

LEGEND

- PROPOSED PIPELINE
- SECTION LINE
- EXTRA TEMPORARY WORKSPACE
- TEMPORARY WORKSPACE
- ACCESS ROAD
- STAGING AREA

NOTES

1. PROFILE IS FOR REFERENCE ONLY.
2. REFER TO DETAIL 1 ON DRAWING 7350-003C FOR CONSTRUCTION PROFILE TOPSOIL STRIPPING.
3. REFER TO DETAIL 2 ON DRAWING 7350-003C FOR OPEN CUT ROAD CONTROL DETAIL.
4. REFER TO DETAIL 3 ON DRAWING 7350-003C FOR UNCASED ROAD CROSSING OPEN CUT METHOD.
5. REFER TO DETAIL 4 ON DRAWING 7350-003C FOR TRENCH AND BACKFILL REQUIREMENTS.
6. REFER TO DETAIL 5 ON DRAWING 7350-003C FOR ADDITIONAL ACCESS ROAD AND ROAD APPROACH REQUIREMENTS.
7. REFER TO DETAIL 6 ON DRAWING 7350-003C FOR EQUIPMENT CROSSING DETAIL.
8. REFER TO DETAIL 7 ON DRAWING 7350-003C FOR TYPICAL PIPELINE MARKER.
9. FOR GENERAL ENVIRONMENTAL NOTES SEE DRAWING 7350-001C
10. FOR EROSION CONTROL DETAILS SEE DRAWING 7350-002C.
11. NO EXCAVATION IS ALLOWED ON HAUL ROAD. ANY DAMAGE TO EXISTING HAUL ROAD SHALL BE REPAIRED IN ACCORDANCE WITH FREEDOM MINE SPECIFICATIONS.
12. APPROXIMATELY FROM STATIONING 29+00 TO 47+00, THE MINIMUM PIPE DEPTH SHALL BE NO LESS THAN 15 FEET.

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REV	ISSUE DATE	DESCRIPTION	DWN	CHK	APP	APP
0	06/10	ISSUED FOR CONSTRUCTION			MAP	

THIS DRAWING IS THE PROPERTY OF THE DAKOTA GASIFICATION COMPANY AND MAY NOT BE COPIED OR USED WITHOUT PRIOR AUTHORIZATION.

DAKOTA GASIFICATION COMPANY
 420 COUNTY ROAD 26
 BEULAH, ND 58523-9400

BASIN ELECTRIC POWER COOPERATIVE
 10" NATURAL GAS PIPELINE / FACILITIES
 PROJECT LOCATION OVERVIEW

DWG. NO: 7350-004C	SCALE: N.T.S.	REV. NO: 0
LDC. NO: D00043049		

1-1

D00043049

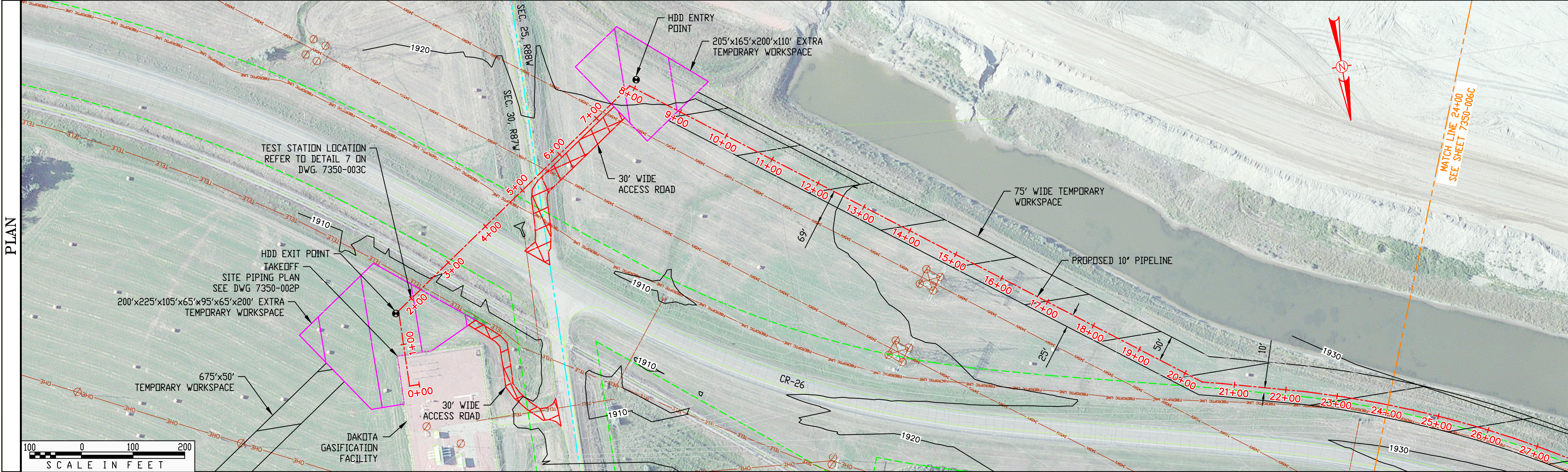
OWNERSHIP		DAKOTA GASIFICATION CO.
RODDAGE		145.45
EASEMENT		50' WIDE STRIP

PIPE DATA	
①	1,745' 10.75" O.D. X 0.365" W.T. X API-5L-X52 W/ 14-20 MILS FUSION BOND EPOXY
②	655' 10.75" O.D. X 0.365" W.T. X API-5L-X52 W/ 14-20 MILS FUSION BOND EPOXY AND 40 MILS POWERCRETE

STATIONING

0+00 BEGIN 10" PIPELINE
 0+19 P.I. < 90°00'00" RT. MARK #87
 0+79 FENCE LINE
 1+66 P.I. < 54°12'05" RT. MARK #88
 2+25 FENCE LINE
 2+32 UTILITY-TELE
 2+73 RAILROAD
 3+07 ROW LINE
 3+16 FENCE LINE
 3+70 EDGE OF ROAD
 3+96 EDGE OF ROAD
 4+67 UTILITY-FD
 4+85 ROW LINE
 5+29 EDGE OF ROAD
 5+43 EDGE OF ROAD
 5+53 UTILITY-345KV
 7+17 UTILITY-345KV
 7+90 P.I. < 71°30'31" RT. MARK #88

20+38 P.I. < 22°56'41" RT. MARK #90
 20+76 P.I. < 1°12'10" RT.
 22+41 P.I. < 2°17'50" RT.
 23+14 P.I. < 1°55'29" RT.
 23+82 P.I. < 1°55'18" RT.
 24+00 MATCH LINE

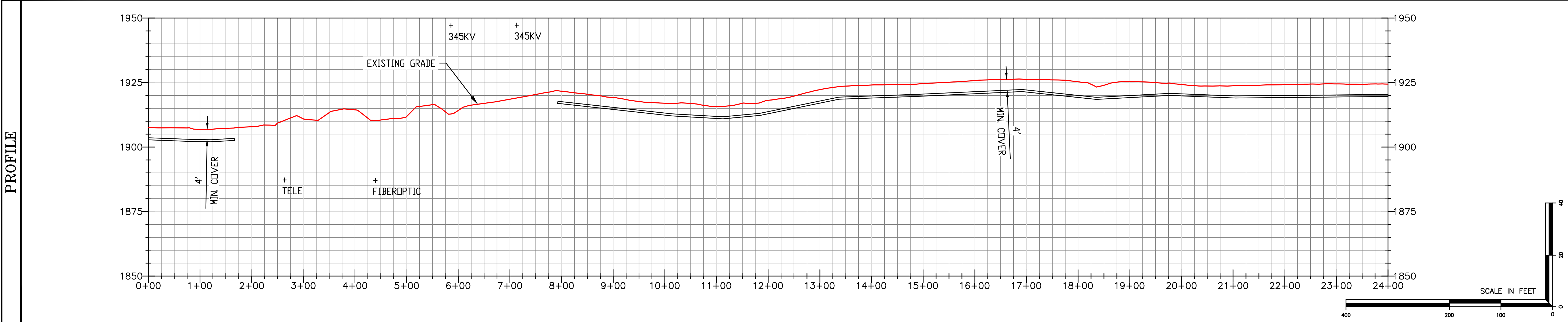


LEGEND	
	PROPOSED PIPELINE
	SECTION LINE
	MATCH LINE
	EXTRA TEMPORARY WORKSPACE
	TEMPORARY WORKSPACE
	ACCESS ROAD
	TREES AND MIXED VEGETATION

- NOTES
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 - REFER TO DETAIL 8 ON DRAWING 7350-003C FOR TYPICAL PIPELINE MARKER.
 - REFER TO DETAIL 9 ON DRAWING 7350-003C FOR GRAVEL SURFACING.
 - FOR GENERAL ENVIRONMENTAL NOTES SEE DRAWING 7350-001C
 - FOR EROSION CONTROL DETAILS SEE DRAWING 7350-002C.
 - NO EXCAVATION IS ALLOWED ON HAUL ROAD. ANY DAMAGE TO EXISTING HAUL ROAD SHALL BE REPAIRED IN ACCORDANCE WITH FREEDOM MINE SPECIFICATIONS.

DESIGN FACTOR	0.50
CLASS LOCATION	1
HYDROSTATIC TEST PRESS (P.S.I.G.)	15 x 1440
M.A.D.P. (P.S.I.G.)	1440

PIPE DETAIL	0+00	1+56	655'	8+11	1,589'	24+00
	①		② CR-26 HDD SEE DWG 7350-013C		①	



REV	ISSUE DATE	DESCRIPTION	DWN	CHK	APP	APP
0	8/6/20	ISSUED FOR CONSTRUCTION				

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DAKOTA GASIFICATION COMPANY
 420 COUNTY ROAD 26
 BEULAH, ND 58523-9400

BASIN ELECTRIC POWER COOPERATIVE
 10" NATURAL GAS PIPELINE / FACILITIES
 ALIGNMENT SHEET

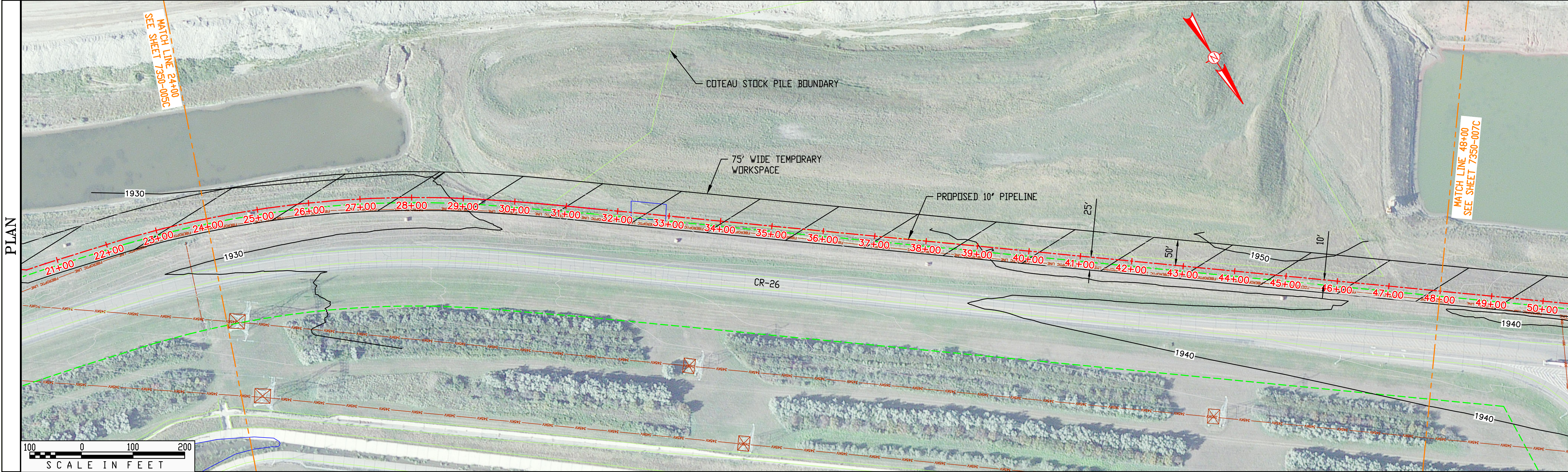
DWG. NO: 7350-005C SCALE: 1"=100'-0"
 LDC. NO: D00043050

1"=1" D00043050

OWNERSHIP	DAKOTA GASIFICATION CO.
RODDAGE	145.45
EASEMENT	50' WIDE STRIP

PIPE DATA	
①	2,400' 10.75" O.D. X 0.365" W.T. X API-5L-X52 W/ 14-20 MILS FUSION BOND EPOXY

STATIONING	24+00 MATCH LINE 24+50 P.I. < 1°55'18" RT. 25+17 P.I. < 1°55'18" RT. 25+85 P.I. < 1°55'18" RT. 26+53 P.I. < 1°55'18" RT. 27+21 P.I. < 1°55'18" RT. 27+88 P.I. < 1°55'18" RT. 28+56 P.I. < 1°6'22" RT. 30+68 EDGE OF TOPSOIL 32+26 EDGE OF POND 32+94 EDGE OF POND 36+89 EDGE OF TOPSOIL 48+00 MATCH LINE
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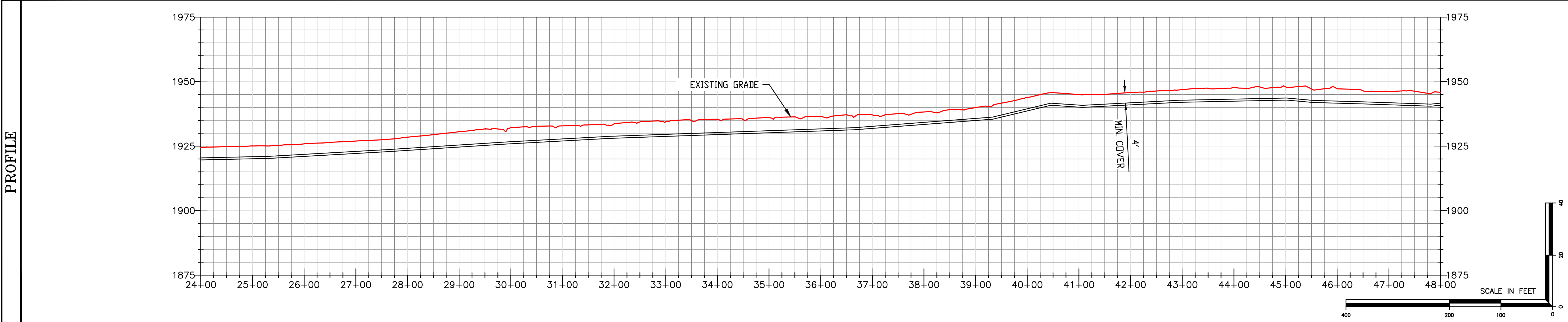


LEGEND	
	PROPOSED PIPELINE
	SECTION LINE
	MATCH LINE
	TEMPORARY WORKSPACE

- | NOTES | |
|-------|---|
| 1. | PROFILE IS FOR REFERENCE ONLY. |
| 2. | REFER TO DETAIL 1 ON DRAWING 7350-003C FOR CONSTRUCTION PROFILE TOPSOIL STRIPPING. |
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| 9. | REFER TO DETAIL 9 ON DRAWING 7350-003C FOR GRAVEL SURFACING. |
| 10. | FOR GENERAL ENVIRONMENTAL NOTES SEE DRAWING 7350-001C |
| 11. | FOR EROSION CONTROL DETAILS SEE DRAWING 7350-002C. |
| 12. | NO EXCAVATION IS ALLOWED ON HAUL ROAD. ANY DAMAGE TO EXISTING HAUL ROAD SHALL BE REPAIRED IN ACCORDANCE WITH FREEDOM MINE SPECIFICATIONS. |
| 13. | APPROXIMATELY FROM STATIONING 29+00 TO 47+00, THE MINIMUM PIPE DEPTH SHALL BE NO LESS THAN 15 FEET. |

DESIGN FACTOR	0.50
CLASS LOCATION	1
HYDROSTATIC TEST PRESS (P.S.I.G.)	1.5 x 1440
M.A.D.P. (P.S.I.G.)	1440

PIPE DETAIL	24+00	2,400'	48+00
		①	



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DAKOTA GASIFICATION COMPANY
420 COUNTY ROAD 26
BEULAH, ND 58523-9400

BASIN ELECTRIC POWER COOPERATIVE
10" NATURAL GAS PIPELINE / FACILITIES
ALIGNMENT SHEET

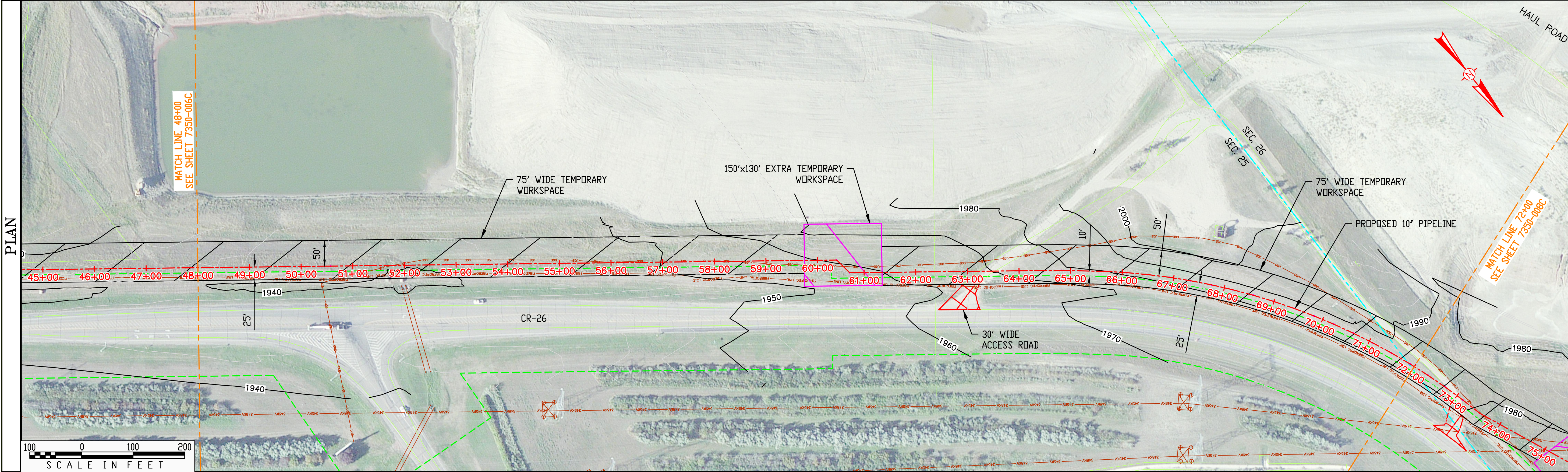
DWG. NO: 7350-006C SCALE: 1"=100'-0"
LDC. NO: D00043051

1"=1" D00043051

OWNERSHIP	DAKOTA GASSIFICATION CO.	CDTEAU
RODDAGE	144.54	0.91
EASEMENT	50' WIDE STRIP	50' WIDE STRIP

PIPE DATA	
①	2,400' 10.75" O.D. X 0.365" W.T. X API-5L-X52 W/ 14-20 MILS FUSION BOND EPOXY

STATIONING	48+00 MATCH LINE	51+78 UTILITY-UGE	58+27 UTILITY-UGE	60+37 P.I. 45°00'00" RT. MARK #89	60+72 P.I. 45°00'00" LT. MARK #89	62+37 TRAIL	63+21 EDGE OF ROAD	63+54 EDGE OF ROAD	64+83 P.I. 1°36'11" RT.	65+66 P.I. 2°11'36" RT.	66+08 P.I. 1°52'47" RT.	66+50 P.I. 1°56'32" RT.	66+91 P.I. 1°56'2" RT.	67+33 P.I. 1°56'2" RT.	67+74 P.I. 1°56'2" RT.	68+16 P.I. 1°56'2" RT.	68+57 P.I. 1°56'2" RT.	68+99 P.I. 1°56'2" RT.	69+41 P.I. 1°56'2" RT.	69+82 P.I. 1°56'2" RT.	70+24 P.I. 1°56'2" RT.	70+65 P.I. 1°56'2" RT.	71+07 P.I. 1°56'2" RT.	71+48 P.I. 1°56'2" RT.	71+89 SECTION LINE	72+00 MATCH LINE
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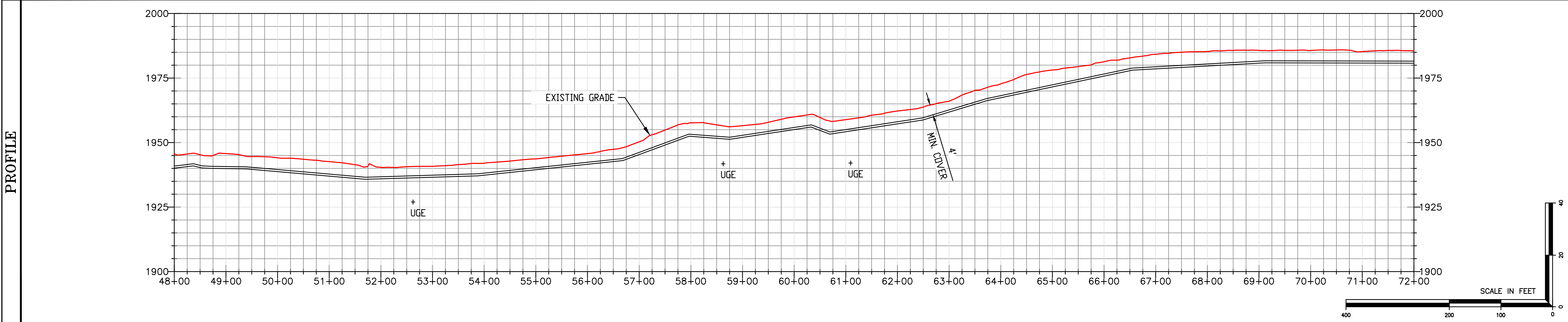


LEGEND	
	PROPOSED PIPELINE
	SECTION LINE
	MATCH LINE
	EXTRA TEMPORARY WORKSPACE
	TEMPORARY WORKSPACE
	ACCESS ROAD

- NOTES**
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 - FOR EROSION CONTROL DETAILS SEE DRAWING 7350-002C.
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 - COORDINATE WITH ELECTRICAL UTILITY ABOUT POSSIBLE RELOCATION OF UNDERGROUND LINE TO ALL FOR INSTALLATION OF NEW GAS LINE (STATION 55+00 TO 59+00).

DESIGN FACTOR	0.50
CLASS LOCATION	1
HYDROSTATIC TEST PRESS (P.S.I.G.)	1.5 x 1440
M.A.D.P. (P.S.I.G.)	1440

PIPE DETAIL	48+00	1,511'	53'	836'	72+00
		①	① ROAD OPEN CUT (T.B.D.) DETAIL 3 SEE DWG 7350-003C	①	



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DAKOTA GASSIFICATION COMPANY
420 COUNTY ROAD 26
BEULAH, ND 58523-9400

BASIN ELECTRIC POWER COOPERATIVE
10" NATURAL GAS PIPELINE / FACILITIES
ALIGNMENT SHEET

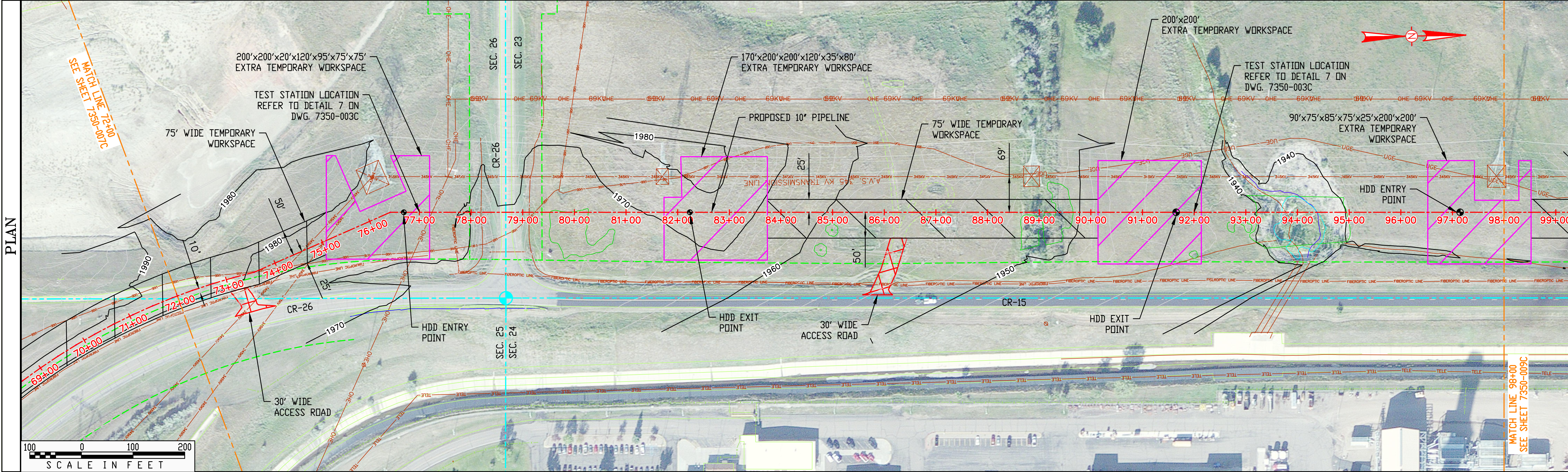
DWG. NO: 7350-007C SCALE: 1"=100'-0"
LDC. NO: D00043052

1"=1" 11/26/2010 04:30:52 D00043052

OWNERSHIP	COTEAU	BASIN ELECTRIC
RODDAGE	40.42	117.15
EASEMENT	50' WIDE STRIP	50' WIDE STRIP

PIPE DATA	
①	1,487' 10.75" D.D. X 0.365" W.T. X API-5L-X52 W/ 14-20 MILS FUSION BOND EPOXY
②	1,113' 10.75" D.D. X 0.365" W.T. X API-5L-X52 W/ 14-20 MILS FUSION BOND EPOXY AND 40 MILS POWERCRETE

STATIONING	STATIONING
72+00 MATCH LINE 72+31 P.I. < 1°56'2" RT. 72+73 P.I. < 1°56'2" RT. 72+79 EDGE OF ROAD 73+06 EDGE OF ROAD 73+14 P.I. < 1°56'2" RT. 73+56 P.I. < 9°18'10" LT. 73+61 UTILITY-UGE	98+00 MATCH LINE
74+58 UTILITY-345KV 74+58 UTILITY-345KV	
76+44 P.I. < 23°45'01" RT. MARK #90	
77+25 UTILITY-OHE	
77+97 ROW LINE	
78+19 UTILITY-DRAIN 78+59 EDGE OF ROAD 78+67 SECTION LINE 78+79 EDGE OF ROAD 79+13 UTILITY-DRAIN 79+23 UTILITY-UGE	
79+37 ROW LINE 79+39 EDGE OF TREES & VEGETATION	
80+27 EDGE OF TREES & VEGETATION	
86+17 EDGE OF ROAD 86+28 EDGE OF ROAD 86+42 EDGE OF ROAD 86+54 EDGE OF ROAD 86+62 EDGE OF ROAD 87+07 EDGE OF ROAD	
89+11 EDGE OF TREES & VEGETATION 89+18 EDGE OF TREES & VEGETATION 89+31 EDGE OF TREES & VEGETATION 89+65 EDGE OF TREES & VEGETATION	
93+21 EDGE OF TREES & VEGETATION 93+70 WETLAND 93+78 UTILITY-DRAIN	
94+39 WETLAND	
94+95 EDGE OF TREES & VEGETATION	

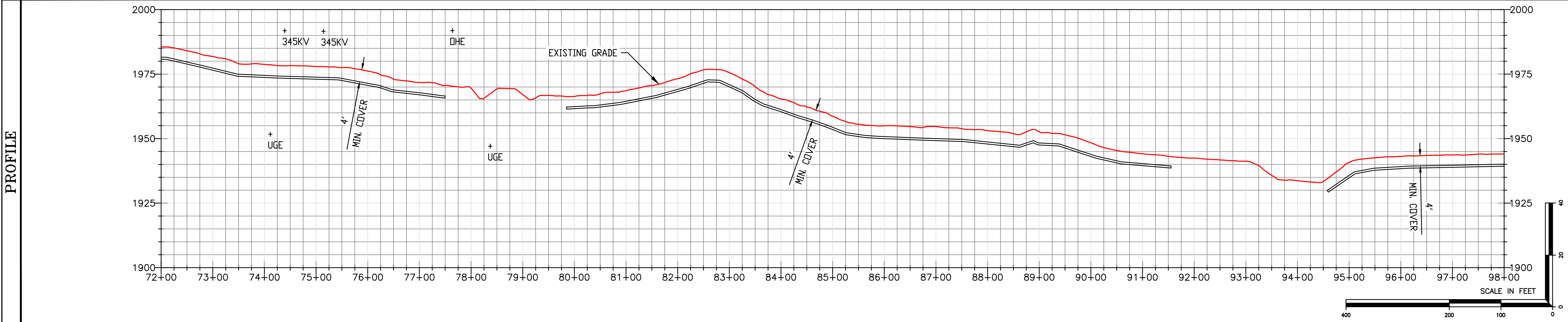


LEGEND	
	PROPOSED PIPELINE
	SECTION LINE
	MATCH LINE
	EXTRA TEMPORARY WORKSPACE
	TEMPORARY WORKSPACE
	ACCESS ROAD
	TREES AND MIXED VEGETATION
	WATERBODY
	WETLAND/MARSH

- NOTES**
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DESIGN FACTOR	0.50
CLASS LOCATION	1
HYDROSTATIC TEST PRESS (P.S.I.G.)	1.5 x 1440
M.A.D.P. (P.S.I.G.)	1440

PIPE DETAIL	72+00	73+00	74+00	75+00	76+00	77+00	78+00	79+00	80+00	81+00	82+00	83+00	84+00	85+00	86+00	87+00	88+00	89+00	90+00	91+00	92+00	93+00	94+00	95+00	96+00	97+00	98+00
PIPE SIZE	69'	47'	351'				558'				938'																
INSTALLATION METHOD	① ROAD OPEN CUT (T.B.D.) DETAIL 3 SEE DWG 7350-003C		①				② CR-26 HDD SEE DWG 7350-014C				①																
CONSTRUCTION REFERENCE	72+69		73+16				76+67				82+25																97+18



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DAKOTA GASIFICATION COMPANY
420 COUNTY ROAD 26
BEULAH, ND 58523-9400

BASIN ELECTRIC POWER COOPERATIVE
10" NATURAL GAS PIPELINE / FACILITIES
ALIGNMENT SHEET

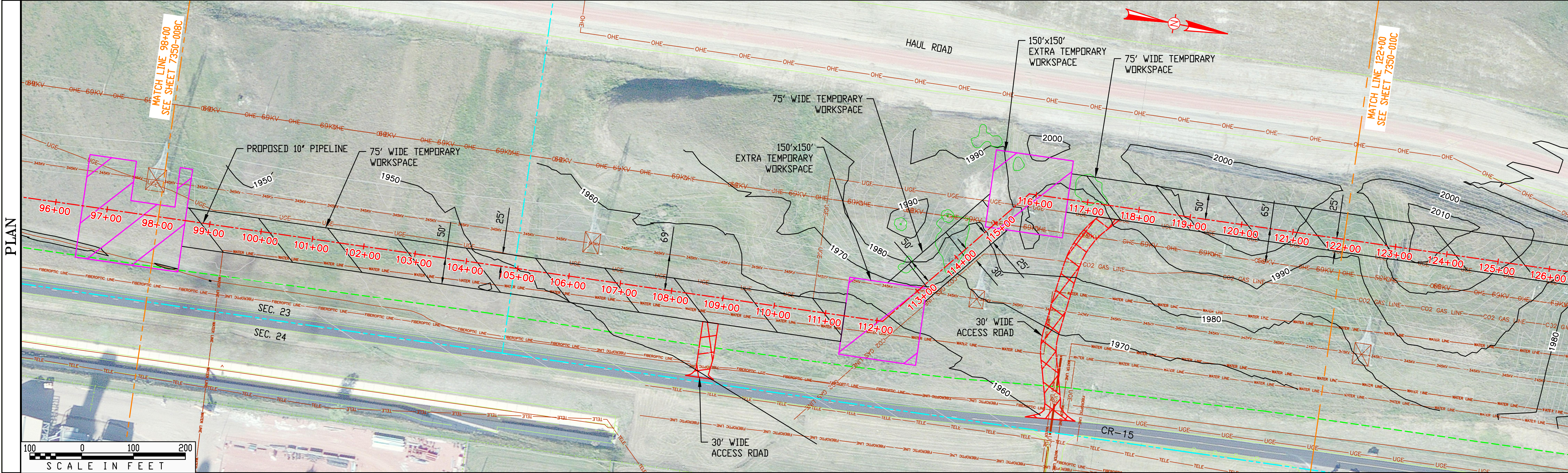
DWG. NO: 7350-008C SCALE: 1"=100'-0" REV. NO: 0
LDC. NO: D00043052

1"=1" D00043052

OWNERSHIP	BASIN ELECTRIC	COTEAU
RODDAGE	42.06	103.39
EASEMENT	50' WIDE STRIP	50' WIDE STRIP

PIPE DATA	
①	2,400' 10.75" O.D. X 0.365" W.T. X API-5L-X52 W/ 14-20 MILS FUSION BOND EPOXY

STATIONING	98+00 MATCH LINE	104+94 SECTION 1/4	112+11 P.I. 49°13'40" LT. MARK #88	113+03 UTILITY-345KV	113+70 EDGE OF TREES & VEGETATION	114+22 EDGE OF TREES & VEGETATION	115+01 UTILITY-69KV	115+53 UTILITY-UGE	115+86 P.I. 49°13'40" RT. MARK #88	116+89 EDGE OF TREES & VEGETATION	117+13 EDGE OF TREES & VEGETATION	117+58 EDGE OF ROAD	117+80 EDGE OF ROAD	122+00 MATCH LINE
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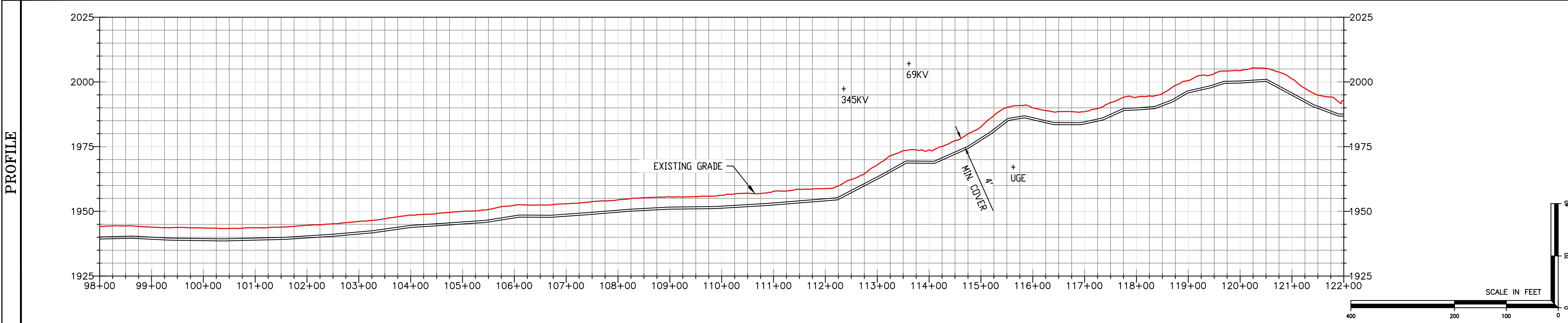


LEGEND	
	PROPOSED PIPELINE
	SECTION LINE
	MATCH LINE
	EXTRA TEMPORARY WORKSPACE
	TEMPORARY WORKSPACE
	ACCESS ROAD
	TREES AND MIXED VEGETATION

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DESIGN FACTOR	0.50
CLASS LOCATION	1
HYDROSTATIC TEST PRESS (P.S.I.G.)	1.5 x 1440
M.A.D.P. (P.S.I.G.)	1440

PIPE DETAIL	98+00	2,400'	①	122+00
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10" NATURAL GAS PIPELINE / FACILITIES
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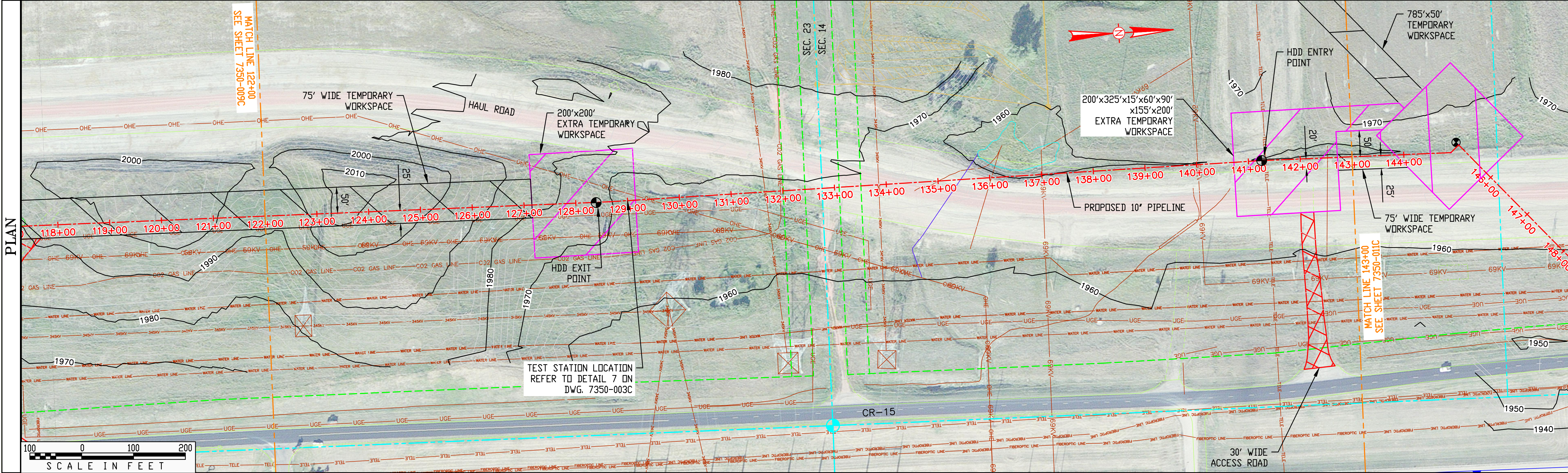
DWG. NO: 7350-009C SCALE: 1"=100'-0" REV. NO: 0
LDC. NO: D00043054

1"=1" 10/26/09 040 PLAN 11-1 D00043054

OWNERSHIP	COTEAU	BASIN ELECTRIC
RODDAGE	65.21	62.06
EASEMENT	50' WIDE STRIP	50' WIDE STRIP

PIPE DATA	
①	807' 10.75" O.D. X 0.365" W.T. X API-5L-X52 W/ 14-20 MILS FUSION BOND EPOXY
②	1,293' 10.75" O.D. X 0.365" W.T. X API-5L-X52 W/ 14-20 MILS FUSION BOND EPOXY AND 40 MILS POWERCRETE

STATIONING	122+00 MATCH LINE	128+65 P.I. < 1'13"54" LT.	129+40 UTILITY-DHE	131+64 EDGE OF ROAD UTILITY-345KV	131+66 UTILITY-345KV	131+85 CO2 PIPELINE	132+01 ROW LINE-PROPOSED	132+42 ROW LINE	132+76 SECTION LINE	133+09 ROW LINE	133+51 ROW LINE-PROPOSED	133+85 UTILITY-345KV	135+01 UTILITY-DRAIN	136+03 UTILITY-DRAIN	137+01 UTILITY-69KV	138+33 EDGE OF ROAD	140+02 UTILITY-69KV	141+33 UTILITY-TELE	141+22 P.I. < 1'11"19" RT.	142+53 UTILITY-DRAIN	143+00 MATCH LINE
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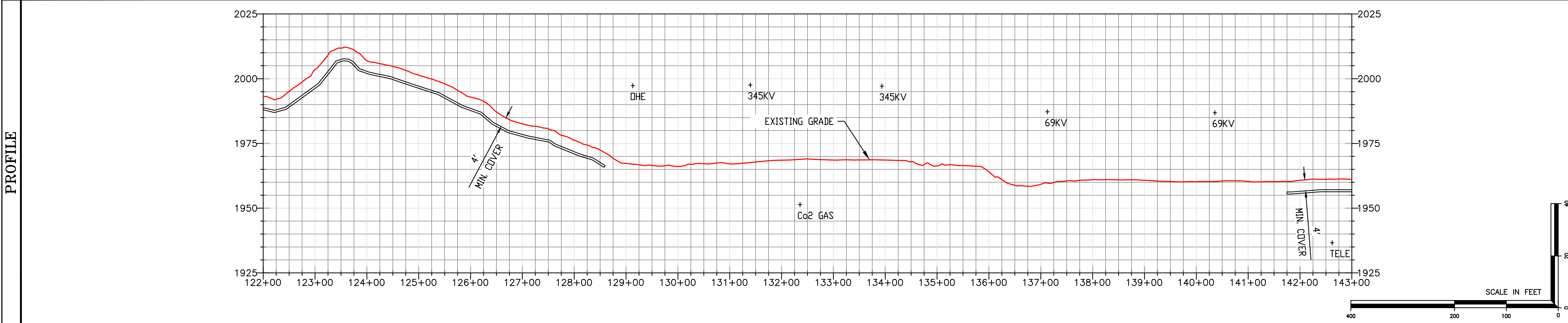


LEGEND	
	PROPOSED PIPELINE
	SECTION LINE
	MATCH LINE
	EXTRA TEMPORARY WORKSPACE
	TEMPORARY WORKSPACE
	ACCESS ROAD
	WATERBODY
	WETLAND/MARSH

- NOTES**
- PROFILE IS FOR REFERENCE ONLY.
 - REFER TO DETAIL 1 ON DRAWING 7350-003C FOR CONSTRUCTION PROFILE TOPSOIL STRIPPING.
 - REFER TO DETAIL 2 ON DRAWING 7350-003C FOR OPEN CUT ROAD CONTROL DETAIL.
 - REFER TO DETAIL 3 ON DRAWING 7350-003C FOR UNCASED ROAD CROSSING OPEN CUT METHOD.
 - REFER TO DETAIL 4 ON DRAWING 7350-003C FOR TRENCH AND BACKFILL REQUIREMENTS.
 - REFER TO DETAIL 5 ON DRAWING 7350-003C FOR ADDITIONAL ACCESS ROAD AND ROAD APPROACH REQUIREMENTS.
 - REFER TO DETAIL 6 ON DRAWING 7350-003C FOR EQUIPMENT CROSSING DETAIL.
 - REFER TO DETAIL 8 ON DRAWING 7350-003C FOR TYPICAL PIPELINE MARKER.
 - REFER TO DETAIL 9 ON DRAWING 7350-003C FOR GRAVEL SURFACING.
 - FOR GENERAL ENVIRONMENTAL NOTES SEE DRAWING 7350-001C
 - FOR EROSION CONTROL DETAILS SEE DRAWING 7350-002C.
 - NO EXCAVATION IS ALLOWED ON HAUL ROAD. ANY DAMAGE TO EXISTING HAUL ROAD SHALL BE REPAIRED IN ACCORDANCE WITH FREEDOM MINE SPECIFICATIONS.

DESIGN FACTOR	0.50
CLASS LOCATION	1
HYDROSTATIC TEST PRESS (P.S.I.G.)	15 x 1440
M.A.D.P. (P.S.I.G.)	1440

PIPE DETAIL	122+00	635'	1,293'	172'	143+00
		①	② CO2 & HAUL ROAD HDD SEE DWG 7350-016C	①	



REV	ISSUE DATE	DESCRIPTION	DWN	CHK	APP	APP
0	8/6/20	ISSUED FOR CONSTRUCTION			MAP	

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DAKOTA GASIFICATION COMPANY
420 COUNTY ROAD 26
BEULAH, ND 58523-9400

BASIN ELECTRIC POWER COOPERATIVE
10" NATURAL GAS PIPELINE / FACILITIES
ALIGNMENT SHEET

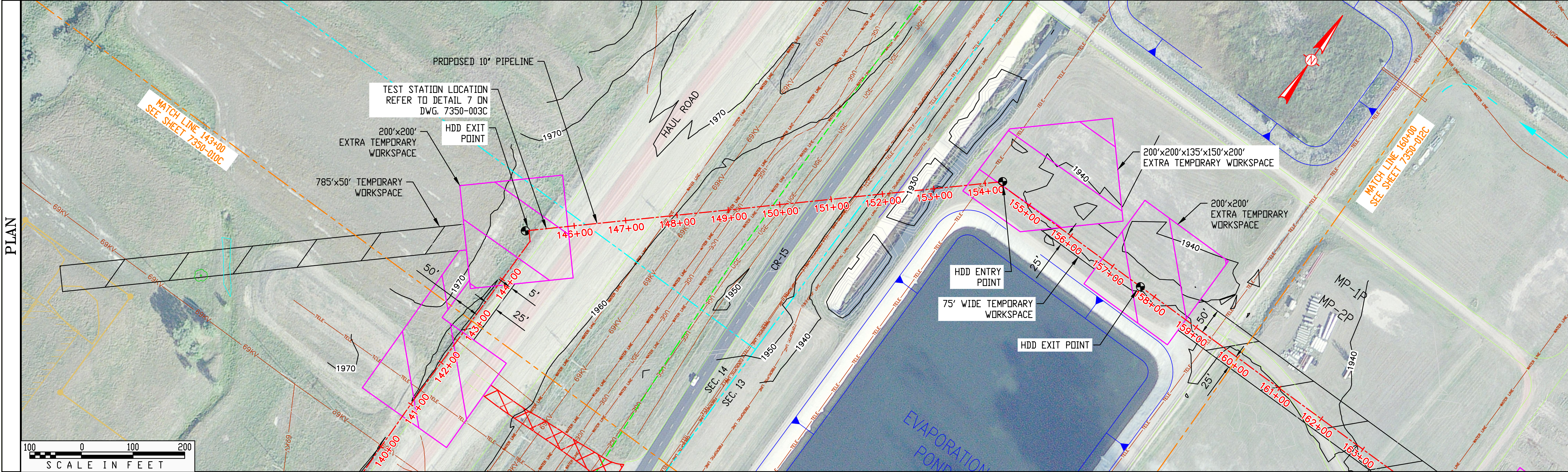
DWG. NO: 7350-010C SCALE: 1"=100'-0"
LDC. NO: D00043055

1"=100'-0" D00043055

OWNERSHIP	BASIN ELECTRIC	COTEAU	BASIN ELECTRIC
RODDAGE	19.51	33.39	50.12
EASEMENT	50' WIDE STRIP	50' WIDE STRIP	50' WIDE STRIP

PIPE DATA	
①	564' 10.75" O.D. X 0.365" W.T. X API-5L-X52 W/ 14-20 MILS FUSION BOND EPOXY
②	1,136' 10.75" O.D. X 0.365" W.T. X API-5L-X52 W/ 14-20 MILS FUSION BOND EPOXY AND 40 MILS POWERCRETE

STATIONING	143+00 MATCH LINE	144+91 P.I. < 42°10'28" LT. MARK #90	145+12 MARK #85	145+58 EDGE OF ROAD	146+22 SECTION 1/4	147+60 EDGE OF ROAD	147+86 WATER LINE	148+38 UTILITY-69KV	149+03 WATER LINE	149+18 UTILITY-UG	149+62 WATER LINE	149+87 ROW LINE	150+13 UTILITY-UG	150+30 UTILITY-DRAIN	150+67 EDGE OF ROAD	150+99 EDGE OF ROAD	151+45 UTILITY-FO	151+52 UTILITY-TELE	151+73 SECTION LINE	152+11 UTILITY-FO	153+39 FENCE LINE	153+96 UTILITY-TELE	154+24 P.I. < 42°2'16" RT. MARK #90	159+35 UTILITY-TELE	159+57 AVS RAILROAD	160+00 MATCH LINE
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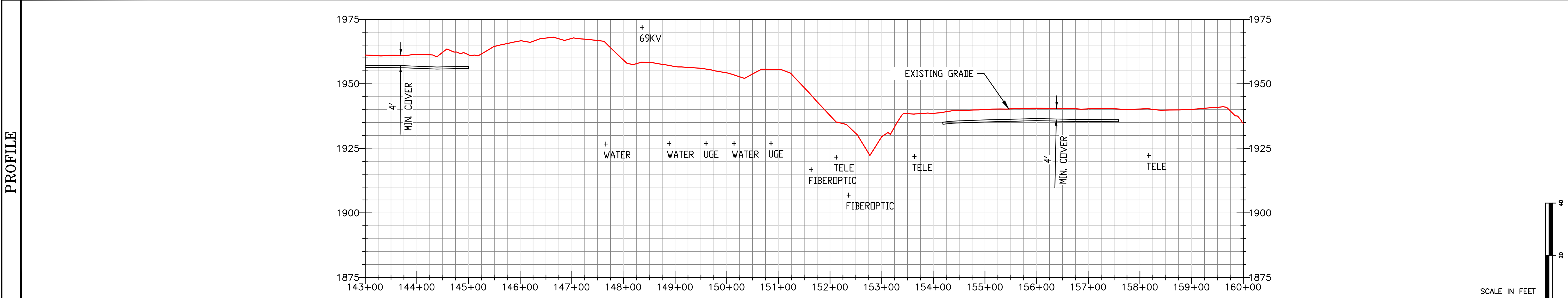


LEGEND	
	PROPOSED PIPELINE
	SECTION LINE
	MATCH LINE
	EXTRA TEMPORARY WORKSPACE
	TEMPORARY WORKSPACE
	TREES AND MIXED VEGETATION
	WETLAND/MARSH

- NOTES**
- PROFILE IS FOR REFERENCE ONLY.
 - REFER TO DETAIL 1 ON DRAWING 7350-003C FOR CONSTRUCTION PROFILE TOPSOIL STRIPPING.
 - REFER TO DETAIL 2 ON DRAWING 7350-003C FOR OPEN CUT ROAD CONTROL DETAIL.
 - REFER TO DETAIL 3 ON DRAWING 7350-003C FOR UNCASED ROAD CROSSING OPEN CUT METHOD.
 - REFER TO DETAIL 4 ON DRAWING 7350-003C FOR TRENCH AND BACKFILL REQUIREMENTS.
 - REFER TO DETAIL 5 ON DRAWING 7350-003C FOR ADDITIONAL ACCESS ROAD AND ROAD APPROACH REQUIREMENTS.
 - REFER TO DETAIL 6 ON DRAWING 7350-003C FOR EQUIPMENT CROSSING DETAIL.
 - REFER TO DETAIL 8 ON DRAWING 7350-003C FOR TYPICAL PIPELINE MARKER.
 - REFER TO DETAIL 9 ON DRAWING 7350-003C FOR GRAVEL SURFACING.
 - FOR GENERAL ENVIRONMENTAL NOTES SEE DRAWING 7350-001C
 - FOR EROSION CONTROL DETAILS SEE DRAWING 7350-002C.
 - NO EXCAVATION IS ALLOWED ON HAUL ROAD. ANY DAMAGE TO EXISTING HAUL ROAD SHALL BE REPAIRED IN ACCORDANCE WITH FREEDOM MINE SPECIFICATIONS.

DESIGN FACTOR	0.50
CLASS LOCATION	1
HYDROSTATIC TEST PRESS (P.S.I.G.)	15 x 1440
M.A.D.P. (P.S.I.G.)	1440

PIPE DETAIL	143+00	206'	939'	358'	197'	160+00
	①		②	①	②	
	145+06		CR-15 & DRAINAGE DITCH HDD SEE DWG 7350-017C	154+45	158+03	RAILROAD HDD SEE DWG 7350-018C



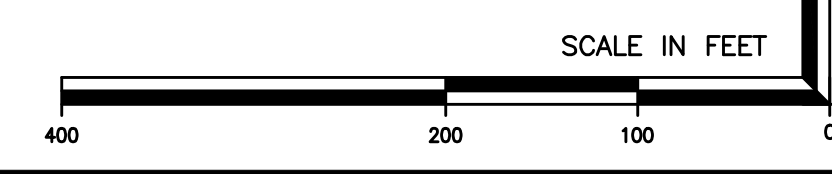
REV	ISSUE DATE	DESCRIPTION	DWN	CHK	APP	APP
0	06/20	ISSUED FOR CONSTRUCTION				

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DAKOTA GASIFICATION COMPANY
420 COUNTY ROAD 26
BEULAH, ND 58523-9400

BASIN ELECTRIC POWER COOPERATIVE
10" NATURAL GAS PIPELINE / FACILITIES
ALIGNMENT SHEET

DWG. NO: 7350-011C SCALE: 1"=100'-0" REV. NO: 0
LDC. NO: D00043056

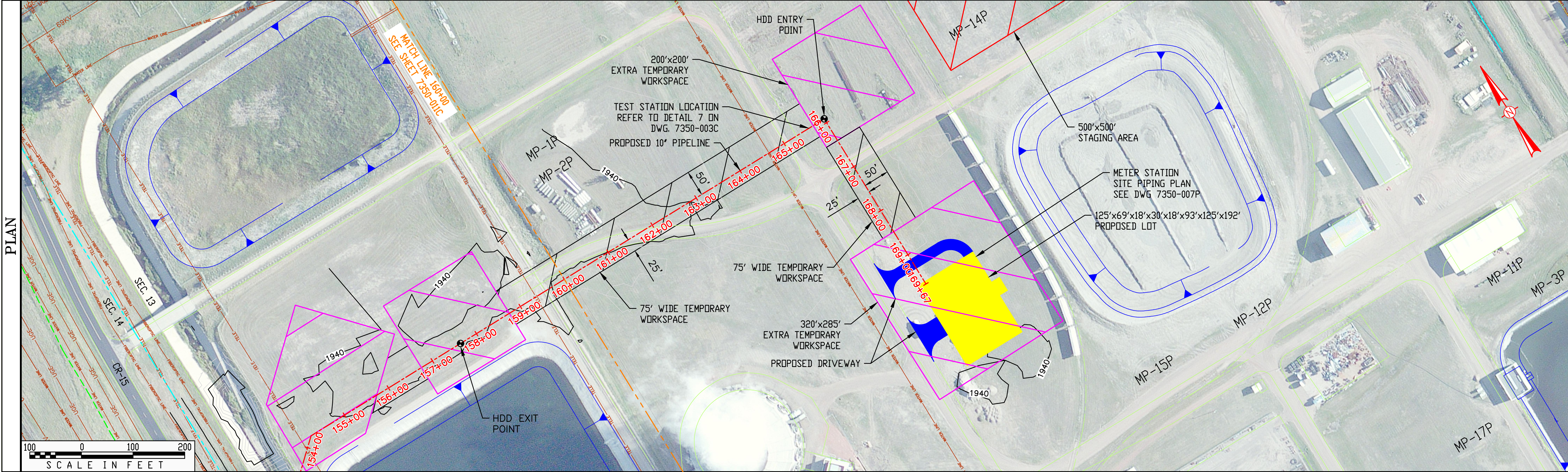


1"=1" 11-11 D00043056

OWNERSHIP	BASIN ELECTRIC
RODDAGE	58.61
EASEMENT	50' WIDE STRIP

PIPE DATA	
①	364' 10.75' O.D. X 0.365' W.T. X API-5L-X52 W/ 14-20 MILS FUSION BOND EPOXY
②	603' 10.75' O.D. X 0.365' W.T. X API-5L-X52 W/ 14-20 MILS FUSION BOND EPOXY AND 40 MILS POWERCRETE

STATIONING	
160+00	MATCH LINE
161+12	EDGE OF ROAD
161+88	EDGE OF ROAD
164+66	WATER LINE
165+02	EDGE OF ROAD
165+28	EDGE OF ROAD
165+91	P.I. < 90°00'00" RT. MARK #87
166+85	EDGE OF ROAD
167+10	EDGE OF ROAD
169+72	PROPOSED LOT
169+67	END 10" PIPELINE

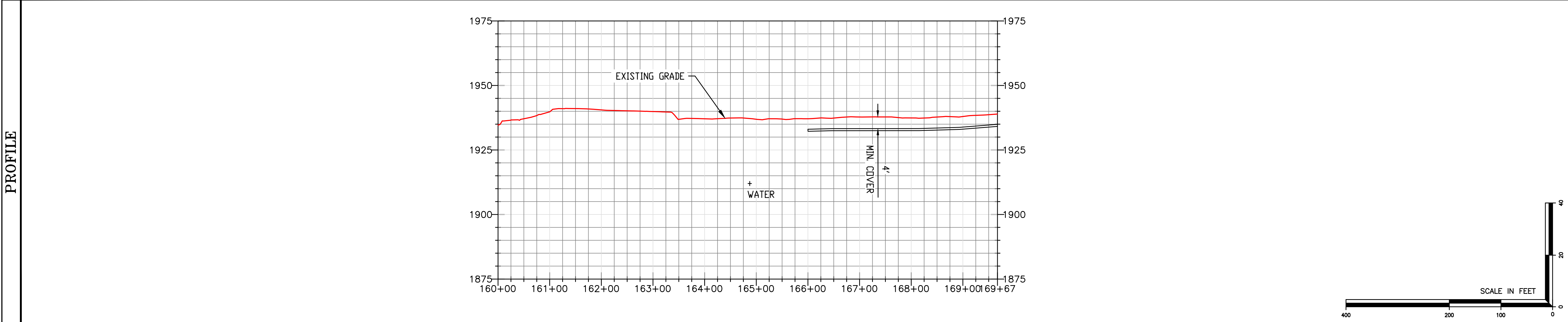


LEGEND	
	PROPOSED PIPELINE
	SECTION LINE
	MATCH LINE
	EXTRA TEMPORARY WORKSPACE
	TEMPORARY WORKSPACE
	STAGING AREA
	PROPOSED LOT
	PROPOSED DRIVEWAY

NOTES	
1.	PROFILE IS FOR REFERENCE ONLY.
2.	REFER TO DETAIL 1 ON DRAWING 7350-003C FOR CONSTRUCTION PROFILE TOPSOIL STRIPPING.
3.	REFER TO DETAIL 2 ON DRAWING 7350-003C FOR OPEN CUT ROAD CONTROL DETAIL.
4.	REFER TO DETAIL 3 ON DRAWING 7350-003C FOR UNCASED ROAD CROSSING OPEN CUT METHOD.
5.	REFER TO DETAIL 4 ON DRAWING 7350-003C FOR TRENCH AND BACKFILL REQUIREMENTS.
6.	REFER TO DETAIL 5 ON DRAWING 7350-003C FOR ADDITIONAL ACCESS ROAD AND ROAD APPROACH REQUIREMENTS.
7.	REFER TO DETAIL 6 ON DRAWING 7350-003C FOR EQUIPMENT CROSSING DETAIL.
8.	REFER TO DETAIL 8 ON DRAWING 7350-003C FOR TYPICAL PIPELINE MARKER.
9.	REFER TO DETAIL 9 ON DRAWING 7350-003C FOR GRAVEL SURFACING.
10.	FOR GENERAL ENVIRONMENTAL NOTES SEE DRAWING 7350-001C
11.	FOR EROSION CONTROL DETAILS SEE DRAWING 7350-002C.
12.	NO EXCAVATION IS ALLOWED ON HAUL ROAD. ANY DAMAGE TO EXISTING HAUL ROAD SHALL BE REPAIRED IN ACCORDANCE WITH FREEDOM MINE SPECIFICATIONS.

DESIGN FACTOR	0.50
CLASS LOCATION	1
HYDROSTATIC TEST PRESS (P.S.I.G.)	1.5 x 1440
M.A.D.P. (P.S.I.G.)	1440

PIPE DETAIL	160+00	166+03	166+75	167+20	169+67
	603'	72'	45'	247'	
	② RAILROAD HDD SEE DWG 7350-018C	①	① ROAD OPEN CUT (T.B.D.) DETAIL 3 SEE DWG 7350-003C	①	



REV	ISSUE DATE	DESCRIPTION	DWN	CHK	APP	APP
0	06/01	ISSUED FOR CONSTRUCTION				

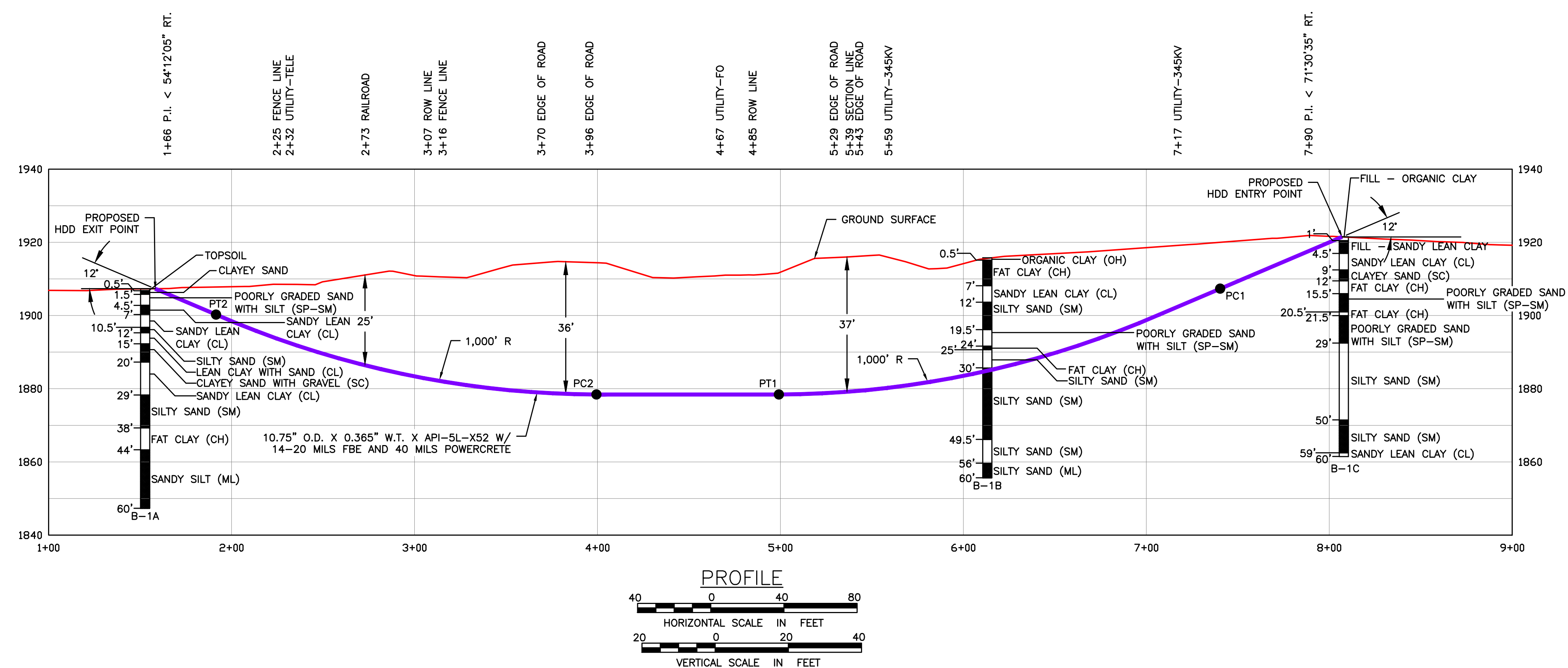
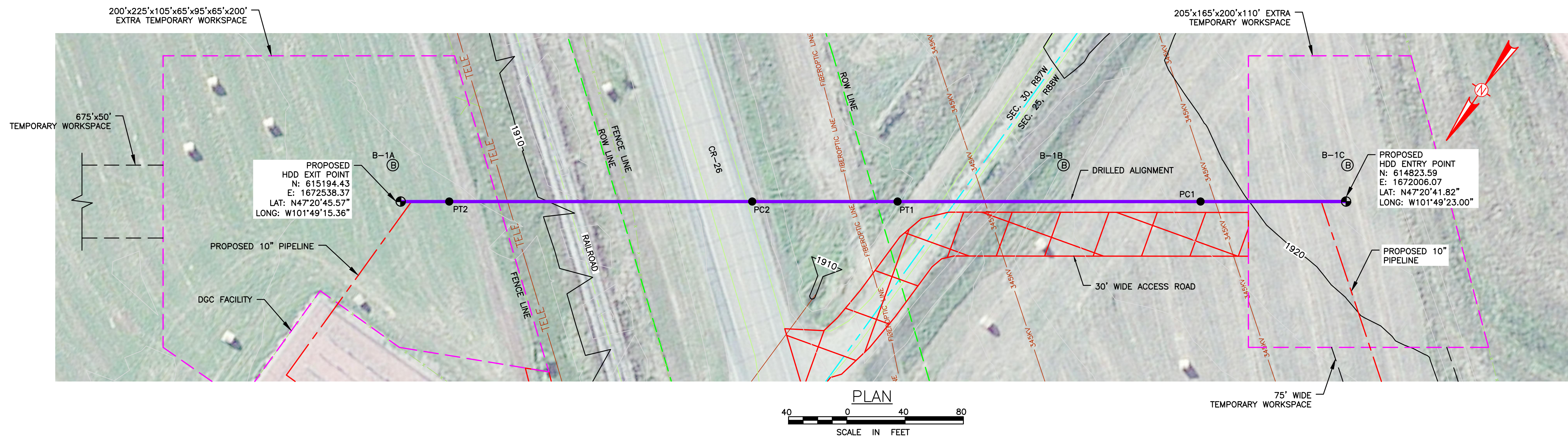
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DAKOTA GASIFICATION COMPANY
420 COUNTY ROAD 26
BEULAH, ND 58523-9400

BASIN ELECTRIC POWER COOPERATIVE
10" NATURAL GAS PIPELINE / FACILITIES
ALIGNMENT SHEET

DWG. NO: 7350-012C SCALE: 1"=100'-0" REV. NO: 0
LDC. NO: D00043057

1"=100'-0" D00043057



BORING LEGEND

TYPE OF SOIL SPT (IN)

HDD DESIGN PATH CRITERIA		
DESCRIPTION	STATION (FT)	ELEVATION (FT)
ENTRY POINT @ 12"	8+06.99	1921.4800
PC1 (1,000 FT RADIUS)	7+07.11	1900.2500
PT1	4+99.20	1878.4000
PC2 (1,000 FT RADIUS)	3+99.43	1878.4000
PT2	1+91.52	1900.2500
EXIT POINT @ 12"	1+58.25	1907.3200
HORIZONTAL DISTANCE = 649 FEET		
DIRECTIONAL DRILL PIPE LENGTH = 655 FEET		

RECOMMENDED TOLERANCES	
ITEM	TOLERANCE
PILOT HOLE ENTRY ANGLE	INCREASE ANGLE UP TO 1° (STEEPER), BUT NO DECREASE IN ANGLE ALLOWED.
PILOT HOLE ENTRY LOCATION	AS PER COORDINATES PROVIDED BY COMPANY WITH NO CHANGES WITHOUT COMPANY APPROVAL.
PILOT HOLE EXIT ANGLE	INCREASE ANGLE UP TO 1° (STEEPER) OR DECREASE UP TO 2° (FLATTER).
PILOT HOLE EXIT LOCATION	UP TO 20 FEET BEYOND OR 10 FEET SHORT OF THE EXIT STAKE, BETWEEN 5 FEET LEFT AND 5 FEET RIGHT OF CENTERLINE.
PILOT HOLE DEPTH	UP TO 2 FEET ABOVE THE DESIGN DRILL PROFILE ALLOWED, UP TO 5 FEET BELOW THE DESIGN DRILL PROFILE ALLOWED.
PILOT HOLE ALIGNMENT	SHALL REMAIN WITHIN 5 FEET LEFT OR RIGHT OF THE HDD ALIGNMENT

PIPE SPECIFICATIONS

- PRODUCT PIPE WILL CONSIST OF 10.75" O.D. X 0.365" W.T. X API-5L-X52 PIPE WITH 14-18 MILS OF FUSION BOND EPOXY (FBE) AND 40 MILS OF POWERCRETE.
- MAXIMUM ALLOWABLE OPERATING PRESSURE (MAOP) = 1440 PSIG

NOTES

- PLACEMENT OF HORIZONTAL DRILLING RIG IS NOT FIXED BY DESIGNATION OF ENTRY AND EXIT POINTS. DRILLING RIG PLACEMENT AND/OR THE USE OF DUAL RIGS SHALL BE AT CONTRACTOR'S OPTION, AS LONG AS THE DRILLING RIG IS PLACED INSIDE APPROVED WORKSPACE BOUNDARIES.
- CONTRACTOR IS TO CONTACT UTILITY LOCATIONS/NOTIFICATION SERVICE FOR THE CONSTRUCTION AREA.
- CONTRACTOR IS TO POSITIVELY LOCATE AND STAKE ALL EXISTING UNDERGROUND FACILITIES. ANY FACILITIES LOCATED WITHIN 10 FEET OF THE DESIGNED DRILLED PATH SHALL BE EXPOSED.
- CONTRACTOR IS TO MODIFY DRILLING PRACTICES AND DOWNHOLE ASSEMBLIES AS NECESSARY TO PREVENT DAMAGE TO EXISTING FACILITIES.
- NORTHINGS AND EASTINGS ARE IN U.S. SURVEY FEET REFERENCED TO NORTH DAKOTA PLANE COORDINATES, SOUTH ZONE, NAD 27.
- ELEVATIONS ARE IN U.S. FEET.
- DRILLED PATH STATIONING IS IN FEET BY HORIZONTAL MEASUREMENT AND IS REFERENCED TO CONTROL ESTABLISHED FOR THE DRILLED SEGMENT.
- DRILLED PATH COORDINATES REFER TO CENTERLINE OF PIPE.
- LOCATION OF EXISTING PIPELINES WAS PROVIDED BY SURVEY COMPANY.
- CONTRACTOR TO ACTIVELY MONITOR THE AREA FOR IMPACTS THAT COULD OCCUR AS A RESULT OF HDD OPERATIONS (I.E. SETTLEMENT, HEAVE, AND DRILLING FLUID FLOW).
- GEOTECHNICAL DATA IS NOT AVAILABLE AT THIS TIME. THEREFORE LSC CANNOT BE HELD RESPONSIBLE FOR ANY DAMAGE TO DRILLING EQUIPMENT LINE PIPE OR ANY CONSTRUCTION ISSUES AS A RESULT OF SUB GRADE CONDITIONS.
- TOPOGRAPHIC SURVEY WAS PROVIDED BY THIRD PARTY CONTRACTOR.

PRELIMINARY

LEGEND

- DRILLED PATH ENTRY/EXIT POINT
- ⊙ BORING LOCATION

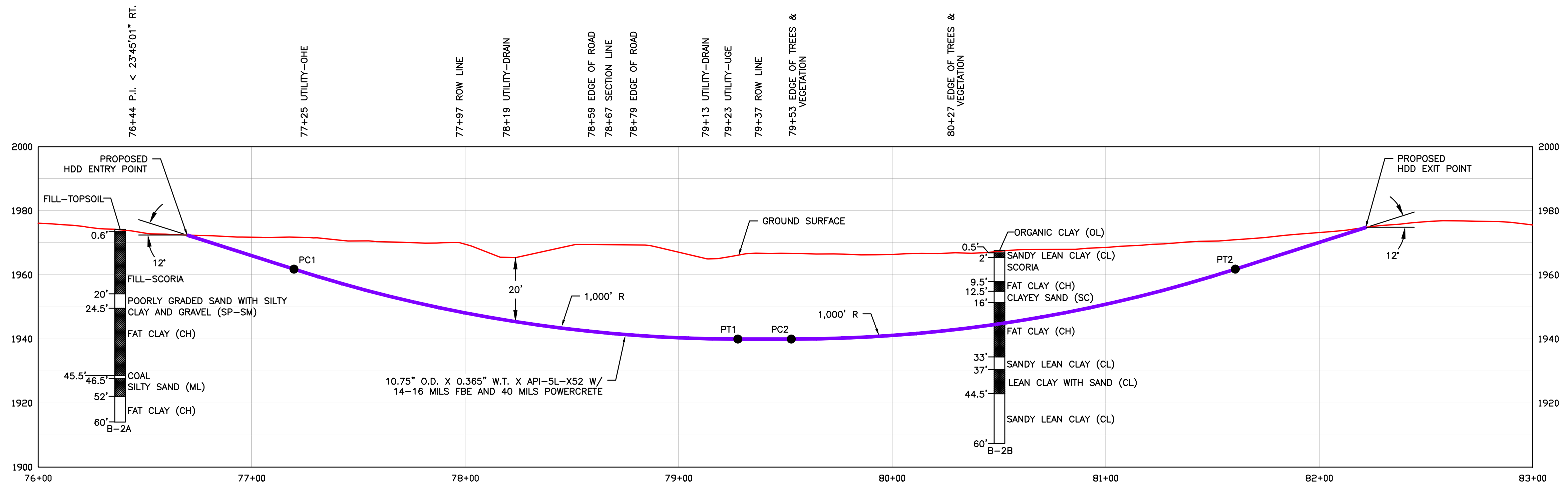
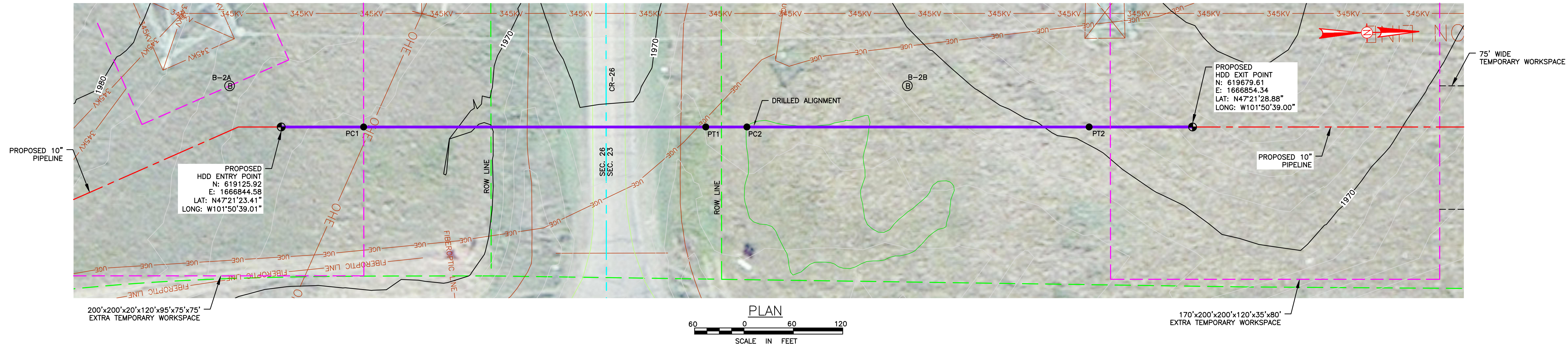
REV	ISSUE DATE	DESCRIPTION	DWN	CHK	APP	APP
0	06/10	ISSUED FOR CONSTRUCTION				

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DAKOTA GASIFICATION COMPANY
420 COUNTY ROAD 26
BEULAH, ND 58523-9400

BASIN ELECTRIC POWER COOPERATIVE
10" NATURAL GAS PIPELINE / FACILITIES
PLAN AND PROFILE OF
CR-26

DWG. NO: 7350-013C SCALE: AS NOTED REV. NO. 0
LDC. NO: D00043058



BORING LEGEND

TYPE OF SOIL	SPT (IN)
[Symbol]	[Symbol]

HDD DESIGN PATH CRITERIA

DESCRIPTION	STATION (FT)	ELEVATION (FT)
ENTRY POINT @ 12'	76+69.79	1972.4300
PC1 (1,000 FT RADIUS)	77+19.85	1961.7900
PT1	79+27.76	1939.9400
PC2 (1,000 FT RADIUS)	79+52.76	1939.9400
PT2	81+60.68	1961.7900
EXIT POINT @ 12'	82+22.18	1974.8700
HORIZONTAL DISTANCE = 552 FEET		
DIRECTIONAL DRILL PIPE LENGTH = 558 FEET		

RECOMMENDED TOLERANCES

ITEM	TOLERANCE
PILOT HOLE ENTRY ANGLE	INCREASE ANGLE UP TO 1° (STEEPER), BUT NO DECREASE IN ANGLE ALLOWED.
PILOT HOLE ENTRY LOCATION	AS PER COORDINATES PROVIDED BY COMPANY WITH NO CHANGES WITHOUT COMPANY APPROVAL.
PILOT HOLE EXIT ANGLE	INCREASE ANGLE UP TO 1° (STEEPER) OR DECREASE UP TO 2° (FLATTER).
PILOT HOLE EXIT LOCATION	UP TO 20 FEET BEYOND OR 10 FEET SHORT OF THE EXIT STAKE, BETWEEN 5 FEET LEFT AND 5 FEET RIGHT OF CENTERLINE.
PILOT HOLE DEPTH	UP TO 2 FEET ABOVE THE DESIGN DRILL PROFILE ALLOWED, UP TO 5 FEET BELOW THE DESIGN DRILL PROFILE ALLOWED.
PILOT HOLE ALIGNMENT	SHALL REMAIN WITHIN 5 FEET LEFT OR RIGHT OF THE HDD ALIGNMENT

PIPE SPECIFICATIONS

- PRODUCT PIPE WILL CONSIST OF 10.75" O.D. X 0.365" W.T. X API-5L-X52 PIPE WITH 14-20 MILS OF FUSION BOND EPOXY (FBE) AND 40 MILS OF POWERCRETE.
- MAXIMUM ALLOWABLE OPERATING PRESSURE (MAOP) = 1440 PSIG

NOTES

- PLACEMENT OF HORIZONTAL DRILLING RIG IS NOT FIXED BY DESIGNATION OF ENTRY AND EXIT POINTS. DRILLING RIG PLACEMENT AND/OR THE USE OF DUAL RIGS SHALL BE AT CONTRACTOR'S OPTION, AS LONG AS THE DRILLING RIG IS PLACED INSIDE APPROVED WORKSPACE BOUNDARIES.
- CONTRACTOR IS TO CONTACT UTILITY LOCATIONS/NOTIFICATION SERVICE FOR THE CONSTRUCTION AREA.
- CONTRACTOR IS TO POSITIVELY LOCATE AND STAKE ALL EXISTING UNDERGROUND FACILITIES. ANY FACILITIES LOCATED WITHIN 10 FEET OF THE DESIGNED DRILLED PATH SHALL BE EXPOSED.
- CONTRACTOR IS TO MODIFY DRILLING PRACTICES AND DOWNHOLE ASSEMBLIES AS NECESSARY TO PREVENT DAMAGE TO EXISTING FACILITIES.
- NORTHINGS AND EASTINGS ARE IN U.S. SURVEY FEET REFERENCED TO NORTH DAKOTA PLANE COORDINATES, SOUTH ZONE, NAD 27.
- ELEVATIONS ARE IN U.S. FEET.
- DRILLED PATH STATIONING IS IN FEET BY HORIZONTAL MEASUREMENT AND IS REFERENCED TO CONTROL ESTABLISHED FOR THE DRILLED SEGMENT.
- DRILLED PATH COORDINATES REFER TO CENTERLINE OF PIPE.
- LOCATION OF EXISTING PIPELINES WAS PROVIDED BY SURVEY COMPANY.
- CONTRACTOR TO ACTIVELY MONITOR THE AREA FOR IMPACTS THAT COULD OCCUR AS A RESULT OF HDD OPERATIONS (I.E. SETTLEMENT, HEAVE, AND DRILLING FLUID FLOW).
- GEOTECHNICAL DATA IS NOT AVAILABLE AT THIS TIME. THEREFORE LSC CANNOT BE HELD RESPONSIBLE FOR ANY DAMAGE TO DRILLING EQUIPMENT LINE PIPE OR ANY CONSTRUCTION ISSUES AS A RESULT OF SUB GRADE CONDITIONS.
- TOPOGRAPHIC SURVEY WAS PROVIDED BY THIRD PARTY CONTRACTOR.

PRELIMINARY

LEGEND

- DRILLED PATH ENTRY/EXIT POINT
- Ⓟ BORING LOCATION

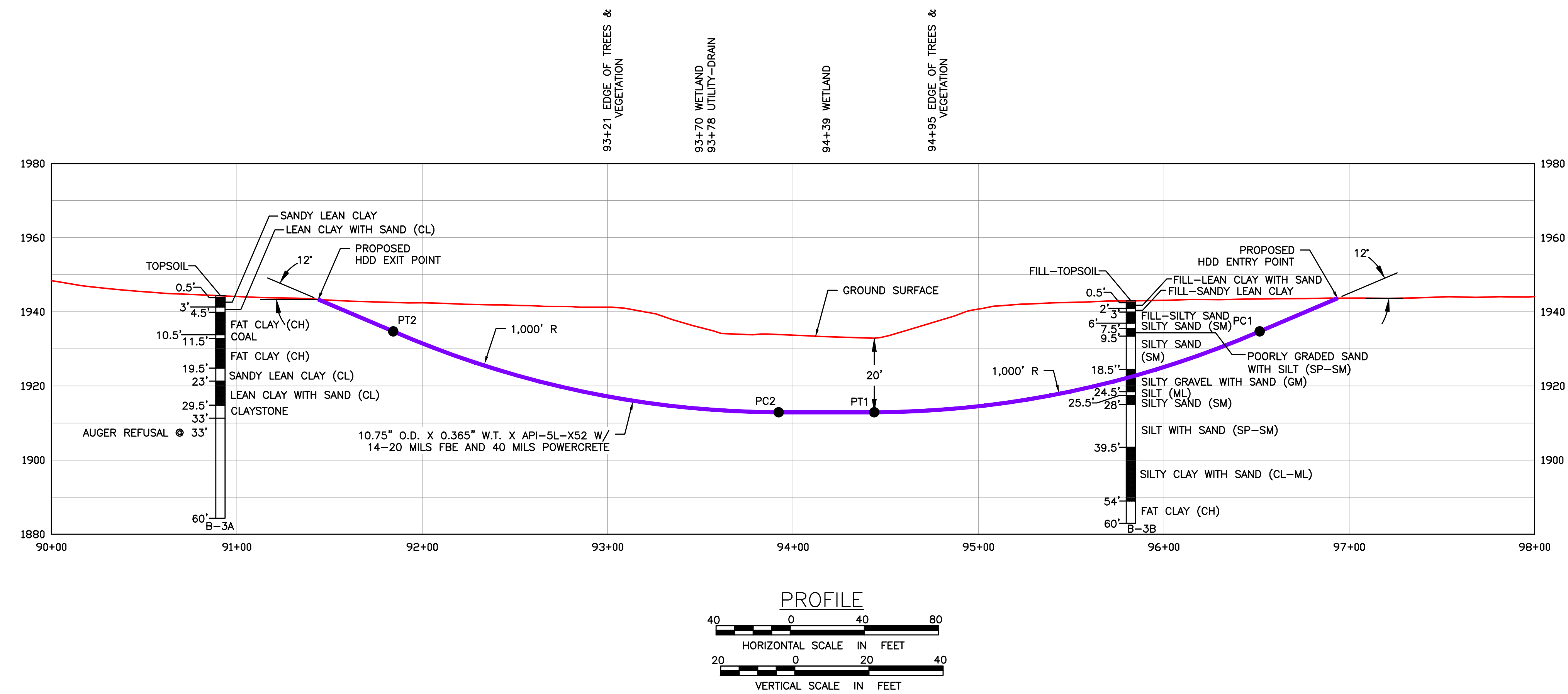
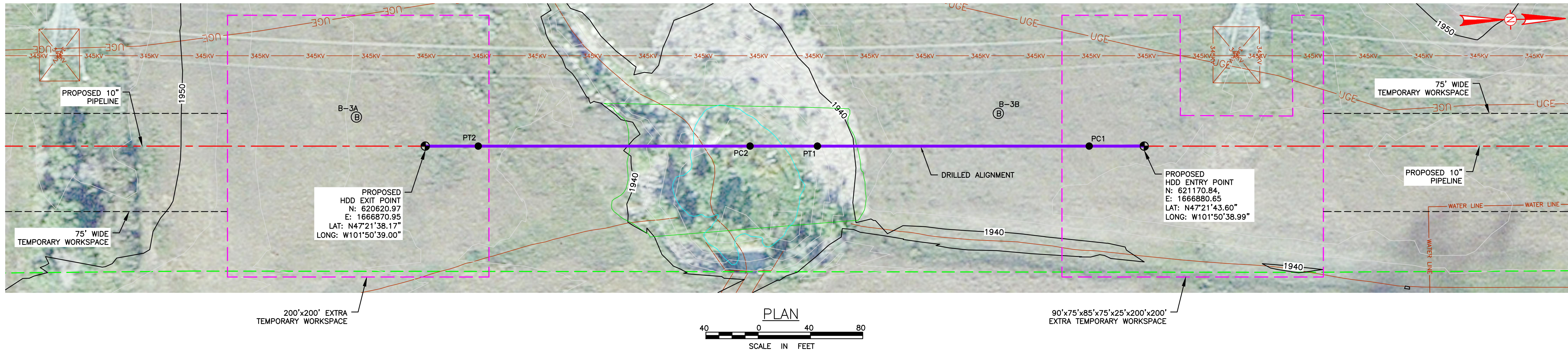
REV	ISSUE DATE	DESCRIPTION	DWN	CHK	APP	APP
0	8/6/20	ISSUED FOR CONSTRUCTION				

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DAKOTA GASIFICATION COMPANY
420 COUNTY ROAD 26
BEULAH, ND 58523-9400

BASIN ELECTRIC POWER COOPERATIVE
10" NATURAL GAS PIPELINE / FACILITIES
PLAN AND PROFILE OF
CR-26

DWG. NO: 7350-014C SCALE: AS NOTED REV. NO: 0
LDC. NO: D00043059



BORING LEGEND

TYPE OF SOIL	SPT (IN)
[Symbol]	[Symbol]

HDD DESIGN PATH CRITERIA

DESCRIPTION	STATION (FT)	ELEVATION (FT)
ENTRY POINT @ 12'	96+93.82	1943.6800
PC1 (1,000 FT RADIUS)	96+51.73	1934.7300
PT1	94+43.82	1912.8800
PC2 (1,000 FT RADIUS)	93+92.27	1912.8800
PT2	91+84.36	1934.7300
EXIT POINT @ 12'	91+43.85	1943.3400
HORIZONTAL DISTANCE = 550 FEET		
DIRECTIONAL DRILL PIPE LENGTH = 555 FEET		

RECOMMENDED TOLERANCES

ITEM	TOLERANCE
PILOT HOLE ENTRY ANGLE	INCREASE ANGLE UP TO 1° (STEEPER), BUT NO DECREASE IN ANGLE ALLOWED.
PILOT HOLE ENTRY LOCATION	AS PER COORDINATES PROVIDED BY COMPANY WITH NO CHANGES WITHOUT COMPANY APPROVAL.
PILOT HOLE EXIT ANGLE	INCREASE ANGLE UP TO 1° (STEEPER) OR DECREASE UP TO 2° (FLATTER).
PILOT HOLE EXIT LOCATION	UP TO 20 FEET BEYOND OR 10 FEET SHORT OF THE EXIT STAKE, BETWEEN 5 FEET LEFT AND 5 FEET RIGHT OF CENTERLINE.
PILOT HOLE DEPTH	UP TO 2 FEET ABOVE THE DESIGN DRILL PROFILE ALLOWED, UP TO 5 FEET BELOW THE DESIGN DRILL PROFILE ALLOWED.
PILOT HOLE ALIGNMENT	SHALL REMAIN WITHIN 5 FEET LEFT OR RIGHT OF THE HDD ALIGNMENT

PIPE SPECIFICATIONS

- PRODUCT PIPE WILL CONSIST OF 10.75" O.D. X 0.365" W.T. X API-5L-X52 PIPE WITH 14-20 MILS OF FUSION BOND EPOXY (FBE) AND 40 MILS OF POWERCRETE.
- MAXIMUM ALLOWABLE OPERATING PRESSURE (MAOP) = 1440 PSIG

NOTES

- PLACEMENT OF HORIZONTAL DRILLING RIG IS NOT FIXED BY DESIGNATION OF ENTRY AND EXIT POINTS. DRILLING RIG PLACEMENT AND/OR THE USE OF DUAL RIGS SHALL BE AT CONTRACTOR'S OPTION, AS LONG AS THE DRILLING RIG IS PLACED INSIDE APPROVED WORKSPACE BOUNDARIES.
- CONTRACTOR IS TO CONTACT UTILITY LOCATIONS/NOTIFICATION SERVICE FOR THE CONSTRUCTION AREA.
- CONTRACTOR IS TO POSITIVELY LOCATE AND STAKE ALL EXISTING UNDERGROUND FACILITIES. ANY FACILITIES LOCATED WITHIN 10 FEET OF THE DESIGNED DRILLED PATH SHALL BE EXPOSED.
- CONTRACTOR IS TO MODIFY DRILLING PRACTICES AND DOWNHOLE ASSEMBLIES AS NECESSARY TO PREVENT DAMAGE TO EXISTING FACILITIES.
- NORTHINGS AND EASTINGS ARE IN U.S. SURVEY FEET REFERENCED TO NORTH DAKOTA PLANE COORDINATES, SOUTH ZONE, NAD 27.
- ELEVATIONS ARE IN U.S. FEET.
- DRILLED PATH STATIONING IS IN FEET BY HORIZONTAL MEASUREMENT AND IS REFERENCED TO CONTROL ESTABLISHED FOR THE DRILLED SEGMENT.
- DRILLED PATH COORDINATES REFER TO CENTERLINE OF PIPE.
- LOCATION OF EXISTING PIPELINES WAS PROVIDED BY SURVEY COMPANY.
- CONTRACTOR TO ACTIVELY MONITOR THE AREA FOR IMPACTS THAT COULD OCCUR AS A RESULT OF HDD OPERATIONS (I.E. SETTLEMENT, HEAVE, AND DRILLING FLUID FLOW).
- GEOTECHNICAL DATA IS NOT AVAILABLE AT THIS TIME. THEREFORE LSC CANNOT BE HELD RESPONSIBLE FOR ANY DAMAGE TO DRILLING EQUIPMENT LINE PIPE OR ANY CONSTRUCTION ISSUES AS A RESULT OF SUB GRADE CONDITIONS.
- TOPOGRAPHIC SURVEY WAS PROVIDED BY THIRD PARTY CONTRACTOR.

PRELIMINARY

LEGEND

- DRILLED PATH ENTRY/EXIT POINT
- ⓑ BORING LOCATION

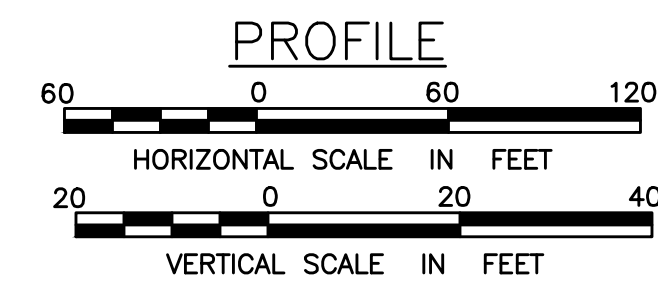
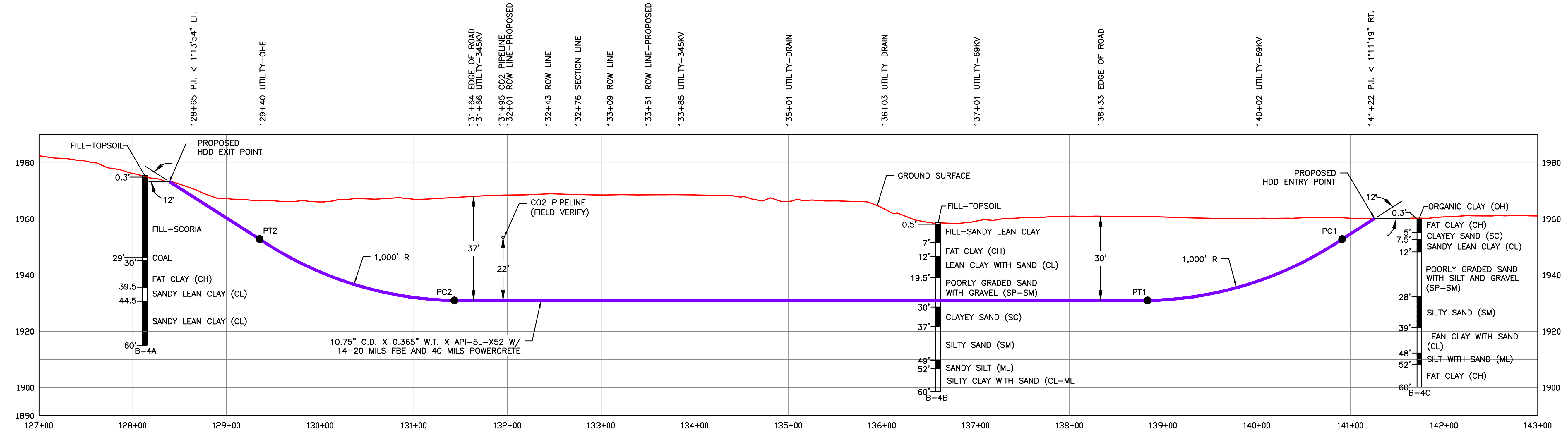
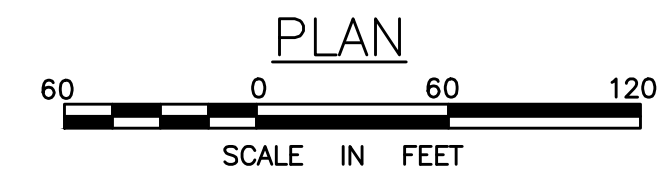
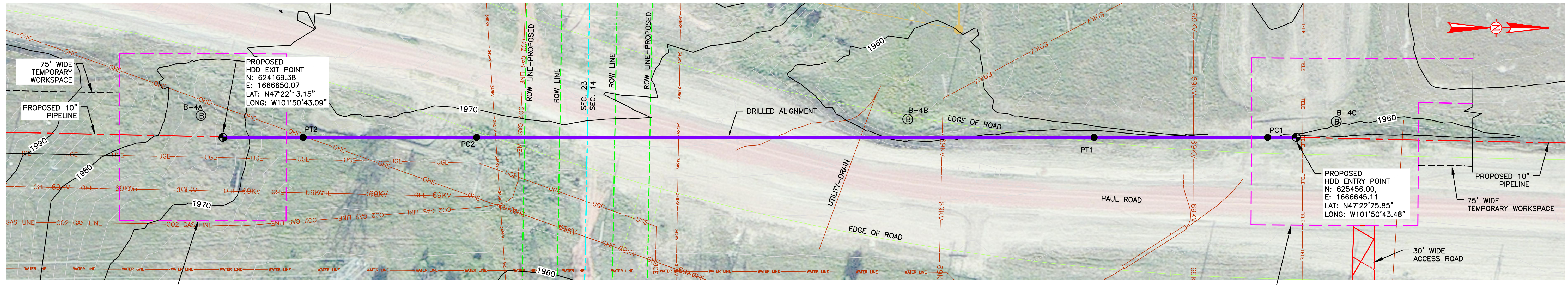
REV	ISSUE DATE	DESCRIPTION	DWN	CHK	APP	APP
0	8/6/20	ISSUED FOR CONSTRUCTION				

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DAKOTA GASIFICATION COMPANY
420 COUNTY ROAD 26
BEULAH, ND 58523-9400

BASIN ELECTRIC POWER COOPERATIVE
10" NATURAL GAS PIPELINE / FACILITIES
PLAN AND PROFILE OF
WATERBODY

DWG. NO: 7350-015C SCALE: AS NOTED REV. NO. 0
LDC. NO: D00043060



BORING LEGEND	
TYPE OF SOIL	SPT (IN)
(Symbol)	(Symbol)

PRELIMINARY

- LEGEND**
- (Symbol) DRILLED PATH ENTRY/EXIT POINT
 - (Symbol) BORING LOCATION

HDD DESIGN PATH CRITERIA		
DESCRIPTION	STATION (FT)	ELEVATION (FT)
ENTRY POINT @ 12'	141+25.80	1960.1700
PC1 (1,000 FT RADIUS)	140+91.37	1952.8500
PT1	138+83.46	1931.0000
PC2 (1,000 FT RADIUS)	131+43.29	1931.0000
PT2	129+35.38	1952.8500
EXIT POINT @ 12'	128+39.17	1973.3000
HORIZONTAL DISTANCE = 1,287 FEET		
DIRECTIONAL DRILL PIPE LENGTH = 1,293 FEET		

RECOMMENDED TOLERANCES	
ITEM	TOLERANCE
PILOT HOLE ENTRY ANGLE	INCREASE ANGLE UP TO 1° (STEEPER), BUT NO DECREASE IN ANGLE ALLOWED.
PILOT HOLE ENTRY LOCATION	AS PER COORDINATES PROVIDED BY COMPANY WITH NO CHANGES WITHOUT COMPANY APPROVAL.
PILOT HOLE EXIT ANGLE	INCREASE ANGLE UP TO 1° (STEEPER) OR DECREASE UP TO 2° (FLATTER).
PILOT HOLE EXIT LOCATION	UP TO 20 FEET BEYOND OR 10 FEET SHORT OF THE EXIT STAKE, BETWEEN 5 FEET LEFT AND 5 FEET RIGHT OF CENTERLINE.
PILOT HOLE DEPTH	UP TO 2 FEET ABOVE THE DESIGN DRILL PROFILE ALLOWED, UP TO 5 FEET BELOW THE DESIGN DRILL PROFILE ALLOWED.
PILOT HOLE ALIGNMENT	SHALL REMAIN WITHIN 5 FEET LEFT OR RIGHT OF THE HDD ALIGNMENT

PIPE SPECIFICATIONS

- PRODUCT PIPE WILL CONSIST OF 10.75" O.D. X 0.365" W.T. X API-5L-X52 PIPE WITH 14-20 MILS OF FUSION BOND EPOXY (FBE) AND 40 MILS OF POWERCRETE.
- MAXIMUM ALLOWABLE OPERATING PRESSURE (MAOP) = 1440 PSIG

NOTES

- PLACEMENT OF HORIZONTAL DRILLING RIG IS NOT FIXED BY DESIGNATION OF ENTRY AND EXIT POINTS. DRILLING RIG PLACEMENT AND/OR THE USE OF DUAL RIGS SHALL BE AT CONTRACTOR'S OPTION, AS LONG AS THE DRILLING RIG IS PLACED INSIDE APPROVED WORKSPACE BOUNDARIES.
- CONTRACTOR IS TO CONTACT UTILITY LOCATIONS/NOTIFICATION SERVICE FOR THE CONSTRUCTION AREA.
- CONTRACTOR IS TO POSITIVELY LOCATE AND STAKE ALL EXISTING UNDERGROUND FACILITIES. ANY FACILITIES LOCATED WITHIN 10 FEET OF THE DESIGNED DRILLED PATH SHALL BE EXPOSED.
- CONTRACTOR IS TO MODIFY DRILLING PRACTICES AND DOWNHOLE ASSEMBLIES AS NECESSARY TO PREVENT DAMAGE TO EXISTING FACILITIES.
- NORTHINGS AND EASTINGS ARE IN U.S. SURVEY FEET REFERENCED TO NORTH DAKOTA PLANE COORDINATES, SOUTH ZONE, NAD 27.
- ELEVATIONS ARE IN U.S. FEET.
- DRILLED PATH STATIONING IS IN FEET BY HORIZONTAL MEASUREMENT AND IS REFERENCED TO CONTROL ESTABLISHED FOR THE DRILLED SEGMENT.
- DRILLED PATH COORDINATES REFER TO CENTERLINE OF PIPE.
- LOCATION OF EXISTING PIPELINES WAS PROVIDED BY SURVEY COMPANY.
- CONTRACTOR TO ACTIVELY MONITOR THE AREA FOR IMPACTS THAT COULD OCCUR AS A RESULT OF HDD OPERATIONS (I.E. SETTLEMENT, HEAVE, AND DRILLING FLUID FLOW).
- GEOTECHNICAL DATA IS NOT AVAILABLE AT THIS TIME. THEREFORE LSC CANNOT BE HELD RESPONSIBLE FOR ANY DAMAGE TO DRILLING EQUIPMENT LINE PIPE OR ANY CONSTRUCTION ISSUES AS A RESULT OF SUB GRADE CONDITIONS.
- TOPOGRAPHIC SURVEY WAS PROVIDED BY THIRD PARTY CONTRACTOR.

REV	ISSUE DATE	DESCRIPTION	DWN	CHK	APP	APP
0	06/01	ISSUED FOR CONSTRUCTION				

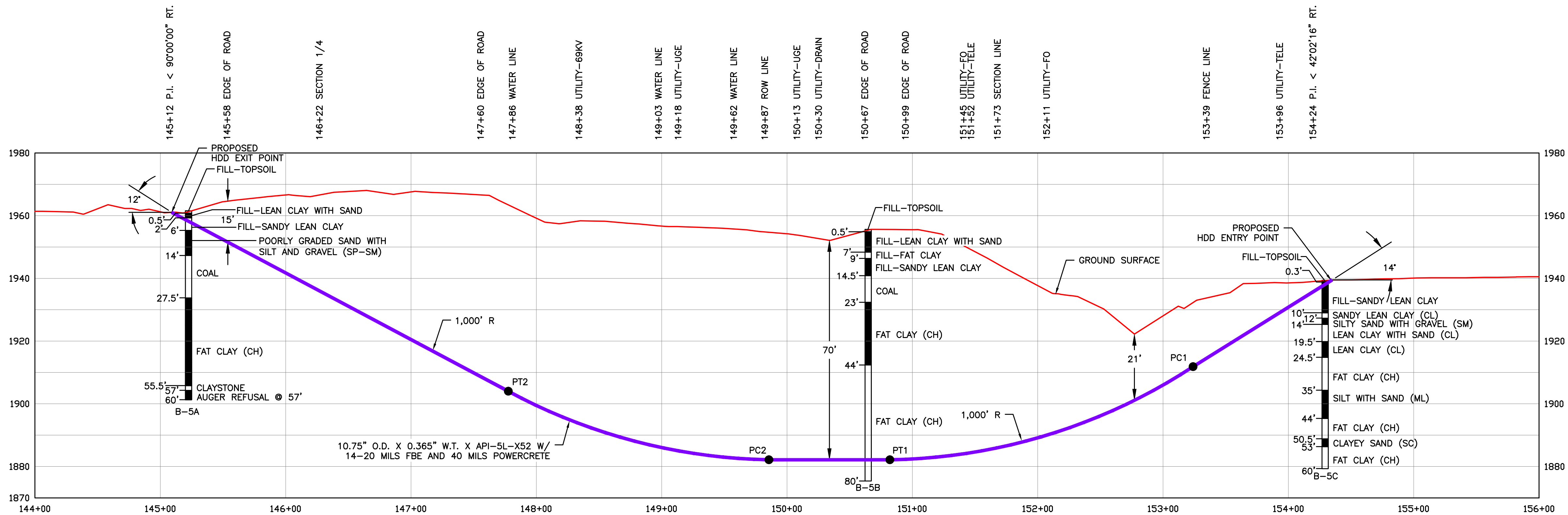
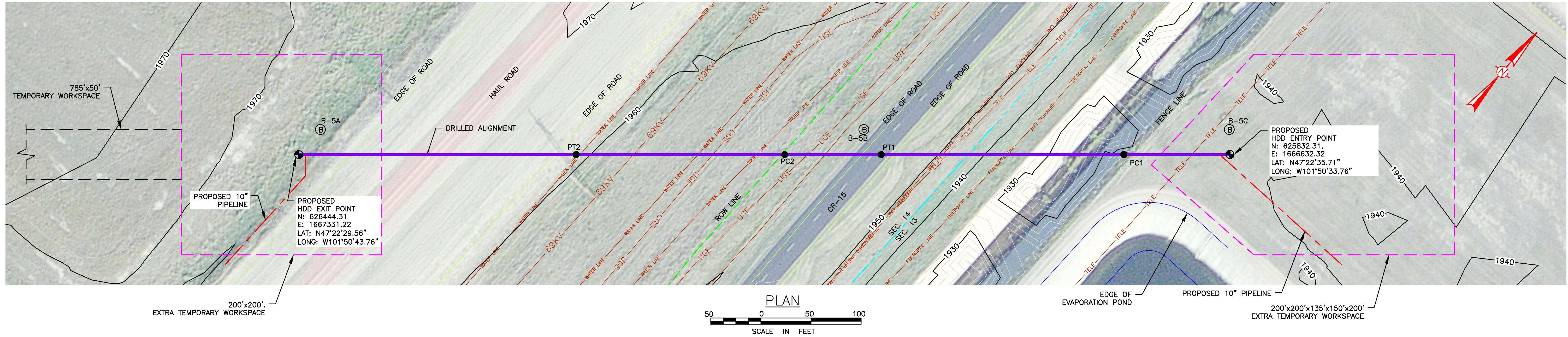
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DAKOTA GASIFICATION COMPANY
420 COUNTY ROAD 26
BEULAH, ND 58523-9400

BASIN ELECTRIC POWER COOPERATIVE
10" NATURAL GAS PIPELINE / FACILITIES
PLAN AND PROFILE OF
CO2 & HAUL ROAD

DWG. NO: 7350-016C SCALE: AS NOTED REV. NO. 0
LDC. NO: D00043061

D00043061



BORING LEGEND

TYPE OF SOIL	SPT (IN)
[Symbol]	[Symbol]

HDD DESIGN PATH CRITERIA

DESCRIPTION	STATION (FT)	ELEVATION (FT)
ENTRY POINT @ 14'	154+34.99	1939.5000
PC1 (1,000 FT RADIUS)	153+24.02	1911.8300
PT1	150+82.12	1882.1300
PC2 (1,000 FT RADIUS)	149+85.58	1882.1300
PT2	147+77.67	1911.8300
EXIT POINT @ 12'	145+09.15	1961.0500
HORIZONTAL DISTANCE = 926 FEET		
DIRECTIONAL DRILL PIPE LENGTH = 939 FEET		

RECOMMENDED TOLERANCES

ITEM	TOLERANCE
PILOT HOLE ENTRY ANGLE	INCREASE ANGLE UP TO 1" (STEEPER), BUT NO DECREASE IN ANGLE ALLOWED.
PILOT HOLE ENTRY LOCATION	AS PER COORDINATES PROVIDED BY COMPANY WITH NO CHANGES WITHOUT COMPANY APPROVAL.
PILOT HOLE EXIT ANGLE	INCREASE ANGLE UP TO 1" (STEEPER) OR DECREASE UP TO 2" (FLATTER).
PILOT HOLE EXIT LOCATION	UP TO 20 FEET BEYOND OR 10 FEET SHORT OF THE EXIT STAKE, BETWEEN 5 FEET LEFT AND 5 FEET RIGHT OF CENTERLINE.
PILOT HOLE DEPTH	UP TO 2 FEET ABOVE THE DESIGN DRILL PROFILE ALLOWED, UP TO 5 FEET BELOW THE DESIGN DRILL PROFILE ALLOWED.
PILOT HOLE ALIGNMENT	SHALL REMAIN WITHIN 5 FEET LEFT OR RIGHT OF THE HDD ALIGNMENT

PIPE SPECIFICATIONS

- PRODUCT PIPE WILL CONSIST OF 10.75" O.D. X 0.365" W.T. X API-5L-X52 PIPE WITH 14-20 MILS OF FUSION BOND EPOXY (FBE) AND 40 MILS OF POWERCRETE.
- MAXIMUM ALLOWABLE OPERATING PRESSURE (MAOP) = 1440 PSIG

NOTES

- PLACEMENT OF HORIZONTAL DRILLING RIG IS NOT FIXED BY DESIGNATION OF ENTRY AND EXIT POINTS. DRILLING RIG PLACEMENT AND/OR THE USE OF DUAL RIGS SHALL BE AT CONTRACTOR'S OPTION, AS LONG AS THE DRILLING RIG IS PLACED INSIDE APPROVED WORKSPACE BOUNDARIES.
- CONTRACTOR IS TO CONTACT UTILITY LOCATIONS/NOTIFICATION SERVICE FOR THE CONSTRUCTION AREA.
- CONTRACTOR IS TO POSITIVELY LOCATE AND STAKE ALL EXISTING UNDERGROUND FACILITIES. ANY FACILITIES LOCATED WITHIN 10 FEET OF THE DESIGNED DRILLED PATH SHALL BE EXPOSED.
- CONTRACTOR IS TO MODIFY DRILLING PRACTICES AND DOWNHOLE ASSEMBLIES AS NECESSARY TO PREVENT DAMAGE TO EXISTING FACILITIES.
- NORTHINGS AND EASTINGS ARE IN U.S. SURVEY FEET REFERENCED TO NORTH DAKOTA PLANE COORDINATES, SOUTH ZONE, NAD 27.
- ELEVATIONS ARE IN U.S. FEET.
- DRILLED PATH STATIONING IS IN FEET BY HORIZONTAL MEASUREMENT AND IS REFERENCED TO CONTROL ESTABLISHED FOR THE DRILLED SEGMENT.
- DRILLED PATH COORDINATES REFER TO CENTERLINE OF PIPE.
- LOCATION OF EXISTING PIPELINES WAS PROVIDED BY SURVEY COMPANY.
- CONTRACTOR TO ACTIVELY MONITOR THE AREA FOR IMPACTS THAT COULD OCCUR AS A RESULT OF HDD OPERATIONS (I.E. SETTLEMENT, HEAVE, AND DRILLING FLUID FLOW).
- GEOTECHNICAL DATA IS NOT AVAILABLE AT THIS TIME. THEREFORE LSC CANNOT BE HELD RESPONSIBLE FOR ANY DAMAGE TO DRILLING EQUIPMENT LINE PIPE OR ANY CONSTRUCTION ISSUES AS A RESULT OF SUB GRADE CONDITIONS.
- TOPOGRAPHIC SURVEY WAS PROVIDED BY THIRD PARTY CONTRACTOR.

PRELIMINARY

LEGEND

- DRILLED PATH ENTRY/EXIT POINT
- ⊙ BORING LOCATION

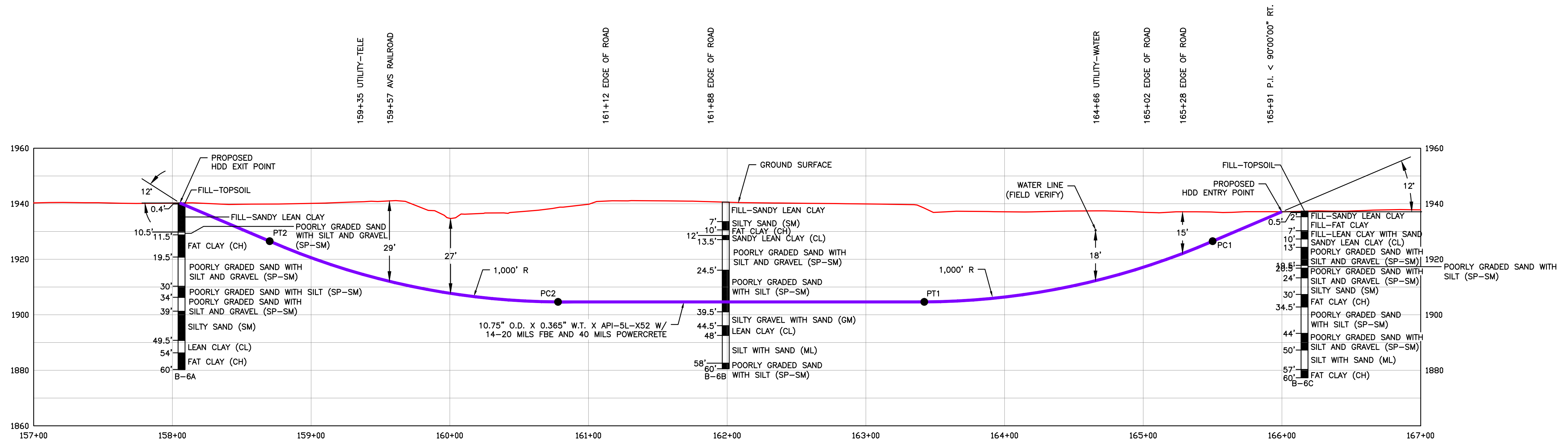
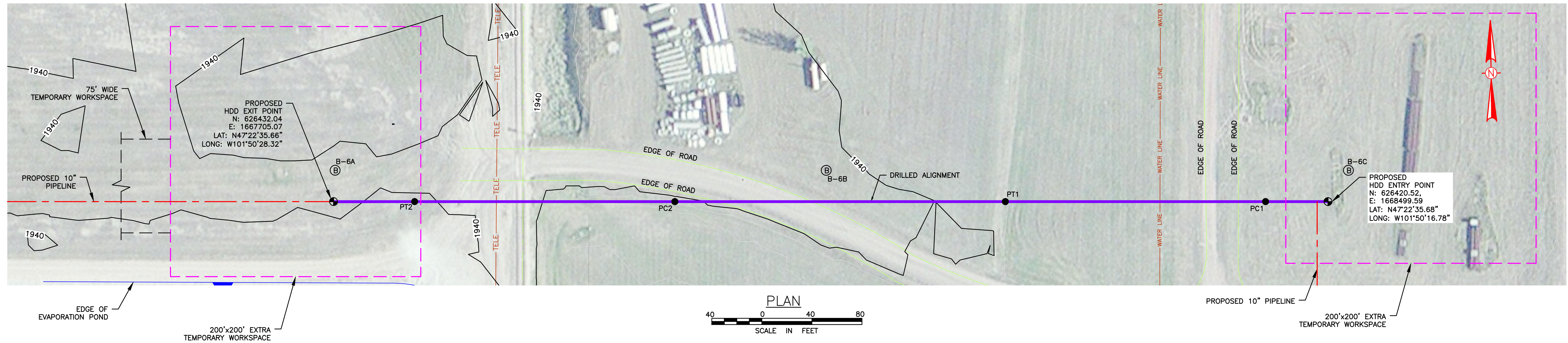
REV	ISSUE DATE	DESCRIPTION	DWN	CHK	APP	APP
0	8/6/23	ISSUED FOR CONSTRUCTION				

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420 COUNTY ROAD 26
BEULAH, ND 58523-9400

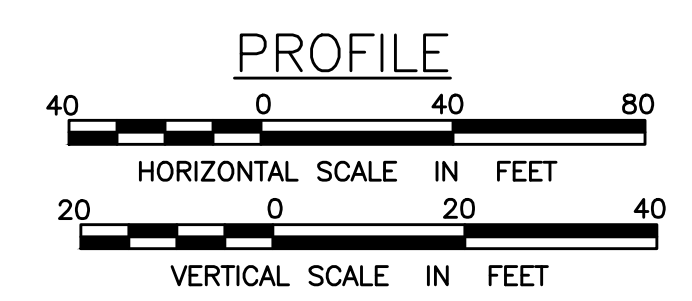
BASIN ELECTRIC POWER COOPERATIVE
10" NATURAL GAS PIPELINE / FACILITIES
PLAN AND PROFILE OF
CR-15 & DRAINAGE DITCH

DWG. NO: 7350-017C SCALE: AS NOTED REV. NO: 0
LDC. NO: D00043062



BORING LEGEND

TYPE OF SOIL	SPT (IN)
[Symbol]	[Symbol]



PRELIMINARY

- LEGEND**
- DRILLED PATH ENTRY/EXIT POINT
 - ⊙ BORING LOCATION

HDD DESIGN PATH CRITERIA

DESCRIPTION	STATION (FT)	ELEVATION (FT)
ENTRY POINT @ 12'	165+99.96	1937.1000
PC1 (1,000 FT RADIUS)	165+50.05	1926.4900
PT1	163+42.13	1904.6400
PC2 (1,000 FT RADIUS)	160+78.05	1904.6400
PT2	158+70.14	1926.4900
EXIT POINT @ 12'	158+05.36	1940.2600
HORIZONTAL DISTANCE = 795 FEET		
DIRECTIONAL DRILL PIPE LENGTH = 800 FEET		

RECOMMENDED TOLERANCES

ITEM	TOLERANCE
PILOT HOLE ENTRY ANGLE	INCREASE ANGLE UP TO 1° (STEEPER), BUT NO DECREASE IN ANGLE ALLOWED.
PILOT HOLE ENTRY LOCATION	AS PER COORDINATES PROVIDED BY COMPANY WITH NO CHANGES WITHOUT COMPANY APPROVAL.
PILOT HOLE EXIT ANGLE	INCREASE ANGLE UP TO 1° (STEEPER) OR DECREASE UP TO 2° (FLATTER).
PILOT HOLE EXIT LOCATION	UP TO 20 FEET BEYOND OR 10 FEET SHORT OF THE EXIT STAKE, BETWEEN 5 FEET LEFT AND 5 FEET RIGHT OF CENTERLINE.
PILOT HOLE DEPTH	UP TO 2 FEET ABOVE THE DESIGN DRILL PROFILE ALLOWED, UP TO 5 FEET BELOW THE DESIGN DRILL PROFILE ALLOWED.
PILOT HOLE ALIGNMENT	SHALL REMAIN WITHIN 5 FEET LEFT OR RIGHT OF THE HDD ALIGNMENT

PIPE SPECIFICATIONS

- PRODUCT PIPE WILL CONSIST OF 10.75" O.D. X 0.365" W.T. X API-5L-X52 PIPE WITH 14-20 MILS OF FUSION BOND EPOXY (FBE) AND 40 MILS OF POWERCRETE.
- MAXIMUM ALLOWABLE OPERATING PRESSURE (MAOP) = 1440 PSIG

NOTES

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- CONTRACTOR IS TO MODIFY DRILLING PRACTICES AND DOWNHOLE ASSEMBLIES AS NECESSARY TO PREVENT DAMAGE TO EXISTING FACILITIES.
- NORTHINGS AND EASTINGS ARE IN U.S. SURVEY FEET REFERENCED TO NORTH DAKOTA PLANE COORDINATES, SOUTH ZONE, NAD 27.
- ELEVATIONS ARE IN U.S. FEET.
- DRILLED PATH STATIONING IS IN FEET BY HORIZONTAL MEASUREMENT AND IS REFERENCED TO CONTROL ESTABLISHED FOR THE DRILLED SEGMENT.
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- TOPOGRAPHIC SURVEY WAS PROVIDED BY THIRD PARTY CONTRACTOR.

REV	ISSUE DATE	DESCRIPTION	DWN	CHK	APP	APP
0	06/07	ISSUED FOR CONSTRUCTION				

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DAKOTA GASIFICATION COMPANY
420 COUNTY ROAD 26
BEULAH, ND 58523-9400

BASIN ELECTRIC POWER COOPERATIVE
10" NATURAL GAS PIPELINE / FACILITIES
PLAN AND PROFILE OF
AVS RAILROAD

DWG. NO: 7350-018C SCALE: AS NOTED REV. NO: 0
LDC. NO: D00043072

1-1

D00043072