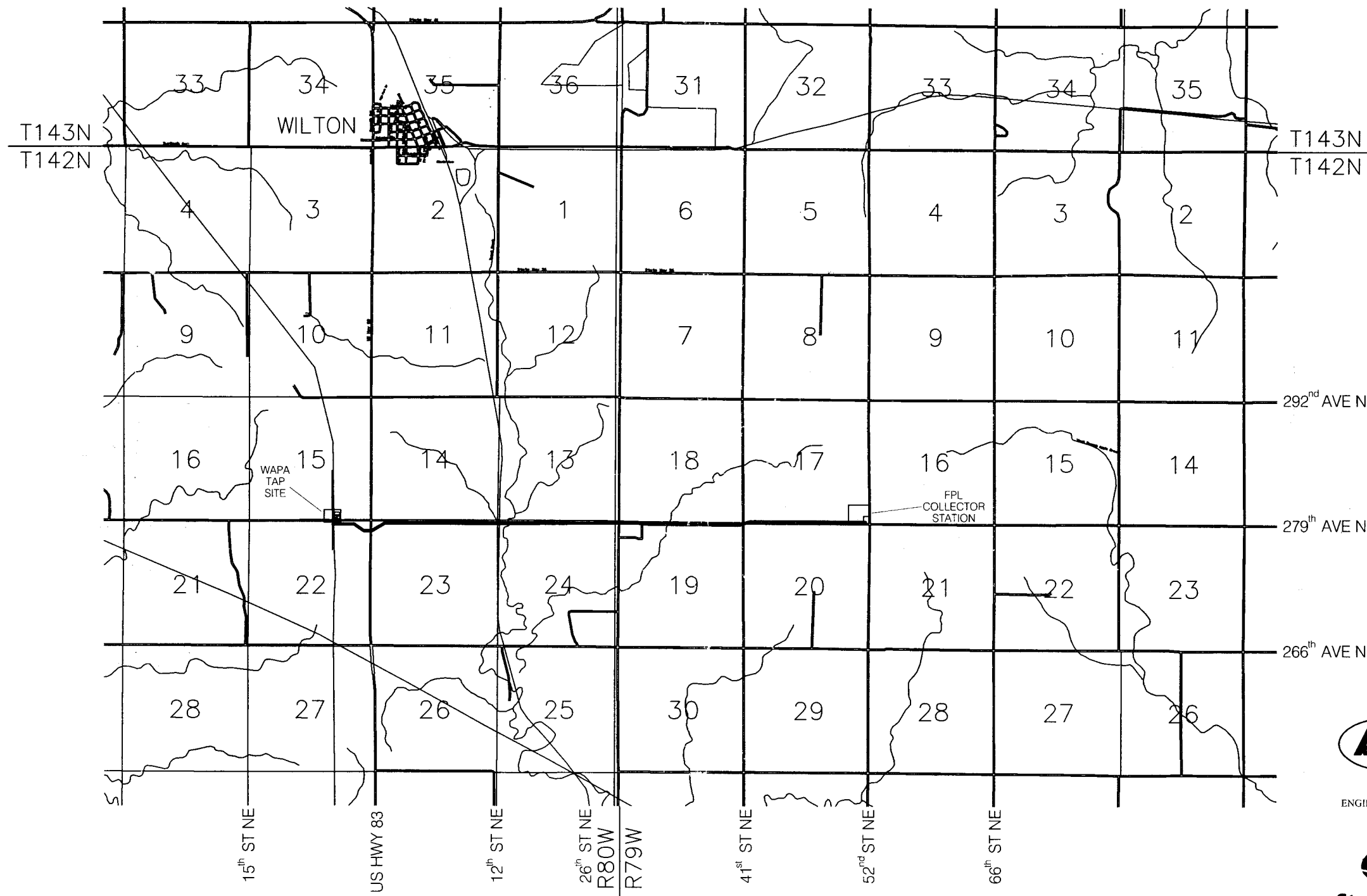




CENTRAL POWER ELECTRIC COOPERATIVE

NORTH DAKOTA 42 WARD



PLAN & PROFILE DRAWINGS

BURLEIGH WIND

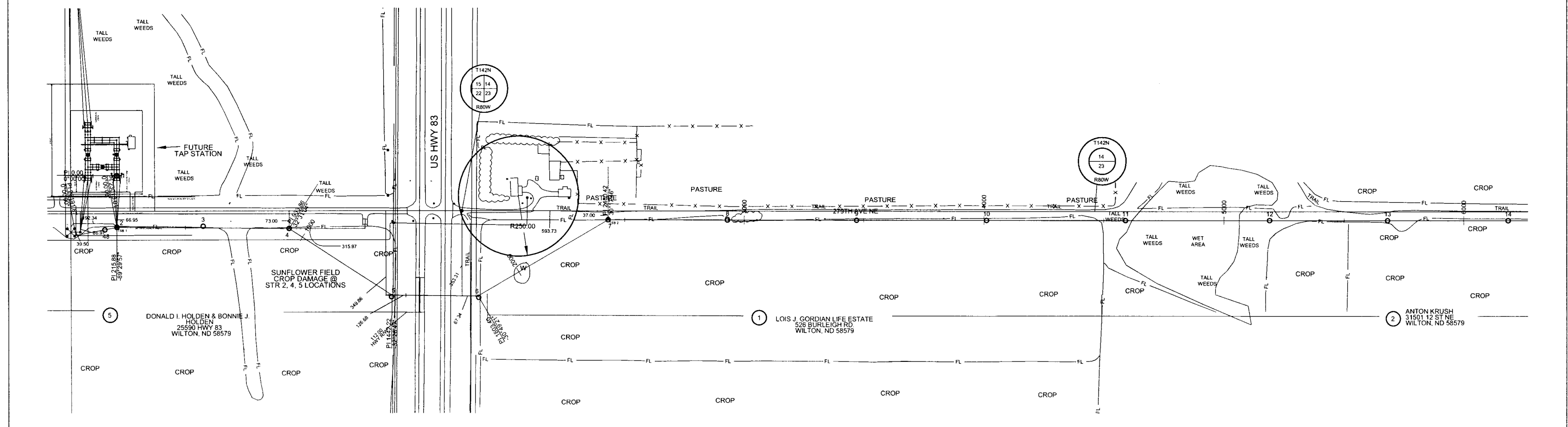
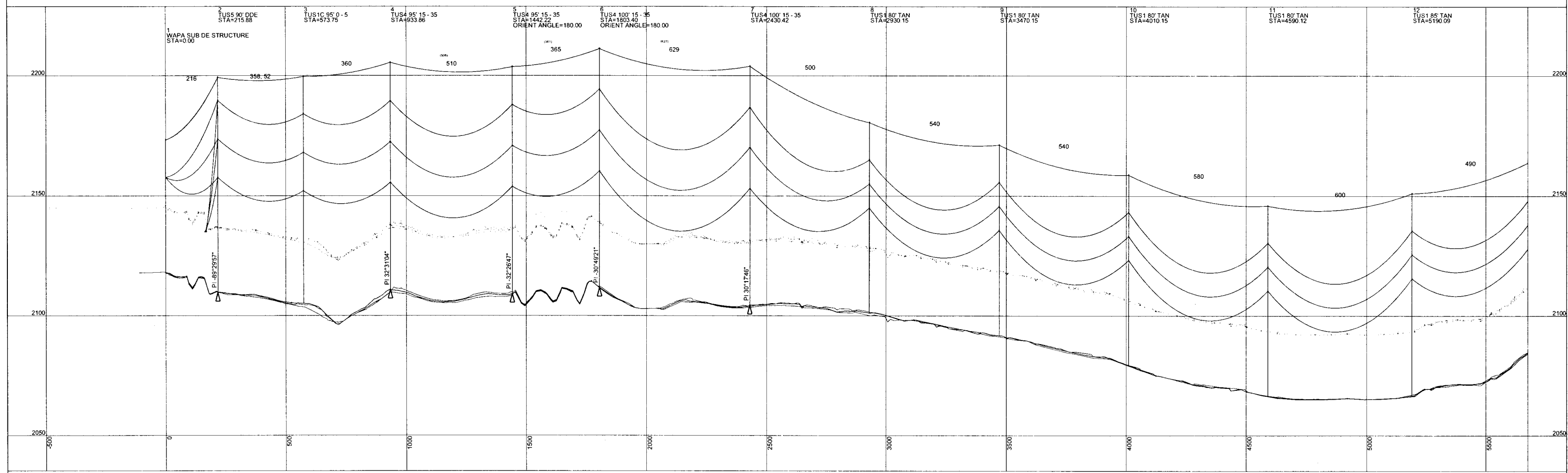
230 KV TRANSMISSION LINE



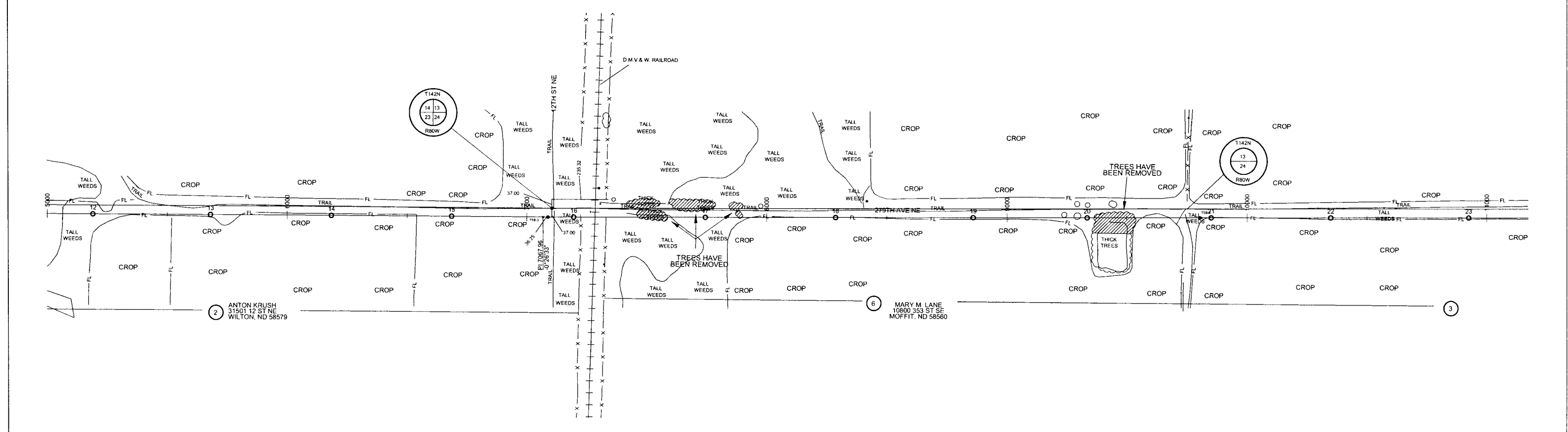
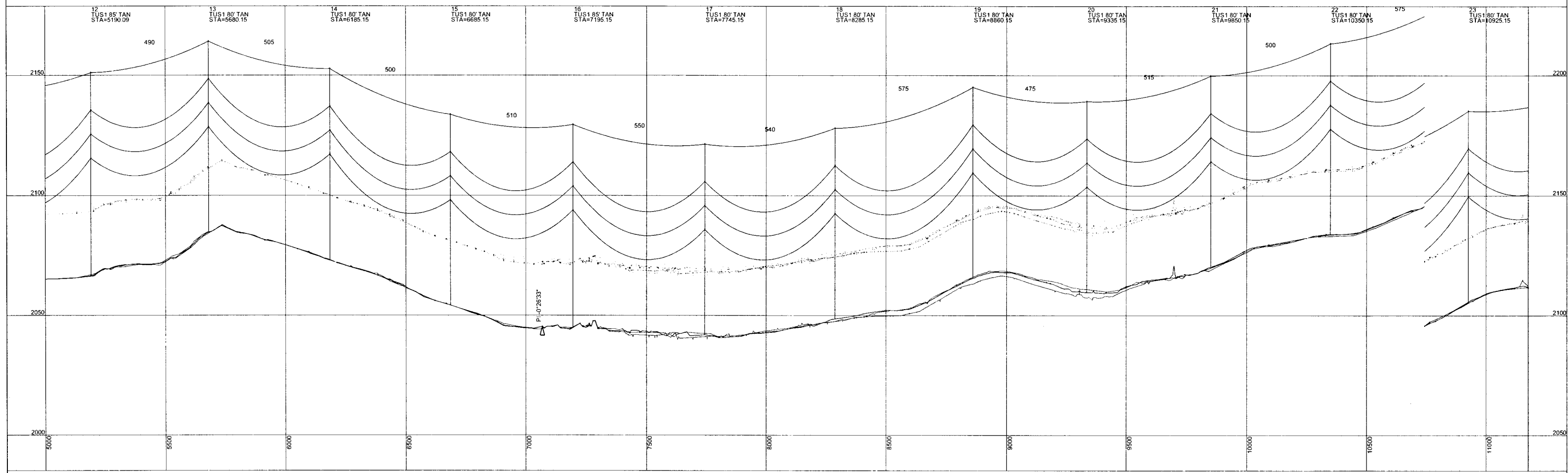
ENGINEERING • PHOTOGRAMMETRY • SURVEYING



AS BUILT
DATE: 12-03-05



<p>CONDUCTOR 795 MCM ACSR 26/7 DR DESIGN TENSION 9,119# RULING SPAN 513'</p>		<p>SHIELD CONDUCTOR AC 64/52R OPGW DESIGN TENSION 5,160# RULING SPAN 513'</p>		<p>DESIGN TENSION AT 2002 NESC HEAVY LOADING 0° F 4 P.S.F. WIND 1/2" ICE 0.30 CONSTANT</p>		<p>INSULATION & CLEARANCES @ 230KV CONTROL - NORTH DAKOTA SOUTH ZONE HORIZONTAL - NAD - 83 VERTICAL - NAVD - 88</p>		<p>ENGINEERING - PLANNING KBM, INC. GRAND FORKS, ND PHOTOGRAMMETRY - SURVEYING</p>		<p>STANLEY CONSULTANTS INC.</p>		<p>CENTRAL POWER ELECTRIC COOPERATIVE BURLEIGH WIND 230KV TRANSMISSION LINE</p>		<p>200.0 FT. HORIZ. SCALE 20.0 FT. VERT. SCALE</p>		<p>NORTH</p>	
<p>AS BUILT</p>		<p>J.L.Z. D.A.M. 11/27/05</p>		<p>FINAL DESIGN</p>		<p>J.L.Z. D.A.M. 8/04/05</p>		<p>DESCRIPTION</p>		<p>DATE</p>		<p>SHEET TITLE PLAN AND PROFILE SHEET</p>		<p>SHEET: 1 OF 5 DRAWN BY: J.L.Z. CHECKED BY: D.A.M. DATE: 12/03/05</p>		<p>REV: #7</p>	



REV. NO.	DESCRIPTION	DRAWN BY	APPROVED BY	DATE
7	AS BUILT	J.L.Z.	D.A.M.	12/03/05
1	FINAL DESIGN	J.L.Z.	D.A.M.	8/04/05

TRANSMISSION		SHIELD	
CONDUCTOR 795 MCM ACSR 26/7	DESIGN TENSION 9,119#	CONDUCTOR AC 64/528 OPWG	DESIGN TENSION 5,360#
RULING SPAN 519'	SAGGED AT MAX ICE, 32°F ICE 1.5"	RULING SPAN 519'	SAGGED AT INITIAL ICE 0

DESIGN TENSION AT 2002 NESC HEAVY LOADING 0' 7"	4 P.S.F. WIND	1/2" ICE	0.30 CONSTANT
INSULATION & CLEARANCES @ 230KV			
CONTROL - NORTH DAKOTA SOUTH ZONE			
HORIZONTAL - NAD - 83			
VERTICAL - NAVD - 88			

ENGINEERING PLANNING
KBM, INC.
 GRAND FORKS, ND
 PHOTOGRAMMETRY SURVEYING
Stanley Consultants Inc.

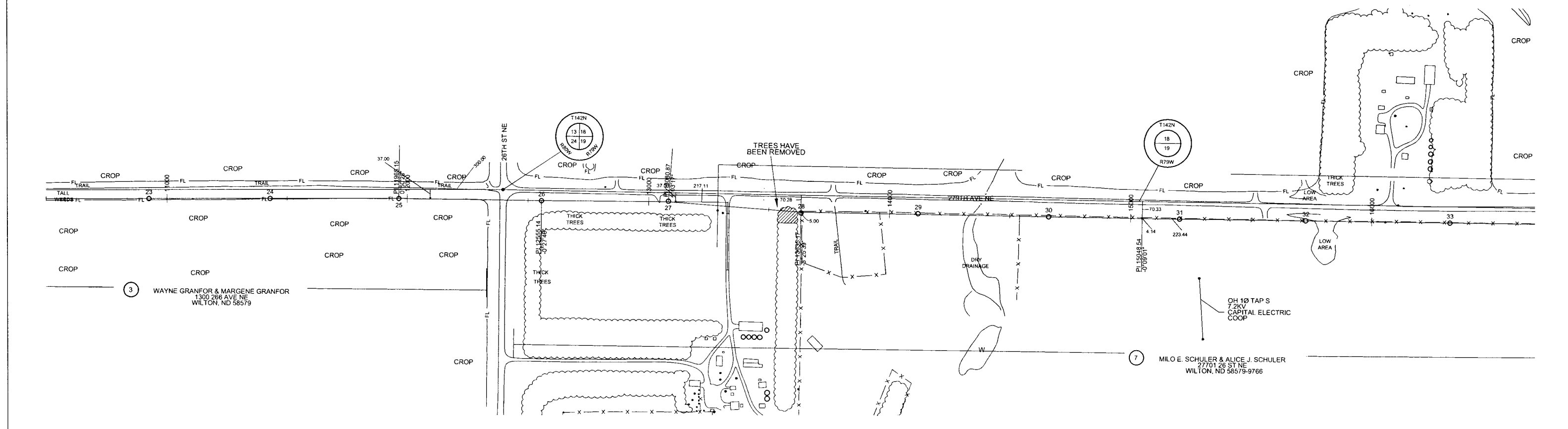
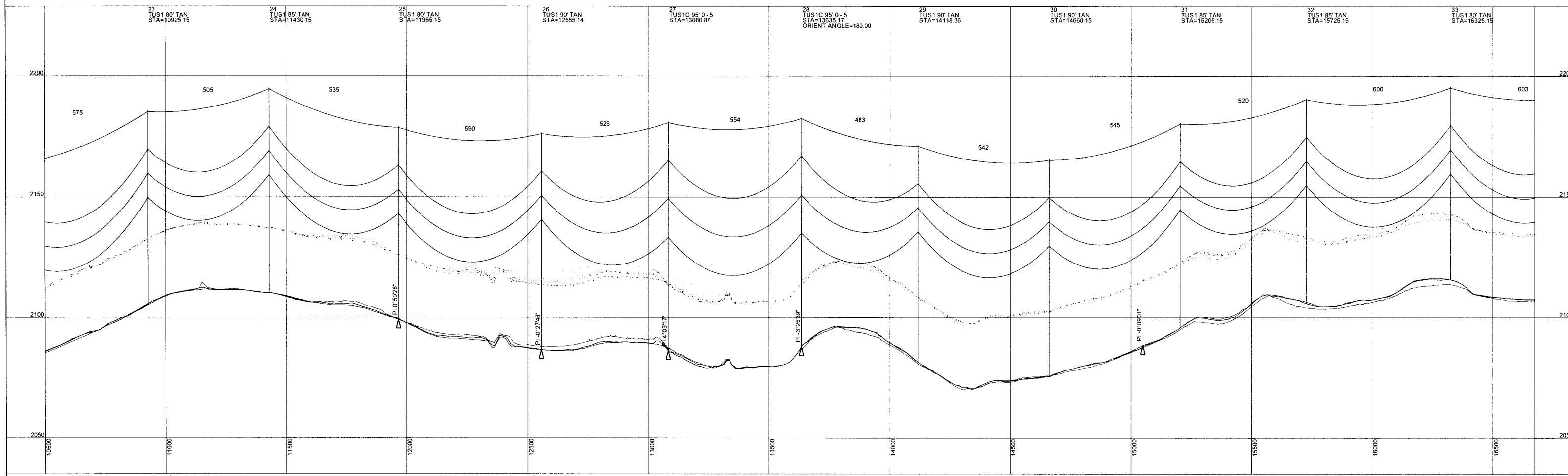
CENTRAL POWER ELECTRIC COOPERATIVE
 BURLEIGH WIND
 230KV TRANSMISSION LINE

SHEET TITLE:
PLAN AND PROFILE SHEET

200.0 FT. HORIZ SCALE
 20.0 FT. VERT. SCALE

NORTH

SHEET: 2 OF 5	REV: #7
DRAWN BY: J.L.Z.	CHECKED BY: D.A.M.
DATE: 12/03/05	



REV. NO.	DESCRIPTION	DRAWN BY	APPR BY	DATE
2	AS BUILT	J.L.Z.	D.A.M.	12/03/05
1	FINAL DESIGN	J.L.Z.	D.A.M.	8/04/05

TRANSMISSION		SHIELD	
CONDUCTOR	795 MCM ACSR 26/7	CONDUCTOR	AC 64/528 OPGW
DESIGN TENSION	9,119#	DESIGN TENSION	5,360#
RULING SPAN	519'	RULING SPAN	519'
SAGGED AT MAX ICE	32°F	SAGGED AT INITIAL ICE	0
	1.5"		

DESIGN TENSION AT 2002 NESC HEAVY LOADING	0' 7"
4 P.S.F. WIND	1/2" ICE
0.30 CONSTANT	
INSULATION & CLEARANCES @ 230KV	
CONTROL - NORTH DAKOTA SOUTH ZONE	
HORIZONTAL - NAD - 83	
VERTICAL - NAVD - 88	



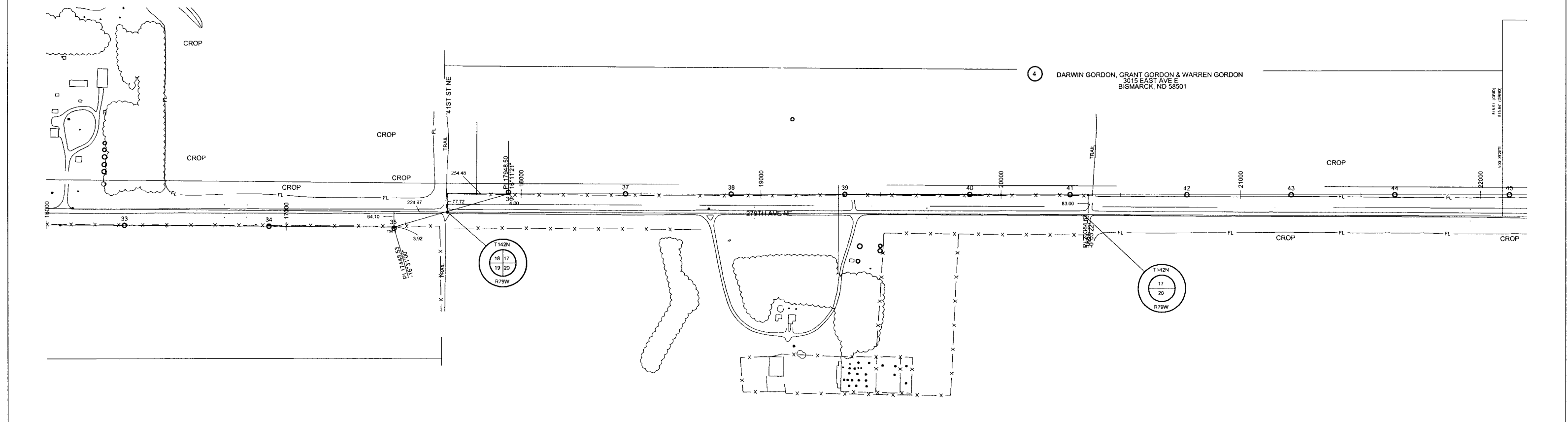
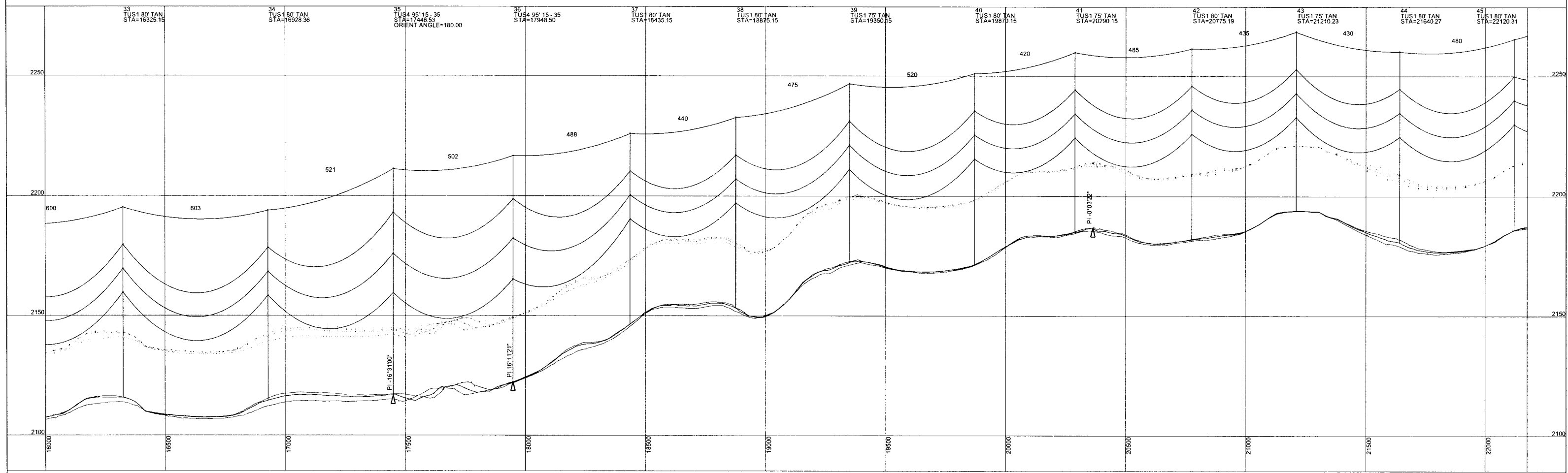
ENGINEERING - PLANNING
 PHOTOGRAMMETRY - SURVEYING

CENTRAL POWER ELECTRIC COOPERATIVE

SITE LOCATION:
**BURLEIGH- WIND
 230KV TRANSMISSION LINE**

SHEET TITLE:
PLAN AND PROFILE SHEET

200.0 FT. HORIZ. SCALE	20.0 FT. VERT. SCALE	NORTH
SHEET: 3 OF 5	REV: #7	DATE: 7/03/05
DRAWN BY: J.L.Z.	CHECKED BY: D.A.M.	



REV. NO.	DESCRIPTION	DRAWN BY	APPR BY	DATE
2	AS BUILT	J.L.Z.	D.A.M.	12/03/05
1	FINAL DESIGN	J.L.Z.	D.A.M.	8/04/05

TRANSMISSION		SHIELD	
CONDUCTOR	795 MCM ACSR 26/7	CONDUCTOR	AC 64/528 OPGW
DESIGN TENSION	9,119#	DESIGN TENSION	5,360#
RULING SPAN	519'	RULING SPAN	519'
SAGGED AT MAX ICE	32°F	SAGGED AT INITIAL ICE	0
	1.5"		

DESIGN TENSION AT 2002 NESC HEAVY LOADING	0"
4 P.S.F. WIND	1/2" ICE
0.30 CONSTANT	
INSULATION & CLEARANCES @ 230KV	
CONTROL - NORTH DAKOTA SOUTH ZONE	
HORIZONTAL - NAD - 83	
VERTICAL - NAVD - 88	

ENGINEERING - PLANNING
KBM, INC.
 GRAND FORKS, ND
 PHOTOGRAMMETRY - SURVEYING

Stanley Consultants INC.

CENTRAL POWER ELECTRIC COOPERATIVE

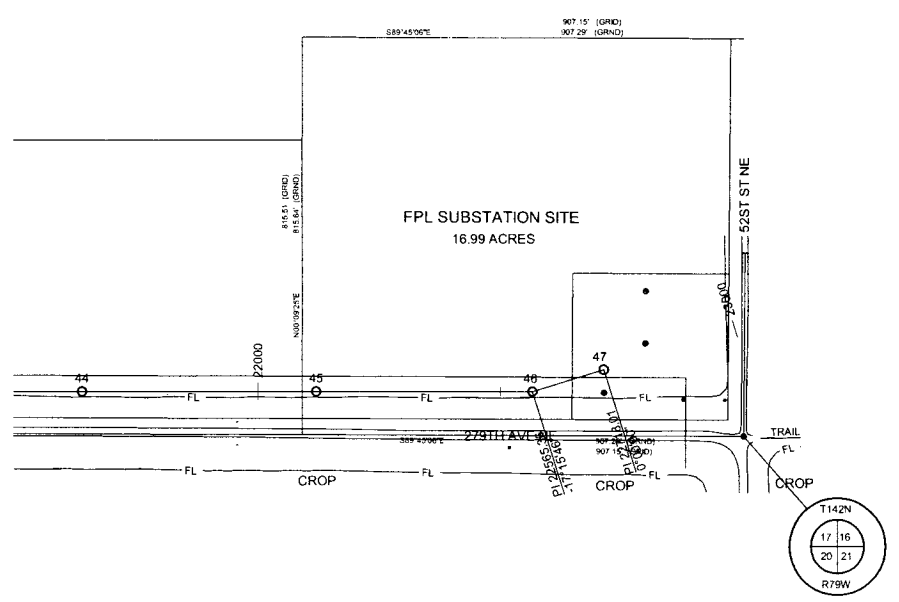
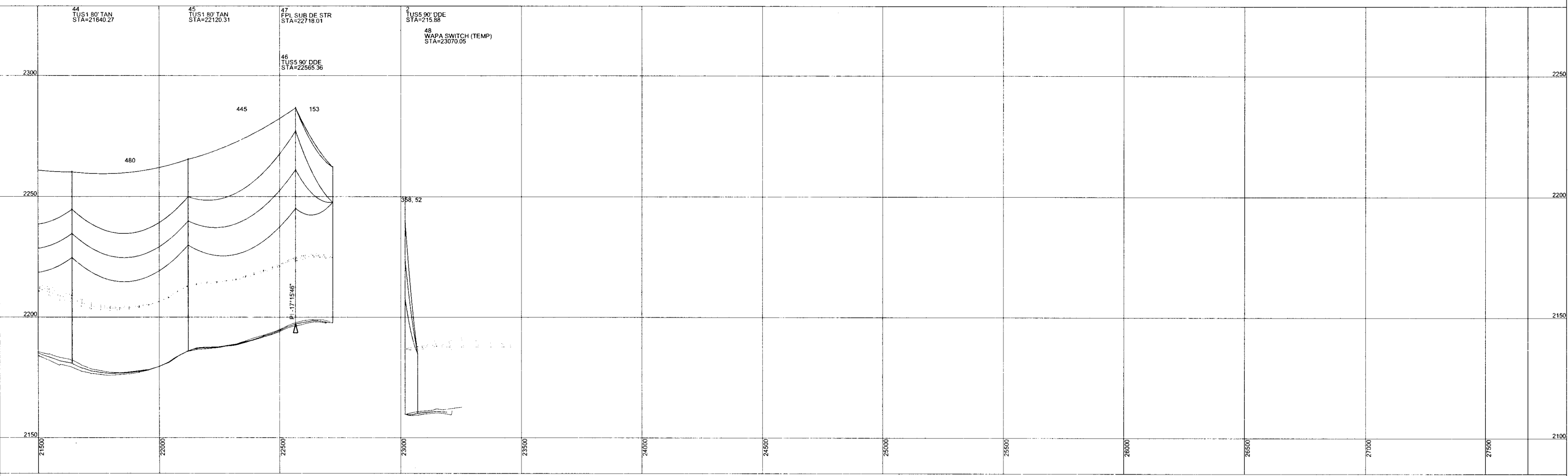
SITE LOCATION:
BURLEIGH WIND
230KV TRANSMISSION LINE

SHEET TITLE:
PLAN AND PROFILE SHEET

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

↑ NORTH

SHEET: 4 OF 5
 REV: #7
 DRAWN BY: J.L.Z. CHECKED BY: D.A.M. DATE: 12/03/05



REV. NO.	DESCRIPTION	DRAWN BY	APPR BY	DATE
2	AS BUILT	J.L.Z.	D.A.M.	12/03/05
1	FINAL DESIGN	J.L.Z.	D.A.M.	8/04/05

TRANSMISSION		SHIELD	
CONDUCTOR	795 MCM ACSR 26/7	CONDUCTOR	AC 64/528 OPGW
DESIGN TENSION	9,119#	DESIGN TENSION	5,360#
RULING SPAN	519'	RULING SPAN	519'
SAGGED AT MAX ICE	32°F	SAGGED AT INITIAL ICE	0
	1.5"		

DESIGN TENSION AT 2002 NESC	HEAVY LOADING	0' F
4 P.S.F WIND	1/2" ICE	0.30 CONSTANT
INSULATION & CLEARANCES @ 230KV		
CONTROL - NORTH DAKOTA SOUTH ZONE		
HORIZONTAL - NAD - 83		
VERTICAL - NAVD - 88		

ENGINEERING - PLANNING
 PHOTOGRAMMETRY - SURVEYING
KBM, INC.
 GRAND FORKS, ND
Stanley Consultants INC.

CENTRAL POWER ELECTRIC COOPERATIVE

SITE LOCATION:
**BURLEIGH WIND
 230KV TRANSMISSION LINE**

SHEET TITLE:
PLAN AND PROFILE SHEET

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

↑ NORTH

SHEET	5 OF 5	REV. #	#7
DRAWN BY	J.L.Z.	CHECKED BY	D.A.M.
DATE	12/03/05		