



# BIG EDDY-KNIGHT NO. 1 500KV TRANSMISSION LINE PROJECT

Big Eddy Substation

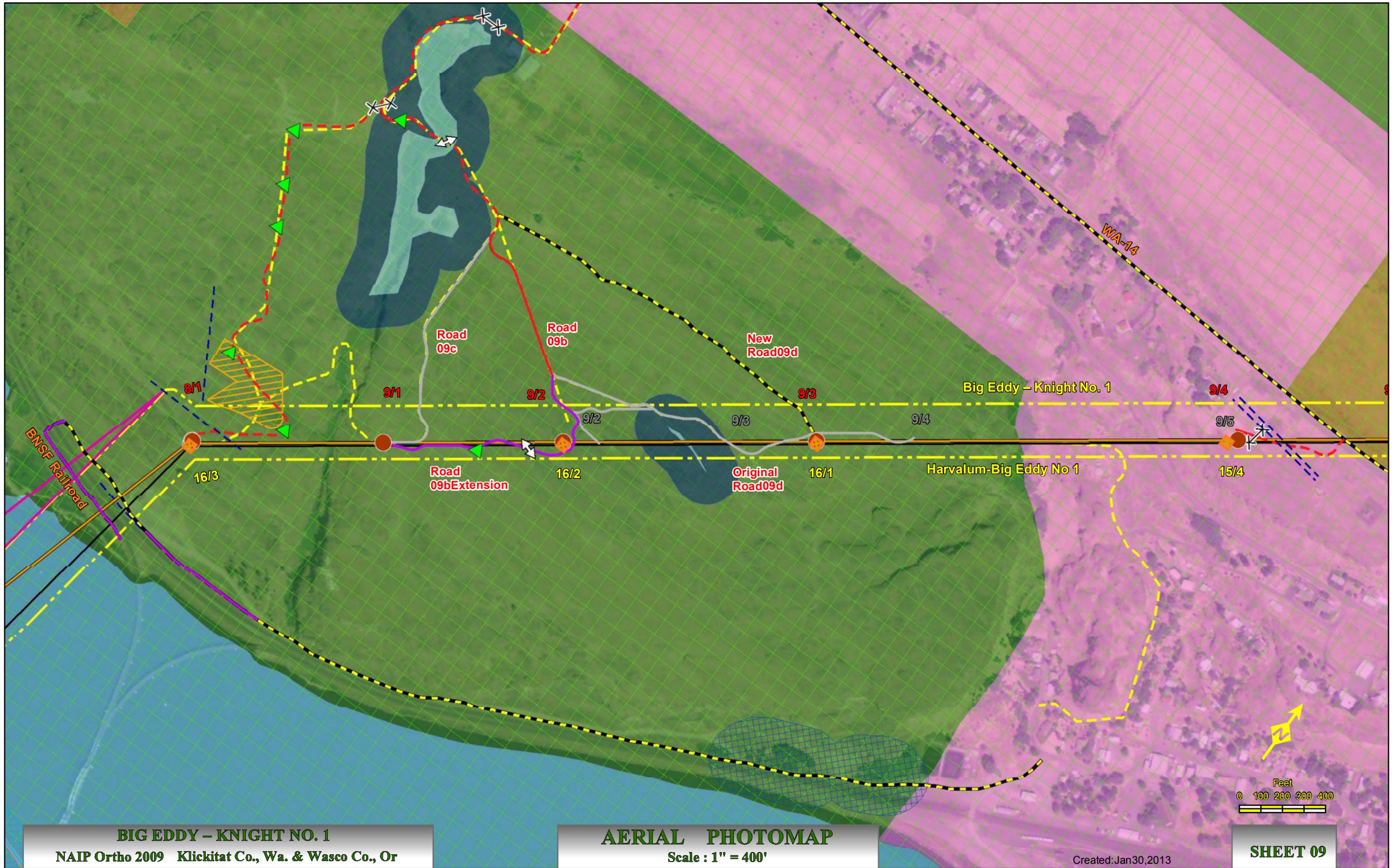
Proposed Knight Substation

MAPS 1, AND 7-14 ARE FOR REVIEW  
IN THE CRGNSA APPLICATION

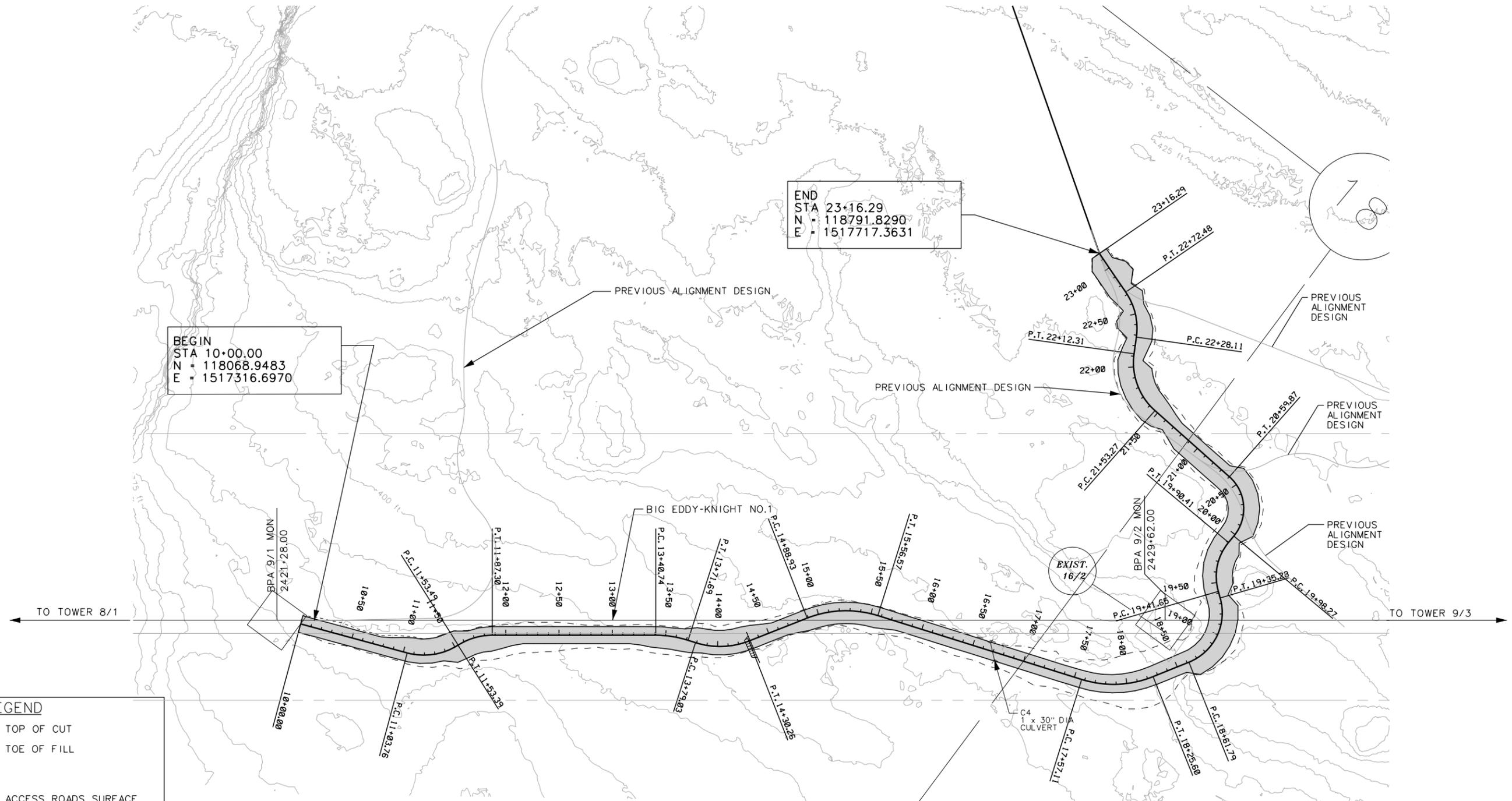
**Legend**

— Big Eddy - Knight Alignment	Proposed Right-of-Way	Wetlands	<b>Land Use Designations</b>
● New Tower Locations	Existing Right-of-Way	Wetlands Buffer	
● Previous Tower Locations	↕ Culvert	Water Way	
— Existing Alignment	▲ Drain Dip	Perennial Streams Buffer	
□ Existing Tower	⌈ Ford	Intermittent Streams Buffer	■ Large-Scale Ag
⊗ Existing Tower Removal	⊗ Gate	Lakes and Ponds Buffer	■ Residential
~ Construction	⊗ Utility Crossings	Fish Bearing Streams	■ Urban Areas
~ Previous Alignment Design	— Gas	DNR Lands	■ Water
~ Repair	— Power	Parcels	
~ Maintenance	● Telephone	Columbia River Gorge NSA	
~ Acquire AR	● Underground	Work Area	
~ Route of Travel			
~ Existing Road Easement			





SEC 18 T2N R15E WM



BEGIN  
STA 10+00.00  
N = 118068.9483  
E = 1517316.6970

END  
STA 23+16.29  
N = 118791.8290  
E = 1517717.3631

7  
8

**LEGEND**

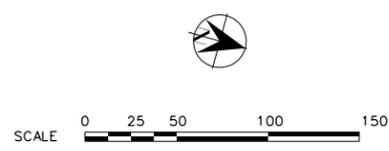
- TOP OF CUT
- - - TOE OF FILL
- 19+50 20+00  
ACCESS ROADS SURFACE & CENTER LINE STATION
- EXISTING RIGHT-OF-WAY
- - - PROPOSED RIGHT-OF-WAY
- - PROPOSED TOWER
- - EXISTING TOWER
- x --- FENCE
- 450 ft --- LIDAR SURFACE CONTOURS
- CULVERT
- FORD
- DRAIN DIP
- GATE
- CREEK
- EXIST. 1/1 - EXISTING TOWER NUMBER

ALTERNATE ACCESS ROAD  
TO TOWERS 9/1 - 9/2

**OFFICIAL USE ONLY**

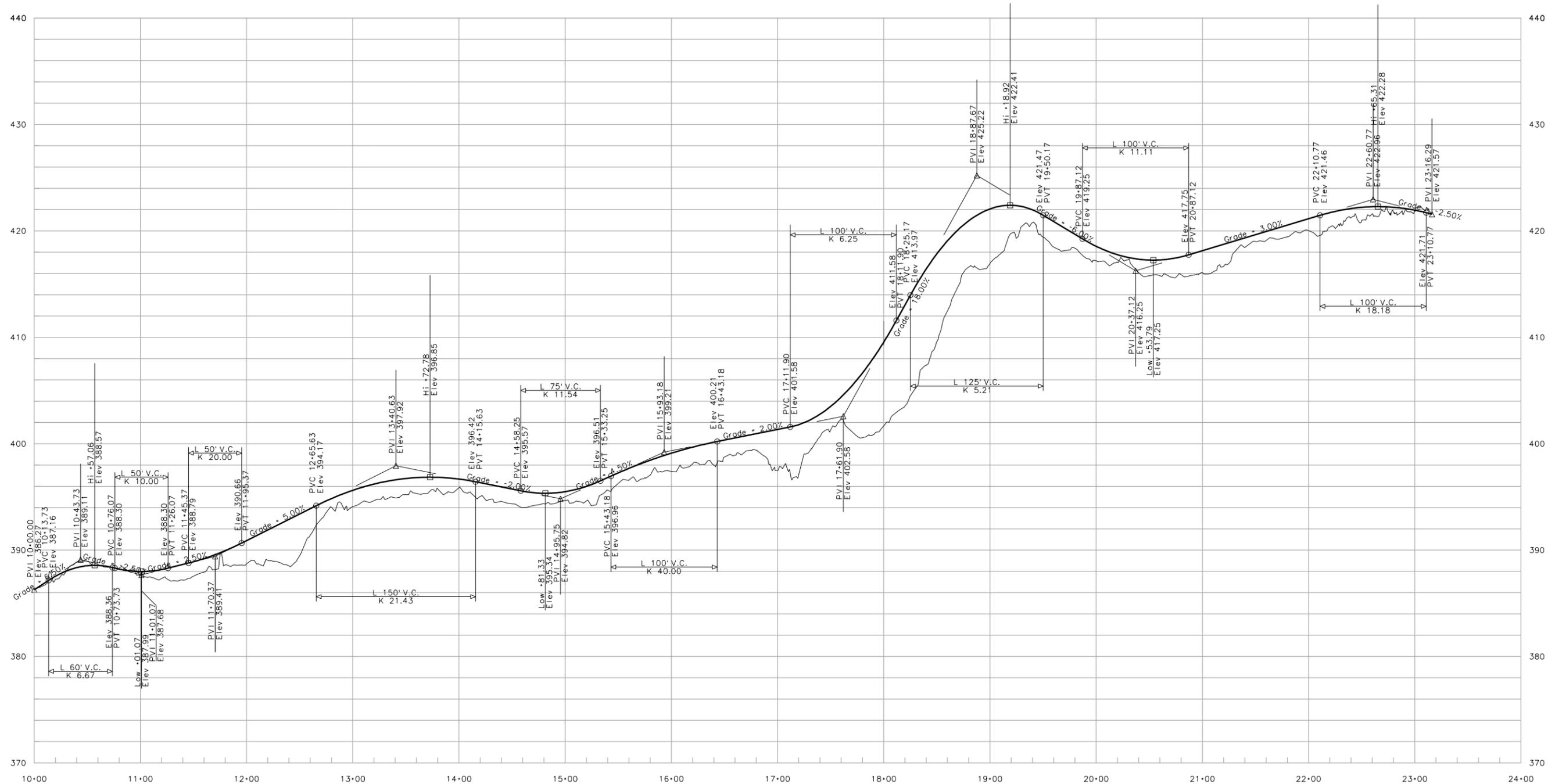
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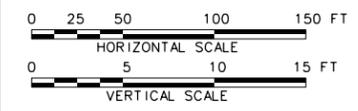


DRAWING NUMBER	SHEET	TITLE
		REFERENCE DRAWINGS

NO.	C	W.D.	00232575	COMPUTER REVISION ONLY	BY	DATE	APPROVED
Design HDR/BAH Drawn HDR/BAH Chkd HDR/DEC Sub Rec Appr Date NOVEMBER 2012							
UNITED STATES DEPARTMENT OF ENERGY <b>BONNEVILLE POWER ADMINISTRATION</b> HEADQUARTERS, PORTLAND, OREGON							
<b>BIG EDDY-KNIGHT NO.1</b> <b>500kv TRANSMISSION LINE</b> <b>PROJECT</b> <b>ACCESS ROAD GRADING PLAN</b>							
SERIAL	SOURCE	SIZE	SHEET	REVISION			
		A	1	0			

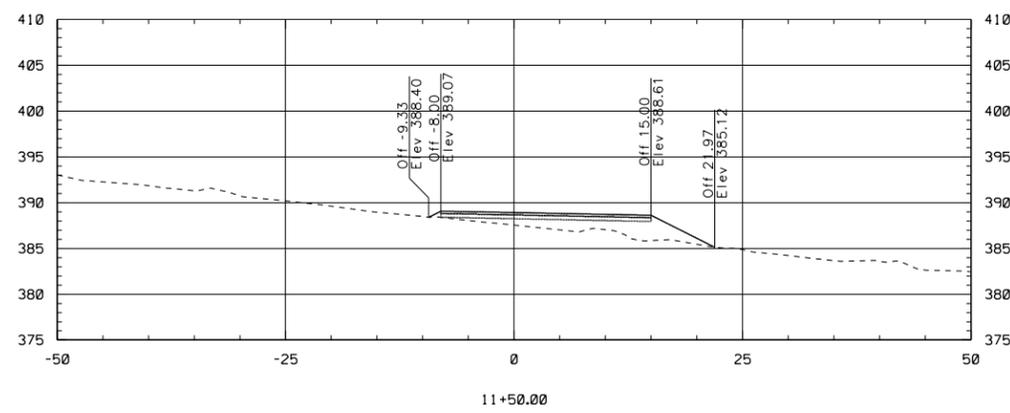
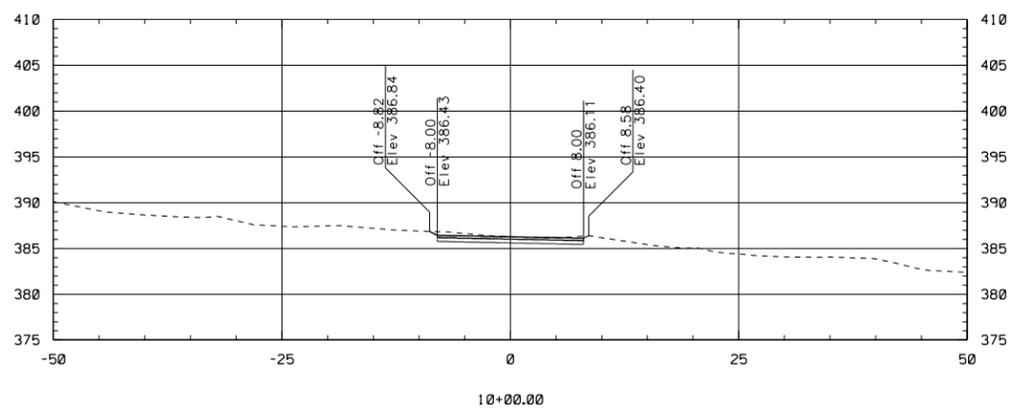
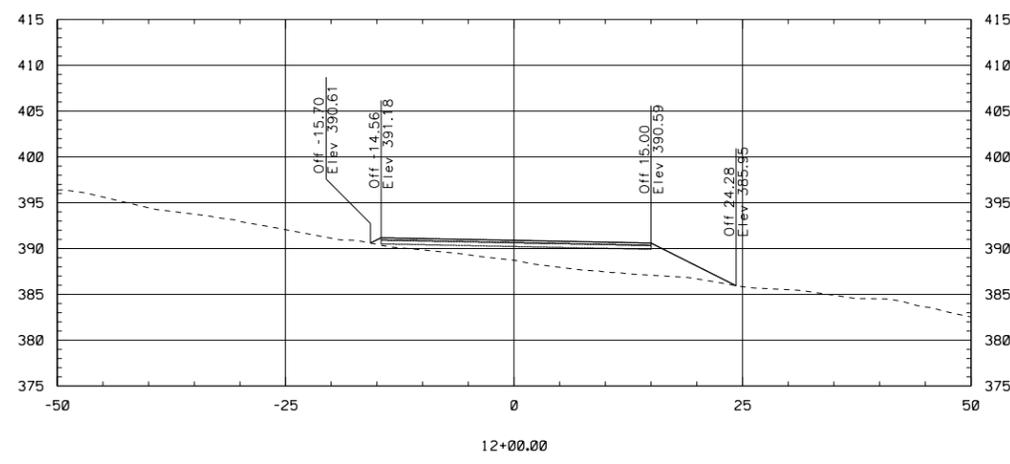
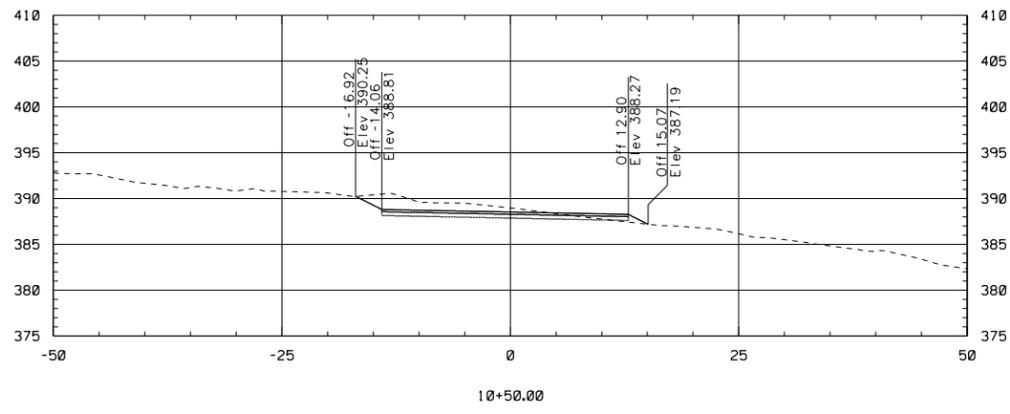
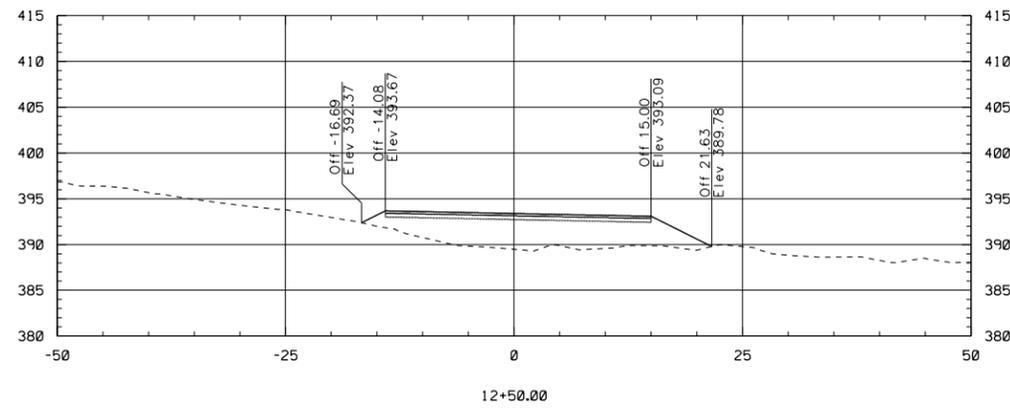
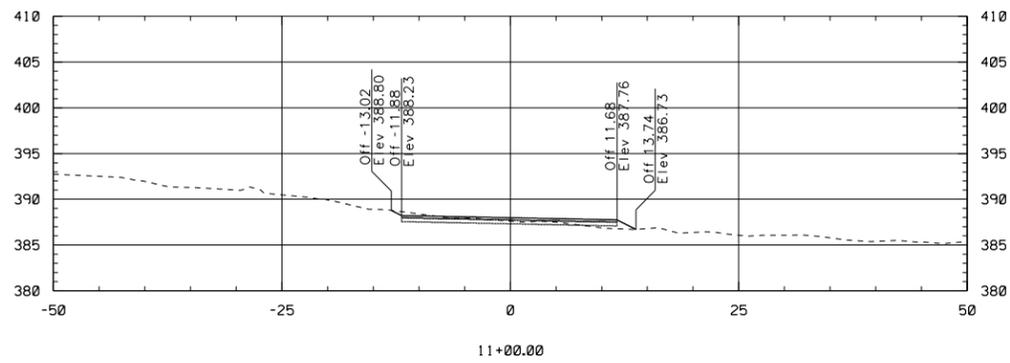


ACCESS ROAD PROFILE  
(SEE SHEET 1 FOR ACCESS ROAD PLAN)



DRAWING NUMBER	SHEET	TITLE
		REFERENCE DRAWINGS

NO.	C	W.D.	00232575	COMPUTER REVISION ONLY	BY	DATE	APPROVED
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Design	HDR/BAH						
Drawn	HDR/BAH						
Chkd	HDR/DEC						
Sub							
Rec							
Appr							
Date	NOVEMBER 2012						
UNITED STATES DEPARTMENT OF ENERGY <b>BONNEVILLE POWER ADMINISTRATION</b> HEADQUARTERS, PORTLAND, OREGON							
<b>BIG EDDY-KNIGHT NO.1          500kv TRANSMISSION LINE          PROJECT</b>							
<b>ACCESS ROAD PROFILE</b>							
SERIAL	SOURCE	SIZE	SHEET	REVISION			
		A1	2	0			

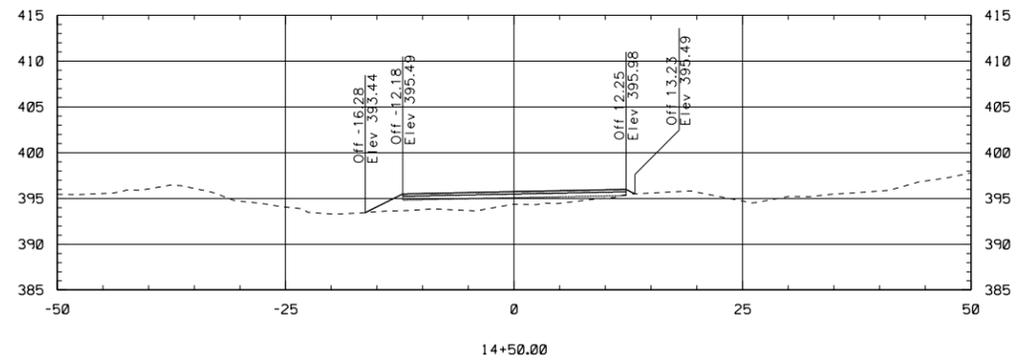
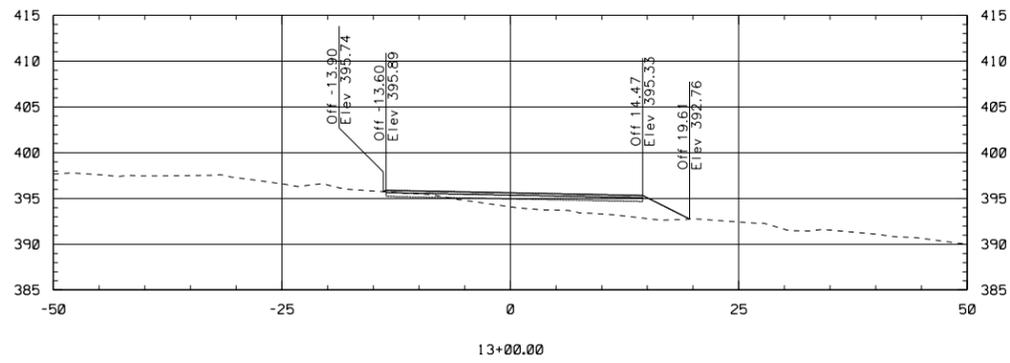
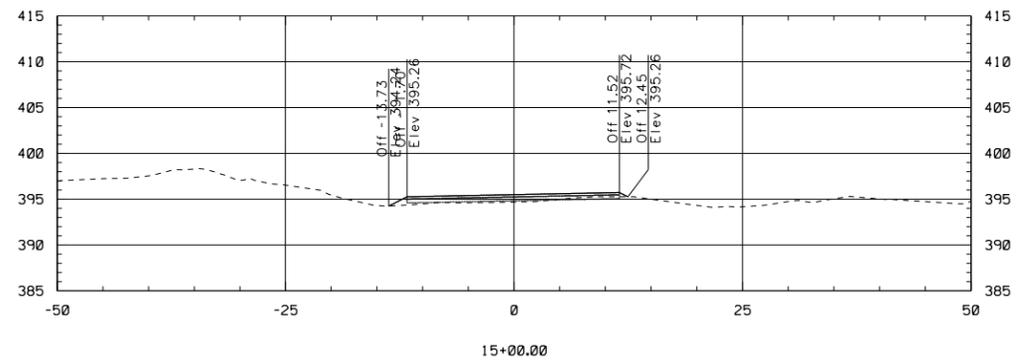
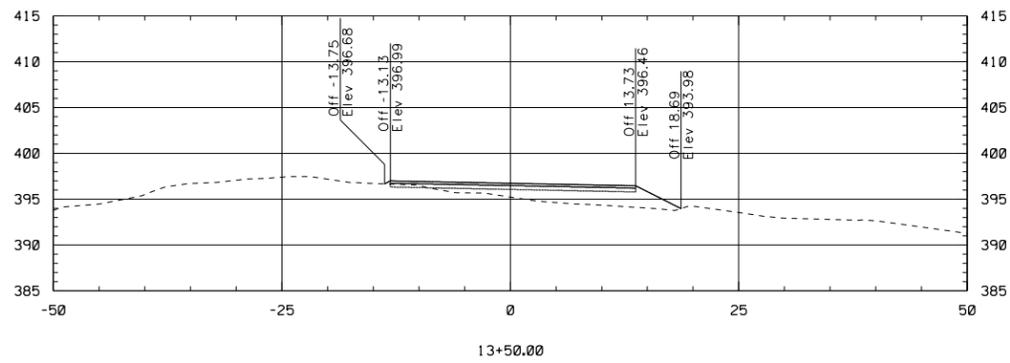
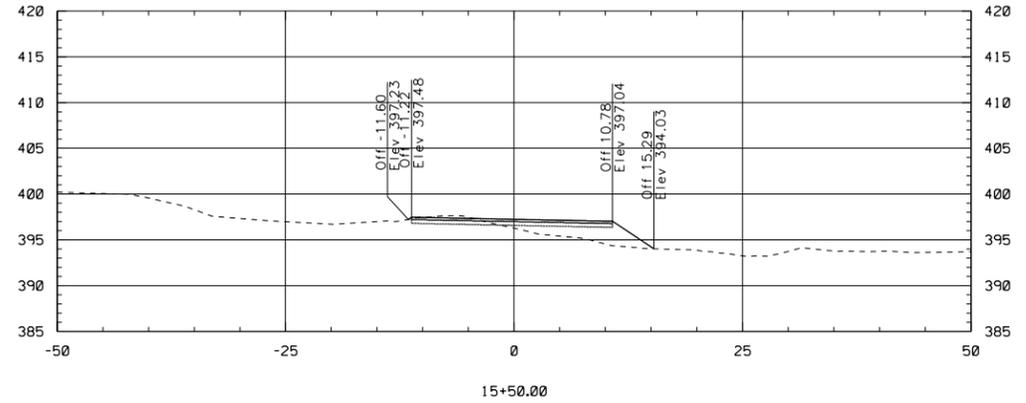
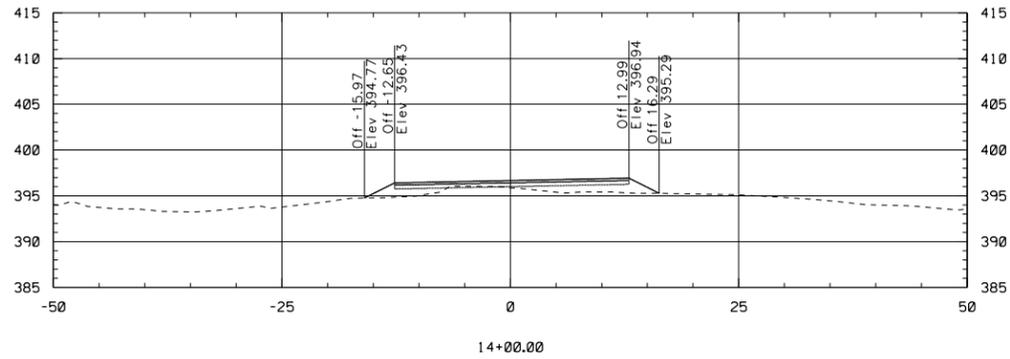


CROSS SECTIONS (1 OF 5)  
(SEE SHEET 1 FOR ACCESS ROAD PLAN)



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		REFERENCE DRAWINGS

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Design	HDR/BAH						
Drawn	HDR/BAH						
Chkd	HDR/DEC						
Sub							
Rec							
Appr							
Date	NOVEMBER 2012						
UNITED STATES DEPARTMENT OF ENERGY BONNEVILLE POWER ADMINISTRATION HEADQUARTERS, PORTLAND, OREGON							
BIG EDDY-KNIGHT NO.1 500kv TRANSMISSION LINE PROJECT							
STA 10+00 TO 12+50 SECTIONS							
SERIAL	SOURCE	SIZE	A1	SHEET	3	REVISION	0

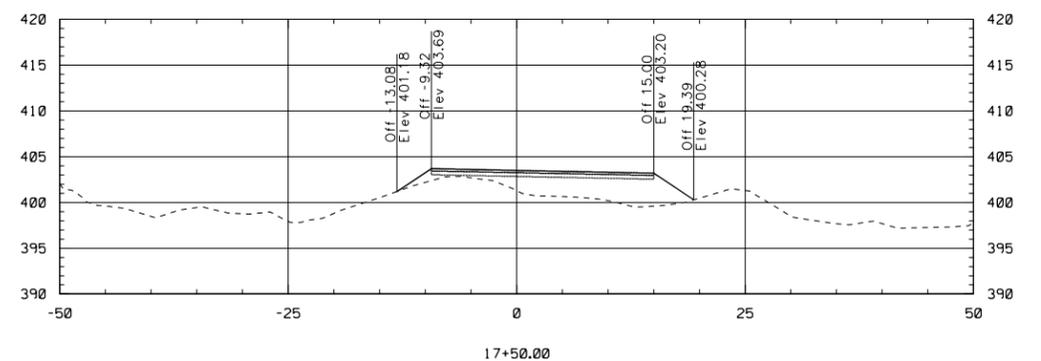
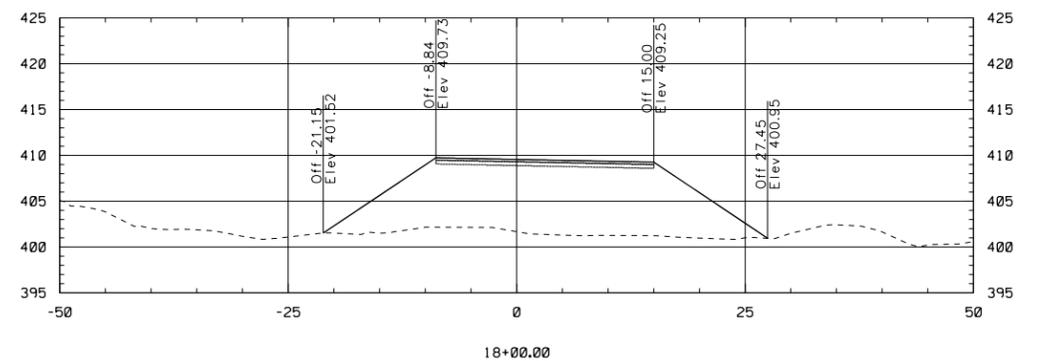
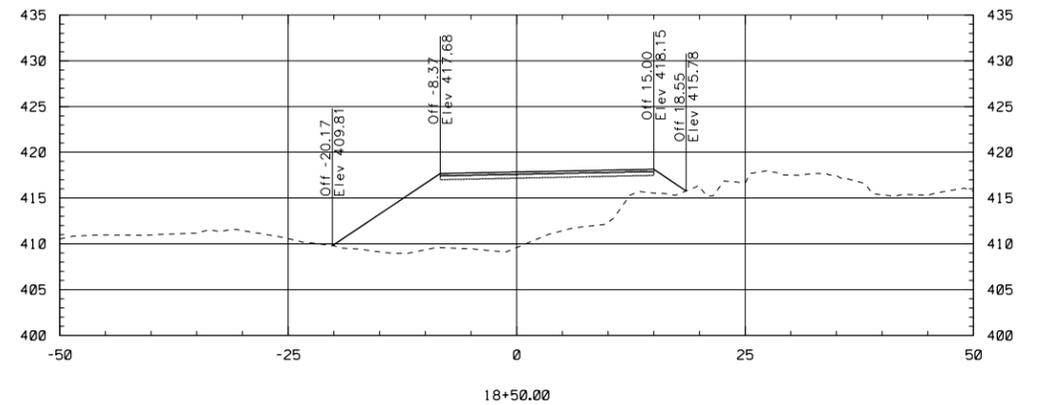
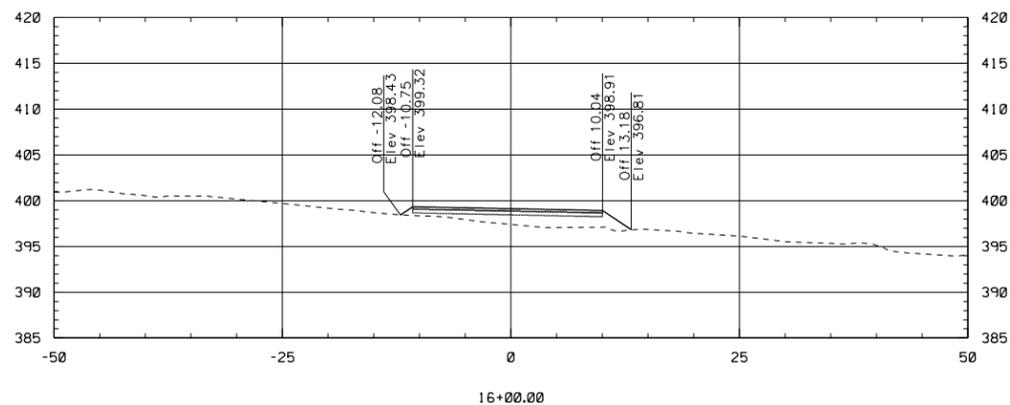
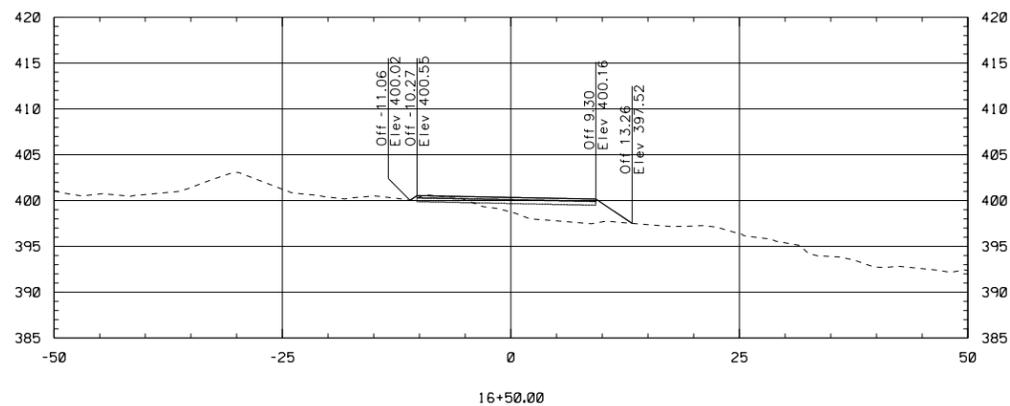
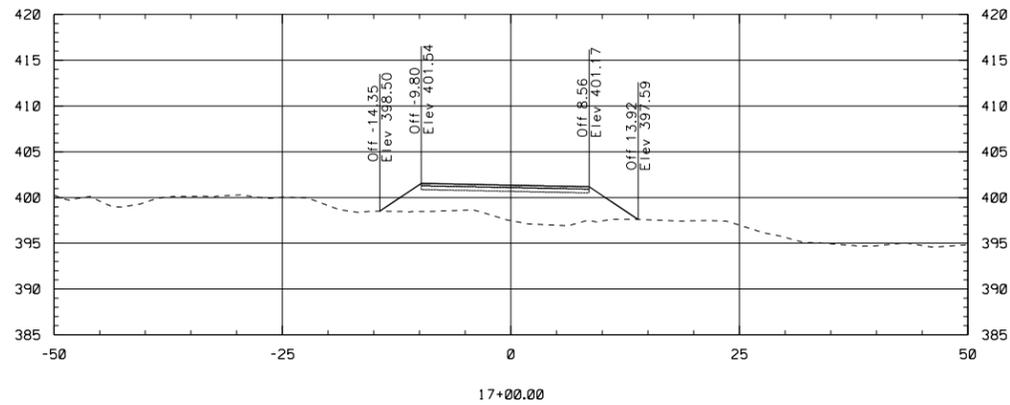


CROSS SECTIONS (2 OF 5)  
(SEE SHEET 1 FOR ACCESS ROAD PLAN)



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Design	HDR/BAH						
Drawn	HDR/BAH						
Chkd	HDR/DEC						
Sub							
Rec							
Appr							
Date	NOVEMBER 2012						
UNITED STATES DEPARTMENT OF ENERGY <b>BONNEVILLE POWER ADMINISTRATION</b> HEADQUARTERS, PORTLAND, OREGON							
<b>BIG EDDY-KNIGHT NO.1          500kv TRANSMISSION LINE          PROJECT</b>							
<b>STA 13+00 TO 15+50 SECTIONS</b>							
SERIAL	SOURCE	SIZE	SHEET	REVISION			
		A1	4	0			

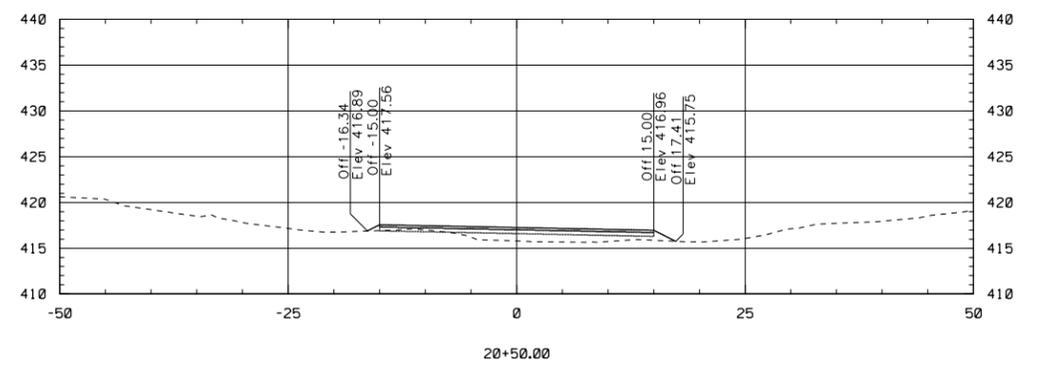
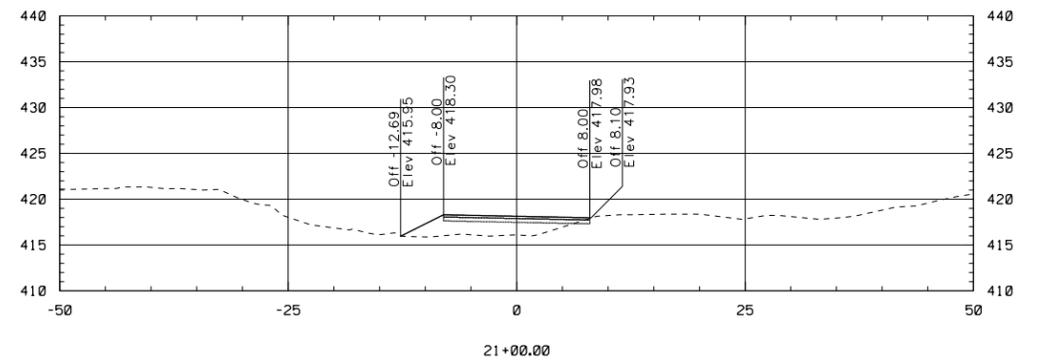
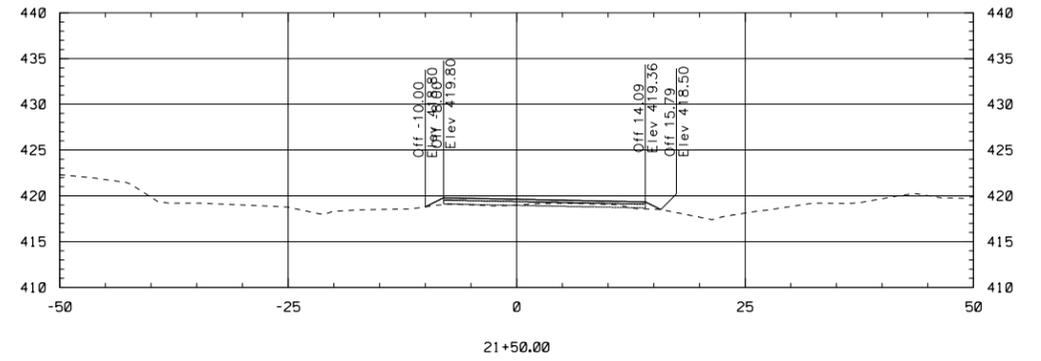
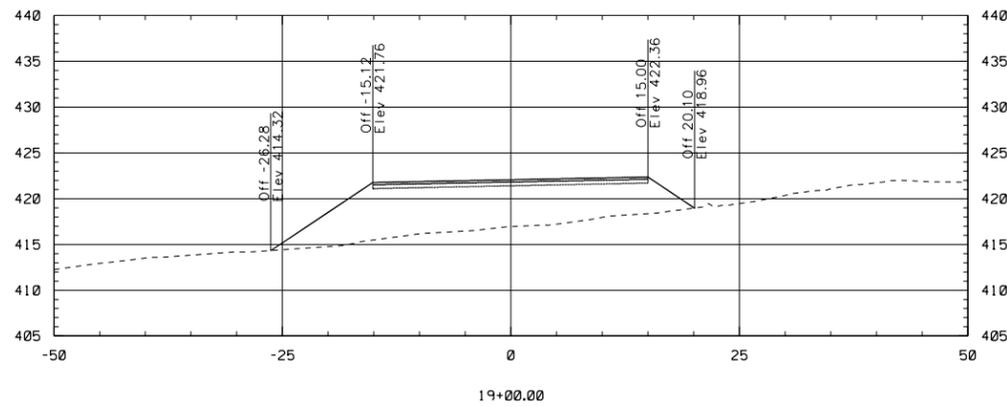
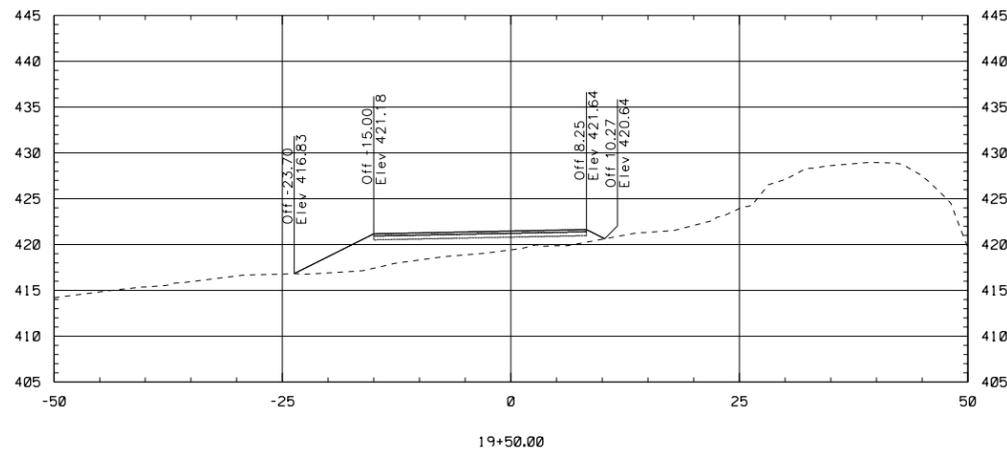
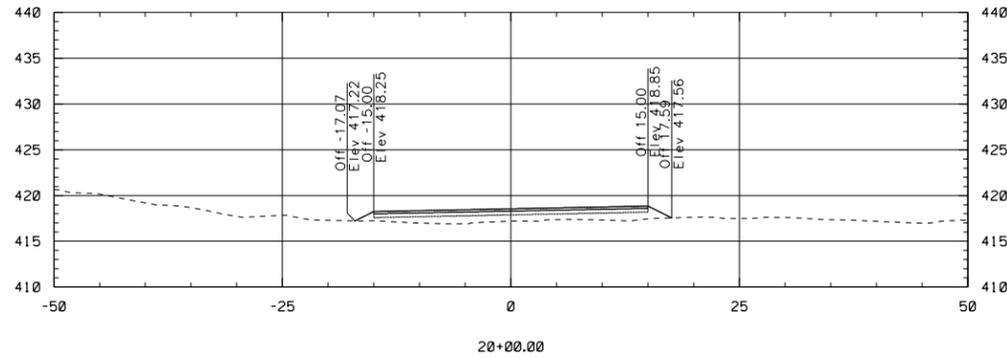


CROSS SECTIONS (3 OF 5)  
(SEE SHEET 1 FOR ACCESS ROAD PLAN)



DRAWING NUMBER	SHEET	TITLE
		REFERENCE DRAWINGS

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Drawn	HDR/BAH						
Chkd	HDR/DEC						
Sub							
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Date	NOVEMBER 2012						
UNITED STATES DEPARTMENT OF ENERGY <b>BONNEVILLE POWER ADMINISTRATION</b> HEADQUARTERS, PORTLAND, OREGON							
<b>BIG EDDY-KNIGHT NO.1          500kv TRANSMISSION LINE          PROJECT</b>							
<b>STA 16+00 TO 18+50 SECTIONS</b>							
SERIAL	SOURCE	SIZE	SHEET	REVISION			
		A1	5	0			

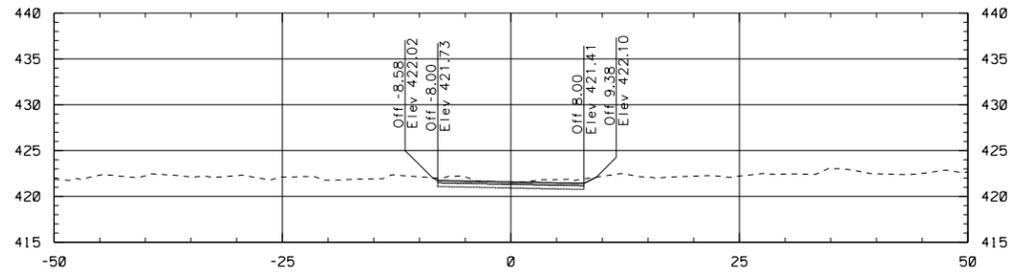


CROSS SECTIONS (4 OF 5)  
(SEE SHEET 1 FOR ACCESS ROAD PLAN)

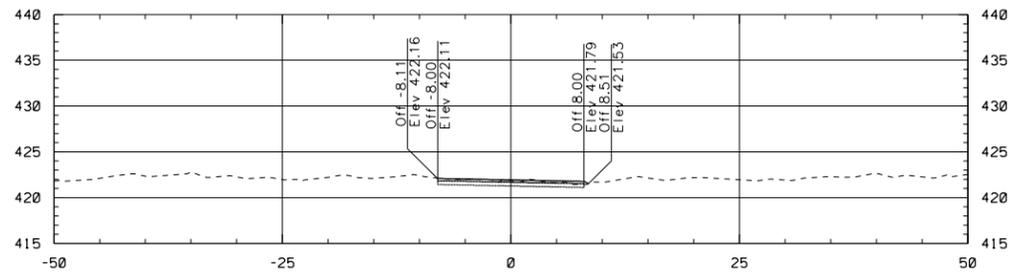


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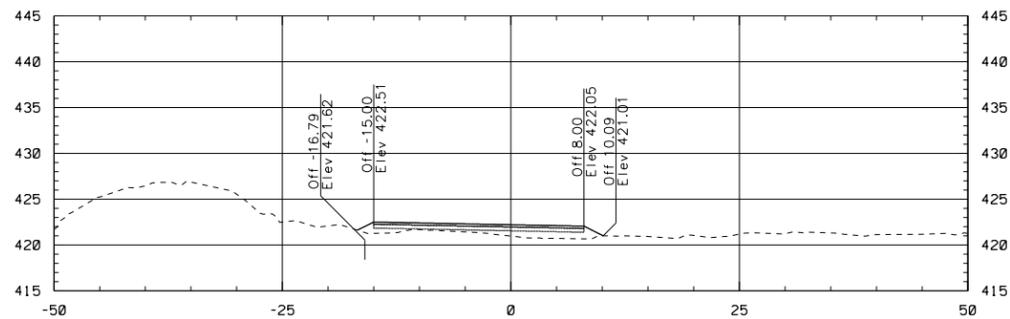
NO.	C	W.D.	00232575	COMPUTER REVISION ONLY	BY	DATE	APPROVED
• C=CONTRACT CONSTRUCTION ,FA=FORCE ACCOUNT CONSTRUCTION ,R=RECORD UNITED STATES DEPARTMENT OF ENERGY <b>BONNEVILLE POWER ADMINISTRATION</b> HEADQUARTERS, PORTLAND, OREGON <b>BIG EDDY-KNIGHT NO.1</b> <b>500kv TRANSMISSION LINE</b> <b>PROJECT</b> <b>STA 19+00 TO 21+50 SECTIONS</b>							
Design	HDR/BAH						
Drawn	HDR/BAH						
Chkd	HDR/DEC						
Sub							
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Date	NOVEMBER 2012						
SERIAL	SOURCE	SIZE	SHEET	REVISION			
		A1	6	0			



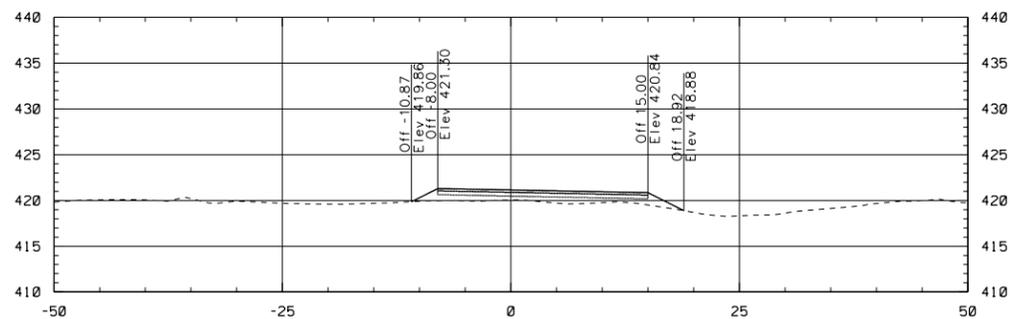
23+16.29



23+00.00



22+50.00



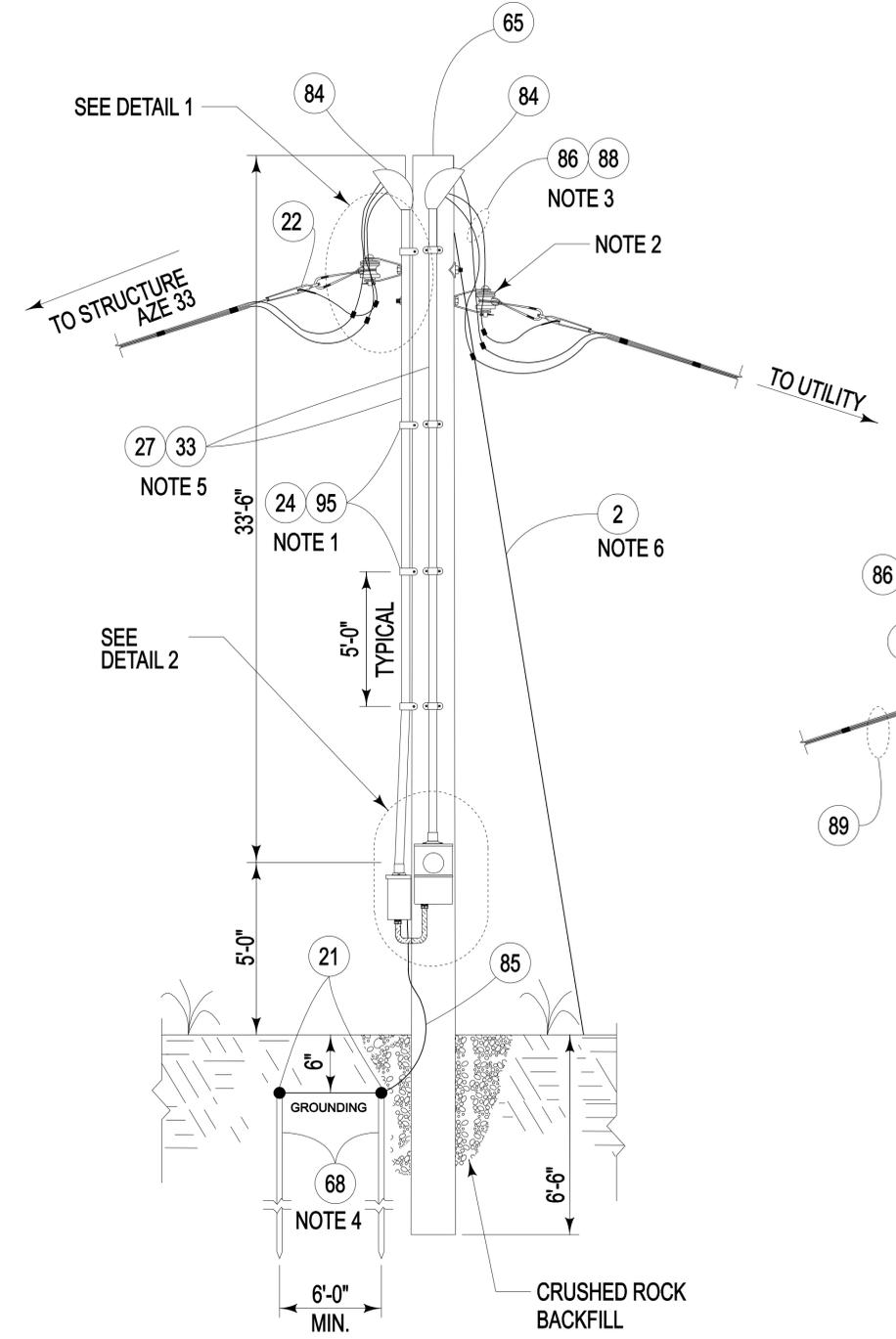
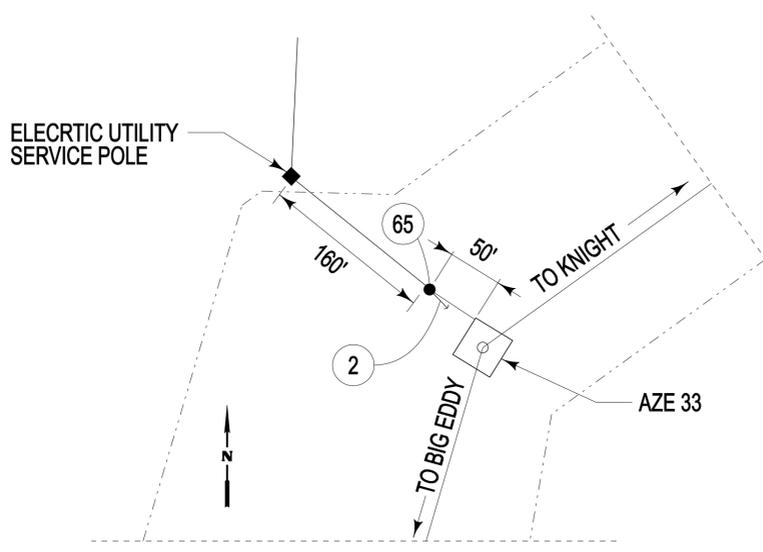
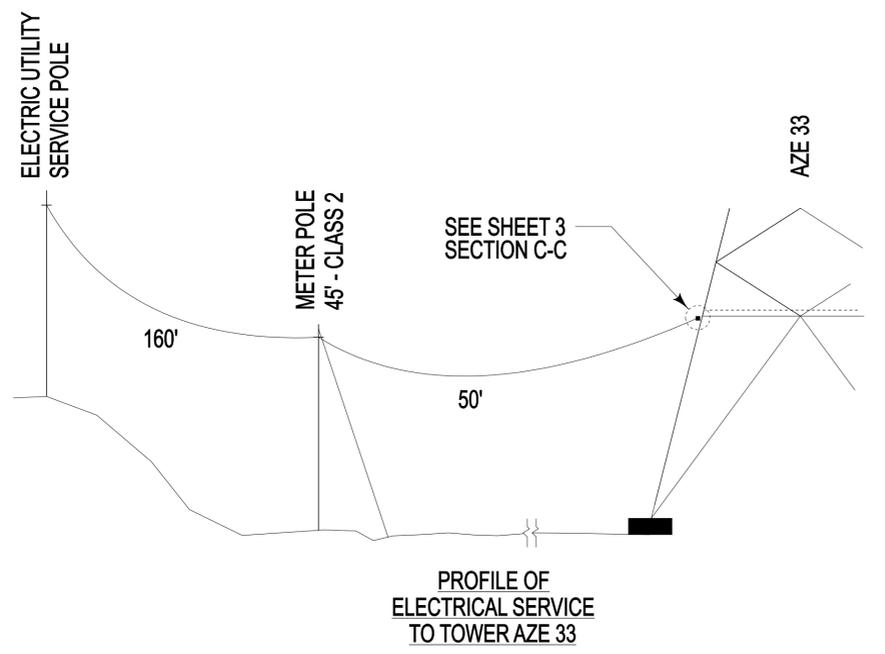
22+00.00

**CROSS SECTIONS (5 OF 5)**  
(SEE SHEET 1 FOR ACCESS ROAD PLAN)

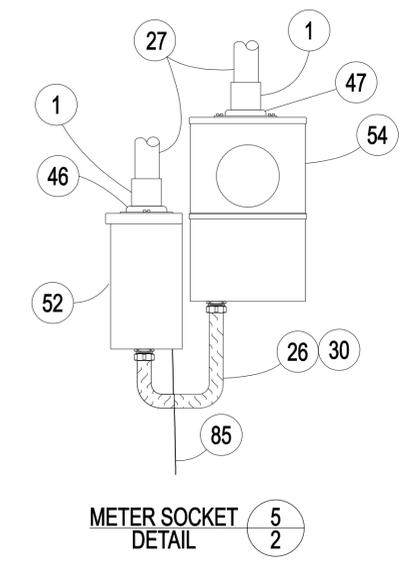
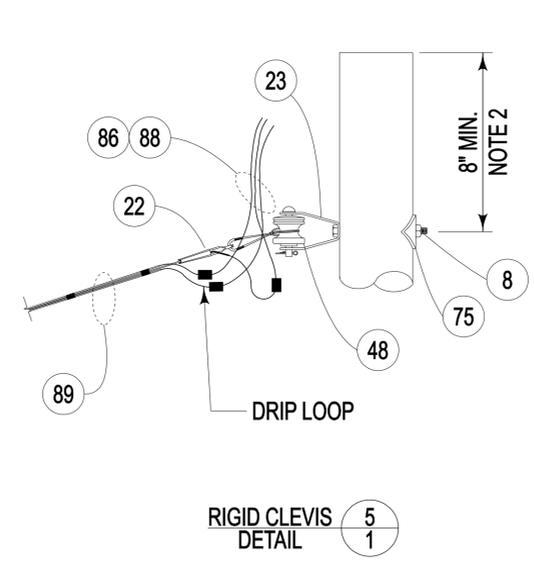


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Chkd	HDR/DEC						
Sub							
Rec							
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Date	NOVEMBER 2012						
UNITED STATES DEPARTMENT OF ENERGY <b>BONNEVILLE POWER ADMINISTRATION</b> HEADQUARTERS, PORTLAND, OREGON							
<b>BIG EDDY-KNIGHT NO.1</b> <b>500kv TRANSMISSION LINE</b> <b>PROJECT</b>							
<b>STA 22+00 TO 23+16 SECTIONS</b>							
SERIAL	SOURCE	SIZE	SHEET	REVISION			
		A1	7	0			



- NOTES:
1. SUPPORT CONDUIT EVERY FIVE FEET.
  2. RIGID CLEVIS SHOULD BE MOUNTED A MINIMUM OF 8 INCHES FROM THE TOP OF THE WOOD POLE. ELECTRIC UTILITY WILL INSTALL THEIR OWN RIGID CLEVIS.
  3. EXTEND CONDUCTORS (ITEMS #85 & #87) 24" FROM THE SERVICE ENTRANCE HEAD. THESE 24" TAILS WILL BE USED BY THE ELECTRIC UTILITY TO CONNECT OVERHEAD TRIPLEX FROM THE SERVICE TRANSFORMER POLE.
  4. REFERENCE DRAWING #301223 AND USE ITEM #41 TO PROPERLY GROUND SYSTEM IN ROCK/POOR SOIL CONDITIONS.
  5. ALL PVC CONDUIT TO BE PREPARED AND SEALED WITH PVC PRIMER AND THEN GLUED TOGETHER.
  6. SEE DRAWING #271063 FOR PA GUY ASSEMBLY AND INSTALLATION.



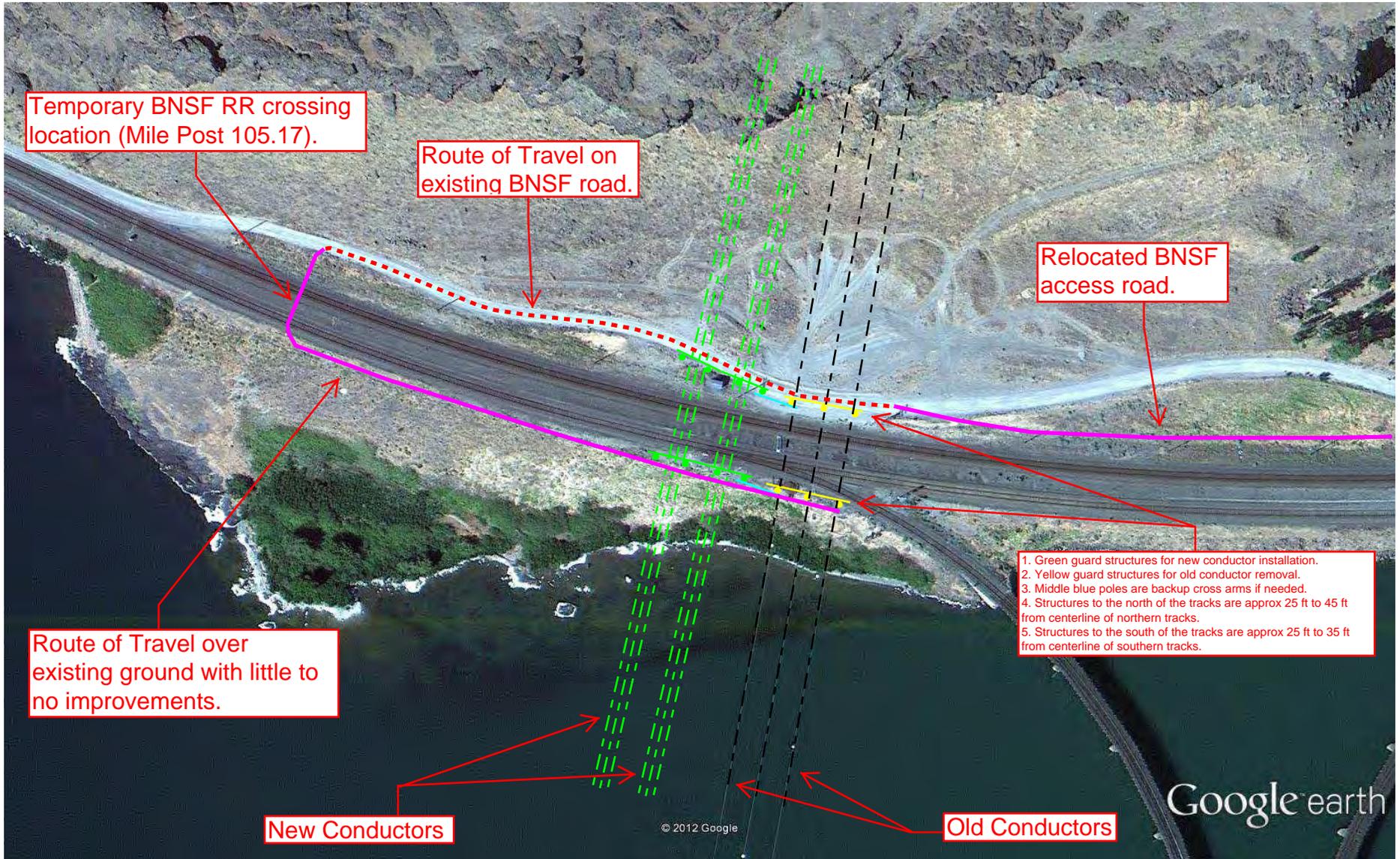
METER POLE

DRAWING NO.	SHT.	TITLE
271063	1	PA GUY INSTALLATION
301223	1	GROUND ROD BACKFILL FOR POOR SOIL

REFERENCE DRAWINGS

NO.	W.O.	COMPUTER REVISION ONLY	BY	DATE	APPROVED
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C=CONTRACT CONSTR., FA=FORCE ACCOUNT CONSTR., R=RECORD FILE NAME: 297947-6-LDCN					
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DRAWN RAD			BIG EDDY-KNIGHT NO 1 OBSTRUCTION LIGHTING INSTALLATION DETAILS STRUCTURE AZE 33		
CHKD EMJ					
SUB					
REC					
APPR VINCE IERULLI			SERIAL		
DATE 3/29/2012			297947		
			SOURCE LBL		SIZE A3
			SHEET 6 OF 9		REVISION 1

# Big Eddy - Knight 500-kV Transmission Line Project BNSF Railroad Access and Guard Structures



Google earth



WOOD POLE GUARD STRUCTURES

