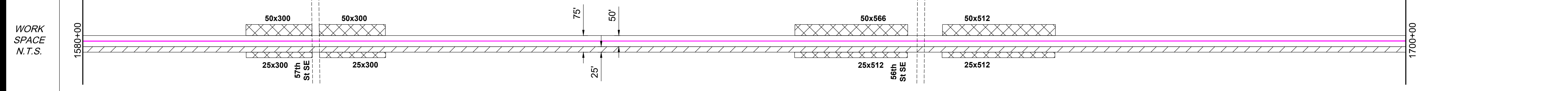
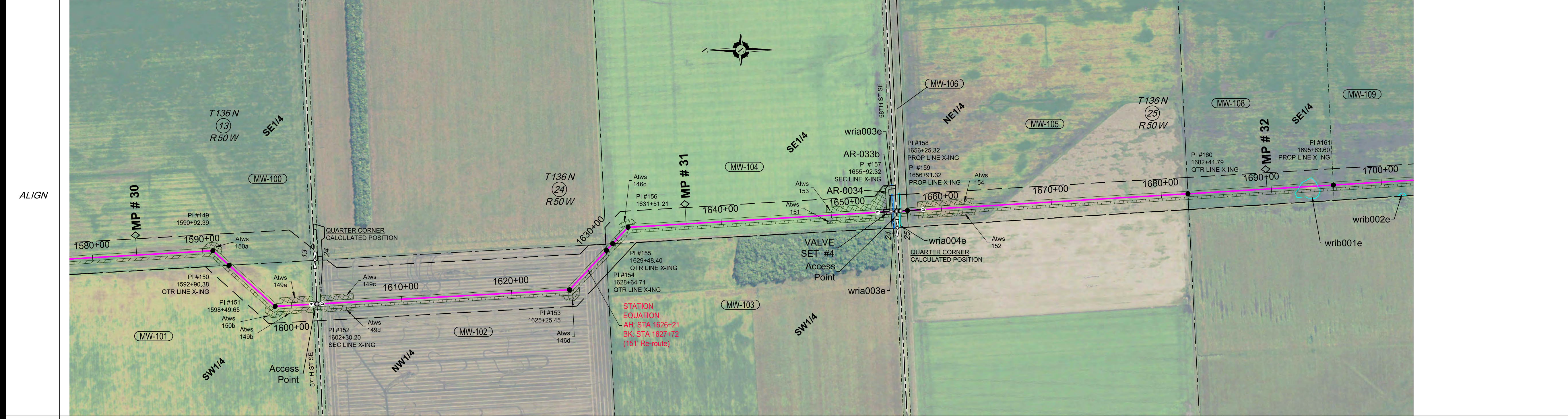


Co, State	SECTIONS 13, 24, 25, T136N, R50W, RICHLAND COUNTY, NORTH DAKOTA									
OWNER	MW-100	MW-101	MW-102	MW-103	MW-104	MW-106	MW-105	MW-108	MW-109	
RODDAGE	1906.38' / 115.54 Rods	939.82' / 56.96 Rods	2783.01' / 168.67 Rods	83.69' / 5.07 Rods	2643.92' / 160.24 Rods	66.00' / 4.00 Rods	2550.47' / 154.57 Rods	1321.81' / 80.11 Rods	1323.75' / 80.23 Rods	

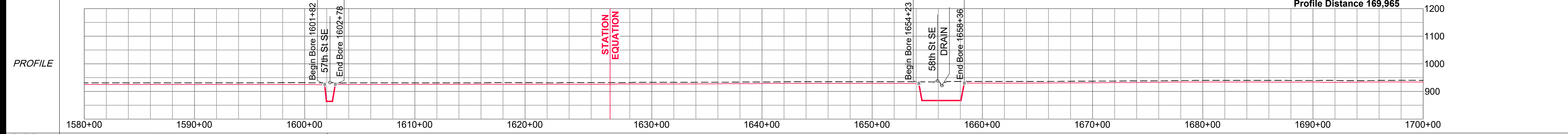


ENVIRO	Water Crossing	Name	wria003e		wria004e		wrib001e	wrib002e
	Wetland Crossing	Method	Bore		Wetland		Wetland	Wetland
ENVIRO	Environmental Feature	Name	1655+59 Drain		1692+52 Wetland		1694+26 Wetland	1701+84 Wetland
	Miscellaneous/Comments	Survey Extent	Approx. 150' ECD		Approx. 500' ECD		Approx. 250' mats	Approx. 100' ECD
HUC-12 Watershed	Seeding Mix		090201051005					

PI TABLE		
PI #	STATION	DEFLECTION
PI #149	1590+92.39	45°00'R
PI #150	1592+90.38	00°00'
PI #151	1598+49.65	45°00'L
PI #152	1602+30.20	00°00'
PI #153	1625+25.45	43°30'L
PI #154	1628+64.71	00°00'
PI #155	1629+48.40	00°00'
PI #156	1631+51.21	43°30'R
PI #157	1655+92.32	00°00'
PI #158	1656+25.32	00°00'
PI #159	1656+91.32	00°00'
PI #160	1682+41.79	00°00'
PI #161	1695+63.60	00°00'

- NOTE:
See Bore Surveys, Typical Bore and Typical Section Crossing sheets for Crossing Details.
- Wetlands
 - Waterbodies
 - Noxious Weeds
 - Saline Soil
 - Permanent Easement
 - Temporary Workspace
 - Additional Temp. Workspace
 - Survey Corridor

ENVIRONMENTAL NOTES:
1. Wetlands depicted on these sheets represent actual field survey data or NWI.
2. Actual wetland or stream width may vary at time of construction.
* Open ("WET") trench if no distinguishable flow at the time of construction, dry crossing method if distinguishable flow at time of construction



Ref. Dwgs. Aerial Image: NAIP 2021

HARNED SURVEYING & ENGINEERING, INC.
11815 ROBINDALE ROAD
LOUISVILLE, KY 40243
OFFICE (502) 254-3921
FAX (502) 254-6093

HSE Project # 19-21

SURVEY DATUM	
North Dakota North (NAD 83)(2011) International Foot	
*Distances are Grid Distances. Combined Scale Factor = 0.99989766 Grid Dist. x 1.00010235 = Ground Dist.	
Drawing Date:	01-19-2022
Drawn By:	D. Smith
Checked by:	J. Harned

LEGEND:	
	Proposed Block Valve
	Proposed Bore
	Alignment PI
	Utility Pole
	Well
	Valve
	Alignment
	Section Line
	Quarter Line
	Fence Line
	UG Fiber Optic
	UG Electric
	Overhead Elec
	Existing Pipeline
	Dirt Road

SUMMARY of MATERIALS		
Mark	Quantity	Description
1	11,491	12.75" OD, .250" WT, X65, FBE, TRL
2	509	12.75" OD, .312" WT, X65, FBE w/ARO, TRL

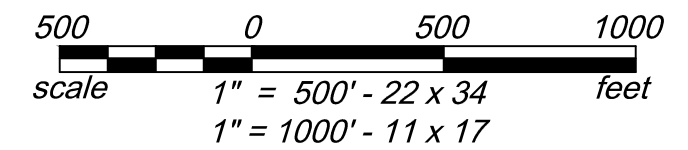
REVISIONS		
No.	Date	Description

WHAHPETON EXPANSION PROJECT

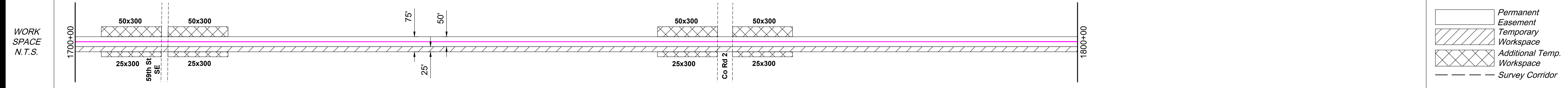
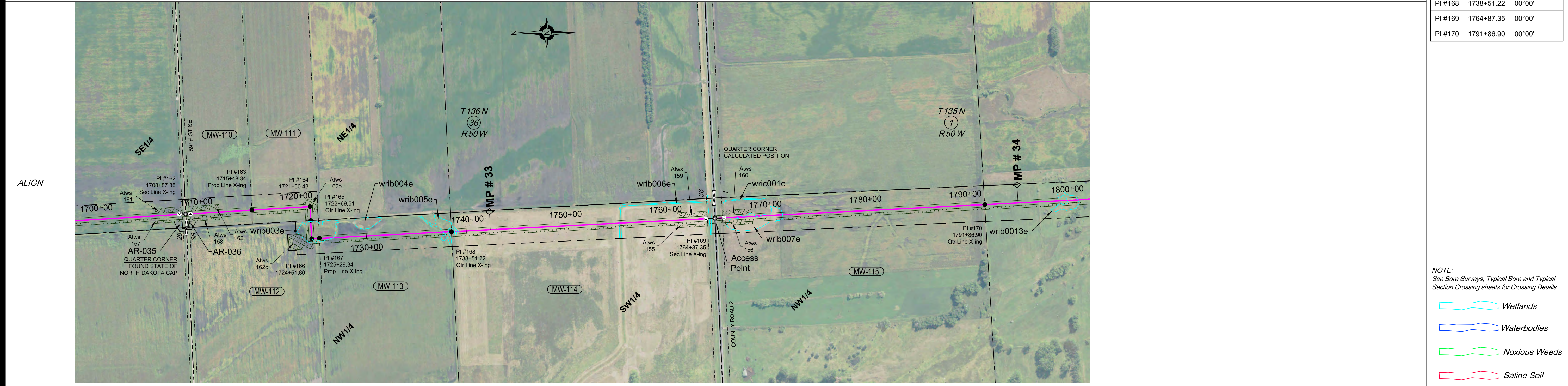
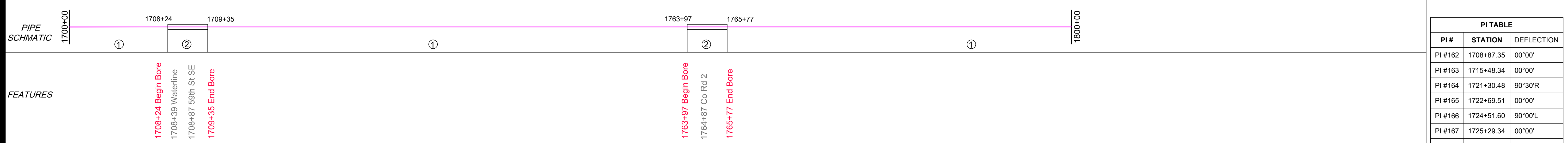
1" = 500' HORIZ.
1" = 200' VERT.

Sec. 13, 24, 25, T136N, R50W,
5th P.M., Richland Co., North Dakota

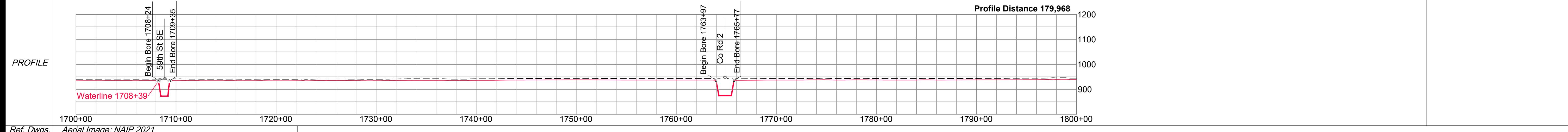
Sheet 15 R2



Co, State	SECTION 36, T136N, R50W, SECTION 1, T135N, R50W, RICHLAND COUNTY, NORTH DAKOTA										
OWNER	MW-110	MW-111	MW-112	MW-113	MW-114	MW-115					
RODDAGE	1708+87 N1/2 OF THE N1/2, OF THE NE1/4 SEC. 36, T136N, R50W 628' Cultivated - 33' Uncultivated 660.99' / 40.06 Rods	1715+48 S1/2 OF THE N1/2, OF THE NE1/4 SEC. 36, T136N, R50W 721' Cultivated 721.17' / 43.71 Rods	1722+70 N1/2 OF THE NW1/4 SEC. 36, T136N, R50W 260' Uncultivated 259.83' / 15.75 Rods	1725+29 S1/2 OF THE NW1/4, WITH EXCEPTIONS, SEC. 36, T136N, R50W 929' Cultivated - 393' Uncultivated 1321.87' / 80.11 Rods	1738+51 SW1/4, WITH EXCEPTIONS SEC. 36, T136N, R50W 2529' Cultivated - 107' Uncultivated 2636.14' / 159.77 Rods	1764+87 GOVT LOT 3 & SE1/4 OF THE NW1/4 SEC. 1, T135N, R50W 2625' Cultivated - 75' Uncultivated 2699.55' / 163.61 Rods					1791+87



ENVIRO	Name	Crossing Method	Bridge	Wetland Name	Survey Extent	Environmental Feature	Miscellaneous/Comments	HUC-12 Watershed	Seeding Mix
	wrib003e	Bridge		Wetland	1722+82	Wetland	Approx. 200' ECD		
	wrib004e	Bridge		Wetland	1726+72	Wetland	Approx. 200' ECD		
	wrib005e	Bridge		Wetland	1728+94	Wetland	Approx. 100' ECD		
	wrib006e	Bridge		Wetland	1731+56	Wetland	Approx. 75' mats	090201051005	
	wrib007e	Bridge		Wetland	1737+68	Wetland	Approx. 100' ECD		
	wric001e	Bridge		Wetland	1739+19	Wetland	Approx. 80' mats		
	wric001e	Bridge		Wetland	1755+39	Wetland	Approx. 200' ECD		
	wric001e	Bridge		Wetland	1764+42	Wetland	Approx. 100' ECD		
	wric001e	Bridge		Wetland	1767+12	Wetland	Approx. 600' mats		
	wric001e	Bridge		Wetland	1771+65	Wetland			
	wric001e	Bridge		Wetland	1765+59	Wetland			
	wric001e	Bridge		Wetland	1770+00	Wetland			
	wrib013e	Bridge		Wetland	1800+15	Wetland	Approx. 100' ECD		
	wrib013e	Bridge		Wetland	1801+18	Wetland	Approx. 125' mats		



HARNED SURVEYING & ENGINEERING, INC.
11815 ROBINDALE ROAD
LOUISVILLE, KY 40243
OFFICE (502) 254-3921
FAX (502) 254-6093

HSE Project # 19-21

SURVEY DATUM

North Dakota North (NAD 83)(2011)
International Foot
*Distances are Grid Distances.
Combined Scale Factor = 0.99989766
Grid Dist. x 1.00010235 = Ground Dist.

Drawing Date: 01-19-2022
Drawn By: D. Smith
Checked by: J. Harned

LEGEND:

- ⊠ Proposed Block Valve
- ⊕ Proposed Bore
- Alignment PI
- Utility Pole
- ⊙ Well
- ⊗ Valve
- Alignment
- - - Section Line
- · - Quarter Line
- x - x - x - Fence Line
- · - · - UG Fiber Optic
- · - · - UG Electric
- · - · - Overhead Elec
- · - · - Existing Pipeline
- · - · - Dirt Road

SUMMARY of MATERIALS

Mark	Quantity	Description
1	9,709	12.75" OD, .250" WT, X65, FBE, TRL
2	291	12.75" OD, .312" WT, X65, FBE w/ARO, TRL

REVISIONS

No.	Date	Description

WHAHPETON EXPANSION PROJECT

1" = 500' HORIZ.
1" = 200' VERT.

WBI ENERGY TRANSMISSION
An MDU Resources Group company

Sec. 36, T136N, R50W,
Sec. 1, T135N, R50W,
5th P.M., Richland Co., North Dakota

Sheet 16 R2

PI TABLE		
PI #	STATION	DEFLECTION
PI #162	1708+87.35	00°00'
PI #163	1715+48.34	00°00'
PI #164	1721+30.48	90°30'R
PI #165	1722+69.51	00°00'
PI #166	1724+51.60	90°00'L
PI #167	1725+29.34	00°00'
PI #168	1738+51.22	00°00'
PI #169	1764+87.35	00°00'
PI #170	1791+86.90	00°00'

NOTE:
See Bore Surveys, Typical Bore and Typical Section Crossing sheets for Crossing Details.

- Wetlands
- Waterbodies
- Noxious Weeds
- Saline Soil

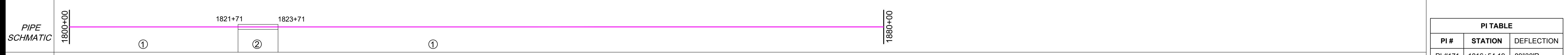
- Permanent Easement
- Temporary Workspace
- Additional Temp. Workspace
- Survey Corridor

ENVIRONMENTAL NOTES:

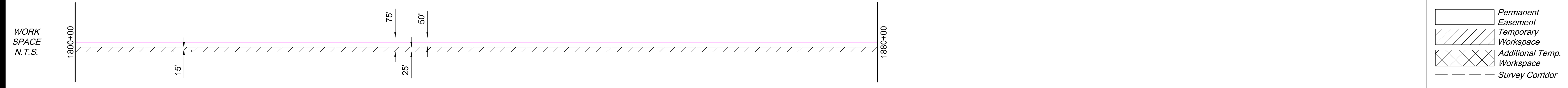
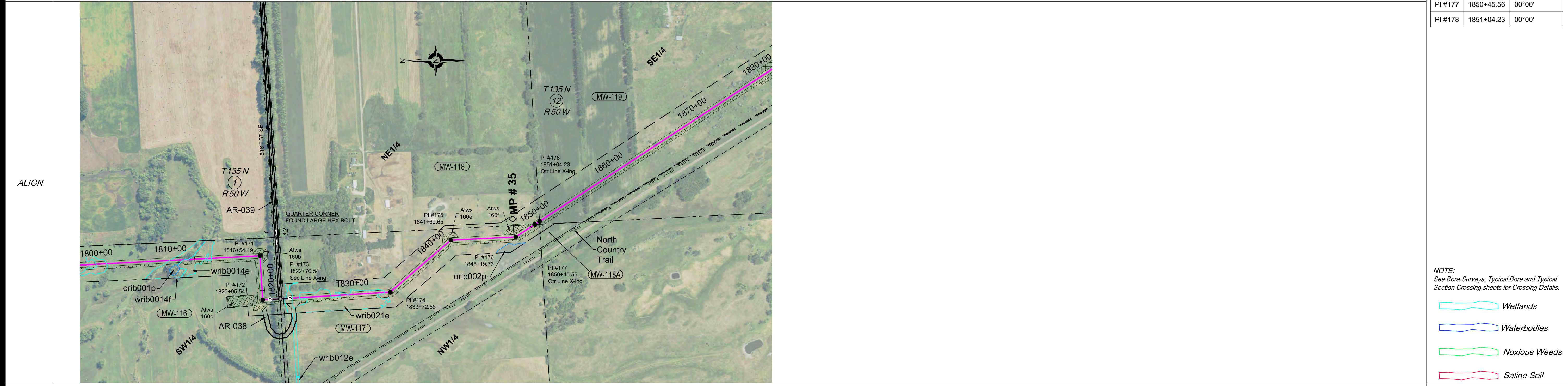
- Wetlands depicted on these sheets represent actual field survey data or NWI.
- Actual wetland or stream width may vary at time of construction.

* Open ("WET") trench if no distinguishable flow at the time of construction, dry crossing method if distinguishable flow at time of construction

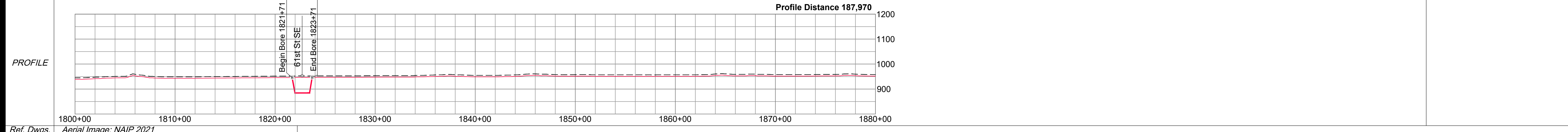
OWNER	MW-116 SW1/4, EXCEPT RAILROAD SEC. 1, T135N, R50W 713' Cultivated - 2371' Uncultivated	MW-117 PART OF NW1/4 LYING NE OF RAILROAD SEC. 12, T135N, R50W 1036' Cultivated - 1739' Uncultivated	MW-118 NE1/4, WITH EXCEPTIONS SEC. 12, T135N, R50W 59' Uncultivated	MW-119 SE1/4 LYING EAST OF RAILROAD SEC. 12, T135N, R50W 1037' Cultivated - 1997' Uncultivated
RODDAGE	3083.64' / 186.89 Rods	2775.02' / 168.18 Rods	58.67' / 3.56 Rods	3033.52' / 183.85 Rods



PI TABLE		
PI #	STATION	DEFLECTION
PI #171	1816+54.19	89°30'R
PI #172	1820+95.54	90°00'L
PI #173	1822+70.54	00°00'
PI #174	1833+72.56	37°00'L
PI #175	1841+69.65	38°00'R
PI #176	1848+19.73	30°30'L
PI #177	1850+45.56	00°00'
PI #178	1851+04.23	00°00'

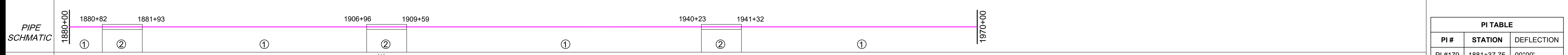


Water Crossing	Name	Crossing Method	Bridge	Survey Extent	Environmental Feature	Miscellaneous/Comments	HUC-12 Watershed	Seeding Mix
orib001p	orib001p	Bridge		1807+50 - 1809+16	Wetland		090201051005	
wrib0014f	wrib0014f	Bridge		1808+01 - 1809+16	Pond			
wrib0014e	wrib0014e	Bridge		1809+16 - 1811+67	Wetland	Approx. 50' ECD		
wrib012e	wrib012e	Bridge		1823+97 - 1823+21	Wetland	Approx. 100' ECD		
wrib021e	wrib021e	Bridge		1833+12 - 1846+20	Wetland	Approx. 1000' mats		
orib002p	orib002p	Bridge		1848+70 - 1848+70	Pond	Approx. 175' ECD		



<p>HARNED SURVEYING & ENGINEERING, INC. 11815 ROBINDALE ROAD LOUISVILLE, KY 40243 OFFICE (502) 254-3921 FAX (502) 254-6093</p> <p>HSE Project # 19-21</p>	<p>SURVEY DATUM</p> <p>North Dakota North (NAD 83)(2011) International Foot *Distances are Grid Distances. Combined Scale Factor = 0.99989766 Grid Dist. x 1.00010235 = Ground Dist.</p> <p>Drawing Date: 01-19-2022 Drawn By: D. Smith Checked by: J. Harned</p>	<p>LEGEND:</p> <ul style="list-style-type: none"> Proposed Block Valve Proposed Bore Alignment PI Utility Pole Well Valve Alignment Section Line Quarter Line Fence Line UG Fiber Optic UG Electric Overhead Elec Existing Pipeline Dirt Road 	<p>SUMMARY of MATERIALS</p> <table border="1"> <thead> <tr> <th>Mark</th> <th>Quantity</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>7,800</td> <td>12.75" OD, .250" WT, X65, FBE, TRL</td> </tr> <tr> <td>2</td> <td>200</td> <td>12.75" OD, .312" WT, X65, FBE w/ARO, TRL</td> </tr> </tbody> </table>	Mark	Quantity	Description	1	7,800	12.75" OD, .250" WT, X65, FBE, TRL	2	200	12.75" OD, .312" WT, X65, FBE w/ARO, TRL	<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>No.</th> <th>Date</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	No.	Date	Description				<p>WHAHPETON EXPANSION PROJECT</p> <p>1" = 500' HORIZ. 1" = 200' VERT.</p>	<p>WBI ENERGY TRANSMISSION An MDU Resources Group company</p> <p>Sec. 1, 12, T135N, R50W, 5th P.M., Richland Co., North Dakota</p> <p>Sheet 17 R2</p>
	Mark	Quantity	Description																		
1	7,800	12.75" OD, .250" WT, X65, FBE, TRL																			
2	200	12.75" OD, .312" WT, X65, FBE w/ARO, TRL																			
No.	Date	Description																			
<p>Ref. Dwgs. Aerial Image: NAIP 2021</p>			<p>500 0 500 1000 scale 1" = 500' - 22 x 34 feet 1" = 1000' - 11 x 17</p>		<p>ENVIRONMENTAL NOTES: 1. Wetlands depicted on these sheets represent actual field survey data or NWI. 2. Actual wetland or stream width may vary at time of construction. * Open ("WET") trench if no distinguishable flow at the time of construction, dry crossing method if distinguishable flow at time of construction</p>																

Co, State	SECTION 13, T135N, R50W, SECTIONS 18, 19, T135N, R49W, RICHLAND COUNTY, NORTH DAKOTA				
OWNER	MW-120 NE1/4 LYING EAST OF RAILROAD WITH EXCEPTIONS SEC. 13, T135N, R50W 2683' Uncultivated	MW-121 GOVT LOT 2 & SE1/4 OF THE NE1/4 SEC. 18, T135N, R49W 210' Uncultivated	MW-123 PART OF THE SW1/4 SEC. 18, T135N, R49W 739' Uncultivated	MW-124 GOVT LOTS 3-4 & E1/2 OF THE SW1/4 WITH EXCEPTIONS SEC. 18, T135N, R49W 2308' Uncultivated	MW-125 ALL LYING EAST OF RAILROAD WITH EXCEPTIONS SEC. 19, T135N, R49W 3507' Cultivated - 619' Uncultivated
RODDAGE	2682.54' / 162.58 Rods	209.85' / 12.72 Rods	739.49' / 44.82 Rods	2308.01' / 139.88 Rods	4126.49' / 250.27 Rods

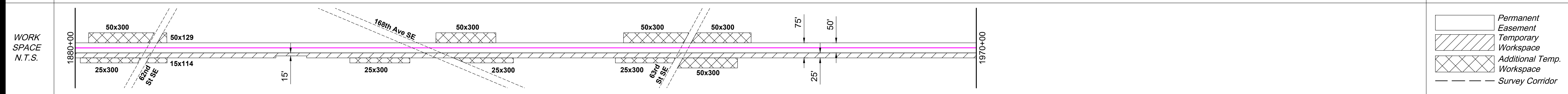


FEATURES	1880+82 1881+38 62nd St SE 1881+93 End Bore	1906+96 1908+20 168th Ave SE 1909+34 Driveway 1909+59 End Bore 1910+70 Fence	1940+23 1940+32 Fence 1940+64 63rd St SE 1941+32 End Bore
----------	---	--	--

PI TABLE		
PI #	STATION	DEFLECTION
PI #179	1881+37.75	00°00'
PI #180	1886+27.24	7°30'R
PI #181	1908+20.29	00°00'
PI #182	1910+30.15	15°30'L
PI #183	1913+92.93	00°00'
PI #184	1915+31.62	10°30'R
PI #185	1921+32.41	00°00'
PI #186	1940+77.64	00°00'
PI #187	1944+05.94	62°30'L
PI #188	1955+62.14	00°00'



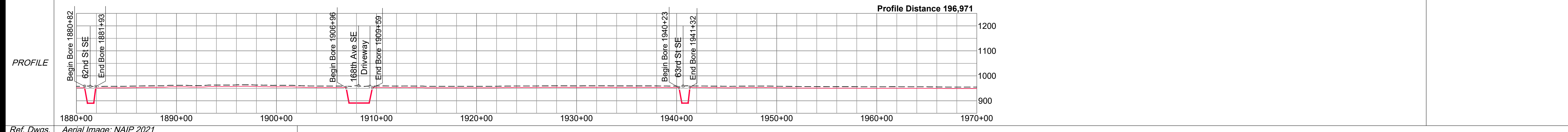
- NOTE:
See Bore Surveys, Typical Bore and Typical Section Crossing sheets for Crossing Details.
- Wetlands
 - Waterbodies
 - Noxious Weeds
 - Saline Soil



- Permanent Easement
- Temporary Workspace
- Additional Temp. Workspace
- Survey Corridor

ENVIRO	Water Crossing	orib003e																
	Wetland Name	wrib015e	wrib016e	wrib017e		wrib018e	wrib020f	wrib020e	wrib019e	wria006e	wria007e							
	Bridge	1881+08	1801+53	1883+48	1887+16	1886+73	1890+50	1892+92	1897+92	1901+36	1899+08	1901+18	1901+68	1909+47	1915+68	1926+90	1915+71	1919+96
	Survey Extent	Wetland	Wetland	Wetland	Wetland	Pond	Wetland	Wetland	Wetland	Wetland	Wetland	Wetland	Wetland	Wetland	Wetland	Wetland	Wetland	Wetland
Environmental Feature	Approx. 100' ECD	Approx. 100' ECD	Approx. 100' ECD	Approx. 400' mats		Approx. 100' ECD	Approx. 275' mats	Approx. 50' ECD	Approx. 40' mats	Approx. 200' mats	Approx. 100' ECD	Approx. 100' ECD	Approx. 625' mats	Approx. 500' mats				
Miscellaneous/Comments	Approx. 40' mats																	
HUC-12 Watershed	090201051005																	
Seeding Mix	090201051004																	

ENVIRONMENTAL NOTES:
1. Wetlands depicted on these sheets represent actual field survey data or NWI.
2. Actual wetland or stream width may vary at time of construction.
* Open ("WET") trench if no distinguishable flow at the time of construction, dry crossing method if distinguishable flow at time of construction



HARNED SURVEYING & ENGINEERING, INC.
11815 ROBINDALE ROAD
LOUISVILLE, KY 40243
OFFICE (502) 254-3921
FAX (502) 254-6093

HSE Project # 19-21

SURVEY DATUM
North Dakota North (NAD 83)(2011)
International Foot
*Distances are Grid Distances.
Combined Scale Factor = 0.99989766
Grid Dist. x 1.00010235 = Ground Dist.

Drawing Date: 01-19-2022
Drawn By: D. Smith
Checked by: J. Harned

LEGEND:

- Proposed Block Valve
- Proposed Bore
- Alignment PI
- Utility Pole
- Well
- Valve
- Alignment
- Section Line
- Quarter Line
- Fence Line
- UG Fiber Optic
- UG Electric
- Overhead Elec
- Existing Pipeline
- Dirt Road

SUMMARY of MATERIALS

Mark	Quantity	Description
1	8,518	12.75" OD, .250" WT, X65, FBE, TRL
2	482	12.75" OD, .312" WT, X65, FBE w/ARO, TRL

REVISIONS

No.	Date	Description

WHAHPETON EXPANSION PROJECT

1" = 500' HORIZ.
1" = 200' VERT.

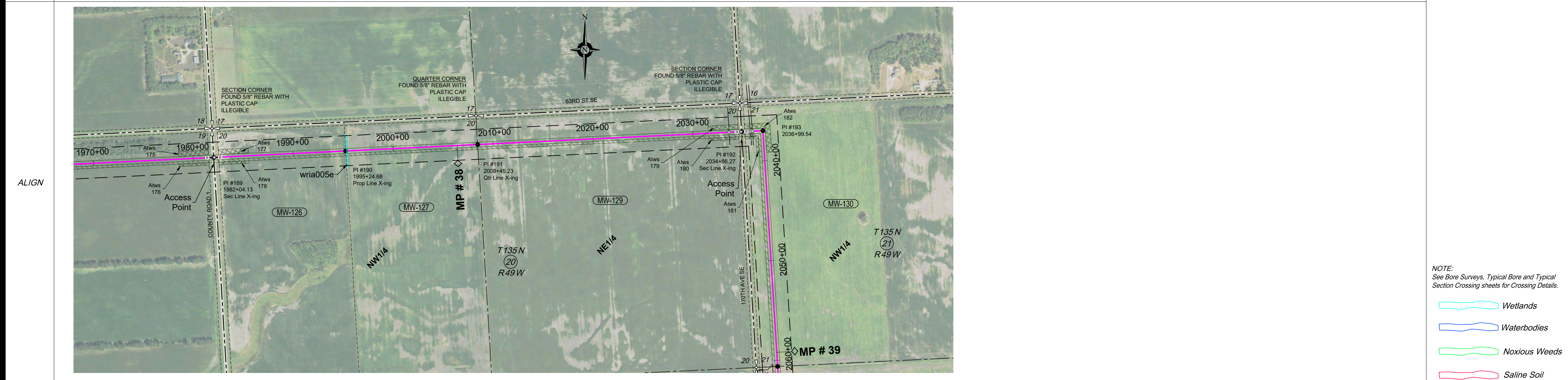
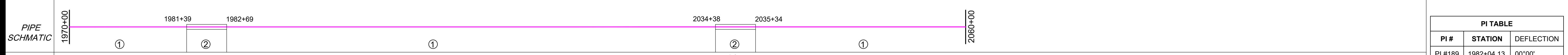
1" = 500' - 22 x 34
1" = 1000' - 11 x 17

WBI ENERGY TRANSMISSION
An MDU Resources Group company

Sec. 13, T135N, R50W,
Sec. 18, 19, T135N, R49W,
5th P.M., Richland Co., North Dakota

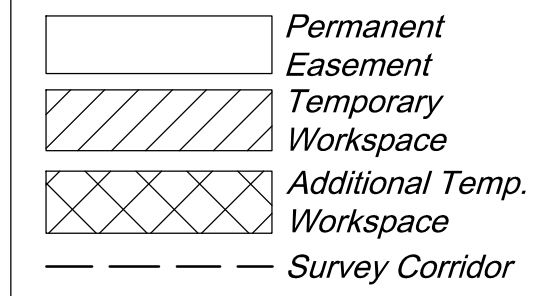
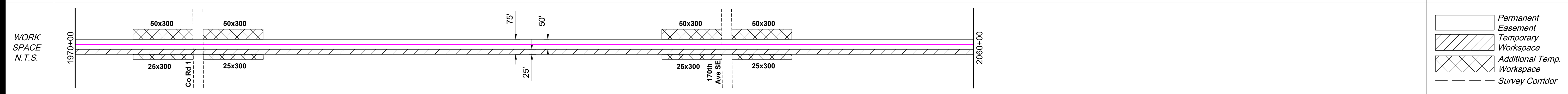
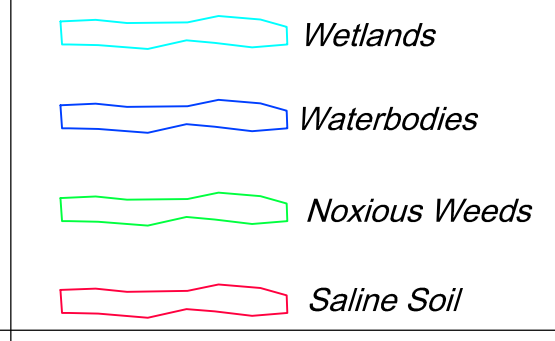
Sheet 18 R2

OWNER	1982+04	MW-126 W1/2 OF THE W1/2 SEC. 20, T135N, R49W 1288' Cultivated - 33' Uncultivated	1995+25	MW-127 E1/2 OF THE W1/2, WITH EXCEPTIONS SEC. 20, T135N, R49W 1321' Cultivated	2008+45	MW-129 NE1/4 SEC. 20, T135N, R49W 2608' Cultivated - 33' Uncultivated	2034+86	MW-130 W1/2 OF THE NW1/4 SEC. 21, T135N, R49W 2542' Cultivated - 33' Uncultivated
RODDAGE		1320.55' / 80.03 Rods		1320.55' / 80.03 Rods		2641.04' / 160.06 Rods		2575.35' / 156.08 Rods



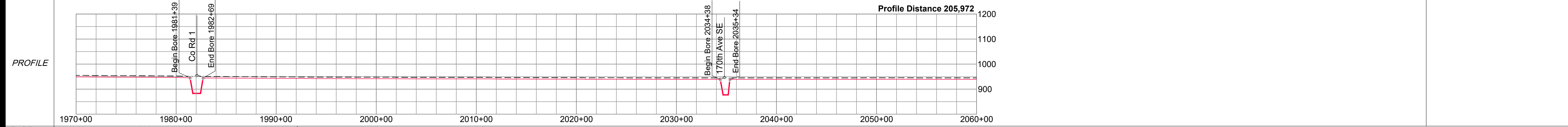
PI TABLE		
PI #	STATION	DEFLECTION
PI #189	1982+04.13	00°00'
PI #190	1995+24.68	00°00'
PI #191	2008+45.23	00°00'
PI #192	2034+86.27	00°00'
PI #193	2036+99.54	89°00'R

NOTE:
See Bore Surveys, Typical Bore and Typical Section Crossing sheets for Crossing Details.



ENVIRO	Water Crossing	Name	
		Crossing Method	Bridge
	Wetland Crossing	Name	wria005e
		Survey Extent	1995+37
	Environmental Feature	Wetland	
	Miscellaneous/Comments		Approx. 100' ECD Approx. 40' mats
	HUC-12 Watershed		090201051004
	Seeding Mix		

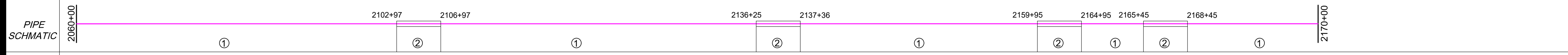
ENVIRONMENTAL NOTES:
1. Wetlands depicted on these sheets represent actual field survey data or NWI.
2. Actual wetland or stream width may vary at time of construction.
* Open ("WET") trench if no distinguishable flow at the time of construction, dry crossing method if distinguishable flow at time of construction



Ref. Dwgs. Aerial Image: NAIP 2021

 HARNED SURVEYING & ENGINEERING, INC. 11815 ROBINDALE ROAD LOUISVILLE, KY 40243 OFFICE (502) 254-3921 FAX (502) 254-6093 HSE Project # 19-21	SURVEY DATUM North Dakota North (NAD 83)(2011) International Foot *Distances are Grid Distances. Combined Scale Factor = 0.99989766 Grid Dist. x 1.00010235 = Ground Dist.	LEGEND: [Symbol] Proposed Block Valve [Symbol] Proposed Bore [Symbol] Alignment PI [Symbol] Utility Pole [Symbol] Well [Symbol] Valve [Symbol] Alignment [Symbol] Section Line [Symbol] Quarter Line [Symbol] Fence Line [Symbol] UG Fiber Optic [Symbol] UG Electric [Symbol] Overhead Elec [Symbol] Existing Pipeline [Symbol] Dirt Road	SUMMARY of MATERIALS <table border="1"> <thead> <tr> <th>Mark</th> <th>Quantity</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>8,774</td> <td>12.75" OD, .250" WT, X65, FBE, TRL</td> </tr> <tr> <td>2</td> <td>226</td> <td>12.75" OD, .312" WT, X65, FBE w/ARO, TRL</td> </tr> </tbody> </table>	Mark	Quantity	Description	1	8,774	12.75" OD, .250" WT, X65, FBE, TRL	2	226	12.75" OD, .312" WT, X65, FBE w/ARO, TRL	REVISIONS <table border="1"> <thead> <tr> <th>No.</th> <th>Date</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	No.	Date	Description				WHAHPETON EXPANSION PROJECT 1" = 500' HORIZ. 1" = 200' VERT.	 1" = 500' - 22 x 34 1" = 1000' - 11 x 17	 An MDU Resources Group company
	Mark	Quantity	Description																			
	1	8,774	12.75" OD, .250" WT, X65, FBE, TRL																			
2	226	12.75" OD, .312" WT, X65, FBE w/ARO, TRL																				
No.	Date	Description																				
	Drawing Date: 01-19-2022 Drawn By: D. Smith Checked by: J. Harned																					
							Sec. 20, 21, T135N, R49W, 5th P.M., Richland Co., North Dakota Sheet 19 R2															

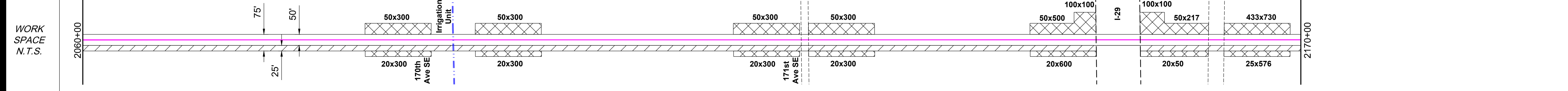
Co, State	SECTIONS 21, 22, 27, T135N, R49W, RICHLAND COUNTY, NORTH DAKOTA																				
OWNER	2060+62	MW-131 SW1/4 SEC. 21, T135N, R49W 4981' Cultivated			2110+42	MW-132 S1/2 OF THE S1/2 OF THE SE1/4 SEC. 21, T135N, R49W 2592' Cultivated - 53' Uncultivated			2136+88	MW-133 SW1/4, WITH EXCEPTIONS SEC. 22, T135N, R49W 2324' Cultivated - 33' Uncultivated		2160+45	MW-140 SEC. 22, T135N, R49W 400' Uncultivated		2164+45	MW-135 SE1/4 EXC 1-29 ROW SEC. 22, T135N, R49W 200' Cultivated		2166+44	MW-137 S7/8 OF N108.5' LESS E33' & W116.8' OF NE1/4 SEC. 27, T135N, R49W 108' Uncultivated		2167+53
RODDAGE	4980.78' / 301.87 Rods		2645.44' / 160.33 Rods			2356.79' / 142.84 Rods		400.04' / 24.24 Rods		199.69' / 12.10 Rods		108.26' / 6.68 Rods									



PI #	STATION	DEFLECTION
PI #194	2060+61.63	00°00'
PI #195	2086+10.22	89°30'L
PI #196	2110+42.40	00°00'
PI #197	2136+87.85	00°00'
PI #198	2160+44.64	00°00'
PI #199	2163+28.17	00°00'
PI #200	2164+44.67	00°00'
PI #201	2165+44.68	89°30'R
PI #202	2166+44.36	00°00'
PI #203	2167+52.62	00°00'

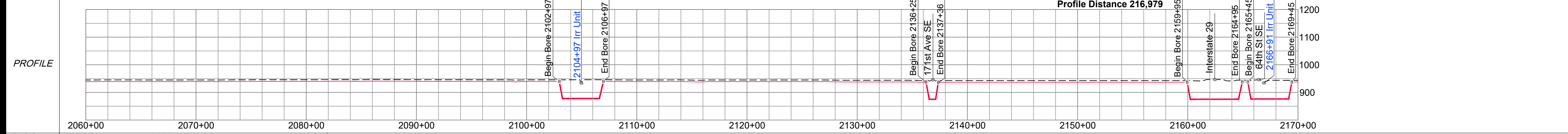
NOTE:
See Bore Surveys, Typical Bore and Typical Section Crossing sheets for Crossing Details.

- Wetlands
- Waterbodies
- Noxious Weeds
- Saline Soil



ENVIRO	Water Crossing	Name	sria002e		sric002p
	Wetland Crossing	Bridge	Bore	Yes	Bore
ENVIRO	Wetland Crossing	Survey Extent	2104+97	Minor	2166+91
	Environmental Feature	Miscellaneous/Comments	Approx. 100' ECD		Intermediate
ENVIRO	HUC-12 Watershed	Seeding Mix	090201051004		090201051003

ENVIRONMENTAL NOTES:
1. Wetlands depicted on these sheets represent actual field survey data or NWI.
2. Actual wetland or stream width may vary at time of construction.
* Open ("WET") trench if no distinguishable flow at the time of construction, dry crossing method if distinguishable flow at time of construction



Ref. Dwgs. Aerial Image: NAIP 2021

SURVEY DATUM
North Dakota North (NAD 83)(2011)
International Foot
*Distances are Grid Distances.
Combined Scale Factor = 0.99989766
Grid Dist. x 1.00010235 = Ground Dist.

Drawing Date: 01-19-2022
Drawn By: D. Smith
Checked by: J. Harned

LEGEND:

- Proposed Block Valve
- Proposed Bore
- Alignment PI
- Utility Pole
- Well
- Valve
- Alignment
- Section Line
- Quarter Line
- Fence Line
- UG Fiber Optic
- UG Electric
- Overhead Elec
- Existing Pipeline
- Dirt Road

SUMMARY of MATERIALS

Mark	Quantity	Description
1	9,589	12.75" OD, .250" WT, X65, FBE, TRL
2	911	12.75" OD, .312" WT, X65, FBE w/ARO, TRL
3	500	12.75" OD, .500" WT, X65, FBE, TRL

REVISIONS

No.	Date	Description

WHAHPETON EXPANSION PROJECT

1" = 500' HORIZ.
1" = 200' VERT.

Sec. 21, 22, 27, T135N, R49W,
5th P.M., Richland Co., North Dakota

Sheet 20 R2

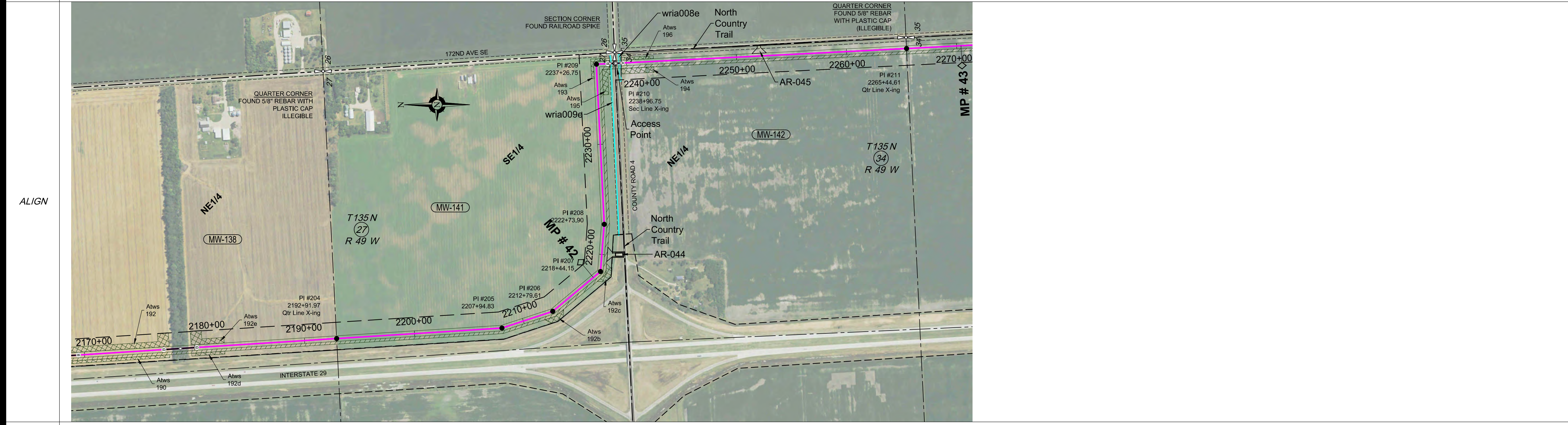
Co, State	SECTIONS 27, 34, T135N, R49W, RICHLAND COUNTY, NORTH DAKOTA					
OWNER	MW-138		MW-141		MW-142	
RODDAGE	NE1/4 EXC 4.49A DRN, 6.62A 1-29 ROW & 10.89A SEC. 27, T135N, R49W 2387' Cultivated - 152' Uncultivated 2539.35' / 153.90 Rods		SE1/4 EXC 1-29 ROW SEC. 27, T135N, R49W 4572' Cultivated - 33' Uncultivated 4604.78' / 279.08 Rods		NE1/4 EXC 1-29 ROW & 6.61A SEC. 34, T135N, R49W 2568' Cultivated - 80' Uncultivated 2647.85' / 160.48 Rods	
PIPE SCHMATIC	2170+00	2177+21	2180+21	2238+32	2239+62	2270+00

PI TABLE		
PI #	STATION	DEFLECTION
PI #204	2192+91.97	00°00'
PI #205	2207+94.83	14°30'L
PI #206	2212+79.61	21°30'L
PI #207	2218+44.15	45°30'L
PI #208	2222+73.90	7°30'L
PI #209	2237+26.75	90°00'R
PI #210	2238+96.75	00°00'
PI #211	2265+44.61	00°00'

FEATURES

2177+21 Begin Bore
2178+71 Shelter Belt
2180+21 End Bore

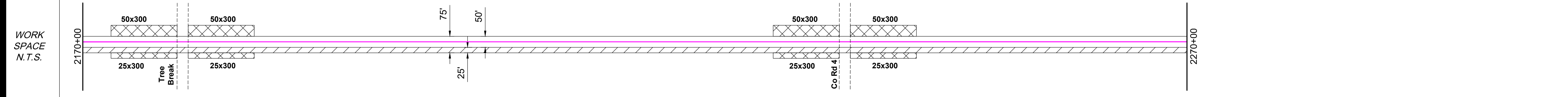
2238+32 Begin Bore
2238+50 UFO
2238+97 Co Rd 4
2239+04 Trail
2239+52 OHE
2239+62 End Bore



NOTE:
See Bore Surveys, Typical Bore and Typical Section Crossing sheets for Crossing Details.

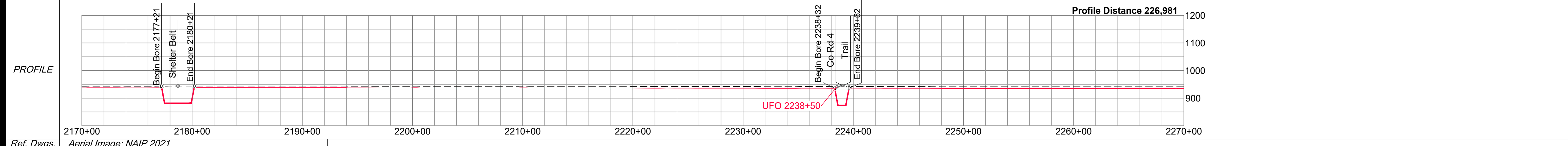
Wetlands
 Waterbodies
 Noxious Weeds
 Saline Soil

Permanent Easement
 Temporary Workspace
 Additional Temp. Workspace
 Survey Corridor



Water Crossing	Name	Bridge Method
	wria009e	2238+59 Wetland
	wria008e	2238+38 Wetland
Miscellaneous/Comments: Approx. 100' ECD, Approx. 40' mats		
HUC-12 Watershed	090201051003	

ENVIRONMENTAL NOTES:
 1. Wetlands depicted on these sheets represent actual field survey data or NWI.
 2. Actual wetland or stream width may vary at time of construction.
 * Open ("WET") trench if no distinguishable flow at the time of construction, dry crossing method if distinguishable flow at time of construction



Ref. Dwgs. Aerial Image: NAIP 2021

HARNED SURVEYING & ENGINEERING, INC.
 11815 ROBINDALE ROAD
 LOUISVILLE, KY 40243
 OFFICE (502) 254-3921
 FAX (502) 254-6093

HSE Project # 19-21

SURVEY DATUM
 North Dakota North (NAD 83)(2011)
 International Foot
 *Distances are Grid Distances.
 Combined Scale Factor = 0.99989766
 Grid Dist. x 1.00010235 = Ground Dist.

Drawing Date: 01-19-2022
 Drawn By: D. Smith
 Checked by: J. Harned

LEGEND:

	Proposed Block Valve		Alignment
	Proposed Bore		Section Line
	Alignment PI		Quarter Line
	Utility Pole		Fence Line
	Well		UG Fiber Optic
	Valve		UG Electric
			Overhead Elec
			Existing Pipeline
			Dirt Road

SUMMARY of MATERIALS

Mark	Quantity	Description
1	9,570	12.75" OD, .250" WT, X65, FBE, TRL
2	430	12.75" OD, .312" WT, X65, FBE w/ARO, TRL

REVISIONS

No.	Date	Description

500 0 500 1000
 scale 1" = 500' - 22 x 34 feet
 1" = 1000' - 11 x 17

WAHPETON EXPANSION PROJECT

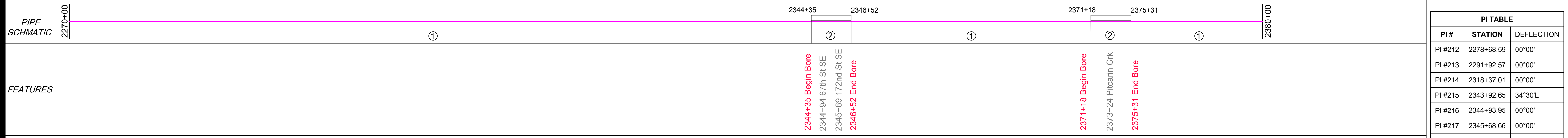
1" = 500' HORIZ.
 1" = 200' VERT.

WBI ENERGY TRANSMISSION
 An MDU Resources Group company

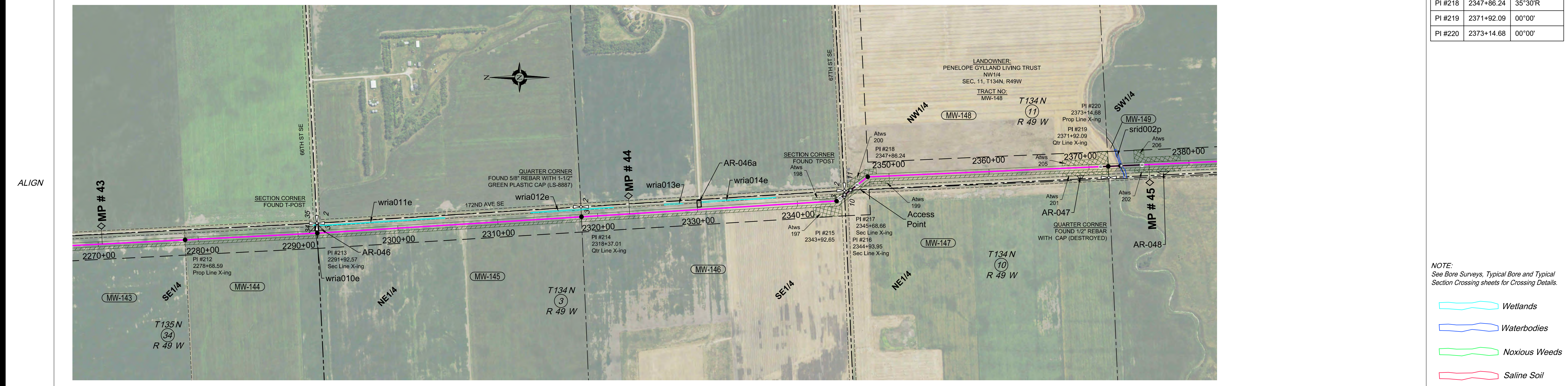
Sec. 27, 34, T135N, R49W,
 5th P.M., Richland Co., North Dakota

Sheet 21 R2

Co, State	SECTION 34, T135N, R49W, SECTIONS 3, 10, 11, T134N, R49W, RICHLAND COUNTY, NORTH DAKOTA									
OWNER	MW-143	MW-144	MW-145	MW-146	MW-147	MW-148	MW-149			
RODDAGE	1323.98' / 80.24 Rods	1323.98' / 80.24 Rods	2644.45' / 160.27 Rods	2656.94' / 161.03 Rods	74.716' / 4.52 Rods	2623.43' / 159.00 Rods	122.59' / 7.43 Rods			

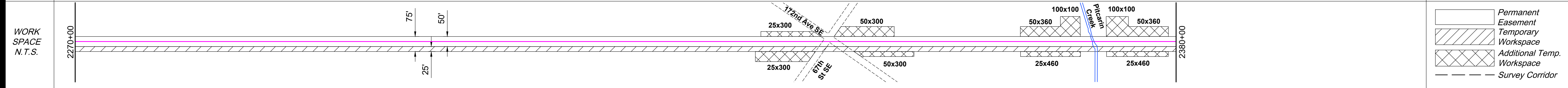


PI TABLE		
PI #	STATION	DEFLECTION
PI #212	2278+68.59	00°00'
PI #213	2291+92.57	00°00'
PI #214	2318+37.01	00°00'
PI #215	2343+92.65	34°30'L
PI #216	2344+93.95	00°00'
PI #217	2345+68.66	00°00'
PI #218	2347+86.24	35°30'R
PI #219	2371+92.09	00°00'
PI #220	2373+14.68	00°00'



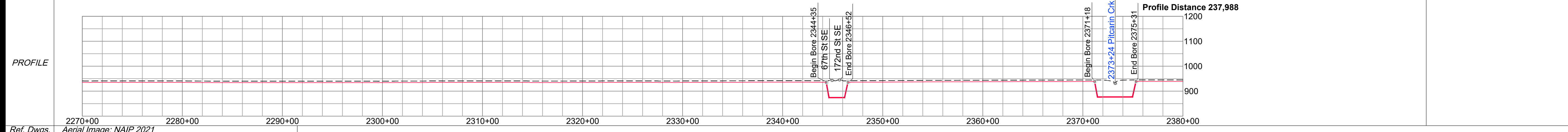
NOTE:
See Bore Surveys, Typical Bore and Typical Section Crossing sheets for Crossing Details.

- Wetlands
- Waterbodies
- Noxious Weeds
- Saline Soil



ENVIRO	Water Crossing		Wetland										Miscellaneous/Comments				
	Name	Crossing Method	Wetland Name	Survey Extent	Environmental Feature	HUC-12 Watershed										Seeding Mix	
	srid002p	Bore	wria010e	2291+71	Wetland	090201051003											
		Yes	wria011e	2292+22	Wetland	090201051002										Approx. 100' ECD Approx. 40' mats	

ENVIRONMENTAL NOTES:
1. Wetlands depicted on these sheets represent actual field survey data or NWI.
2. Actual wetland or stream width may vary at time of construction.
* Open ("WET") trench if no distinguishable flow at the time of construction, dry crossing method if distinguishable flow at time of construction



Ref. Dwgs. Aerial Image: NAIP 2021

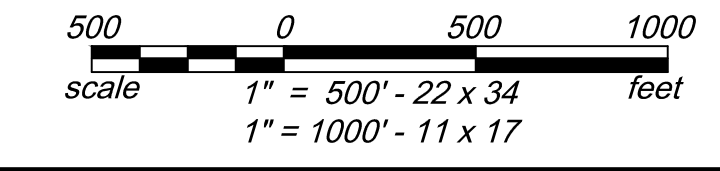
HSE INC.
HARNED SURVEYING & ENGINEERING, INC.
11815 ROBINDALE ROAD
LOUISVILLE, KY 40243
OFFICE (502) 254-3921
FAX (502) 254-6093
HSE Project # 19-21

SURVEY DATUM	
North Dakota North (NAD 83)(2011) International Foot *Distances are Grid Distances. Combined Scale Factor = 0.99989766 Grid Dist. x 1.00010235 = Ground Dist.	
Drawing Date:	01-19-2022
Drawn By:	D. Smith
Checked by:	J. Harned

LEGEND:	
⊠	Proposed Block Valve
⊙	Proposed Bore
●	Alignment PI
○	Utility Pole
⊕	Well
⊗	Valve
—	Alignment
- - -	Section Line
- · - · -	Quarter Line
- x - x - x -	Fence Line
- - - - -	UG Fiber Optic
- - - - -	UG Electric
- - - - -	Overhead Elec
- · - · -	Existing Pipeline
- - - - -	Dirt Road

SUMMARY of MATERIALS		
Mark	Quantity	Description
1	10,370	12.75" OD, .250" WT, X65, FBE, TRL
2	430	12.75" OD, .312" WT, X65, FBE w/ARO, TRL

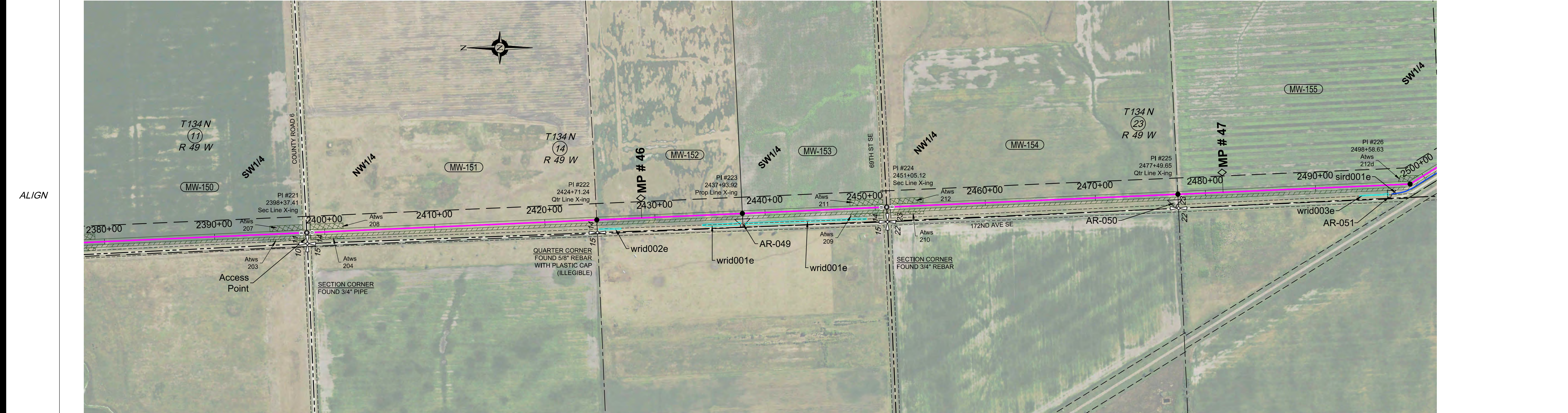
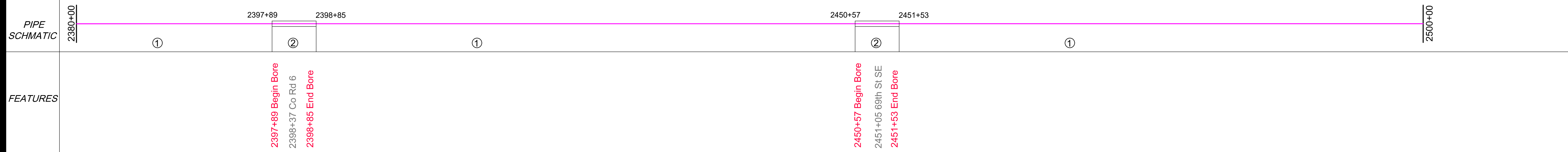
REVISIONS		
No.	Date	Description



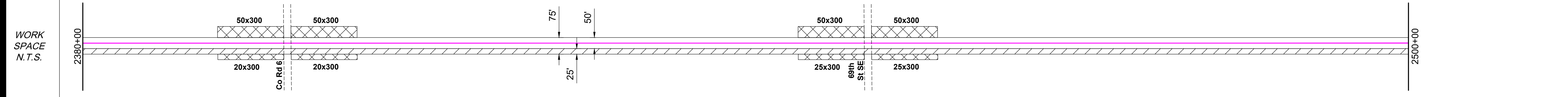
WAHPETON EXPANSION PROJECT

WBI ENERGY TRANSMISSION
An MDU Resources Group company
Sec. 34, T135N, R49W,
Sec. 3, 10, 11, T134N, R49W,
5th P.M., Richland Co., North Dakota
Sheet 22 R2

Co, State	SECTIONS 11, 14, 23, T134N, R49W, RICHLAND COUNTY, NORTH DAKOTA					
OWNER	MW-150	MW-151	MW-152	MW-153	MW-154	MW-155
RODDAGE	SW1/4, WITH EXCEPTIONS SEC. 11, T134N, R49W 2490' Cultivated - 33' Uncultivated 2522.73' / 152.89 Rods	NW1/4 SEC. 14, T134N, R49W 2601' Cultivated - 33' Uncultivated 2633.83' / 159.63 Rods	N 1/2 OF THE SW1/4 SEC. 14, T134N, R49W 1323' Cultivated 1322.68' / 80.16 Rods	S 1/2 OF THE SW1/4 SEC. 14, T134N, R49W 1278' Cultivated - 353' Uncultivated 1311.20' / 79.47 Rods	NW1/4 SEC. 23, T134N, R49W 2510' Cultivated - 135' Uncultivated 2644.53' / 160.28 Rods	SW1/4 EXC 1-29 ROW SEC. 23, T134N, R49W 4821' Cultivated - 73' Uncultivated 4894.17' / 296.62 Rods



PI TABLE		
PI #	STATION	DEFLECTION
PI #221	2398+37.41	00°00'
PI #222	2424+71.24	00°00'
PI #223	2437+93.92	00°00'
PI #224	2451+05.12	00°00'
PI #225	2477+49.65	00°00'
PI #226	2498+58.63	29°00'L

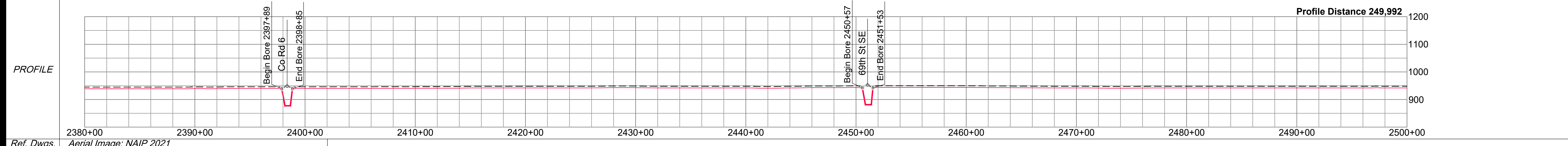


NOTE:
See Bore Surveys, Typical Bore and Typical Section Crossing sheets for Crossing Details.

- Wetlands
- Waterbodies
- Noxious Weeds
- Saline Soil
- Permanent Easement
- Temporary Workspace
- Additional Temp. Workspace
- Survey Corridor

ENVIRO	Name	Crossing Method	Station	Notes
Water Crossing	srld001e	open-cut	2498+58.63	
Wetland Crossing	wrid002e	Wetland	2424+88	
Wetland Crossing	wrid001e	Wetland	2426+89	
Wetland Crossing	wrid003e	Wetland	2434+27	
Wetland Crossing	wrid0001e	Wetland	2449+15	Approx. 50' ECD
Wetland Crossing	wrid0003e	Wetland	2493+96	Approx. 50' ECD
Wetland Crossing	wrid0003e	Wetland	2496+60	Approx. 50' ECD
Wetland Crossing	wrid0003e	Wetland	2496+89	Approx. 50' ECD
Wetland Crossing	wrid0003e	Wetland	2552+20	Minor
Wetland Crossing	wrid0003e	Wetland	2552+20	Approx. 50' ECD

ENVIRONMENTAL NOTES:
 1. Wetlands depicted on these sheets represent actual field survey data or NWI.
 2. Actual wetland or stream width may vary at time of construction.
 * Open ("WET") trench if no distinguishable flow at the time of construction, dry crossing method if distinguishable flow at time of construction



Ref. Dwgs. Aerial Image: NAIP 2021

SURVEY DATUM
 North Dakota North (NAD 83)(2011)
 International Foot
 *Distances are Grid Distances.
 Combined Scale Factor = 0.99989766
 Grid Dist. x 1.00010235 = Ground Dist.

Drawing Date: 01-19-2022
 Drawn By: D. Smith
 Checked by: J. Harned

LEGEND:

- Proposed Block Valve
- Proposed Bore
- Alignment PI
- Utility Pole
- Well
- Valve
- Alignment
- Section Line
- Quarter Line
- Fence Line
- UG Fiber Optic
- UG Electric
- Overhead Elec
- Existing Pipeline
- Dirt Road

SUMMARY of MATERIALS

Mark	Quantity	Description
1	11,808	12.75" OD, .250" WT, X65, FBE, TRL
2	192	12.75" OD, .312" WT, X65, FBE w/ARO, TRL

REVISIONS

No.	Date	Description

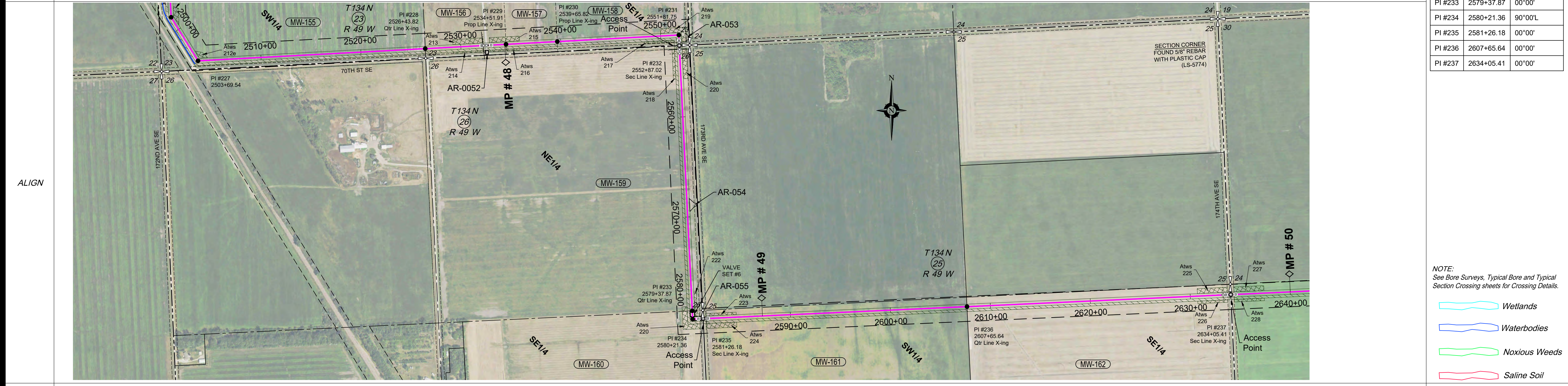
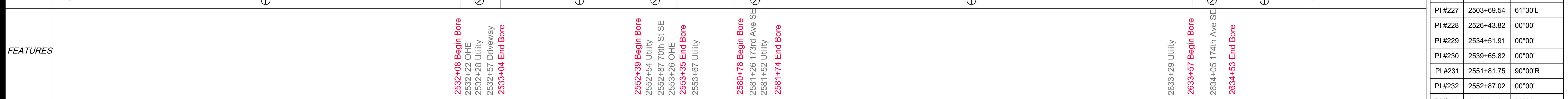
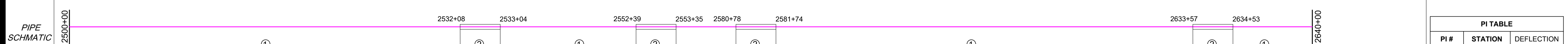
Scale: 1" = 500' HORIZ.
 1" = 200' VERT.

WAHPETON EXPANSION PROJECT

Sec. 11, 14, 23, T134N, R49W,
 5th P.M., Richland Co., North Dakota

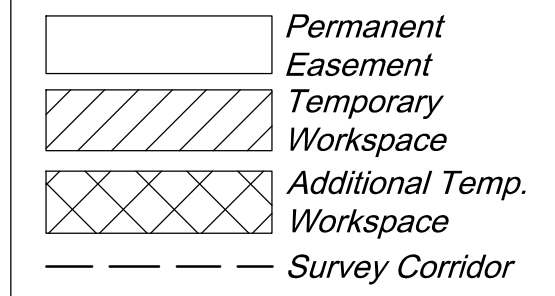
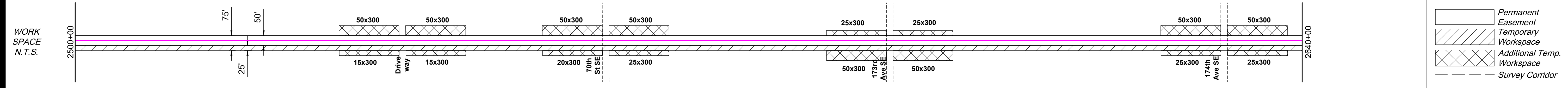
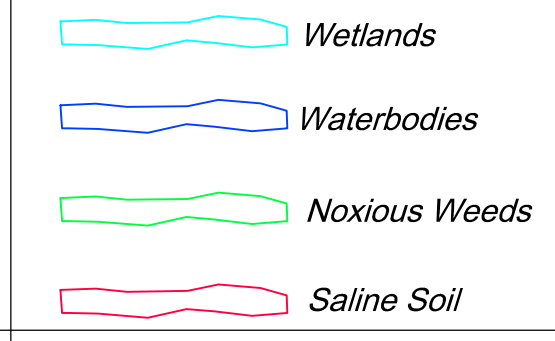
Sheet 23 R2

OWNER	MW-155 SW1/4 EXC 1-29 ROW SEC. 23, T134N, R49W 4771' Cultivated - 73' Uncultivated	MW-156 PART OF THE SE1/4 SEC. 23, T134N, R49W 781' Cultivated - 27' Uncultivated	MW-157 W1/2 OF THE SE1/4 WITH EXCEPTIONS 514' Cultivated	MW-158 E1/2 SE1/4 SEC. 23, T134N, R49W 1235' Cultivated - 86' Uncultivated	MW-159 NE1/4 SEC. 26, T134N, R49W 2616' Cultivated - 33' Uncultivated	MW-160 SE1/4, WITH EXCEPTIONS SEC. 26, T134N, R49W 155' Cultivated - 33' Uncultivated	MW-161 SW1/4 SEC. 25, T134N, R49W 2606' Cultivated - 33' Uncultivated	MW-162 SE1/4 SEC. 25, T134N, R49W 2607' Cultivated - 33' Uncultivated
RODDAGE	4844.63' / 296.28 Rods	808.09' / 48.97 Rods	513.91' / 31.15 Rods	1321.20' / 80.07 Rods	2650.85' / 160.66 Rods	188.30' / 11.41 Rods	2639.47' / 159.97 Rods	2639.77' / 159.99 Rods



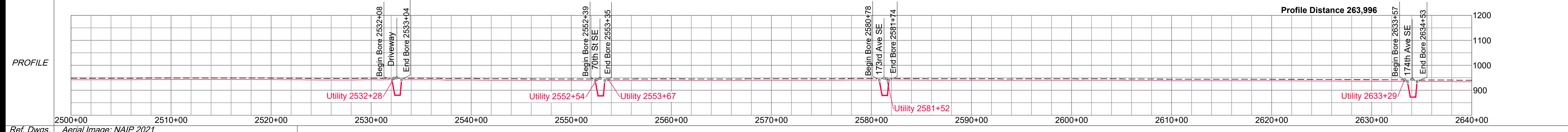
PI TABLE		
PI #	STATION	DEFLECTION
PI #227	2503+69.54	61°30'L
PI #228	2526+43.82	00°00'
PI #229	2534+51.91	00°00'
PI #230	2539+65.82	00°00'
PI #231	2551+81.75	90°00'R
PI #232	2552+87.02	00°00'
PI #233	2579+37.87	00°00'
PI #234	2580+21.36	90°00'L
PI #235	2581+26.18	00°00'
PI #236	2607+65.64	00°00'
PI #237	2634+05.41	00°00'

NOTE:
See Bore Surveys, Typical Bore and Typical Section Crossing sheets for Crossing Details.



ENVIRO	Name	
	Water Crossing	Bridge
	Wetland Name	
	Crossing Survey Extent	
	Environmental Feature	
Miscellaneous/Comments		
HUC-12 Watershed	090201051001	
Seeding Mix		

ENVIRONMENTAL NOTES:
1. Wetlands depicted on these sheets represent actual field survey data or NWI.
2. Actual wetland or stream width may vary at time of construction.
* Open ("WET") trench if no distinguishable flow at the time of construction, dry crossing method if distinguishable flow at time of construction



Ref. Dwgs. Aerial Image: NAIP 2021

HARNED SURVEYING & ENGINEERING, INC.
11815 ROBINDALE ROAD
LOUISVILLE, KY 40243
OFFICE (502) 254-3921
FAX (502) 254-6093

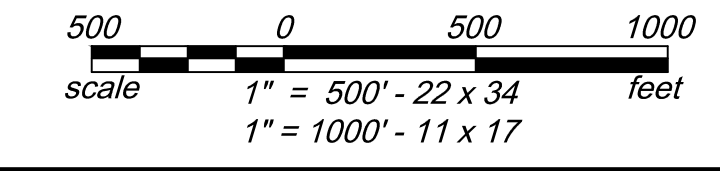
HSE Project # 19-21

SURVEY DATUM	
North Dakota North (NAD 83)(2011) International Foot *Distances are Grid Distances. Combined Scale Factor = 0.99989766 Grid Dist. x 1.00010235 = Ground Dist.	
Drawing Date:	01-19-2022
Drawn By:	D. Smith
Checked by:	J. Harned

LEGEND:	
⊗	Proposed Block Valve
⊕	Proposed Bore
●	Alignment PI
○	Utility Pole
⊙	Well
⊗	Valve
—	Proposed Block Valve
---	Section Line
- - -	Quarter Line
x x x x	Fence Line
—	UG Fiber Optic
—	UG Electric
—	Overhead Elec
---	Existing Pipeline
---	Dirt Road

SUMMARY of MATERIALS		
Mark	Quantity	Description
1	13,616	12.75" OD, .250" WT, X65, FBE, TRL
2	384	12.75" OD, .312" WT, X65, FBE w/ARO, TRL

REVISIONS		
No.	Date	Description



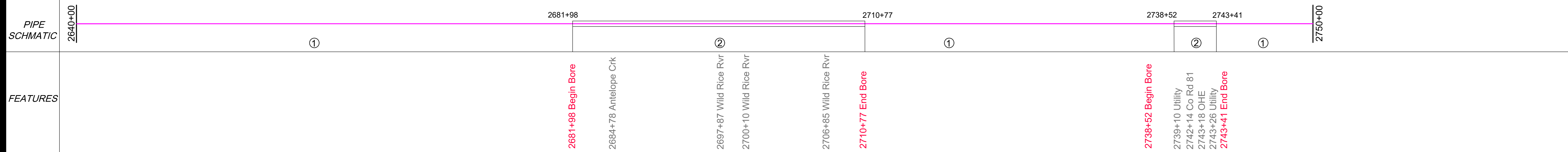
WAHPETON EXPANSION PROJECT
1" = 500' HORIZ.
1" = 200' VERT.

WBI ENERGY TRANSMISSION
An MDU Resources Group company

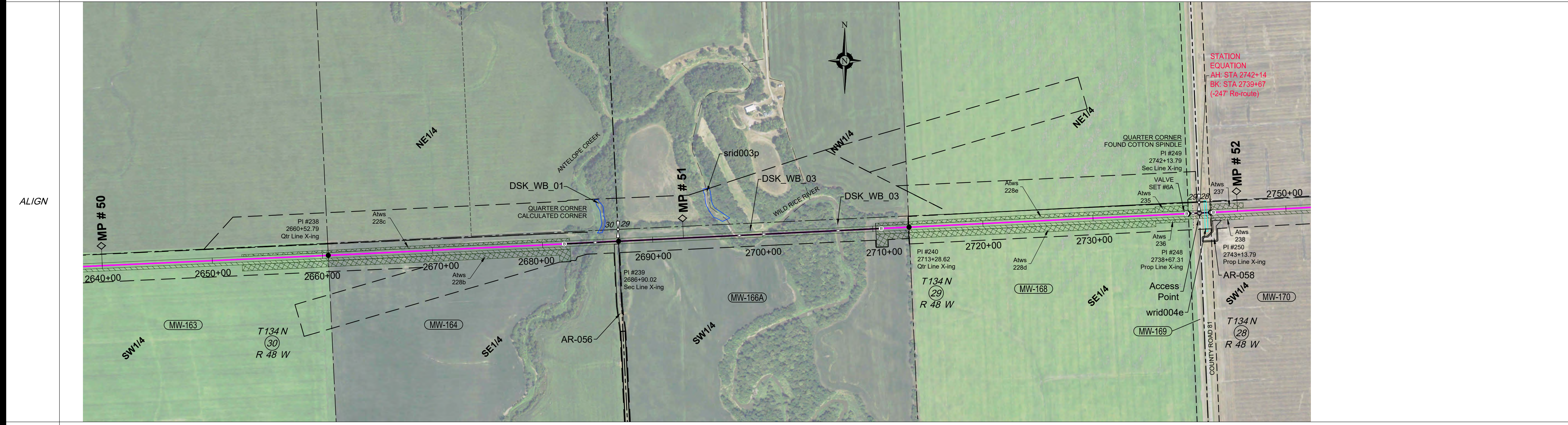
Sec. 23, 25, 26, T134N, R49W,
5th P.M., Richland Co., North Dakota

Sheet 24 R2

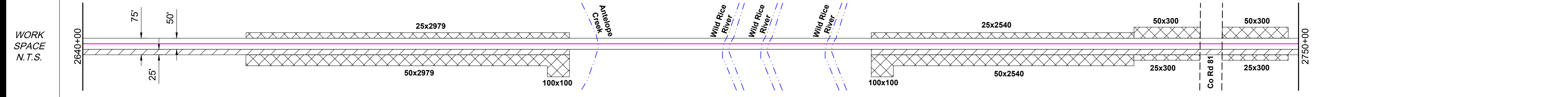
Co, State	SECTIONS 28, 29, 30, T134N, R48W, RICHLAND COUNTY, NORTH DAKOTA											
OWNER	MW-163		MW-164		MW-166A		MW-168		MW-169		MW-170	
RODDAGE	2647.37' / 160.45 Rods		2637.29' / 158.84 Rods		2638.59' / 159.92 Rods		2538.69' / 153.86 Rods		200.01' / 12.12 Rods		1880.01' / 113.94 Rods	



PI TABLE		
PI #	STATION	DEFLECTION
PI #238	2660+52.79	00°00'
PI #239	2686+90.02	00°00'
PI #240	2713+28.62	00°00'
PI #248	2738+67.31	00°00'
PI #249	2742+13.79	00°00'
PI #250	2743+13.79	00°00'



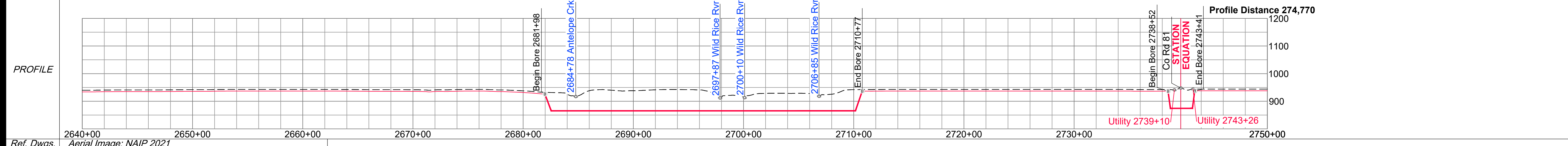
- NOTE:
See Bore Surveys, Typical Bore and Typical Section Crossing sheets for Crossing Details.
- Wetlands
 - Waterbodies
 - Noxious Weeds
 - Saline Soil



- Permanent Easement
- Temporary Workspace
- Additional Temp. Workspace
- Survey Corridor

ENVIRO	Water Crossing	Name	Crossing Method	Crossing				Environmental Feature	Miscellaneous/Comments	HUC-12 Watershed	Seeding Mix
				Bridge	Survey Extent	Feature	Comments				
		DSK WB_01							090201051001	090201050906	
		srid003p							090201050907		
		DSK WB_02	Bore								
		DSK WB_02	Bore						090201050805		
		wrid004e									
		Wetland									
		Approx. 50' ECD									
		Approx. 40' mats									
		090201040401									

ENVIRONMENTAL NOTES:
1. Wetlands depicted on these sheets represent actual field survey data or NWI.
2. Actual wetland or stream width may vary at time of construction.
* Open ("WET") trench if no distinguishable flow at the time of construction, dry crossing method if distinguishable flow at time of construction



Ref. Dwgs. Aerial Image: NAIP 2021

SURVEY DATUM	
North Dakota North (NAD 83)(2011) International Foot	
*Distances are Grid Distances.	
Combined Scale Factor = 0.99989766	
Grid Dist. x 1.00010235 = Ground Dist.	
Drawing Date:	01-19-2022
Drawn By:	D. Smith
Checked by:	J. Harned

LEGEND:	
	Proposed Block Valve
	Proposed Bore
	Alignment PI
	Utility Pole
	Well
	Valve
	Alignment
	Section Line
	Quarter Line
	Fence Line
	UG Fiber Optic
	UG Electric
	Overhead Elec
	Existing Pipeline
	Dirt Road

SUMMARY of MATERIALS		
Mark	Quantity	Description
1	7,632	12.75" OD, .250" WT, X65, FBE, TRL
2	3,368	12.75" OD, .312" WT, X65, FBE w/ARO, TRL

REVISIONS		
No.	Date	Description

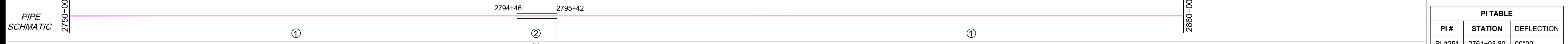
WHAHPETON EXPANSION PROJECT

1" = 500' HORIZ.
1" = 200' VERT.

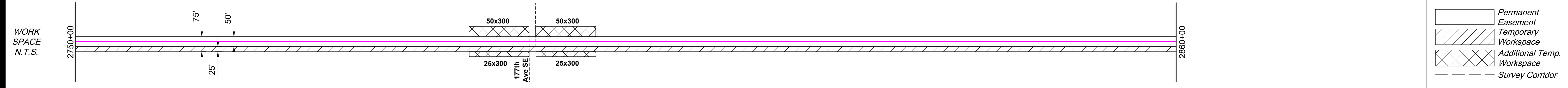
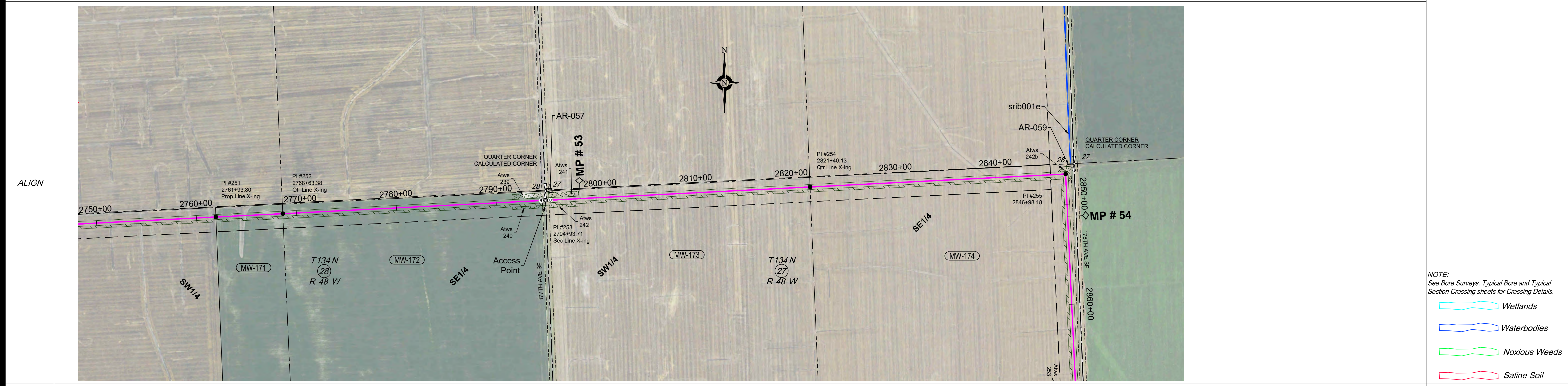
Sec. 28, 29, 30, T134N, R48W,
5th P.M., Richland Co., North Dakota

Sheet 25 R2

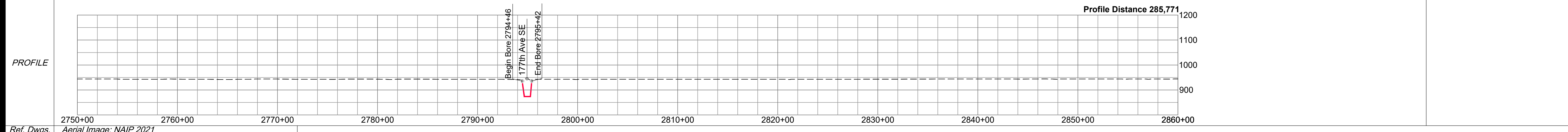
OWNER	MW-171	MW-172	MW-173	MW-174
2761+94	PART OF THE SW1/4 SEC. 28, T134N, R48W 660' Cultivated	2768+63	SE1/4 SEC. 28, T134N, R48W 2607' Cultivated - 33' Uncultivated	2794+94
RODDAGE	660.01' / 40.00 Rods	2639.89' / 159.99 Rods	2646.43' / 160.39 Rods	2821+40



PI #	STATION	DEFLECTION
PI #251	2761+93.80	00°00'
PI #252	2768+63.38	00°00'
PI #253	2794+93.71	00°00'
PI #254	2821+40.13	00°00'
PI #255	2846+98.18	90°00'R



ENVIRO	Water Crossing	Name: srib001e	Bridge Method	
	Wetland Crossing	Name: 3046+23	Survey Extent	Ditch
	Environmental Feature		Miscellaneous/Comments	Approx. 50' ECD
	HUC-12 Watershed	090201040401	Seeding Mix	



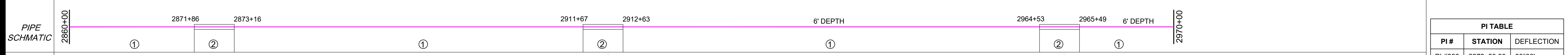
<p>HARNED SURVEYING & ENGINEERING, INC. 11815 ROBINDALE ROAD LOUISVILLE, KY 40243 OFFICE (502) 254-3921 FAX (502) 254-6093</p> <p>HSE Project # 19-21</p>	<p>SURVEY DATUM</p> <p>North Dakota North (NAD 83)(2011) International Foot *Distances are Grid Distances. Combined Scale Factor = 0.99989766 Grid Dist. x 1.00010235 = Ground Dist.</p> <p>Drawing Date: 01-19-2022 Drawn By: D. Smith Checked by: J. Harned</p>	<p>LEGEND:</p> <ul style="list-style-type: none"> Proposed Block Valve Proposed Bore Alignment PI Utility Pole Well Valve Alignment Section Line Quarter Line Fence Line UG Fiber Optic UG Electric Overhead Elec Existing Pipeline Dirt Road 	<p>SUMMARY of MATERIALS</p> <table border="1"> <thead> <tr> <th>Mark</th> <th>Quantity</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>10,904</td> <td>12.75" OD, .250" WT, X65, FBE, TRL</td> </tr> <tr> <td>2</td> <td>96</td> <td>12.75" OD, .312" WT, X65, FBE w/ARO, TRL</td> </tr> </tbody> </table>	Mark	Quantity	Description	1	10,904	12.75" OD, .250" WT, X65, FBE, TRL	2	96	12.75" OD, .312" WT, X65, FBE w/ARO, TRL	<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>No.</th> <th>Date</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	No.	Date	Description				<p>WHA PETON EXPANSION PROJECT</p> <p>1" = 500' HORIZ. 1" = 200' VERT.</p>	<p>WBI ENERGY TRANSMISSION An MDU Resources Group company</p> <p>Sec. 27, 28, T134N, R48W, 5th P.M., Richland Co., North Dakota</p> <p>Sheet 26 R2</p>
	Mark	Quantity	Description																		
1	10,904	12.75" OD, .250" WT, X65, FBE, TRL																			
2	96	12.75" OD, .312" WT, X65, FBE w/ARO, TRL																			
No.	Date	Description																			

NOTE:
See Bore Surveys, Typical Bore and Typical Section Crossing sheets for Crossing Details.

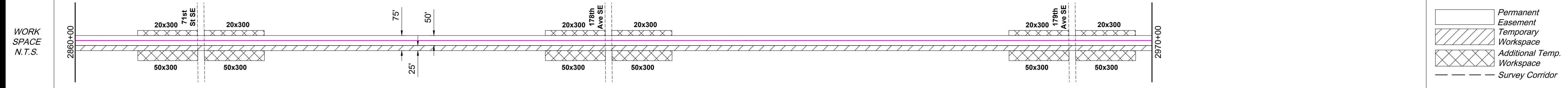
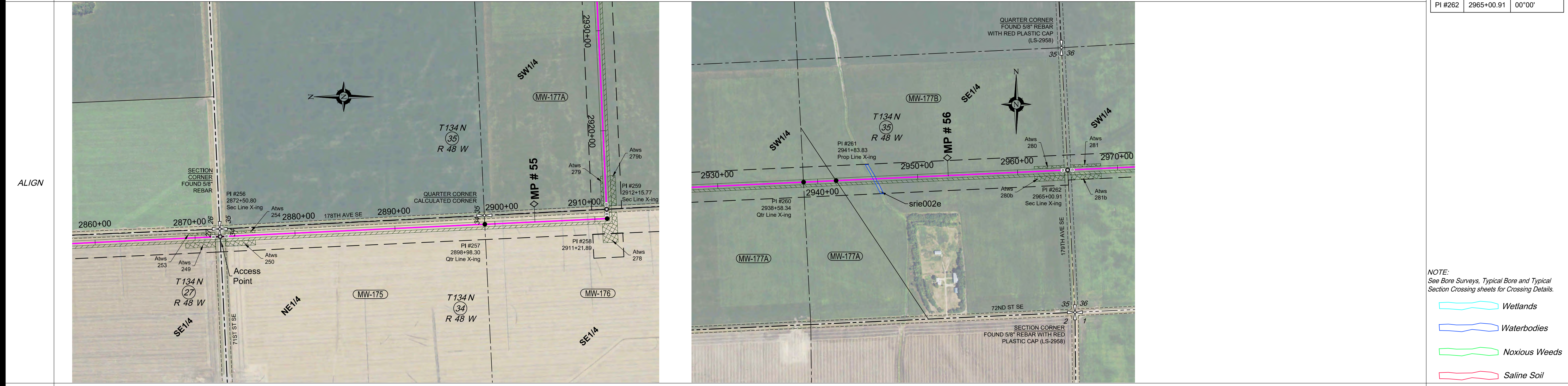
- Wetlands
- Waterbodies
- Noxious Weeds
- Saline Soil

ENVIRONMENTAL NOTES:
1. Wetlands depicted on these sheets represent actual field survey data or NWI.
2. Actual wetland or stream width may vary at time of construction.
* Open ("WET") trench if no distinguishable flow at time of construction, dry crossing method if distinguishable flow at time of construction

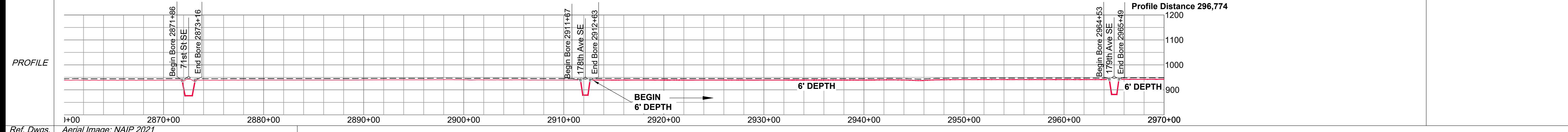
OWNER	MW-175	MW-176	MW-177A	MW-177A	MW-177B
RODDAGE	2647.50' / 160.46 Rods	1317.48' / 79.85 Rods	2642.57' / 160.16 Rods	325.49' / 19.73 Rods	2317.08' / 140.43 Rods



PI #	STATION	DEFLECTION
PI #256	2872+50.80	00°00'
PI #257	2898+98.30	00°00'
PI #258	2911+21.89	90°00'L
PI #259	2912+15.77	00°00'
PI #260	2938+58.34	00°00'
PI #261	2941+83.83	00°00'
PI #262	2965+00.91	00°00'



ENVIRO	Water Crossing	Name: srib006e	Bridge	Bore
	Wetland Crossing	Name: srie002e	Survey Extent	Yes
ENVIRO	Environmental Feature	2925+24	Minor	
	Miscellaneous/Comments	Approx. 100' ECD	Approx. 40' mats	
HUC-12 Watershed		090201040401		
Seeding Mix			090201050805	



<p>HARNED SURVEYING & ENGINEERING, INC. 11815 ROBINDALE ROAD LOUISVILLE, KY 40243 OFFICE (502) 254-3921 FAX (502) 254-6093</p> <p>HSE Project # 19-21</p>	<p>SURVEY DATUM</p> <p>North Dakota North (NAD 83)(2011) International Foot *Distances are Grid Distances. Combined Scale Factor = 0.99989766 Grid Dist. x 1.00010235 = Ground Dist.</p> <p>Drawing Date: 01-19-2022 Drawn By: D. Smith Checked by: J. Harned</p>	<p>LEGEND:</p> <ul style="list-style-type: none"> Proposed Block Valve Proposed Bore Alignment PI Utility Pole Well Valve Alignment Section Line Quarter Line Fence Line UG Fiber Optic UG Electric Overhead Elec Existing Pipeline Dirt Road 	<p>SUMMARY of MATERIALS</p> <table border="1"> <thead> <tr> <th>Mark</th> <th>Quantity</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>10,678</td> <td>12.75" OD, .250" WT, X65, FBE, TRL</td> </tr> <tr> <td>2</td> <td>322</td> <td>12.75" OD, .312" WT, X65, FBE w/ARO, TRL</td> </tr> </tbody> </table>	Mark	Quantity	Description	1	10,678	12.75" OD, .250" WT, X65, FBE, TRL	2	322	12.75" OD, .312" WT, X65, FBE w/ARO, TRL	<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>No.</th> <th>Date</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	No.	Date	Description				<p>WHAHPETON EXPANSION PROJECT</p> <p>1" = 500' HORIZ. 1" = 200' VERT.</p>	<p>WBI ENERGY TRANSMISSION An MDU Resources Group company</p> <p>Sec. 27, 34, 35, T134N, R48W, 5th P.M., Richland Co., North Dakota</p> <p>Sheet 27 R2</p>
	Mark	Quantity	Description																		
1	10,678	12.75" OD, .250" WT, X65, FBE, TRL																			
2	322	12.75" OD, .312" WT, X65, FBE w/ARO, TRL																			
No.	Date	Description																			

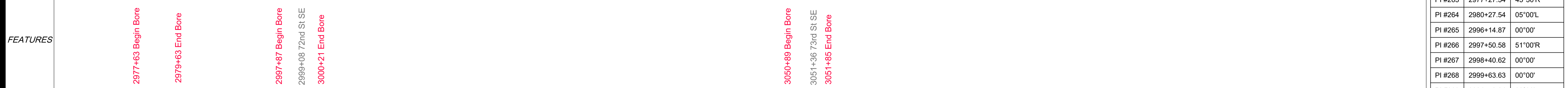
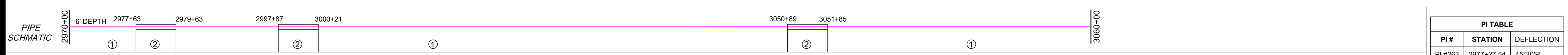
NOTE:
See Bore Surveys, Typical Bore and Typical Section Crossing sheets for Crossing Details.

- Wetlands
- Waterbodies
- Noxious Weeds
- Saline Soil

- Permanent Easement
- Temporary Workspace
- Additional Temp. Workspace
- Survey Corridor

ENVIRONMENTAL NOTES:
1. Wetlands depicted on these sheets represent actual field survey data or NWI.
2. Actual wetland or stream width may vary at time of construction.
* Open ("WET") trench if no distinguishable flow at the time of construction, dry crossing method if distinguishable flow at time of construction

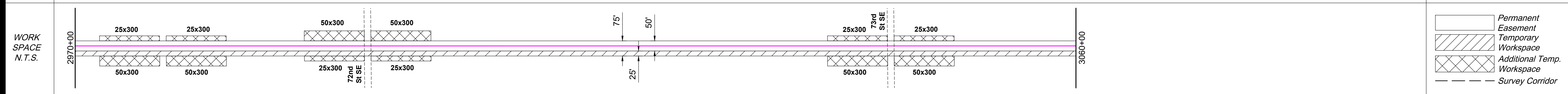
OWNER	MW-177C NW1/4 - SW1/4, GOVT LOTS 1-4 EXCEPT GRAHAM'S CROSSING 3340' Cultivated	MW-177D PART OF GOVT LOTS 1 SEC. 1, T133N, R48W 123' Uncultivated	MW-177E SW1/4 - NE1/4, GOVT LOTS 1-2 WITH EXCEPTIONS SEC. 1, T133N, R48W 2509' Cultivated	MW-177F W1/2-SE1/4 SEC. 1, T133N, R48W 2632' Cultivated - 33' Uncultivated	MW-177G N1/2-NE1/4 SEC. 12, T133N, R48W 1287' Cultivated - 33' Uncultivated
RODDAGE	3339.70' / 202.41 Rods	123.01' / 7.46 Rods	2508.61' / 152.04 Rods	2664.76' / 161.50 Rods	1320.02' / 80.00 Rods



PI TABLE		
PI #	STATION	DEFLECTION
PI #263	2977+27.54	45°30'R
PI #264	2980+27.54	05°00'L
PI #265	2996+14.87	00°00'
PI #266	2997+50.58	51°00'R
PI #267	2998+40.62	00°00'
PI #268	2999+63.63	00°00'
PI #269	3024+72.24	00°00'
PI #270	3051+37.00	00°00'
PI #272	3076+76.11	91°30'L
PI #273	3101+18.95	90°00'R

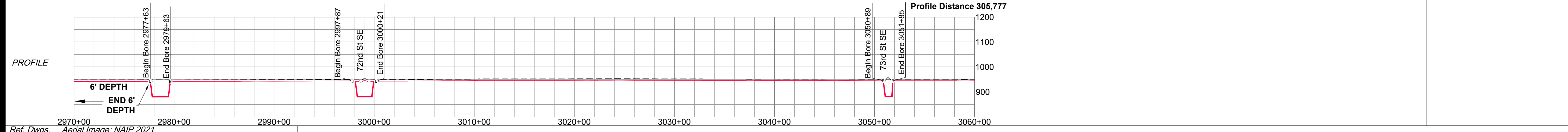
NOTE:
See Bore Surveys, Typical Bore and Typical Section Crossing sheets for Crossing Details.

- Wetlands
- Waterbodies
- Noxious Weeds
- Saline Soil



ENVIRO	Name	
	Crossing Method	
Wetland	Name	
	Crossing Survey Extent	
Environmental Feature		
	Miscellaneous/Comments	
HUC-12 Watershed		090201050805
Seeding Mix		

ENVIRONMENTAL NOTES:
1. Wetlands depicted on these sheets represent actual field survey data or NWI.
2. Actual wetland or stream width may vary at time of construction.
* Open ("WET") trench if no distinguishable flow at the time of construction, dry crossing method if distinguishable flow at time of construction



Ref. Dwgs. Aerial Image: NAIP 2021

SURVEY DATUM	
North Dakota North (NAD 83)(2011) International Foot *Distances are Grid Distances. Combined Scale Factor = 0.99989766 Grid Dist. x 1.00010235 = Ground Dist.	
Drawing Date:	01-19-2022
Drawn By:	D. Smith
Checked by:	J. Harned

LEGEND:	
⊗	Proposed Block Valve
⊕	Proposed Bore
●	Alignment PI
○	Utility Pole
⊙	Well
⊗	Valve
—	Alignment
- - -	Section Line
- · - · -	Quarter Line
- x - x - x -	Fence Line
- - - - -	UG Fiber Optic
- - - - -	UG Electric
- - - - -	Overhead Elec
- · - · -	Existing Pipeline
- - - - -	Dirt Road

SUMMARY of MATERIALS		
Mark	Quantity	Description
1	8470	12.75" OD, .250" WT, X65, FBE
2	530	12.75" OD, .312" WT, X65, FBE w/ARO

REVISIONS		
No.	Date	Description

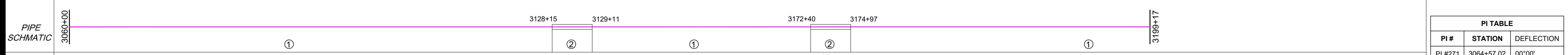
WHAHPETON EXPANSION PROJECT

1" = 500' HORIZ.
1" = 200' VERT.

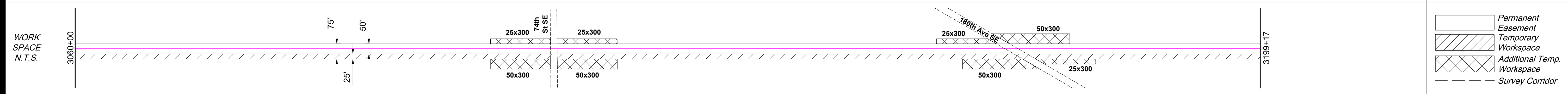
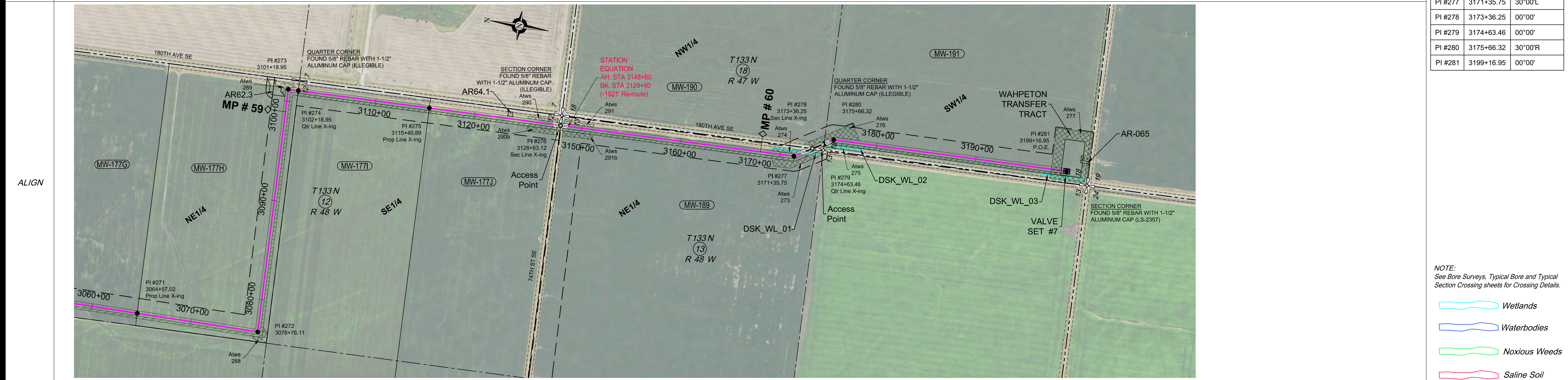
Sec. 36, T134N, R48W,
Sec. 1, 12, T133N, R48W,
5th P.M., Richland Co., North Dakota

Sheet 28 R2

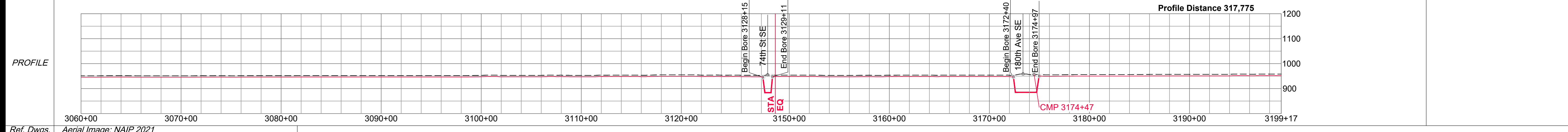
OWNER	MW-177G N1/2-NE1/4 SEC. 12, T133N, R48W 2865' Cultivated - 136' Uncultivated	MW-177H S1/2-NE1/4 SEC. 12, T133N, R48W 3762' Cultivated	MW-177I N1/2-SE1/4 SEC. 12, T133N, R48W 1322' Cultivated	MW-177J S1/2-SE1/4 SEC. 12, T133N, R48W 1254' Cultivated - 68' Uncultivated	MW-189 NE1/4 SEC. 13, T133N, R48W 4993' Cultivated - 33' Uncultivated	MW-190 EXCEPT ABANDONED RAILROAD PLUS ABANDONED RAILROAD SEC. 18, T133N, R47W 127' Uncultivated	MW-191 sw1/4 SEC. 18, T133N, R47W 2553' Cultivated
RODDAGE	2999.07' / 181.76 Rods	3761.93' / 228.00 Rods	1321.94' / 80.12 Rods	1322.23' / 80.14 Rods	2552.19' / 154.68 Rods	127.21' / 7.71 Rods	2553.49' / 154.76 Rods



PI TABLE		
PI #	STATION	DEFLECTION
PI #271	3064+57.02	00°00'
PI #272	3076+76.11	91°30'L
PI #273	3101+18.95	90°00'R
PI #274	3102+18.95	00°00'
PI #275	3115+40.89	00°00'
PI #276	3128+63.12	90°00'R
PI #277	3171+35.75	30°00'L
PI #278	3173+36.25	00°00'
PI #279	3174+63.46	00°00'
PI #280	3175+66.32	30°00'R
PI #281	3199+16.95	00°00'



Water Crossing	Name	Crossing Method	Wetland Name	Crossing Survey Extent	Environmental Feature	Miscellaneous/Comments
DSK WL 01				3168+97	Wetland	Approx. 50' ECD
DSK WL 02				3173+89	Wetland	Approx. 50' ECD
DSK WL 03				3175+10	Wetland	Approx. 50' ECD
				3178+76	Wetland	Approx. 50' ECD
				3196+65	Wetland	Approx. 50' ECD
				3199+17	Wetland	Approx. 50' ECD



HARNED SURVEYING & ENGINEERING, INC.
11815 ROBINDALE ROAD
LOUISVILLE, KY 40243
OFFICE (502) 254-3921
FAX (502) 254-6093

HSE Project # 19-21

SURVEY DATUM
North Dakota North (NAD 83)(2011)
International Foot
*Distances are Grid Distances.
Combined Scale Factor = 0.99989766
Grid Dist. x 1.00010235 = Ground Dist.

Drawing Date: 01-19-2022
Drawn By: D. Smith
Checked by: J. Harned

LEGEND:

- ⊠ Proposed Block Valve
- ⊙ Proposed Bore
- Alignment PI
- Utility Pole
- ⊕ Well
- ⊗ Valve
- Alignment
- - - Section Line
- · - · - Quarter Line
- x - x - x - Fence Line
- - - - - UG Fiber Optic
- - - - - UG Electric
- - - - - Overhead Elec
- · - · - - Existing Pipeline
- - - - - Dirt Road

SUMMARY of MATERIALS

Mark	Quantity	Description
1	11,643	12.75" OD, .250" WT, X65, FBE
2	353	12.75" OD, .312" WT, X65, FBE w/ARO

REVISIONS

No.	Date	Description

WHAHPETON EXPANSION PROJECT

1" = 500' HORIZ.
1" = 200' VERT.

500 0 500 1000
scale 1" = 500' - 22 x 34 feet
1" = 1000' - 11 x 17

WBI ENERGY TRANSMISSION
An MDU Resources Group company

Sec. 13, 14, T133N, R48W,
Sec. 18, T133N, R47W
5th P.M., Richland Co., North Dakota

Sheet 29 R2

NOTE:
See Bore Surveys, Typical Bore and Typical Section Crossing sheets for Crossing Details.

- Wetlands
- Waterbodies
- Noxious Weeds
- Saline Soil

- Permanent Easement
- Temporary Workspace
- Additional Temp. Workspace
- Survey Corridor

ENVIRONMENTAL NOTES:
1. Wetlands depicted on these sheets represent actual field survey data or NWI.
2. Actual wetland or stream width may vary at time of construction.
* Open ("WET") trench if no distinguishable flow at the time of construction, dry crossing method if distinguishable flow at time of construction