05/08/15
SCALE	N.T.S.	
SHEET	1	OF 1
INDEX	400298	

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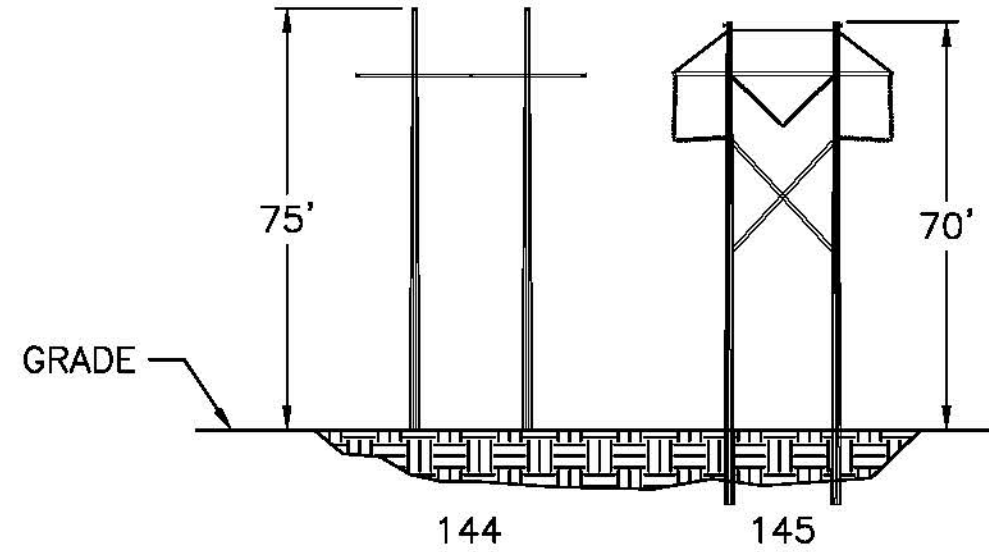
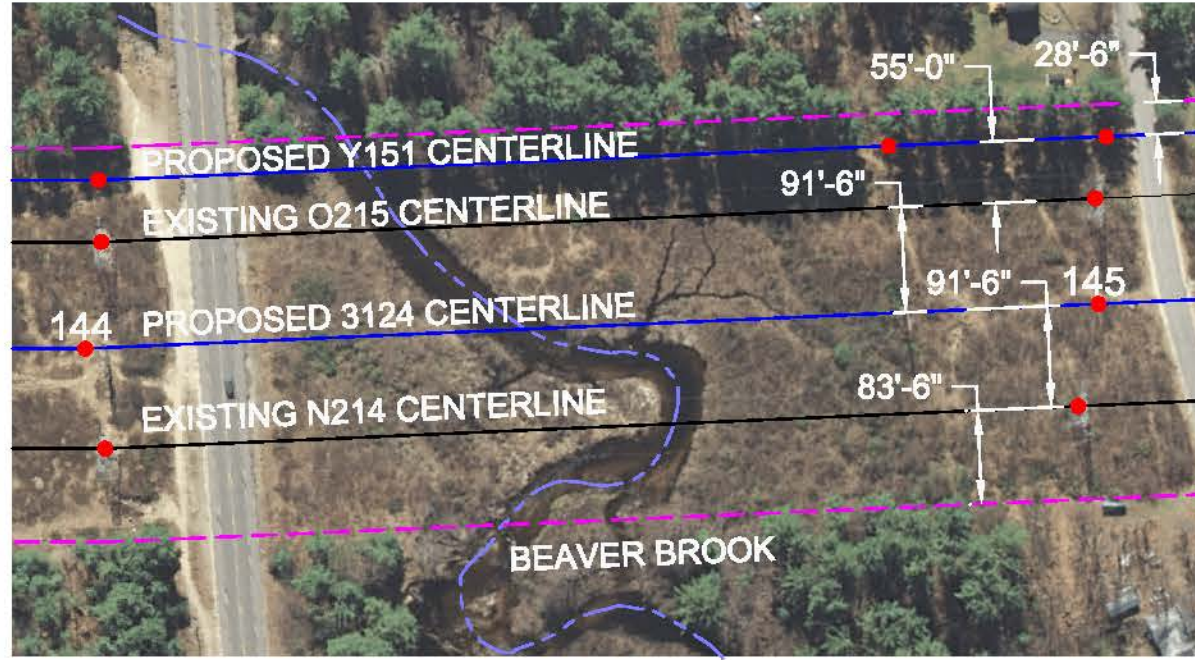
INCHES ON ORIGINAL

400298-C-L-02

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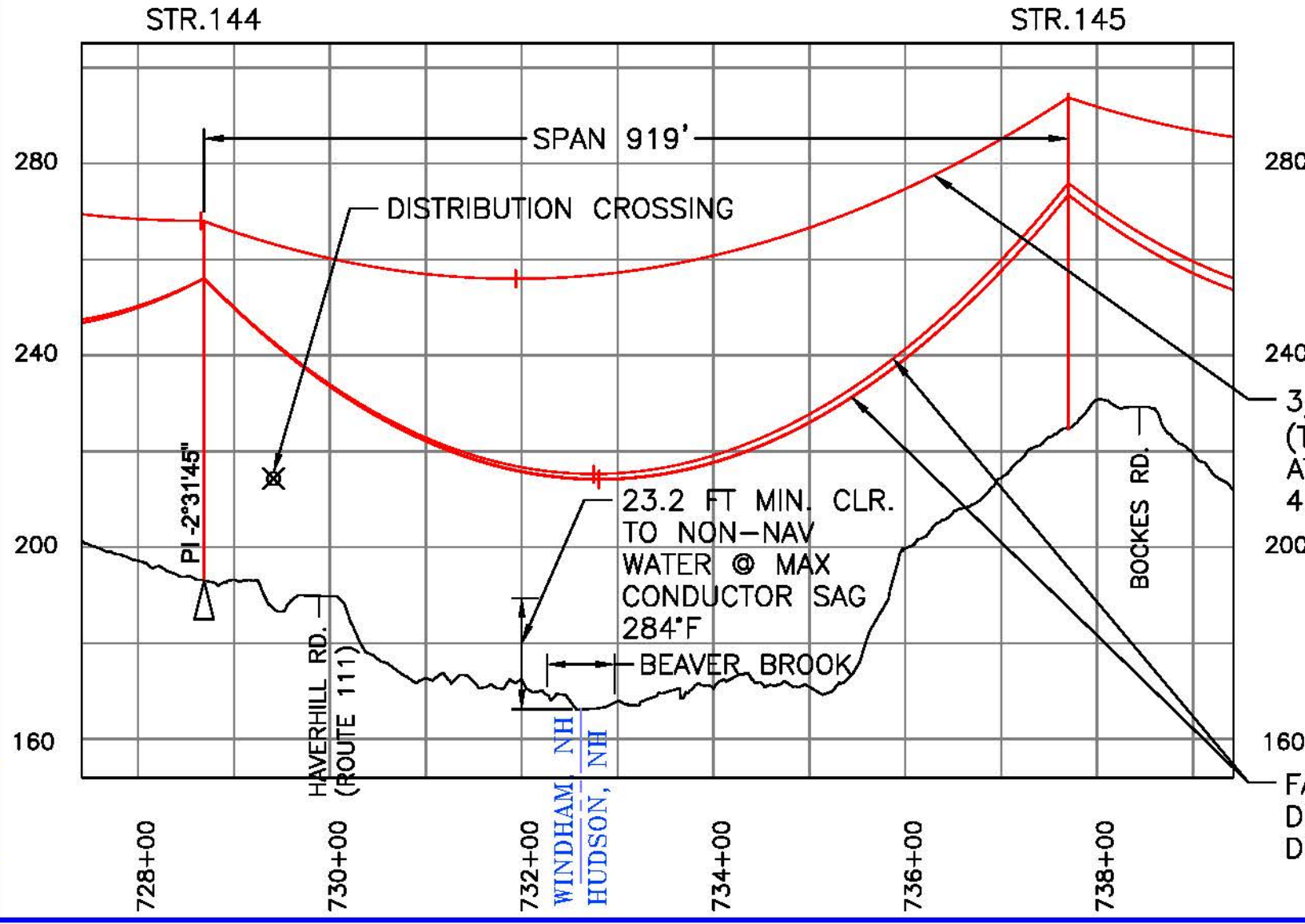
VERSION		PREPARED / REVIEWED / APPROVED		VERSION	
VER	DATE	ISSUED FOR PERMITTING		RAM	FTX
1	05/08/15				
2					
3					
4					



POLE DETAIL
LOOKING AHEAD

NOTES:

1. DESIGN CLEARANCE 345KV = 30FT



3/8"-7 STRAND E.H.S. OPGW
(TO BE DETERMINED) DISPLAYED
AT 60°F, MAX. SAG DESIGNED AT
4,000 LBS NESC HEAVY

FALCON 1590 KCMIL 54/19 ACSR
DISPLAYED AT 284°F, MAX. SAG
DESIGNED AT 10,000 LBS NESC HEAVY

INCHES ON ORIGINAL

400298-C-L-01

MERRIMACK VALLEY RELIABILITY PROJECT

345KV 3124 TRANSMISSION LINE

BEAVER BROOK
CROSSING SPAN STR.144-145

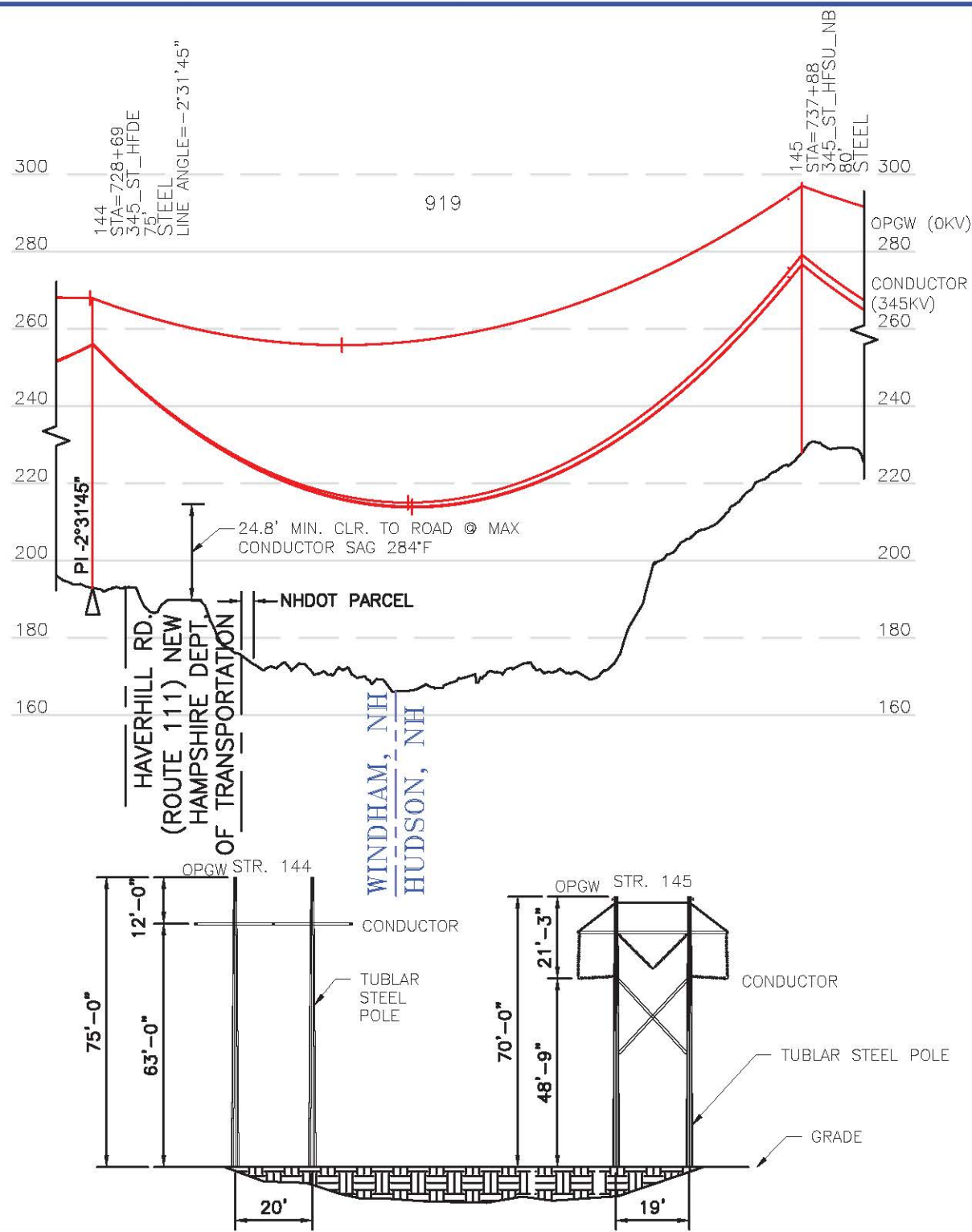
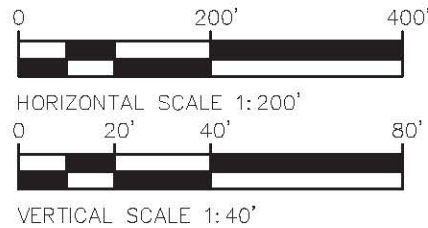
PREPARED BY	RAM	05/08/15
REVIEWED BY	FTX	05/08/15
APPROVED BY	NPA	05/08/15
SCALE	N.T.S.	
SHEET	1	OF 1
INDEX	400298	

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VER	DATE	VERSION DESCRIPTION			PREPARED / REVIEWED / APPROVED			VERSION	
		ISSUED FOR PERMITTING			DD	FTX	NPA		
1	06/16/15							1	
2									
3									
4									



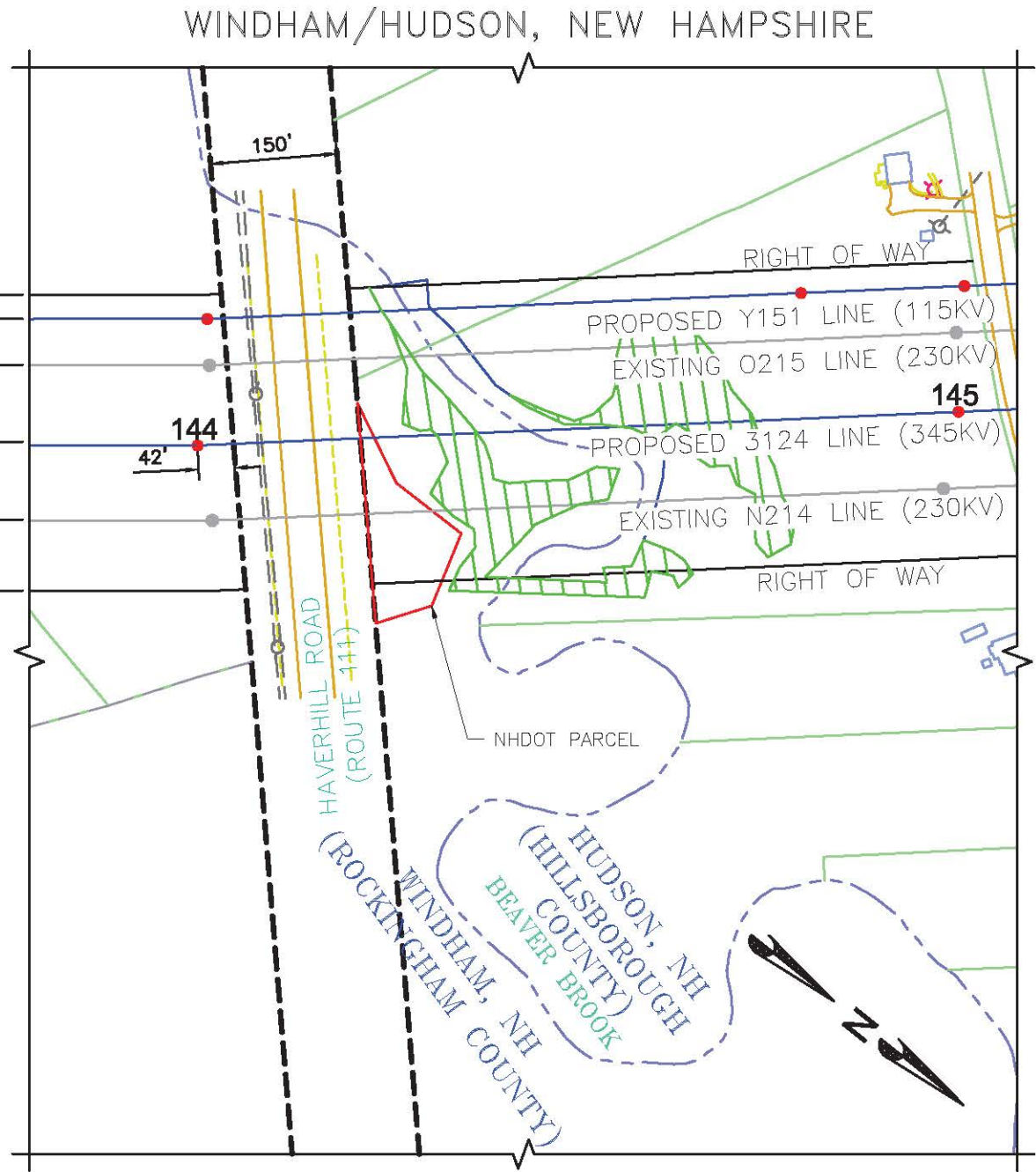
STRUCTURE LOCATION:		
STR. 144	LATITUDE	42°47'39.621"N
	LONGITUDE	71°21'46.737"W
STR. 145	LATITUDE	42°47'46.699"N
	LONGITUDE	71°21'54.444"W

NOTES:

1. DESIGN CLEARANCE 345KV = 30FT
2. OPGW AND SHIELD WIRE SHOWN AT NESC HEAVY, 4000 LBS, 60°F MAX SAG
3. CONDUCTOR SHOWN AT NESC HEAVY, 10000 LBS 284°F MAX SAG

CABLE SCHEDULE:						
LINE	WIRE	# OF CABLES	TYPE	DIA. (IN.)	WEIGHT/ 1000 FT	CABLE STRENGTH (LBS.)
3124	NEW OPGW	1	TO BE DETERMINED	-	-	-
	NEW SHIELD WIRE	1	3/8"-7 STRAND EHS	0.360	273	15,400
	NEW CONDUCTOR	6	FALCON 1590 KCMIL 54/19 ACSR	1.545	2044	54,500

INCHES ON ORIGINAL



MERRIMACK VALLEY RELIABILITY PROJECT
LINE 3124 345KV TRANSMISSION
NH DOT CROSSING PERMIT DRAWING
ROUTE 111 CROSSING

PREPARED BY	DD	06/16/15
REVIEWED BY	FTX	06/16/15
APPROVED BY	NPA	06/16/15
SCALE	-	-
SHEET	1	OF 1
INDEX	400298	

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