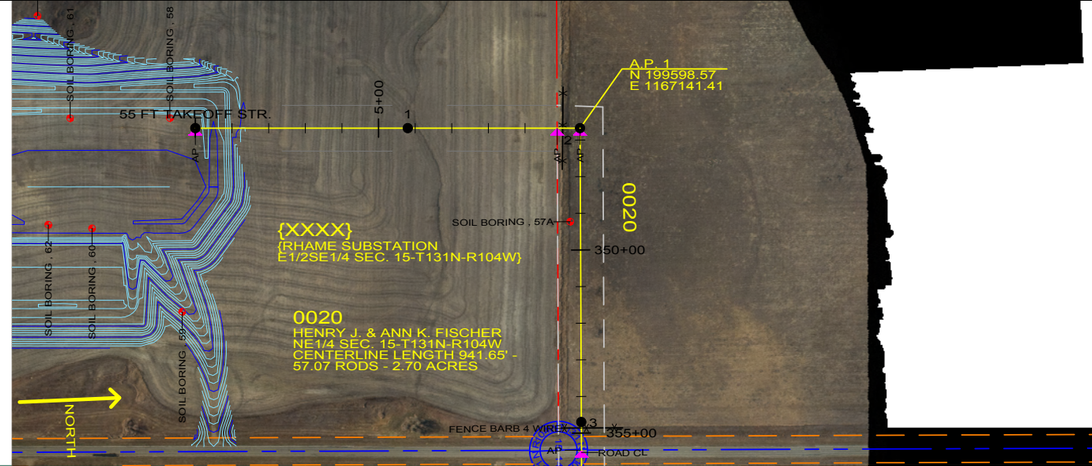
Appendix D
(NDCRS Site and Isolated Find Forms)
AGENCY COPIES ONLY



DATE OF AERIAL PHOTOGRAPHY
NOVEMBER 08, 2007
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STEEL DE A-FRAME
STA=0+00.00
HT ADJUST=54.50
55 FT TAKEOFF STR.

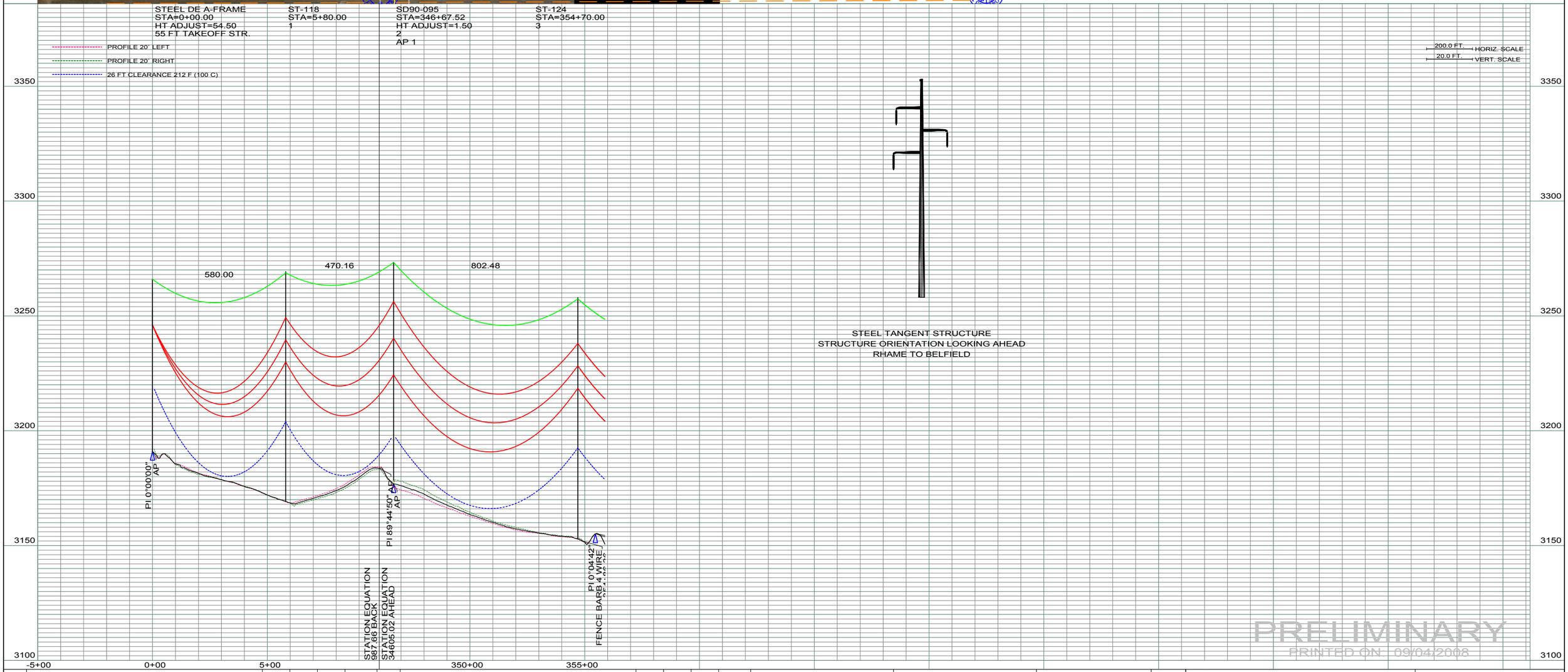
ST-118
STA=5+80.00
1

SD90-095
STA=346+67.52
HT ADJUST=1.50
2
AP 1

ST-124
STA=354+70.00
3

PROFILE 20' LEFT
PROFILE 20' RIGHT
26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE



STEEL TANGENT STRUCTURE
STRUCTURE ORIENTATION LOOKING AHEAD
RHAME TO BELFIELD

PRELIMINARY
PRINTED ON: 09/04/2008

REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

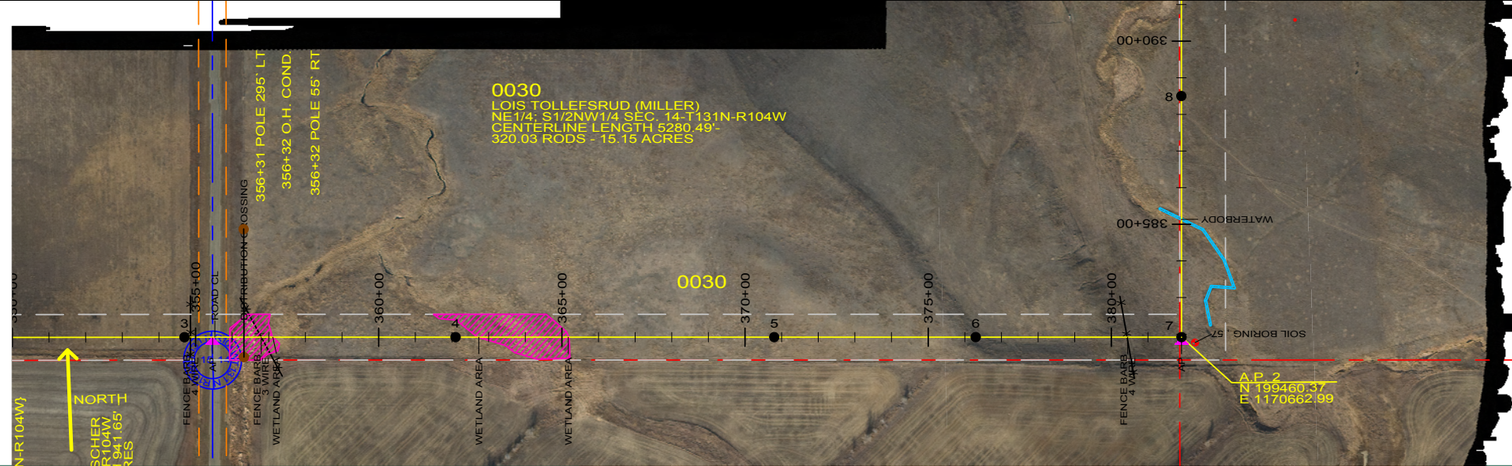
DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE
LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE
PLAN AND PROFILE
MILE 1 & FROM RHAME SUBSTATION

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN
COUNTY NAME: BOWMAN
BASIN DRAWING NO. 181-090-T3-001
REV. 1



DATE OF AERIAL PHOTOGRAPHY
NOVEMBER 08, 2007
GEODIGITAL INTERNATIONAL

ST-124
STA=354+70.00
3

ST-124
STA=362+10.00
4

ST-118
STA=370+80.00
5

ST-107
STA=376+30.00
6

SD90-100
STA=381+91.81
HT ADJUST=1.50
7
AP 2

ST-107
STA=388+50.00
8

PROFILE 20' LEFT

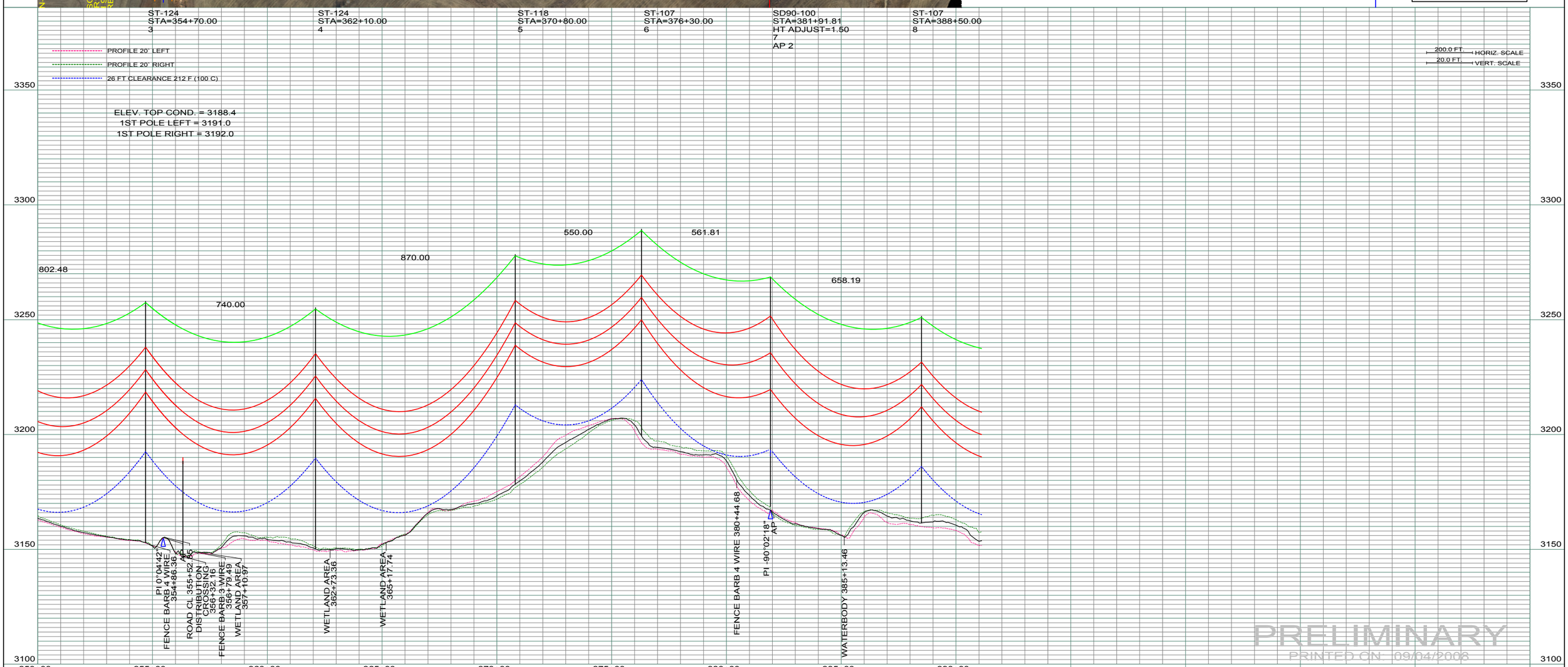
PROFILE 20' RIGHT

26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE

20.0 FT. VERT. SCALE

ELEV. TOP COND. = 3188.4
1ST POLE LEFT = 3191.0
1ST POLE RIGHT = 3192.0



PRELIMINARY
PRINTED ON: 09/04/2008

REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

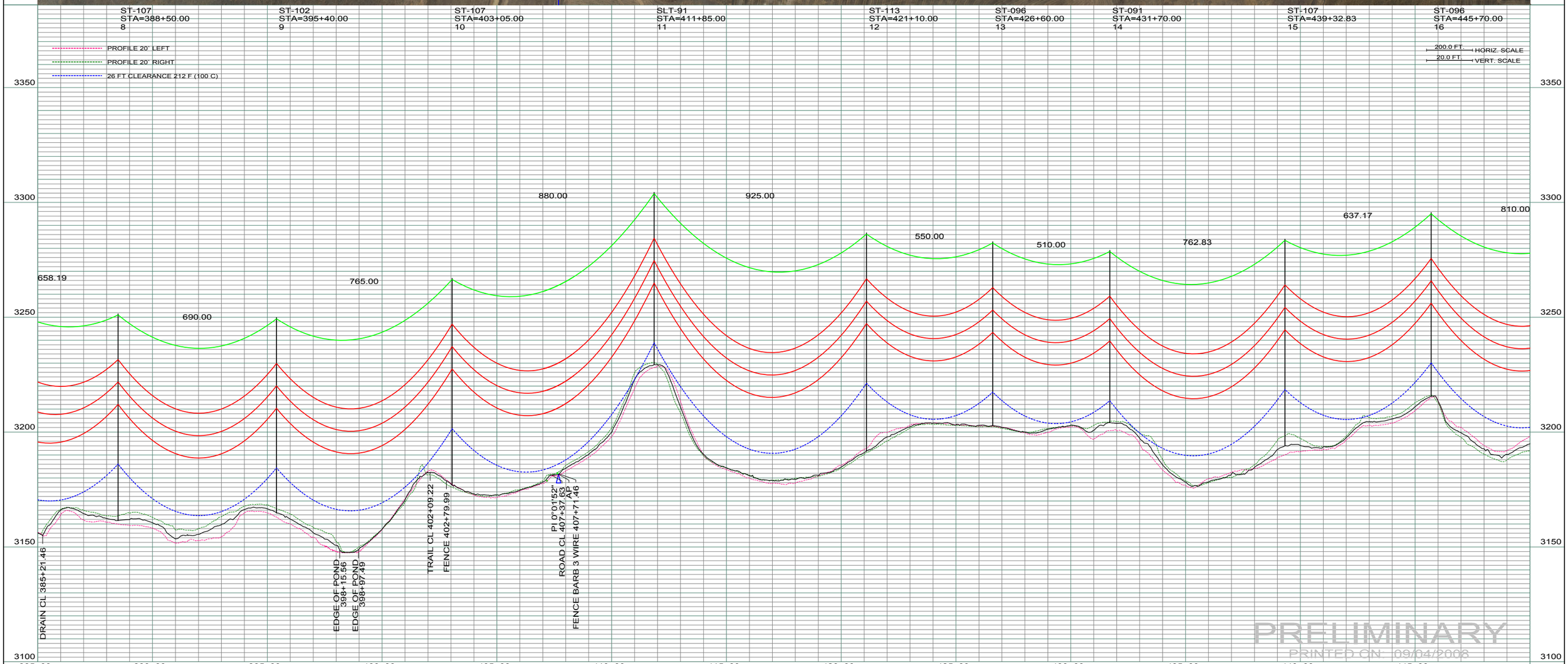
RHAME TO BELFIELD 230KV TRANSMISSION LINE

PLAN AND PROFILE

MILE 1

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE:	COUNTY NAME:
AS SHOWN	BOWMAN
BASIN DRAWING NO.	REV.
181-090-T3-002	1



REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE

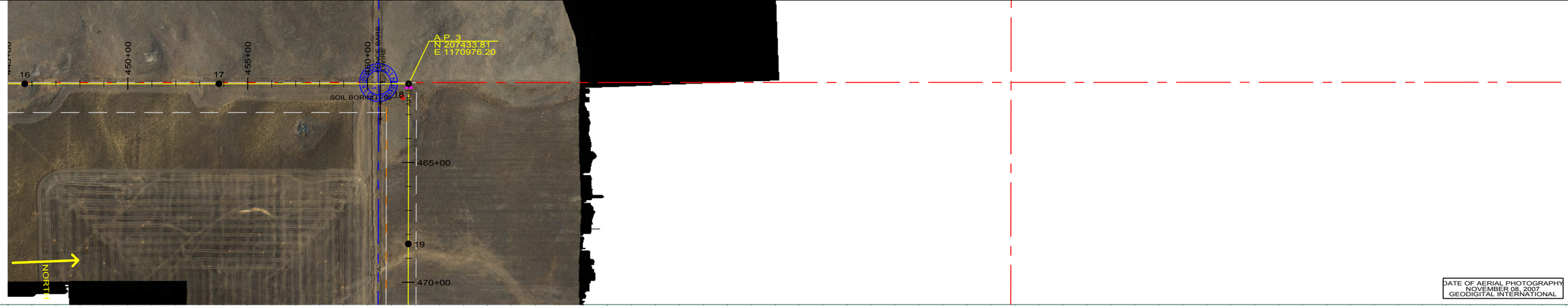
PLAN AND PROFILE

MILE 1 & 2

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN | COUNTY NAME: BOWMAN

BASIN DRAWING NO. 181-090-T3-003 | REV. 1



DATE OF AERIAL PHOTOGRAPHY
NOVEMBER 08, 2007
GEODIGITAL INTERNATIONAL

ST-096
STA=445+70.00
16

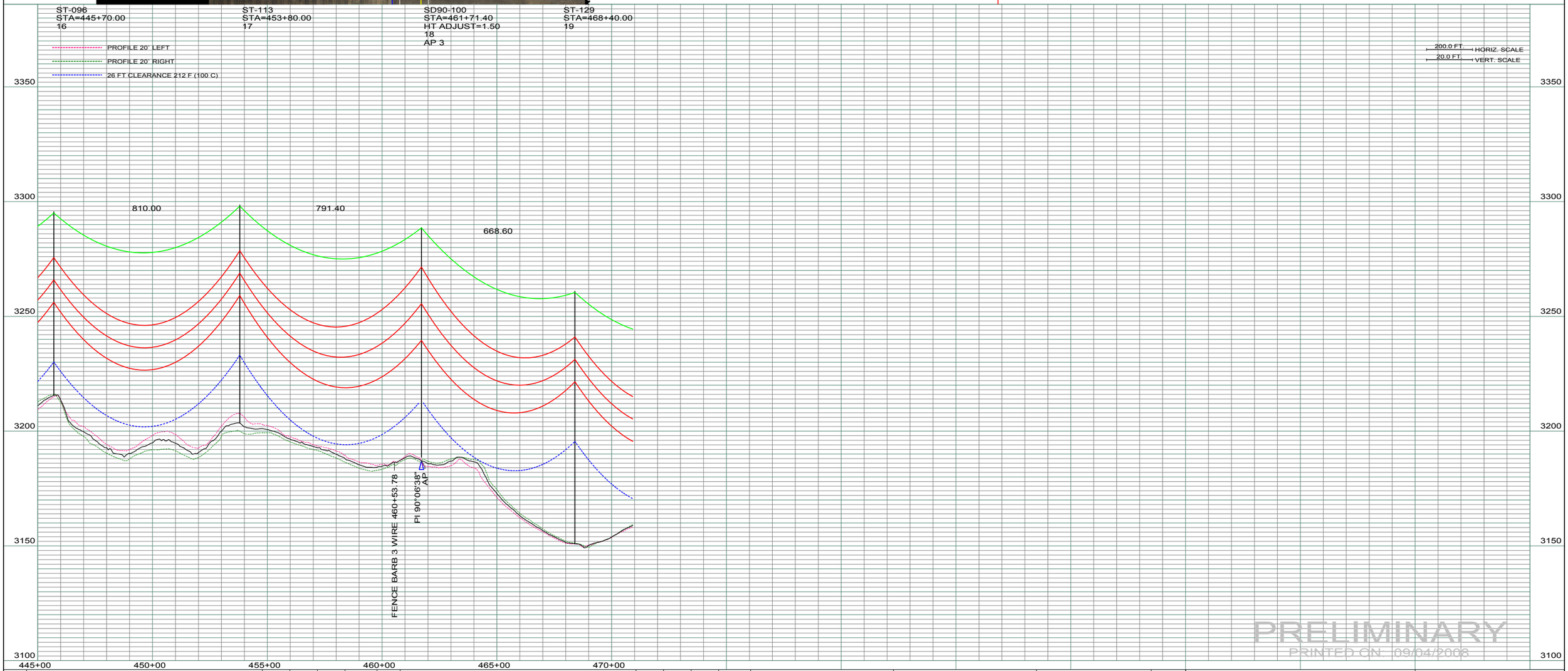
ST-113
STA=453+80.00
17

SD90-100
STA=461+71.40
HT ADJUST=1.50
18
AP 3

ST-129
STA=468+40.00
19

PROFILE 20' LEFT
PROFILE 20' RIGHT
26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE



PRELIMINARY
PRINTED ON: 09/04/2008

REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE
LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE
PLAN AND PROFILE
MILE 2

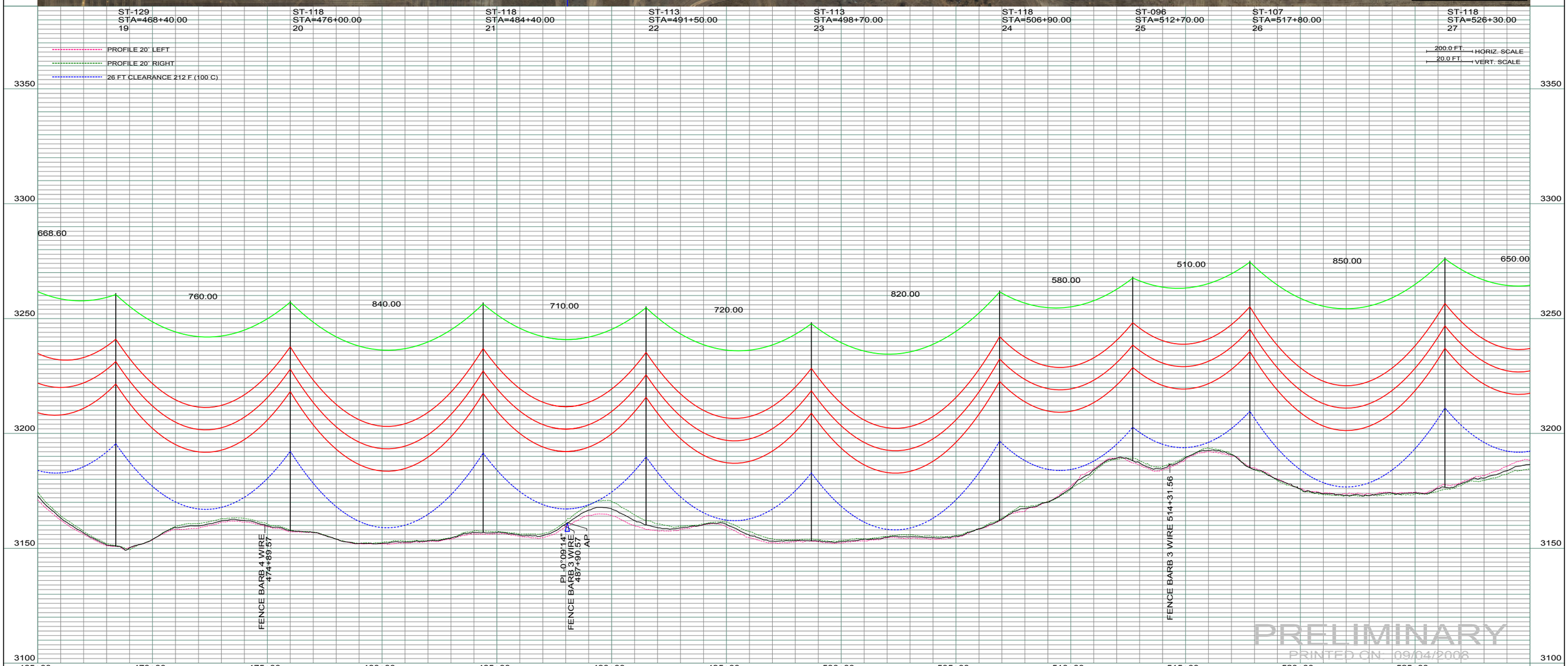
BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN
COUNTY NAME: BOWMAN
BASIN DRAWING NO. 181-090-T3-004
REV. 1

ST-129	ST-118	ST-118	ST-113	ST-113	ST-118	ST-096	ST-107	ST-118
STA=468+40.00	STA=476+00.00	STA=484+40.00	STA=491+50.00	STA=498+70.00	STA=506+90.00	STA=512+70.00	STA=517+80.00	STA=526+30.00
19	20	21	22	23	24	25	26	27

PROFILE 20' LEFT
PROFILE 20' RIGHT
26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE



REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE

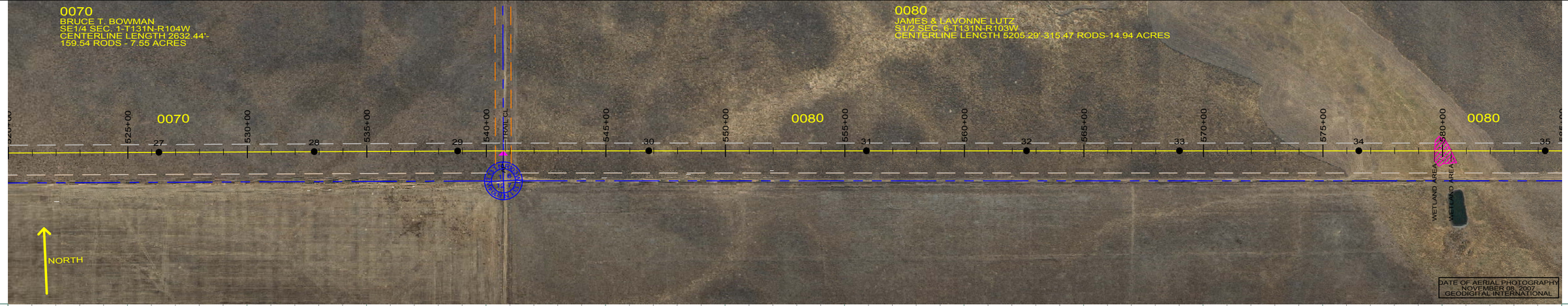
PLAN AND PROFILE

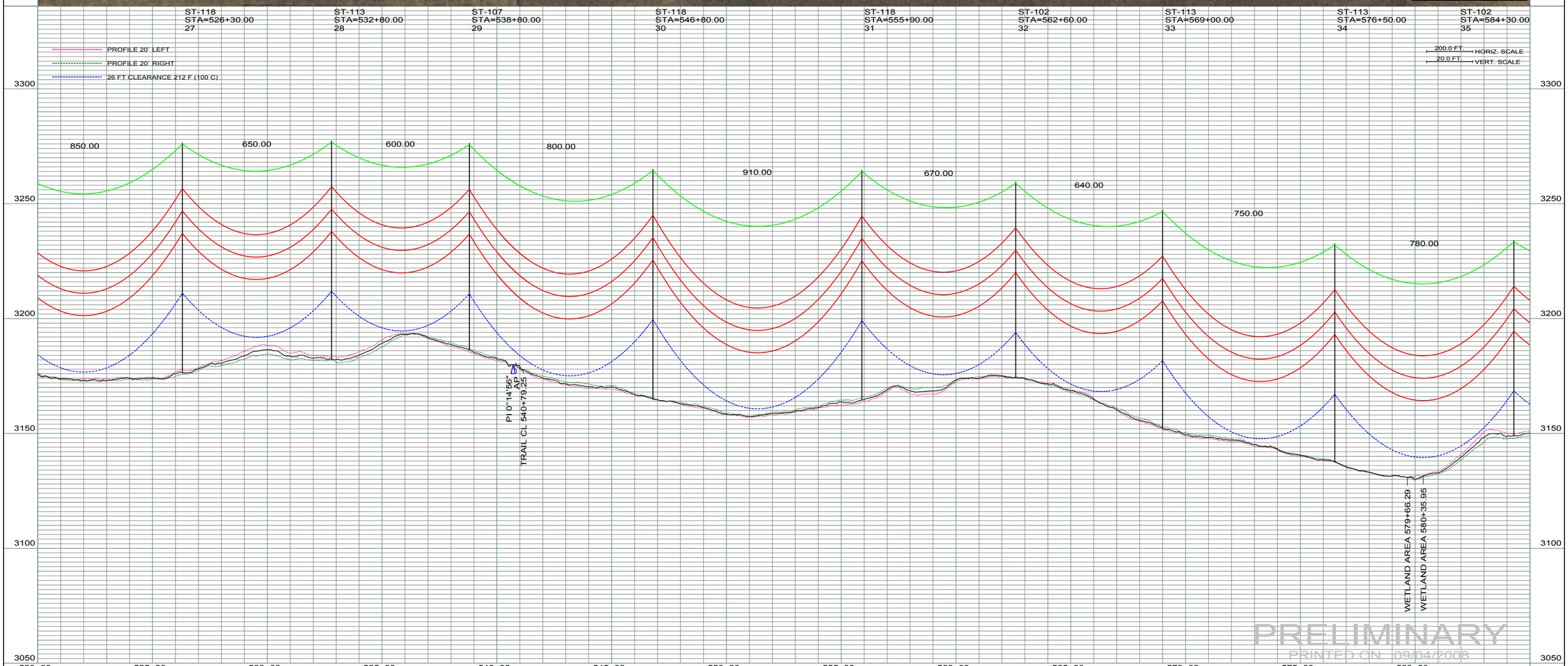
MILE 2 & 3

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN | COUNTY NAME: BOWMAN

BASIN DRAWING NO. 181-090-T3-005 | REV. 1





REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE

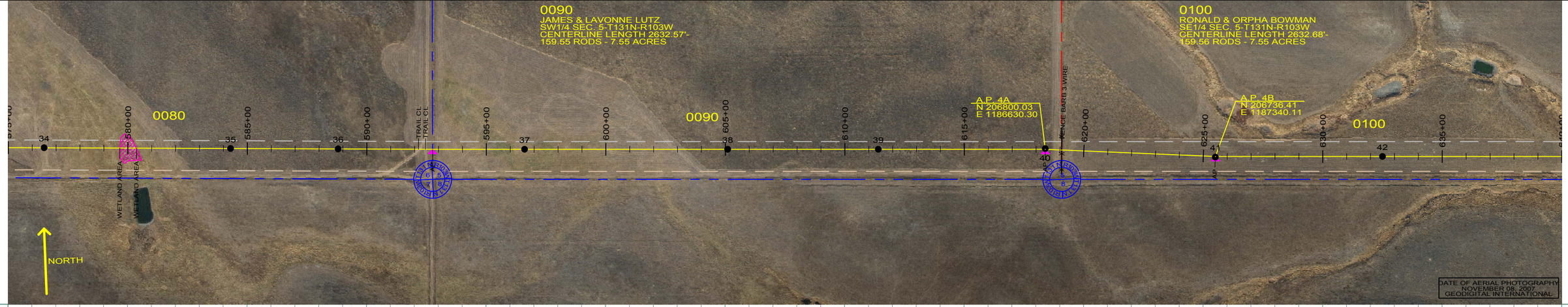
PLAN AND PROFILE

MILE 3 & 4

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN | COUNTY NAME: BOWMAN

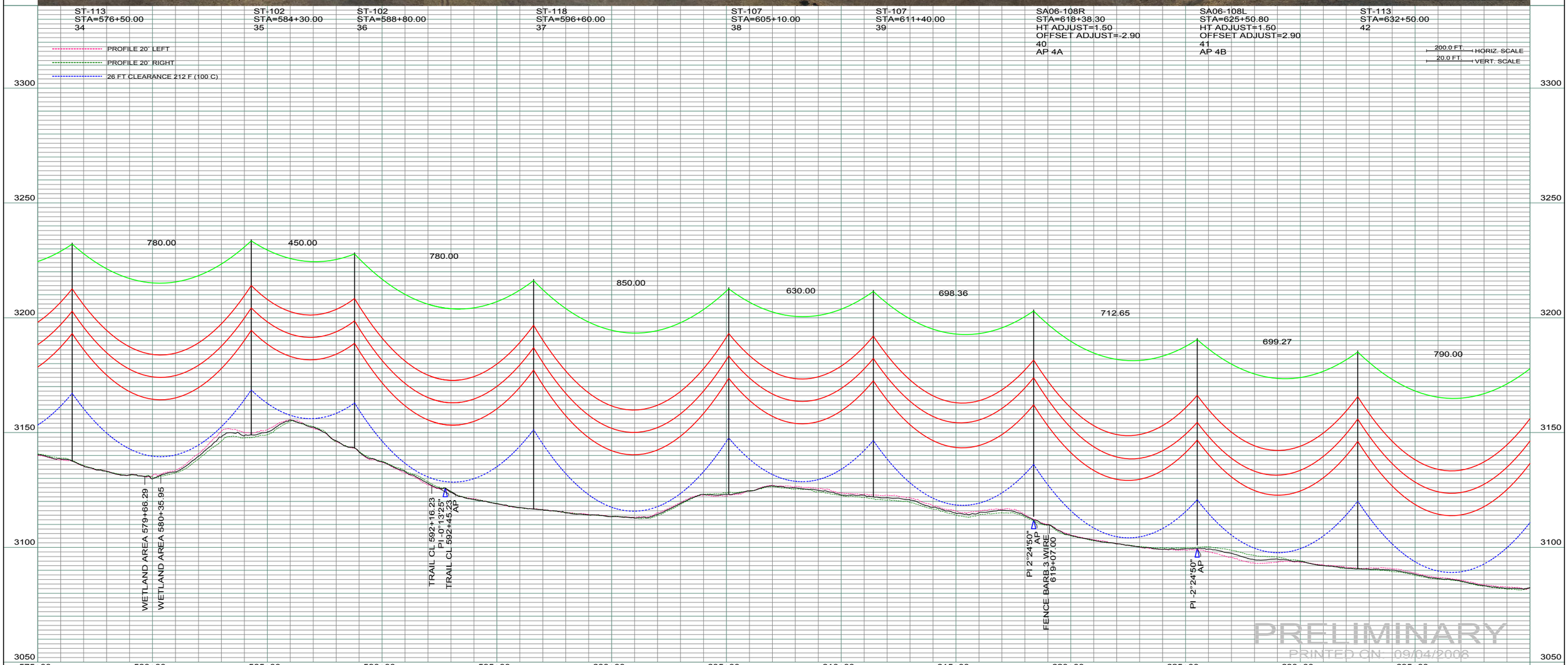
BASIN DRAWING NO. 181-090-T3-006 | REV. 1



ST-113	ST-102	ST-102	ST-118	ST-107	ST-107	SA06-108R	SA06-108L	ST-113
STA=576+50.00	STA=584+30.00	STA=588+80.00	STA=596+60.00	STA=605+10.00	STA=611+40.00	STA=618+38.30	STA=625+50.80	STA=632+50.00
34	35	36	37	38	39	HT ADJUST=1.50	HT ADJUST=1.50	42
						OFFSET ADJUST=-2.90	OFFSET ADJUST=2.90	
						40	41	
						AP 4A	AP 4B	

PROFILE 20' LEFT
PROFILE 20' RIGHT
26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE



REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE

PLAN AND PROFILE

MILE 4 & 5

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

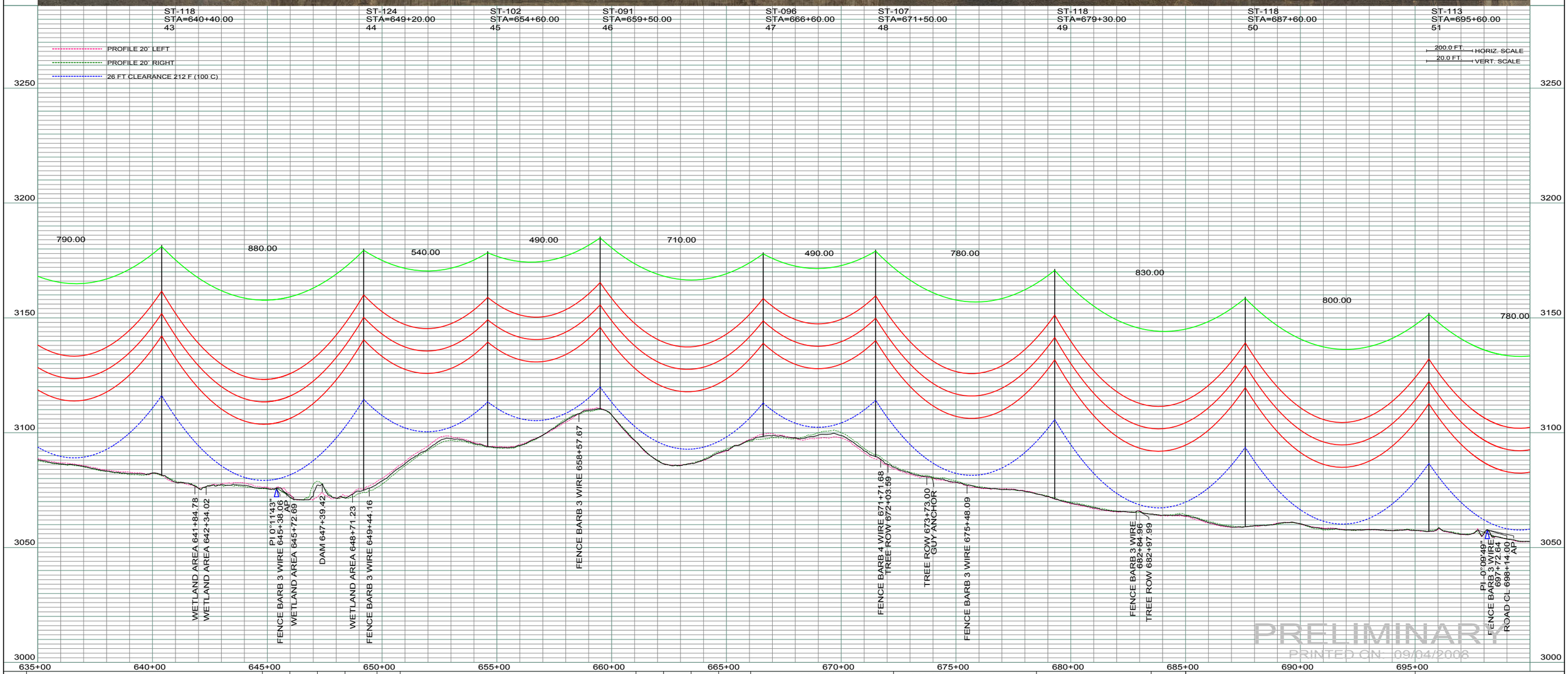
SCALE: AS SHOWN | COUNTY NAME: BOWMAN

BASIN DRAWING NO. 181-090-T3-007 | REV. 1

ST-118	ST-124	ST-102	ST-091	ST-096	ST-107	ST-118	ST-118	ST-113
STA=640+40.00	STA=649+20.00	STA=654+60.00	STA=659+50.00	STA=666+60.00	STA=671+50.00	STA=679+30.00	STA=687+60.00	STA=695+60.00
43	44	45	46	47	48	49	50	51

PROFILE 20' LEFT
PROFILE 20' RIGHT
26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE



REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

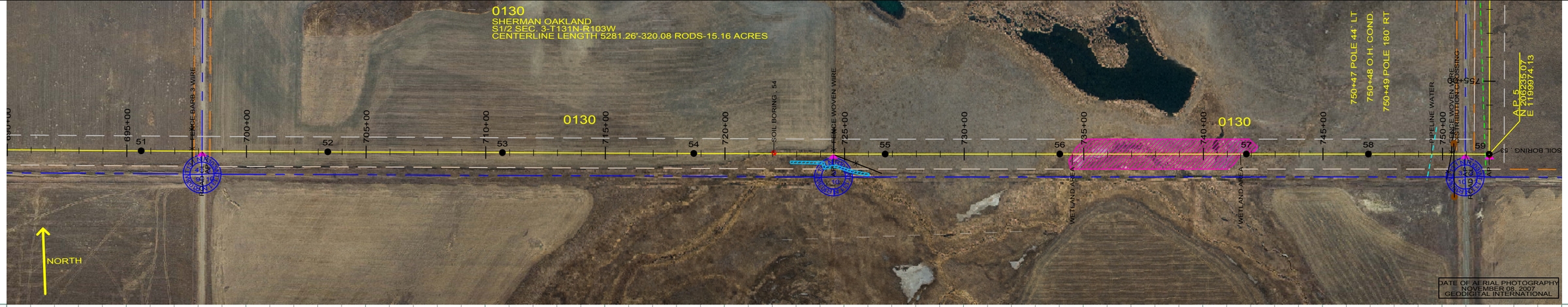
DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE
LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE
PLAN AND PROFILE
MILE 5 & 6

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN
COUNTY NAME: BOWMAN
BASIN DRAWING NO. 181-090-T3-008
REV. 1

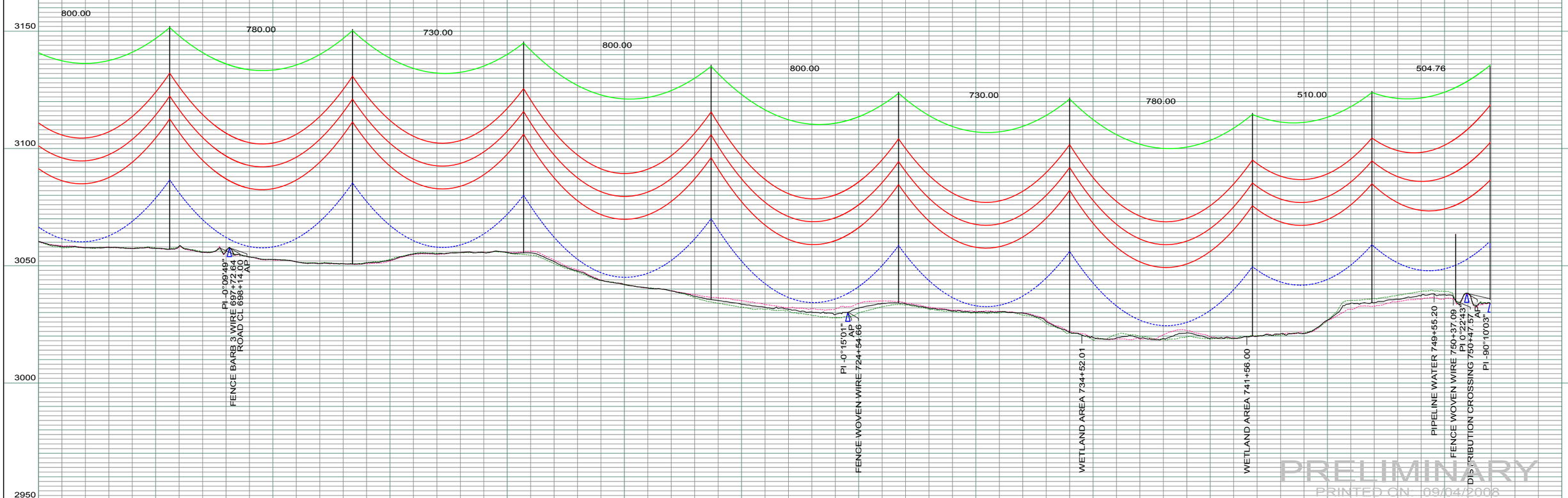


ST-113	ST-118	ST-107	ST-118	ST-107	ST-118	ST-113	ST-107
STA=695+60.00	STA=703+40.00	STA=710+70.00	STA=718+70.00	STA=726+70.00	STA=734+00.00	STA=741+80.00	STA=746+90.00
51	52	53	54	55	56	57	58

PROFILE 20' LEFT
PROFILE 20' RIGHT
26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE

ELEV. TOP COND. = 3063.3
1ST POLE LEFT = 3063.3
1ST POLE RIGHT = 3066.7



REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

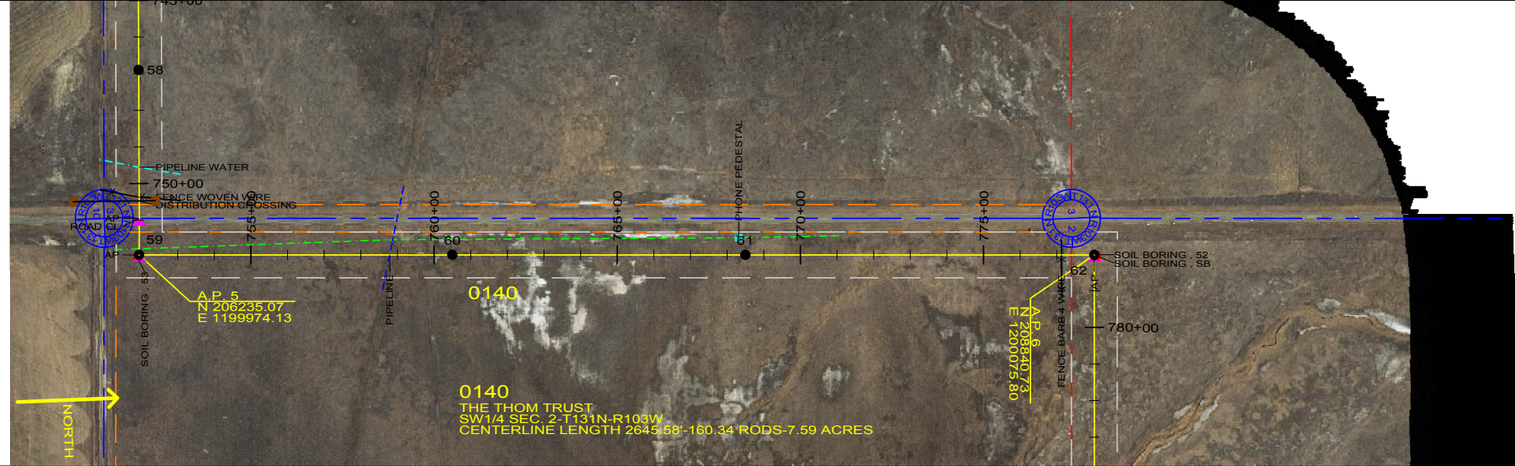
RHAME TO BELFIELD 230KV TRANSMISSION LINE

PLAN AND PROFILE

MILE 6 & 7

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN
COUNTY NAME: BOWMAN
BASIN DRAWING NO. 181-090-T3-009
REV. 1

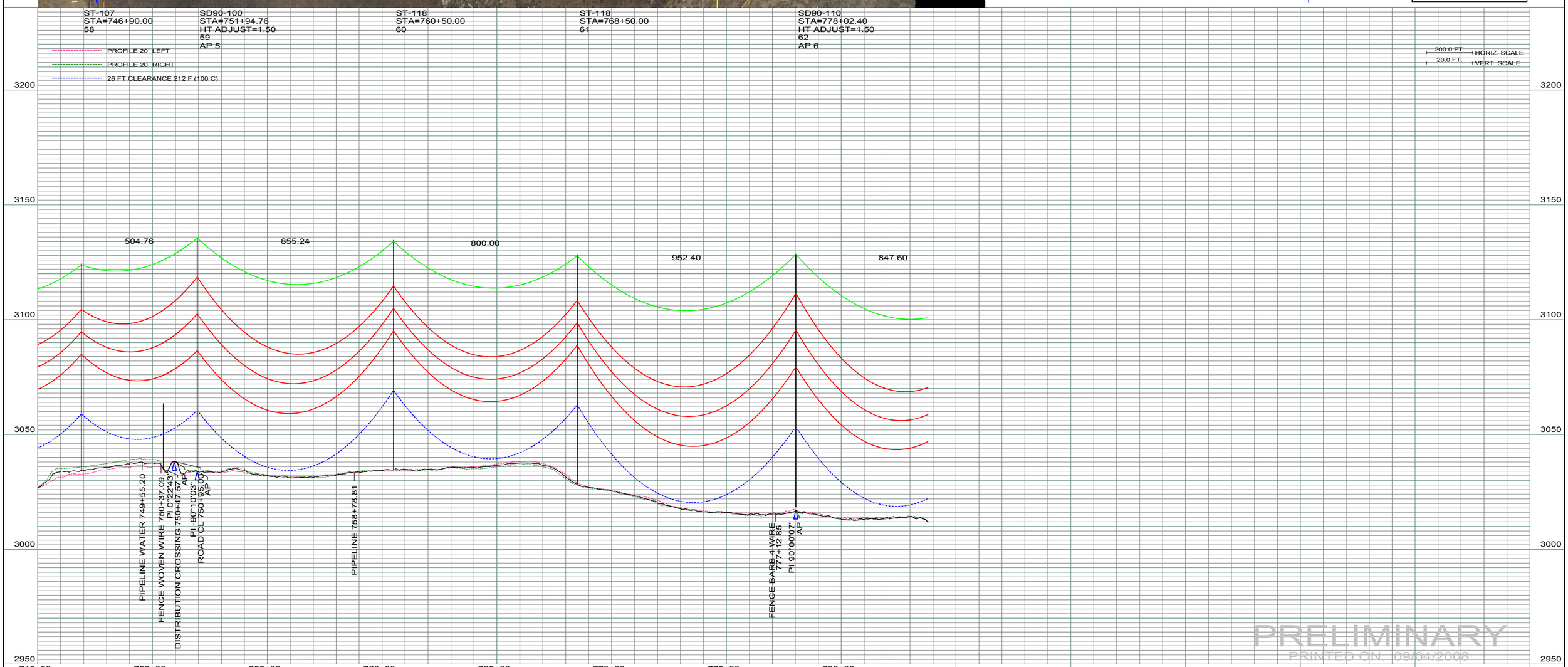


DATE OF AERIAL PHOTOGRAPHY
NOVEMBER 08, 2007
GEODIGITAL INTERNATIONAL

ST-107	SD90-100	ST-118	ST-118	SD90-110
STA=746+90.00	STA=751+94.76	STA=760+50.00	STA=768+50.00	STA=778+02.40
58	HT ADJUST=1.50	60	61	HT ADJUST=1.50
	59			62
	AP 5			AP 6

PROFILE 20' LEFT
PROFILE 20' RIGHT
26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE



PRELIMINARY
PRINTED ON: 09/04/2008

REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

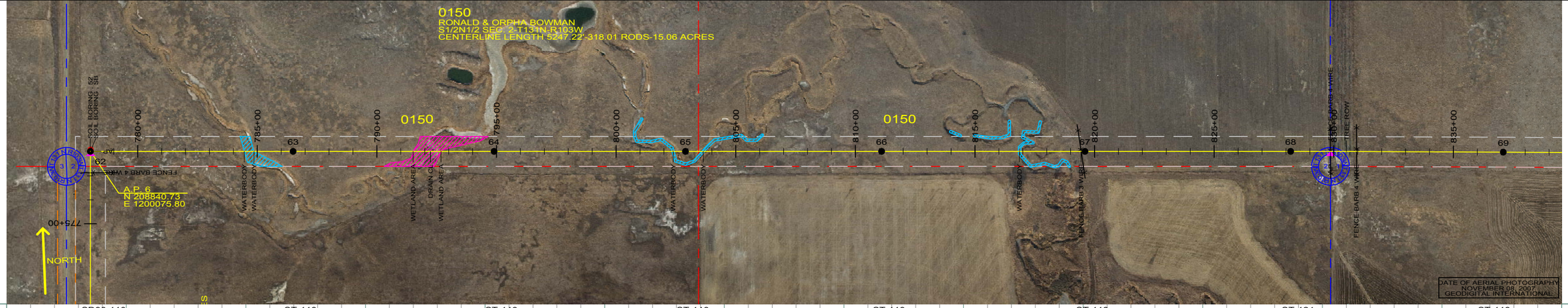
DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE
LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE
PLAN AND PROFILE
MILE 7 & 8

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE:	COUNTY NAME:
AS SHOWN	BOWMAN
BASIN DRAWING NO.	REV.
181-090-T3-010	1



SD90-110
STA=778+02.40
HT ADJUST=1.50
62
AP 6

ST-118
STA=786+50.00
63

ST-113
STA=794+90.00
64

ST-118
STA=802+90.00
65

ST-118
STA=811+10.00
66

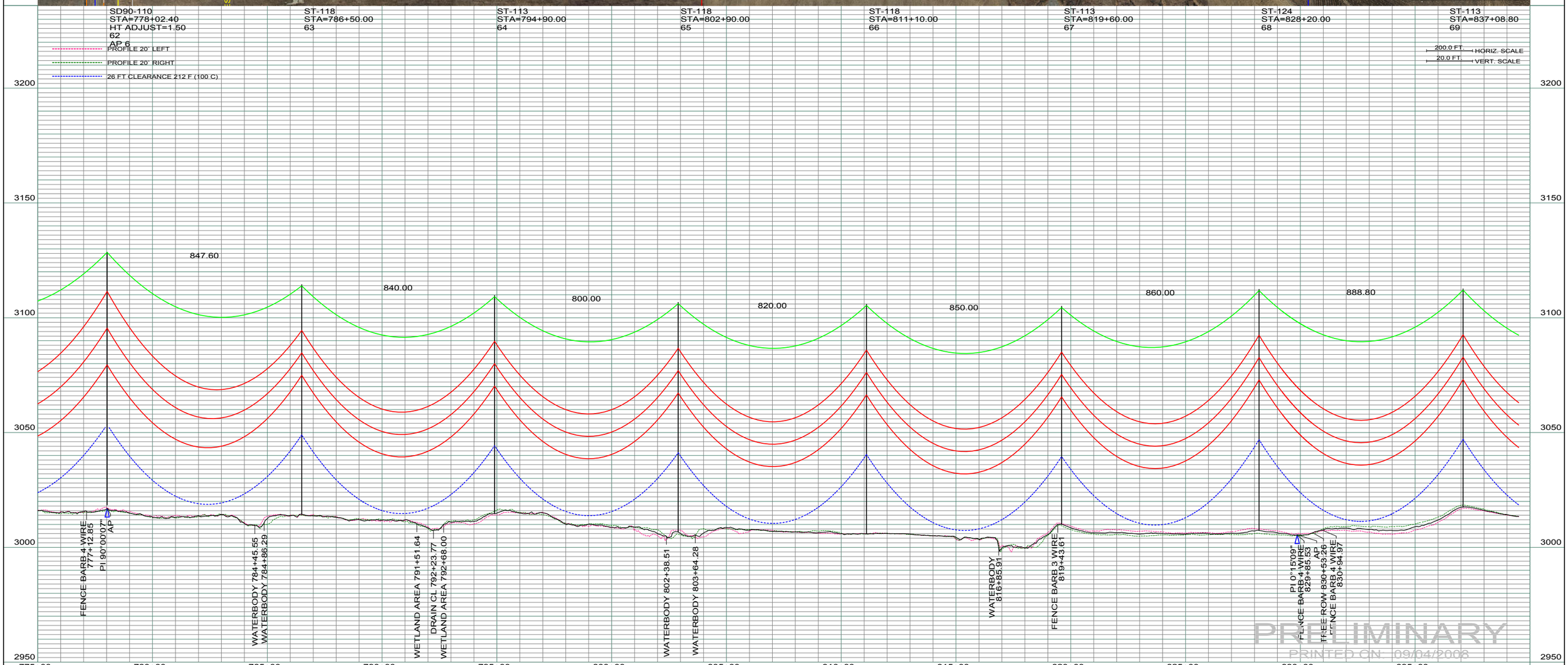
ST-113
STA=819+60.00
67

ST-124
STA=828+20.00
68

ST-113
STA=837+08.80
69

PROFILE 20' LEFT
PROFILE 20' RIGHT
26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE



PRELIMINARY
PRINTED ON: 09/04/2008

REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

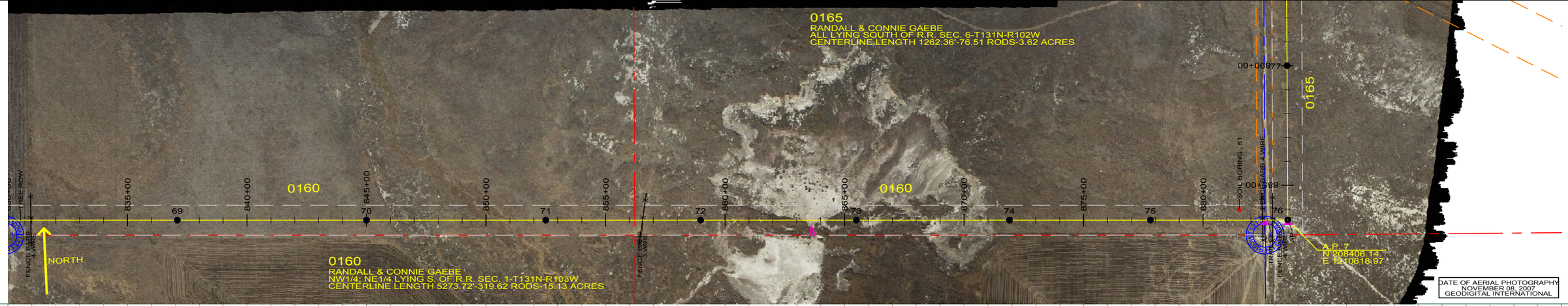
DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE
LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE
PLAN AND PROFILE
MILE 8 & 9

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

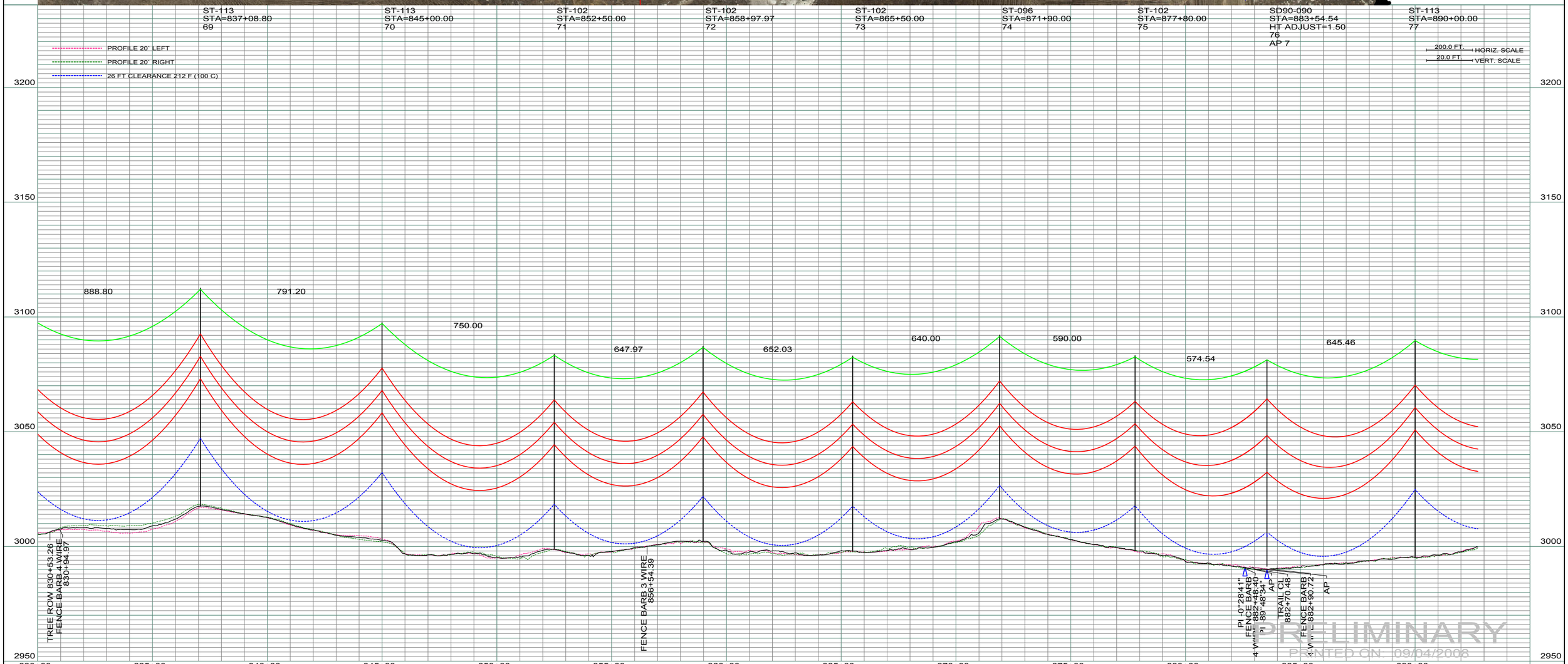
SCALE: AS SHOWN
COUNTY NAME: BOWMAN
BASIN DRAWING NO. 181-090-T3-011
REV. 1



ST-113	ST-113	ST-102	ST-102	ST-102	ST-096	ST-102	SD90-090	ST-113
STA=837+08.80	STA=845+00.00	STA=852+50.00	STA=858+97.97	STA=865+50.00	STA=871+90.00	STA=877+80.00	STA=883+54.54	STA=890+00.00
69	70	71	72	73	74	75	HT ADJUST=1.50	77
							76	
							AP 7	

PROFILE 20' LEFT
PROFILE 20' RIGHT
26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE



REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE

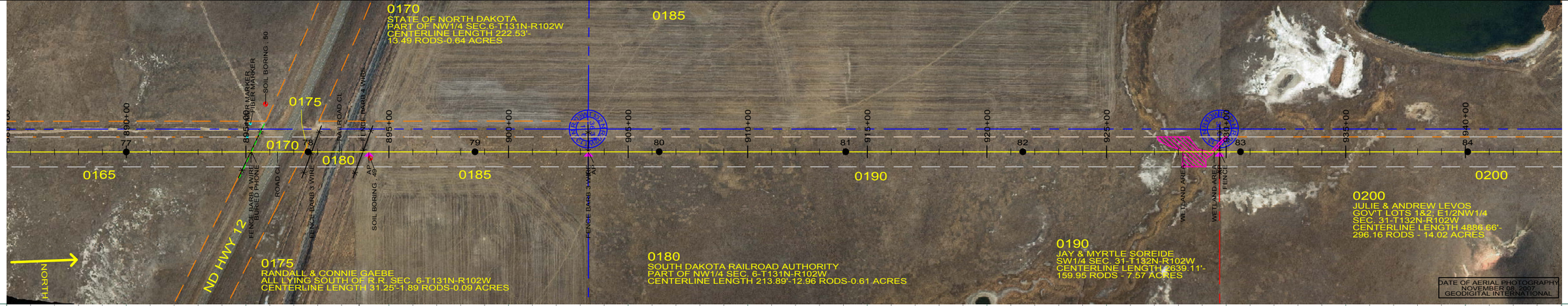
PLAN AND PROFILE

MILE 9 & 10

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE:	COUNTY NAME:
AS SHOWN	BOWMAN

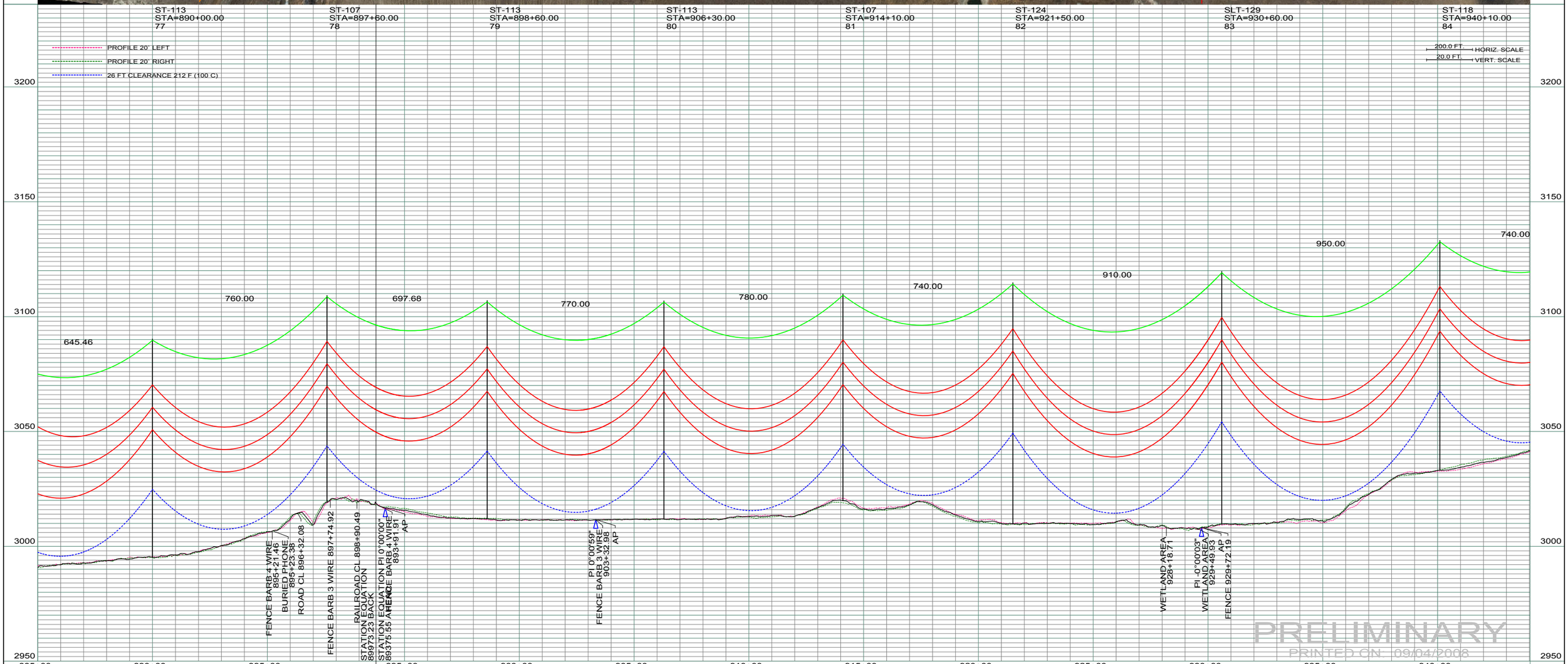
BASIN DRAWING NO.	REV.
181-090-T3-012	1



ST-113	ST-107	ST-113	ST-113	ST-107	ST-124	SLT-129	ST-118
STA=890+00.00	STA=897+60.00	STA=898+60.00	STA=906+30.00	STA=914+10.00	STA=921+50.00	STA=930+60.00	STA=940+10.00
77	78	79	80	81	82	83	84

PROFILE 20' LEFT
PROFILE 20' RIGHT
26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE



REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA — NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

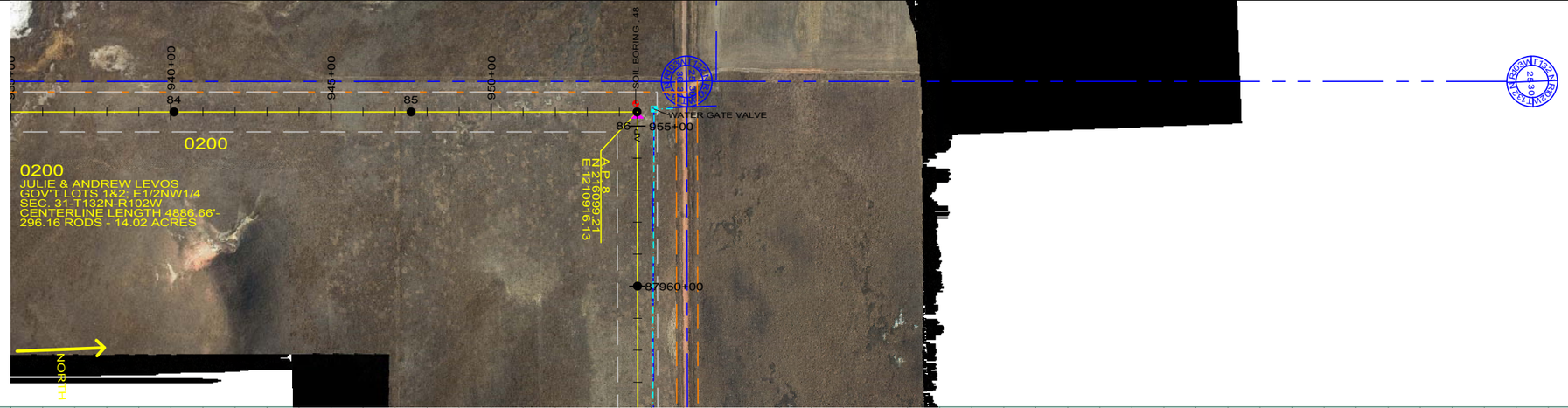
RHAME TO BELFIELD 230KV TRANSMISSION LINE

PLAN AND PROFILE

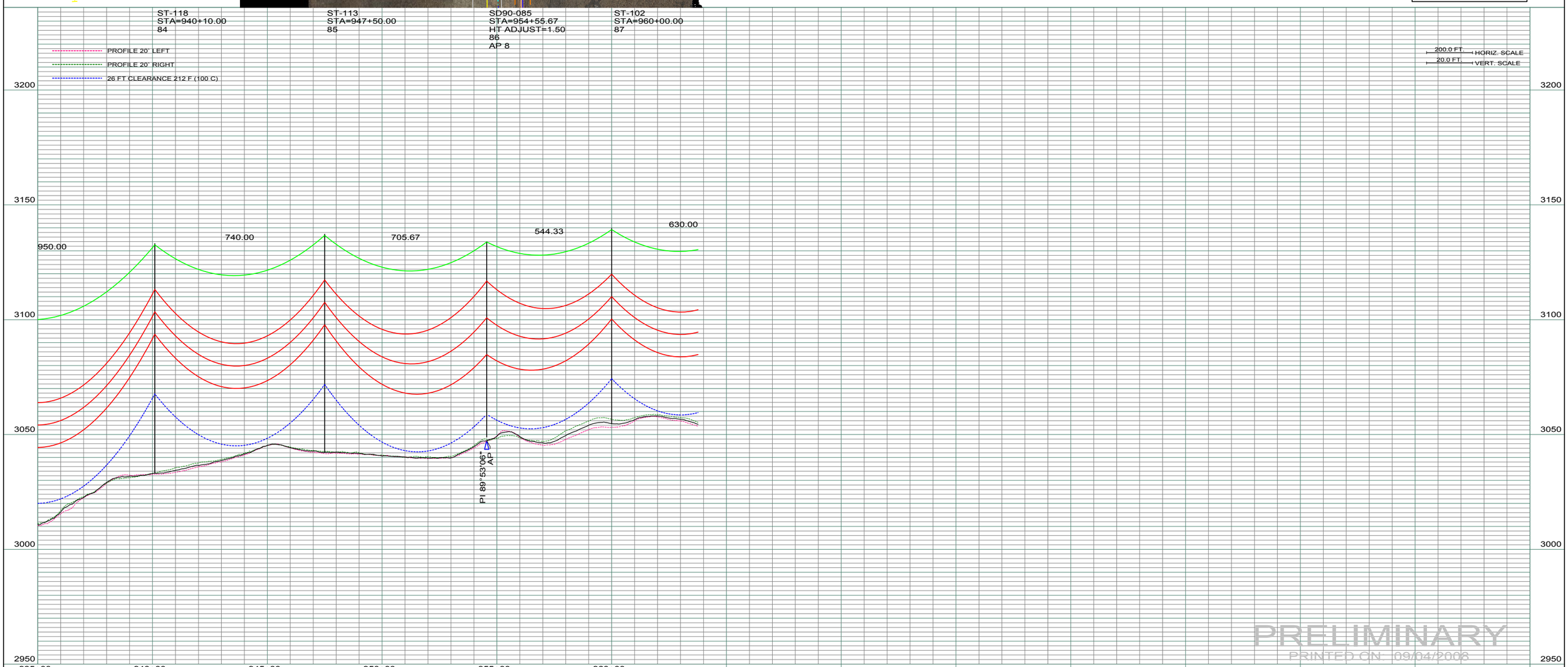
MILE 10 & 11

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN
COUNTY NAME: BOWMAN
BASIN DRAWING NO. 181-090-T3-013
REV. 1



DATE OF AERIAL PHOTOGRAPHY
NOVEMBER 08, 2007
GEODIGITAL INTERNATIONAL



PRELIMINARY
PRINTED ON: 09/04/2008

REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

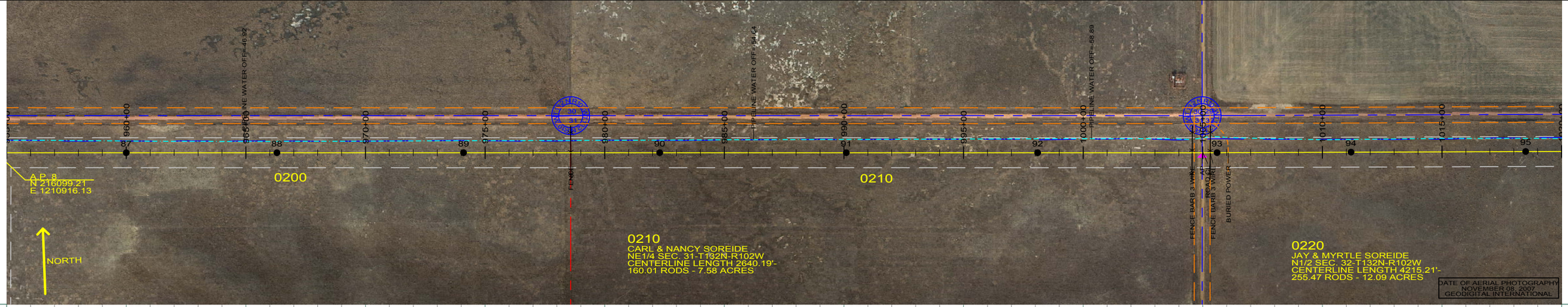
DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

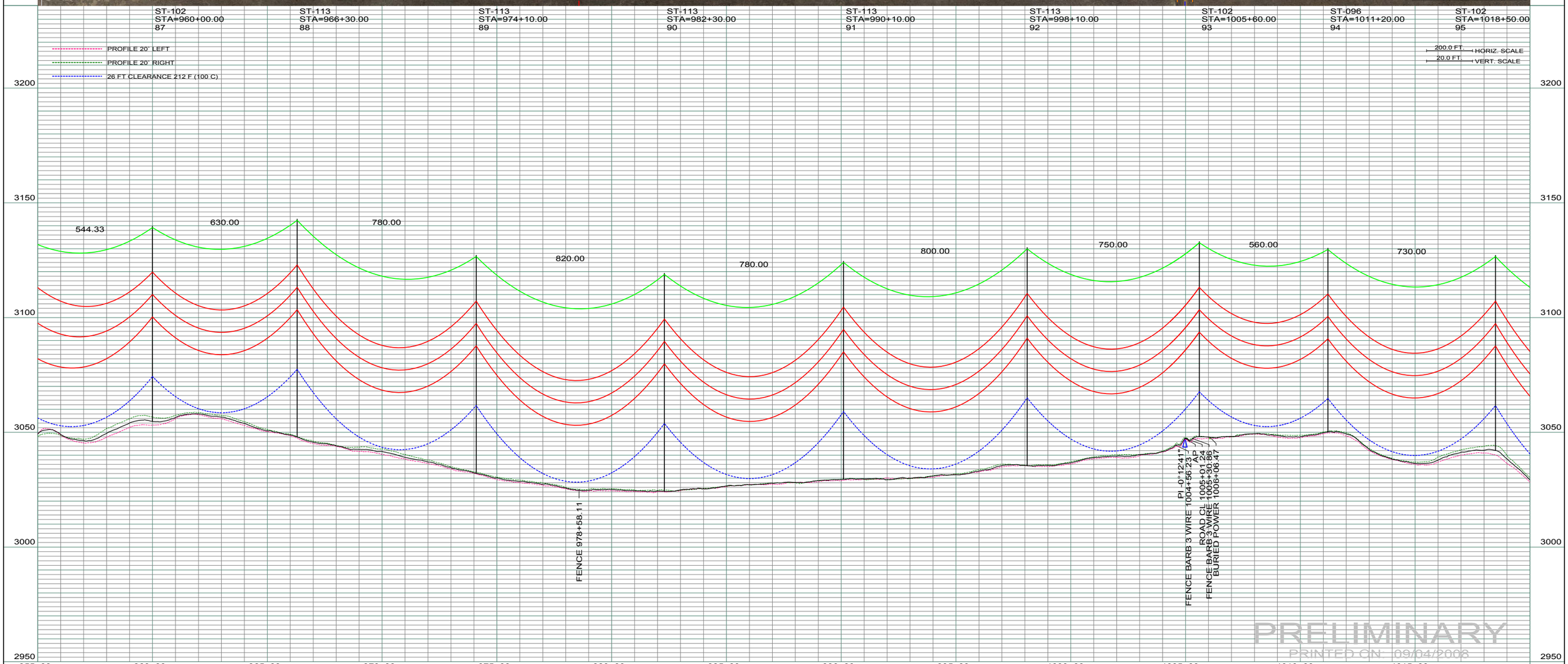
FACILITY: TRANSMISSION SYSTEM MAINTENANCE
LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE
PLAN AND PROFILE
MILE 11

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN
COUNTY NAME: BOWMAN
BASIN DRAWING NO. 181-090-T3-014
REV. 1





REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE

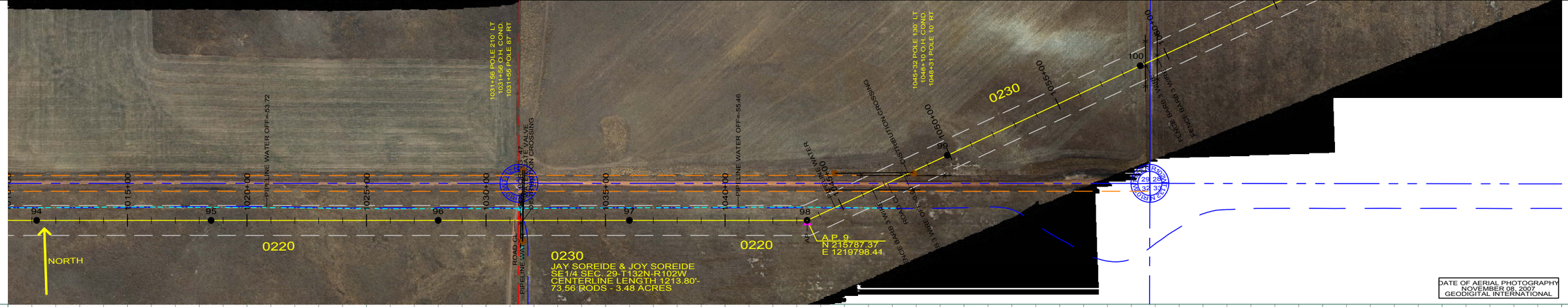
PLAN AND PROFILE

MILE 11 & 13

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN | COUNTY NAME: BOWMAN

BASIN DRAWING NO. 181-090-T3-015 | REV. 1



ST-096
STA=1011+20.00
94

ST-102
STA=1018+50.00
95

SLT-124
STA=1028+00.00
96

ST-124
STA=1036+00.00
97

SA28-095
STA=1043+43.43
HT ADJUST=1.50
98
AP 9

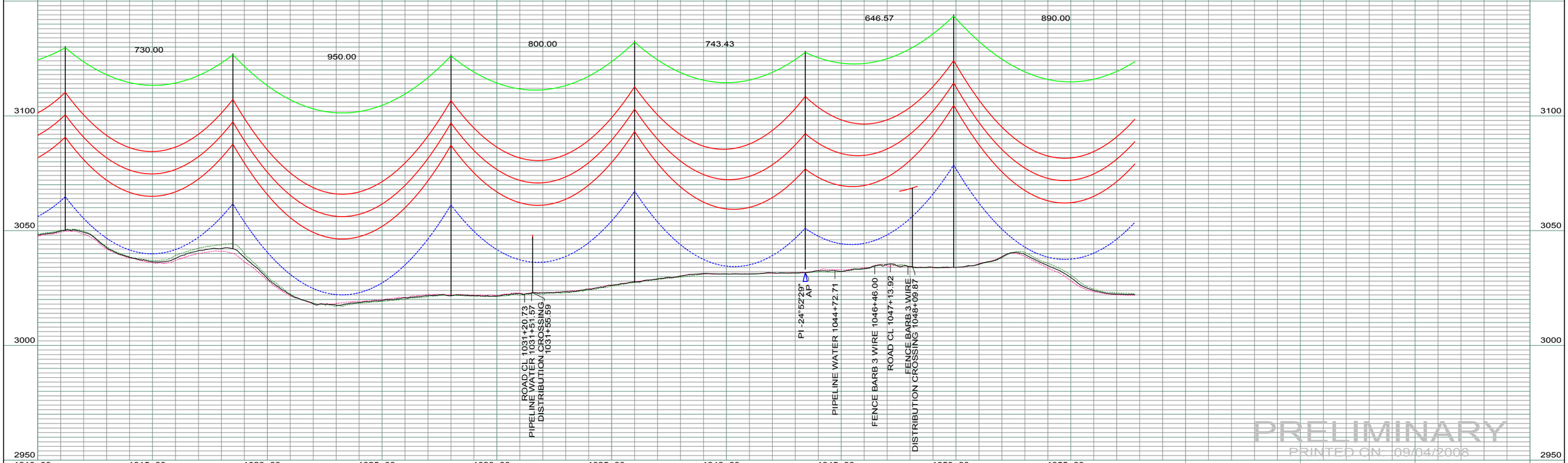
ST-129
STA=1049+90.00
99

PROFILE 20' LEFT
PROFILE 20' RIGHT
26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE

ELEV. TOP COND. = 3047.1
1ST POLE LEFT = 3045.4
1ST POLE RIGHT = 3051.0

ELEV. TOP COND. = 3068.6
1ST POLE LEFT = 3069.7
1ST POLE RIGHT = 3069.3



PRELIMINARY
PRINTED ON: 09/04/2008

REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

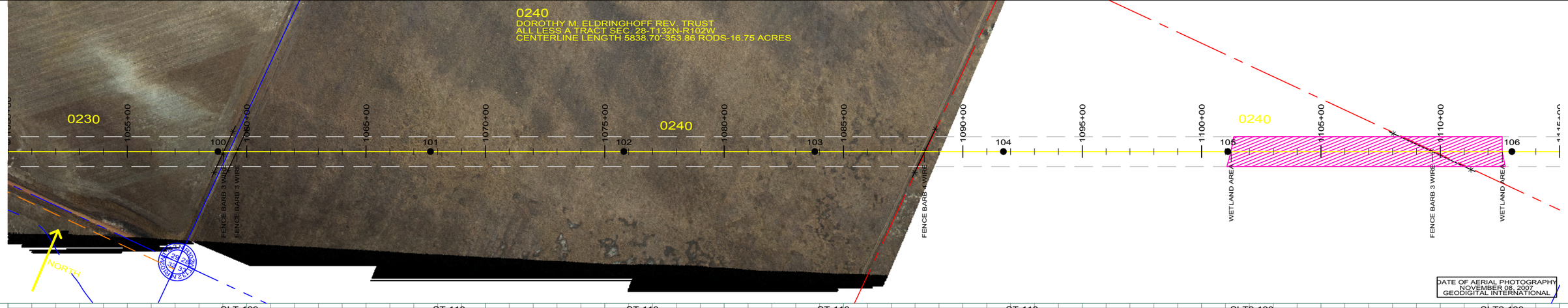
DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

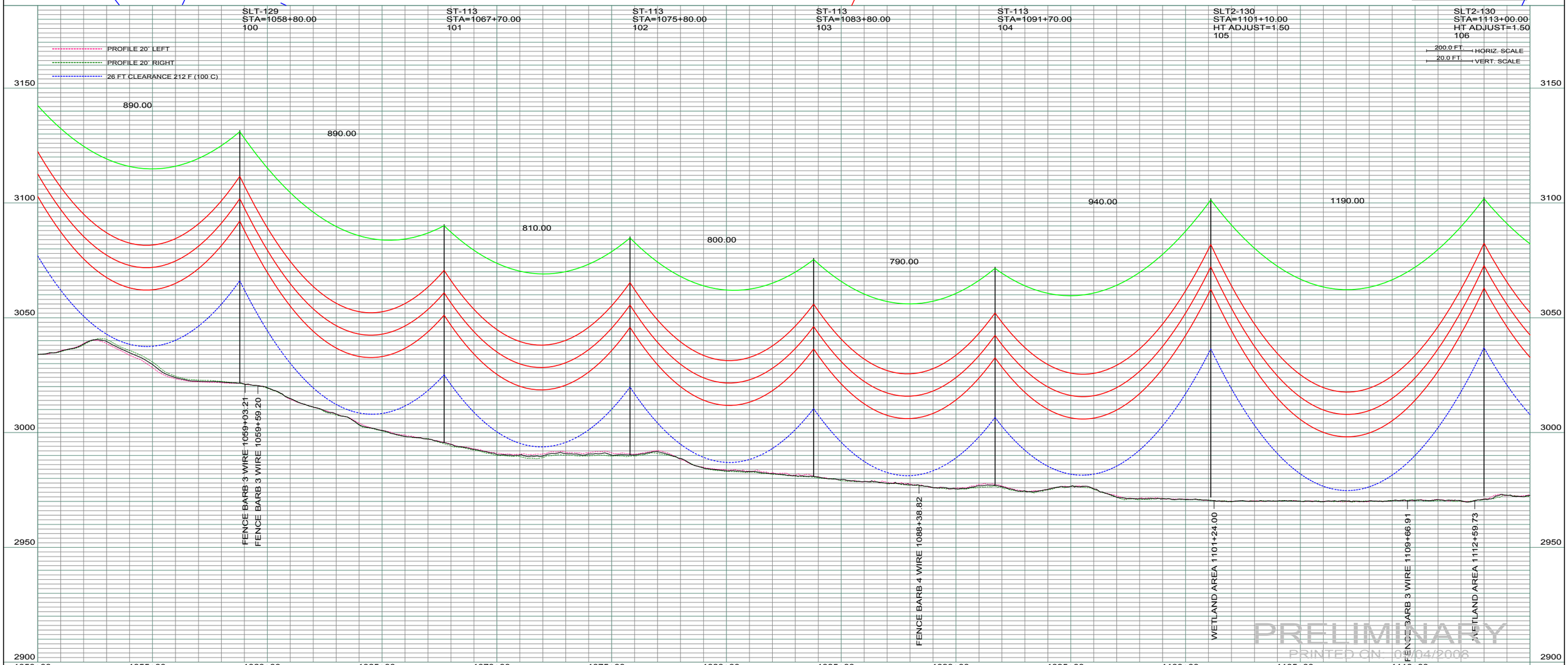
FACILITY: TRANSMISSION SYSTEM MAINTENANCE
LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE
PLAN AND PROFILE
MILE 12 & 13

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN
COUNTY NAME: BOWMAN
BASIN DRAWING NO. 181-090-T3-016
REV. 1





REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

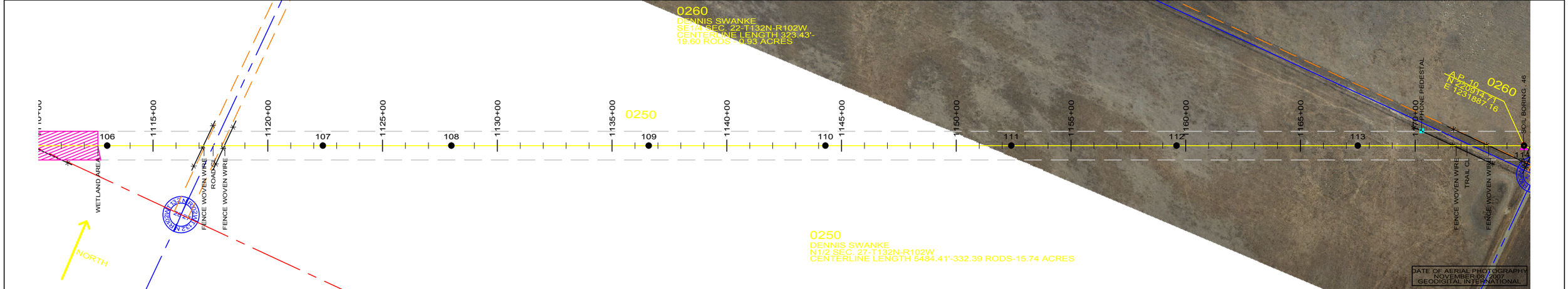
RHAME TO BELFIELD 230KV TRANSMISSION LINE

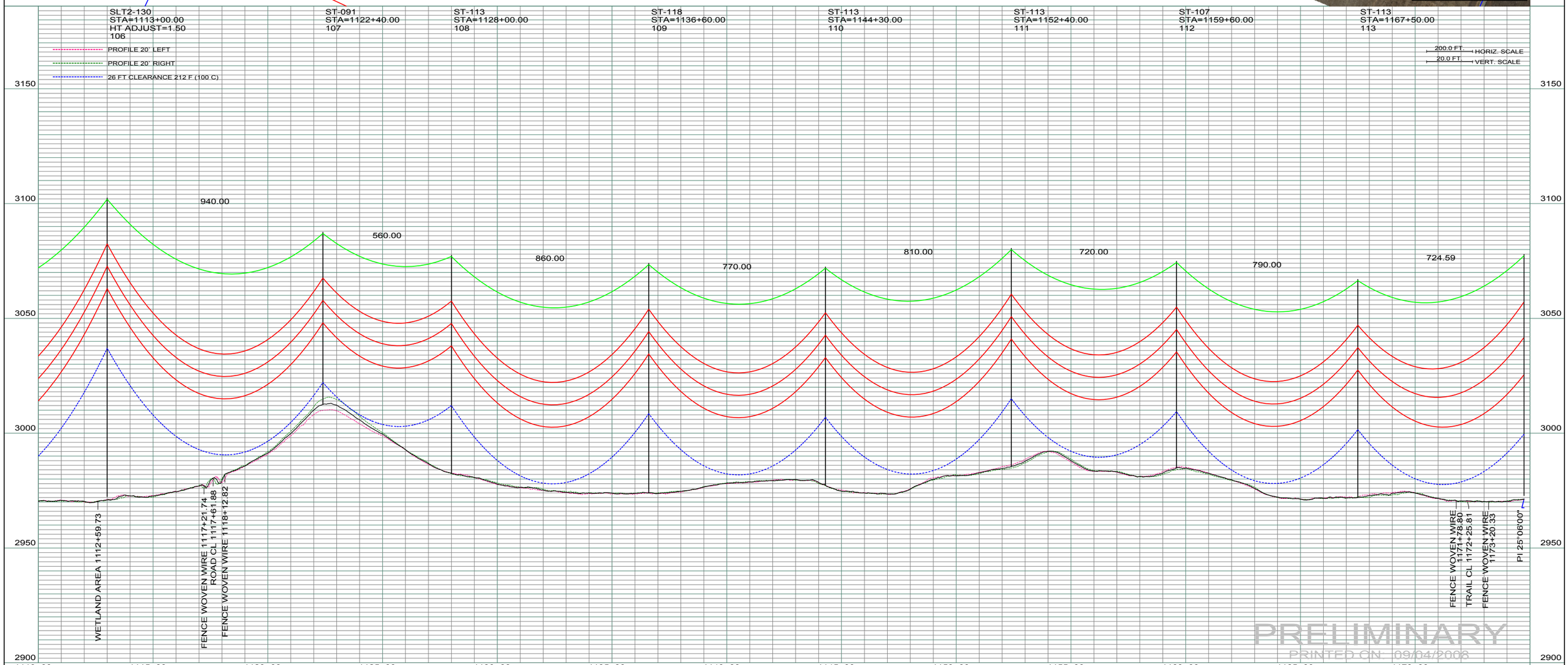
PLAN AND PROFILE

MILE 13 & 14

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE:	COUNTY NAME:
AS SHOWN	BOWMAN
BASIN DRAWING NO.	REV.
181-090-T3-017	1





REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE

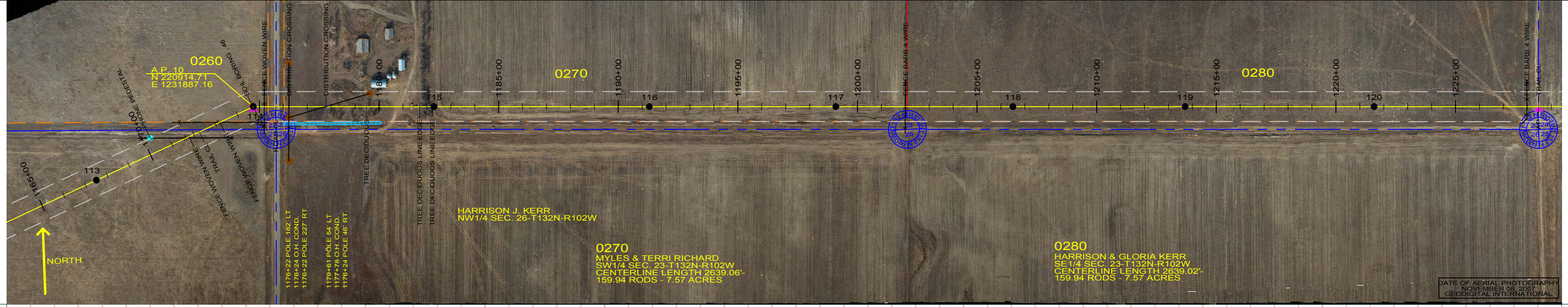
PLAN AND PROFILE

MILE 14 & 15

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN | COUNTY NAME: BOWMAN

BASIN DRAWING NO. 181-090-T3-018 | REV. 1



ST-113
STA=1167+50.00
113

SA28-105
STA=1174+74.59
HT ADJUST=1.50
114
AP 10

ST-129
STA=1182+30.00
115

ST-118
STA=1191+30.00
116

ST-113
STA=1199+10.00
117

ST-113
STA=1206+50.00
118

ST-113
STA=1213+70.00
119

ST-113
STA=1221+60.00
120

PROFILE 20' LEFT

PROFILE 20' RIGHT

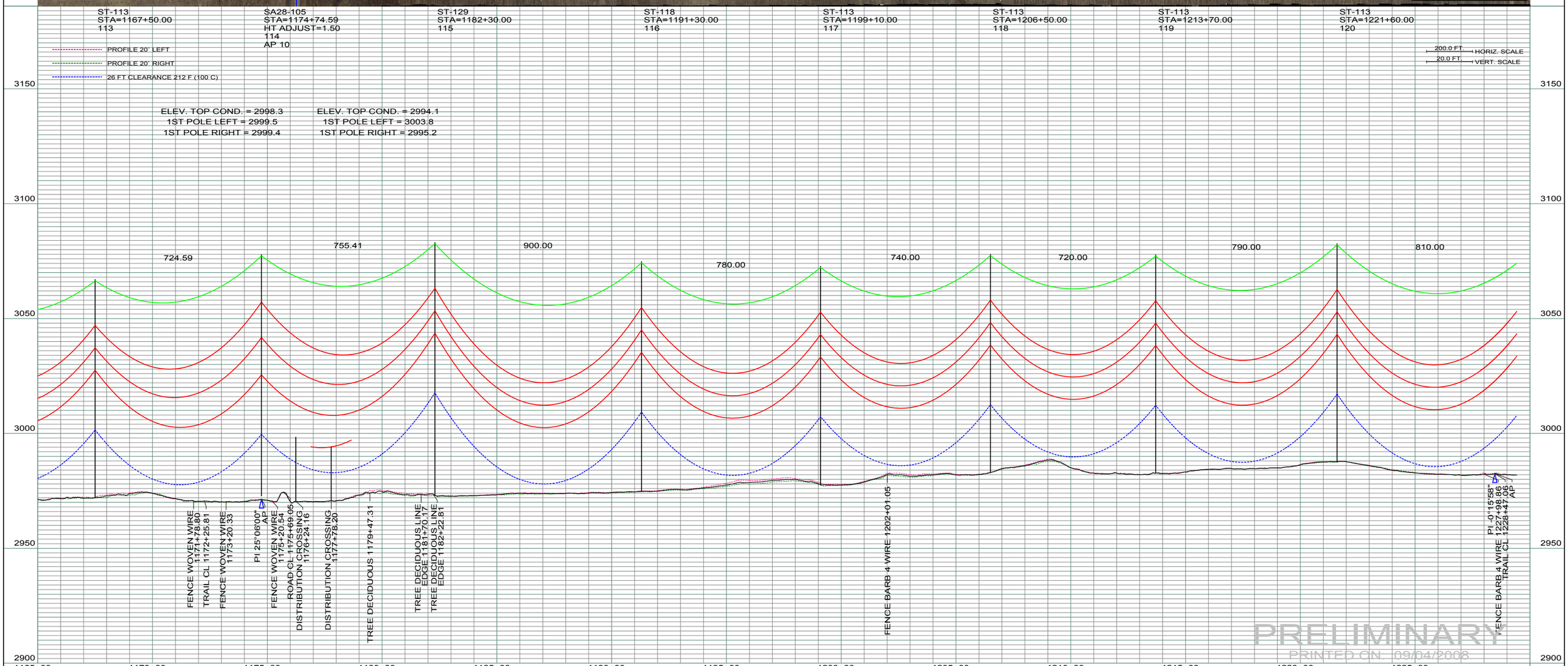
26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE

20.0 FT. VERT. SCALE

ELEV. TOP COND. = 2998.3
1ST POLE LEFT = 2999.5
1ST POLE RIGHT = 2999.4

ELEV. TOP COND. = 2994.1
1ST POLE LEFT = 3003.8
1ST POLE RIGHT = 2995.2



REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

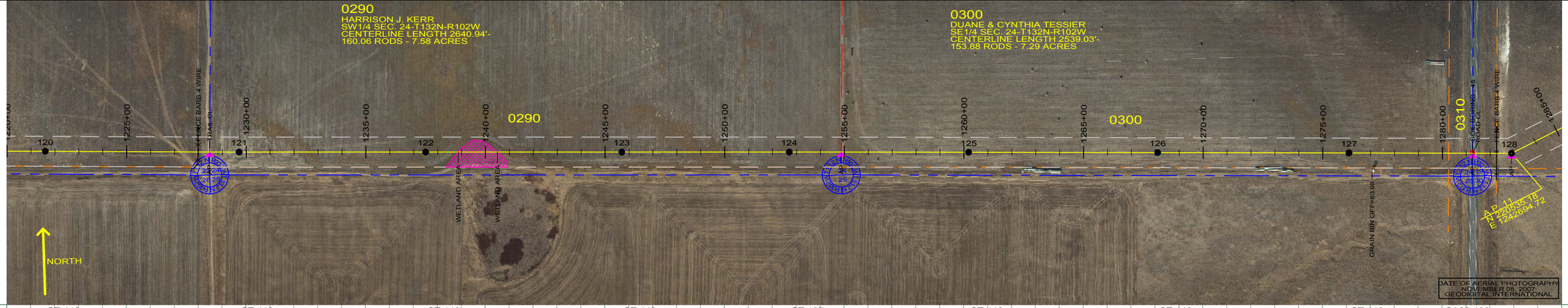
RHAME TO BELFIELD 230KV TRANSMISSION LINE

PLAN AND PROFILE

MILE 15 & 17

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE:	COUNTY NAME:
AS SHOWN	BOWMAN
BASIN DRAWING NO.	REV.
181-090-T3-019	1



ST-113
STA=1221+60.00
120

ST-113
STA=1229+70.00
121

ST-113
STA=1237+50.00
122

ST-113
STA=1245+70.00
123

ST-107
STA=1252+70.00
124

ST-113
STA=1260+20.00
125

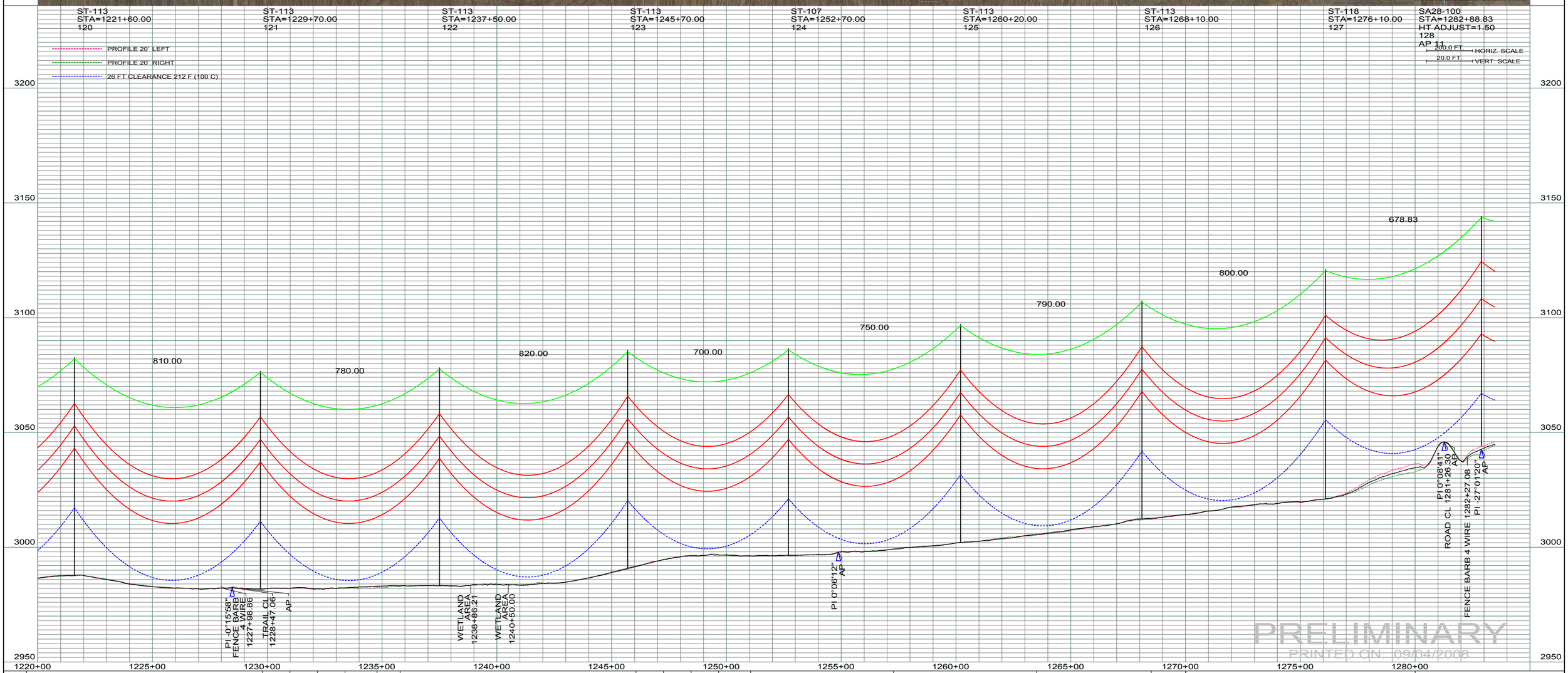
ST-113
STA=1268+10.00
126

ST-118
STA=1276+10.00
127

SA28-100
STA=1282+88.83
HT ADJUST=1.50
128
AP 11

PROFILE 20' LEFT
PROFILE 20' RIGHT
26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE



REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

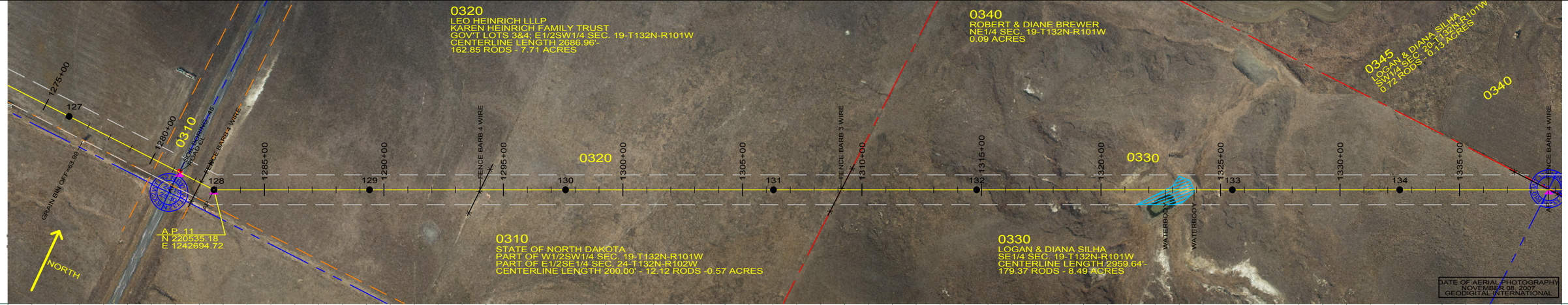
RHAME TO BELFIELD 230KV TRANSMISSION LINE

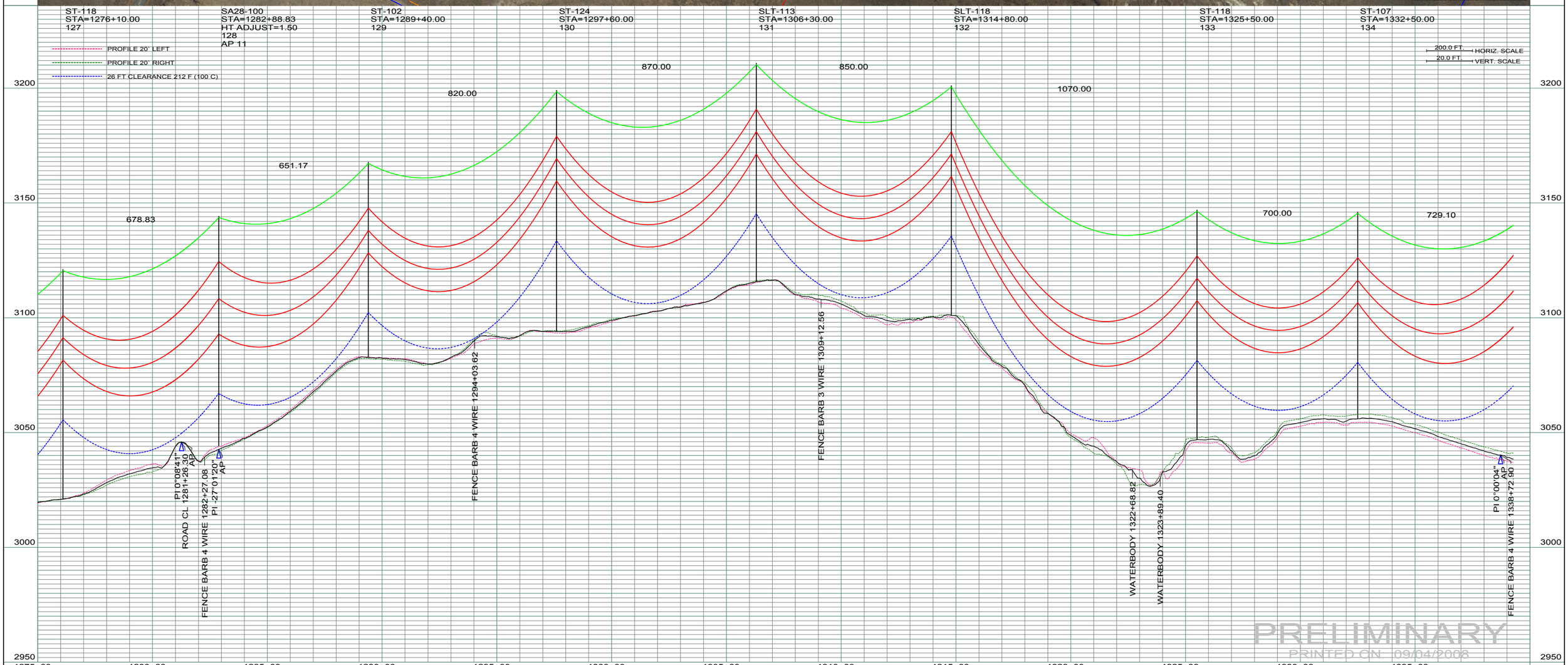
PLAN AND PROFILE

MILE 16 & 18

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN
COUNTY NAME: BOWMAN
BASIN DRAWING NO. 181-90-T3-020
REV. 1





REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE

PLAN AND PROFILE

MILE 17 & 19

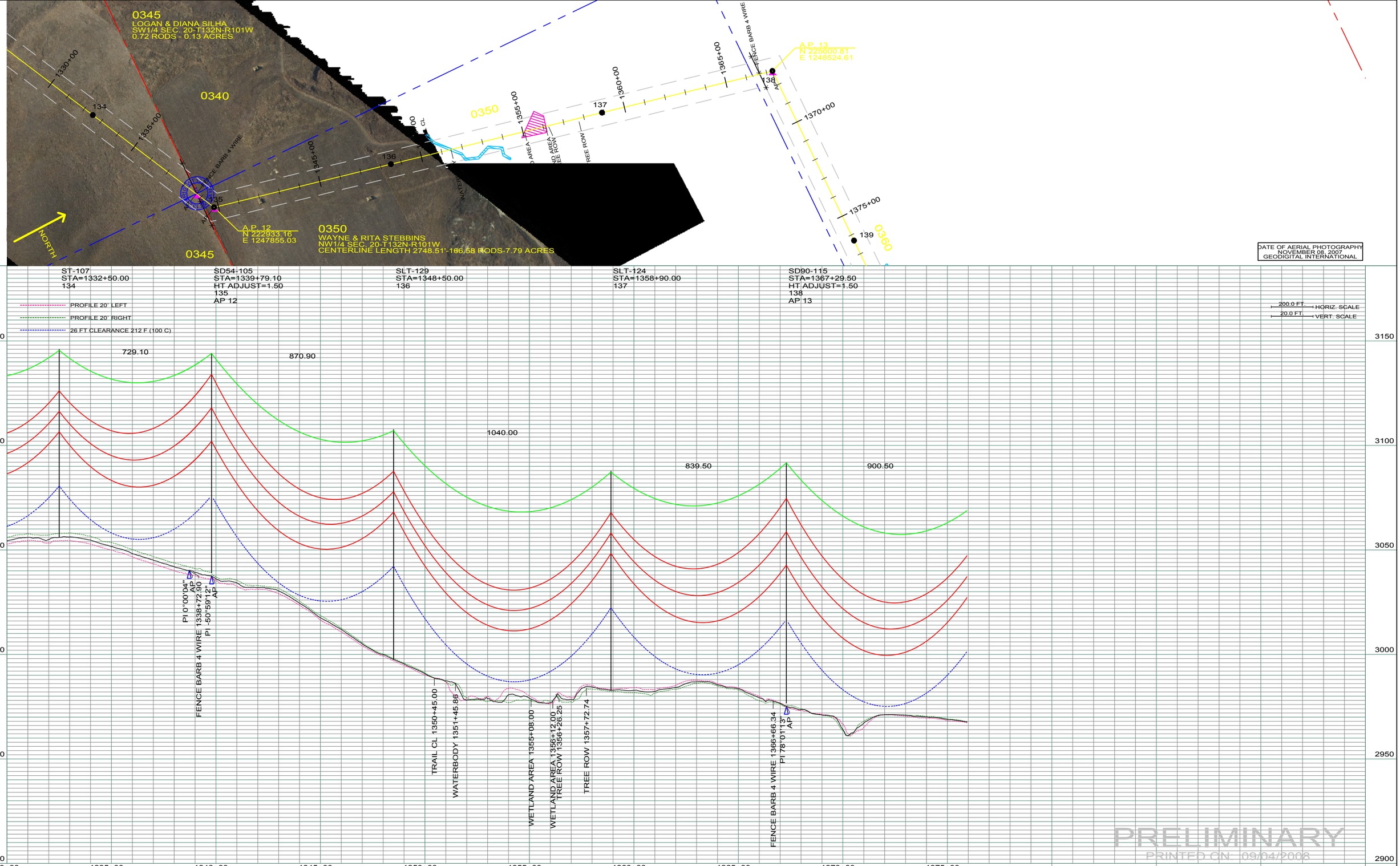
BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN

COUNTY NAME: BOWMAN

BASIN DRAWING NO. 181-90-T3-021

REV. 1



REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

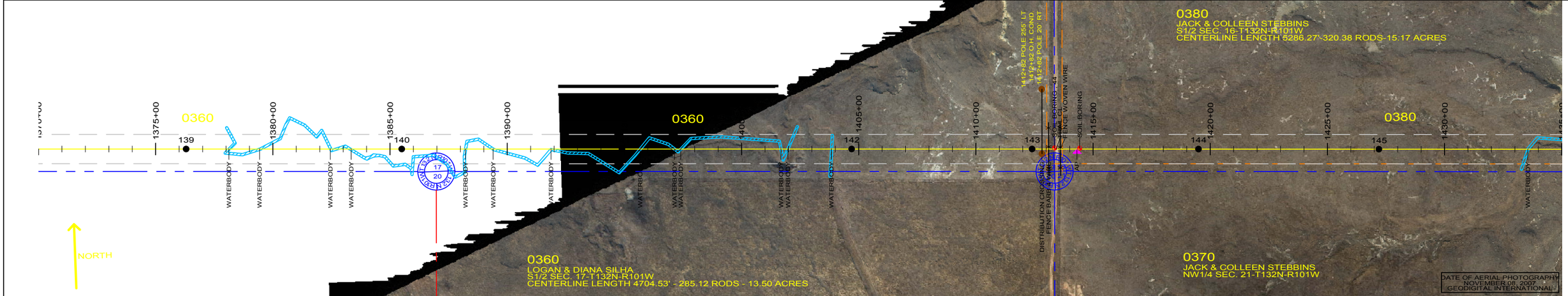
RHAME TO BELFIELD 230KV TRANSMISSION LINE

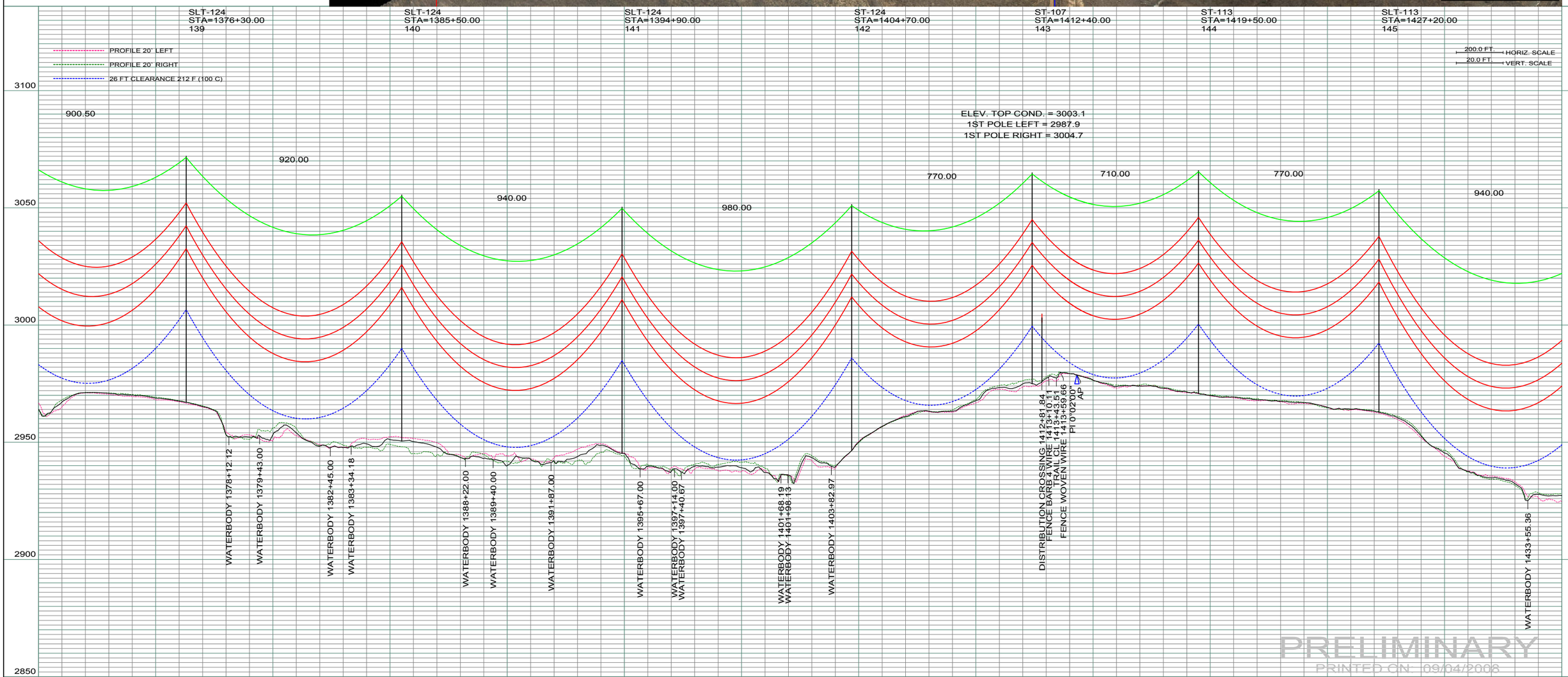
PLAN AND PROFILE

MILE 18 & 19

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE:	COUNTY NAME:
AS SHOWN	BOWMAN
BASIN DRAWING NO.	REV.
181-90-T3-022	1





REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

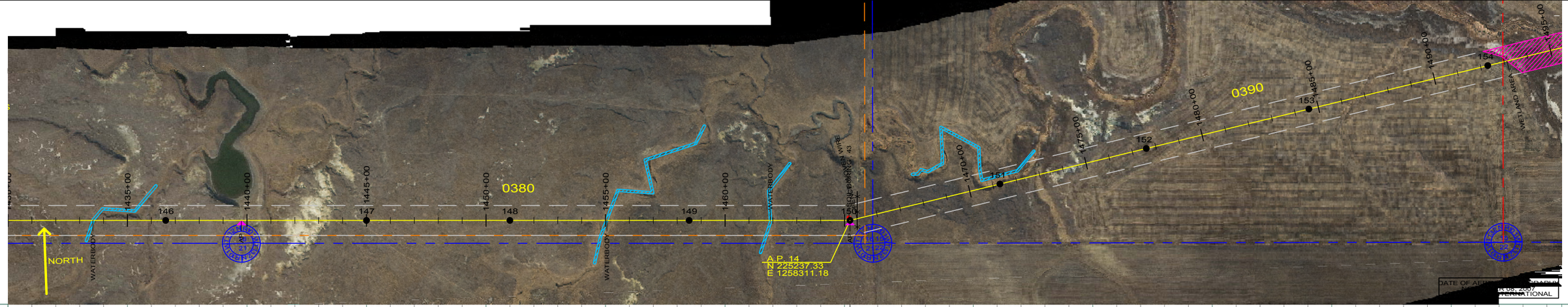
RHAME TO BELFIELD 230KV TRANSMISSION LINE

PLAN AND PROFILE

MILE 19 & 20

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE:	COUNTY NAME:
AS SHOWN	BOWMAN
BASIN DRAWING NO.	REV.
181-90-T3-023	1



ST-124
STA=1436+60.00
146

ST-102
STA=1445+00.00
147

ST-102
STA=1451+00.00
148

ST-107
STA=1458+50.00
149

SA16-090
STA=1465+22.82
HT ADJUST=1.50
150
AP 14

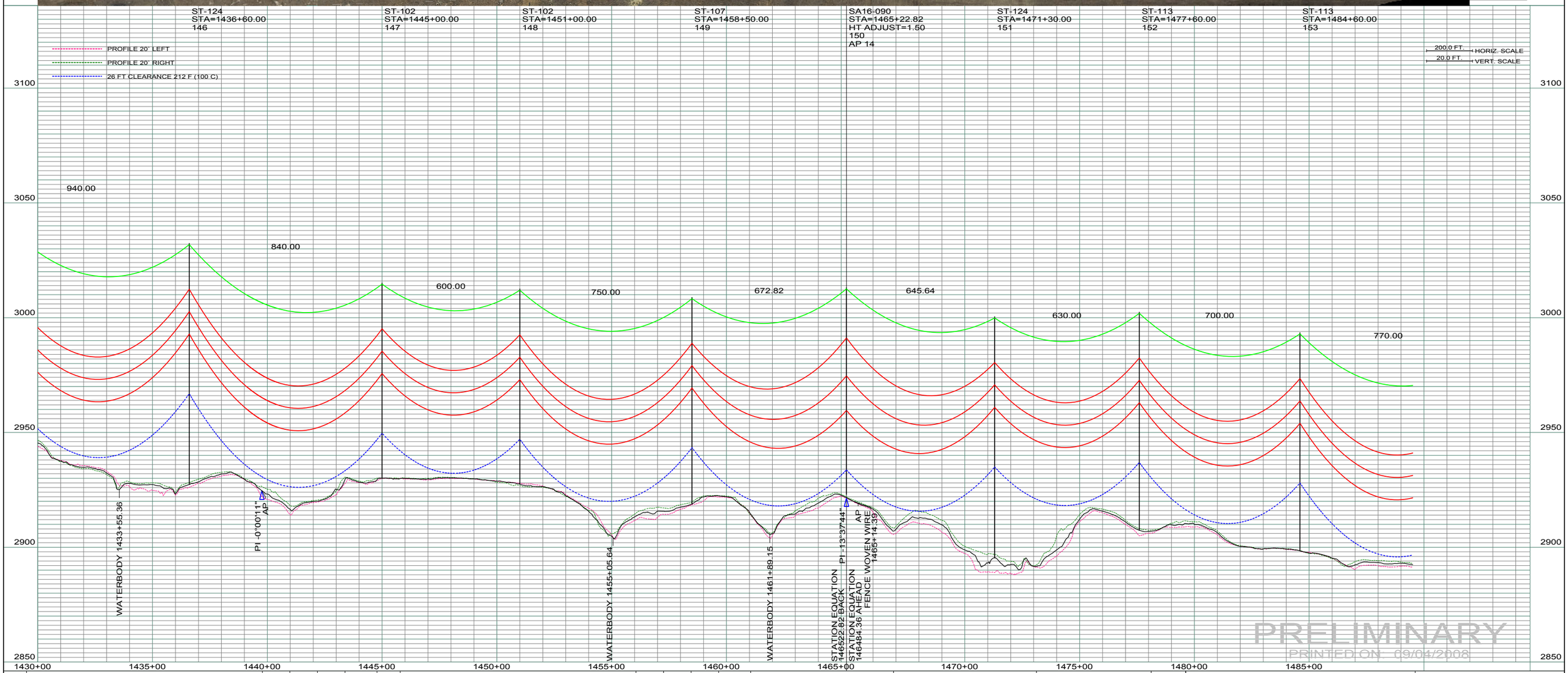
ST-124
STA=1471+30.00
151

ST-113
STA=1477+60.00
152

ST-113
STA=1484+60.00
153

PROFILE 20' LEFT
PROFILE 20' RIGHT
26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE



PRELIMINARY
PRINTED ON: 09/04/2008

REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE
LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

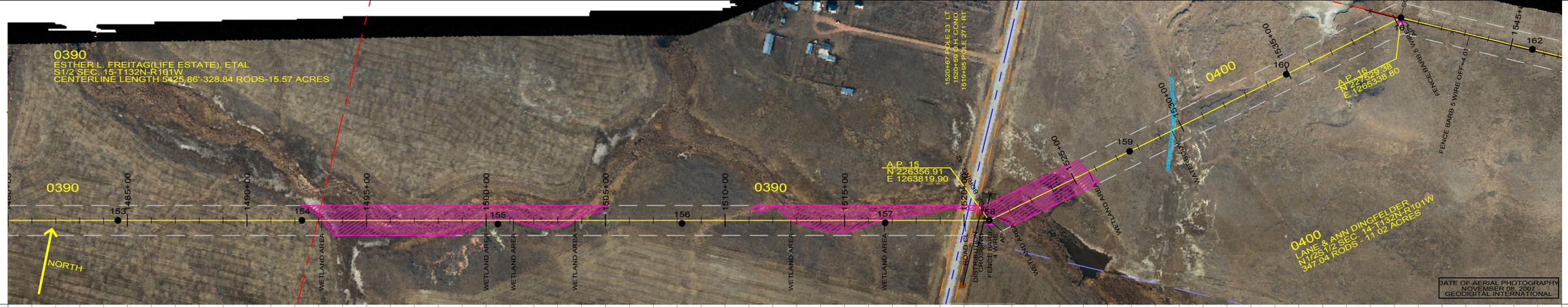
RHAME TO BELFIELD 230KV TRANSMISSION LINE

PLAN AND PROFILE

MILE 20 & 21

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN
COUNTY NAME: BOWMAN
BASIN DRAWING NO. 181-90-T3-024
REV. 1



ST-113
STA=1484+60.00
153

ST-113
STA=1492+30.00
154

ST-113
STA=1500+50.00
OFFSET ADJUST=15.00
155

ST-113
STA=1508+20.00
OFFSET ADJUST=12.62
156

ST-124
STA=1516+70.00
OFFSET ADJUST=10.00
157

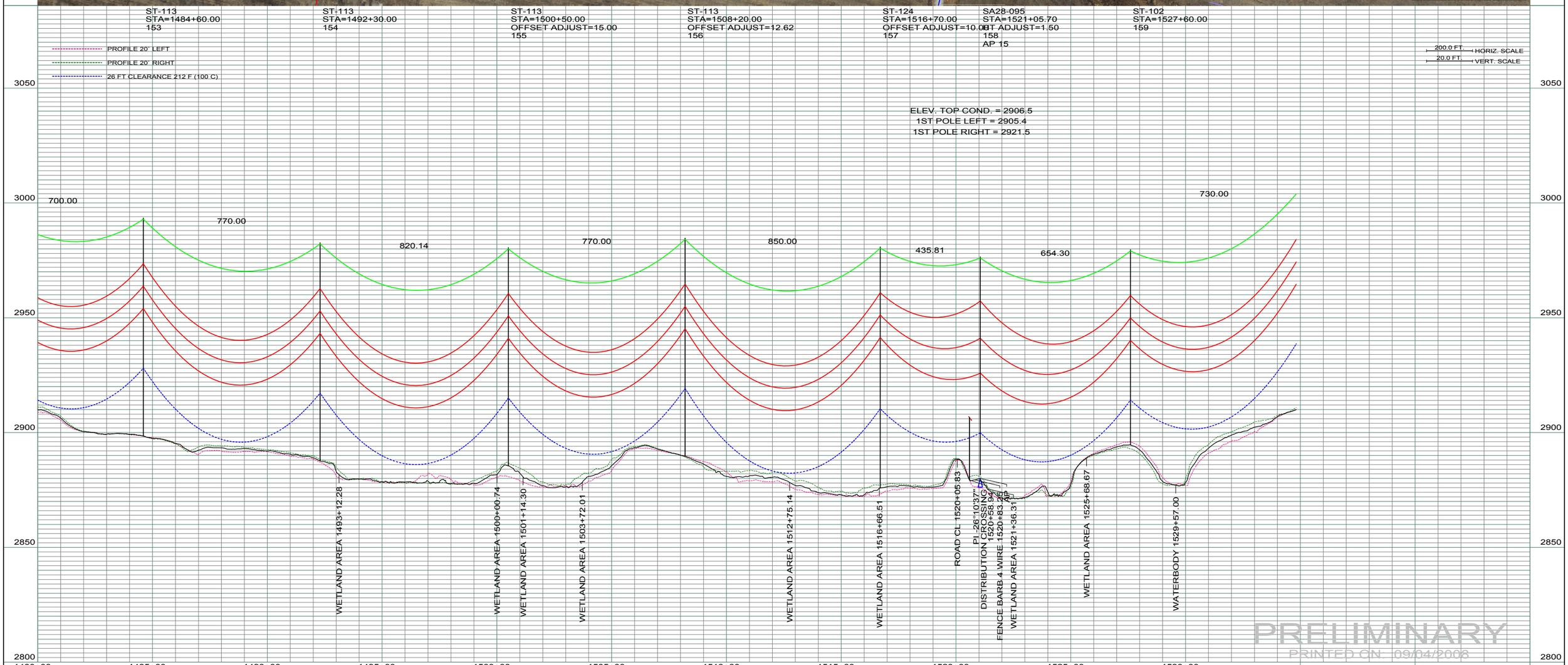
SA28-095
STA=1521+05.70
OFFSET ADJUST=1.50
158
AP 15

ST-102
STA=1527+60.00
159

PROFILE 20' LEFT
PROFILE 20' RIGHT
26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE

ELEV. TOP COND. = 2906.5
1ST POLE LEFT = 2905.4
1ST POLE RIGHT = 2921.5



PRELIMINARY
PRINTED ON: 09/04/2008

REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

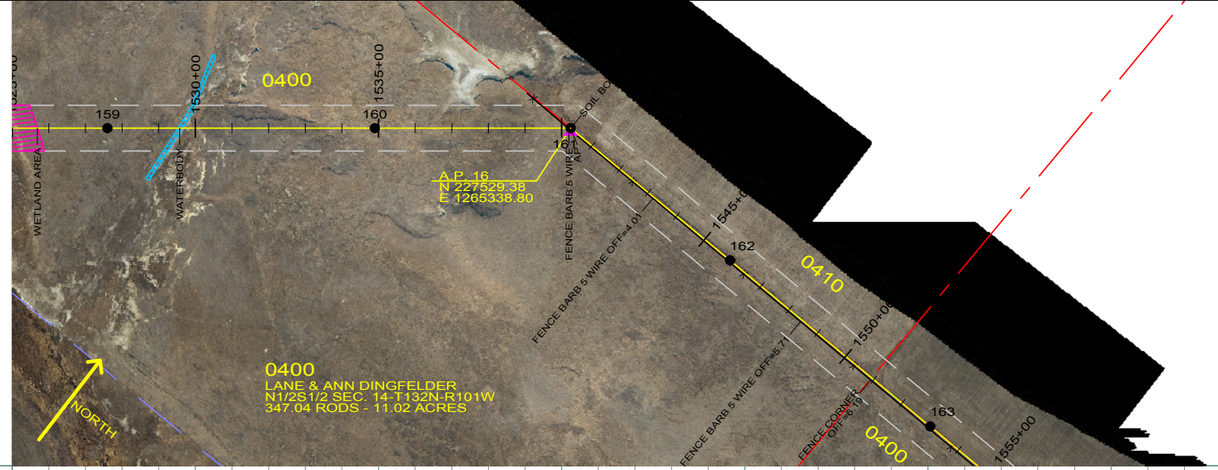
DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

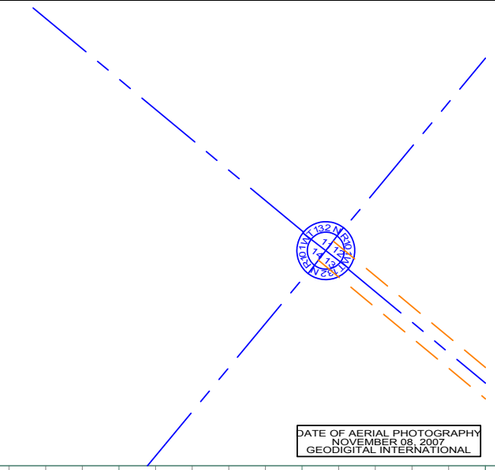
FACILITY: TRANSMISSION SYSTEM MAINTENANCE
LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE
PLAN AND PROFILE
MILE 21 & 22

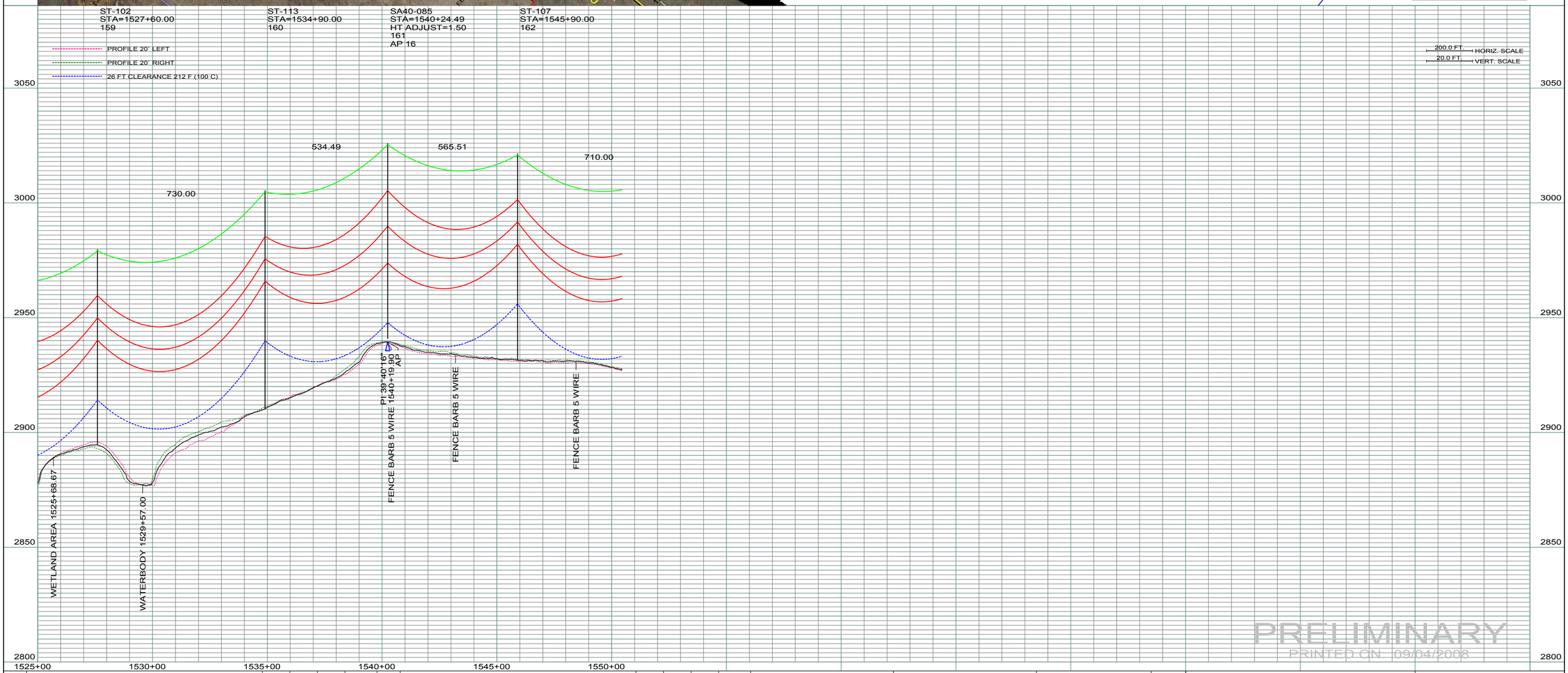
BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN
COUNTY NAME: BOWMAN
BASIN DRAWING NO. 181-90-T3-025
REV. 1





DATE OF AERIAL PHOTOGRAPHY
NOVEMBER 08, 2007
GEODIGITAL INTERNATIONAL



PRELIMINARY
PRINTED ON: 09/04/2008

REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE

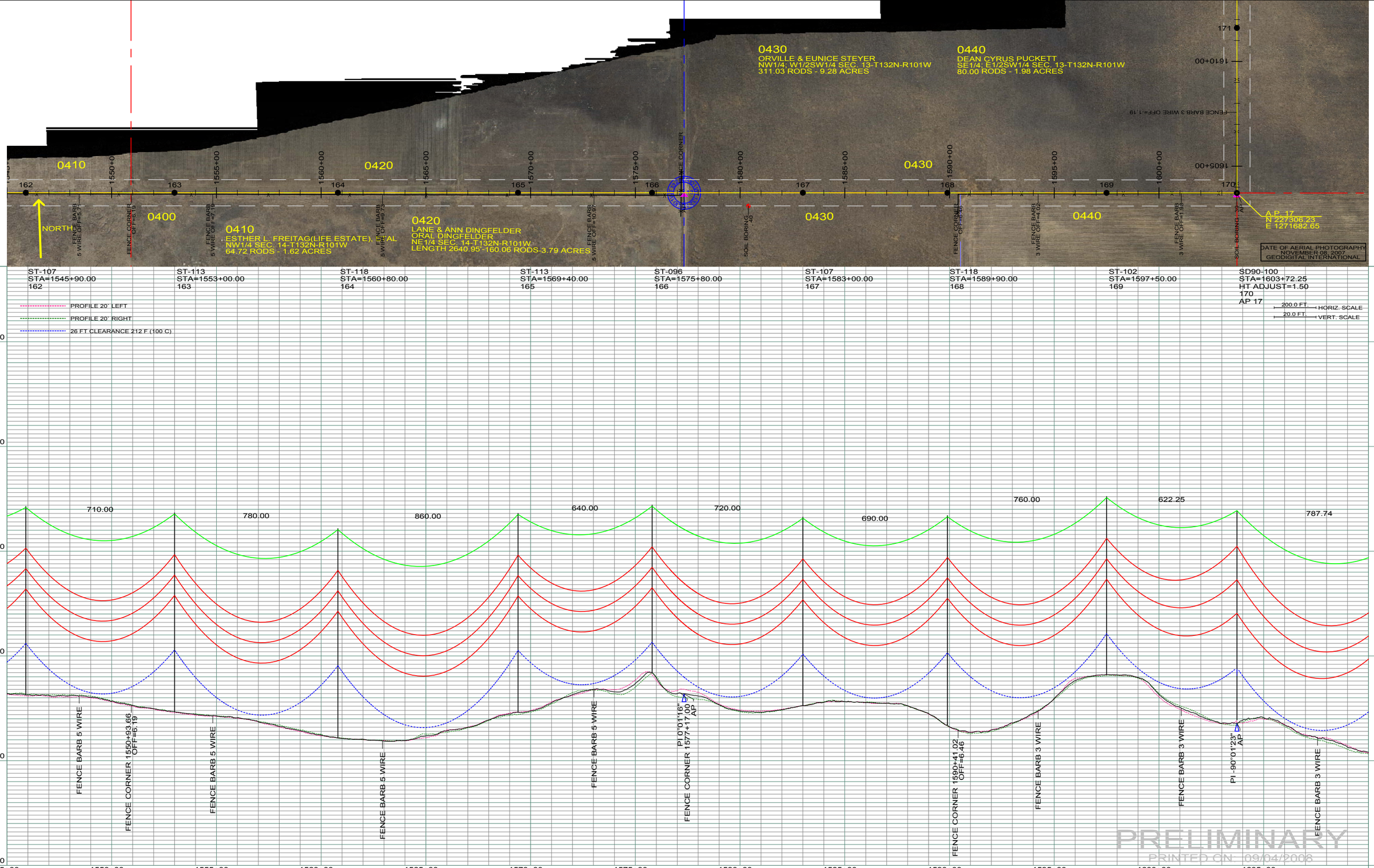
PLAN AND PROFILE

MILE 22 & 23

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN | COUNTY NAME: BOWMAN

BASIN DRAWING NO. 181-90-T3-026 | REV. 1



REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE

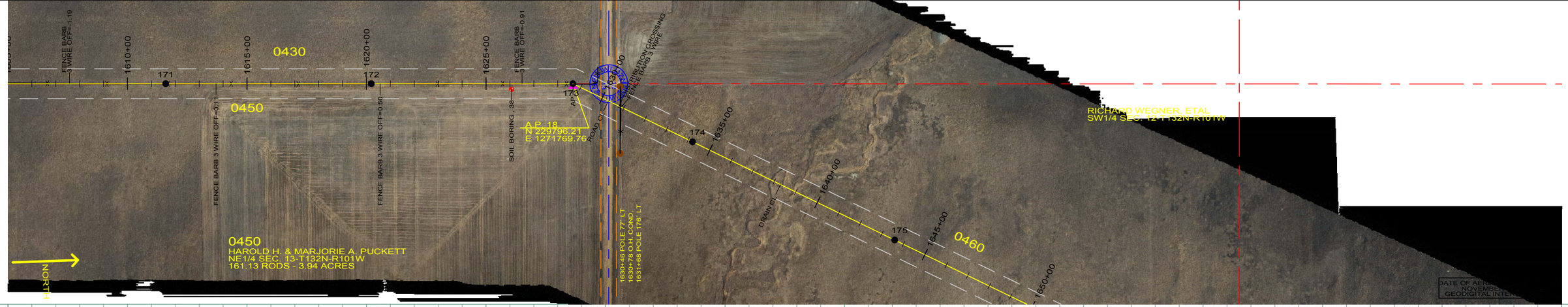
PLAN AND PROFILE

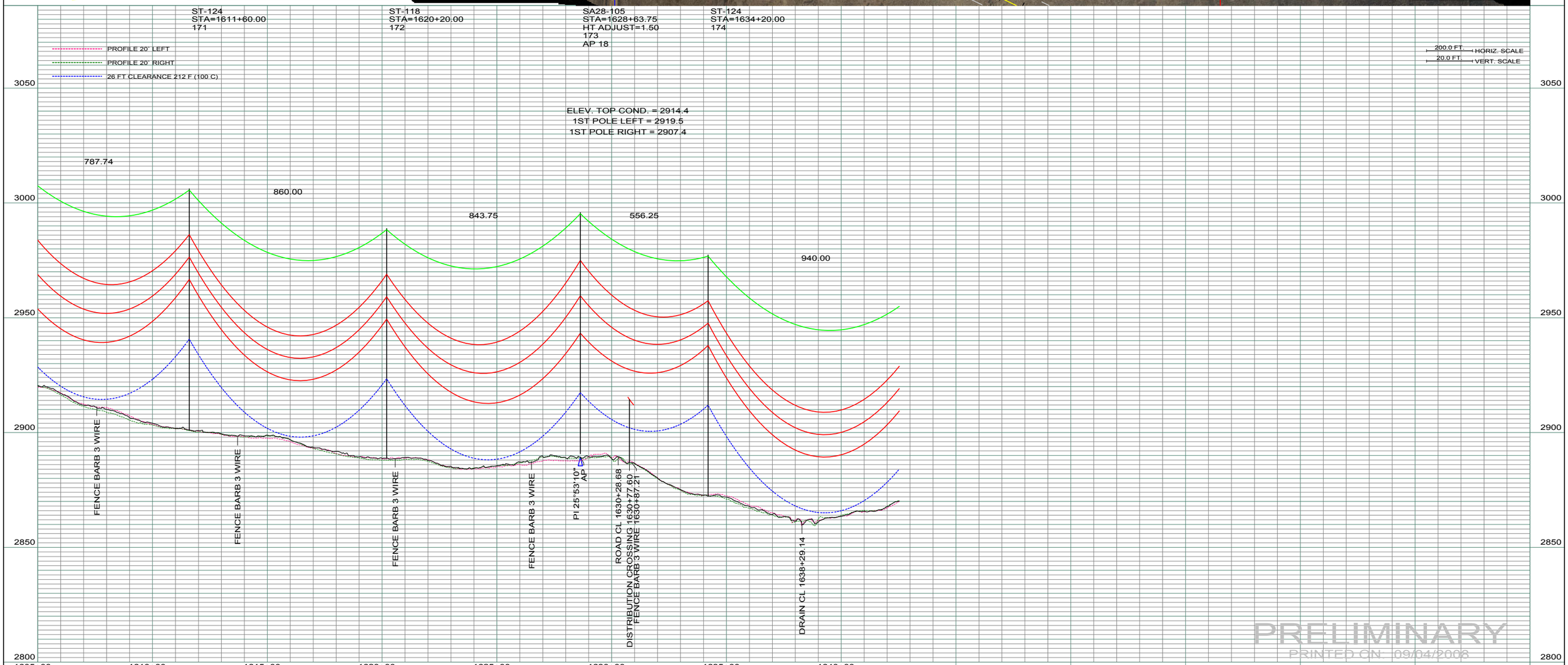
MILE 23 & 24

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN | COUNTY NAME: BOWMAN

BASIN DRAWING NO. 181-90-T3-027 | REV. 1





PRELIMINARY
PRINTED ON: 09/04/2008

REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

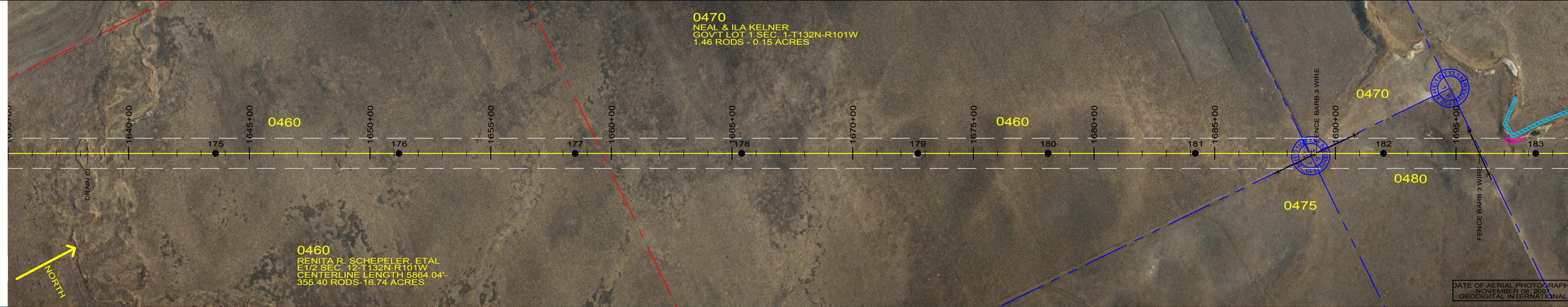
RHAME TO BELFIELD 230KV TRANSMISSION LINE

PLAN AND PROFILE

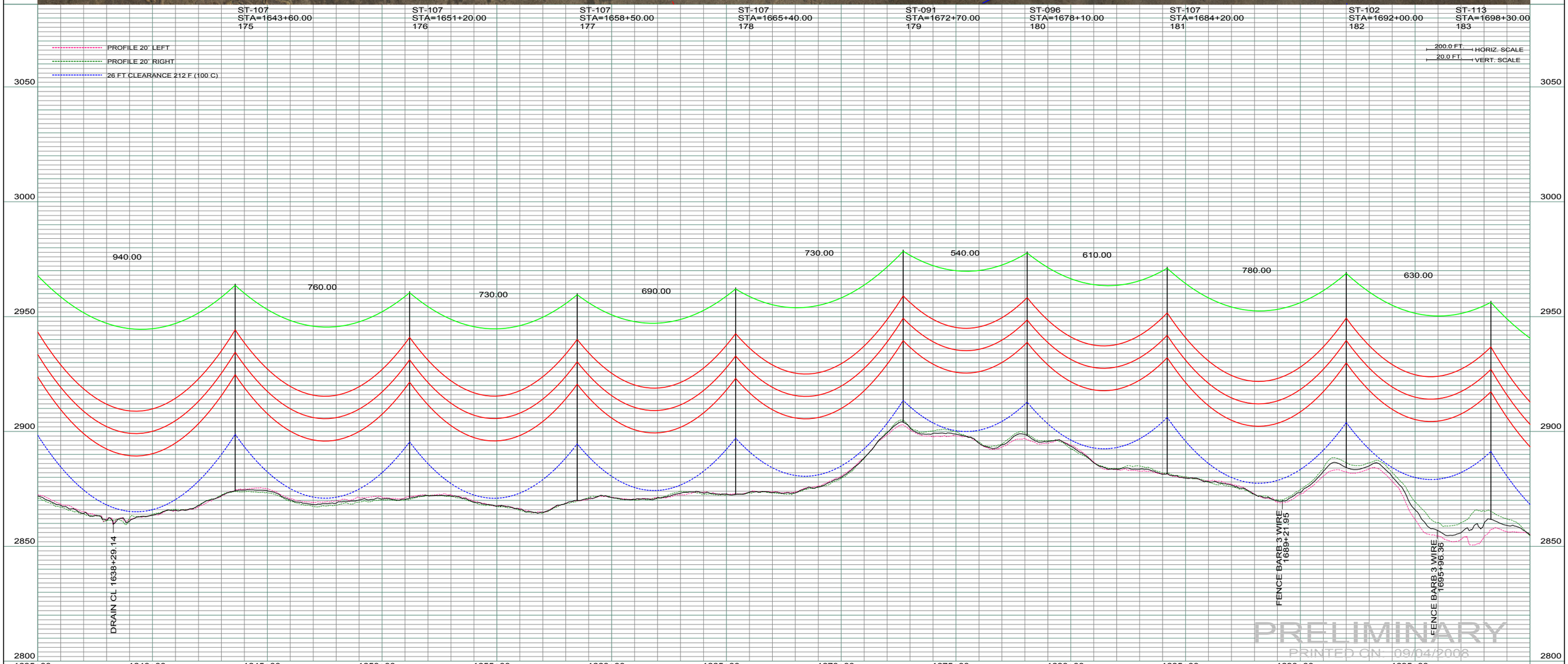
MILE 24

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE:	COUNTY NAME:
AS SHOWN	SLOPE
BASIN DRAWING NO.	REV.
181-90-T3-028	1



ST-107	ST-107	ST-107	ST-107	ST-091	ST-096	ST-107	ST-102	ST-113
STA=1643+60.00	STA=1651+20.00	STA=1658+50.00	STA=1665+40.00	STA=1672+70.00	STA=1678+10.00	STA=1684+20.00	STA=1692+00.00	STA=1698+30.00
175	176	177	178	179	180	181	182	183



REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE

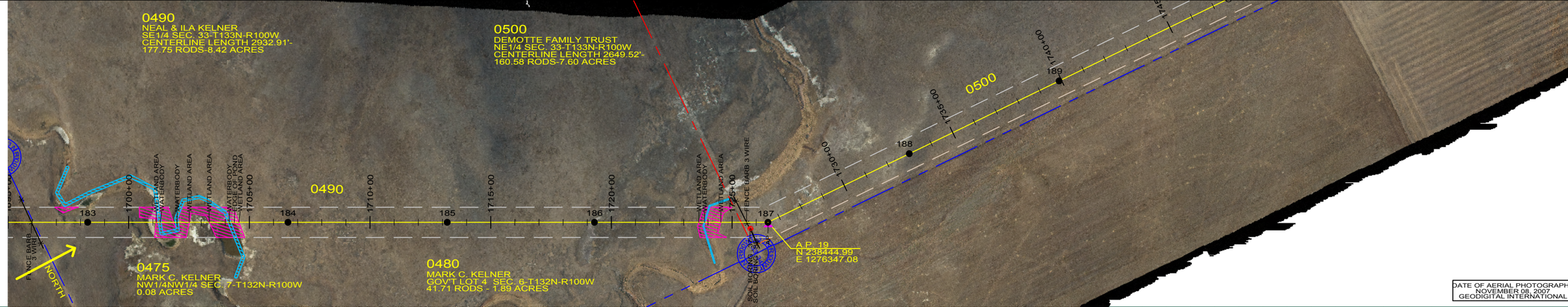
PLAN AND PROFILE

MILE 24 & 25

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN | COUNTY NAME: SLOPE

BASIN DRAWING NO. 181-90-T3-029 | REV. 1



ST-113
STA=1698+30.00
183

ST-107
STA=1706+60.00
184

ST-091
STA=1713+20.00
185

ST-118
STA=1719+30.00
186

SA28-090
STA=1726+49.11
HT ADJUST=1.50
187
AP 19

ST-102
STA=1733+00.00
188

ST-118
STA=1739+90.00
189

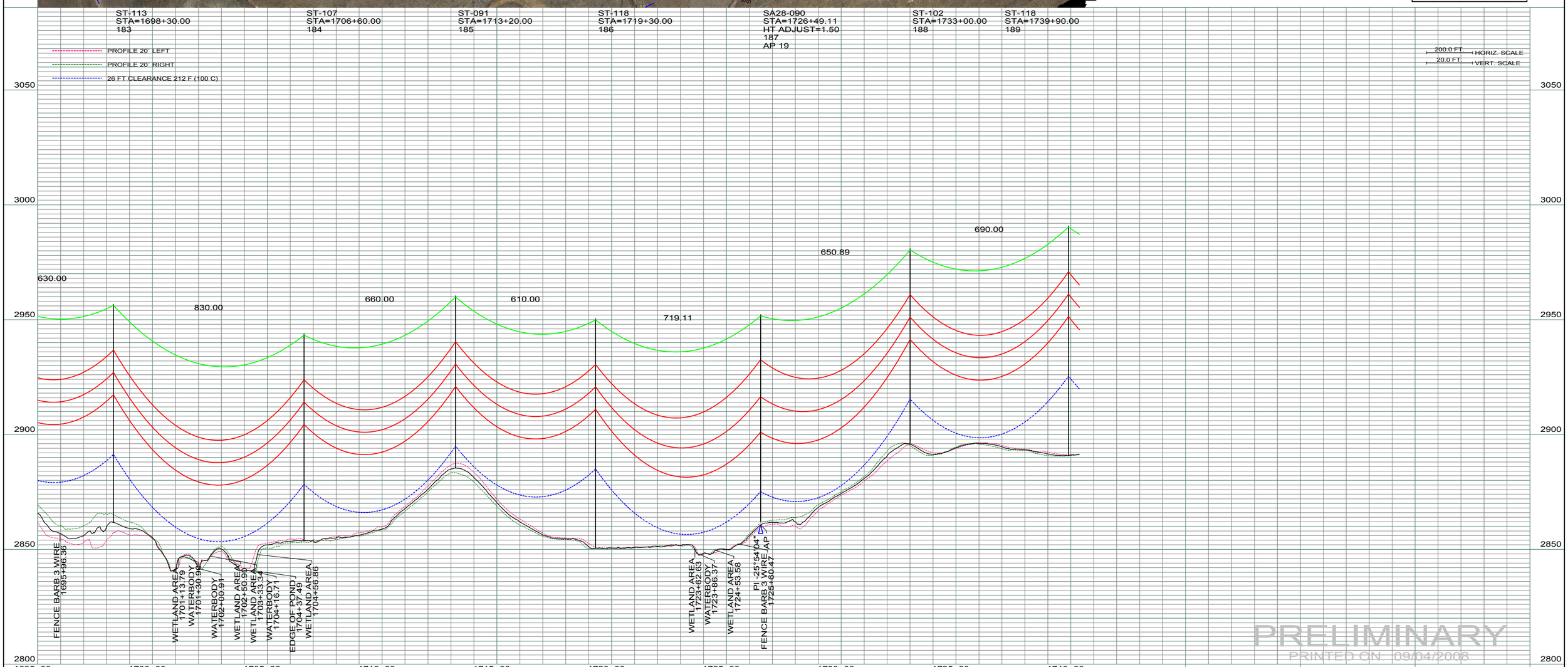
PROFILE 20' LEFT

PROFILE 20' RIGHT

26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE

20.0 FT. VERT. SCALE



PRELIMINARY
PRINTED ON: 09/04/2008

REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE

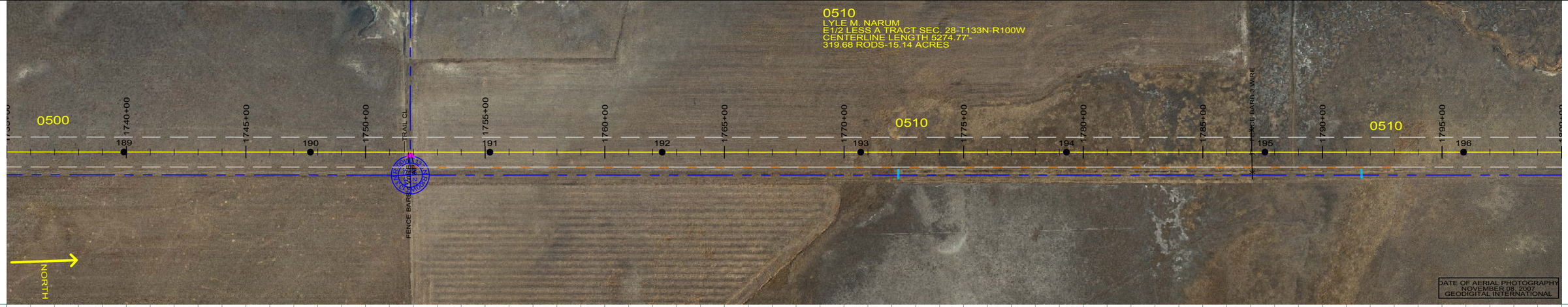
PLAN AND PROFILE

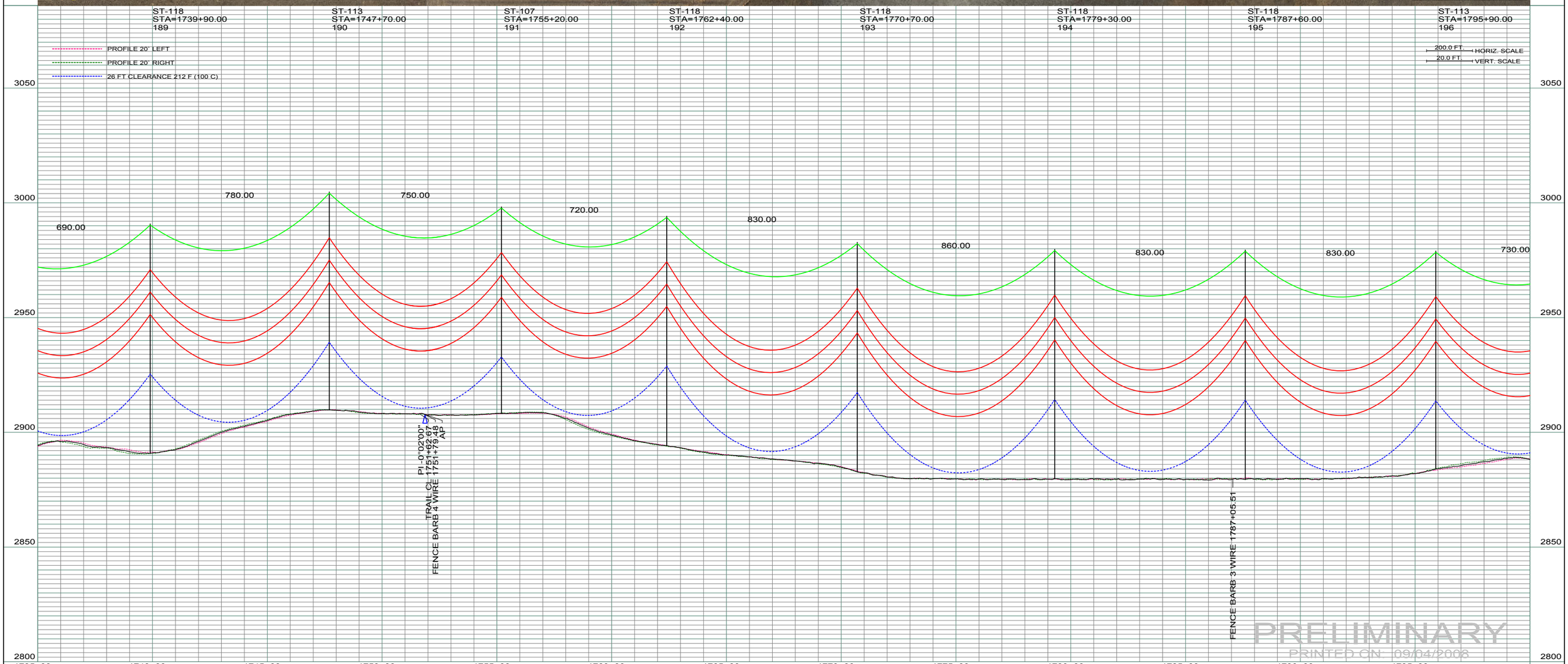
MILE 25 & 26

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN | COUNTY NAME: SLOPE

BASIN DRAWING NO. 181-90-T3-030 | REV. 1





REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

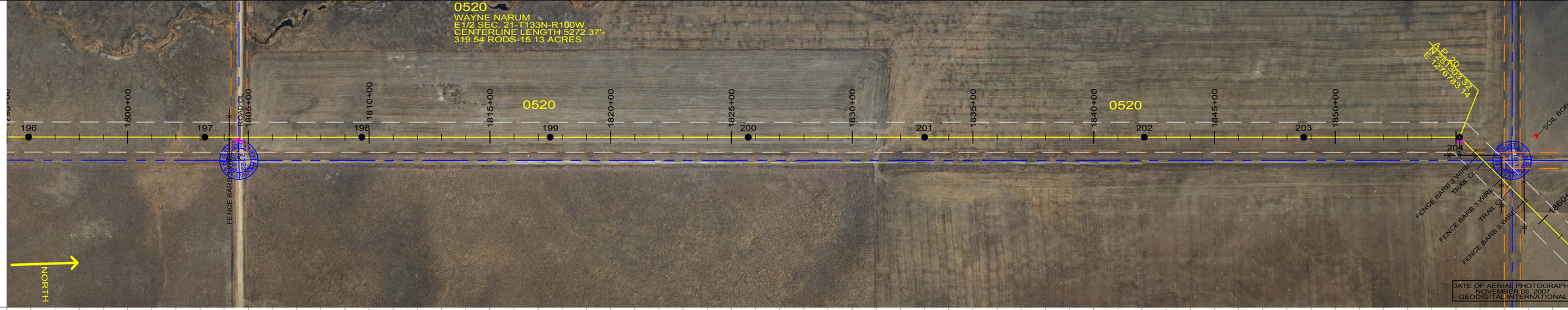
RHAME TO BELFIELD 230KV TRANSMISSION LINE

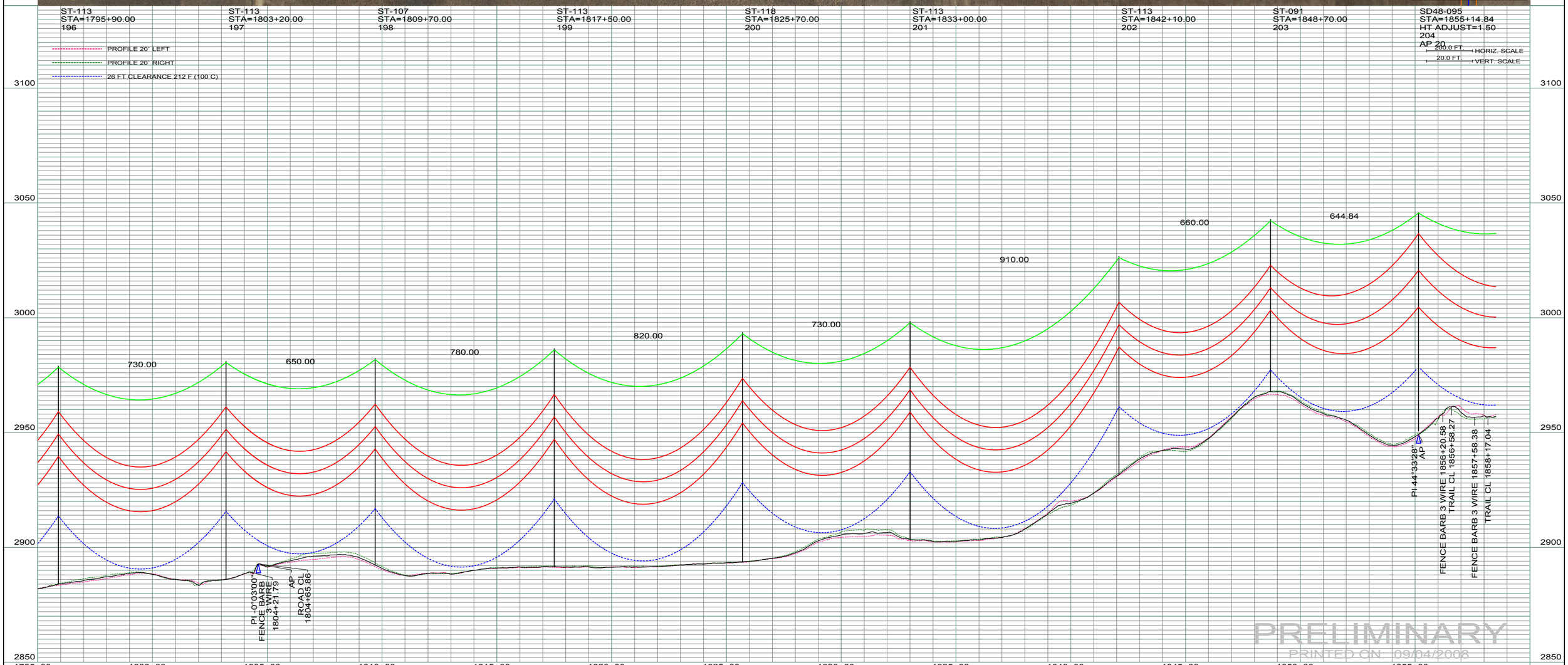
PLAN AND PROFILE

MILE 26 & 27

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE:	COUNTY NAME:
AS SHOWN	SLOPE
BASIN DRAWING NO.	REV.
181-90-T3-031	1





REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE

PLAN AND PROFILE

MILE 27 & 28

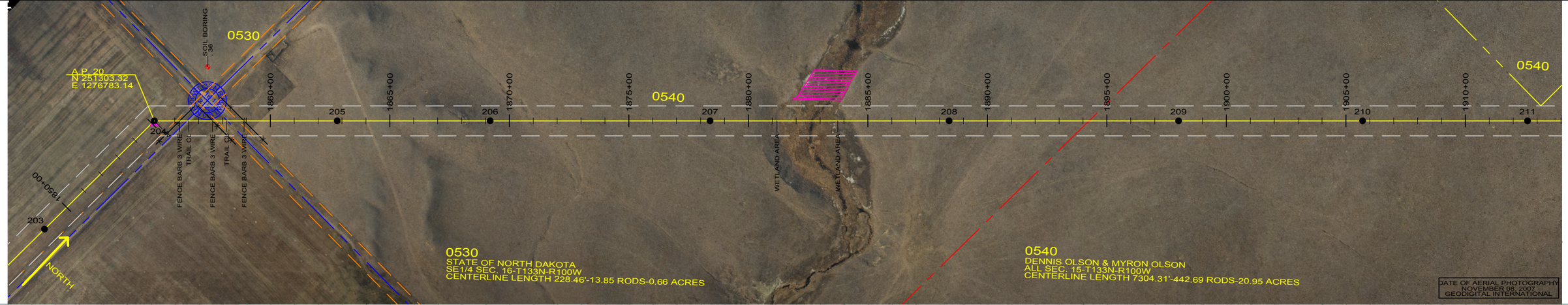
BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

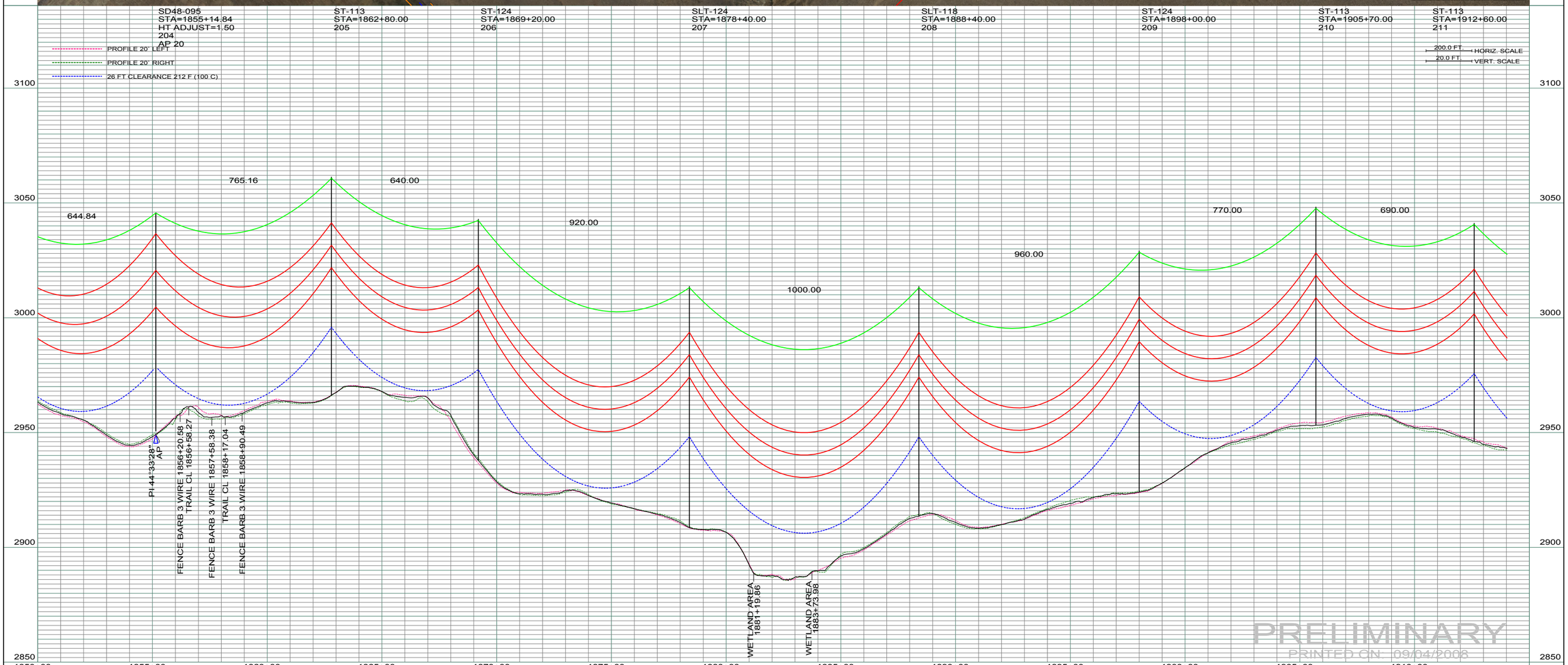
SCALE: AS SHOWN

COUNTY NAME: SLOPE

BASIN DRAWING NO. 181-90-T3-032

REV. 1





REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE

PLAN AND PROFILE

MILE 28 & 30

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN | COUNTY NAME: SLOPE

BASIN DRAWING NO. 181-90-T3-033 | REV. 1

DATE OF AERIAL PHOTOGRAPHY
NOVEMBER 08, 2007
GEODIGITAL INTERNATIONAL

ST-113
STA=1905+70.00
210

ST-113
STA=1912+60.00
211

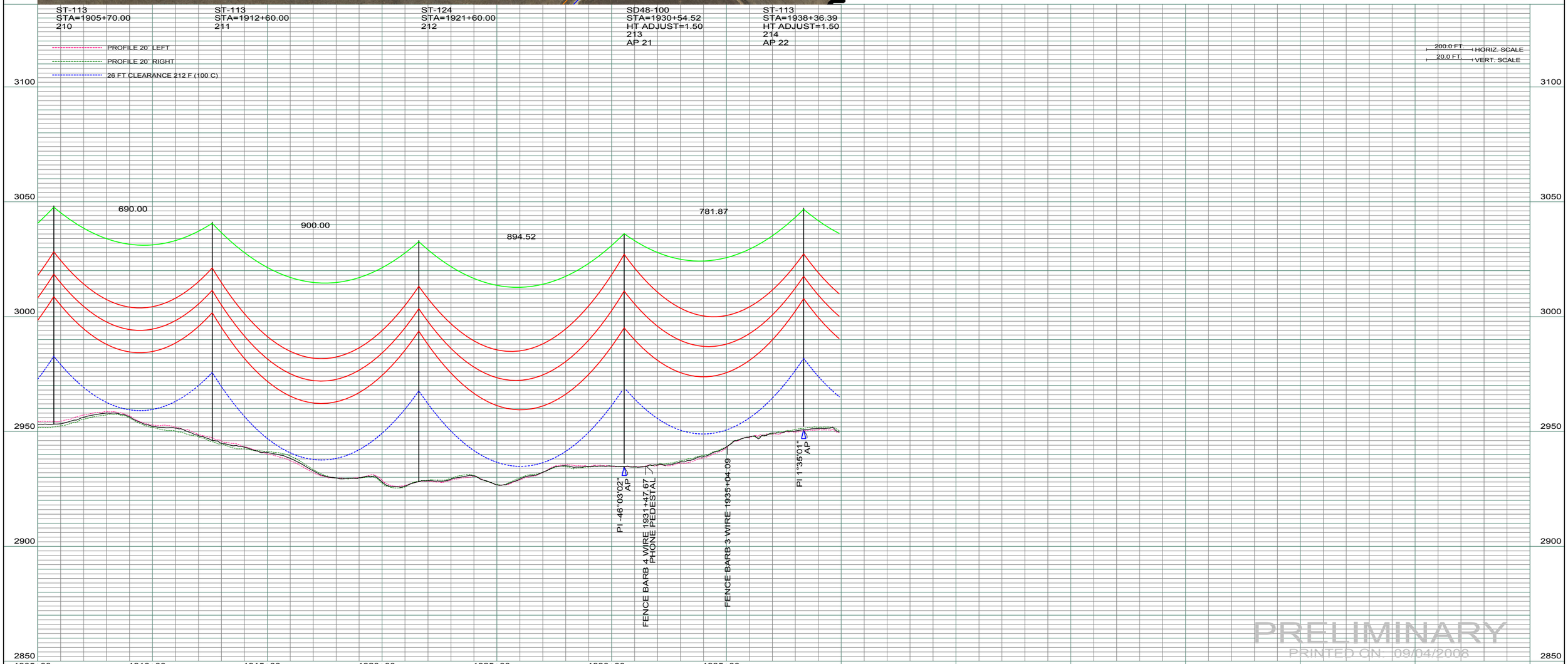
ST-124
STA=1921+60.00
212

SD48-100
STA=1930+54.52
HT ADJUST=1.50
213
AP 21

ST-113
STA=1938+36.39
HT ADJUST=1.50
214
AP 22

PROFILE 20' LEFT
PROFILE 20' RIGHT
26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE



PRELIMINARY
PRINTED ON: 09/04/2008

REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

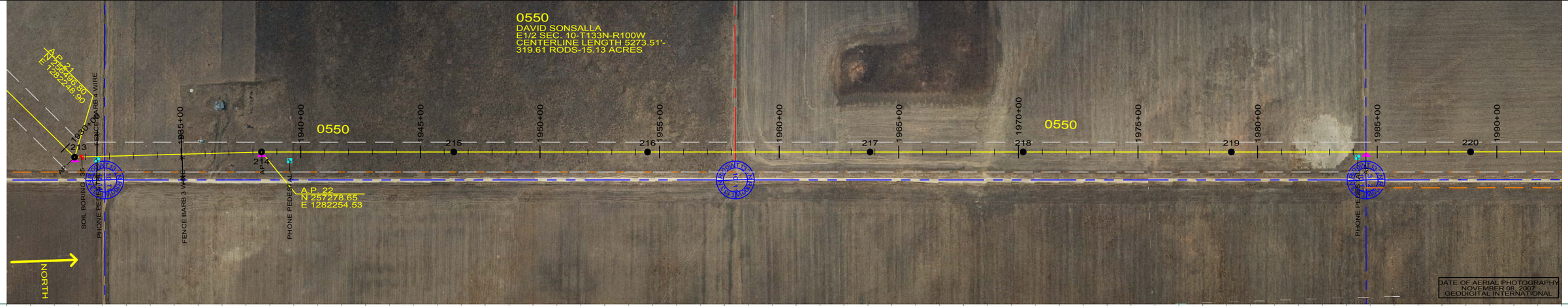
DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE
LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE
PLAN AND PROFILE
MILE 29 & 30

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE:	COUNTY NAME:
AS SHOWN	SLOPE
BASIN DRAWING NO.	REV.
181-90-T3-034	1



SD48-100
STA=1930+54.52
HT ADJUST=1.50
213
AP 21

ST-113
STA=1938+36.39
HT ADJUST=1.50
214
AP 22

ST-113
STA=1946+40.00
215

ST-118
STA=1954+50.00
216

ST-124
STA=1963+80.00
217

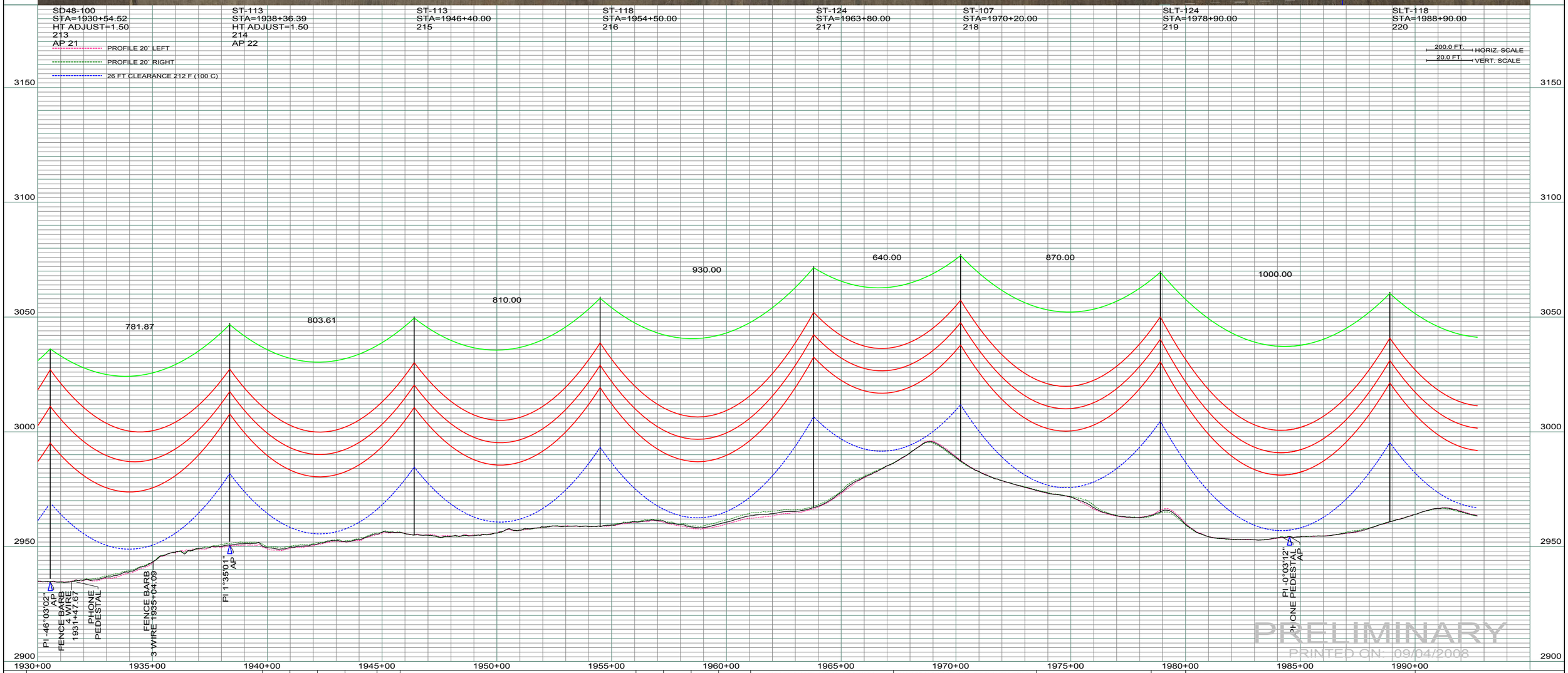
ST-107
STA=1970+20.00
218

SLT-124
STA=1978+90.00
219

SLT-118
STA=1988+90.00
220

PROFILE 20' LEFT
PROFILE 20' RIGHT
26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE



REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

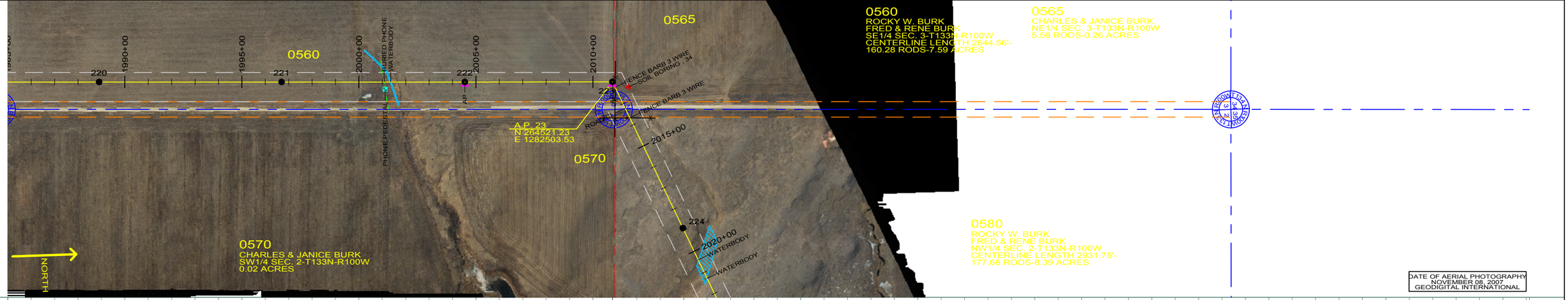
RHAME TO BELFIELD 230KV TRANSMISSION LINE

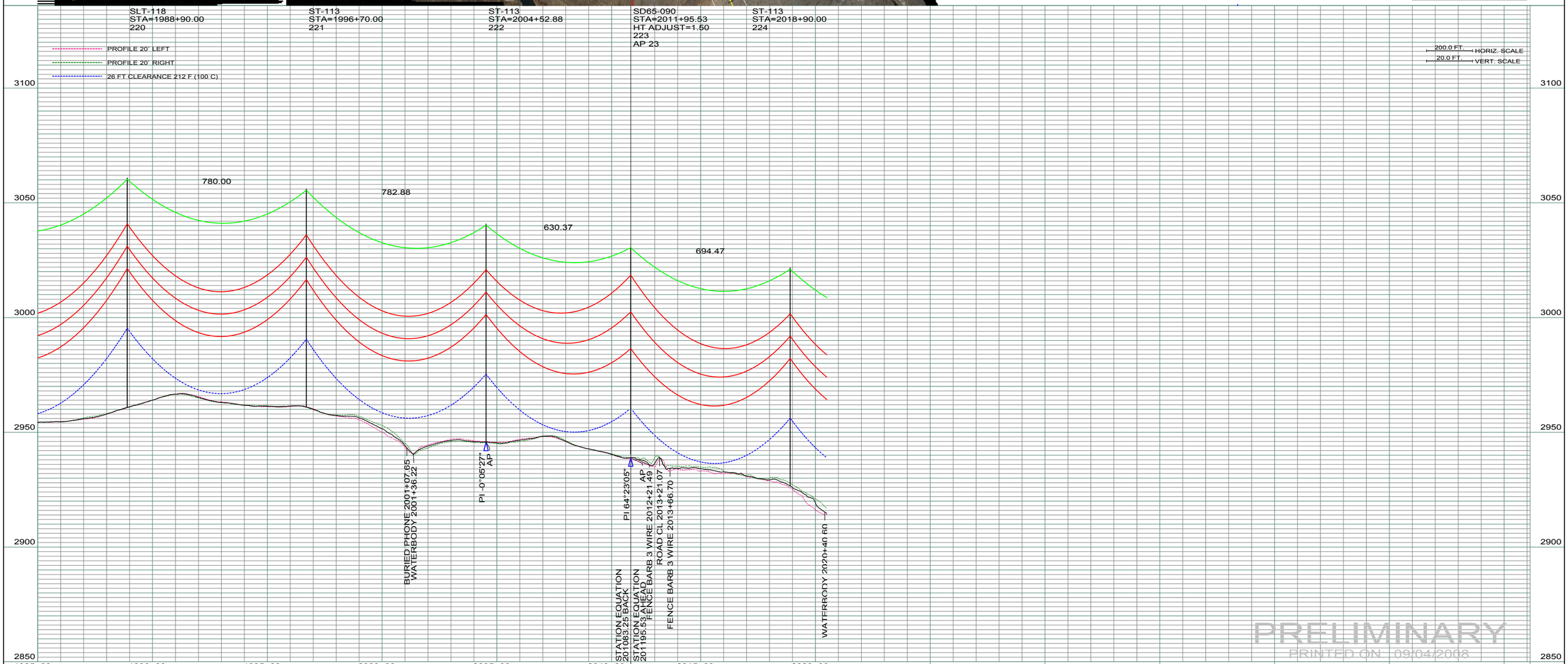
PLAN AND PROFILE

MILE 30 & 31

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN
COUNTY NAME: SLOPE
BASIN DRAWING NO. 181-90-T3-035
REV. 1





REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE

PLAN AND PROFILE

MILE 31

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE:	COUNTY NAME:
AS SHOWN	SLOPE
BASIN DRAWING NO.	REV.
181-90-T3-036	1

ST-113
STA=2018+90.00
224

ST-091
STA=2025+20.00
225

ST-113
STA=2033+50.00
226

ST-107
STA=2040+90.00
227

ST-107
STA=2047+90.00
228

ST-118
STA=2055+40.00
229

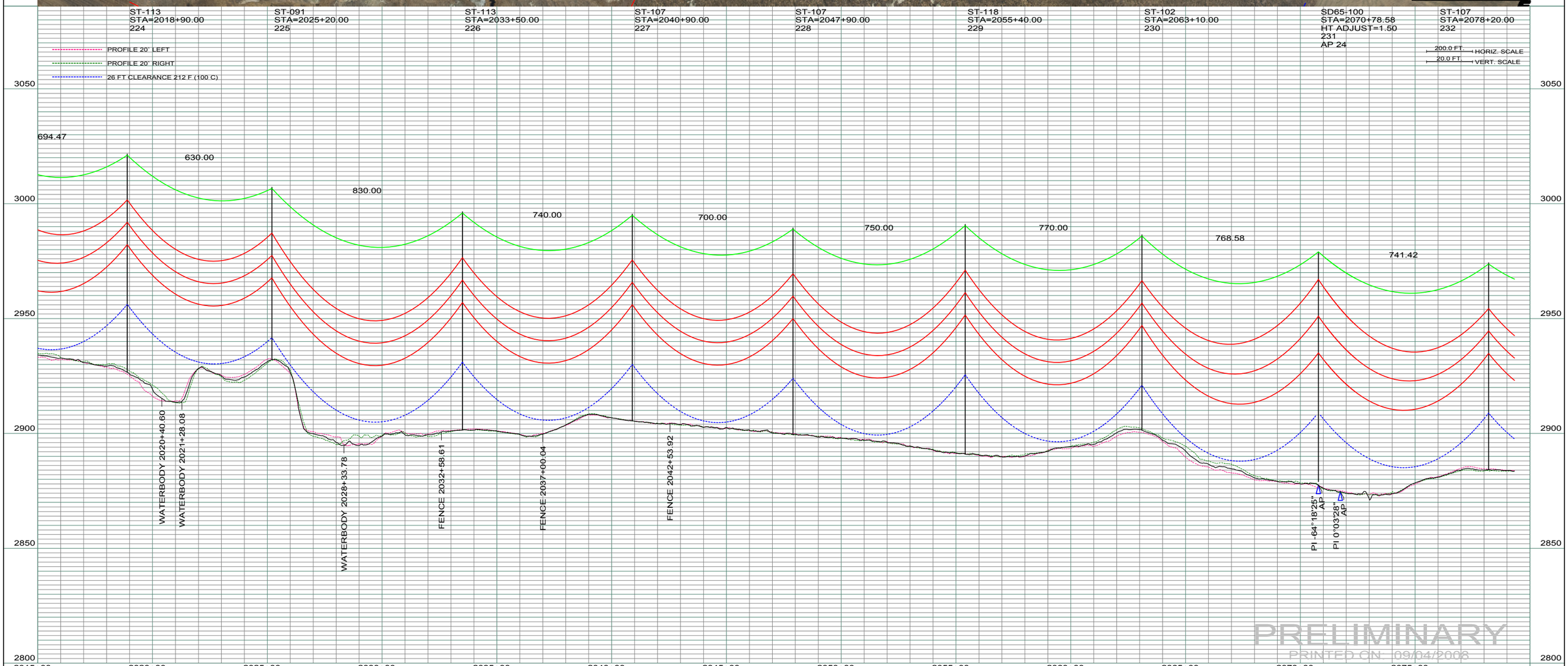
ST-102
STA=2063+10.00
230

SD65-100
STA=2070+78.58
HT ADJUST=1.50
231
AP 24

ST-107
STA=2078+20.00
232

PROFILE 20' LEFT
PROFILE 20' RIGHT
26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE



PRELIMINARY
PRINTED ON: 09/04/2008

REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

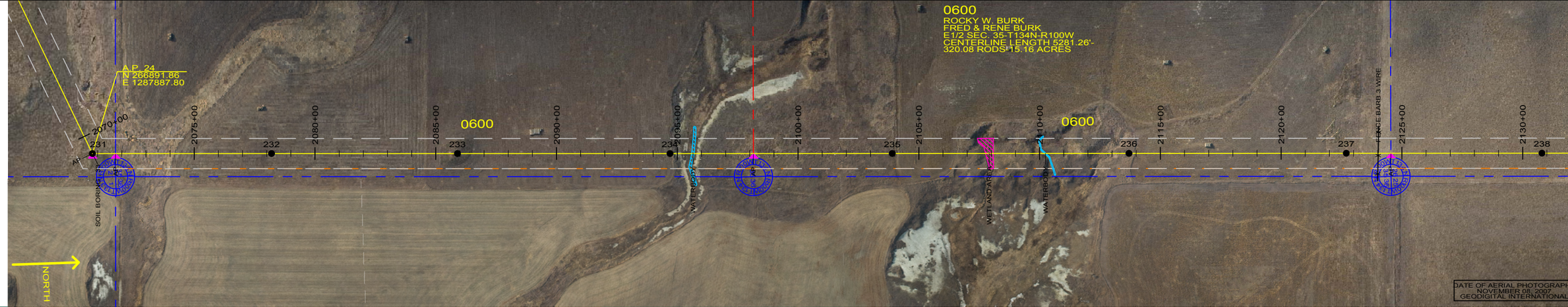
DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

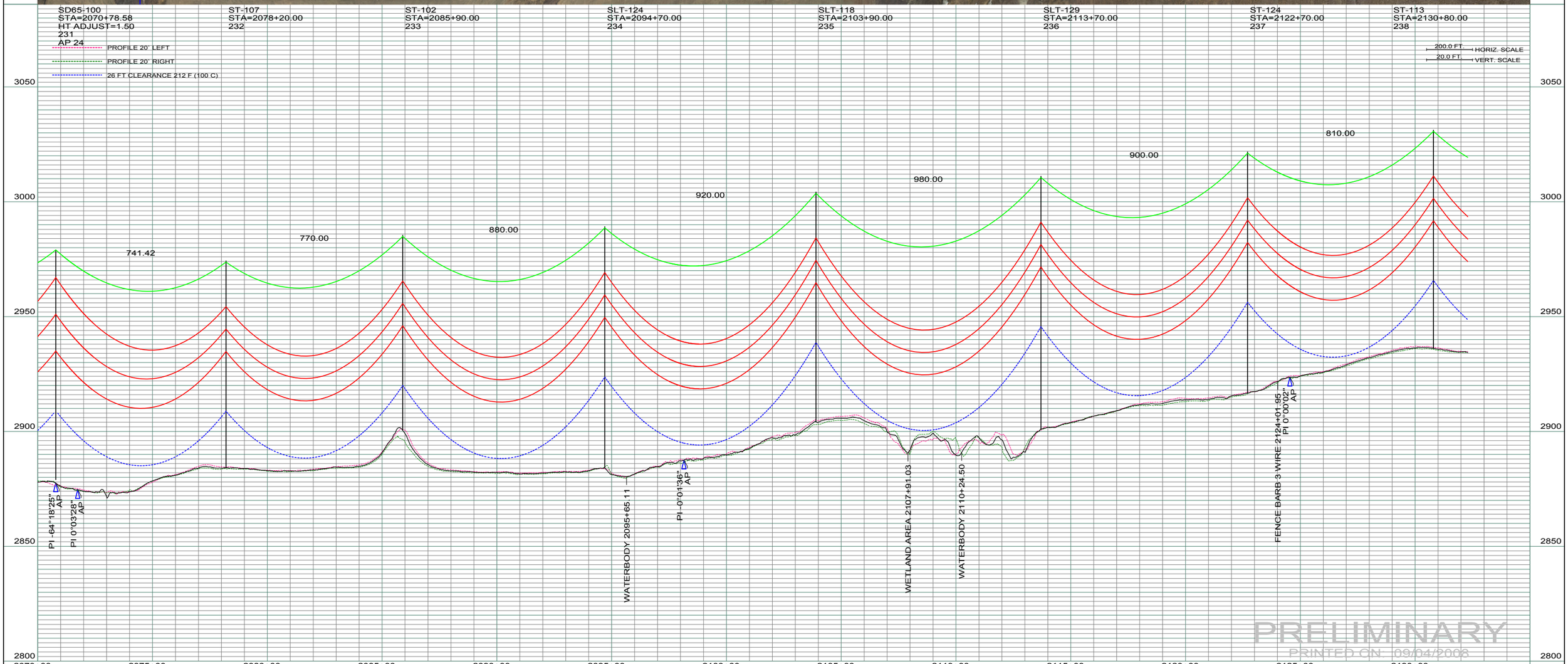
FACILITY: TRANSMISSION SYSTEM MAINTENANCE
LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE
PLAN AND PROFILE
MILE 31 & 33

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN
COUNTY NAME: SLOPE
BASIN DRAWING NO. 181-90-T3-037
REV. 1





REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE

PLAN AND PROFILE

MILE 32 & 34

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN | COUNTY NAME: SLOPE

BASIN DRAWING NO. 181-90-T3-038 | REV. 1

ST-113
STA=2130+80.00
238

ST-107
STA=2138+40.00
239

SLT-129
STA=2147+50.00
240

ST-113
STA=2156+80.00
241

ST-113
STA=2162+70.00
242

ST-118
STA=2172+10.00
243

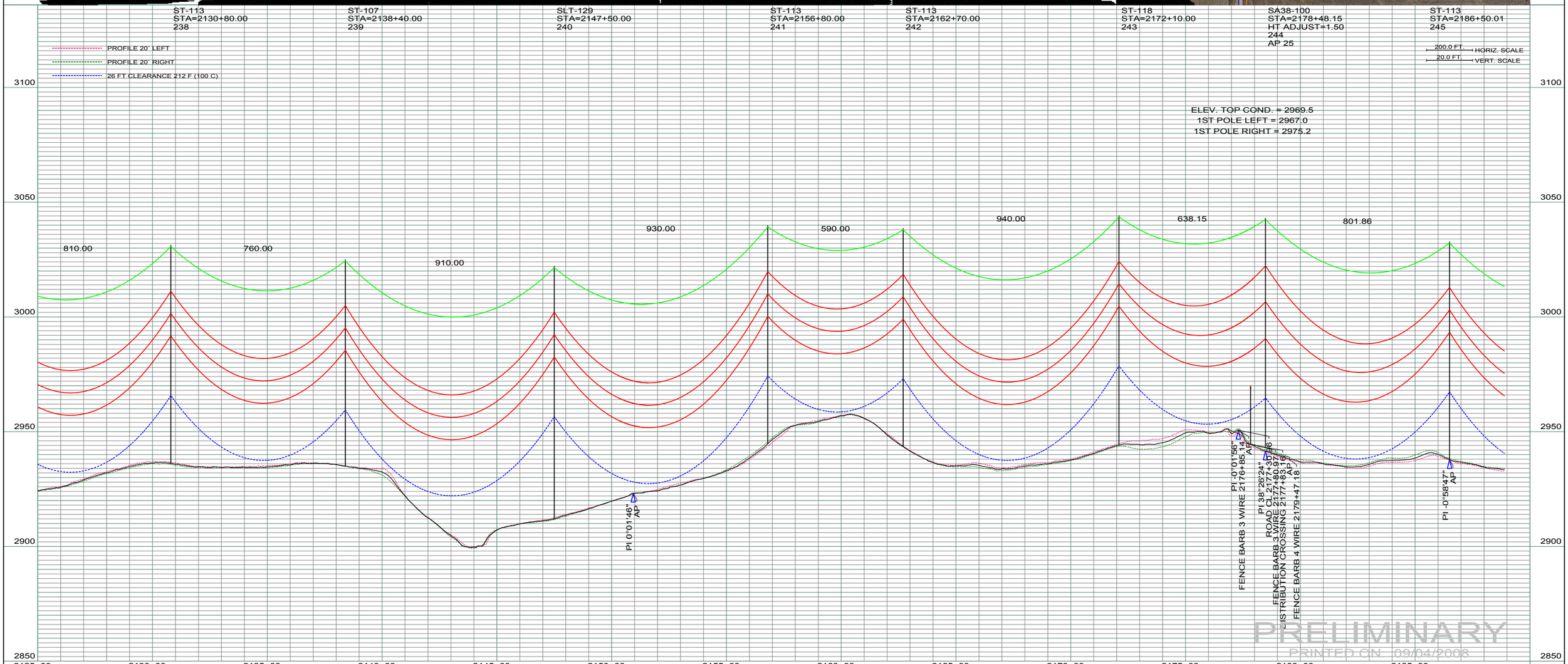
SA38-100
STA=2178+48.15
HT ADJUST=1.50
244
AP 25

ST-113
STA=2186+50.01
245

PROFILE 20' LEFT
PROFILE 20' RIGHT
26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE

ELEV. TOP COND. = 2969.5
1ST POLE LEFT = 2967.0
1ST POLE RIGHT = 2975.2



PRELIMINARY
PRINTED ON: 09/04/2008

REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

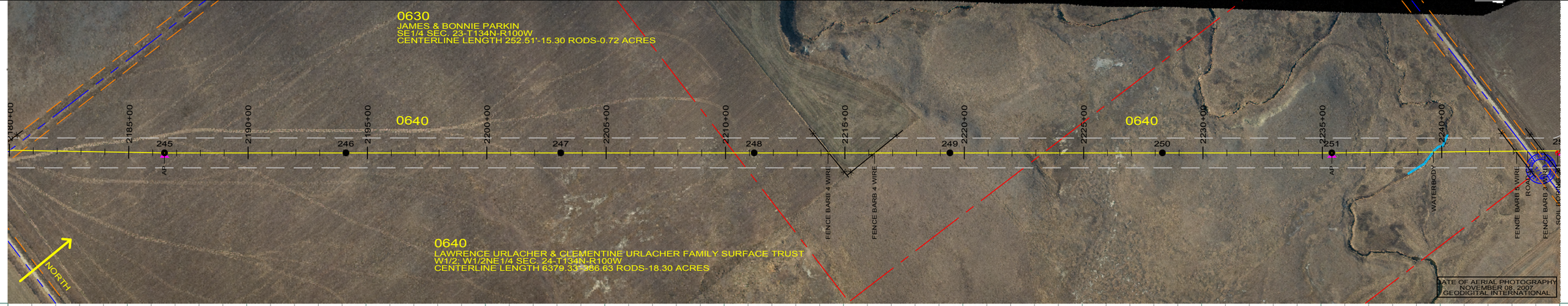
RHAME TO BELFIELD 230KV TRANSMISSION LINE

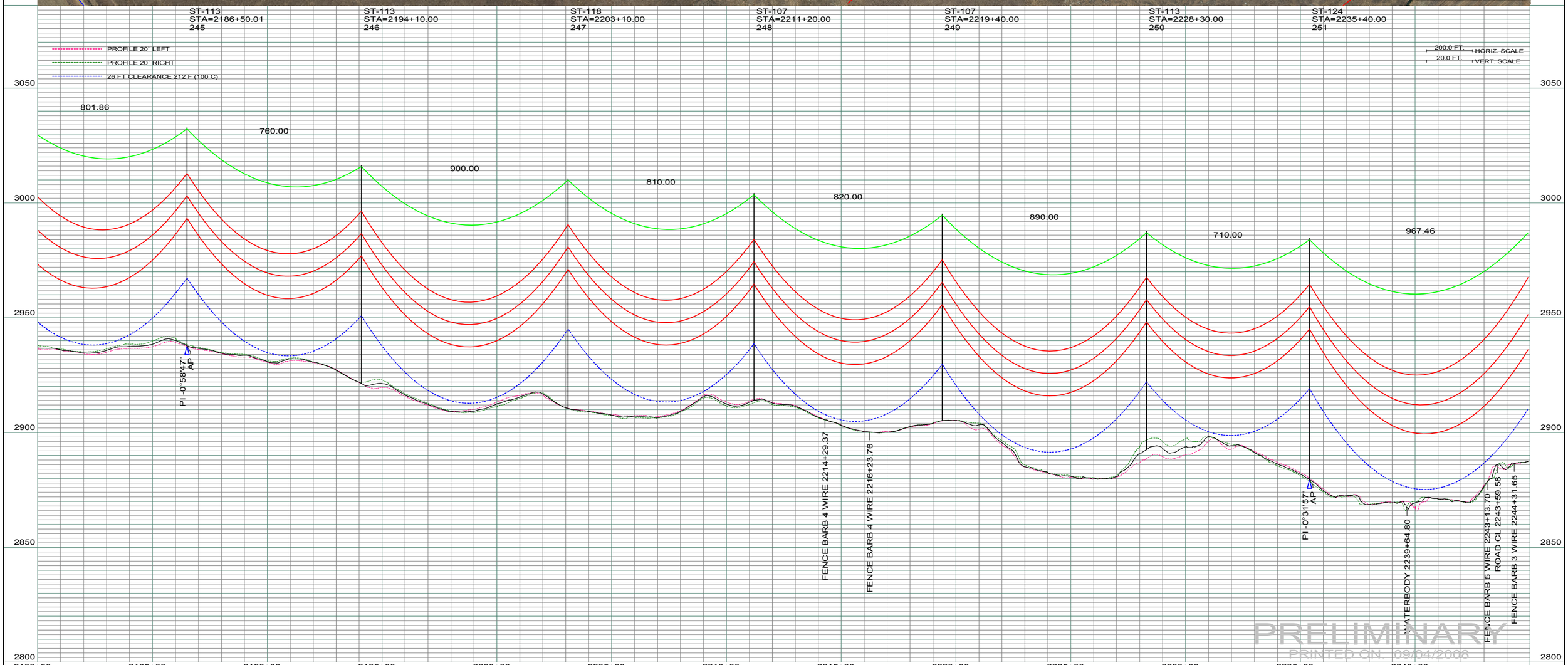
PLAN AND PROFILE

MILE 33 & 35

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE:	COUNTY NAME:
AS SHOWN	SLOPE
BASIN DRAWING NO.	REV.
181-90-T3-039	1





REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

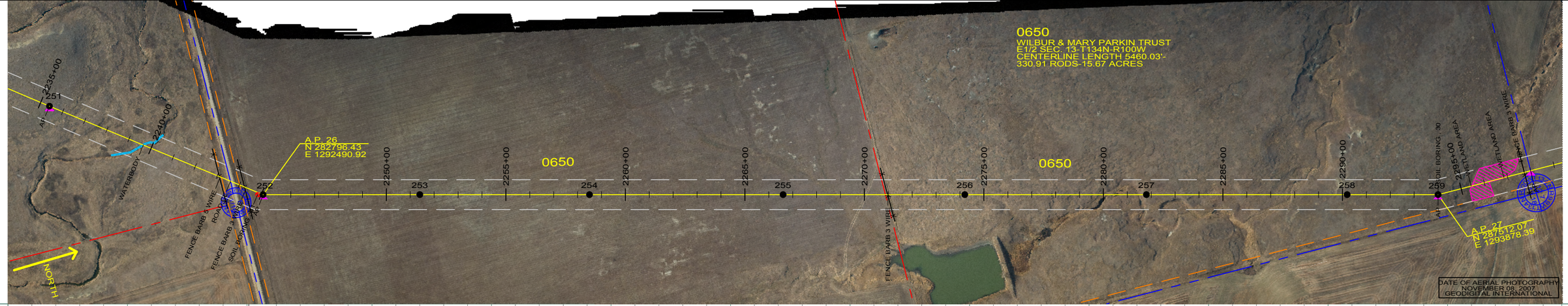
RHAME TO BELFIELD 230KV TRANSMISSION LINE

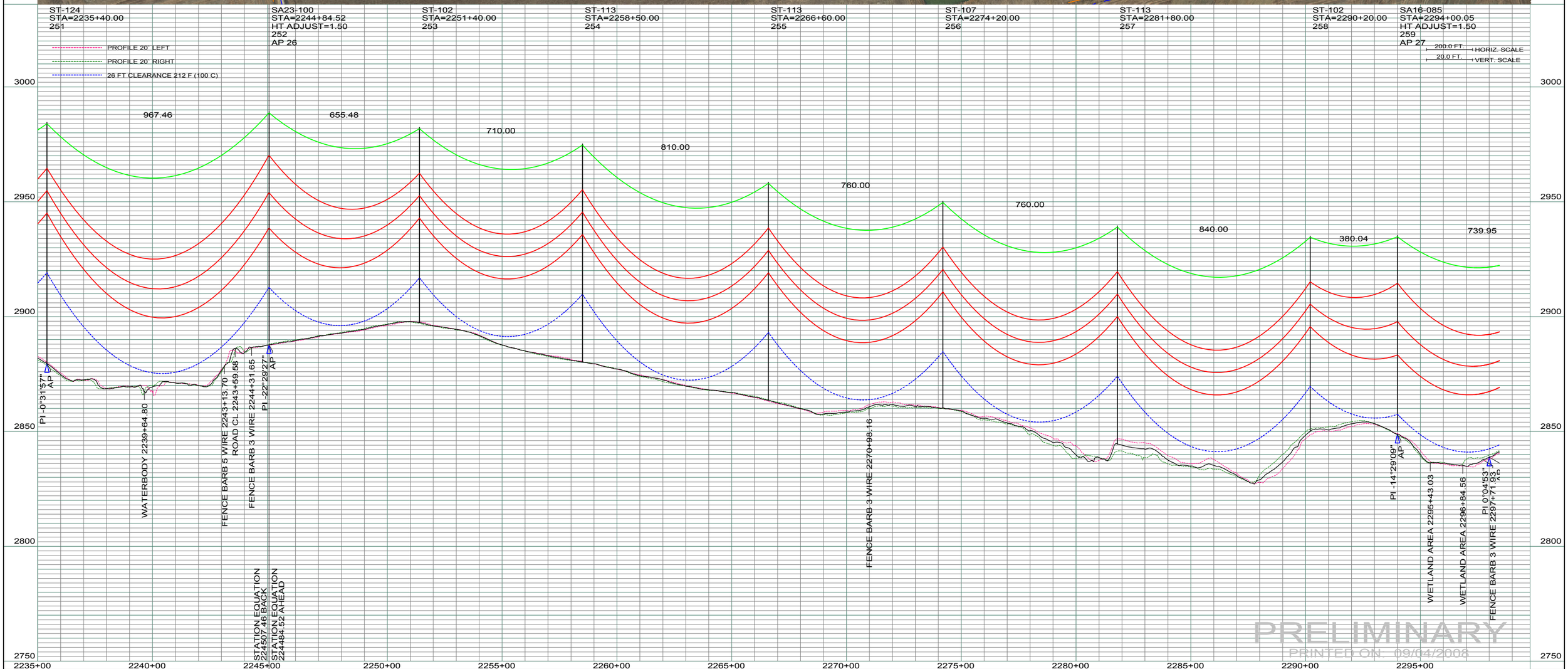
PLAN AND PROFILE

MILE 35 & 36

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE:	COUNTY NAME:
AS SHOWN	SLOPE
BASIN DRAWING NO.	REV.
181-90-T3-040	1





REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA — NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE

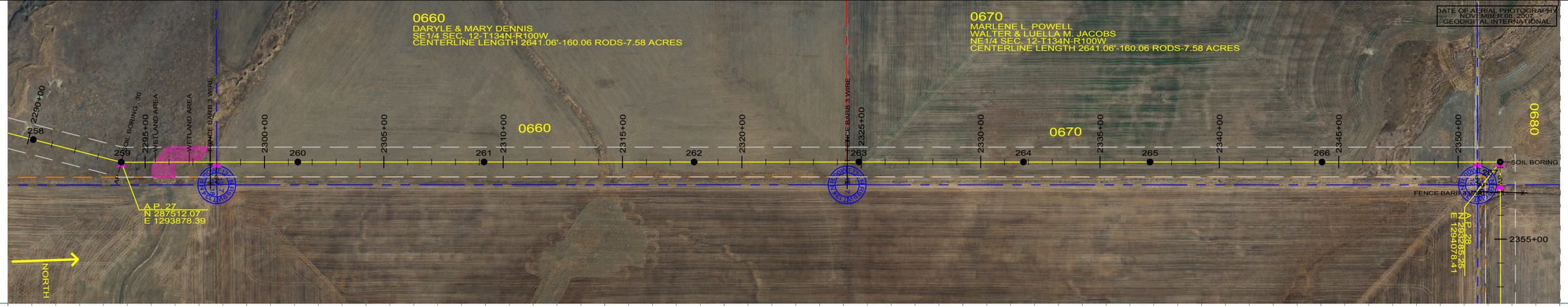
PLAN AND PROFILE

MILE 36 & 37

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE:	COUNTY NAME:
AS SHOWN	SLOPE

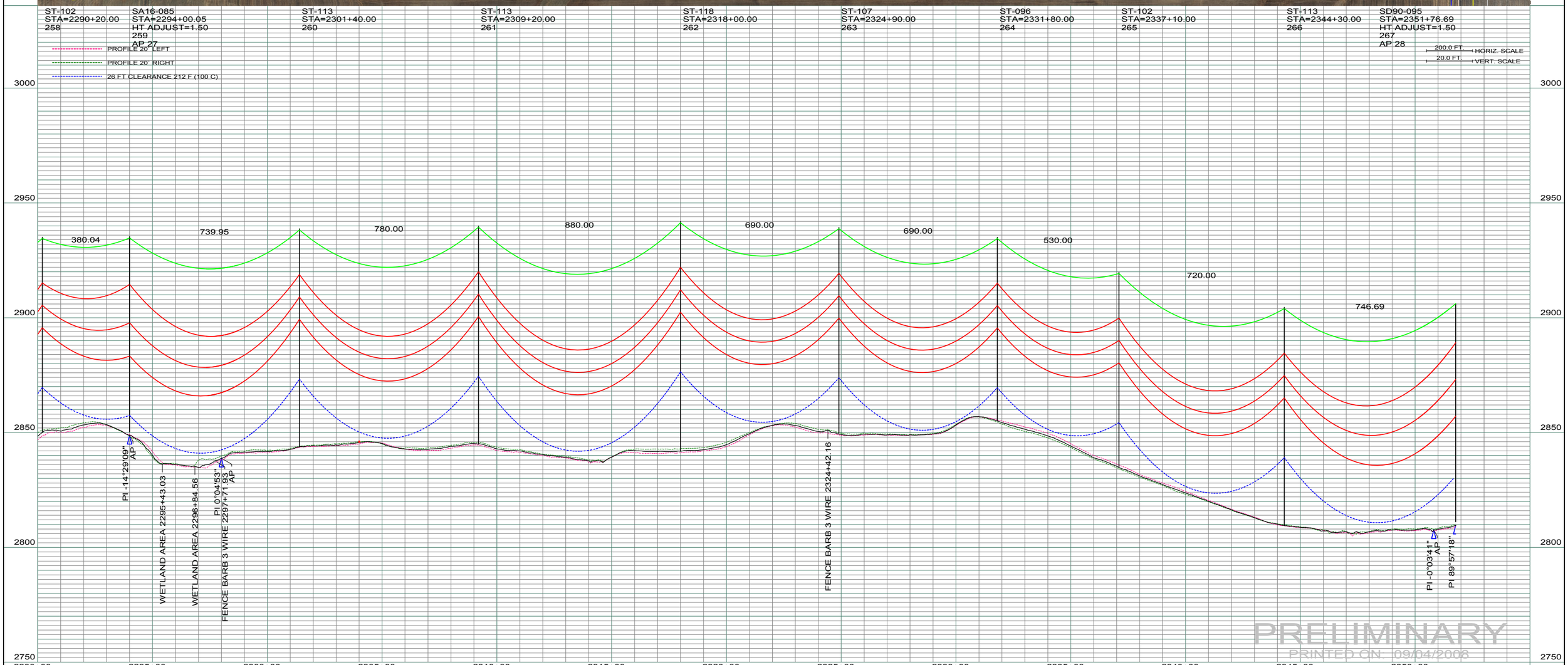
BASIN DRAWING NO.	REV.
181-90-T3-041	1



ST-102	SA16-085	ST-113	ST-113	ST-118	ST-107	ST-096	ST-102	ST-113	SD90-095
STA=2290+20.00	STA=2294+00.05	STA=2301+40.00	STA=2309+20.00	STA=2318+00.00	STA=2324+90.00	STA=2331+80.00	STA=2337+10.00	STA=2344+30.00	STA=2351+76.69
258	HT ADJUST=1.50	260	261	262	263	264	265	266	HT ADJUST=1.50
	259								267
	AP 27								AP 28

PROFILE 20' LEFT
PROFILE 20' RIGHT
26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE



PRELIMINARY
PRINTED ON: 09/04/2008

REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	09-05-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

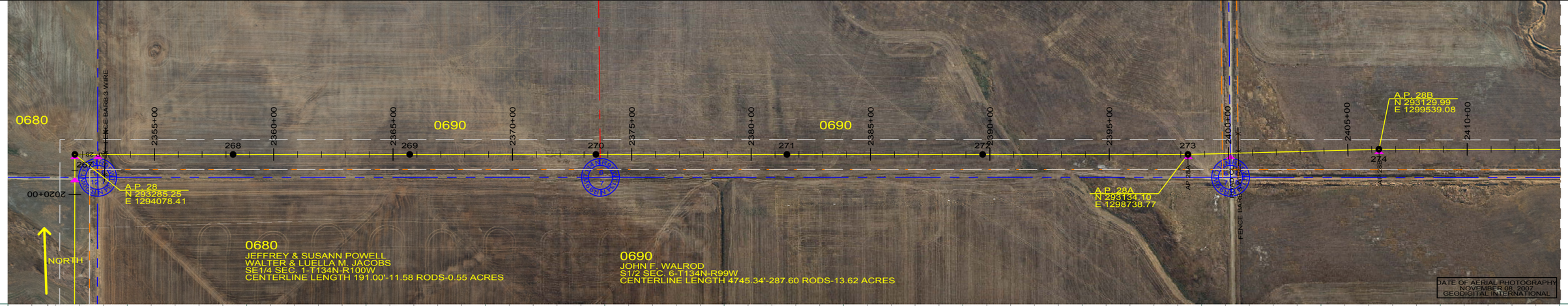
DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

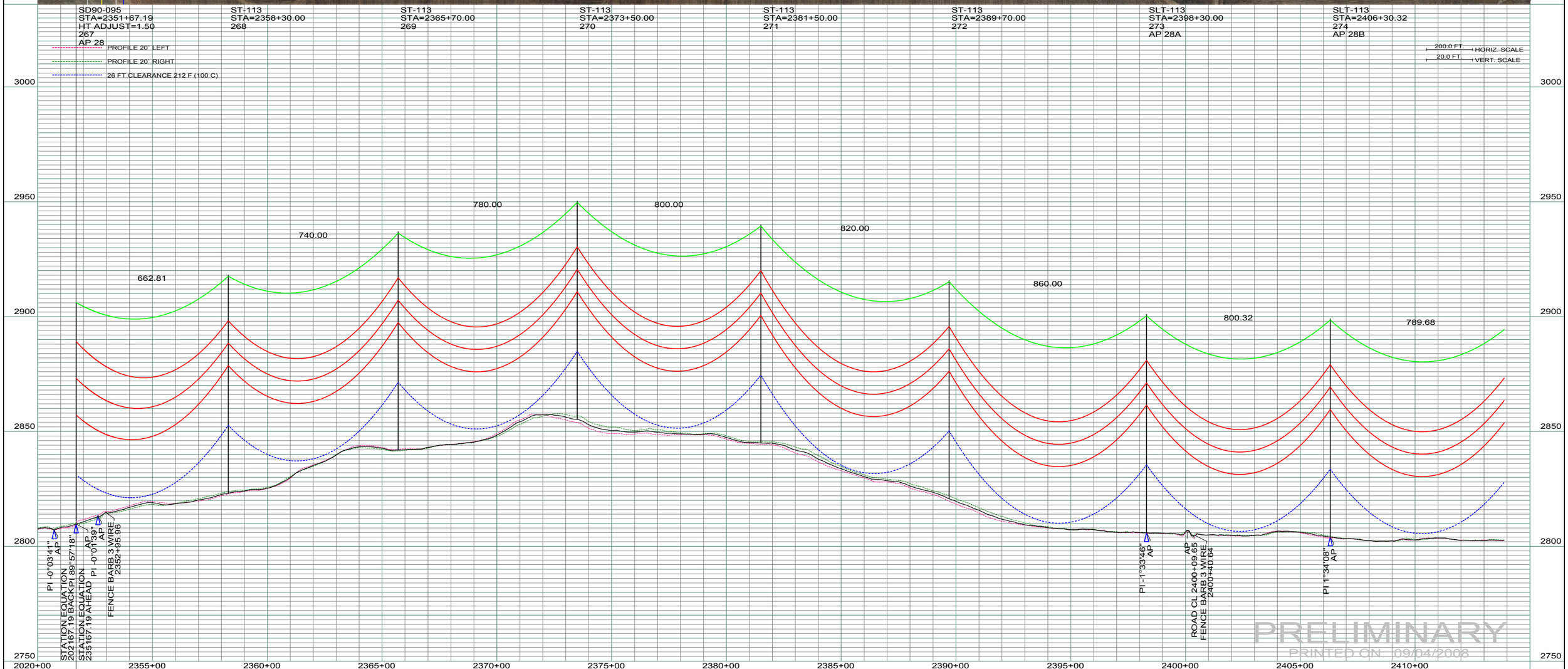
FACILITY: TRANSMISSION SYSTEM MAINTENANCE
LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE
PLAN AND PROFILE
MILE 37 & 38

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN
COUNTY NAME: SLOPE
BASIN DRAWING NO. 181-90-T3-042
REV. 1





REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE

PLAN AND PROFILE

MILE 38 & 39

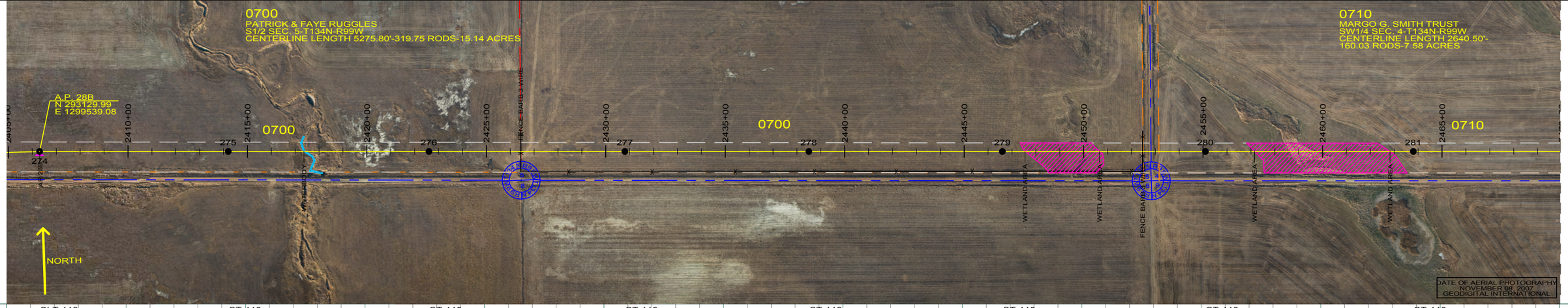
BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN

COUNTY NAME: BOWMAN

BASIN DRAWING NO. 181-090-T3-043

REV. 1



SLT-113
STA=2406+30.32
274
AP 28B

ST-113
STA=2414+20.00
275

ST-118
STA=2422+60.00
276

ST-113
STA=2430+80.00
277

ST-113
STA=2438+50.00
278

ST-118
STA=2446+60.00
279

ST-113
STA=2455+10.00
280

ST-118
STA=2463+80.00
281

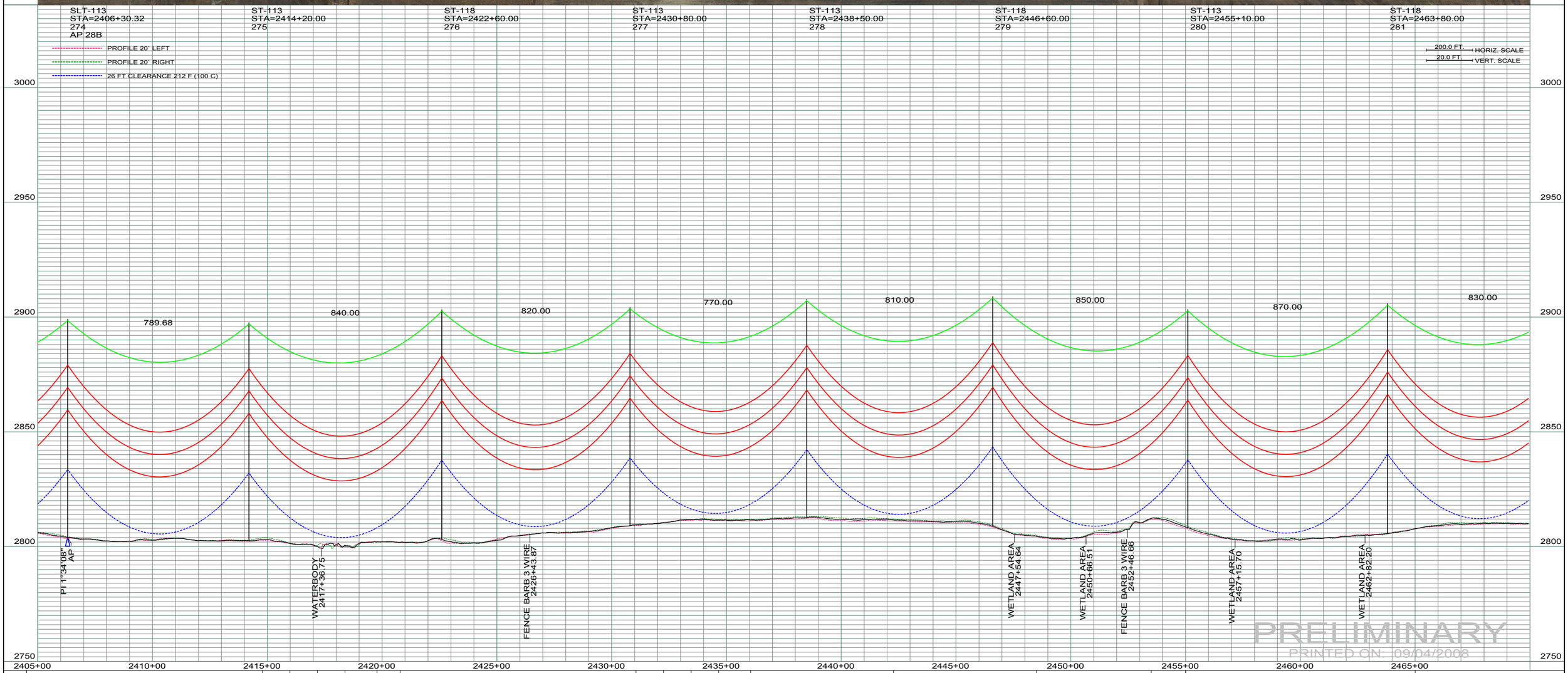
PROFILE 20' LEFT

PROFILE 20' RIGHT

26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE

20.0 FT. VERT. SCALE



REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE

PLAN AND PROFILE

MILE 39 & 40

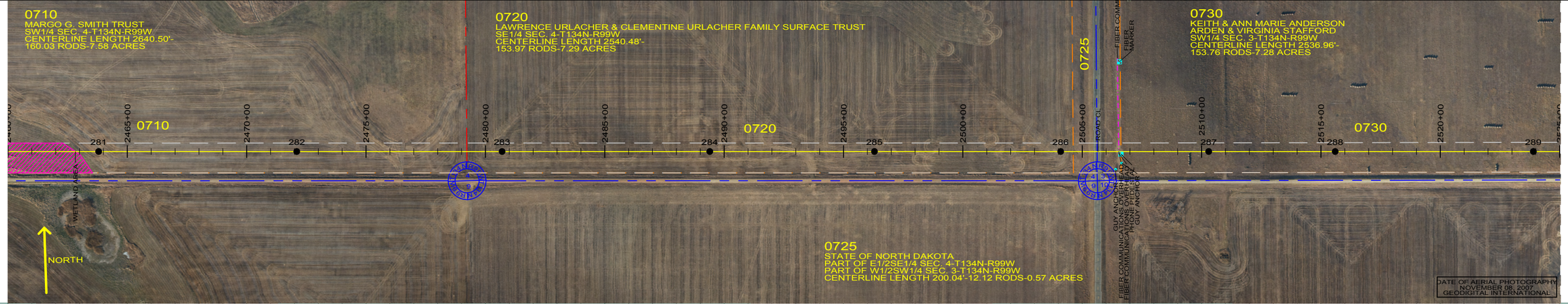
BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN

COUNTY NAME: BOWMAN

BASIN DRAWING NO. 181-090-T3-044

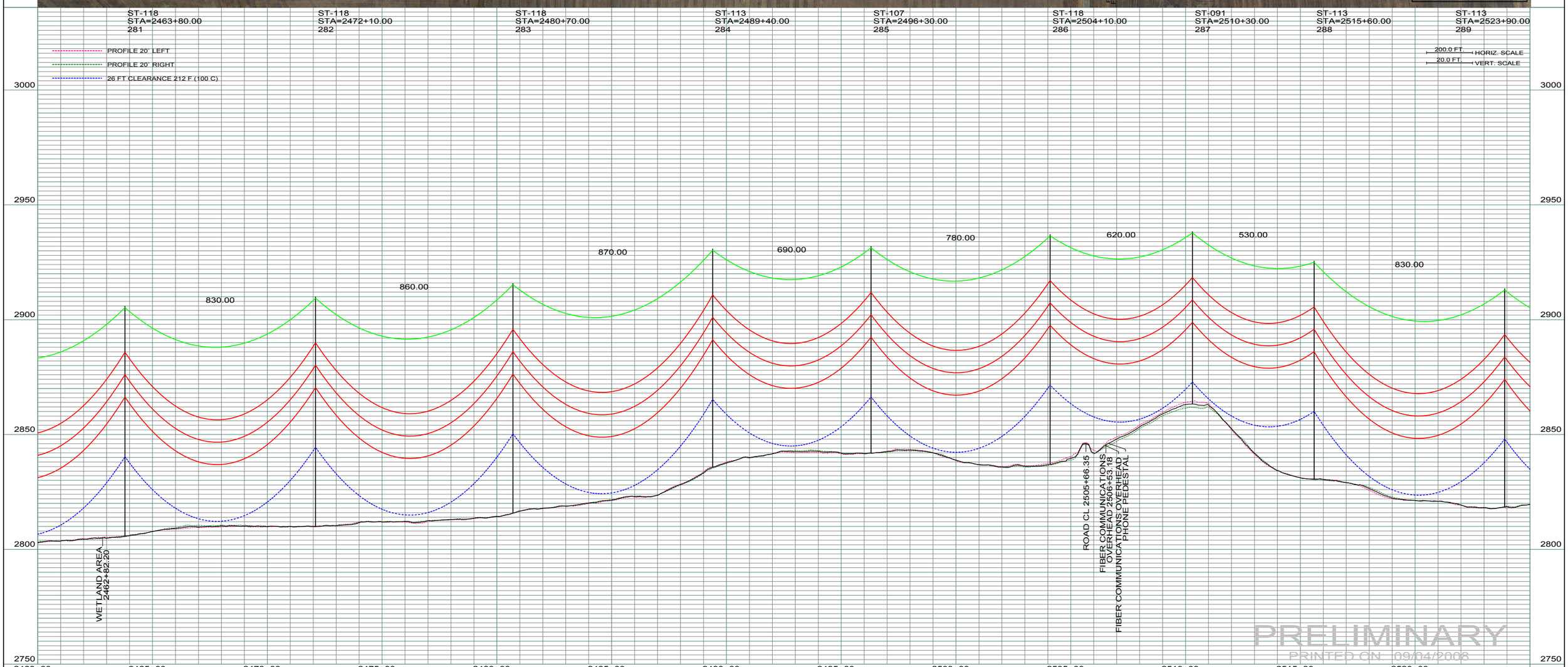
REV. 1



ST-118	ST-118	ST-118	ST-113	ST-107	ST-118	ST-091	ST-113	ST-113
STA=2463+80.00	STA=2472+10.00	STA=2480+70.00	STA=2489+40.00	STA=2496+30.00	STA=2504+10.00	STA=2510+30.00	STA=2515+60.00	STA=2523+90.00
281	282	283	284	285	286	287	288	289

PROFILE 20' LEFT
PROFILE 20' RIGHT
26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE



REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

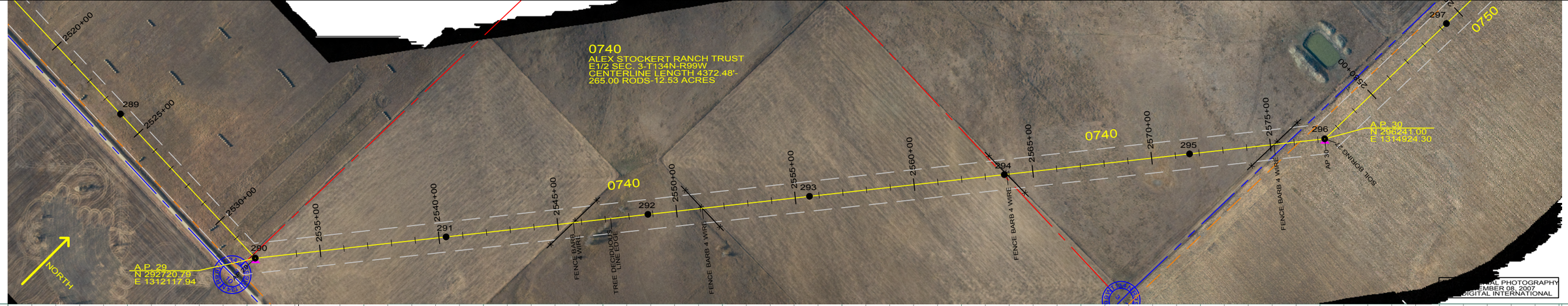
DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

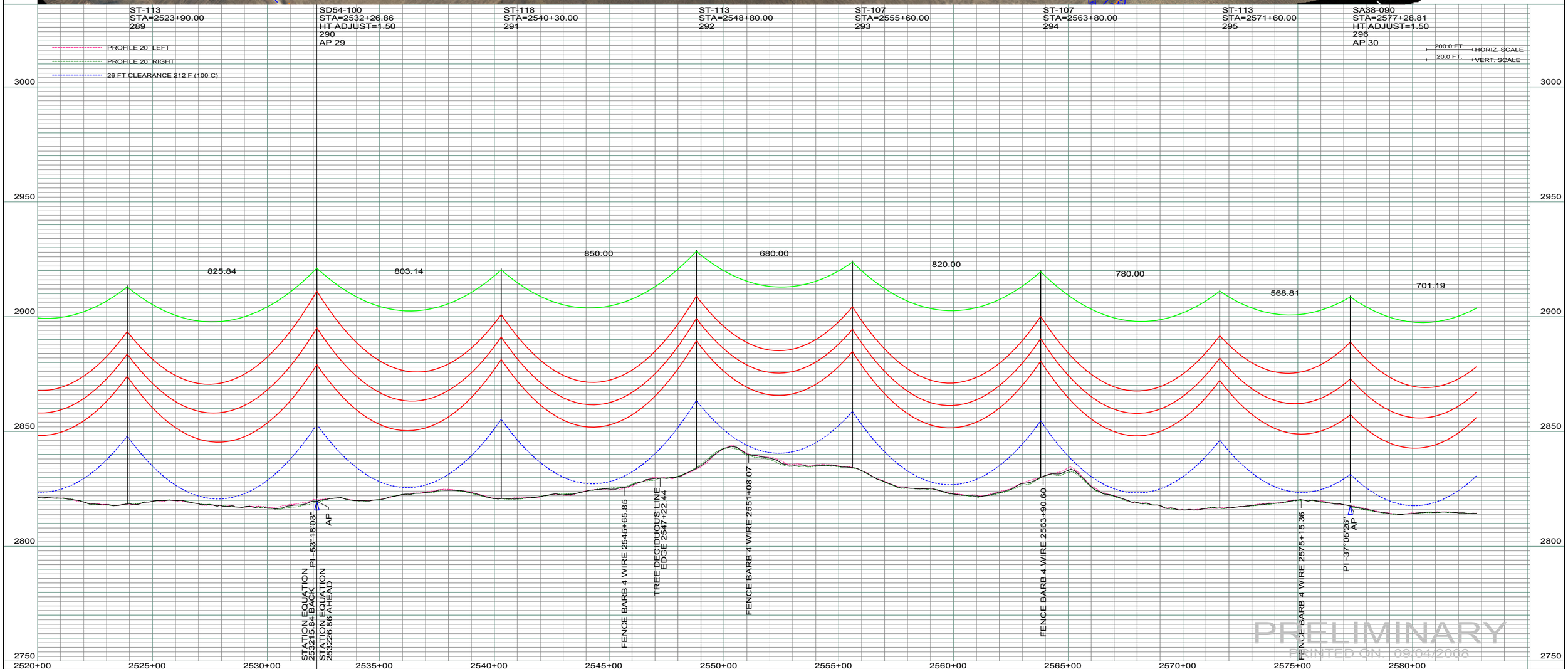
FACILITY: TRANSMISSION SYSTEM MAINTENANCE
LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE
PLAN AND PROFILE
MILE 40 & 41

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN
COUNTY NAME: BOWMAN
BASIN DRAWING NO. 181-090-T3-045
REV. 1





PRELIMINARY
PRINTED ON: 09/04/2008

REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE

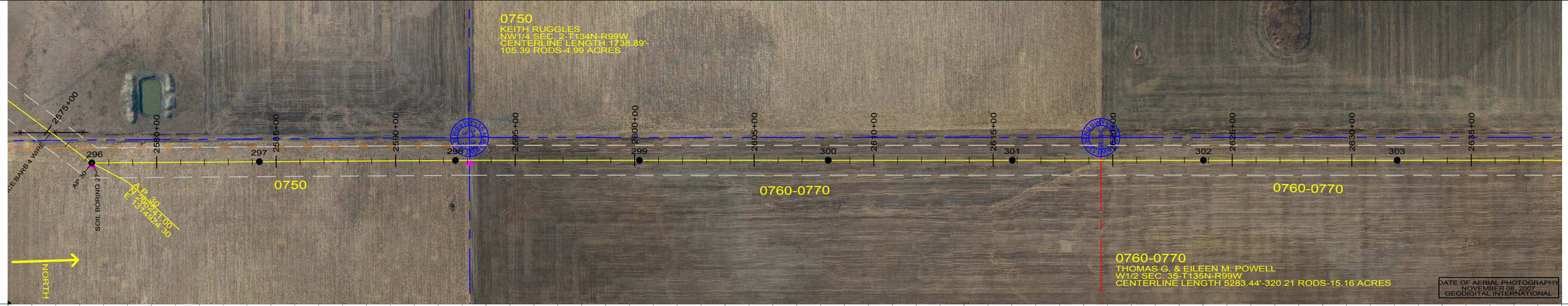
PLAN AND PROFILE

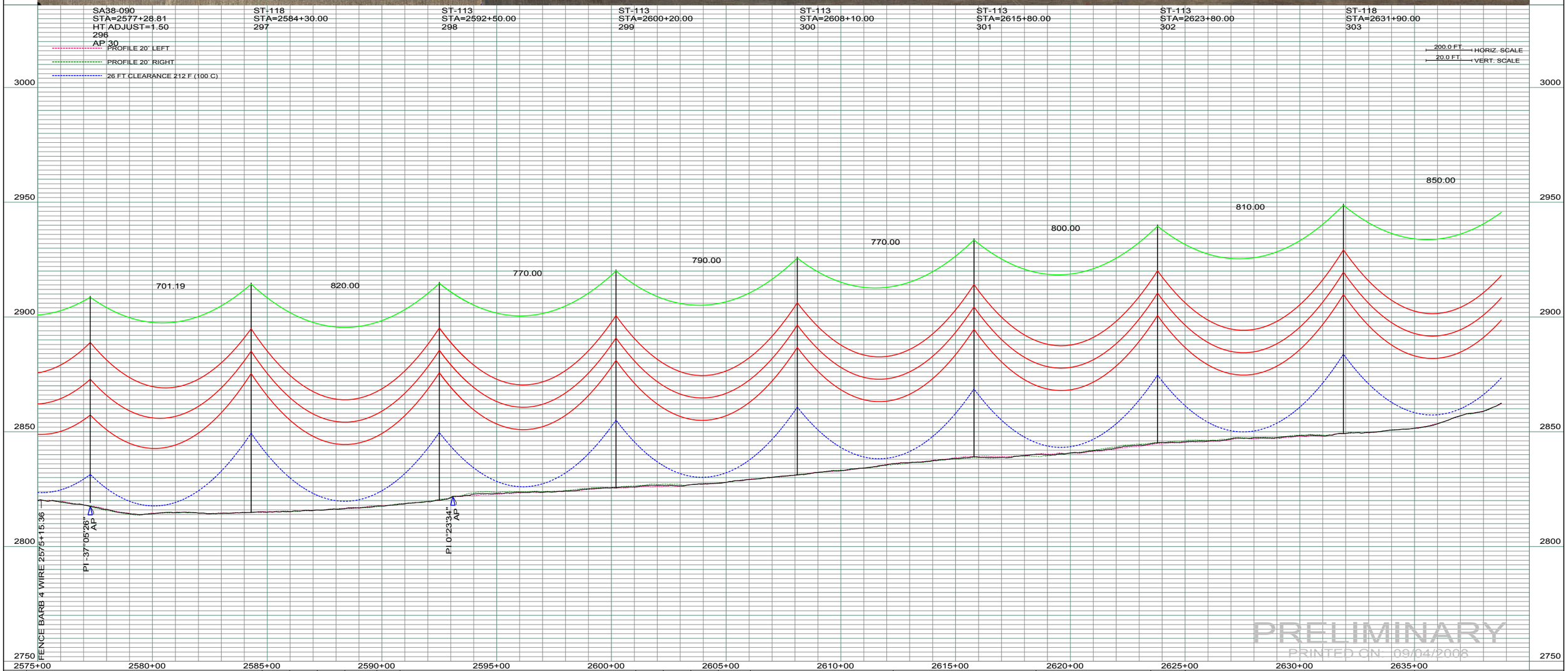
MILE 41 & 42

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN | COUNTY NAME: BOWMAN

BASIN DRAWING NO. 181-090-T3-046 | REV. 1





REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA — NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE

PLAN AND PROFILE

MILE 42 & 43

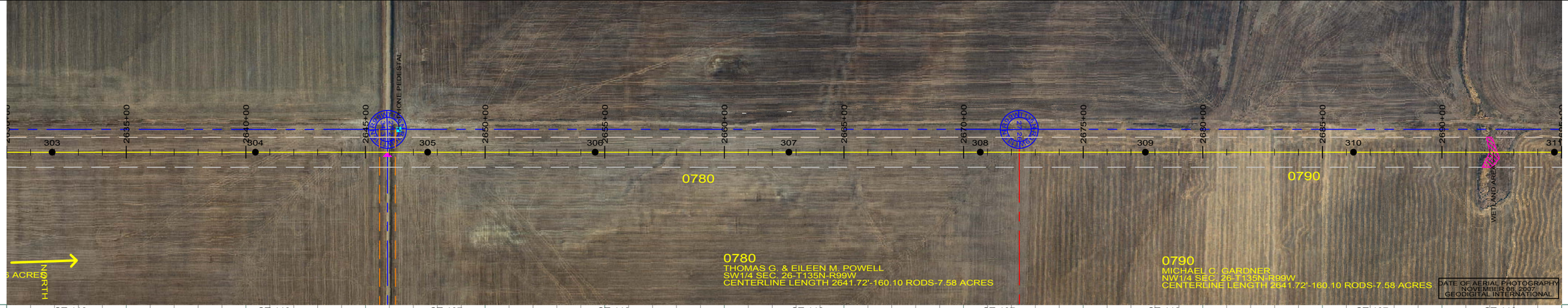
BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN

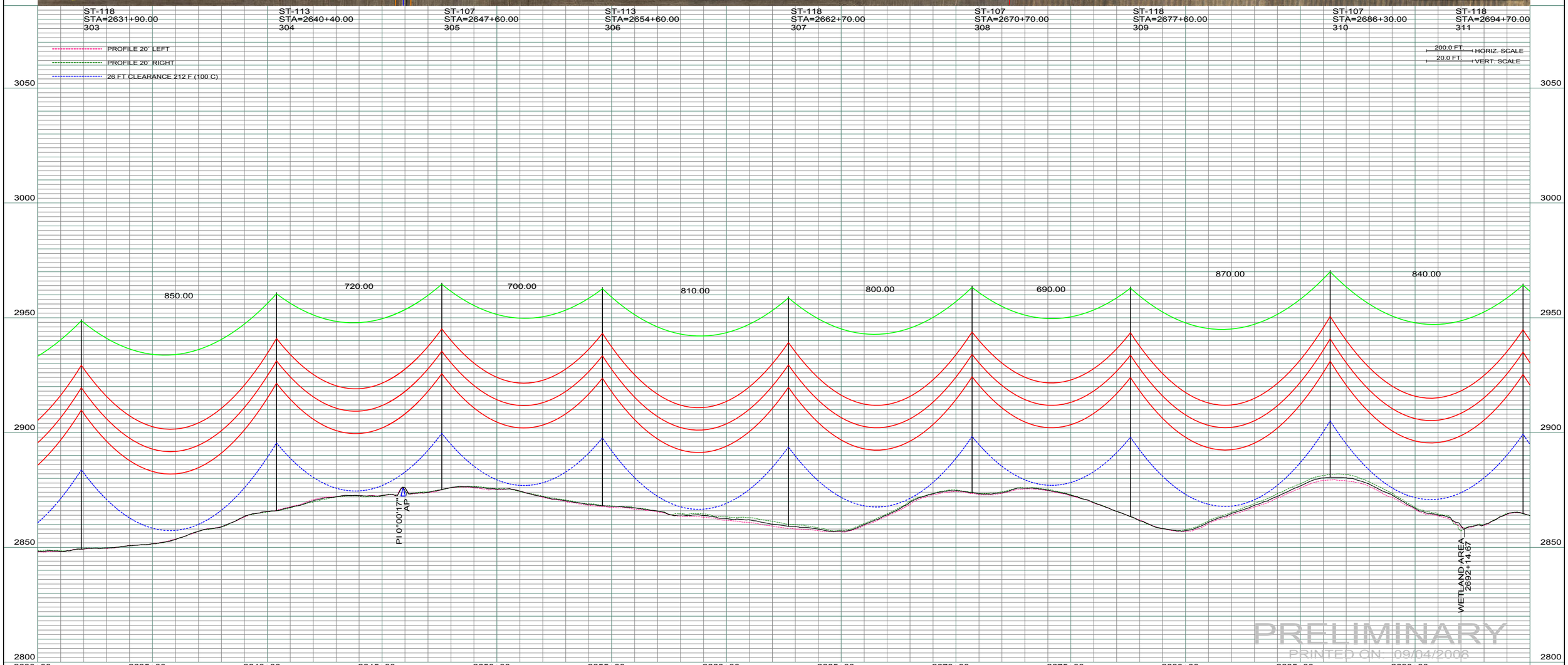
COUNTY NAME: BOWMAN

BASIN DRAWING NO. 181-090-T3-047

REV. 1



ST-118	ST-113	ST-107	ST-113	ST-118	ST-107	ST-118	ST-107	ST-118
STA=2631+90.00	STA=2640+40.00	STA=2647+60.00	STA=2654+60.00	STA=2662+70.00	STA=2670+70.00	STA=2677+60.00	STA=2686+30.00	STA=2694+70.00
303	304	305	306	307	308	309	310	311



REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA — NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE

PLAN AND PROFILE

MILE 43 & 44

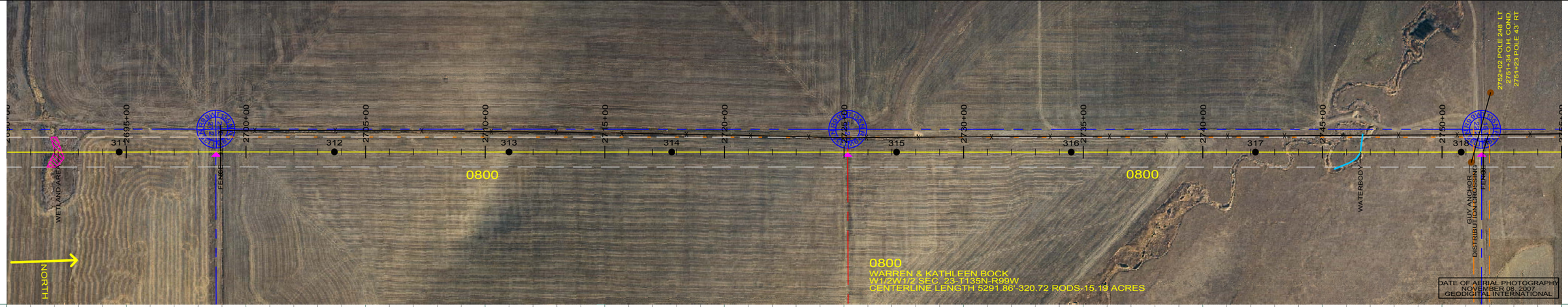
BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

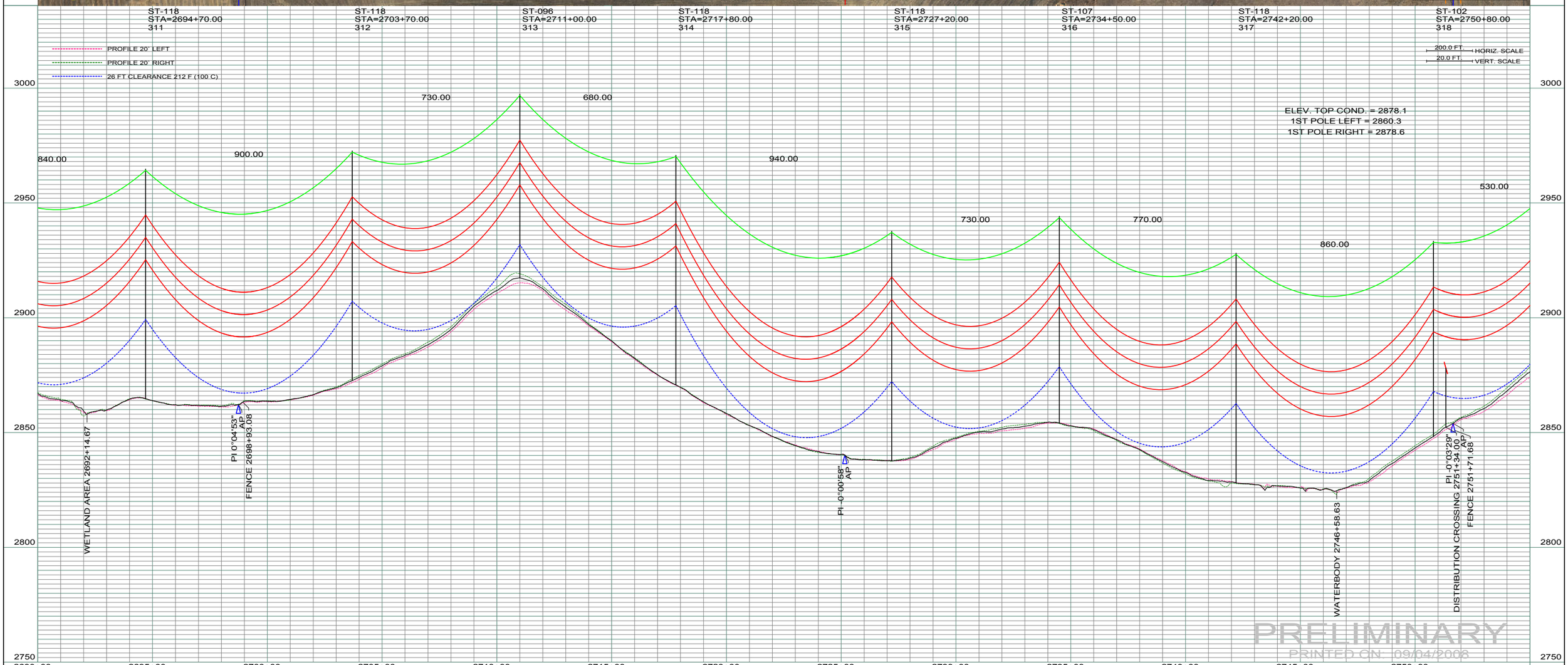
SCALE: AS SHOWN

COUNTY NAME: BOWMAN

BASIN DRAWING NO. 181-090-T3-048

REV. 1





REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE

PLAN AND PROFILE

MILE 44 & 45

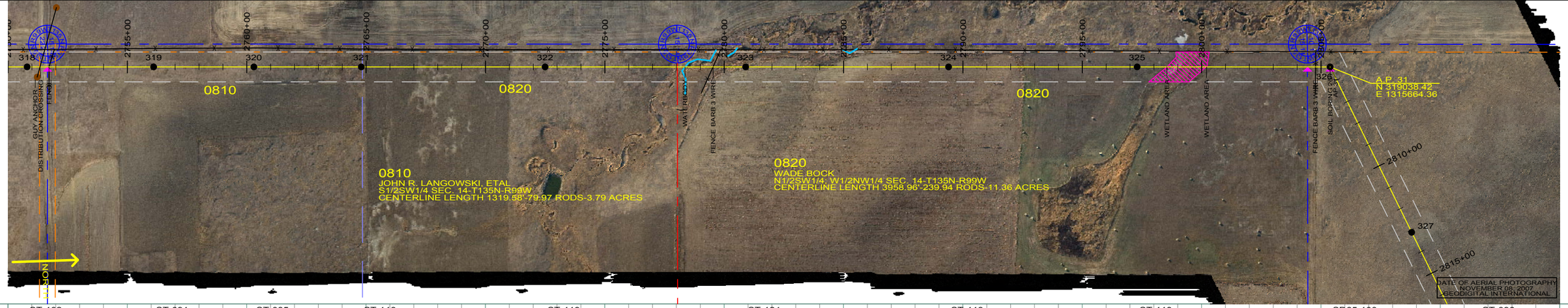
BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

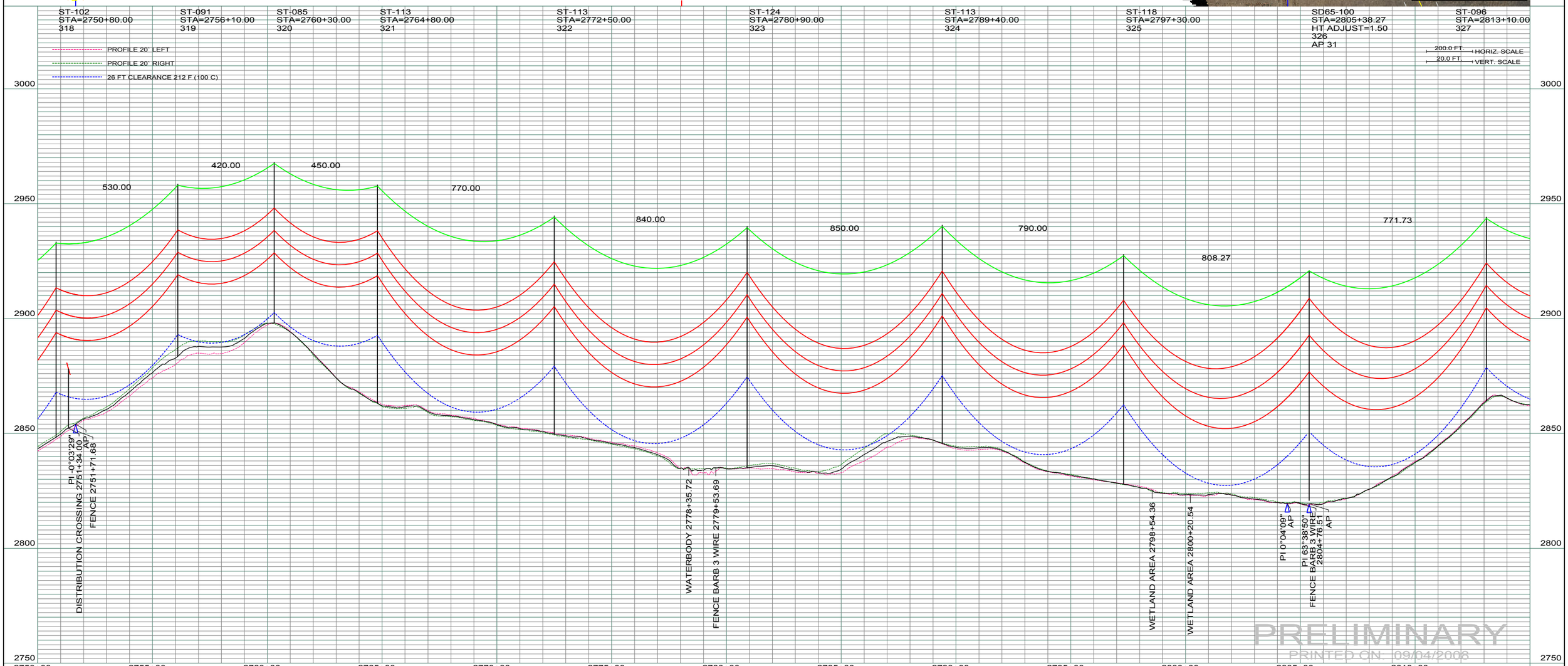
SCALE: AS SHOWN

COUNTY NAME: BOWMAN

BASIN DRAWING NO. 181-090-T3-049

REV. 1





REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

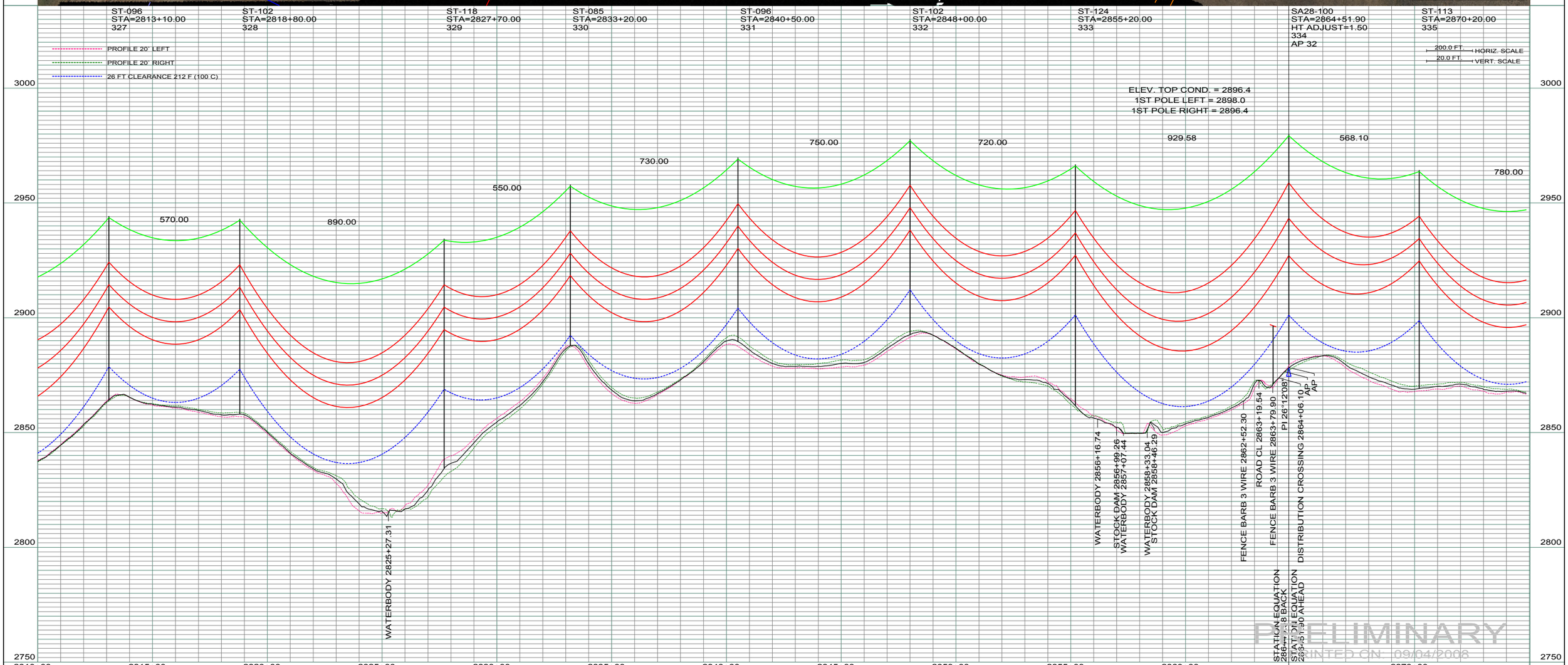
RHAME TO BELFIELD 230KV TRANSMISSION LINE

PLAN AND PROFILE

MILE 45 & 47

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE:	COUNTY NAME:
AS SHOWN	BOWMAN
BASIN DRAWING NO.	REV.
181-090-T3-050	1



REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

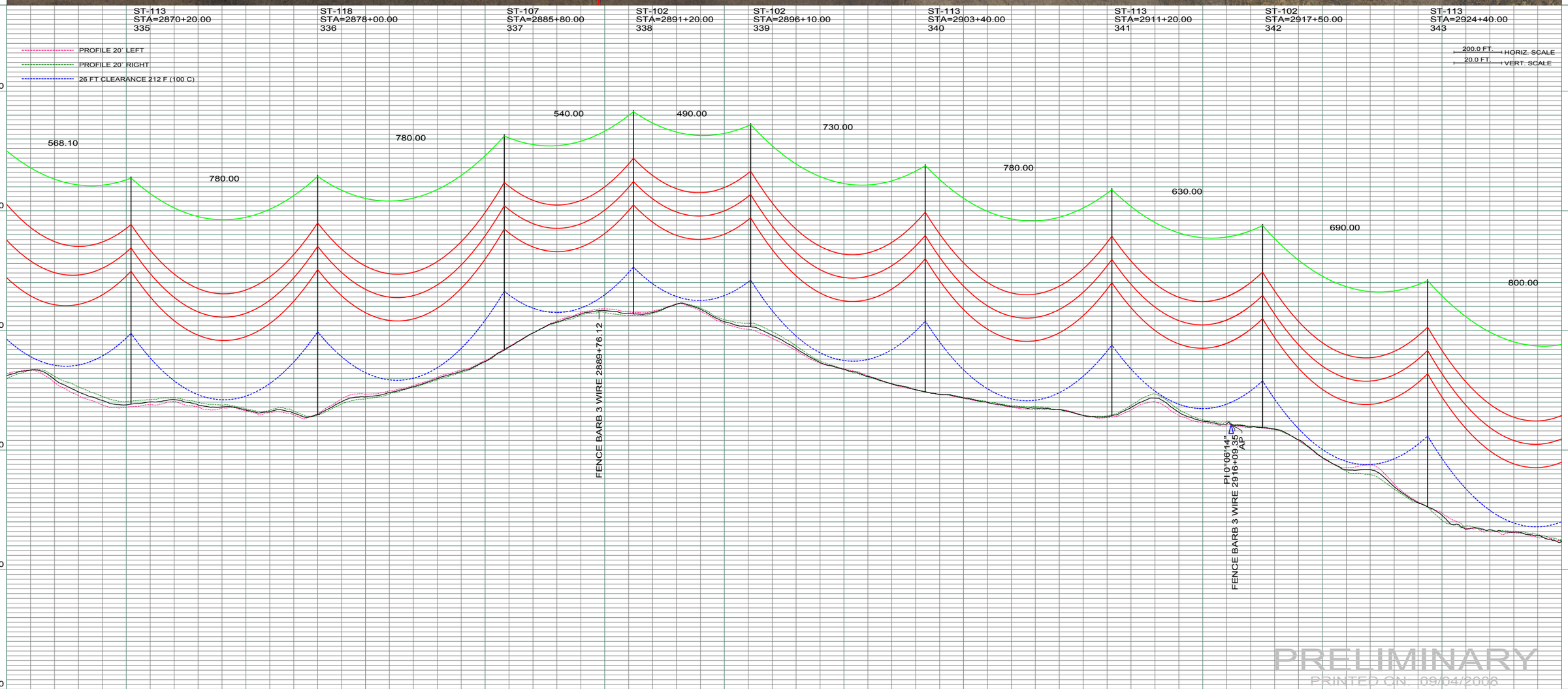
RHAME TO BELFIELD 230KV TRANSMISSION LINE

PLAN AND PROFILE

MILE 46 & 48

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE:	COUNTY NAME:
AS SHOWN	BOWMAN
BASIN DRAWING NO.	REV.
181-090-T3-051	1



REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE

PLAN AND PROFILE

MILE 48 & 49

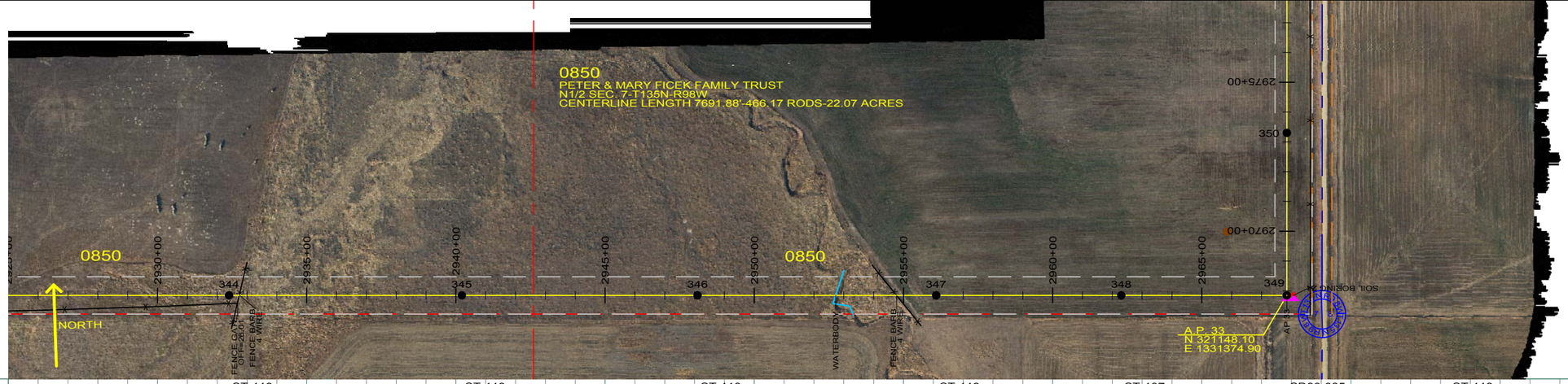
BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN

COUNTY NAME: BOWMAN

BASIN DRAWING NO. 181-090-T3-052

REV. 1



DATE OF AERIAL PHOTOGRAPHY
NOVEMBER 08, 2007
GEODIGITAL INTERNATIONAL

ST-113
STA=2932+40.00
344

ST-113
STA=2940+20.00
345

ST-118
STA=2948+10.00
346

ST-113
STA=2956+10.00
347

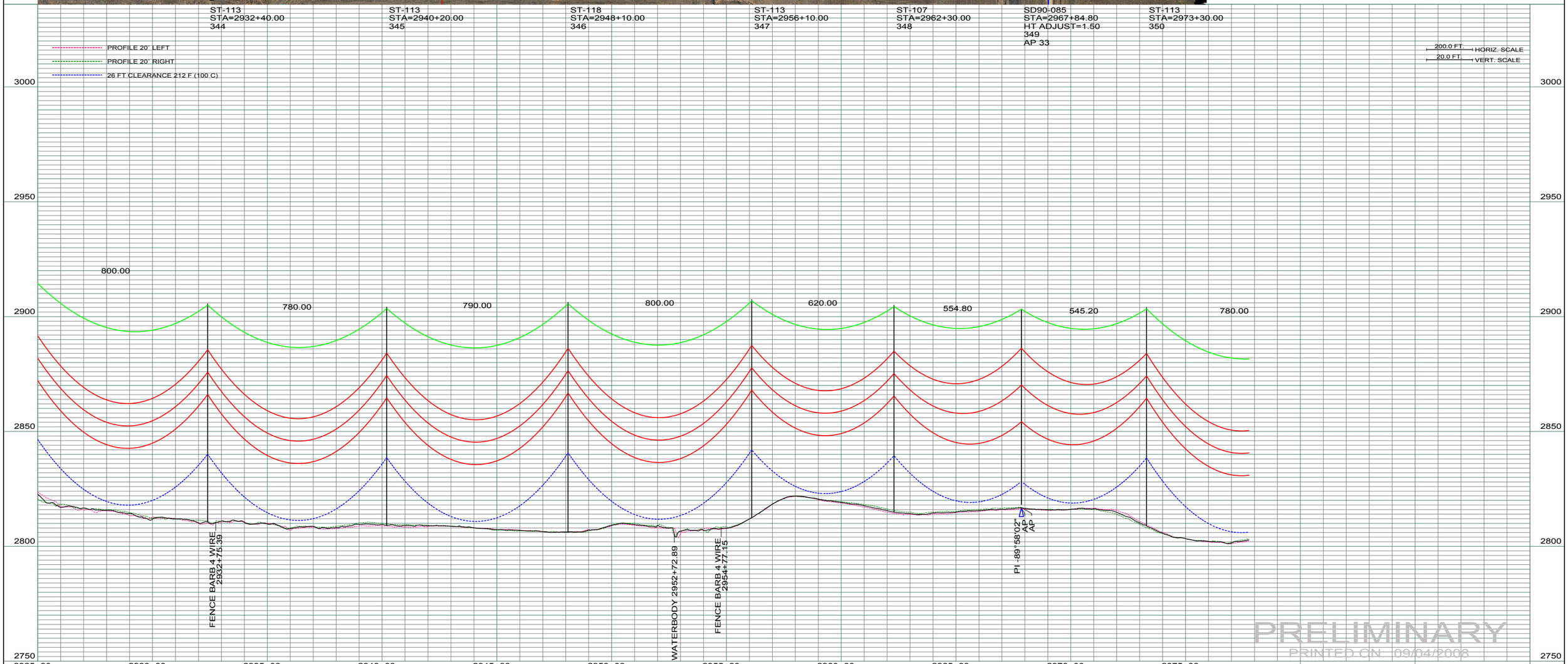
ST-107
STA=2962+30.00
348

SD90-085
STA=2967+84.80
HT ADJUST=1.50
349
AP 33

ST-113
STA=2973+30.00
350

PROFILE 20' LEFT
PROFILE 20' RIGHT
26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE



PRELIMINARY
PRINTED ON: 09/04/2008

REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA — NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY: DAM/CDB	08-08-08
DRAWN BY: CDB	08-08-08
DESIGN CHK: SW/ULTEIG	08-08-08
DRAFT CHK:	
APPROVED: DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

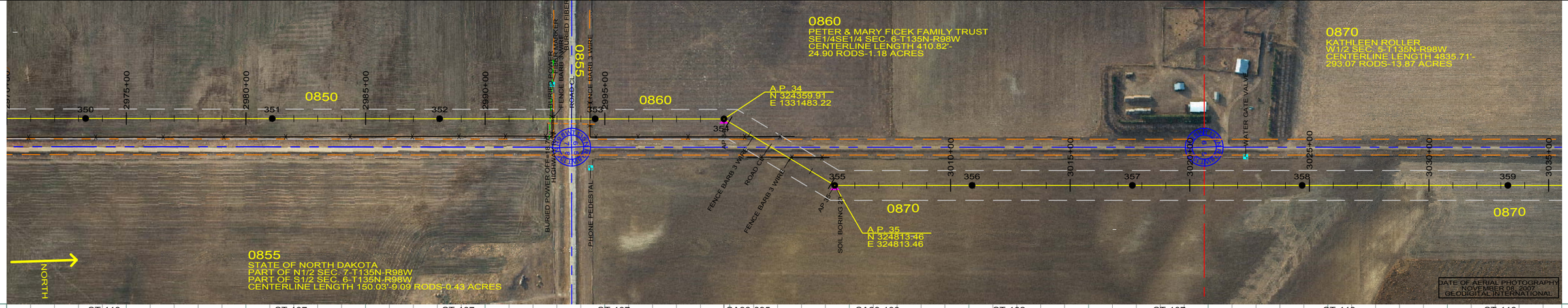
RHAME TO BELFIELD 230KV TRANSMISSION LINE

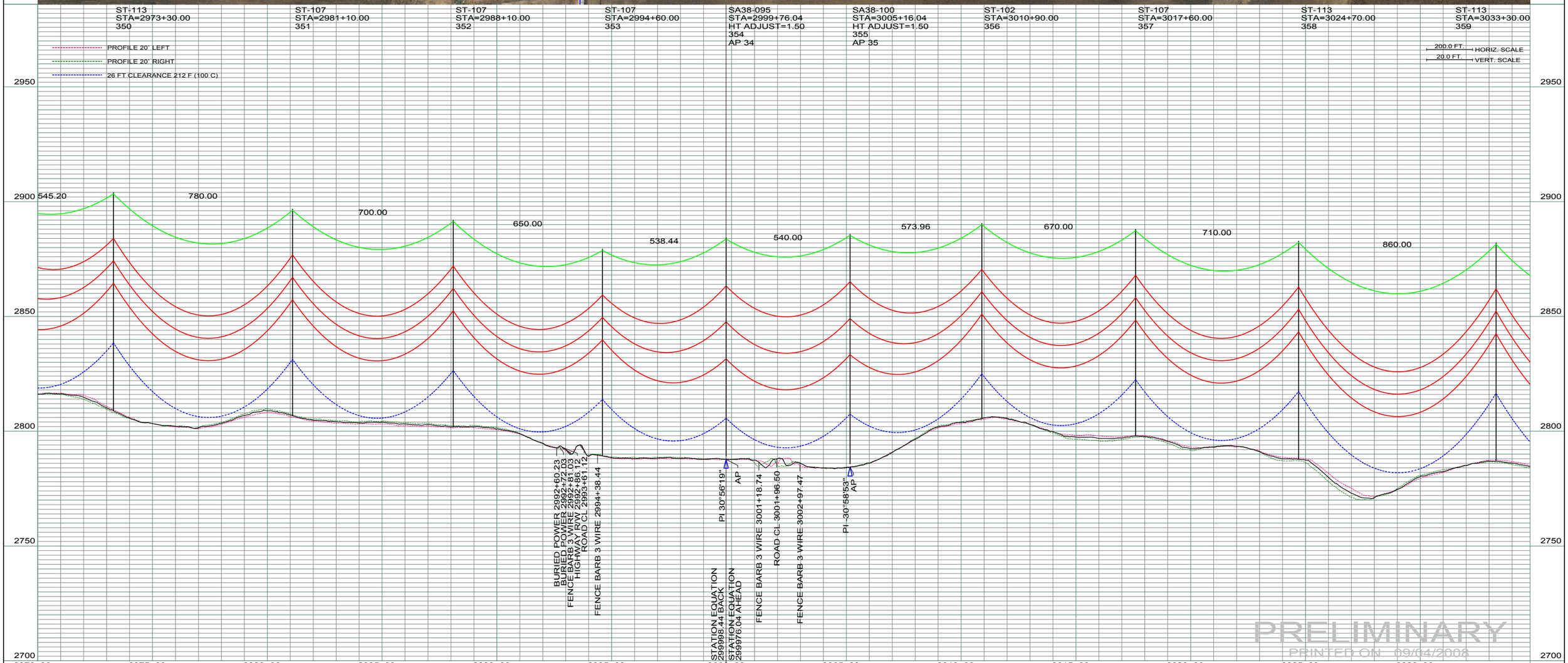
PLAN AND PROFILE

MILE 49 & 50

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN
COUNTY NAME: BOWMAN
BASIN DRAWING NO. 181-090-T3-053
REV. 1





REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA — NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE

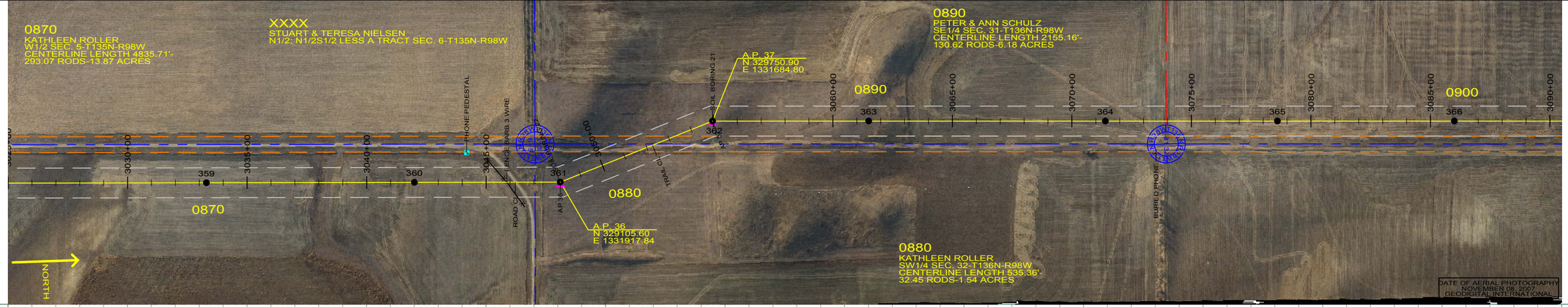
PLAN AND PROFILE

MILE 49 & 51

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE:	COUNTY NAME:
AS SHOWN	BOWMAN

BASIN DRAWING NO. 181-090-T3-054 — REV. 1



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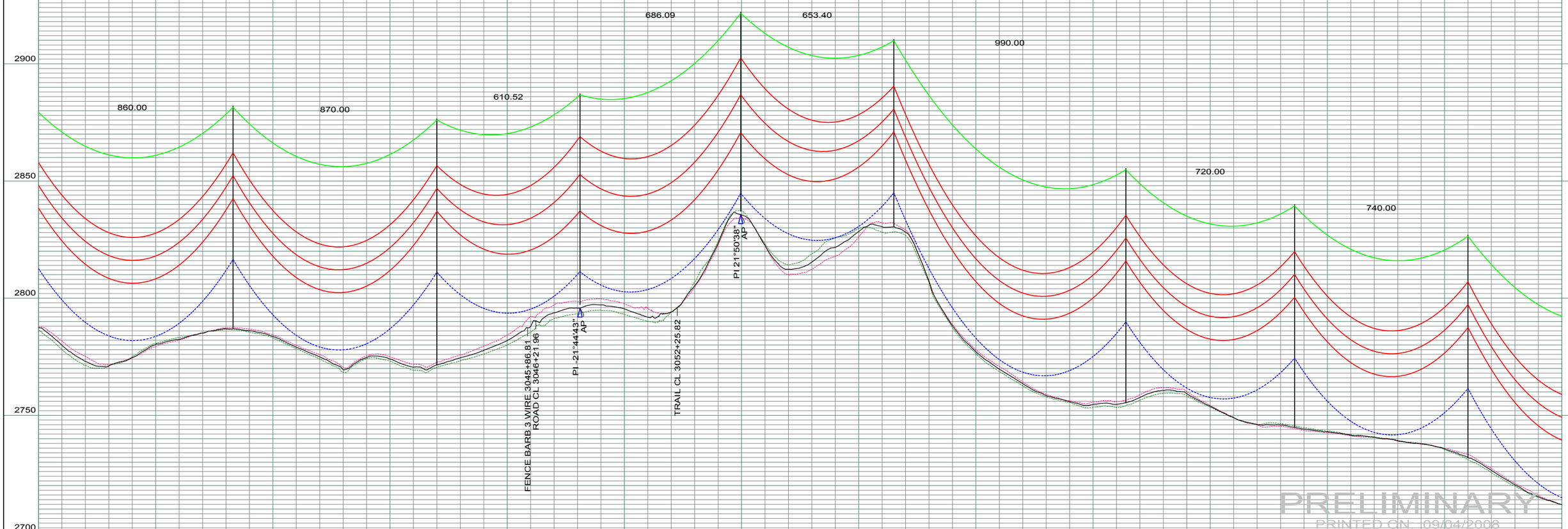
359	360	HT ADJUST=1.50	HT ADJUST=1.50	363	364	365	366
		361	362				
		AP 36	AP 37				

PROFILE 20' LEFT
PROFILE 20' RIGHT
26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE



REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

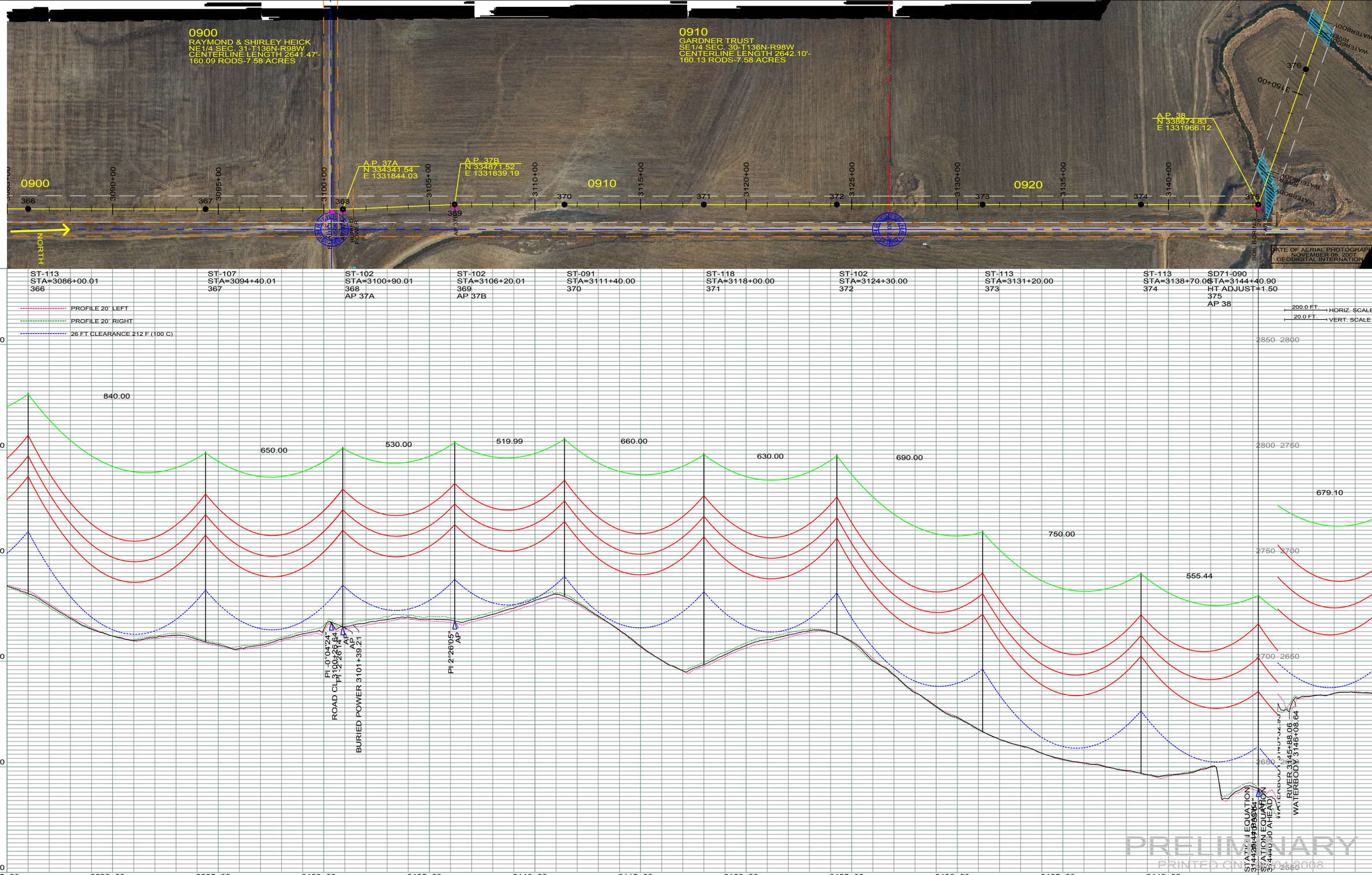
DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE
LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE
PLAN AND PROFILE
MILE 51 & 52

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN
COUNTY NAME: BOWMAN
BASIN DRAWING NO. 181-090-T3-055
REV. 1



REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED: DAM		09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE

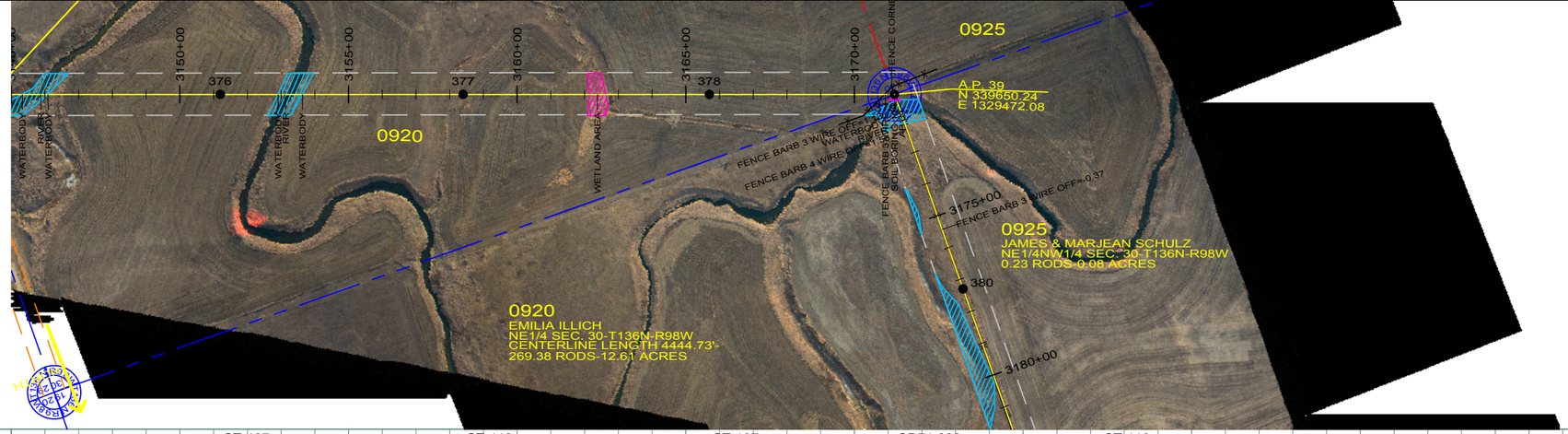
PLAN AND PROFILE

MILE 52 & 53

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN | COUNTY NAME: BOWMAN

BASIN DRAWING NO. 181-090-T3-056 | REV. 1



DATE OF AERIAL PHOTOGRAPHY
NOVEMBER 08, 2007
GEODIGITAL INTERNATIONAL

ST-107
STA=3151+20.00
376

ST-113
STA=3158+40.00
377

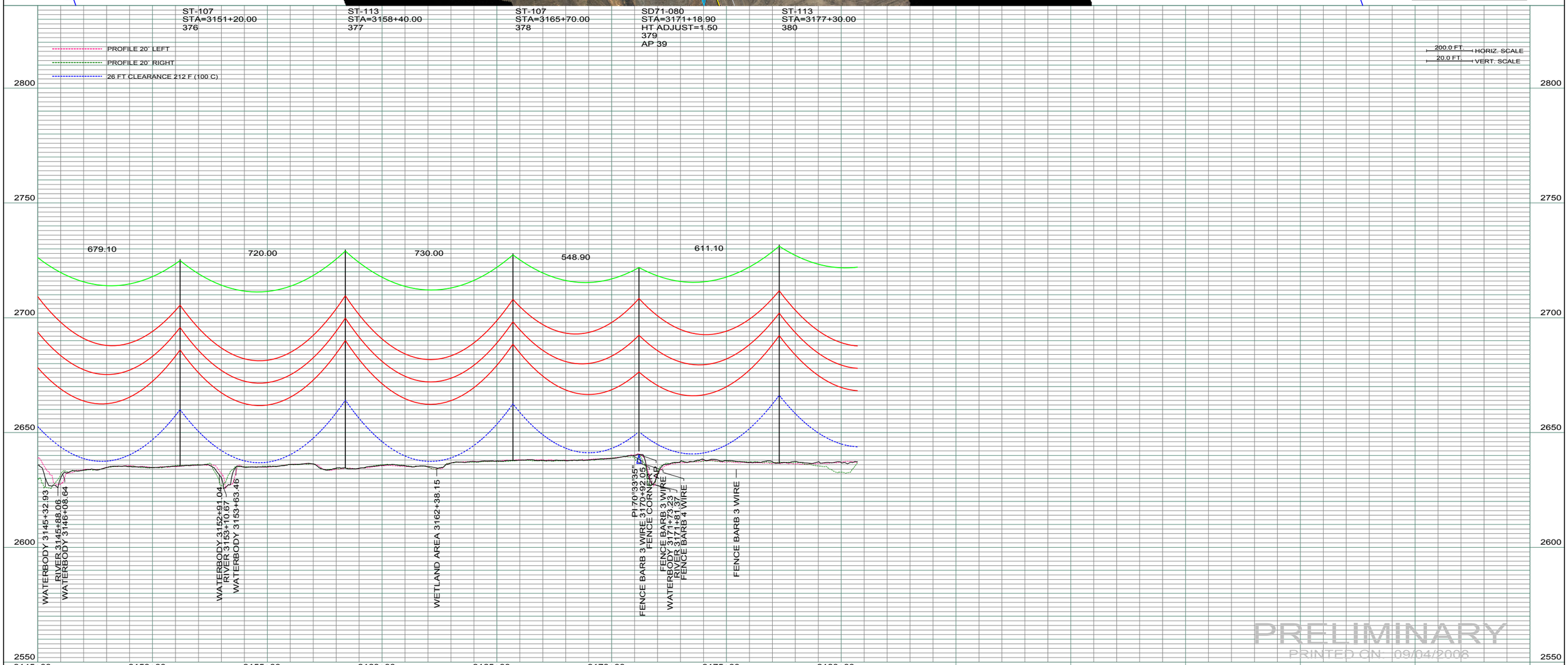
ST-107
STA=3165+70.00
378

SD71-080
STA=3171+18.90
HT ADJUST=1.50
379
AP 39

ST-113
STA=3177+30.00
380

PROFILE 20' LEFT
PROFILE 20' RIGHT
26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE



PRELIMINARY
PRINTED ON: 09/04/2008

REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

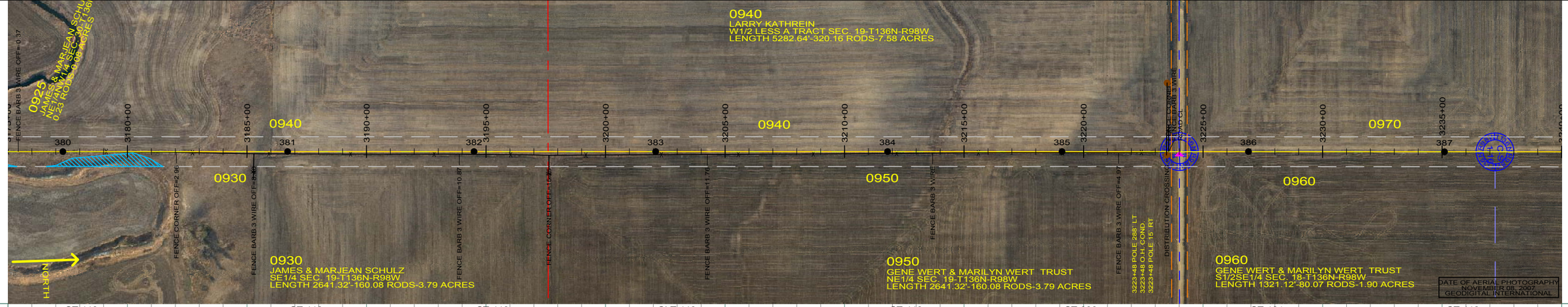
DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

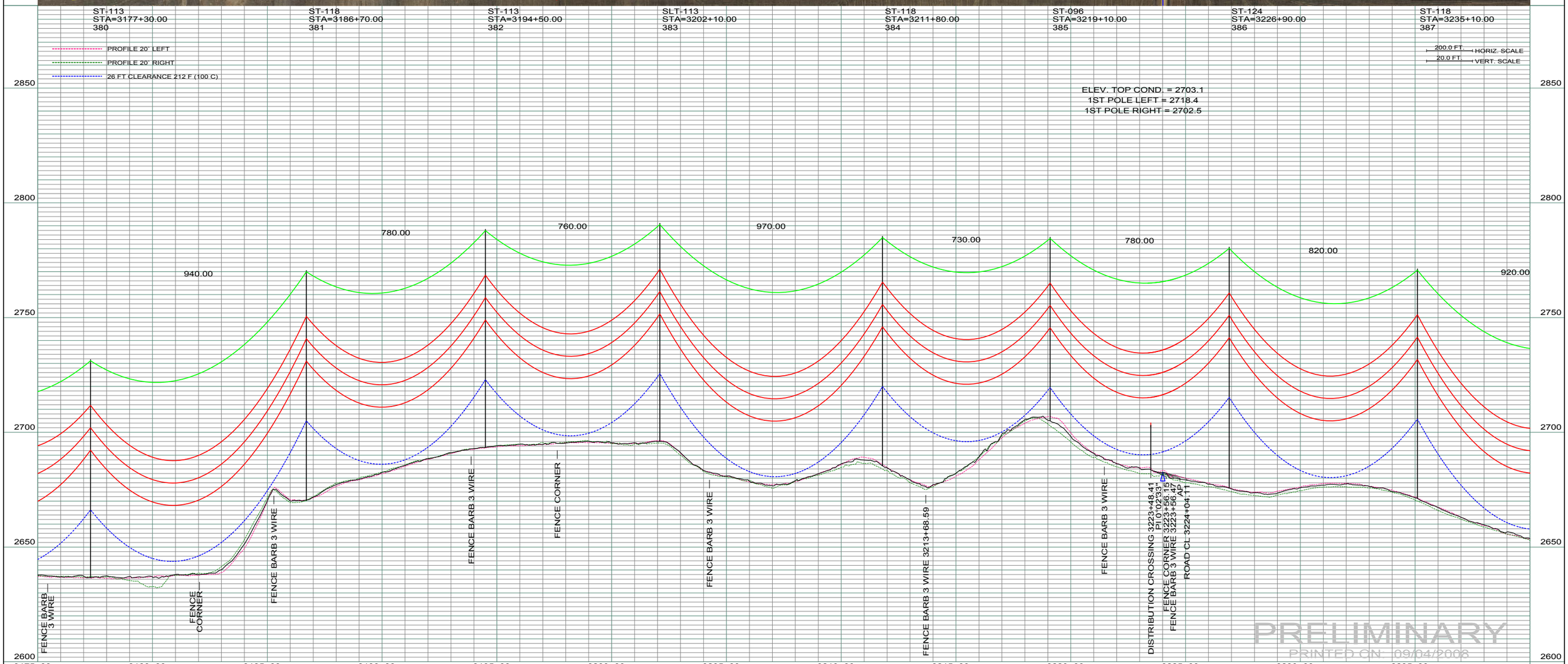
FACILITY: TRANSMISSION SYSTEM MAINTENANCE
LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE
PLAN AND PROFILE
MILE 53

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN
COUNTY NAME: BOWMAN
BASIN DRAWING NO. 181-090-T3-057
REV. 1





REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE

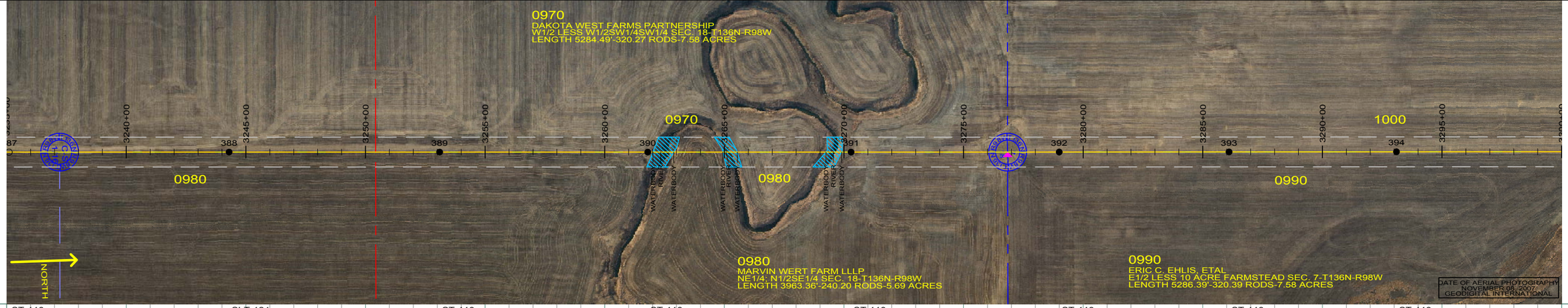
PLAN AND PROFILE

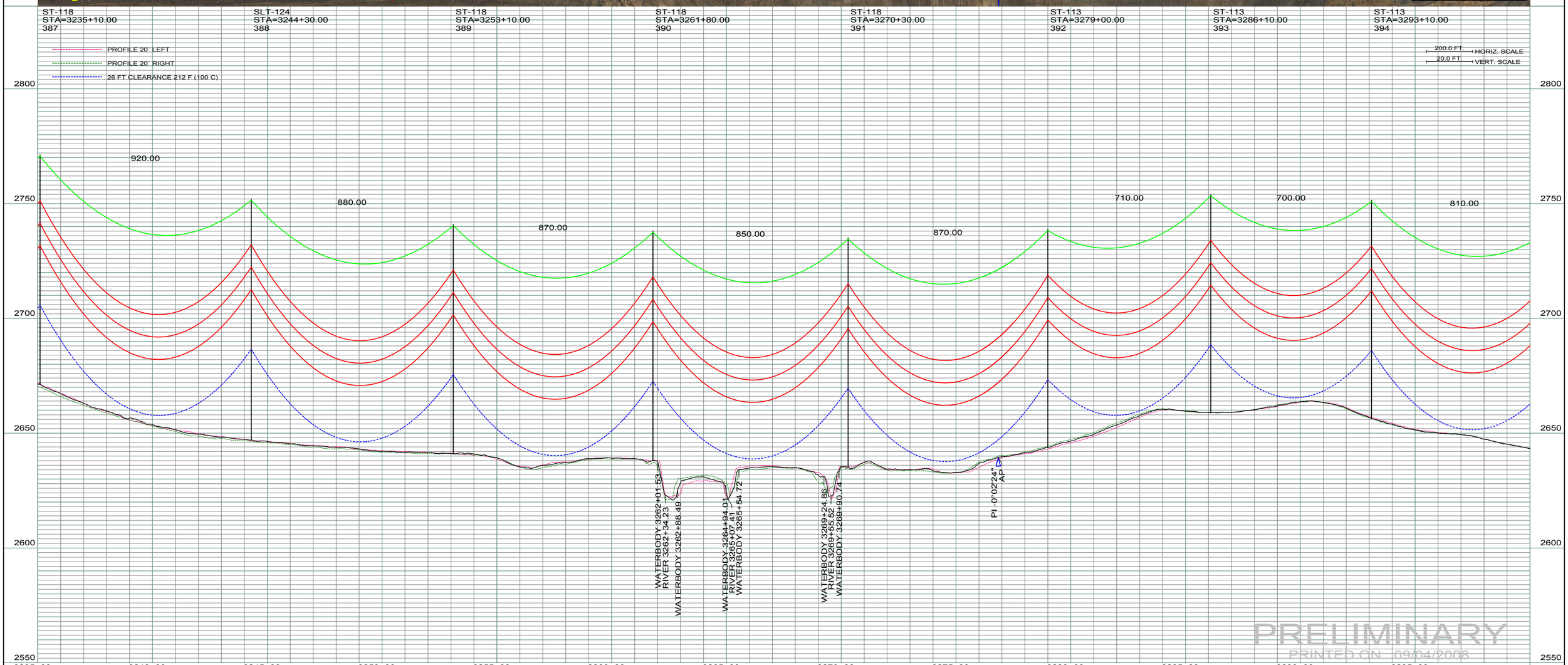
MILE 53 & 55

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN | COUNTY NAME: BOWMAN

BASIN DRAWING NO. 181-090-T3-058 | REV. 1





REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE

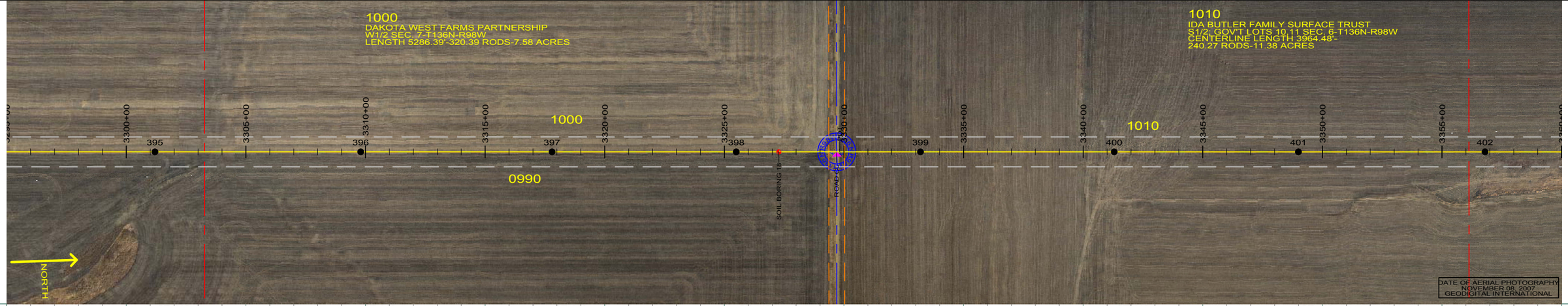
PLAN AND PROFILE

MILE 55 & 56

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN | COUNTY NAME: BOWMAN

BASIN DRAWING NO. 181-090-T3-059 | REV. 1



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ST-118
STA=3309+80.00
396

ST-113
STA=3317+80.00
397

ST-118
STA=3325+50.00
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ST-118
STA=3333+20.00
399

ST-113
STA=3341+30.00
400

ST-113
STA=3349+00.00
401

ST-113
STA=3356+80.00
402

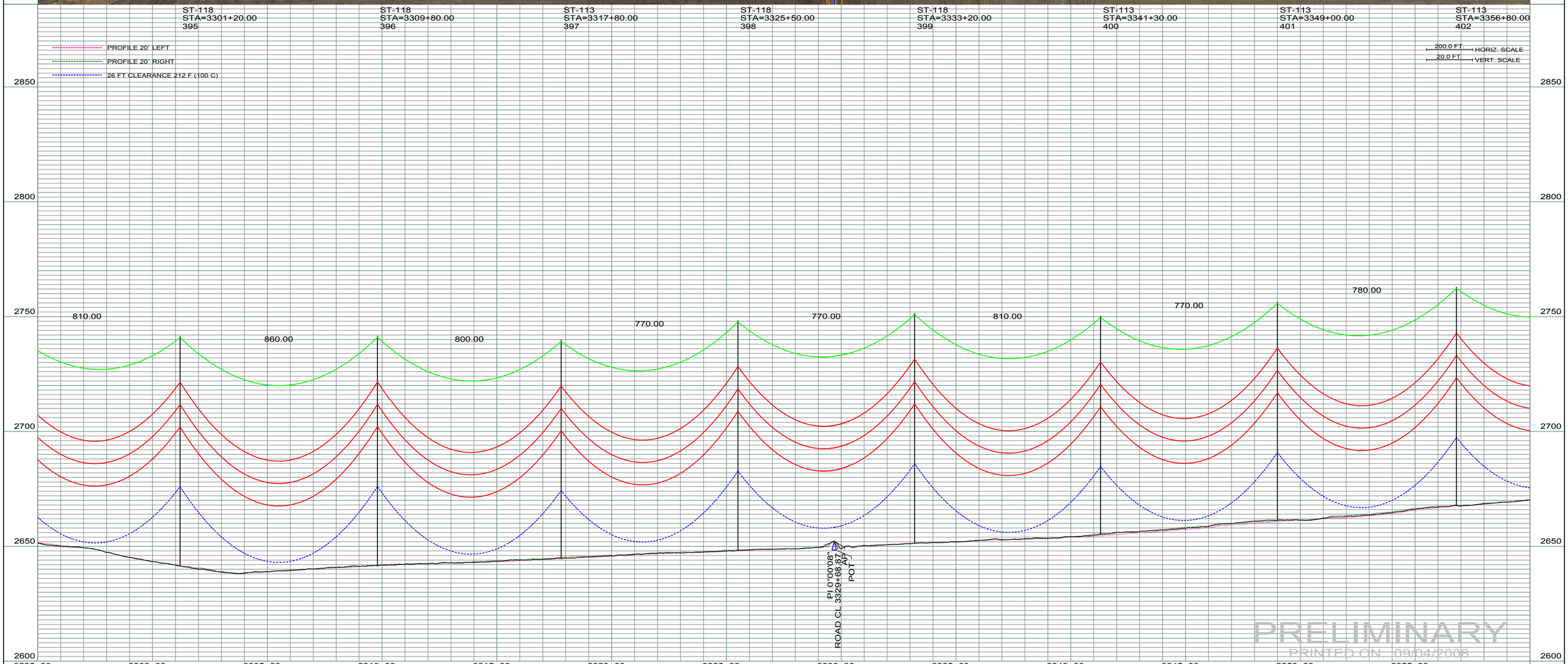
PROFILE 20' LEFT

PROFILE 20' RIGHT

26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE

20.0 FT. VERT. SCALE



REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE

PLAN AND PROFILE

MILE 56 & 57

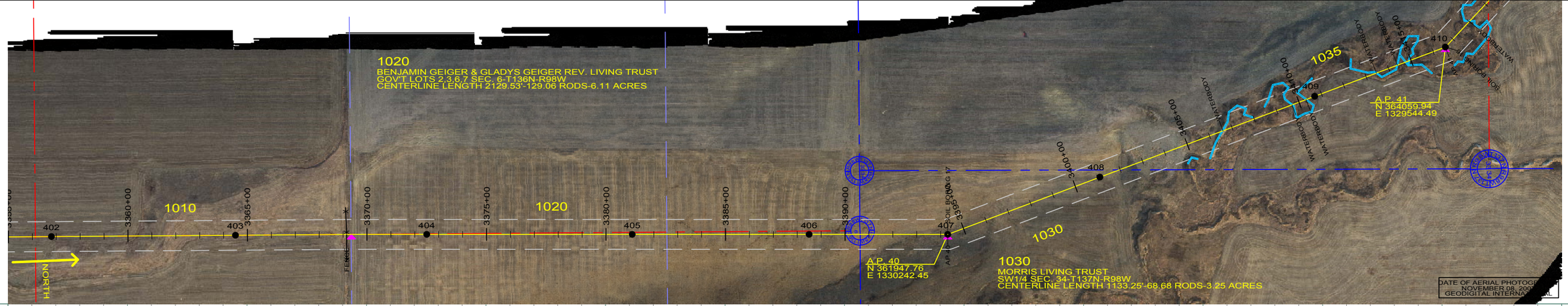
BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN

COUNTY NAME: BOWMAN

BASIN DRAWING NO. 181-090-T3-060

REV. 1



ST-113
STA=3356+80.00
402

ST-118
STA=3364+50.00
403

ST-118
STA=3372+50.00
404

ST-113
STA=3381+10.00
405

ST-107
STA=3388+50.00
406

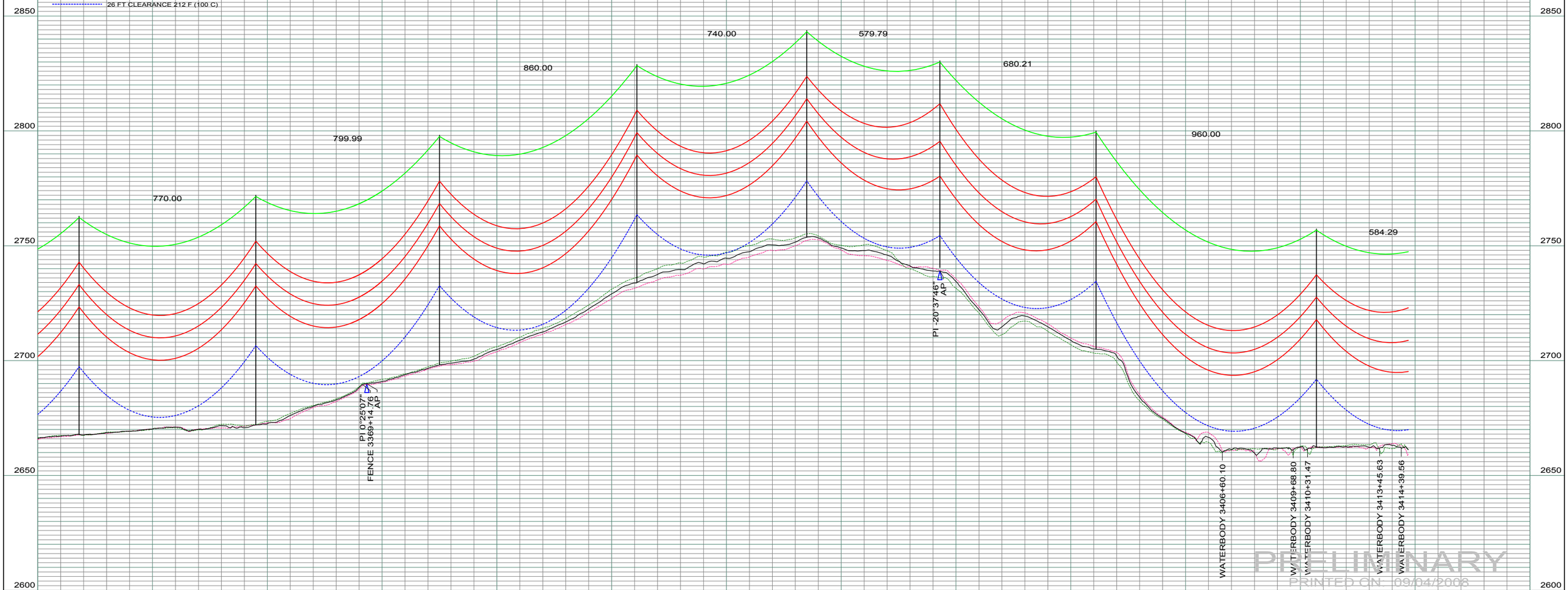
SA23-090
STA=3394+29.79
HT ADJUST=1.50
407
AP 40

ST-113
STA=3401+10.00
408

ST-113
STA=3410+70.00
409

PROFILE 20' LEFT
PROFILE 20' RIGHT
26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE



REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA — NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

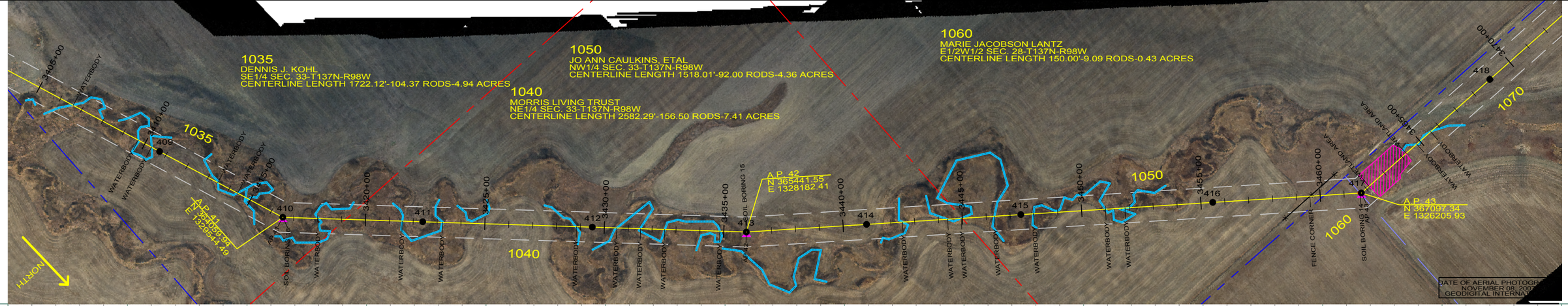
RHAME TO BELFIELD 230KV TRANSMISSION LINE

PLAN AND PROFILE

MILE 57 & 58

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN
COUNTY NAME: BOWMAN
BASIN DRAWING NO. 181-090-T3-061
REV. 1



ST-113
STA=3410+70.00
409

SA28-090
STA=3416+54.29
HT ADJUST=1.50
410
AP 41

ST-107
STA=3422+40.00
411

ST-107
STA=3429+50.00
412

SA06-108L
STA=3435+94.43
HT ADJUST=1.50
413
AP 42

ST-096
STA=3440+98.56
414

ST-113
STA=3447+45.14
415

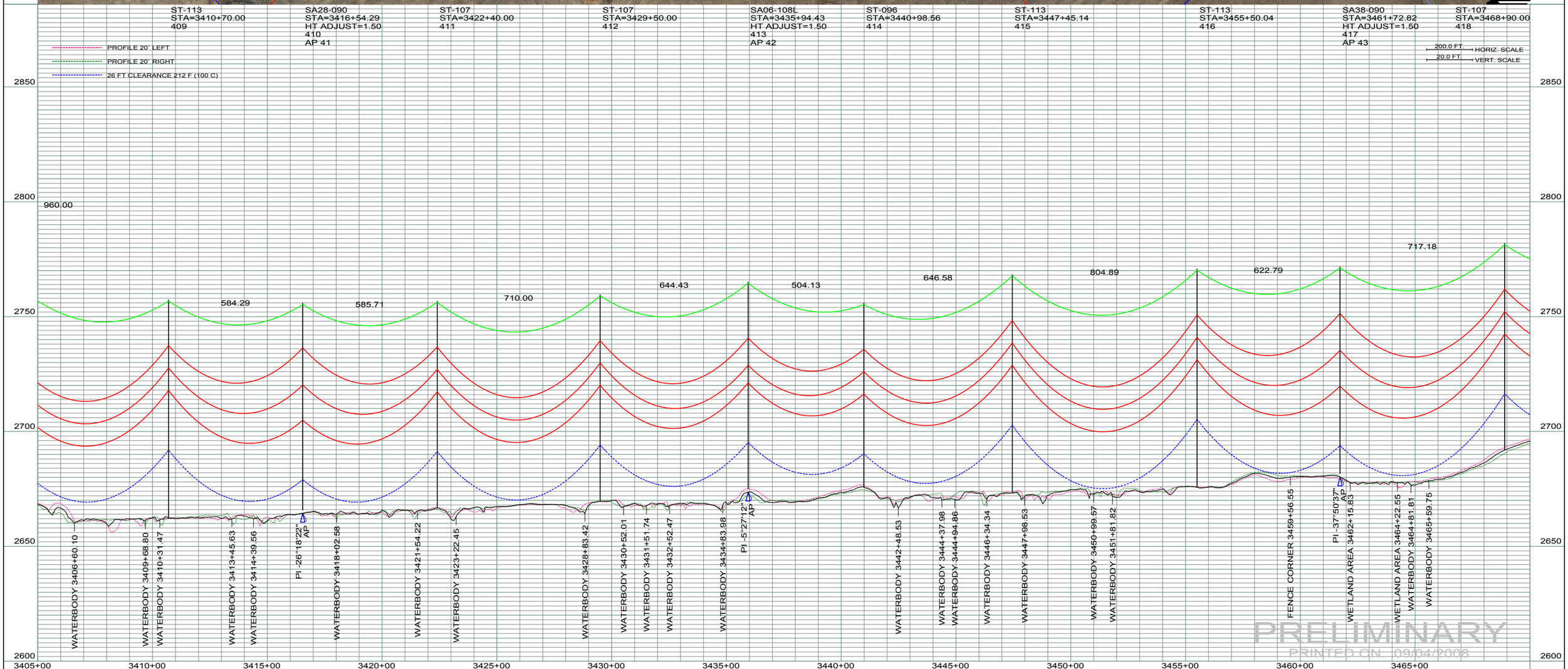
ST-113
STA=3455+50.04
416

SA38-090
STA=3461+72.82
HT ADJUST=1.50
417
AP 43

ST-107
STA=3468+90.00
418

PROFILE 20' LEFT
PROFILE 20' RIGHT
26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE



PRELIMINARY
PRINTED ON: 09/04/2008

REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE

PLAN AND PROFILE

MILE 58 & 59

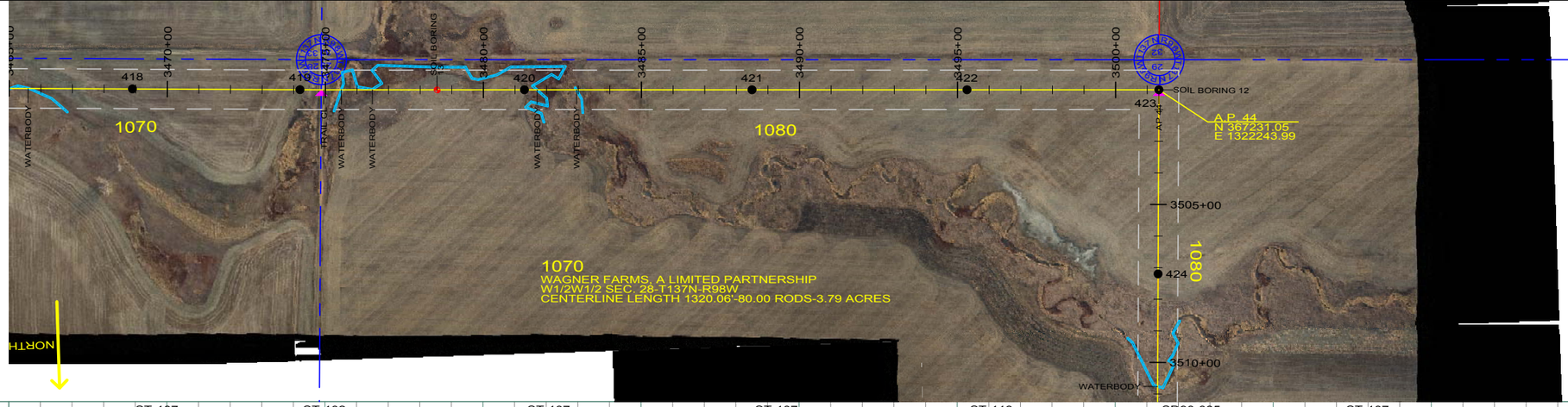
BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN

COUNTY NAME: BOWMAN

BASIN DRAWING NO. 181-90-T3-062

REV. 1

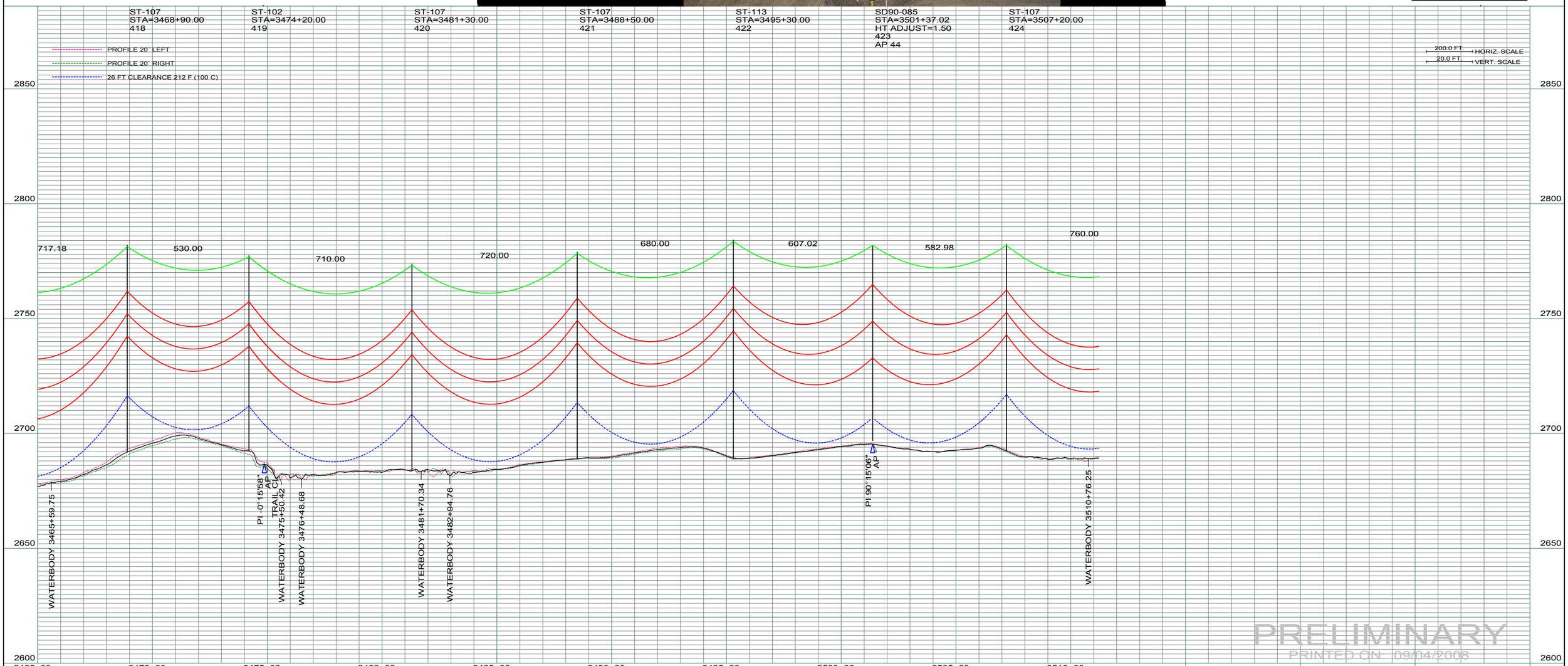


DATE OF AERIAL PHOTOGRAPHY
NOVEMBER 08, 2007
GEODIGITAL INTERNATIONAL

ST-107 STA=3468+90.00 418	ST-102 STA=3474+20.00 419	ST-107 STA=3481+30.00 420	ST-107 STA=3488+50.00 421	ST-113 STA=3495+30.00 422	SD90-085 STA=3501+37.02 HT ADJUST=1.50 423 AP 44	ST-107 STA=3507+20.00 424

PROFILE 20' LEFT
PROFILE 20' RIGHT
26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE



PRELIMINARY
PRINTED ON: 09/04/2008

REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

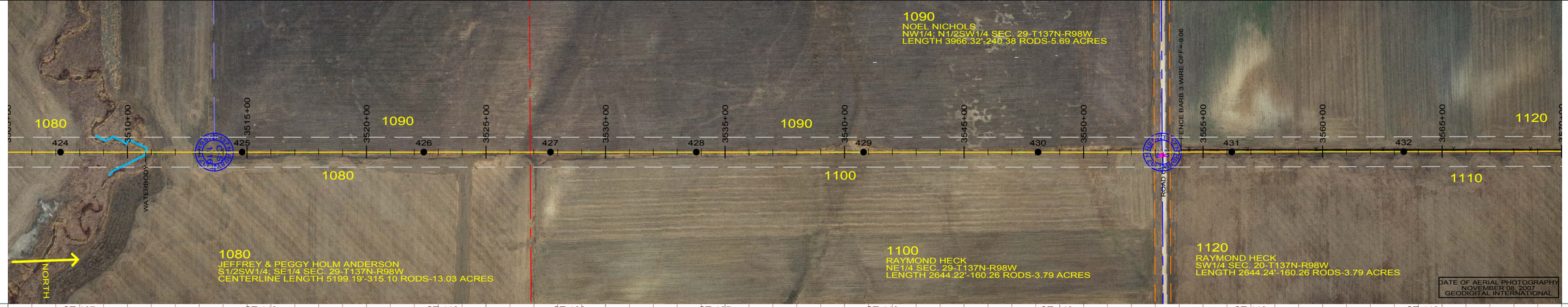
DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

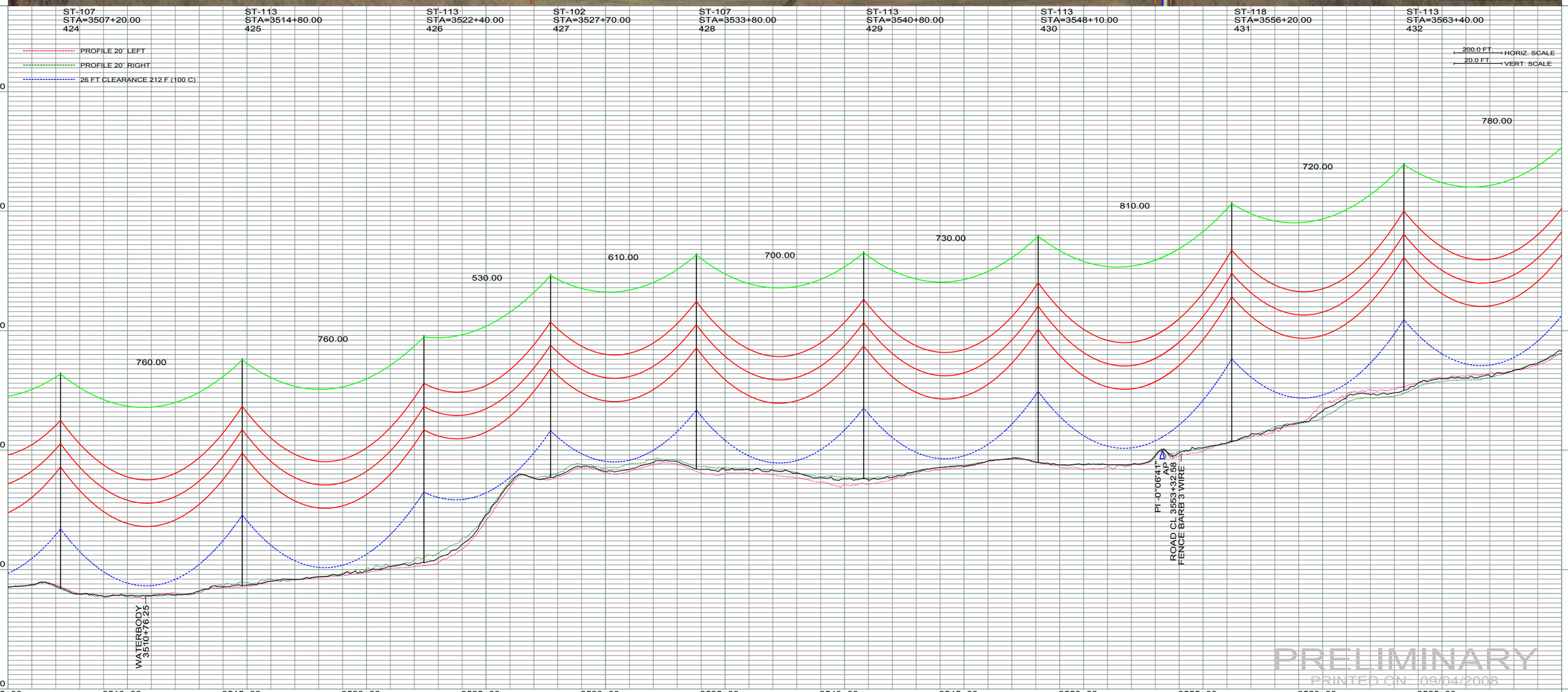
FACILITY: TRANSMISSION SYSTEM MAINTENANCE
LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE
PLAN AND PROFILE
MILE 59 & 60

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE:	COUNTY NAME:
AS SHOWN	BOWMAN
BASIN DRAWING NO.	REV.
181-90-T3-063	1





REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

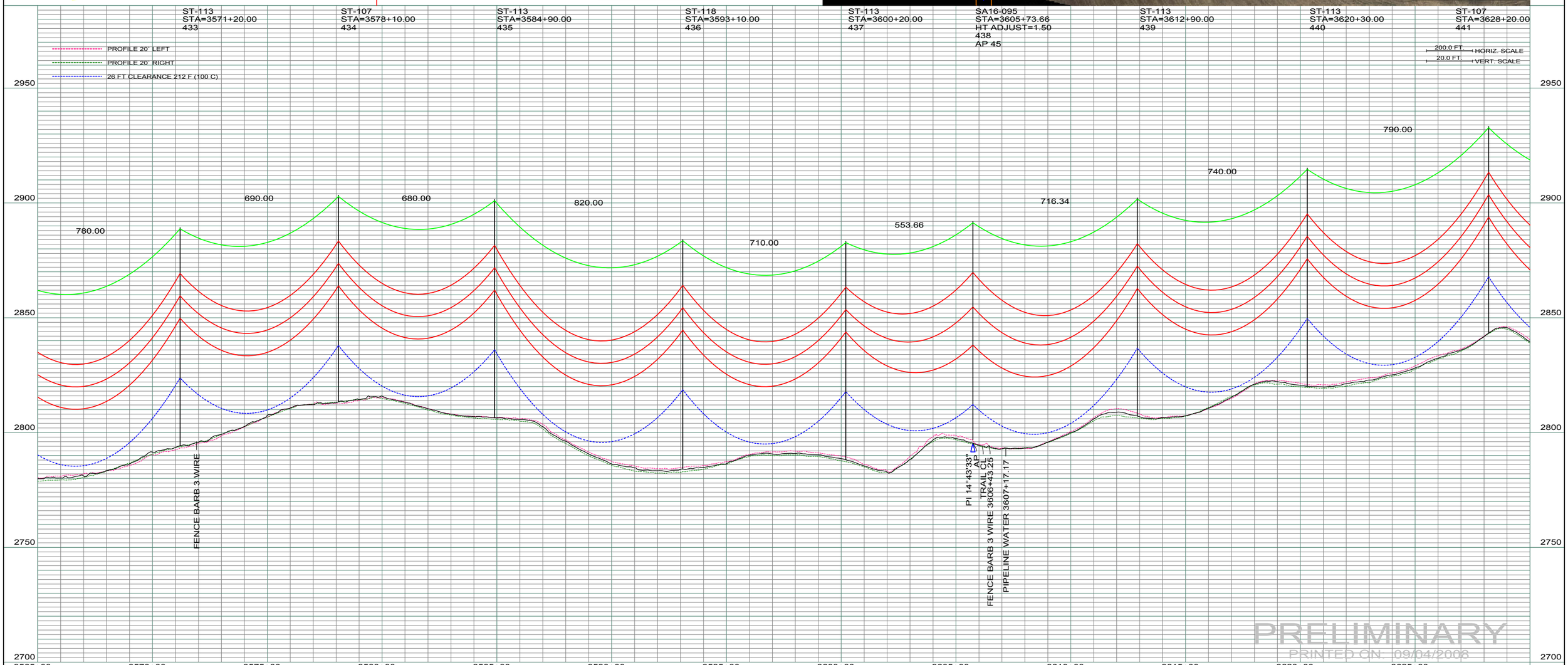
RHAME TO BELFIELD 230KV TRANSMISSION LINE

PLAN AND PROFILE

MILE 60 & 61

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE:	COUNTY NAME:
AS SHOWN	BOWMAN
BASIN DRAWING NO.	REV.
181-90-T3-064	1



REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

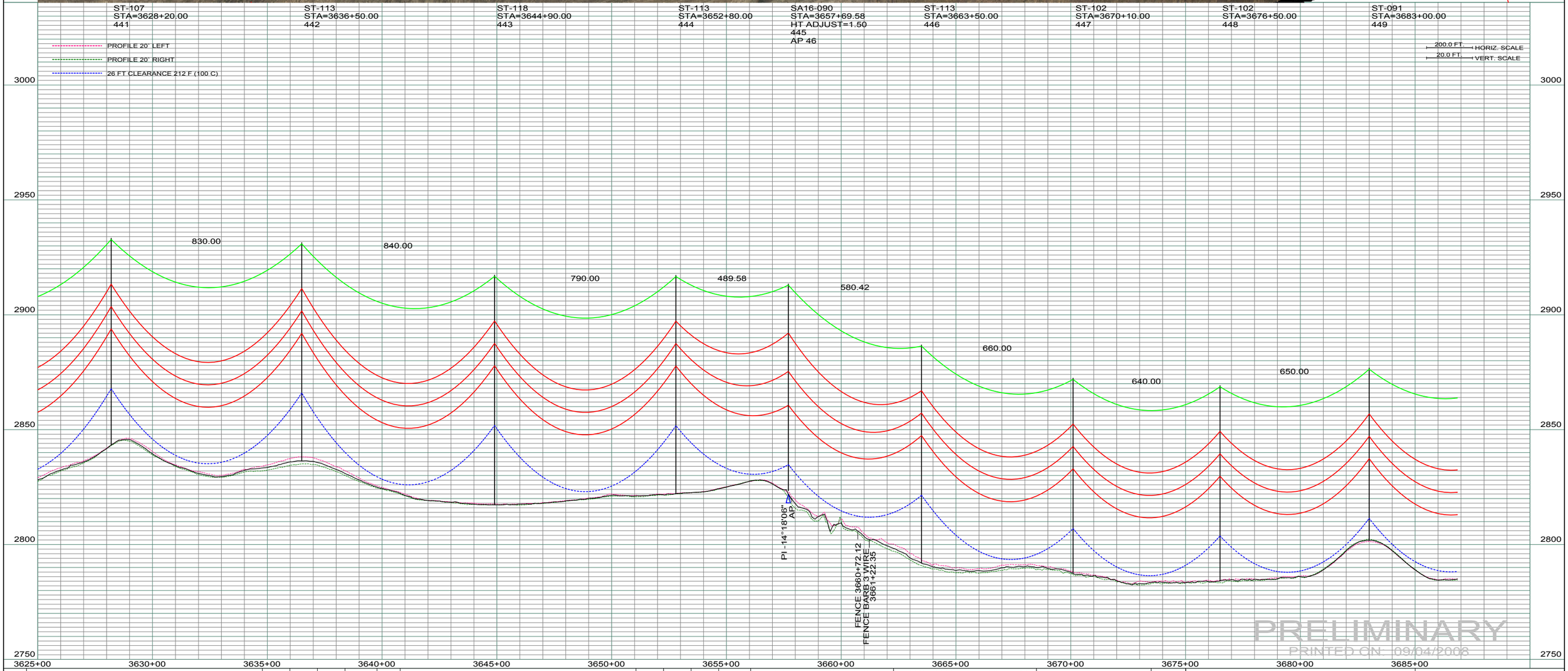
RHAME TO BELFIELD 230KV TRANSMISSION LINE

PLAN AND PROFILE

MILE 61 & 62

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE:	COUNTY NAME:
AS SHOWN	BOWMAN
BASIN DRAWING NO.	REV.
181-90-T3-065	1



REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA — NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE

PLAN AND PROFILE

MILE 62 & 63

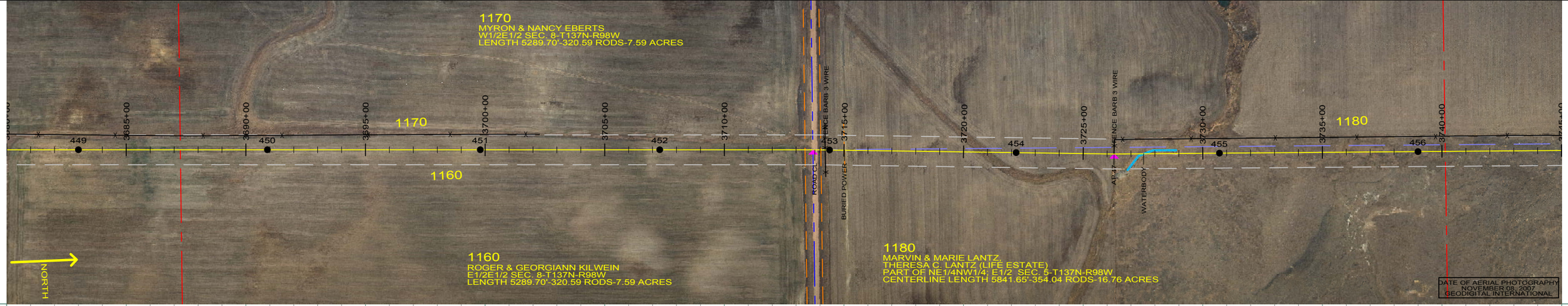
BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

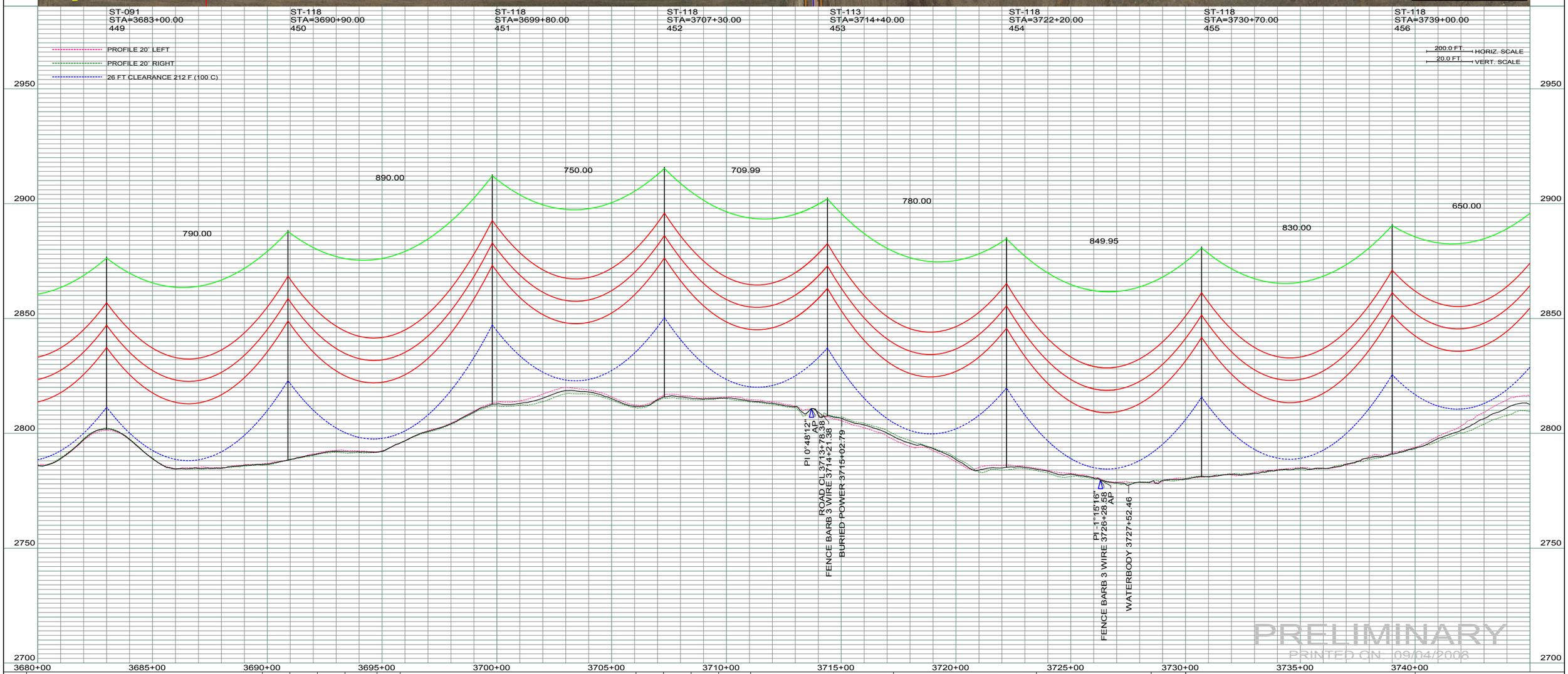
SCALE: AS SHOWN

COUNTY NAME: BOWMAN

BASIN DRAWING NO. 181-90-T3-066

REV. 1





REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA — NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY: DAM/CDB	08-08-08	
DRAWN BY: CDB	08-08-08	
DESIGN CHK: SW/ULTEIG	08-08-08	
DRAFT CHK:		
APPROVED: DAM	09-05-08	

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE

PLAN AND PROFILE

MILE 63 & 64

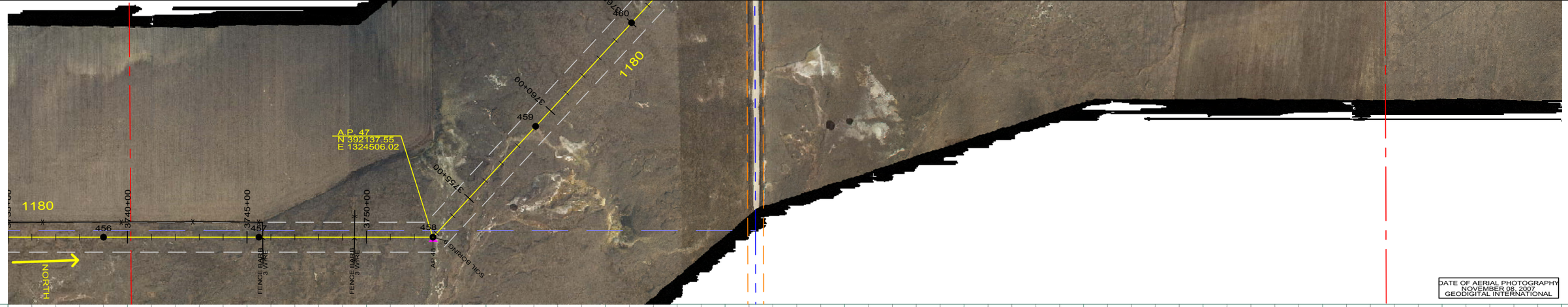
BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN

COUNTY NAME: BOWMAN

BASIN DRAWING NO. 181-90-T3-067

REV. 1



ST-118
STA=3739+00.00
456

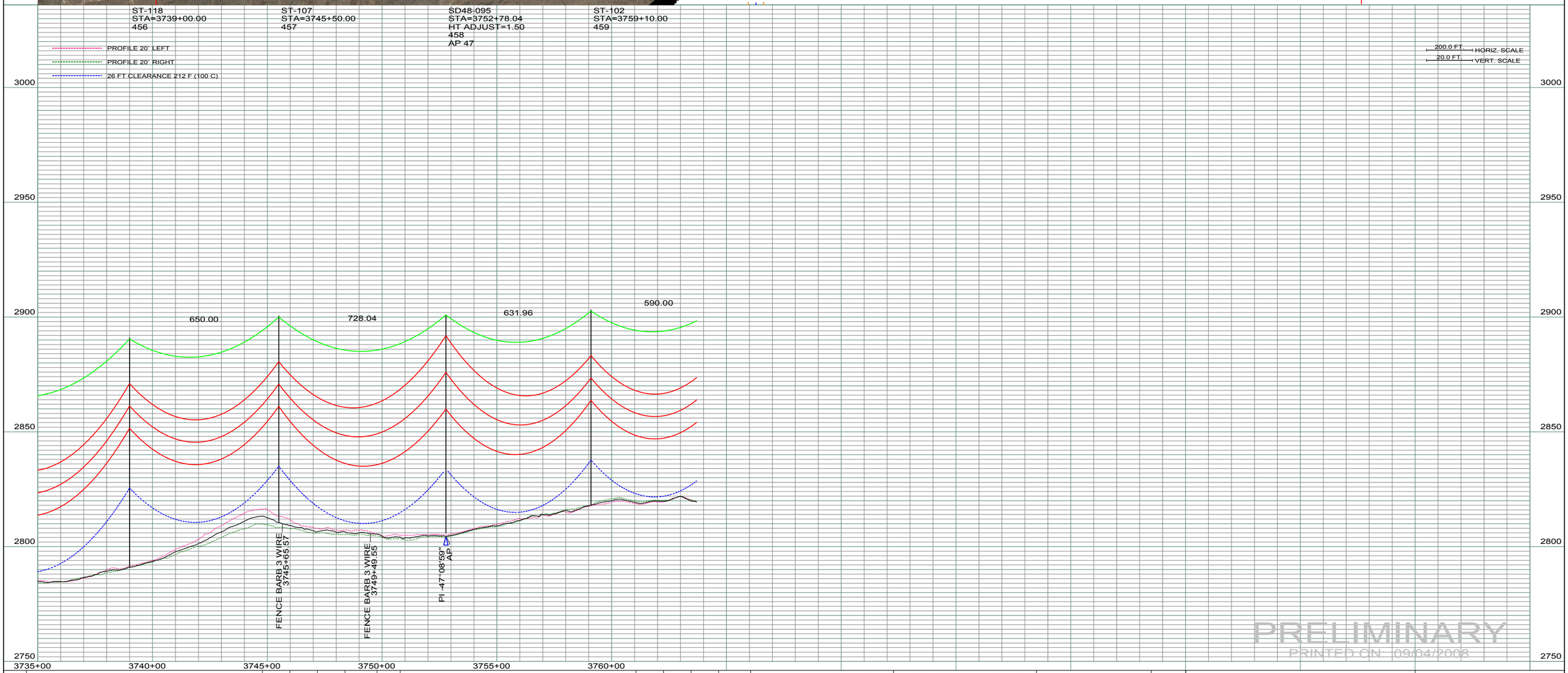
ST-107
STA=3745+50.00
457

SD48-095
STA=3752+78.04
HT ADJUST=1.50
458
AP 47

ST-102
STA=3759+10.00
459

PROFILE 20' LEFT
PROFILE 20' RIGHT
26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE



PRELIMINARY
PRINTED ON: 09/04/2008

REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

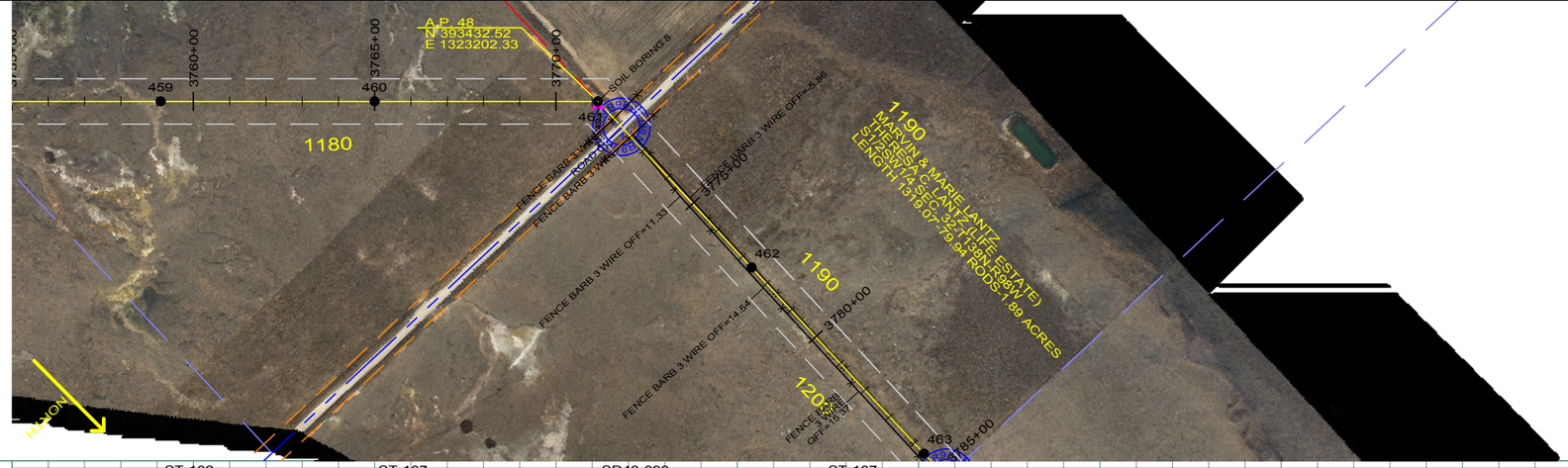
DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE
LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE
PLAN AND PROFILE
MILE 64 & 65

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN
COUNTY NAME: BOWMAN
BASIN DRAWING NO. 181-90-T3-068
REV. 1



DATE OF AERIAL PHOTOGRAPHY
NOVEMBER 08, 2007
GEODIGITAL INTERNATIONAL

ST-102
STA=3759+10.00
459

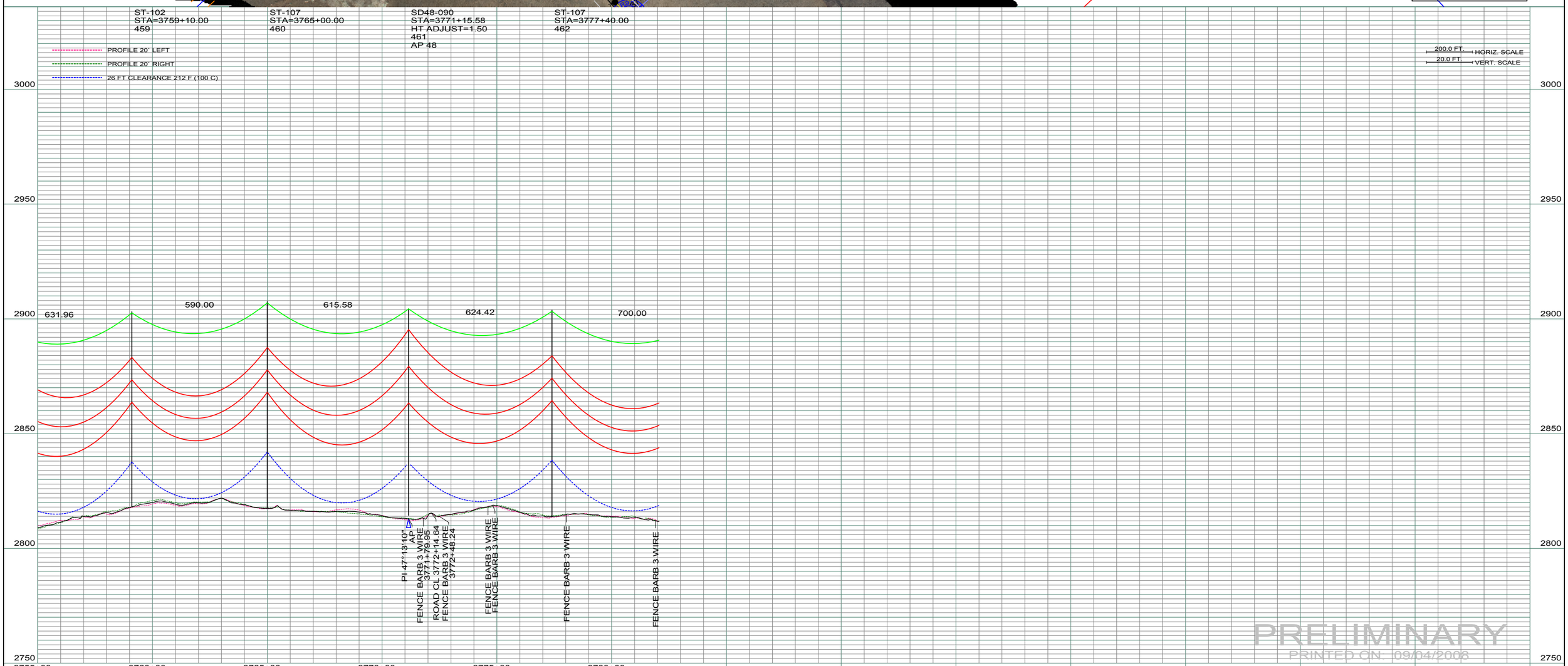
ST-107
STA=3765+00.00
460

SD48-090
STA=3771+15.58
HT ADJUST=1.50
461
AP 48

ST-107
STA=3777+40.00
462

PROFILE 20' LEFT
PROFILE 20' RIGHT
26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE



PRELIMINARY
PRINTED ON: 09/04/2008

REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA — NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

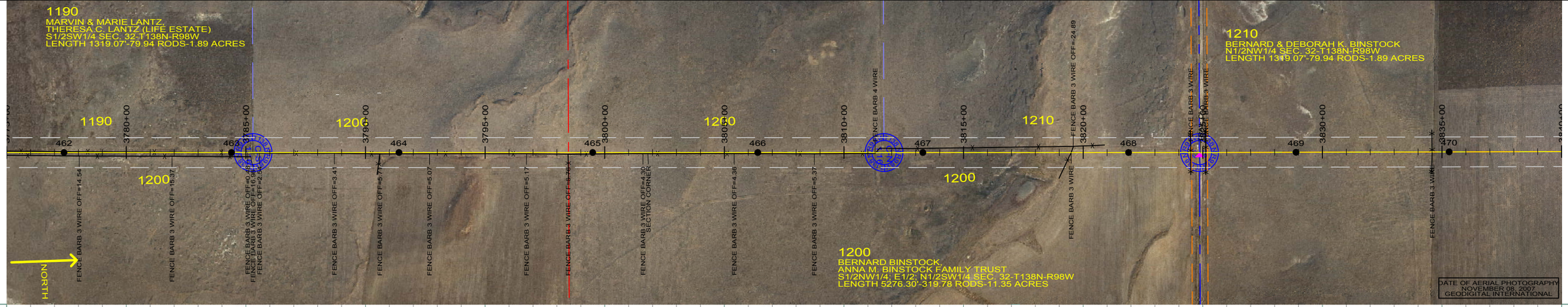
DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE
LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE
PLAN AND PROFILE
MILE 64 & 65

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

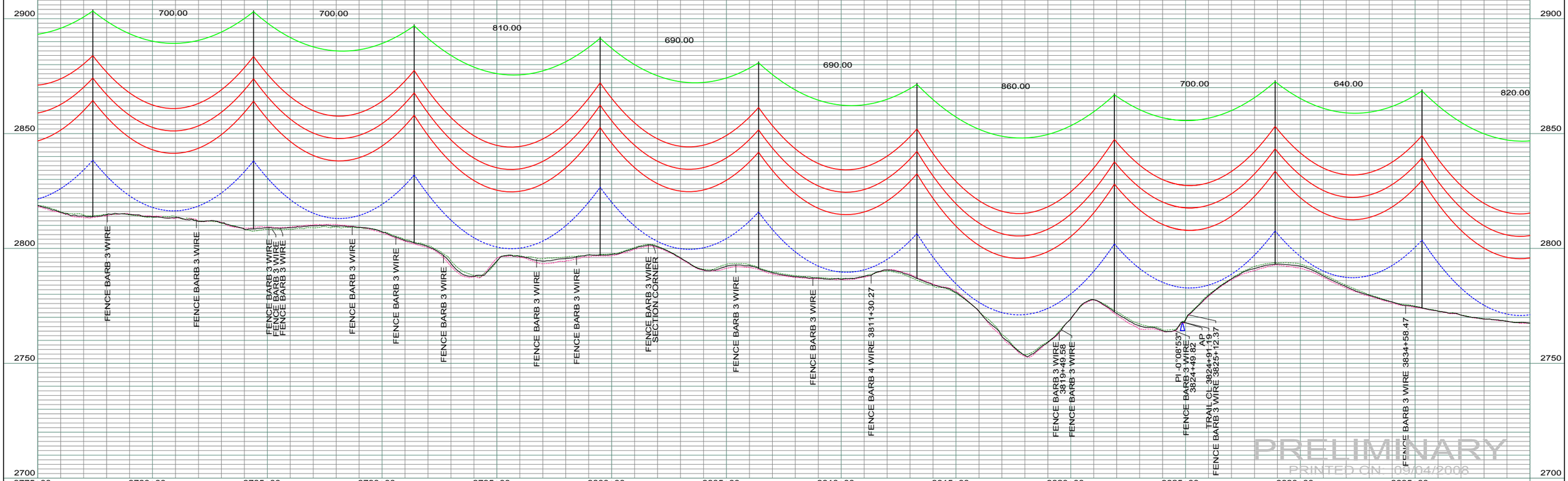
SCALE: AS SHOWN
COUNTY NAME: BOWMAN
BASIN DRAWING NO. 181-90-T3-069
REV. 1



ST-107	ST-113	ST-113	ST-113	ST-107	ST-102	ST-113	ST-096	ST-113
STA=3777+40.00	STA=3784+40.00	STA=3791+40.00	STA=3799+50.00	STA=3806+40.00	STA=3813+30.00	STA=3821+90.00	STA=3828+90.00	STA=3835+30.00
462	463	464	465	466	467	468	469	470

PROFILE 20' LEFT
PROFILE 20' RIGHT
26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE



PRELIMINARY
PRINTED ON: 09/04/2008

REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE
LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE
PLAN AND PROFILE
MILE 65 & 66

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE:	COUNTY NAME:
AS SHOWN	SLOPE
BASIN DRAWING NO.	REV.
181-90-T3-070	1

ST-113
STA=3835+30.00
470

ST-118
STA=3843+50.00
471

ST-118
STA=3852+00.00
472

ST-107
STA=3859+90.00
473

ST-118
STA=3866+50.00
474

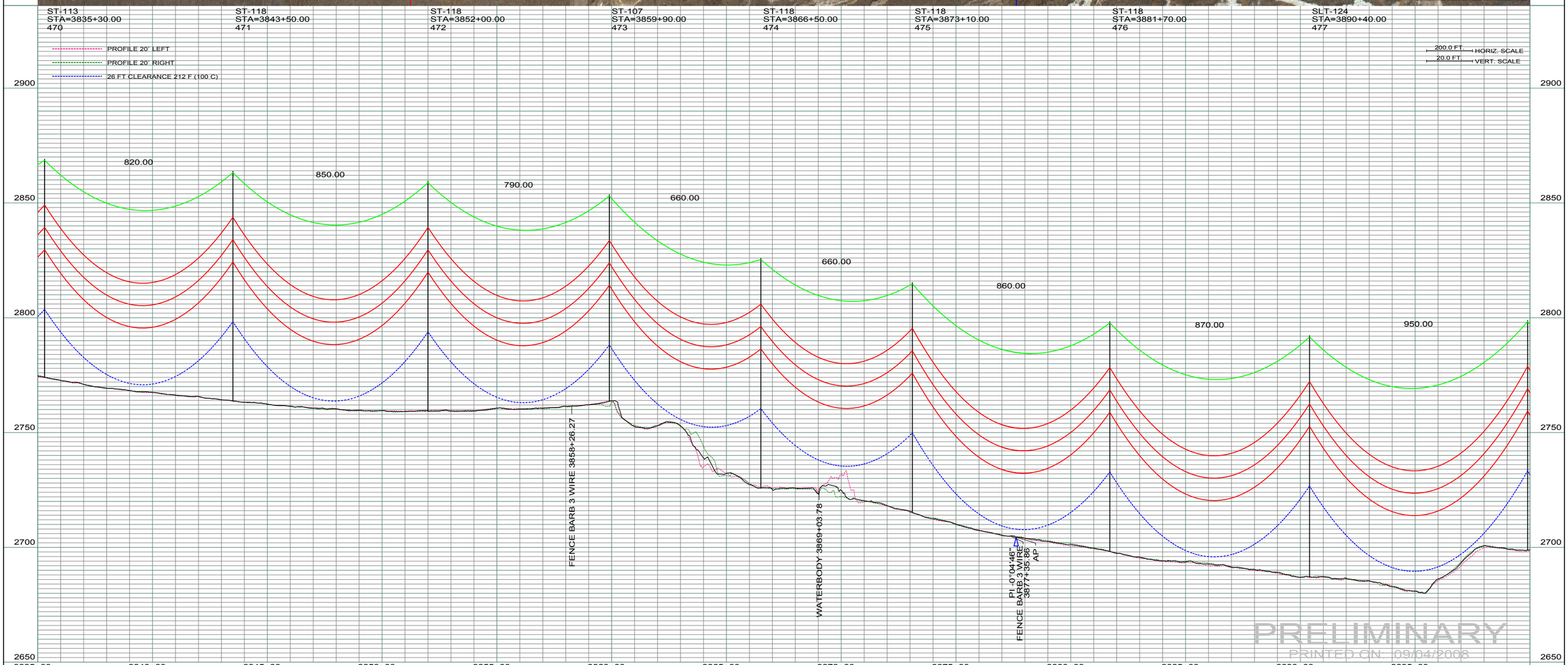
ST-118
STA=3873+10.00
475

ST-118
STA=3881+70.00
476

SLT-124
STA=3890+40.00
477

PROFILE 20' LEFT
PROFILE 20' RIGHT
26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE



REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

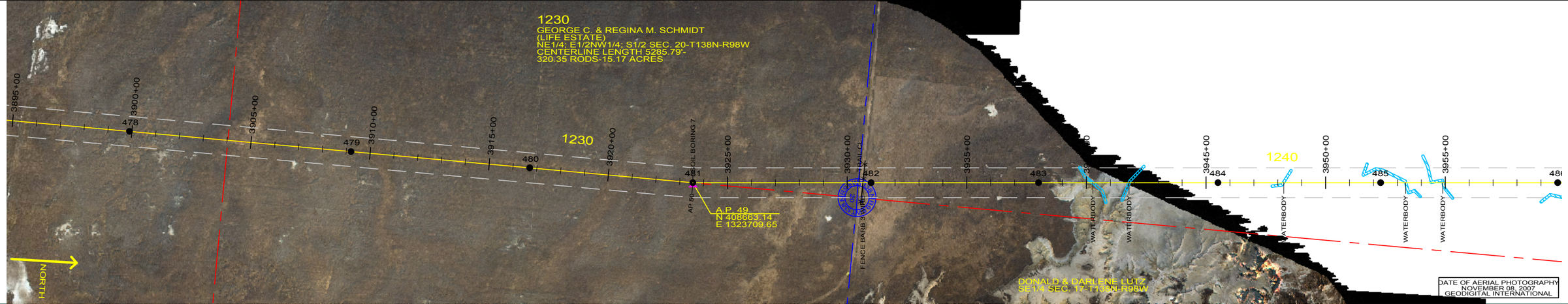
RHAME TO BELFIELD 230KV TRANSMISSION LINE

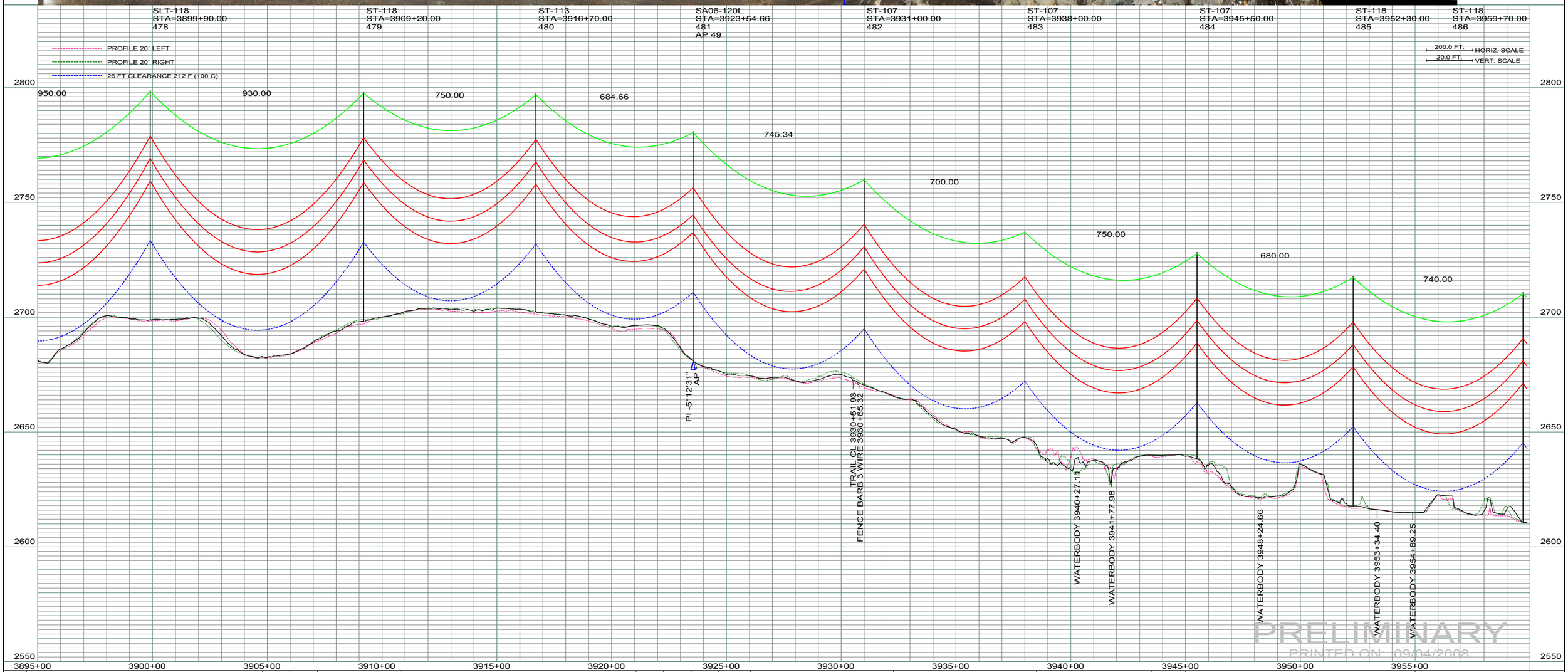
PLAN AND PROFILE

MILE 66 & 67

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE:	COUNTY NAME:
AS SHOWN	SLOPE
BASIN DRAWING NO.	REV.
181-90-T3-071	1





REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

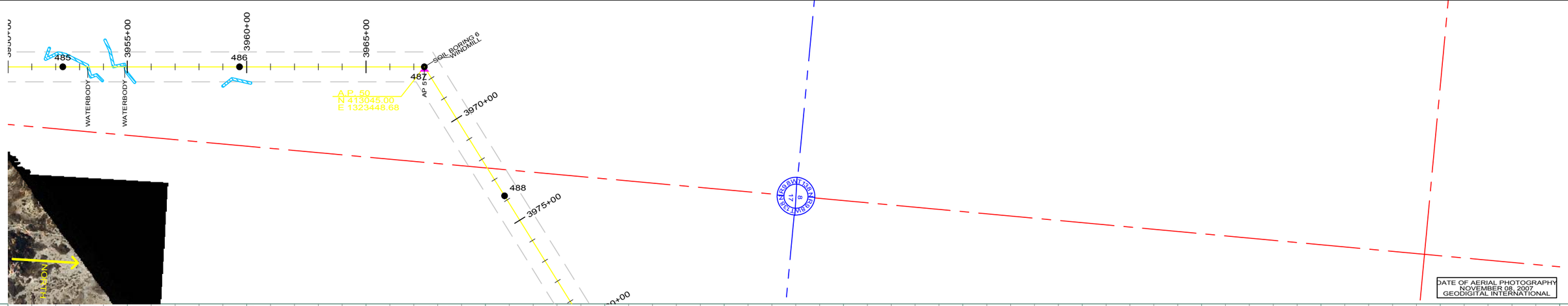
RHAME TO BELFIELD 230KV TRANSMISSION LINE

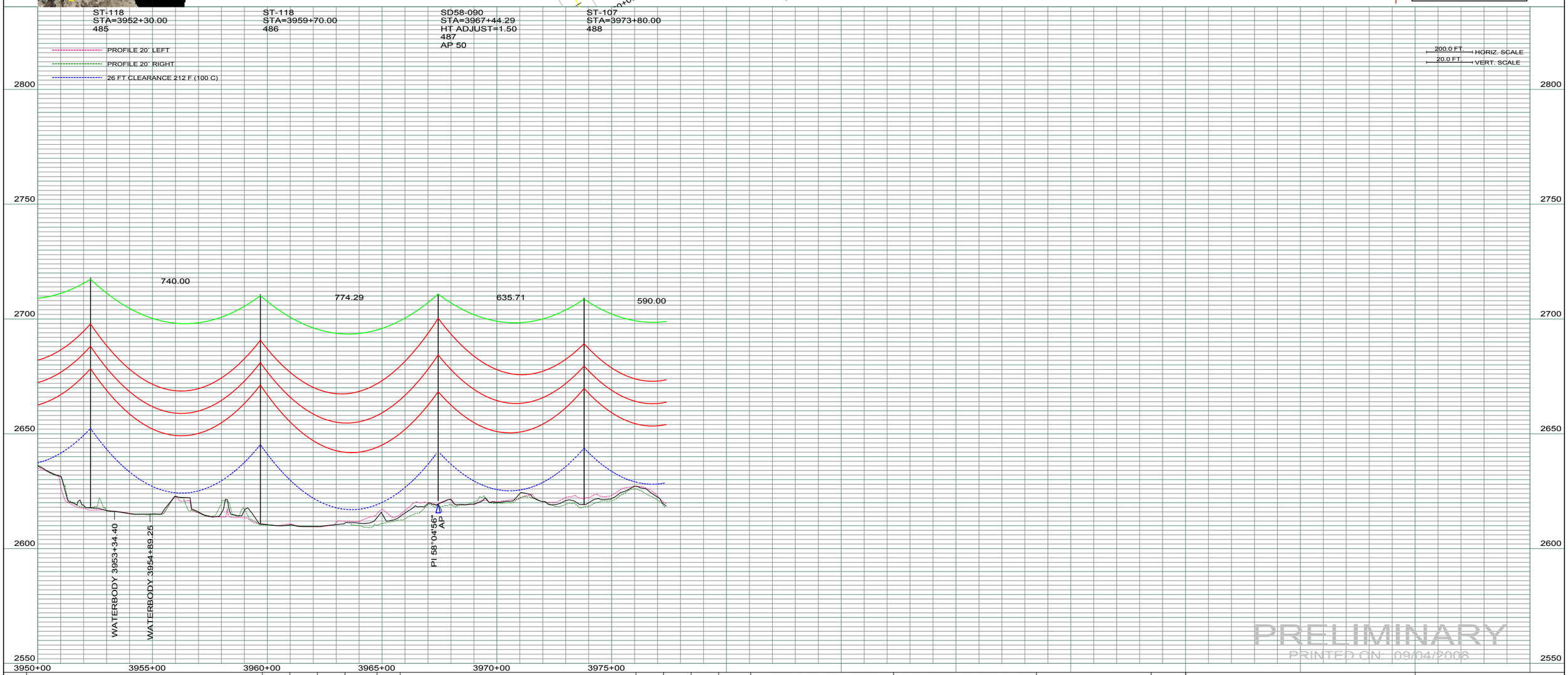
PLAN AND PROFILE

MILE 67 & 68

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE:	COUNTY NAME:
AS SHOWN	SLOPE
BASIN DRAWING NO.	REV.
181-90-T3-072	1





PRELIMINARY
PRINTED ON: 09/04/2008

REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

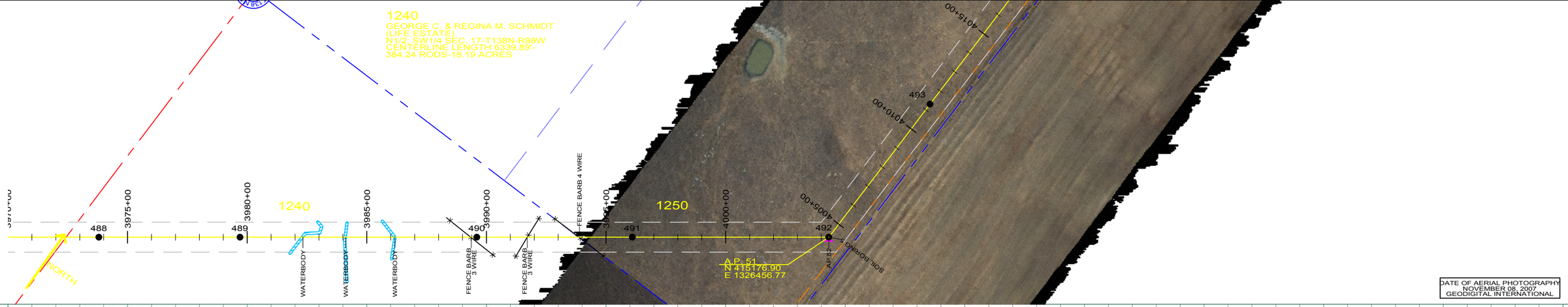
RHAME TO BELFIELD 230KV TRANSMISSION LINE

PLAN AND PROFILE

MILE 68 & 69

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE:	COUNTY NAME:
AS SHOWN	SLOPE
BASIN DRAWING NO.	REV.
181-90-T3-073	1



ST-107
STA=3973+80.00
488

ST-113
STA=3979+70.00
489

ST-102
STA=3989+60.00
490

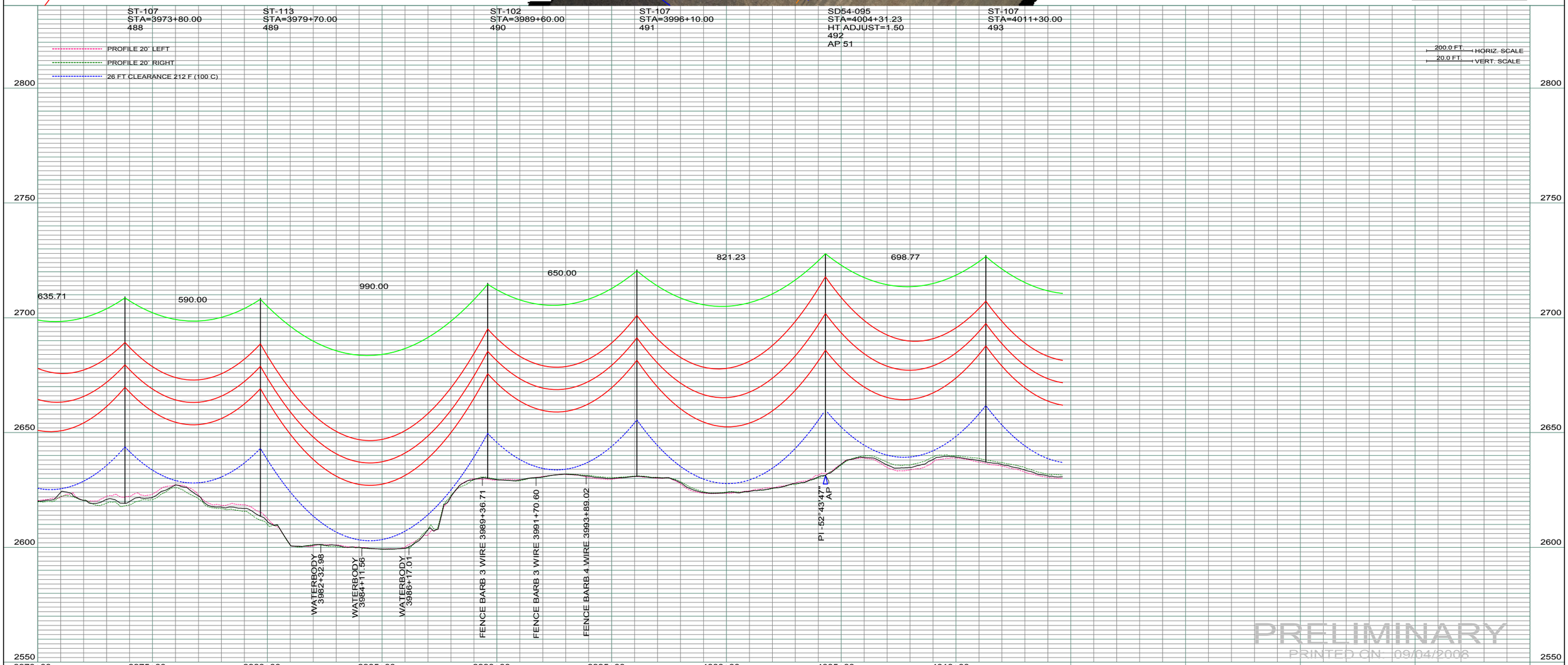
ST-107
STA=3996+10.00
491

SD54-095
STA=4004+31.23
HT ADJUST=1.50
492
AP 51

ST-107
STA=4011+30.00
493

PROFILE 20' LEFT
PROFILE 20' RIGHT
26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE



REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE
LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

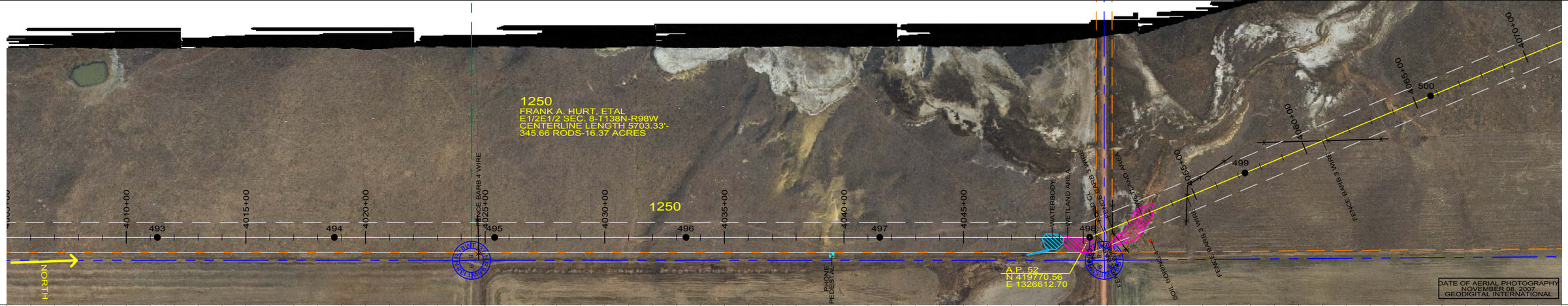
RHAME TO BELFIELD 230KV TRANSMISSION LINE

PLAN AND PROFILE

MILE 68 & 69

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE:	COUNTY NAME:
AS SHOWN	SLOPE
BASIN DRAWING NO.	REV.
181-90-T3-074	1



ST-107
STA=4011+30.00
493

ST-113
STA=4018+70.00
494

ST-113
STA=4025+40.00
495

ST-118
STA=4033+40.00
496

ST-118
STA=4041+50.00
497

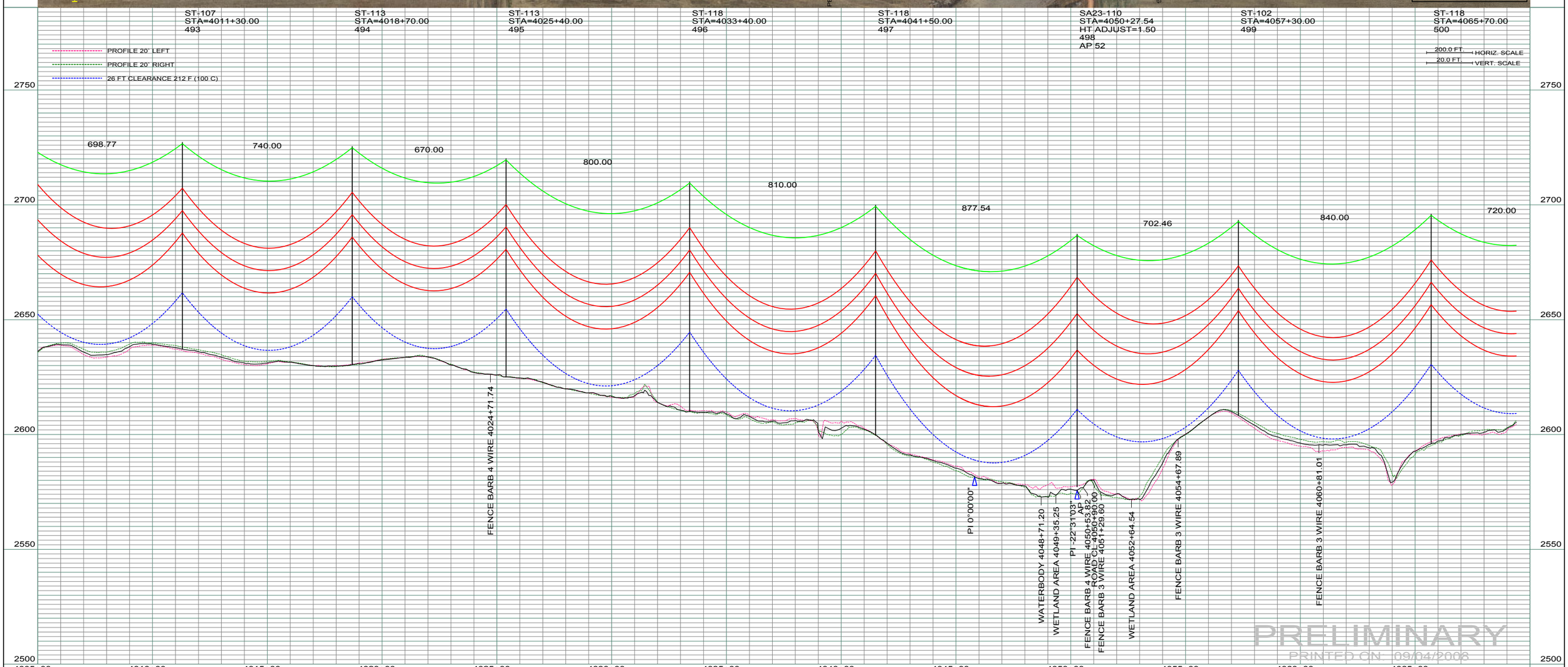
SA23-110
STA=4050+27.54
HT ADJUST=1.50
498
AP 52

ST-102
STA=4057+30.00
499

ST-118
STA=4065+70.00
500

PROFILE 20' LEFT
PROFILE 20' RIGHT
26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE



REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE

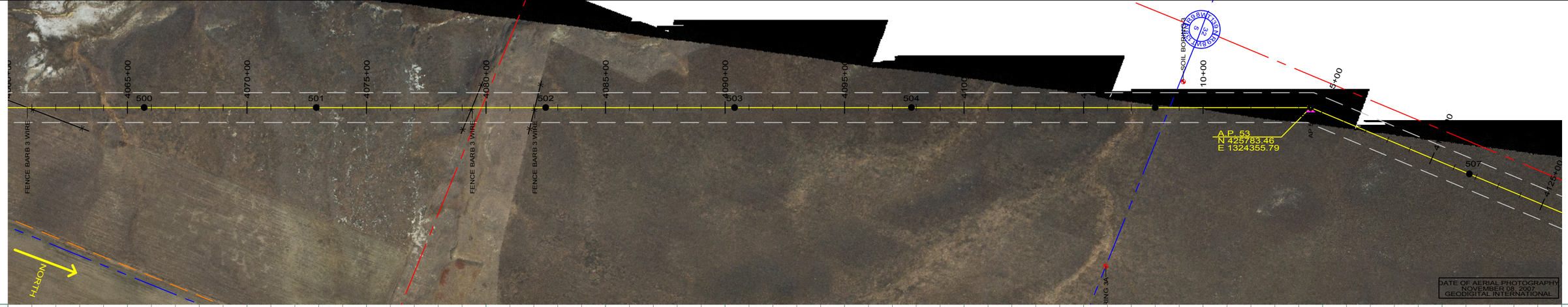
PLAN AND PROFILE

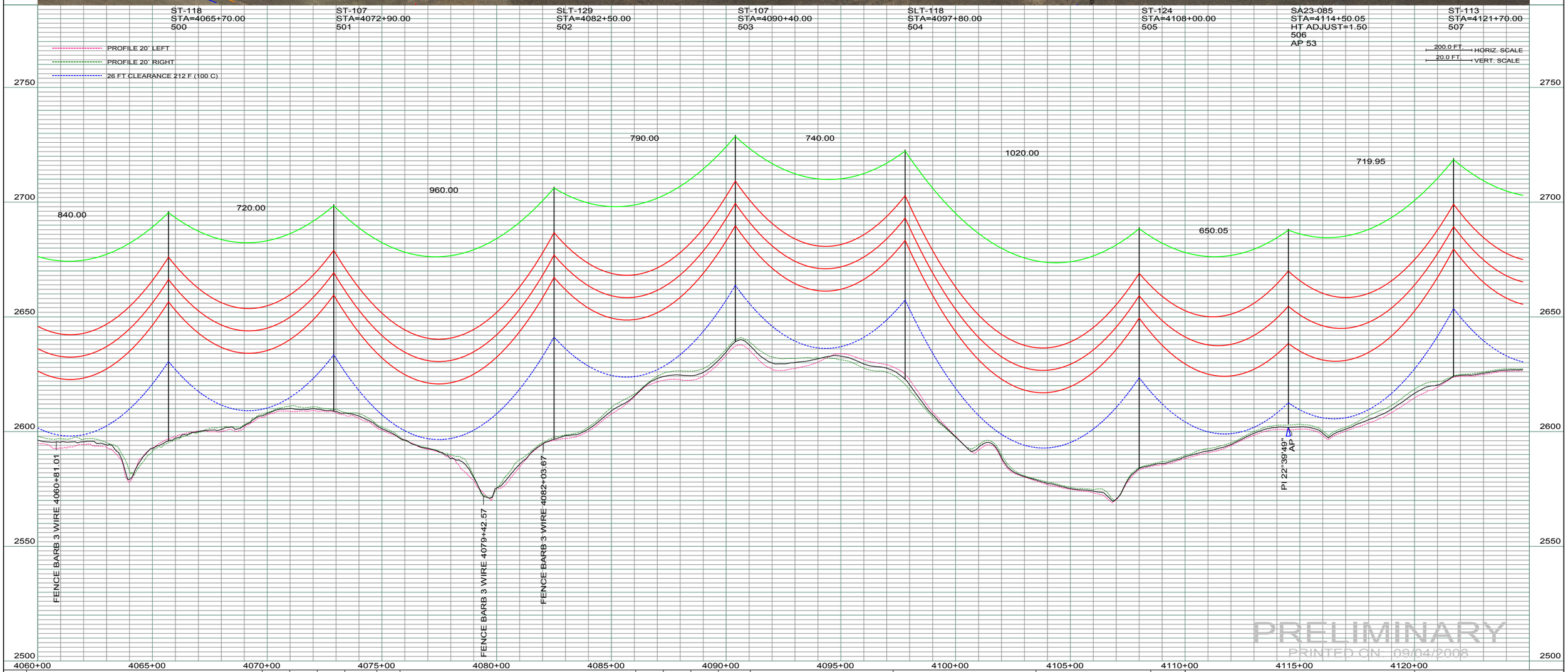
MILE 69 & 70

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE:	COUNTY NAME:
AS SHOWN	SLOPE

BASIN DRAWING NO. 181-90-T3-075 | REV. 1





REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED: DAM		09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE

PLAN AND PROFILE

MILE 70 & 71

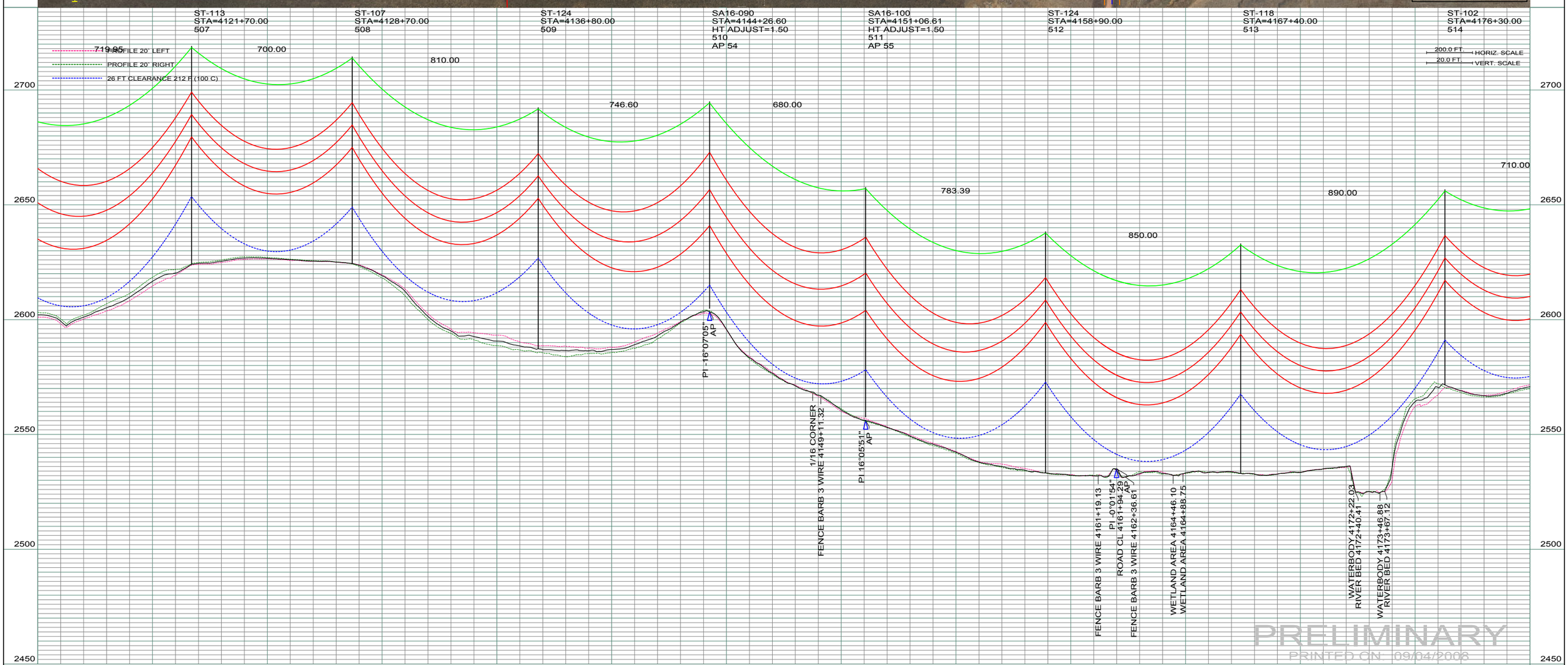
BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN

COUNTY NAME: SLOPE

BASIN DRAWING NO. 181-90-T3-076

REV. 1



REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

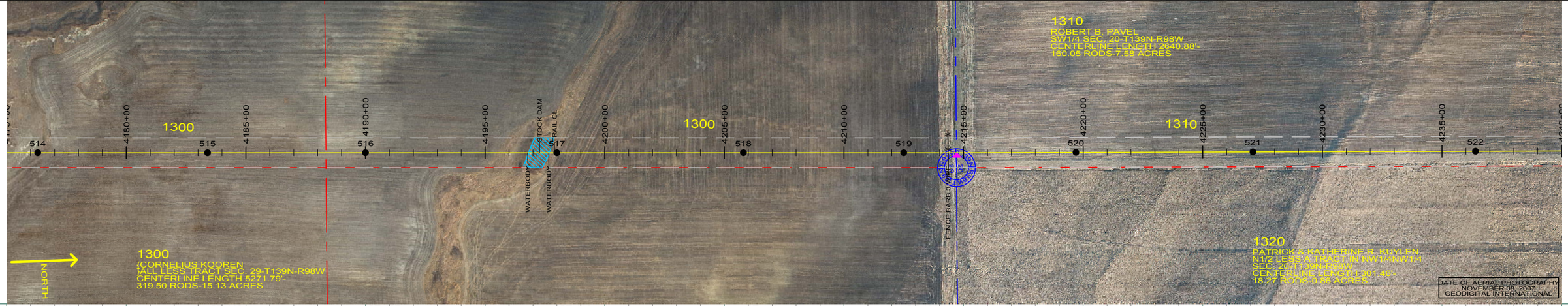
RHAME TO BELFIELD 230KV TRANSMISSION LINE

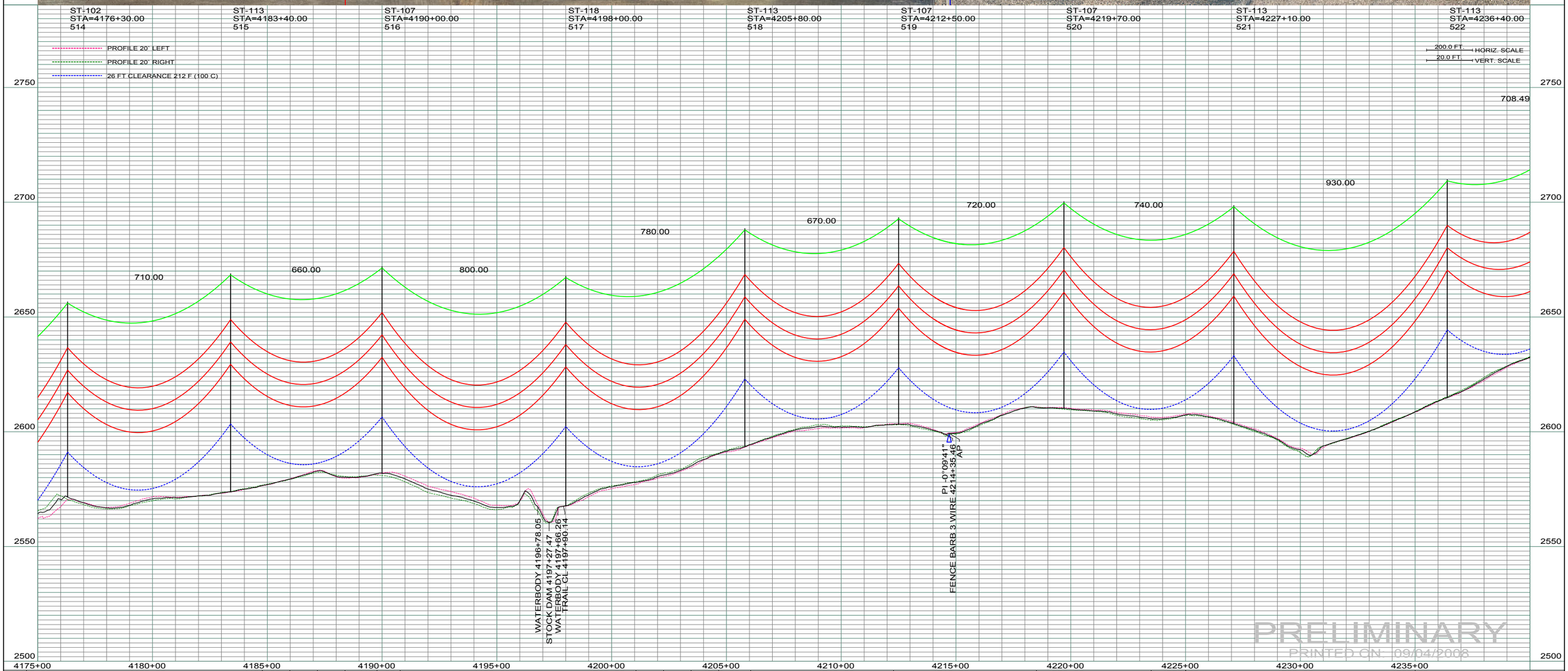
PLAN AND PROFILE

MILE 71 & 72

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE:	COUNTY NAME:
AS SHOWN	SLOPE
BASIN DRAWING NO.	REV.
181-90-T3-077	1





REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE

LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE

PLAN AND PROFILE

MILE 72 & 73

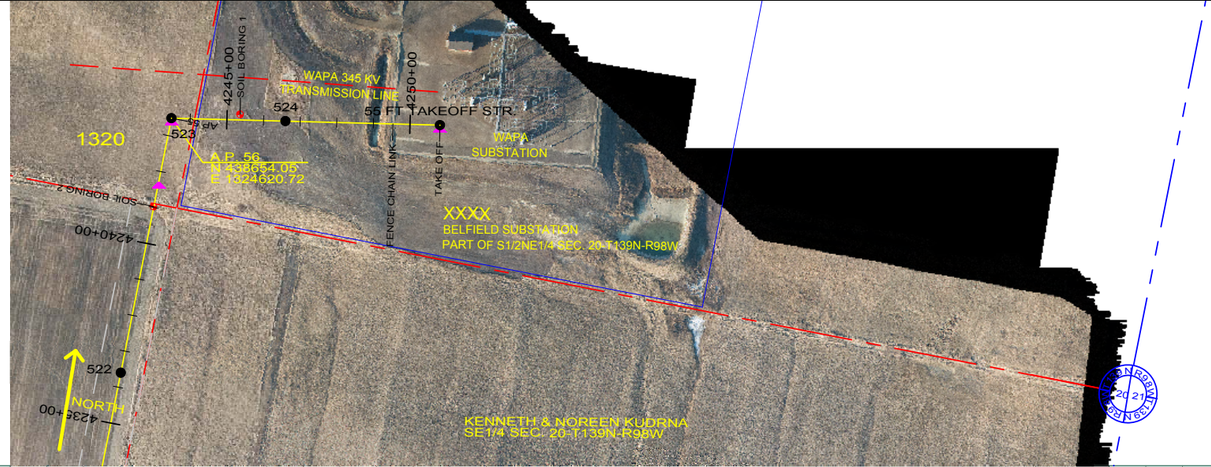
BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN

COUNTY NAME: SLOPE

BASIN DRAWING NO. 181-90-T3-078

REV. 1



DATE OF AERIAL PHOTOGRAPHY
NOVEMBER 08, 2007
GEODIGITAL INTERNATIONAL

ST-113
STA=4236+40.00
522

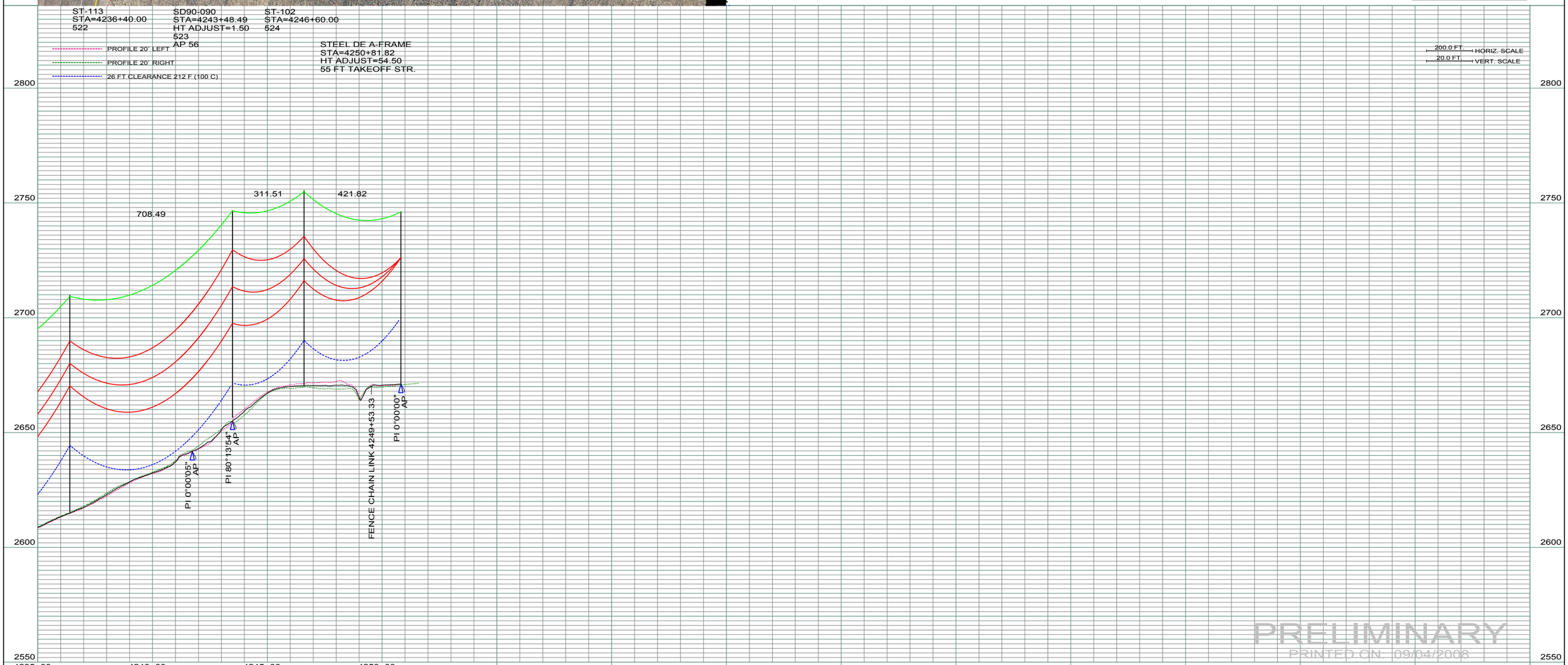
SD90-090
STA=4243+48.49
HT ADJUST=1.50
523
AP 56

ST-102
STA=4246+60.00
524

STEEL DE A-FRAME
STA=4250+81.82
HT ADJUST=54.50
55 FT TAKEOFF STR.

PROFILE 20' LEFT
PROFILE 20' RIGHT
26 FT CLEARANCE 212 F (100 C)

200.0 FT. HORIZ. SCALE
20.0 FT. VERT. SCALE



PRELIMINARY
PRINTED ON: 09/04/2008

REV	DESCRIPTION	DRWN	DSGN	APPD	DATE	REV	DESCRIPTION	DRWN	DSGN	APPD	DATE
1	ISSUE TO PUBLIC SERVICE COMMISSION	CDB	CDB	DAM	08-08-08	-					
2	-	-	-	-	-						
3	-	-	-	-	-						
4	-	-	-	-	-						

STATE NAME: NORTH DAKOTA | NAD83 NDSPCS INTL FT SOUTH ZONE

DESIGN INFORMATION

	SIZE	STRINGING TENSION	NESC TENSION	DESIGN RULING SPAN	ACTUAL RULING SPAN
CONDUCTOR	1272 MCM 45/7 ACSR		0	800	0
OPGW	AC-71/571		0		

DESIGN BY:	DAM/CDB	08-08-08
DRAWN BY:	CDB	08-08-08
DESIGN CHK:	SW/ULTEIG	08-08-08
DRAFT CHK:		
APPROVED:	DAM	09-05-08

FACILITY: TRANSMISSION SYSTEM MAINTENANCE
LOCATION UNIT: 181-230KV LINE-RHAME SUBSTATION TO BELFIELD SUBSTATION

RHAME TO BELFIELD 230KV TRANSMISSION LINE
PLAN AND PROFILE
MILE 73 & 74

BASIN ELECTRIC POWER COOPERATIVE
1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA
PHONE 701-223-0441

SCALE: AS SHOWN
COUNTY NAME: SLOPE
BASIN DRAWING NO. 181-90-T3-079
REV. 1