1250 West Century Avenue
Mailing Address:
P.O. Box 5601
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July 26, 2022

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E., Room 1A
Washington, D.C. 20426

Re: OEP/DG2E/Gas Branch 4
WBI Energy Transmission, Inc.
Wahpeton Expansion Project
Docket No. CP22-466-000

Dear Ms. Bose:

WBI Energy Transmission, Inc. (WBI Energy), herewith submits responses to the environmental information requests of the Office of Energy Projects of the Federal Energy Regulatory Commission (Commission) received on July 6, 2022 in the above referenced docket.

Pursuant to 18 CFR § 385.2010 of the Commission's regulations, copies of responses are being served to each person whose name appears on the official service list for this proceeding.

Any questions regarding this filing should be addressed to the undersigned at (701) 530-1563.

Sincerely,

/s/ Lori Myerchin

Lori Myerchin
Director, Regulatory Affairs and
Transportation Services

Attachments

cc: via email
David Hanobic, FERC Project Manager
Dawn Ramsey, FERC
Official Service List

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated this 26th day of July 2022.

By /s/ Lori Myerchin
Lori Myerchin
Director, Regulatory Affairs and
Transportation Services
WBI Energy Transmission, Inc.
1250 West Century Avenue
Bismarck, ND 58503
Telephone: (701) 530-1563

STATE OF NORTH DAKOTA)
COUNTY OF BURLEIGH)

I, Lori Myerchin, being first duly sworn, do hereby depose and say that I am the Director, Regulatory Affairs and Transportation Services for WBI Energy Transmission, Inc.; that I have read the foregoing document; that I know the contents thereof; that I am authorized to execute such document; and that all such statements and matters set forth therein are true and correct to the best of my knowledge, information and belief.

Dated this 26th day of July 2022.

By Lori Myerchin
Lori Myerchin
Director, Regulatory Affairs and
Transportation Services

Subscribed and sworn to before me this 26 day of July 2022.

Kathleen Schuster
Kathleen Schuster, Notary Public
Burleigh County, North Dakota
My Commission Expires: 5/31/2026

KATHLEEN SCHUSTER
Notary Public
State of North Dakota
My Commission Expires May 31, 2026

WBI Energy Transmission, Inc.
Wahpeton Expansion Project
Docket No. CP22-466-000

Responses to FERC's July 6, 2022 Environmental Information Request

Resource Report 1 – Request No. 1

Provide an updated schedule for completing field surveys and filing of all remaining survey reports and associated data and information (anticipated month and year). If changes in routing are required by data recovered during field surveys, indicate when all updated tables would be provided to the Federal Energy Regulatory Commission (FERC).

Response:

WBI Energy is currently performing the remaining biological and cultural surveys for the Project. It is anticipated that the remaining biological and cultural surveys, with the exception of deep testing, will be completed in Summer 2022. Survey reports are anticipated to be completed within approximately one month of completion of the field work and are anticipated to be filed with FERC by the end of September 2022. Deep testing locations are being determined based on the results of geomorphological evaluations and are planned to be performed during Fall 2022. The deep testing survey report is expected to be completed within 60 days of completion of deep testing geomorphological survey, at which time it will be filed with FERC.

Resource Report 1 – Request No. 2

As previously requested, provide actual or estimated details for non-jurisdictional facilities such as corridor lengths and widths, pipeline diameters, land requirements, survey status, permitting agencies and status, and maps. If information is not available, provide an estimated schedule for submittal (month and year) or if unknown, a description of when the information related to the non-jurisdictional facilities might be available and the reason the timeframe is unknown.

Response:

WBI Energy provided all information that was known about non-jurisdictional facilities at the time of WBI Energy's May 27, 2022 FERC Application (Application) filing. Since filing the Application, additional information pertaining to non-jurisdictional facilities planned has been identified and is included below. The information in this response represents the extent of information known by WBI Energy related to non-jurisdictional facilities.

Currently, there are no agreements with any customers for farm taps (taps), as such there is no information regarding taps. Moreover, it is possible that no taps will be identified prior to placing the proposed Wahpeton Expansion Project in service.

WBI Energy plans to install non-jurisdictional power and communications facilities at the seven block valve settings and the two delivery stations. Specifically, WBI Energy plans to install 240/120 200 amp service at each facility. Specific details are yet to be determined. Communications will either be fiber optic cable or cellular, or both. The power and communications are anticipated to be installed in September 2024 (following installation of the pipeline and during construction of aboveground facilities).

Montana-Dakota Utilities Company (MDU) plans to construct a new natural gas distribution system from the new MDU-Kindred Border Station to serve natural gas to homes and businesses within the city of Kindred, North Dakota. A preliminary map showing the location of the new distribution system is included as an attachment to this filing (see Resource Report 1 Request No. 2 Attachment Figure 1.2-1). The new Kindred distribution system will include approximately 12,000 feet of 6-inch-diameter high density polyethylene (HDPE) pipeline (shown in green in Figure 1.2-1), 3,500 feet of 4-inch-diameter medium density polyethylene (MDPE) pipeline (shown in purple in Figure 1.2-1), and 17,500 feet of 2-inch-diamter MDPE pipeline (shown in blue in Figure 1.2-1). MDU has obtained a franchise with the city of Kindred and has received a Certificate of Public Convenience and Necessity for this area from the North Dakota Public Service Commission. MDU expects approximately 4,000 feet of the 6-inch-diameter HDPE pipeline will be installed in a private easement and the remainder of the 6-inch, 4-inch, and 2-inch-diameter pipeline will be installed in road rights of way.

MDU plans to construct approximately 1.5 miles of new 10-inch-diameter natural gas distribution pipeline from the new MDU-Wahpeton Border Station to a tie-in with MDU's existing Wahpeton distribution system. A preliminary map showing the location of MDU's new distribution system is included as an attachment to this filing (see Resource Report 1 Request No. 2 Attachment Figure 1.2-2). As shown on Figure 1.2-2, MDU is currently planning to install the new 10-inch-diameter steel pipeline within road rights of way. The project will require a railroad crossing permit.

Attachment

Resource Report 1 Request No. 2 Attachment – Non-jurisdictional Facilities Figures

Resource Report 1 – Request No. 3

Clarify whether railroad companies would require continuous boring without interruption until completion at railroad crossings.

Response:

WBI Energy understands that the railroad companies will not require continuous boring without interruption until each railroad crossing is complete.

Resource Report 1 – Request No. 4

Confirm if all facilities associated with cathodic protection systems would be contained within the permanent right-of-way or aboveground facilities.

Response:

Yes, as currently planned, all cathodic protection systems will be contained within the permanent pipeline right-of-way or aboveground facility sites.

Resource Report 1 – Request No. 5

As previously requested, provide a site-specific assessment of risk and feasibility based on desktop resources, a plan and profile drawing, bore depths, setbacks (on both sides) from sensitive resources, and drilling fluid safety data sheets, for each proposed bore in appendix 6C. Appendix 1F-2 indicates that this information will be provided prior to construction. This information is needed for the National Environmental Policy Act (NEPA) analysis.

Response:

FERC requested additional information regarding directional boring in its April 4, 2022 comments on WBI Energy's Draft Resource Reports 1 through 8 and 10. Specifically, FERC requested a table listing bore lengths, depths, setbacks (on both sides) from sensitive resources (e.g., wetlands, waterbodies), and estimated duration of boring operations; and asked that WBI Energy provide for each bore crossing of perennial waterbodies or wetlands, subsurface geology and soils data and site-specific risk and feasibility assessments based on desktop resources.

WBI Energy addressed FERC's comments on the draft resource reports in its May 27, 2022 Application. Appendix 6C of the Application includes a table listing the location and feature crossing associated with each bore, as well as the length of each bore, setbacks of bore workspace from wetlands and waterbodies, duration of drilling each day and the total estimated days to complete each bore crossing. WBI Energy also provided in the Application a desktop analysis of the underlying geologic formation, deposit type, and map unit.

As part of this response, WBI Energy has included an updated copy the previously submitted Appendix 6C table that includes the estimated depth of each bore and the estimated gallons of drilling fluid required to complete each bore (see Resource Report 1 Request No. 5 Attachment – Revised Appendix 6C). Plan and profile drawings for all perennial waterbody bores and the two interstate highway crossings are also included with this filing.

As described in the Application, the primary components of drilling fluid are water and bentonite clay. The specific bentonite product is not known at this time and will not be known until a drilling contractor is selected; however, the bentonite utilized will be American National Standards Institute (ANSI)-National Sanitation Foundation (NSF) International Standard 60 certified. The primary hazard of bentonite clay pertains to inhalation of material when in a dry form. As WBI Energy has not yet hired a construction contractor, it is unknown what other additives may be used in the make-up of the drilling fluid. However, any such additives would be used in accordance with manufacturer's health and safety specifications to protect the health and safety or workers, the public, and environmental resources. Safety data sheets can be provided after a drilling contractor is selected and prior to construction.

As shown in the Revised Appendix 6C, WBI Energy has identified 73 guided bore crossings. The vast majority (59 of the 73) of these are short bores expected to take no more than one to three days. Sixty-two of the 73 proposed bores are road, railroad, or private driveway crossings. Of these 62 bores, 43 bores are 200 feet in length or less, 10 bores are between 200 and 300 feet in length, 8 bores are between 300 and 500 feet in length, and only 1 bore (the bore of Interstate 94) exceeds 500 feet in length. Only 10 of these road/railroad/driveway bores also cross wetlands or waterbodies, and of these 10 bores, all but three (at MPs 4.90, 33.43, and 36.14) cross narrow wetlands or waterbodies associated with roadside or railroad side ditches. As described in table 1.3-1 of Resource Report 1, the wetlands at MPs 4.90, 33.43 and 36.14 consist of fast growing species such as narrowleaf cattail, reed canary grass and swamp smartweed, which

will quickly recolonize any disturbed areas that may be affected by boring or access activities. WBI Energy's proposal to employ the guided bore crossing method versus an open cut method will reduce impacts on wetlands or waterbodies by eliminating the need to trench through these resources.

As described in Resource Report 6, the proposed Project is located within the Red River basin of eastern North Dakota. The Red River basin reflects the prehistoric bounds of glacial Lake Agassiz, which extended from the Hudson Bay to the eastern portion of North Dakota and formed during the end of the Pleistocene epoch about 11,700 years ago. Around 9,000 years ago, Lake Agassiz drained and retreated from North Dakota, leaving behind thick deposited layers of fine silt and clay (Bluemle, 2021).

WBI Energy conducted a desktop assessment of the surficial geologic deposits underlying the Project based on Clayton et al., 1980, and determined the guided bores beneath the Maple River, Sheyenne River, Pitcairn Creek, Antelope River, and all crossings of the Wild Rice River are anticipated to cross river sediments of the Holocene-age Oahe Formation. The fluvial (i.e., river-deposited) overbank sediments consist of poorly sorted clay and silt, with thin interbedded layers of sand, while the underlying channel sediments typically consist of cross-bedded sand or plane-bedded gravel in alluvial fans. The channel and overbank river sediments may reach thicknesses of up to 10 meters (approximately 30 feet) and overlie glacial lake sediments of the Pleistocene-age Coleharbor Group (Clayton et al., 1980).

Based on the summary of surficial geologic sediments that may be encountered during the proposed guided bores for WBI Energy's Project, it is not anticipated that hard, consolidated bedrock or large cobbles or boulders would prevent successful completion of the guided bores. If such an obstacle were encountered during construction of the Project, WBI Energy would implement procedures described in the Guided Bore Drilling Fluid Monitoring and Operations Plan (Appendix 1F-2 of Resource Report 1) as needed, to successfully complete the guided bore.

In summary, the underlying surficial geology consists primarily of fine-grained lakebed and glacial sediments exhibiting a high continuity and consistency of the subsoil. Given this, the shallow depth of the bores (generally 6 to 12 feet below the crossing feature and no more than 31 feet below the larger waterbodies), and WBI Energy's past experience regarding the suitability of the underlying sediments for boring as described here and in sections 6.1 and 6.7 of Resource Report 6 to the Application, WBI Energy's engineers and construction managers are confident the proposed bores are feasible and will be successfully completed with minimal environmental impact.

Attachment

Resource Report 1 Request No. 5 Attachment – Revised Appendix 6C, Summary of Guided Bore Locations and Plan and Profile Drawings for Perennial Waterbody and Interstate Crossings.

References

Clayton, L., Moran, S.R., and Bluemle, J.P. 1980. Explanatory Text to Accompany the Geologic Map of North Dakota. North Dakota Geological Survey Report of Investigation No. 69. Available online at: https://www.dmr.nd.gov/ndgs/documents/Publication_List/pdf/RISeries/RI-69.pdf. Accessed July 2022.

North Dakota Geological Survey. 2022. Surface Geology. Available online at https://gishubdata-ndgov.hub.arcgis.com/datasets/NDGOV::ndgishub-surface-geology/about. Accessed July 2022.

Resource Report 1 – Request No. 6

Clarify for table 1.1-3 if the New Land Area Affected During Operation should be zero (instead of <0.1 acre) for Valve Site Nos. 4 and 6 as section 1.1.3.5 indicates that these facilities would be located within the permanent right-of-way. Reconcile with section 8.2.3, which indicates that Valve Sites 4 and 6 (along with Sites 2 and 5) would extend "beyond the permanent right-of-way."

Response:

The dimensions and acreages listed in table 1.1-3 and in section 1.1.3.5 for the valve sites, including Valve Site Nos. 4 and 6, are correct. The operational (graveled and fenced) footprint of Valve Sites Nos. 4 and 6 will be 45 feet wide and 55 feet long and thus will be narrower than the 50-foot-wide permanent right-of-way for the pipeline. The operational footprint of Valve Sites Nos. 2 and 5, which will also include a pig launcher/receiver, will be approximately 60 feet wide by 80 feet long (about 0.1 acre) and, therefore, will extend 5 feet beyond either side of the permanent right-of-way for the pipeline. The operational footprints of the valves are listed on the table because they will change the existing land use at each site. To avoid double counting, this acreage was not counted as part of the permanent right-of-way for the pipeline.

Resource Report 1 – Request No. 7

Provide the minimum depth of cover over the pipeline for roadside ditches that would not be crossed via the guided bore method (section 1.3.2.1). As found in the same section, define stream width or provide other parameters to classify "small flowing waterbodies" and "large flowing waterbodies."

Response:

As indicated in the table in appendix 8D of the Application, WBI Energy proposes to bore all but six roads and railroads crossed by the Project. Three of these six crossings (at MPs 53.2, 55.3, and 58.9) are associated with an historic railroad, which is no longer in use. The current land use at these three crossings is agricultural cropland. The anticipated depth of cover at these three locations will be similar to other active agricultural lands (i.e., a minimum depth of cover of 4 feet over the pipeline). The three other open cut crossings are roads. These include two local neighborhood roads at MPs 32.6 and 36.2 (a two-track road and a dirt covered road) and a dirt road at 61st Street SE at MP 34.5. The minimum depth of cover at these three roads and associated road ditches will be 4 feet. WBI Energy reported in table 2.2-2 of Resource Report 2 of the Application that it plans to bore all of the waterbodies crossed by the pipeline except two ephemeral streams at MPs 19.7 and 47.4. After additional review, WBI Energy has determined that the waterbody at MP 19.7 will also be bored and that the waterbody at MP 47.4, while in the proposed workspace, will not be crossed by the pipeline centerline. Large flowing waterbodies consist of rivers (Maple, Sheyenne, and Wild Rice River crossings) and all other waterbodies are considered small flowing waterbodies.

Resource Report 1 – Request No. 8

Indicate whether WBI Energy would obtain landowner permission to mix drilling fluid into subsoil, describe measures to keep drilling fluid and drilling fluid mixed with soil out of adjacent waterbodies and wetlands, and describe how this process would meet proper waste disposal requirements per the FERC Upland Erosion Control, Revegetation, and Maintenance Plan (Plan) at section III.E.

Response:

Drilling fluid (consisting of water mixed with bentonite) contained in the bore pits after the bore is completed will either be mixed in with subsoil material and incorporated into the soil on the right-of-way and additional temporary workspaces or hauled away for disposal at a landfill. If drilling fluid and cuttings are mixed with the subsoil on an affected landowner's property, WBI Energy will obtain that landowner's permission to do so. As stated in section 1.3 of Resource Report 1, WBI Energy proposes to conduct Project activities in accordance with the 2013 versions of the FERC Plan and FERC Procedures, with the exception of the proposed modifications to section VI.B.1 of the FERC Procedures in table 1.3-1 of Resource Report 1. Any such disposal would be in accordance with section III.E of FERC's Plan in compliance with applicable survey, landowner or land management agency approval, and permit requirements. Any wetlands and waterbodies in the vicinity where drilling fluid and cuttings are mixed into the existing soil will be protected by erosion controls (e.g., waterbars/slopebreakers, silt fence and/or strawbales as well as other sediment barriers), as needed.

Resource Report 1 – Request No. 9

Clarify section 1.5 to indicate whether herbicides could be used for normal vegetation maintenance during operations.

Response:

WBI Energy typically controls vegetation on its permanent rights-of-way by mowing; however, selective use of herbicides may occur during operations to control weeds on the right-of-way or maintain vegetation at aboveground facility sites. Any application of herbicides would be applied by a properly licensed individual according to county, state, and landowner requirements, label instructions, and manufacturer's recommendations.

Resource Report 1 – Request No. 10

Regarding table 1.3-1:

a. the title of table 1.3-1 indicates modifications to the FERC Plan and FERC Wetland and Waterbody Construction and Mitigation Procedures (Procedures), however, the table appears to only provide modifications to the FERC Procedures. Confirm WBI Energy would adopt the FERC Plan with no modifications;

b. indicate if access road 013 could be shifted to the northwest to avoid wetland wcaa007e;

c. confirm the wetland identifier (ID) provided in table 1.3-1 should be wcab003e as depicted on the alignment sheet;

d. indicate if access road 034 could be shifted to avoid wetland wria003e;

e. indicate if the configuration of access road 049 could be modified to fit between wetlands wrid001e and wrid001e; and

f. indicate if access road 051 could be moved to the north to avoid wetland wrid003e.

If modifications are made as detailed above, update all associated tables throughout the applicable resource reports.

Response:

a. As indicated in section 1.3 of Resource Report 1, WBI Energy will construct the Project in accordance with the 2013 version of the FERC Plan and WBI Energy is not requesting any modifications to the FERC's Plan at this time.

b. Based on a review of aerial photography, this wetland and the linear depression in which it is located appears to extend to the northwest. As described in table 1.3-1, wetland wcaa007e needs to be crossed by access road 013 for equipment to access the workspace associated with the bore of wetland wcaa006e. Wetland wcaa007e is dominated almost entirely by reed canary grass (95 percent cover). Given the vegetation, small size and temporary nature of the impact (0.02 acre), and the speed at which it is expected to revegetate, WBI Energy does not propose to relocate the road.

c. The description of this wetland in table 1.3-1 is accurate but the wetland identifier was mislabeled. The correct wetland identifier in the table should be wcab003e, not wacb003e. The alignment sheet is correct.

d. Based on a review of aerial photography, this road ditch wetland appears to extend to the east and west of the proposed crossing location area. As described in table 1.3-1, WBI Energy needs to cross the wetland to access Valve Site No. 4 site during construction and for later operation of the valve. Given the vegetation (see table 1.3-1), small size and temporary nature of the impact (less than 0.01 acre), and the speed at which it is expected to revegetate, WBI Energy does not propose to relocate the road.

e. Based on a review of aerial photography, this road ditch wetland appears to extend to the north and south of the proposed crossing location area. This wetland consists mostly of fast-growing species (broadleaf cattail), and any areas of the wetland that are disturbed will be quickly recolonized with similar vegetation. Given the vegetation (see table 1.3-1), small size and temporary nature of the impact

(less than 0.01 acre), and the speed at which it is expected to revegetate, WBI Energy does not propose to relocate the road.

f. Based on a review of the field delineations and aerial photography, this road ditch wetland appears to extend to the north of the proposed crossing location area. This wetland consists mostly of fast-growing species (narrowleaf cattail and reed canarygrass), and any areas of the wetland that are disturbed will be quickly recolonized with similar vegetation. Given the vegetation (see table 1.3-1), small size and temporary nature of the impact (less than 0.01 acre), and the speed at which it is expected to revegetate, WBI Energy does not propose to relocate the road.

Resource Report 1 – Request No. 11

Section 1.3.2.2 states "if the waterbody being bored is used as a source of hydrostatic test water, some additional trimming and limited clearing of trees and other vegetation may occur between the bore entry and exit holes to enable equipment (e.g., a UTV or standard wheeled backhoe) to haul pumps and hoses to the water's edge." Clarify if the "trimming and limited clearing" would be similar to the guide wire clearing also discussed in this section (i.e., selective cutting of small woody vegetation consisting of shrubs and potentially small trees likely less than 1 to 2 inches in diameter at breast height) or alternately describe the scope in detail (corridor width, tree diameter, etc.) of more extensive clearing if applicable. Clarify whether the same corridor could be used for bore guide wires and pathways to obtain water for the bore process and hydrostatic test water. Indicate if these impacts (waterbody access) have been included in all tables.

Response:

The trimming and limited clearing required to obtain water from a perennial waterbody will be similar to that described for guide wires in section 1.3.2.2 of Resource Report 1 and will consist of selective cutting of small woody vegetation (e.g., shrubs and small diameter trees) within the approved right-of-way. However, given the size of the construction and hydrostatic test equipment, the width of the area potentially impacted for access to waterbodies may be wider than the 2 to 3 feet of clearing required for the guide wires.

Of the ten perennial waterbody crossings, the crossings at MP 41.0 and Pitcairn Creek have negligible riparian vegetation, and what exists consists of narrow strips of upland emergent vegetation. There are varying degrees of upland riparian vegetation at the other eight perennial waterbody crossings. At the Maple River, there are strips of shrubby upland riparian vegetation about 40 feet wide west of the river and 60 feet wide east of the river. At the Sheyenne River, there are strips of forested land about 155 feet wide north of the crossing and 65 feet wide south of the crossing. At Antelope Creek, there are strips of forested land about 100 feet wide west of the creek and 140 feet wide east of the creek. At the Wild Rice River and between MPs 51.1 and 51.3, there are bands of forested land approximately 165 feet wide west of the river, 645 feet wide between the bends in the river and 220 feet wide east of the river. The Wild Rice River crossing at MP 57.0 includes a 125-foot-wide strip of upland riparian forested land north of the crossing and about a 240-foot-wide strip of upland riparian forested land south of the crossing. The Wild Rice River crossing at MP 57.6 includes an 80-foot-wide strip of upland riparian forested land west of the crossing and about a 140-foot-wide strip of upland riparian forested land east of the crossing. All of these riparian areas are between the guided bore entry and exit locations.

WBI Energy will attempt to minimize the vegetation impacts between the bore entry and exit locations at these waterbodies but included all of the workspace shown on the alignment sheets between the bore entry and exit locations in the acreage impacts listed in Resource Reports 1, 3 and 8. However, WBI Energy has determined this acreage was not reported in table 2.3-1 or appendix 2E of Resource Report 2. A discussion of potential wetland impacts associated with access to and from waterbodies and wetlands and updates to table 2.3-1 and appendix 2E are provided associated with response to Resource Report 2 – Request No 7.

Resource Report 1 – Request No. 12

File periodic updates to table 1.8-1 as permits are filed or received.

Response:

WBI Energy will periodically file updates to table 1.8-1 and identify new applications that are filed and permits that are received. An updated table 1.8-1 is included as an attachment to this filing.

Attachment

Resource Report 1 Request No. 12 Attachment – Updated Table 1.8-1 Environmental Permits, Approvals, and Consultations

Resource Report 1 – Request No. 13

Regarding Appendix 1B-1:

a. revise to provide additional temporary workspace identification numbers as provided in Appendix 8A;

b. as previously requested, update all alignment sheets to ensure that all wetland and waterbody numbers match between the text and alignment sheets, for example table 2.2-2 lists a roadside ditch at milepost (MP) 47.4 as ID sird001e and the alignment sheet lists the roadside ditch as srid001e;

c. sheet 18: The "Align" portion of the map lists 168th Ave SE while the "Workspace N.T.S" portion lists 68th Ave SE;

d. the temporary workspace and additional temporary workspace configurations in the "Align" portion of the map do not match the "Workspace N.T.S" portion of the map. For example, temporary workspace on either side of the Interstate 94 crossing extends beyond the additional temporary workspace in the "Align" portion but do not extend beyond the additional temporary workspace in the "Workspace N.T.S." portion of the map. Resolve all apparent discrepancies;

e. depict the survey corridor on the alignment sheets; and

f. depict the location of Valve Site No. 1, which does not appear to be located in the alignment sheets, and Valve Site No. 7, which does not appear to be located in the alignment sheets or in the CEII plot plans.

Response:

a. The alignment sheets in Appendix 1B have been revised to include additional temporary workspace identification numbers and are included as an attachment to this filing (see Resource Report 1 Request No. 13 Attachment – Updated Appendix 1B)

b. The alignment sheet correctly lists the waterbody in question as srid001e. The listing of this waterbody on table 2.2-2 should also be srid001e.

c. The Align portion of the alignment sheet is correct and the Workspace N.T.S. portion has been updated to also list the road in question as 168th Ave SE. See the Updated Appendix 1B for this area.

d. The discrepancies in workspace between the Align and Workspace N.T.S. portions of the sheets have been corrected on the revised alignment sheets in the Updated Appendix 1B.

e. The survey corridor is shown in the Updated Appendix 1B.

f. Valve Site Nos. 1 and 7 have been included on the Updated Appendix 1B. Valve Site No. 7 was labeled "WBI Pig Launcher" on Page 4 of Appendix 1E of Resource Report 1 (filed under separate cover in Volume III to the Application and marked as "CUI//CEII – DO NOT RELEASE")..

Attachment

Resource Report 1 Request No. 13 Attachment – Updated Appendix 1B.

Resource Report 2 – Request No. 1

As previously requested, indicate whether there are suitable alternative locations outside the floodplain for the Montana Dakota Utilities (MDU)-Kindred Border Station and Valve Site No. 2.

Response:

Two alternative sites were reviewed for the MDU-Kindred Border Station; however, the current location was determined to have less adverse environmental impacts. The alternative sites were also located within the 100-year floodplain and would impact a greater amount of prime farmland with one sites having additional wetland impacts. There is also a significant amount of floodplain mapped within the vicinity of the MDU-Kindred Border Station, so it would be challenging to find a site that is outside the floodplain.

Valve Site No. 2 is located along a portion of the pipeline that runs parallel, and in close proximity, to the Sheyenne River Tributary. The majority of the pipeline from approximately MP 11 to MP 25 is within the 100-year floodplain and it would not be practical to find an alternative site for Valve Site No. 2 that is outside the 100-year floodplain.

Resource Report 2 – Request No. 2

Section 2.1.4 states the Project would pass within 500 feet of 14 residences. WBI Energy does not anticipate that construction would affect active septic systems, however, "WBI Energy will coordinate with the landowners in those nine locations to determine the exact location of the septic systems." Rectify this apparent discrepancy.

Response:

The reference to nine locations was in error. The pipeline will pass within 500 feet of 14 residences, and WBI Energy will coordinate with the landowners in the 14 locations to determine the exact location of the septic systems.

Resource Report 2 – Request No. 3

Section 2.2.7 states "use of the flume or dam and pump methods are not currently proposed but could be used if chosen by the construction contractor." Clarify if WBI Energy would seek authorization from the Commission and appropriate agencies in order to change the proposed waterbody crossing method.

Response:

WBI Energy will seek authorization from applicable agencies if the proposed crossing method of any streams differs from what was presented in Resource Report 2.

Resource Report 2 – Request No. 4

Section 2.2.8 states "WBI Energy will periodically inspect the integrity of the streambanks along the pipeline route and will perform streambank maintenance as necessary if significant scouring becomes apparent." Clarify the frequency of the periodic inspections.

Response:

After construction, WBI Energy will evaluate all stream crossings on an annual basis. Inspectors will report and address any scouring resulting in pipe exposure.

Resource Report 2 – Request No. 5

As previously requested, regarding hydrostatic testing:

a. provide specific surface waters (waterbody identification code and name) and locations and/or specific municipal water sources, along with volumes for each source, that would be used (or anticipated for use) for hydrostatic test water (including bore pre-tests). Provide a discussion of how WBI Energy would maintain adequate downstream flows;

b. identify whether any surface waters that would be used as hydrostatic test water sources contain invasive aquatic or invasive plant species. For any such withdrawal where invasive species are present, identify locations where test water would not be cascaded into the next section of the pipeline as prohibited by the *Aquatic Nuisance Species Prevention Plan*;

c. provide the source and volume of water for drilling fluid; and

d. indicate the anticipated discharge location and volume for each hydrostatic test water discharge.

Response:

a. A construction contractor has not been selected and specific information is unknown at this time. Generally, the resource reports explain that WBI Energy commits to obtaining water for hydrostatic testing from perennial surface waters (with required permits) crossed by the Project or municipal sources. Volumes and sources are subject to change based on seasonal water levels of potential surface water sources at the time of hydrostatic testing. WBI Energy will meet North Dakota state requirements for maintaining stream flows during water withdrawal from surface waters. The maximum amount of water that may be used for hydrostatic testing is 2,175,000 gallons if hydrostatic testing is completed in one section for the entire pipeline route. The volume of water needed for hydrostatic testing will be less if hydrostatic testing is completed in multiple sections, particularly if water can be cascaded from section to section within the parameters of the *Aquatic Nuisance Species Prevention Plan*. An estimated hydrostatic test water volume needed for each guided bore crossing is included in appendix 6C which has been updated and provided in response to Environmental Information Request Resource Report 1 Request No. 5.

   If hydrostatic testing is completed at the border station locations, the estimated volumes are 1,160 gallons for the Wahpeton Border Station and 68 gallons for the MDU-Kindred Border Station. As with the pipeline, the source may be from a nearby surface water or a municipal source.

b. Section 2.2.4 of Resource Report 2 states "Potential surface water sources for hydrostatic test water include: the Maple River, Sheyenne River, Wild Rice River, Antelope Creek, Pitcarn Creek, and an unnamed tributary to the Wild Rice River. All surface waters that may be sourced for hydrostatic testing may contain aquatic nuisance species and, therefore, any water sourced from an infested waterbody will be either returned to the same waterbody or discharged to an upland area within the same HUC-12 as it was withdrawn from." The *Aquatic Nuisance Species Prevention Plan* does not prohibit cascading water from one segment of pipe to another and only requires that water sourced from an aquatic nuisance species (ANS) infested waterbody be returned to the same waterbody or upland area within the same HUC-12. In addition, if WBI Energy sources water from one of the surface water sources

identified, WBI Energy will need to acquire an ANS transport permit prior to construction to ensure compliance under North Dakota state law.

c. The source of water for bore drilling fluid is not currently known but would be sourced from either municipal water or obtained from one of the identified surface water bodies for hydrostatic test water. The anticipated volume of water required for drilling fluid is approximately 1,279,109 gallons. An estimate of the volume of water needed for drilling fluid at each guided bore location is included in a revised Appendix 6C Bore Summary Table (see Resource Report 1 Request No. 5 Attachment – Revised Appendix 6C).

d. The specific discharge locations for hydrostatic test water will be dependent on the water source that is ultimately used, how the pipeline is tested (i.e., all at once or in segments), and landowner approval. Hydrostatic test water will either be returned to the designated surface waterbody or discharged at an approved location in accordance with FERC Procedures and applicable North Dakota Department of Environmental Quality (ND DEQ) discharge permit requirements.

   Hydrostatic testing will be performed at bore locations for bore string testing prior to installation, for the final hydrotest, and potentially at block valve settings and border stations. For bore string burst testing, discharges may occur at either end of each bore path. For final hydrostatic testing, exact discharge locations are unknown and dependent on if the final hydrotest is completed in one or multiple sections; however, potential discharge locations would include either end of the pipeline and/or at block valve setting locations. Specific discharge locations will be determined during construction. Total volume of water to complete hydrostatic testing activities is 2,175,000 gallons, representing the maximum amount of water that may be discharged. All discharges will take place in accordance with ND DEQ discharge permit requirements.

Resource Report 2 – Request No. 6

As previously requested, provide the source and volume of water that is anticipated to be used for dust suppression and compaction and decompaction at the border stations. If unknown based on weather conditions, provide an estimate based on dry conditions. In addition, provide the source and volume of water that is anticipated to be used for and steam cleaning of equipment as discussed in the *Aquatic Nuisance Species Prevention Plan*, and for any other use.

Response:

As indicated in section 2.2.4 of Resource Report 2, the source and exact volume of water needed for dust control is not known at this time. Water for dust suppression may be sourced from municipal or perennial surface waters, with applicable permits obtained. Hydrostatic test water may also be used for dust control. The volume and source of water required will ultimately be dependent on weather conditions at the time of construction, the amount of bare soil, and the seasonal availability of surface water versus municipal water. WBI Energy will obtain permits from the North Dakota Department of Water Resources for any surface water withdrawals used for hydrostatic testing, dust control, and compaction/decompaction activities prior to construction. Section 2.2.4 of Resource Report 2 also provides the application rate of 0.5 gallons of water per square yard of bare ground when conditions require dust suppression.

Based on dry conditions, it is estimated that the volume of water that will be required for dust suppression and compaction at the MDU-Kindred and Wahpeton Border Stations will be approximately 240,000 gallons at each location.

As stated in the *Aquatic Nuisance Species Prevention Plan (ANSP Plan)*, no in-water equipment crossings are anticipated in waterbodies containing invasive plant or animal species. WBI Energy does not anticipate working within contaminated waterbodies, and therefore, does not plan to steam clean equipment during construction. The ANSP Plan requires equipment to be cleaned, drained, and dried prior to entering the Project area.

Resource Report 2 – Request No. 7

WBI Energy's response to environmental information request (EIR) No. 13 states "all the riparian areas will be avoided by the use of guided bore." However, section 2.2.7.1 states temporary equipment bridges would likely be needed for each of the ten perennial waterbody guided bore crossings. Footnote 6 in section 1.3.2.2 states that "a 50-foot-wide area would be cleared between the bore entry and exit holes, but actual clearing will likely be less." Clarify if riparian areas would be impacted by temporary bridges and associated travel lanes at the guided bore waterbody crossings and specify a proposed width for clearing between the entry and exit points for each bore. As previously requested, indicate why the bridges and travel lane are needed, describe impacts on the waterbody and riparian area, and evaluate alternatives to clearing between bore entry and exit points (i.e., avoiding the installation of equipment bridges especially in areas that contain forested riparian vegetation or cross perennial waterbodies). Indicate if all disturbed areas for temporary equipment bridges have been included in the provided tables or provide updated tables as necessary.

Response:

The pipeline crosses 20 waterbodies with 18 crossed using the guided bore method. Of those 18, 8 are ephemeral and primarily roadside ditches and the remaining 10 waterbodies are perennial waterbodies. For the 8 ephemeral waterbodies and 2 of the perennial waterbodies (an unnamed tributary to the Wild Rice River crossed at MP 41.0, and Pitcairn Creek crossed at MP 45.0), WBI Energy may use temporary travel lanes and temporary equipment bridges between the bore entry and exit locations. While some temporary vegetation removal may be required to accommodate the proposed travel lanes and equipment bridges, the amount of vegetation removal will be the minimum necessary to accommodate equipment access and will not exceed the 50-foot-wide area between the bore exit and entry points. These crossing locations do not contain significant riparian areas or trees and are generally of low quality and consist of invasive herbaceous and shrub species. Impacts on the riparian areas will be significantly reduced by utilizing the bore crossing method, which will not require the excavation of a trench. All temporarily impacted areas will be revegetated as necessary after construction.

For the remaining 8 perennial waterbodies crossings (the Maple River, Sheyenne River, Antelope Creek and 5 crossings of the Wild Rice River), WBI Energy is not proposing a travel lane or temporary equipment bridge between the guided bore entry and exit site. Impacts at these locations, which do include more substantive riparian areas and forested bands between guided bore entry and exit sites, will be minimal and limited to selective cutting of small woody vegetation consisting of shrubs and potentially small trees likely less than 1 to 2 inches in diameter at breast height for guide wire and for access to obtain water from a perennial waterbody (see response the Resource Report 1 Request No. 11).

The wetland impact table (Appendix 2E) and Wetland Types Crossed by the Project summary table (Table 2.3-1 from Resource Report 2) have been updated to include the temporary impacts associated with the travel lanes and equipment bridges between applicable guided bore entry and exit locations. An updated Appendix 2E and table 2.3-1 are provided below.

APPENDIX 2E
Wahpeton Expansion Project
Updated Wetlands Crossed or Otherwise Affected by the Project [a, b]

Wetland ID	Cowardin Classification	Milepost	Centerline Distance Crossed (feet)	Construction Impact (acres)[c]	Operation Impact[d] (acres)	Proposed Crossing Method
PIPELINE FACILITIES						
wcaa002e	PEM	4.9	54.1	0.01[e]	0.00	Guided Bore
wcaa010e	PEM	5.1	11.6	0.01[e]	0.00	Guided Bore
wcaa011e	PEM	5.2	10.5	0.01[e]	0.00	Guided Bore
wcaa003e	PEM	5.9	32.0	0.04[e]	0.00	Guided Bore
wcaa004e	PEM	6.0	24.0	0.03[3]	0.00	Guided Bore
wcaa001e	PEM	6.6	14.7	0.03[e]	0.00	Guided Bore
wcaa005e	PEM	8.9	48.4	0.07[e]	0.00	Open Cut
DSK_WL_04	PEM	10.0	88.4	0.14[e]	0.0	Guided Bore
wcaa006e	PEM	10.0	0.0	0.01[e]	0.00	Guided Bore
wcab001e	PEM	13.7	0.0	0.01[e]	0.00	Guided Bore
wcab003e	PEM	13.7	0.0	0.07[e]	0.00	NA[f]
wcab002e	PEM	13.9	0.0	0.01[e]	0.00	NA[f]
wcab004e	PEM	14.7	21.5	0.06[e]	0.00	Guided Bore
wcab005e	PEM	15.7	12.0	0.02[e]	0.00	Guided Bore
wcab008e	PEM	18.8	29.1	0.05[e]	0.00	Guided Bore
DSK_WL_05	PEM	27.6	9.4	0.02[e]	0.00	Guided Bore
wria002e	PEM	28.3	17.2	0.03[e]	0.00	Guided Bore
wria003e	PEM	31.3	11.4	0.05	0.00	Guided Bore
wria004e	PEM	31.4	14.6	0.03	0.0	Guided Bore
wrib001e	PEM	32.1	164.8	0.31	0.00	Open Cut
wrib003e	PEM	32.6	385.6	0.62	0.00	Open Cut
wrib005e	PEM	32.9	88.1	0.13	0.00	Open Cut
wrib006e	PEM	33.2	38.2	0.06	0.00	Open Cut
wrib007e	PEM	33.5	376.9	0.88	0.00	Open Cut
wrib013e	PEM	34.1	103.3	0.21	0.00	Open Cut
wrib014f	PFO	34.2	178.3	0.25	<0.10[d]	Open Cut
wrib014e	PEM	34.3	214.7	0.38	0.00	Open Cut
wrib021e	PEM	34.5	821.3	1.59	0.00	Open Cut
wrib015e	PEM	35.6	14.4	0.03	0.00	Guided Bore
wrib016e	PEM	35.6	22.7	0.04	0.00	Guided Bore
wrib017e	PEM	35.7	368.0	0.68	0.00	Guided Bore
wrib018e	PEM	35.8	245.1	0.36	0.00	Open Cut
wrib020f	PFO	36.0	0.0	0.11	<0.10[e]	Open Cut
wrib020e	PEM	36.0	96.3	0.08	0.00	Open Cut
wrib019e	PEM	36.0	586.2	1.18	0.00	Open Cut
wria006e	PEM	36.3	463.4	0.81	0.00	Open Cut
wria005e	PEM	37.8	12.4	0.02	0.00	Open Cut
wria009e	PEM	42.4	10.8	0.01	0.00	Guided Bore
wria008e	PEM	42.4	15.7	0.03	0.00	Guided Bore
wrid004e	PEM	51.9	23.3	0.04	0.00	Guided Bore

APPENDIX 2E
Wahpeton Expansion Project
Updated Wetlands Crossed or Otherwise Affected by the Project [a, b]

Wetland ID	Cowardin Classification	Milepost	Centerline Distance Crossed (feet)	Construction Impact (acres)[c]	Operation Impact[d] (acres)	Proposed Crossing Method
DSK_WL_01	PEM	60.1	21.5	0.09	0.00	Open Cut
DSK_WL_02	PEM	60.2	0.0	0.09	0.00	Open Cut
SUBTOTAL				**8.70**	**<0.10**	
ACCESS ROADS						
wcaa009e	PEM	5.1	NA	0.11	0.00	NA
wcaa007e	PEM	9.9	NA	0.02	0.00	NA
wcab003e	PEM	13.7	NA	0.01	0.00	NA
wcab004e	PEM	14.7	NA	0.01	0.00	NA
wria003e	PEM	31.3	NA	<0.01	<0.01	NA
wrib021e	PEM	34.3	NA	0.24	0.00	NA
wria010e	PEM	43.4	NA	<0.01	0.00	NA
wria014e	PEM	44.2	NA	<0.01	0.00	NA
wrid001e	PEM	46.3	NA	<0.01	0.00	NA
wrid003e	PEM	47.3	NA	<0.01	0.00	NA
SUBTOTAL				**0.42**	**<0.01**	
ABOVEGROUND FACILITIES						
WHAPETON BORDER STATION						
DSK_WL_03	PEM	NA	NA	0.13	0.00	Open Cut
PIPE YARDS						
COMSTOCK YARD						
Wrib026e	PEM	NA	NA	0.04	0.00	NA
KOST YARD						
Wcab010e	PEM	NA	NA	1.65	0.00	NA
SUBTOTAL				**1.82**	**<0.10**	
TOTAL				**10.84**	**<0.10**	

[a] The numbers in this table have been rounded for presentation purposes. As a result, the subtotals and totals may not reflect the exact sum of the addends in all cases.

[b] NA = not applicable
PEM = Palustrine emergent wetland
PFO = Palustrine forested wetland
PSS = Palustrine scrub shrub wetland

[c] Impacts associated with guided bore consist of an approximately 50-foot travel lane, and no trenching.

[d] All PEM wetlands will be restored to their herbaceous state; therefore, no permanent impacts will occur

[e] Permanent woody vegetation removal in PFO will occur in the 10-foot wide permanent pipeline easement. The permanent removal of woody vegetation will constitute a wetland conversion of PFO to PEM wetland.

[f] Wetland is within temporary workspace but is not crossed by the pipeline.

TABLE 2.3-1

Wahpeton Expansion Project
Updated Wetland Types Crossed by the Project [a]

NWI Classification [b]	Approximate Crossing Length (feet) [c]	Acreage Affected During Construction (acres) [d]	Acreage Affected During Operation
PEM	4,452	10.48	<0.01[e]
PFO	178	0.36	<0.10[f]
Project TOTAL	4,666	10.84	<0.10

[a] Wetland crossings are based on WBI Energy's field survey data as of the end of the 2021 field season.

[b] Types listed are those occurring within the 75-foot-wide construction corridor based on Cowardin classifications.
PEM = Palustrine emergent; may be temporarily, seasonally, or semi-permanently flooded
PSS = Palustrine scrub shrub
PFO = Palustrine forested

[c] The length of the centerline crossing was calculated from field-delineated or NWI polygons, rounded to the nearest foot, and summed for each type. Values are rounded to the nearest tenth of an acre.

[d] Based on the construction corridor and additional workspace areas associated with the construction corridor.

[e] All palustrine emergent wetlands crossed by the Project will be restored to their original contour and re-seeded with a native emergent seed mix after construction; therefore, no permanent impacts will occur for the palustrine emergent wetlands crossed by the Project.

[f] Woody vegetation will likely be permanently removed in the forested wetlands identified within the 10-foot-wide permanent easement along the pipeline route. The vegetation removal will constitute a wetland conversion from palustrine forested to palustrine emergent and, therefore, is considered an operational impact.

Resource Report 2 – Request No. 8

Revise table 2.2-2 to:

a. provide access road names;

b. actual or estimated crossing widths rather than <10 feet;

c. confirm crossing methods of all waterbodies. For example, waterbody scab005e is listed as open cut in table 2.2-2 however, appendix 1B lists a bore for this waterbody; and

d. confirm if waterbody sirb003e at MP 58.7 should be srib003e as depicted on the alignment sheet.

Response:

Table 2.2-2 has been updated to include access road names and estimated crossing widths. Any crossing method discrepancies between table 2.2-2 and appendix 1B have been rectified, and waterbody sirb003e has been corrected to srib003e to match the alignment sheet. Revised table 2.2-2 is provided below.

TABLE 2.2-2
Wahpeton Expansion Project
Updated Waterbodies Crossed by the Project [a]

MP	Unique ID	Waterbody Name [b]	North Dakota Water Quality Classification [c]	Flow Regime [d]	Crossing width (feet) [e]	Pipeline Crossing Method [f]
HUC 12 Watershed 090202050704						
1.2	scad001p	Maple River	Class II	PN	79	Bore
HUC 12 Watershed 090202050603						
3.9	scaa002e	Unnamed tributary to the Maple River	Class III	E	13	Bore
5.9	scaa003e	Roadside ditch	Class III	E	7	Bore
HUC 12 Watershed 090202040605						
10.7	scab001e	Roadside ditch	Class III	E	4	Bore
HUC 12 Watershed 090202040604						
19.7	scab005e	Roadside ditch	Class III	E	9	Bore
HUC 12 Watershed 090201051005						
24.1	scab006p	Sheyenne River	Class IA	PN	42	Bore
HUC 12 Watershed 090201051005						
29.3	sria001e	Roadside ditch	Class III	E	4	Bore
HUC 12 Watershed 090201051004						
39.9	sria002e	Unnamed ditch	Class III	E	8	Bore
41.0	sric002p	Unnamed tributary to Wild Rice River	Class III	PN	23	Bore
HUC 12 Watershed 090201051001						
45.0	srid002p	Pitcairn Creek	Class III	PN	15	Bore
47.4	sird001e	Roadside ditch	Class III	E	NA[g]	NA[g]
HUC 12 Watershed 090201050907						
50.9	Desktop	Antelope Creek	Class II	PN	65	Bore
HUC 12 Watershed 090201050805						
51.1	DSK_WB_03	Wild Rice River	Class II	PN	122	Bore

TABLE 2.2-2
Wahpeton Expansion Project
Updated Waterbodies Crossed by the Project [a]

51.2	DSK_WB_03	Wild Rice River	Class II	PN	146	Bore
51.3	DSK_WB_03	Wild Rice River	Class II	PN	92	Bore
HUC 12 Watershed 090201040401						
55.4	sirb006e	Roadside ditch	Class III	E	6	Bore
HUC 12 Watershed 090201050805						
56.4	sirb005e	Roadside ditch	Class III	E	5	Bore
57.0	sirc006p	Wild Rice River	Class II	PN	78	Bore
57.6	srib004p	Wild Rice River	Class II	PN	38	Bore
HUC 12 Watershed 090201040401						
58.7	srib003e	Roadside ditch	Class III	E	6	Bore
Access Roads						
HUC 12 Watershed 090201051005						
AR24						
19.3	scab005e	Roadside ditch	Class III	E	6	NA
HUC 12 Watershed 090201051005						
AR32.1						
29.3	sria001e	Roadside ditch	Class III	E	4	NA
HUC 12 Watershed 090201051001						
AR51						
47.3	srid001e	Roadside ditch	Class III	E	4	NA
HUC 12 Watershed 090201050805						
AR60						
56.4	srib005e	Roadside ditch	Class III	E	5	NA
HUC 12 Watershed 090201040401						
AR64						
58.7	sirb003e	Roadside ditch	Class III	E	6	NA

[a] Based on the data from Project field surveys to date, USGS mapping, National Hydrography Dataset data, the North Dakota State Water Commission's geographic information system data viewer, and review of aerial photographs.

[b] Waterbody names are based on USGS topographic maps.

[c] See section 2.2.2 below for category definitions (NDDEQ, 2020e). None of the Class III streams are specifically identified in the Stream Classifications Table located in Appendix I of the NDDEQ Standards of Quality for Waters of the State and are classified as Class III as a default based on specifications included in that appendix.

[d] Based on field surveys, National Hydrography Dataset designations, and/or aerial photography interpretation for unmapped streams:
PN = Perennial
E = Ephemeral
NA = Not applicable (USACE, 2012).

[e] Approximate width based on field surveys and/or estimated from aerial photography. Where National Hydrography Dataset data have been used to supplement areas where surveys are not complete an assumed less than 10-feet-wide has been used for all intermittent National Hydrography Dataset features.

[f] Refer to Resource Report 1, section 1.3.2.1, for detailed descriptions of each crossing method.

[g] Stream is within workspace but is not crossed by the pipeline centerline.

Resource Report 2 – Request No. 9

As previously requested, revise appendix 2A to add a FERC staff contact or a FERC staff representative to the notification list for significant discoveries of contaminated media in the *Plan for Unanticipated Discovery of Contaminated Environmental Media*.

Response:

A FERC staff contact has been added to the *Plan for Unanticipated Discovery of Contaminated Environmental Media* and an updated plan is included as an attachment to this filing.

Attachment

Resource Report 2 Request No. 9 Attachment – Updated *Plan for Unanticipated Discovery of Contaminated Environmental Media*

Resource Report 2 – Request No. 10

Clarify if wetlands would be impacted by the use of mats (or if impacted in other ways, then describe) as part of a travel lane at the Project's wetland crossings, including those that would be crossed via guided bore. Confirm that these impacts are accounted for in all applicable tables reporting wetland acreages or land use affected.

Response:

There will be minor temporary impacts to wetlands associated with the travel lanes between some bore entry and exit points as described in response to Environmental Information Request Resource Report 2 Request No. 7. These impacts will be much less significant than impacts that would occur using the open cut technique, which would require digging a trench through the wetland. Impacts will be limited to vegetation removal that may be required to accommodate equipment access, and the placement of timber mats to allow passage of the equipment. The minor temporary impacts associated with the travel lanes and equipment bridges are included in the revised wetland impact tables (see Resource Report 2 Request No. 7 response - revised Appendix 2E and table 2.3-1).

Resource Report 2 – Request No. 11

Revise appendix 2E (Wetlands Crossed or Otherwise Affected by the Project) to:

a. clarify which wetlands would be crossed via open cut. For example, appendix 2E indicates wetland wcaa001e would be open cut however, appendix 1B indicates this wetland would be crossed via guided bore. Resolve all discrepancies. Revise appendix 1B as necessary;

b. discuss why wetland wria003e (Permanent Access Road 034) would have a permanent impact of <0.01 acre but no temporary impact; and

c. indicate the correct wetland ID for the Kost Yard. Appendix 2E indicates 1.65 acres of wetland Wcab010e would be temporarily impacted at the Kost Yard. Appendix 1B indicates that wetland wcab010_ would be located within the boundaries of the yard. Clarify if WBI Energy could cordon off the wetland within the yard to avoid impacts.

Response:

a. All discrepancies with crossing methods are resolved. See revised Appendix 2E in response to Environmental Information Request Resource Report 2 Request No 7 and updated alignment sheets provided in response to Environmental Information Request Resource Report 1 Request No. 13.

b. Appendix 2E in response to Resource Report 2 Request No 7 has been revised to correct the temporary impact column to display that wetland wria003e will have a temporary and permanent impact from Permanent Access Road 034).

c. The correct wetland id for the impacted wetland in the Kost Yard is wcab010e. In response to FERC's April 4, 2022 Comments on Draft Resource Report 2 (comment number 9), WBI Energy explained that during the Pre-Filing Process, WBI Energy reduced workspaces at contractor yards to avoid wetlands to the extent feasible. This included reducing the workspace at the Kost Yard to avoid two of the three wetlands. The remaining wetland is low quality and is vegetated almost exclusively by narrow-leaved cattail (*Typha angustifolia*) and reed canary grass (*Phalaris arundinacea*). The remaining workspace for the Kost Yard, including wetland wcab010e, is the space WBI Energy proposes to accommodate equipment access and materials storage, and therefore cannot avoid temporary impacts to this low-quality wetland.

Resource Report 3 – Request No. 1

As previously requested, specify the maximum allowable amount of time (interval in days) between the completion of surveys for migratory nesting birds and the start of construction in that area (indicating that the nest survey must be repeated if the maximum amount of time is exceeded). Indicate the starting and ending dates that seasonal nest surveys would be conducted.

Response:

North Dakota Game and Fish Department states that primary nesting season for migratory birds is April 15 through August 1. Any ground clearing activities on non-agricultural land occurring within this timeframe will be preceded by ground-based nest surveys with the objective of having surveys completed within 7 days of ground disturbance.

References

North Dakota Game and Fish Department. Grassland Nesting Bird Habitat. https://gf.nd.gov/private-lands/landowner-resources/habitat-development/grassland-nesting

Resource Report 3 – Request No. 2

Confirm that WBI Energy would perform raptor surveys in the spring prior to leaf out as recommended by the North Dakota Game and Fish Department.

Response:

Raptor nest surveys will be conducted. The majority of the Project route is in agriculture or disturbed land with limited treed or forested areas. These limited treed or forested areas are easily visible even after leaf out; therefore, the timing of the surveys will be dependent on the construction schedule.

Resource Report 3 – Request No. 3

As previously requested, determine and provide a list of possible herbicides, surfactants, and additives that may be used to control invasive plant species.

Response:

Section 3.2 of the Noxious Weeds Management Plan in appendix 3C to Resource Report 3 provides preventative measures that will be used to prevent the spread of weeds along the Project right-of-way and within the aboveground facility sites. Sections 4.0, 4.1, and 5.0 of the Plan provide details on herbicide use, if needed. The specific herbicides, surfactants, and other additives are unknown at this time. Prior to herbicide use, WBI Energy would obtain any required permits/approvals.

Resource Report 3 – Request No. 4

Section 3.6.2.1 states that no forested lands would be located within contractor yards. Clarify the discrepancy with table 3.5-2 which lists 0.2 acre of forest impact at the Kindred Yard. Indicate if there are any alternative yard configurations that could avoid forest impacts. Evaluate options to avoid forest impacts (0.3 acre) associated with temporary access roads and indicate if any alternative temporary access road configurations can be adopted, especially in areas of higher quality forest.

Response:

National Land Cover Database land cover data was used for the Kindred Yard in table 3.5-2 and shows small areas of the yard as deciduous forest. This is due to the limitations for the land cover layer as a raster layer with large pixels. However, during the Pre-Filing Process, WBI Energy reduced the footprint of the Kindred Yard to avoid forested lands at this location based on current land use practices. All areas within the Kindred Yard are currently developed or herbaceous land cover.

Resource Report 3 – Request No. 5

Provide the distance to the bald eagle nest northeast of the Kost Yard.

Response:

The bald eagle nest is approximately 0.75 mile northeast of the Kost Yard.

Resource Report 3 – Request No. 6

Clarify what is meant by "water withdrawn for drilling mud would be used to backfill the trench" in section 3.0 of the *Aquatic Nuisance Species Prevention Plan*.

Response:

An updated Appendix 3B - *Aquatic Nuisance Species Prevention Plan* has been included as an attachment to this filing to clarify that drilling mud produced with water from infested waters may be mixed with soil or other materials to backfill trenches.

Attachment

Resource Report 3 Request No. 6 Attachment – Updated Appendix 3B, *Aquatic Nuisance Species Prevention Plan*.

Resource Report 3 – Request No. 7

List the components of any "disinfection solution" associated with the *Aquatic Nuisance Species Prevention Plan* and provide safety data sheets.

Response:

Section 3.0 of the *Aquatic Nuisance Species Prevention Plan* states that three methods may be utilized to decontaminant equipment infested with aquatic nuisance species. At this time, it is unknown whether disinfection solutions would be utilized, and as such, the specific solution (s) are unknown. If solution (s) need to be used during construction, they would be appropriate for the activity and for the species being treated.

Resource Report 3 – Request No. 8

Provide an update on informal consultation conducted by WBI Energy with the U.S. Fish and Wildlife Service for all federally-listed species.

Response:

WBI Energy received a response from the U.S. Fish and Wildlife Service (USFWS) dated June 29, 2022, concurring with WBI Energy's "may affect, not likely to adversely affect" determinations for the threatened Dakota skipper, northern long-eared bat, and Western prairie fringed orchid. A copy of this concurrence letter from USFWS is included as an attachment to this filing.

Attachment

Resource Report 3 Request No. 8 Attachment – USFWS Concurrence Letter.

Resource Report 4 – Request No. 1

All material filed with the Commission containing location, character, and ownership information about cultural resources must have the cover and any relevant pages therein clearly labeled in bold lettering: "CUI//PRIV – DO NOT RELEASE."

Section 4.2.2 lists 31 previously recorded site leads, but table 4.2-1 contains only 30. Resolve the apparent discrepancy. Section 4.2.3 lists 52 previously recorded historic architectural sites and one historic structure site lead, but table 4.2-2 appears to contain 53 and/or contains a single site lead which is not identified. Resolve the apparent discrepancy.

Response:

Table 4.2-1 is correct; the text in section 4.2.2 of Resource Report 4 should read: "The background research identified 30 previously recorded site leads and 85 archaeological sites/isolated finds within 2 miles of the Project."

The text of Section 4.2.3 is correct; there are 52 previously recorded historic architectural sites and 32RIX368 is a Site Lead.

Resource Report 4 – Request No. 2

All material filed with the Commission containing location, character, and ownership information about cultural resources must have the cover and any relevant pages therein clearly labeled in bold lettering: "CUI//PRIV – DO NOT RELEASE."

Explain why there would be no adverse effects for historic architectural resources as described in section 4.3.3.2 or table 4.3-4.

Response:

There will be no adverse effects on the unevaluated resources due to the distance from the Project or because the Project will not cause any long-term or permanent viewshed changes; therefore, no additional work is recommended.

Table 4.3-4 has been updated to indicate whether there will be no adverse effects to each resource because of distance, viewshed, or a combination of both, and is provided below.

TABLE 4.3-4
Wahpeton Expansion Project
Updated Historic Architectural Resources Identified

Site Number	Date of Construction	Resource Type/Name	Applicant NRHP Assessment	Applicant Recommendation	SHPO Comment
32CS5283	circa 1960	Animal shelter and corral	Not eligible	No further action	Pending
32CS5284	circa 1950	Bishop Farm	Unevaluated	No adverse effect[a]; no further action	Pending
32CS5119	circa 1930	Outbuilding	Unevaluated	No adverse effect[a]; no further action	Pending
32CS5353	circa 1960	Bridge	Unevaluated	No adverse effect[b]; no further action	Pending
32CS5354	circa 1910	Granary and grain bins	Unevaluated	No adverse effect[b]; no further action	Pending
32CS5355	circa 1910	Vernacular dwelling and farmstead	Unevaluated	No adverse effect[b]; no further action	Pending
32CS5356	circa 1930	Ranch dwelling and farmstead	Unevaluated	No adverse effect[b]; no further action	Pending
32CS5357	circa 1960	Oil tanks and associated machinery	Unevaluated	No adverse effect[b]; no further action	Pending
32CS5358	circa 1880–1920	Plain Residential-style dwelling and farmstead—no longer extant	Unevaluated	No adverse effect[b]; no further action	Pending
32CS5359	circa 1930	Vernacular dwelling and farmstead	Unevaluated	No adverse effect[b]; no further action	Pending
32RI813	1936	Bridge	Not eligible	No further action	Pending
32RI814	1948	Bridge	Not eligible	No further action	Pending
32RI915	circa 1960	Minimal Traditional dwelling and farmstead	Unevaluated	No adverse effect[b]; no further action	Pending
32RI916	1908	Minimal Traditional dwelling and outbuildings	Unevaluated	No adverse effect[b]; no further action	Pending

TABLE 4.3-4
Wahpeton Expansion Project
Updated Historic Architectural Resources Identified

Site Number	Date of Construction	Resource Type/Name	Applicant NRHP Assessment	Applicant Recommendation	SHPO Comment
32RI917	1911	Vernacular dwelling with farmstead	Unevaluated	No adverse effect[b]; no further action	Pending
32RI918	circa 1960	Hage Farm; Residence and farmstead	Unevaluated	No adverse effect[c]; no further action	Pending
32RI919	circa 1960	Minimal Traditional dwelling and farmstead	Unevaluated	No adverse effect[c]; no further action	Pending
32RI920	circa 1960	Vernacular dwelling with outbuildings	Unevaluated	No adverse effect[b]; no further action	Pending

a No adverse effect due to distance from Project and no long-term or permanent viewshed changes.
b No adverse effect due to no long-term or permanent viewshed changes.
c No adverse effect due to distance from Project.

Resource Report 4 – Request No. 3

All material filed with the Commission containing location, character, and ownership information about cultural resources must have the cover and any relevant pages therein clearly labeled in bold lettering: "CUI//PRIV – DO NOT RELEASE."

Provide a status update on the completion of archaeological and architectural resources surveys and results, and a projected date for submittal of the combined report. When available, provide the report and the SHPO's comments on the report.

Response:

The status of additional surveys and timing to provide reports is provided in response to Environmental Information Request Resource Report 1 Request No. 1. SHPO comments on the reports will be filed with FERC upon receipt.

Resource Report 4 – Request No. 4

All material filed with the Commission containing location, character, and ownership information about cultural resources must have the cover and any relevant pages therein clearly labeled in bold lettering: "CUI//PRIV – DO NOT RELEASE."

Provide any previously unfiled correspondence to and from the Native American tribes contacted. Provide a status update on tribal communications, including any tribal participation in surveys or plans for archaeological monitoring (as recommended by the Northern Cheyenne Tribe).

Response:

There have not been any communications with Native American tribes since filing the Application; therefore, no correspondence is provided. No tribes have expressed further interest in participating in Summer 2022 surveys.

Resource Report 5 – Request No. 1

Provide the actual distances of the nearest commercial locations, schools, daycare centers, churches, municipal buildings, or other sensitive receptors in each environmental justice community to the Project.

Response:

The requested distances are provided in table 5.1 below.

TABLE 5.1
Wahpeton Expansion Project
Community Sensitive Receptors

Sensitive Receptor	Distance and Direction
Census Tract 408, Block 2	
N/A	N/A
Census Tract 408, Block 3	
Mapleton Elementary	1 mi. SE of Project Centerline
Church of Lutheran Confession	0.9 mi. SE of Project Centerline
Mapleton Community Center and City Office	0.9 mi. SE of Project Centerline
Prairie View Park	0.6 mi. SE of Project Centerline
Christianson Park	0.9 mi. SE of Project Centerline
Census Tract 9707, Block 2	
Our Savior Lutheran Church	1.3 mi. SW of Project Centerline
Colfax High School	1.2 mi. SW of Project Centerline
Colfax Community Center	1.4 mi. SW of Project Centerline
Colfax Parks and Recreation	1.2 mi. SW of Project Centerline
Richland Elementary School	4 mi. E of Project Centerline
Census Tract 9709, Block 1	
Tiny Tykes, Inc.	0.4 mi. SE of Wahpeton City Yard
Harvest Outreach Church	0.4 mi. SE of Wahpeton City Yard
Census Tract 9710, Block 2	
Peek N Play Daycare Center	0.1 mi. E of Comstock South Yard
Giggles & Grins Childcare Center and Preschool	0.2 mi. NE of Comstock South Yard
Wahpeton Parks & Recreation Community Center	0.3 mi. NE of Comstock South Yard

Resource Report 5 – Request No. 2

As previously requested, check and revise the data and calculations in table 5.1-2, for example, the 2020 population density for the Study Area Total appears to be incorrect.

Response:

Table 5.1-2 has been updated below. Data in red have been updated.

TABLE 5.1-2
Wahpeton Expansion Project
Updated Land Area and Population Characteristics Within the Project Study Area

State/County/ City or Town	Population (2010)	Population (2020)	Population Percent Change (2010 to 2020)	Population Density (2020; persons per square mile)	Land Area (square miles)
North Dakota	672,576	779,094	15.8	11.3	69,000.8
Cass County	149,778	184,525	18.8	104.4	1,768.0
Fargo	105,549	125,209	15.7	2,519.3	49.7
West Fargo	25,830	38,194	32.4	2,343.2	16.3
Mapleton	762	1,282	40.6	328.7	3.9
Casselton	2,329	2,476	5.9	1,238.0	2.0
Kindred	692	802	13.7	534.7	1.5
Richland County	16,321	16,529	1.3	11.4	1,445.0
Wahpeton	7,766	7,728	-0.5	1486.2	5.2
Walcott	235	251	6.4	251.0	1.0
Colfax	121	154	21.4	154.0	1.0
Study Area Total	166,099	201,054	17.4	62.6	3,213

Source: United States Census Bureau, 2021a.

Resource Report 5 – Request No. 3

Clarify, and if necessary, reconcile section 5.1.2.4 that indicates the closest Waterfowl Production Area is located 19 miles from the Project to section 3.2.2 which says the Tewaukon Wetland Management District includes one Waterfowl Production Area less than 0.1 mile west of MP 35.

Response:

The nearest Waterfowl Production Area is less than 0.1 mile west of MP 35. More specific details on the wetlands and Waterfowl Production Areas are included in Resource Report 3.

Resource Report 5 – Request No. 4

Provide the distance (miles) for police and fire departments in relation to the Project area, as well as the names of the departments in table 5.2-1.

Response:

The requested distances are provided in table 5.2 below.

TABLE 5.2
Wahpeton Expansion Project
Police and Fire Stations

Department	Distance and Direction from Project Centerline
Police	
West Fargo Police Department	5.7 miles E
Fargo Police Department	9 miles E
Cass County Law Enforcement Center	9.3 miles E
Richland County Sheriff's Office	4 miles SE
Fire	
West Fargo Fire Department	5 miles E
Fargo Fire Department Station 6	6.5 miles E
Fargo Fire Department Station 5	7.5 miles E
West Fargo Fire Department South Station	4.8 miles E
Wahpeton Fire Department	4.8 miles SE

Resource Report 5 – Request No. 5

Section 5.3.1 states, "because the 2020 Decennial Census data was released in March 2022 after most of WBI Energy's outreach efforts occurred, WBI Energy's early outreach was based on environmental justice communities identified during the majority of its Pre-Filing Process." Describe any additional outreach planned based on the newly identified environmental justice communities. Discuss any site-specific impacts (and if necessary, mitigation) within the environmental justice communities such as a groundwater well located at MP 9.3 and a noise sensitive area within 0.5-mile of the proposed I-94 guided bore.

Response:

Due to the nature of the Project, socioeconomic impacts will be temporary and localized with little to no permanent impacts. For example, three of the environmental justice communities are included due to the location of contractor yards within the block group area. WBI Energy held four meetings each in Kindred and Wahpeton, two in September and two in November of 2021 for all Project stakeholders. WBI Energy will continue to work with Project stakeholders, including environmental justice communities, as needed.

As referenced in Section 2.1.5 Groundwater Construction Impacts and Mitigation of Resource Report 2, for any wells identified within 150 feet of the proposed workspace, including the groundwater well at MP 9.3, "WBI Energy will—where permitted by the landowner—conduct preconstruction and post-construction water quality and yield testing and/or sampling to verify that construction of the Project does not permanently affect water wells. WBI Energy will obtain landowner or municipality permission prior to testing. Pre- and post-construction well testing will include a bacterial test, general chemistry (mineralogical) analysis, and a nitrate test. WBI Energy will analyze any damaged well or water supply system and perform the necessary repairs and/or modifications to return it to its former capacity as determined by the testing and/or sampling. In the event that a private well or water supply system is damaged beyond repair due to construction-related activities, WBI Energy will provide for a temporary water source and replace the well as necessary. In addition, in the event that an active well is identified within construction work areas and must be taken out of service, WBI Energy will provide an alternate water source or negotiate a mitigation plan with the landowner to offset any adverse impacts."

As shown in Table 9.2-4 in Resource Report 9, the estimated noise levels from the guided bore equipment for the proposed I-94 guided bore represent a noise increase of less than 1 decibel which would not be noticeable above the ambient noise level for that area. In total, the sum of the estimated day/night noise level would be around 52 decibels on the A-weighted scale (dBA) and is below the FERC criterion of 55 dBA. Therefore, no further mitigation is needed.

Resource Report 5 – Request No. 6

Table 5.3-1 Footnote "a" indicates that data provided is for all block groups within a mile of Project facilities. For pipeline facilities, as requested in Question #7 of the April 4, 2022 comments on the draft resource reports, provide an updated table 5.3-1 of racial, ethnic, and poverty statistics for each block group crossed by pipeline facilities. Provide updated figures 5.3-1 and 5.3-2 based on this data.

Response:

Table 5.3-1 in Resource Report 5 provided data for all block groups crossed by or within one mile of Project facilities and workspaces. This information exceeds the information requested by FERC in providing census block groups crossed by and within one mile of the Project pipeline.

Resource Report 5 – Request No. 7

As described in section 5.2.6, provide an estimate of ad valorem and sales tax revenues to be paid to each county during the first year of operation.

Response:

WBI Energy estimates annual ad valorem taxes to be paid to Cass County to be $99,007. For Richland County, WBI Energy estimates $143,501. North Dakota sales tax is generally 5% that would be applied to appliable purchases during the project's first year of operation.

Resource Report 5 – Request No. 8

As described in section 5.2.6, clarify the estimated percentage of the Project material purchases or other construction related expenditures that would be spent within Cass and Richland counties.

Response:

WBI Energy estimates that up to 5 percent of Project material purchases and other construction-related expenditures will be spent locally within Cass and Richland Counties.

Resource Report 6 – Request No. 1

Section 6.4.1 states "Based on earthquake records in Minnesota and North Dakota, the closest recorded earthquake to the Project area was a 3.0- to 3.9-magnitude earthquake that occurred in 1939 (Chandler, 2020). The earthquake was located about 47 miles east-northeast of MP 11.0 and was reportedly felt within an 8,000-square kilometer area." This section later states "No recorded earthquakes in North Dakota have been located within 50 miles of the Project." Clarify the apparent discrepancy.

Response:

To clarify, the closest recorded earthquake to the Project area occurred in Minnesota, approximately 47 miles east-northeast of MP 11.0. To date, no earthquakes have been recorded within 50 miles of the Project area in North Dakota.

Resource Report 6 – Request No. 2

Section 6.4.3 states that the north bank of the Sheyenne River crossing has a slope which exceeds 20 percent. Clarify if the guided bore pit would be set back from the north bank to avoid this slope. Provide minimization and mitigation measures for all slopes greater than 15 percent or alternately describe if the steep slopes would be avoided via guided bores.

Response:

As described in Appendix 6C to Resource Report 6, the guided bore pit at about MP 24.15 would be set back approximately 235 feet from the north bank of the Sheyenne River and will avoid the steep slope. In addition, the slopes exceeding 15 percent at the crossing of 49th Street SE and adjacent wetland (MPs 18.77 and 18.78) will be avoided by using the guided bore method, with setbacks approximately 102 feet north of the road and 50 feet south of the wetland on the south side of 49th Street SE.

Resource Report 7 – Request No. 1

Appendix 1B indicates areas of saline soil along the Project right-of-way. Describe any issues associated with saline soils and provide impact avoidance, minimization, and mitigation measures as applicable.

Response:

There is potential for slightly saline to moderately saline soils to occur along segments of the pipeline right-of-way, access roads, and one block valve site. Saline soils are soils that have water soluble salt content high enough to raise the osmotic potential of the soil and reduce the available soil water. This reduced available soil water may negatively impact revegetation efforts, and therefore may increase post construction erosion due to reduce plant cover.

To mitigate potential revegetation concerns, WBI Energy will implement best management practices in accordance with the FERC Plan and Procedures. Saline soils will be identified in the field by an environmental inspector based on visual surface characteristics, such as white crusted soil surface, salt rings adjacent to waterbodies, white salt spots and streaks, poor vegetation growth, and/or naturally growing salt-tolerant vegetation. Deep tillage will be avoided in suspected saline soils and soil excavated from suspected saline soil areas will be returned as backfill from where it was excavated.

Resource Report 8 – Request No. 1

As previously requested, clarify and discuss the planned open cut crossings of the three historic railroads. Clarify the footnote "Placeholder for railroad crossing information" in Appendix 8D. Clarify and reconcile the updated information in Resource Report 4 for the historic railroad crossings (two crossings) with the information provided in appendix 8D (three crossings).

Response:

Construction across the three historic railroad crossings will be conducted using conventional open-cut methods in accordance with the FERC Plan and other site-specific plans and permits. All three crossings are in agricultural lands. Backhoe type excavators will be used to open a trench. Spoil materials excavated from the trench will be placed along the construction ROW, with topsoil and subsoil materials clearly segregated within approved workspace boundaries. A prefabricated segment of pipeline will then be placed into the trench using side-boom tractors. Once the pipe has successfully been installed across the historic railroad crossing, the trench will be backfilled, contours will be restored as near as practicable to preconstruction contours, and the site will be stabilized/reclaimed. Stabilization measures may include seeding and installation of erosion controls as appropriate. Each open-cut historic railroad crossing is proposed to be completed and restored within a few days.

Appendix 8D has been revised to be consistent with Resource Report 4 and is included as an attachment to this filing. In addition, column headers have been revised and a reference to Appendix 6C has been added to clarify crossing lengths of roads and railroads that will be bored.

Attachment

Resource Report 8 Request No. 1 Attachment – Revised Appendix 8D, Road and Railroad Crossings

Resource Report 8 – Request No. 2

As previously requested, add a data column for "Reason Needed" for additional temporary workspaces to appendix 8A.

Response:

Appendix 8A has been updated to include a "reason needed" column for the additional temporary workspaces and is included as an attachment to this filing.

Attachment

Resource Report 8 Request No. 2 Attachment – Revised Appendix 8A, Additional Temporary Workspaces

Resource Report 8 – Request No. 3

Provide an update regarding the presence of specialty or organic crops that would be affected by the Project.

Response:

No specialty or organic crops have been identified along the Project route.

Resource Report 8 – Request No. 4

Provide an updated table 8.11-1 that includes the following:

a. a statement as to whether the structure is visible from the closest residences and identify any existing screening between the structure and the residence;

b. distance to nearest non-residential sensitive receptors (i.e., users of nearby roadways, and users of nearby recreational areas, if any) within environmental justice communities. State whether the structure is visible and identify any existing screening between the structure and the sensitive receptor; and

c. proposed visual screening that WBI Energy would install and maintain to minimize the visual impact of the facility (e.g., installing a combination of deciduous and evergreen trees).

Response:

Table 8.11-1 has been updated to include the requested information below.

TABLE 8.11-1
Wahpeton Expansion Project
Revised Potential Visual Resource Impacts Associated with the Aboveground Facilities

Aboveground Facility	New or Existing Facility	Approximate Distance to Nearest Residence	Approximate Distance to Nearest Non-Residential Sensitive Receptors within an Environmental Justice Community	Description of Existing Conditions and Proposed Mitigation
Mapleton Compressor Station	Existing (Proposed Modification)	1,669 feet south	1.3 miles There is a park within the town of Mapleton that is approximately 1.3 miles south of this facility. This facility would not be visible from this park due to the housing development located around the park.	Additional equipment and facilities will be installed within the fence line of the existing facility; therefore, no impacts on the existing visual character of the location are anticipated. There is existing screening between this facility and the nearest residence. This facility may be visible to other residences in the area but no impacts are anticipated as this is an existing facility. WBI Energy is not planning to do any visual mitigation or tree planting at the above ground facilities.
MDU—Kindred Border Station	New	3,587 feet southwest	This facility is not located within an environmental justice community.	While this is a new facility, there is an existing airport located approximately 0.7 mile northwest that has changed the visual appearance of the area. This facility will change the landscape, but no significant changes to the existing visual character of the area are anticipated overall. There appears to be existing screening between this facility and the nearest residence therefore this facility should not be visible to the nearest residence. WBI Energy is not planning to do any visual mitigations or tree plantings at the above ground facilities.

TABLE 8.11-1
Wahpeton Expansion Project
Revised Potential Visual Resource Impacts Associated with the Aboveground Facilities

Aboveground Facility	New or Existing Facility	Approximate Distance to Nearest Residence	Approximate Distance to Nearest Non-Residential Sensitive Receptors within an Environmental Justice Community	Description of Existing Conditions and Proposed Mitigation
MDU—Wahpeton Border Station	New	1,741 feet southwest	This facility is not located within an environmental justice community.	While this is a new facility, there is an existing food processing facility and energy facility both located approximately 1.6 miles east that have changed the visual appearance of the area. This facility will change the landscape, but no significant changes to the existing visual character of the area are anticipated overall. There appears to be existing screening between this facility and the nearest residence therefore this facility should not be visible to the nearest residence. WBI Energy is not planning to do any visual mitigations or tree plantings at the above ground facilities.
Valve Site #1 and pig launcher/receiver	New	1,669 feet south	1.3 miles There is a park within the town of Mapleton that is approximately 1.3 miles south of this facility. This facility would not be visible from this park due to the housing development located around the park.	This valve site will be constructed and operated within the existing Mapleton Compressor Station site; therefore, no impacts on the existing visual character of the location are anticipated. There is existing screening between this facility and the nearest residence. This facility may be visible to other residences in the area but no impacts are anticipated as this is an existing facility. WBI Energy is not planning to do any visual mitigations or tree plantings at the above ground facilities.
Valve Site #2 and pig launcher/receiver	New	5,500 feet northeast	This facility is not located within an environmental justice community.	While this is a new facility, it is minimal in scope and is anticipated to result in negligible impacts on aesthetics. There appears to be existing screening between this facility and the nearest residence therefore this facility should not be visible to the nearest residence. WBI Energy is not planning to do any visual mitigations or tree plantings at the above ground facilities.
Valve Site #3	New	3,587 feet southwest	This facility is not located within an environmental justice community.	This valve site will be constructed and operated within the construction and operational footprint of the MDU—Kindred Border Station. This facility will change the landscape, but no significant changes to the existing visual character of the area are anticipated overall. There appears to be existing screening between

TABLE 8.11-1
Wahpeton Expansion Project
Revised Potential Visual Resource Impacts Associated with the Aboveground Facilities

Aboveground Facility	New or Existing Facility	Approximate Distance to Nearest Residence	Approximate Distance to Nearest Non-Residential Sensitive Receptors within an Environmental Justice Community	Description of Existing Conditions and Proposed Mitigation
				this facility and the nearest residence therefore this facility should not be visible to the nearest residence. WBI Energy is not planning to do any visual mitigations or tree plantings at the above ground facilities.
Valve Site #4	New	6,200 feet northwest	This facility is not located within an environmental justice community.	While this is a new facility, it is minimal in scope and is anticipated to result in negligible impacts on aesthetics. There appears to be existing screening between this facility and the nearest residence therefore this facility should not be visible to the nearest residence. WBI Energy is not planning to do any visual mitigations or tree plantings at the above ground facilities.
Valve Site #5 and pig launcher/receiver	New	5,565 feet northeast	1.1 miles The North Country National Scenic Trail is located approximately 1.1 miles south of this facility. This facility may be visible from the trail however it is minimal in scope.	While this is a new facility, it is minimal in scope and is anticipated to result in negligible impacts on aesthetics. There appears to be existing screening between this facility and the nearest residence therefore this facility should not be visible to the nearest residence. WBI Energy is not planning to do any visual mitigations or tree plantings at the above ground facilities.
Valve Site #6	New	2,290 feet southwest	This facility is not located within an environmental justice community.	While this is a new facility, it is minimal in scope and is anticipated to result in negligible impacts on aesthetics. There does not appear to be screening between this facility and the nearest residence, however due to the distance between them and the minimal scope of this facility, it should not be visible. WBI Energy is not planning to do any visual mitigations or tree plantings at the above ground facilities.
Valve Site #7 and pig launcher/receiver	New	1,741 feet southwest	This facility is not located within an environmental justice community.	This valve site will be constructed and operated within the construction and operational footprint of the MDU—Wahpeton Border Station. This facility will change the landscape, but no significant changes to the existing visual character of the area are anticipated overall. There appears to be existing screening between

TABLE 8.11-1
Wahpeton Expansion Project
Revised Potential Visual Resource Impacts Associated with the Aboveground Facilities

Aboveground Facility	New or Existing Facility	Approximate Distance to Nearest Residence	Approximate Distance to Nearest Non-Residential Sensitive Receptors within an Environmental Justice Community	Description of Existing Conditions and Proposed Mitigation
				this facility and the nearest residence therefore this facility should not be visible to the nearest residence. WBI Energy is not planning to do any visual mitigations or tree plantings at the above ground facilities.

Resource Report 8 – Request No. 5

Indicate the measures (by milepost) WBI Energy would implement to avoid or minimize impacts on North Country Scenic National Trail users. Include any measures, as relevant, related to visual impacts, notifications of trail use limits or closures, dust, and protection of trail users from entering construction workspaces. Provide any updated correspondence with the National Park Service or the North Country Trail Association concerning any measures they recommend.

Response:

WBI Energy will coordinate with the National Park Service (NPS) and North Country Trial Association regarding the timing of construction. This coordination will confirm that proper signage will be displayed, and safety measures will be taken so the trail remains accessible for maintenance work and recreational users.

As stated in the meeting notes from the March 15, 2022 meeting between WBI Energy, NPS and North Country Trail Association (included in Appendix 8C of Resource Report 8), no permit is required from NPS and NPS indicated its review process will continue with a review of the draft Environmental Impact Statement and it may provide comments on that document.

Resource Report 9 – Request No. 1

Section 9.1.4.1 states if the need for open burning arises, WBI Energy would follow all requirements stipulated in North Dakota Administrative Code (NDAC) 33.1-15-04. Clarify if WBI Energy would seek authorization from FERC to utilize open burning.

Response:

As stated in Resource Report 9, WBI Energy does not anticipate the need to open burn. However, if needed, the North Dakota Department of Environmental Quality (ND DEQ) is the regulatory authority that regulates open burning in North Dakota. The rules pertaining to open burning are contained in Chapter 33.1-15-04 of the North Dakota Air Pollution Control Rules. WBI Energy is not aware of any specific FERC permitting authority related to open burning. WBI Energy has identified the potential for open burning to FERC for purposes of developing FERC's National Environmental Policy Act document and disclosing potential impacts from the Project.

If the contractor decides open burning is necessary to remove vegetation, WBI Energy will require the contractor to follow ND DEQ regulations. Those requirements are listed below.

NDAC 33-15-04-02 Permissible open burning

1. The following types of burning are specifically authorized subject to the conditions listed in subsection 2 as well as any condition included as part of this subsection

    f. The burning of trees, brush, grass, wood, and other vegetable matter in the clearing of land, right-of-way maintenance operations, and agricultural crop burning.

2. The following conditions apply to all types of permissible burning listed in subsection 1.

    a. Air pollution, as defined in section 33-15-01-04, will not be created.

    b. The burning must not be conducted upwind of, or in proximity to, an occupied building such that the ambient air of such occupied building may be adversely affected by the air contaminants being emitted.

    c. Care must be used to minimize the amount of dirt on the material being burned and the material must be dry enough to burn cleanly.

    d. Oils, rubber, and other materials that produce unreasonable amounts of air contaminants may not be burned.

    e. The burning may be conducted only when meteorological conditions favor smoke dispersion and air mixing.

    f. The burning must not be conducted adjacent to any highway or public road so as to create a traffic hazard.

g. The burning must not be conducted adjacent to any operational military, commercial, county, municipal, or private airport or landing strip in such a manner as to create a hazard.

h. Except in an emergency, burning may not be conducted in such proximity of any class I area, as defined in chapter 33-15-15, that the ambient air of such area is adversely impacted.

i. Except in an emergency, the visibility of any class I area cannot be adversely impacted as defined in chapter 33-15-19.

j. Burning activities must be attended and supervised at all times burning is in progress.

k. If state or local fire officials determine conditions to be unsafe for open burning such burning must cease until conditions are deemed safe by such officials.

Resource Report 9 – Request No. 2

WBI Energy's table of responses to the FERC's April 14, 2022 comments on draft Resource Report 9 indicates that information responsive to item 2 may be found in section 9.1.4.1, which details state regulatory requirements, but does not appear to state any commitments by WBI Energy to mitigate exhaust emissions from construction equipment. Complying with applicable regulatory requirements is not a commitment, but rather an obligation. It appears that WBI Energy's stated commitments are instead found within section 9.1.5.1, in which WBI Energy would "comply with the applicable USEPA mobile source emissions performance standards by using modern, well-maintained vehicles and equipment will be shut down when not in use to minimize idling emissions." Supplement WBI Energy's response to FERC's April 14, 2022 comments to:

a. identify and describe the applicable U.S. Environmental Protection Agency (EPA) mobile source emissions performance standards WBI Energy would comply with for the Project, including any that include the use of low-sulfur fuel, newer-tier equipment, and emissions controls on stationary equipment;

b. describe any commitments, if any, WBI Energy would implement to mitigate exhaust emissions that are not otherwise specified in applicable EPA standards described in a. above; and

c. specify the criteria WBI Energy and its contractors would use to determine that any piece of equipment is no longer "in use" and the maximum allowable idling time WBI Energy would commit to follow between cease of use and equipment shutdown.

Response:

a. Large construction equipment is typically powered using diesel engines. The allowable emissions from diesel engines is based on EPA standards that have been phased in over the past two decades in four steps, referred to as Tier 1 to Tier 4. All engines must comply with the emission standards in place based on the size of the engine for the year the engine was built. Compliance with the applicable standard is throughout its useful life. The engine manufacturers certify the standard the engine is to meet.

   In 2010, the EPA required the sulfur concentration in diesel fuels be lowered from a historical concentration of 500 ppm to 15 ppm (ultra-low sulfur diesel fuel), which allows diesel engines to meet current Tier 4 emission requirements. Proper maintenance of construction equipment and use of low and ultra-low-sulfur diesel fuel will minimize engine emissions during Project construction. To reduce emissions from internal combustion engines, idling of construction vehicles will be minimized.

   WBI Energy is not planning on mandating the equipment to be used by the contractors. WBI Energy will suggest that when possible, newer equipment is to be used. WBI Energy will require contractors have programs to minimize engine idling. The tailpipe emissions are based on EPA MOVES3 modeling that incorporates the latest data on vehicle populations for an area as well updated fuel supply data. The calculations of emissions for construction equipment are based on conservative assumptions.

b. The Project is not located in any non-attainment areas where improving air quality is a concern. Other than suggesting that idling be kept to a minimum, WBI Energy is not implementing any additional

mitigation to tail pipe emissions other than mandating that the onsite equipment comply with EPA standards.

c. Engine idling causes unnecessary costs due to wear and tear on engines, additional fuel consumption, and non-productive labor time. Typically idling is a result of waiting for something to occur such as work instructions or delivery of necessary equipment to complete a task. There are also times when an employee may take a work break in a vehicle and run the engine for heat or air conditioning.

   WBI Energy requests that construction teams minimize idle time, but in reality, the construction contractors already strive to reduce idle time to reduce costs. WBI Energy will ask their contractors to consider using equipment that incorporates idle reduction technology, work plans and schedules to reduce wait times, material management so personnel are not waiting on deliveries, and employee break areas so that vehicles do not have to be used as break rooms.

Resource Report 9 – Request No. 3

Provide an accession number for the pre- and post-construction noise survey data for the Mapleton Compressor Station referenced in section 9.2.3.1.

Response:

The pre-construction noise survey was not used as the basis for the analysis presented in Resource Report 9 and is erroneously referenced in section 9.2.3.1. Data from the post-construction noise survey for the Mapleton Compressor Station was used in the analysis (Accession number 20181116-5067). A copy of the post-construction noise survey is included as an attachment to this filing.

Attachment

Resource Report 9 Request No. 3 Attachment – Mapleton Compressor Station Post-Construction Noise Survey

Resource Report 9 – Request No. 4

Section 9.2.3.1 states "NSA [noise sensitive area] 3 is a new NSA that was added since the Mapleton Compressor Station was originally constructed and this NSA has been included in the analysis." Footnotes for tables 9.2-2 and 9.2-5 seem to indicate that noise data for NSA 3 were estimated from surveys taken prior to construction of NSA 3. Clarify when NSA 3 was constructed and if it was prior to the post-construction noise survey collected on November 8, 2018 at the Mapleton Compressor Station.

Response:

The construction completion date for NSA 3 is not known. WBI Energy believes that the construction of NSA 3 was completed after the post-construction noise survey, which occurred on November 8, 2018. Aerial photography and tax records appear to indicate that construction started around the same time as the compressor station was being placed into service. Regardless, WBI Energy has identified NSA 3 as an NSA for the applicable proposed Project facilities and included NSA 3 in the noise impact analysis for the Project.

Resource Report 9 – Request No. 5

Provide the following regarding the noise survey:

a. the locations and duration of noise measurements;

b. the date and time for each measurement;

c. the physical and ambient environment;

d. state of vegetation cover;

e. weather conditions;

f. wind speed and direction;

g. engine load;

h. other sources of noise present during noise measurement at each location; and

i. step-by-step supporting calculations or identify the computer program used to model the noise levels, the input and raw output data and all assumptions made when running the model, far-field sound level data for maximum facility operation, and the source of the data.

Response:

The Mapleton Compressor Station post-construction noise survey is provided in response to Environmental Information Request Resource Report 9 Request No. 3 and includes the information requested in items a, b, e, f, and g. Items c, d, and h are unknown and were not requested by FERC at the time the noise survey was filed.

In response to item i, the data presented in the post-construction noise survey was based on noise monitoring completed at NSAs 1 and 2. The make and model of the noise monitor used to collect the data is indicated in the survey report. No additional model was used in the survey.

Resource Report 9 – Request No. 6

Clarify if bore pit excavation/backfill or other related non-boring activities would occur at night and if so, clarify if those activities were included in the modelling.

Response:

Bore pit excavation/backfill activities will not occur during nighttime hours. Only boring activities (including drilling/pullback operations) are proposed to potentially occur during nighttime hours.

Resource Report 9 – Request No. 7

Clarify if WBI Energy would monitor nighttime noise levels at the four guided bore locations for NSAs within 0.5 mile to confirm that nighttime construction would not exceed a day-night average sound level (Ldn) of 55 decibels on the A-weighted scale (dBA) at these locations. For each proposed bore location, describe the noise mitigation (such as a sound barrier) that WBI Energy would implement for any NSA where the nighttime construction noise exceeds an Ldn of 55 dBA. Provide updated noise modelling that incorporates all proposed noise mitigation measures for each crossing as applicable.

Response:

WBI Energy is not proposing to monitor nighttime noise levels given the short duration of these activities. No noise mitigation measures are proposed for the three guided bore locations where noise levels are projected to be below FERC's day/night noise criterion of 55 decibels on the A-weight scale (dBA) L_{dn} at the nearest noise sensitive area (NSA). The Sheyenne River guided bore is predicated to exceed 55 dBA L_{dn} at the nearest NSA. As described in Section 9.2.4.1 of Resource Report 9, WBI Energy is proposing to notify affected landowners within 0.5 miles of the guided bore entry and exit sites prior to commencing the guided bore at this location and is proposing mitigation of financial compensation to accommodate temporary landowner relocation during the 24-hour per day activities.

Resource Report 9 – Request No. 8

Resource Report 1 indicates that guided bore operations could occur up to 24 hours per day. In addition to the 6 bore locations already assessed, assess potential impacts at NSAs within 0.5 mile from nighttime construction noise attributable to the other 66 guided bore crossings that identify and incorporate all proposed noise mitigation measures for any sites predicted to result in unmitigated Ldn noise levels above 55 dBA. Identify any bore sites for which WBI Energy commits to daytime only construction between the hours of 7:00am to 7:00pm.

Response:

The 6 bore locations assessed for 24-hour operation are the only locations where 24-hour boring activities are proposed. All other bore locations will be daytime only.

Resource Report 9 – Request No. 9

Clarify if any planned or possible nighttime construction activities as described in Resource Report 1 including "hydrostatic testing and associated activities, critical tie-ins, trench dewatering (if necessary), completing in-progress construction activities and wetland/waterbody crossings, incident response procedures/measures, emergency equipment repairs/maintenance, and aboveground facility commissioning" could impact NSAs and, if so describe the impacts and any potential mitigation measures.

Response:

WBI Energy is not able to speculate on the locations where these activities could occur, which would be dictated by conditions at the time of construction; therefore, WBI Energy is not able to identify individual NSAs that could be impacted by these activities or describe the impacts and propose mitigation measures. These activities are typical of any pipeline construction activity and WBI Energy has included their identification for FERC's disclosure in its National Environmental Policy Act document.

Resource Report 9 – Request No. 10

Amend the table "Construction Emission Totals for Entire Project - Appendix 9B" within "Appendix 9C - Construction Emission Calculations" to include pollutants carbon dioxide, nitrous oxide, and methane.

Response:

The construction emission calculations have been amended to include carbon dioxide, nitrous oxide, and methane. WBI Energy notes that while updating the tables to show carbon dioxide, nitrous oxide, and methane, an error in the "Project Emissions Totals" (last row of the table) was noted. The summation of emissions did not include the MDU-Kindred Border Station. That error has been corrected. The revised table for "Construction Emission Totals for Entire Project" is included as an attachment to this filing.

Attachment

Resource Report 9 Request No. 10 Attachment – Revised Construction Emissions Total for the Entire Project Table within Appendix 9C – Construction Emission Calculations

Resource Report 10 – Request No. 1

The response to April 4, 2022 EIR No. 3 states that no stakeholders have objected to the locations of WBI's proposed aboveground facilities. Section 10.7.2 states that WBI Energy's customer indicated a preference for Alternative Site A for the MDU – Wahpeton Border Station. Explain the rationale, if known, behind the preference for the location of the station.

Response:

The customer, Montana-Dakota Utilities Companies (MDU), has agreed to the proposed MDU-Wahpeton Border Station site. The reasons why Alternative A was determined to be less preferable and was rejected by both WBI Energy and MDU are described in Resource Report 10.

Resource Report 10 – Request No. 2

Provide figures 10.7-1 and 10.7-2 which are referenced in the text, but are not included in appendix 10A.

Response:

Figures 10.7-1 and 10.7-2 were inadvertently omitted from appendix 10A of Resource Report 10. Copies of these figures are included as an attachment to this filing.

Attachment

Resource Report 10 Request No. 2 Attachment – Updated Appendix 10A, Aboveground Facility Alternative Figures.

Resource Report 10 – Request No. 3

Provide the results of WBI Energy's coordination with the Federal Aviation Administration regarding a hazard analysis for the use of a temporary crane at the MDU – Kindred Border Station. If the results are unavailable, indicate when they are anticipated and provide the results. Provide the anticipated schedule for airport construction and the potential for overlap with construction at the MDU – Kindred Border Station.

Response:

WBI Energy submitted a revised construction application filing(2022-AGL-11833-OE) and the temporary structure (crane) application filing (2022-AGL-11834-OE) to the Federal Aviation Administration (FAA) on May 23, 2022. Both applications were for the currently proposed MDU-Kindred Border Station, which is slightly east of and further from the current runway and proposed runway expansion than identified in WBI Energy's previous FAA application. The FAA accepted these applications on the same day (May 23, 2022) and a response from the FAA is anticipated in August 2022. WBI Energy will file a copy of the FAA response when it is received.

Construction of the border station will require approximately 12 weeks of on-site work and the crane and other tall temporary equipment is anticipated to be on site for four to six weeks. The current construction period for the Wahpeton Expansion Project is from May through mid-October 2024. As reported in Resource Report 8, the runway expansion is planned to begin in 2027, several years after the border station is constructed.

Resource Report 11 – Request No. 1

Section 11.1.1 states "WBI Energy will monitor population changes in the vicinity of the pipeline over the life of the pipeline system." Clarify the frequency WBI Energy would monitor for population changes.

Response:

WBI Energy will complete a review annually for population changes.

Resource Report 11 – Request No. 2

Section 11.1.1 states "WBI Energy has identified two areas that would qualify as a moderate consequence area (MCA)." Provide mitigation measures WBI Energy would utilize for these MCAs.

Response:

WBI Energy increased pipe wall thickness through these MCA segments. WBI Energy is keeping any sections of line located within an MCA within a Maximum Allowable Operating Pressure (MAOP) of less than 30 percent of the specified minimum yield strength, in accordance with the U.S. Department of Transportation's regulations at 49 CFR 192.710. In addition, pig launchers/receivers will be installed along the new pipeline to allow for the MCA sections to be readily inspected and confirm the integrity of the pipeline through these areas.

Resource Report 11 – Request No. 3

Section 11.2.2 states "The proposed Project will be hydrostatically strength and leak tested throughout its entire length before it is put into service. In this procedure, water or test media is introduced into the pipeline and pressurized to a specified magnitude above the maximum allowable operating pressure for a specified amount of time." Specify the test media that could be used.

Response:

WBI Energy will only use water as "test media" for hydrostatic testing activities.

ENVIRONMENTAL INFORMATION REQUEST RESPONSE ATTACHMENTS

Resource Report 1 Request No. 2 Attachment

Non-jurisdictional Facilities Figures

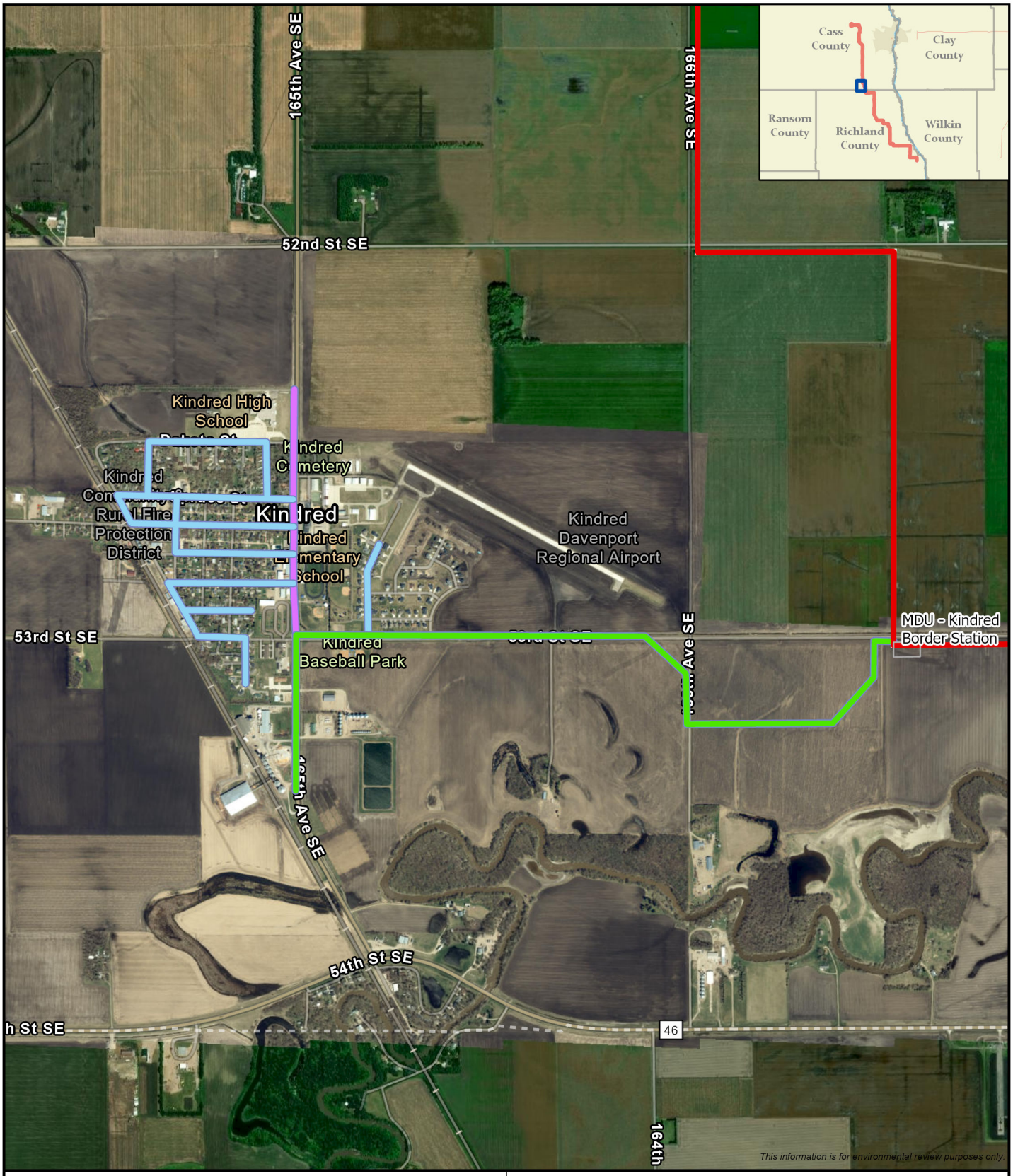
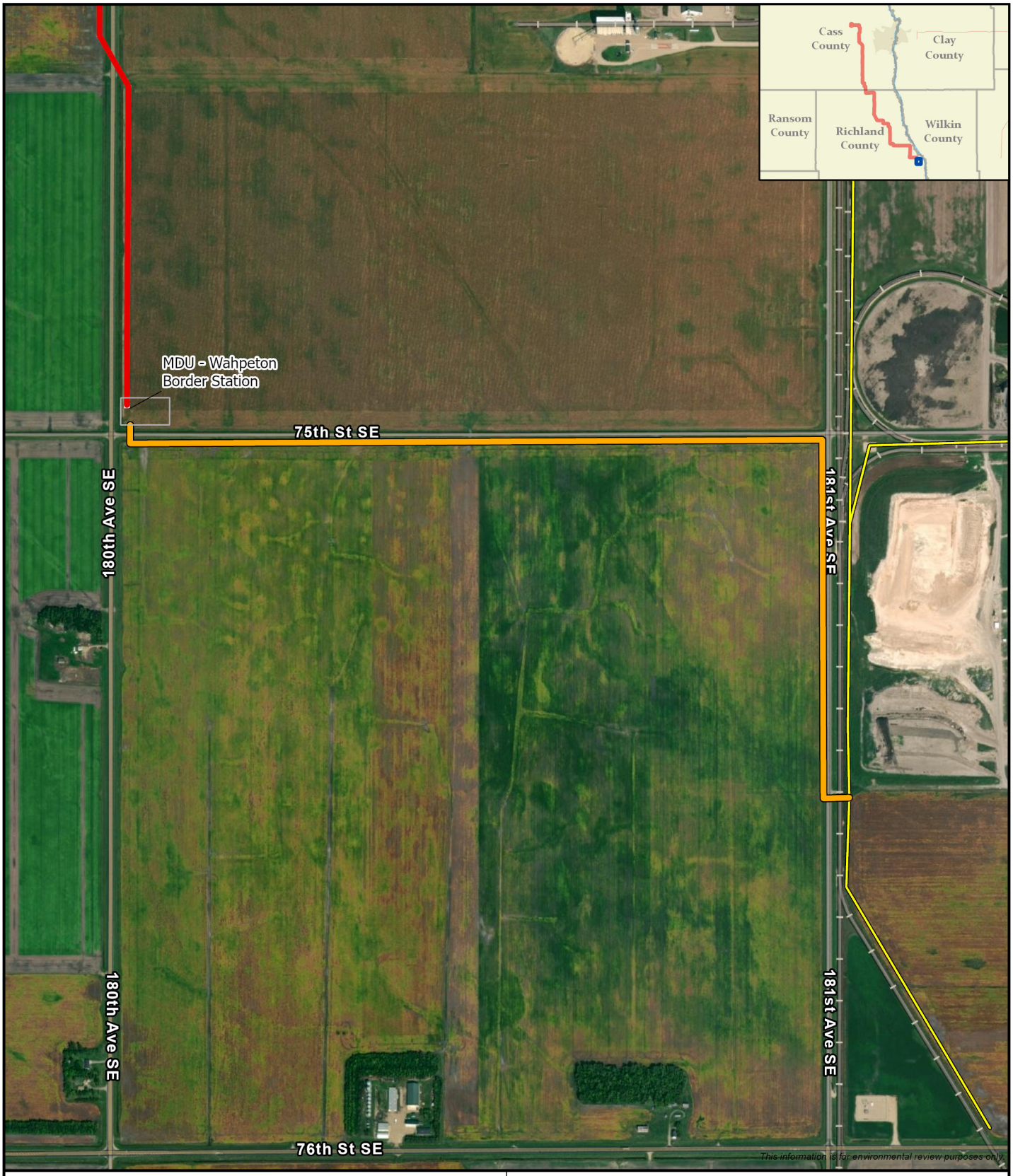


Figure 1.2-1
Non-Jurisdictional Piping
MDU-Kindred Border Station
Wahpeton Expansion Project
WBI Energy Transmission, Inc.
Cass County, North Dakota

ERM

MPLS M:\Clients\V-X\WBI\Mapleton_to_Wahpeton\ArcGIS\M2W_FERC_Filing_Report\M2W_FERC_Filing_Report.aprx | REVISED: 07/19/2022 | SCALE: 1:22,000 DRAWN BY: RJC



Proposed WBI Route
Proposed WBI Border Station
Proposed MDU Line
10-inch HDPE
Existing Distribution (MDU)

1:12,000

0 500 1,000 Feet

Figure 1.2-2
Non-Jurisdictional Piping
MDU-Wahpeton Border Station
Wahpeton Expansion Project
WBI Energy Transmission, Inc.
Richland County, North Dakota

ERM

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DRAWN BY: RJC

Resource Report 1 Request No. 5 Attachment

Revised Appendix 6C, Summary of Guided Bore Locations

Appendix 6C
Wahpeton Expansion Project
Summary of Guided Bore Locations

Milepost	Feature Crossed	Length (feet)	Min Depth (feet)	ATWS setbacks from Wetlands/Waterbodies (west or north bank/east or south bank)	Hours per Day of Drilling	Days of Drilling	Geologic Formation / Deposit Type [1]	Map Unit	Site-Specific Plan (Yes/No)	Water Needed for Drilling Fluid (gal)	Water Needed for Hydrostatic Testing (gal)
0.74	35th St SE	193	6’	N/A	12	2 to 3	Oahe / River Sediment	Qor	N	12,610	1,408
1.23	Maple River	750	28’	316 feet / 255 feet	24	4 to 6	Oahe / River Sediment	Qor	Y	49,003	5,472
1.55	163rd Ave SE	231	6’	N/A	12	2 to 3	Oahe / River Sediment	Qor	N	15,093	1,685
2.67	164th Ave SE	96	6’	N/A	12	1 to 2	Oahe / River Sediment	Qor	N	6,272	700
3.67	165th Ave SE	134	6’	N/A	12	2 to 3	Oahe / River Sediment	Qor	N	8,755	978
3.85	Drainage Ditch	400	10’	46 feet / 86 feet	12	2 to 4	Oahe / River Sediment	Qor	Y	26,135	2,918
4.90	36th St SE[a]	388	13’	133 feet / 130 feet	12	2 to 3	Oahe / River Sediment	Qor	Y	25,351	2,831
5.14	BNSF Railroad[a]	461	17’	150 feet / 134 feet	12	3 to 5	Oahe / River Sediment	Qor	Y	30,121	3,363
5.44	Driveway	96	6’	N/A	12	1 to 2	Oahe / River Sediment	Qor	N	6,272	700
5.94	Interstate 94[a]	766	15	350 feet / 60 feet	24	4 to 6	Oahe / River Sediment	Qor	Y	50,048	5,589
6.48	165th Ave SE	200	6’	N/A	12	2 to 3	Oahe / River Sediment	Qor	N	13,067	1,459
6.64	Drainage Ditch	450	12’	133 feet / 157 feet	12	3 to 5	Oahe / River Sediment	Qor	Y	29,402	3,282
7.19	38th St SE	179	6’	N/A	12	2 to 3	Oahe / River Sediment	Qor	N	11,695	1.306
8.19	39th St SE	96	6’	N/A	12	1 to 2	Oahe / River Sediment	Qor	N	6,272	700
8.36	165th Ave SE	160	6’	N/A	12	2 to 3	Oahe / River Sediment	Qor	N	10.454	1,167
9.24	40th St SE	96	6’	N/A	12	1 to 2	Oahe / River Sediment	Qor	N	6,272	700
10.03	Wetland	322	10’	53 feet / 66 feet	12	2 to 3	Oahe / River Sediment	Qor	Y	21,039	2,349
10.61	41st St SE[b]	225	6’	72 feet / 63 feet	12	2 to 3	Oahe / River Sediment	Qor	N	14,701	1,642
11.67	42nd Ave SE	96	6’	N/A	12	1 to 2	Oahe / River Sediment	Qor	N	6,272	700
12.15	166th Ave SE	156	6’	N/A	12	2 to 3	Coleharbor / Proglacial Lake	Qcof	N	10,193	1,138
12.67	43rd St SE	96	6’	N/A	12	1 to 2	Coleharbor / Proglacial Lake	Qcof	N	6,272	700
13.68	44th St SE[a]	245	6’	8 feet / 8 feet	12	2 to 3	Coleharbor / Proglacial Lake	Qcof	N	16,008	1,787

Appendix 6C
Wahpeton Expansion Project
Summary of Guided Bore Locations

Milepost	Feature Crossed	Length (feet)	Min Depth (feet)	ATWS setbacks from Wetlands/Waterbodies (west or north bank/east or south bank)	Hours per Day of Drilling	Days of Drilling	Geologic Formation / Deposit Type [1]	Map Unit	Site-Specific Plan (Yes/No)	Water Needed for Drilling Fluid (gal)	Water Needed for Hydrostatic Testing (gal)
14.70	45th St SE[a]	320	6’	9 feet / 8 feet	12	2 to 3	Coleharbor / Proglacial Lake	Qcof	N	20,908	2.335
15.73	46th St SE[a]	120	6’	21 feet / 5 feet	12	2 to 3	Coleharbor / Proglacial Lake	Qcof	N	7,840	875
16.71	Red River RR/ 47th St SE[c]	381	12’	N/A	12	3 to 4	Oahe / River Sediment	Qor	Y	24,894	2,780
17.74	48th St SE	180	6’	N/A	12	2 to 3	Oahe / River Sediment	Qor	N	11,761	1,313
18.75	49th St SE/Wetland[a]	350	10’	102feet / 50 feet	12	2 to 3	Oahe / River Sediment	Qor	Y	22,868	2,554
19.75	50th St SE[b]	294	6’	18 feet / 119 feet	12	2 to 3	Oahe / River Sediment	Qor	N	19.209	2,145
20.82	51st St SE	162	6’	N/A	12	2 to 3	Oahe / River Sediment	Qor	N	10,585	1,182
21.82	52nd St SE	96	6’	N/A	12	1 to 2	Oahe / River Sediment	Qor	N	6,272	700
23.33	53rd St SE	143	6’	N/A	12	2 to 3	Oahe / River Sediment	Qor	N	9,343	1,043
24.15	Sheyenne River	750	26’	235 feet / 310 feet	24	4 to 6	Oahe / River Sediment	Qor	Y	49,003	5,472
24.72	County Rd 46	230	6’	N/A	12	2 to 3	Oahe / River Sediment	Qor	N	15,028	1,678
26.64	County Rd 26	104	6’	N/A	12	2 to 3	Oahe / River Sediment	Qor	N	6,795	759
27.65	167th Ave SE[a]	123	6’	16 feet / 70 feet	12	2 to 3	Oahe / River Sediment	Qor	N	8,036	897
28.30	55th St SE[a]	300	11’	58 feet / 104 feet	12	2 to 3	Oahe / River Sediment	Qor	Y	19,601	2,189
29.30	56th St SE[b]	96	6’	50 feet / 6 feet	12	1 to 2	Oahe / River Sediment	Qor	N	6,272	700
30.32	57th St SE	128	6’	N/A	12	2 to 3	Oahe / River Sediment	Qor	N	8,363	934
31.36	58th St SE[a]	413	10’	48 feet / 160 feet	12	3 to 5	Oahe / River Sediment	Qor	Y	26,984	3,013
32.37	59th St SE	111	6’	N/A	12	1 to 2	Oahe / River Sediment	Qor	N	6,272	7,00
33.43	County Rd 2[a]	180	6’	12 feet / 114 feet	12	2 to 3	Oahe / Wind Blown Sediment	QTou	N	11,761	1,313
34.52	61st St SE/Tree Row	200	6’	400 feet / 0 feet	12	2 to 3	Oahe / Wind Blown Sediment	QTou		13,067	1,459

Appendix 6C
Wahpeton Expansion Project
Summary of Guided Bore Locations

Milepost	Feature Crossed	Length (feet)	Min Depth (feet)	ATWS setbacks from Wetlands/Waterbodies (west or north bank/east or south bank)	Hours per Day of Drilling	Days of Drilling	Geologic Formation / Deposit Type [1]	Map Unit	Site-Specific Plan (Yes/No)	Water Needed for Drilling Fluid (gal)	Water Needed for Hydrostatic Testing (gal)
35.63	62nd St SE[a]	111	6’	53 feet / 35 feet	12	2 to 3	Oahe / Wind Blown Sediment	QTou	N	7,252	810
36.14	168th Ave SE[a]	263	6’	0 feet / 106 feet	12	2 to 3	Oahe / Wind Blown Sediment	QTou	N	17,184	1,919
36.76	63rd St SE	108	6’	N/A	12	2 to 3	Oahe / Wind Blown Sediment	QTou	N	7,056	788
37.54	County Rd 1	130	6’	N/A	12	2 to 3	Oahe / River Sediment	Qor	N	8,494	948
38.54	170th Ave SE	96	6’	N/A	12	1 to 2	Oahe / River Sediment	Qor	N	6,272	700
39.87	Irrigation Drainage Unit /Ephemeral Stream	400	11’	190 feet / 200 feet	12	3 to 5	Oahe / River Sediment	Qor	Y	26,135	2,918
40.47	171st Ave SE	111	6’	N/A	12	2 to 3	Oahe / River Sediment	Qor	N	7,252	810
40.97	Interstate 29	500	20’	N/A	24	3 to 5	Oahe / River Sediment	Qor	Y	32,669	3.648
41.03	64th St SE/Unnamed tributary to Wild Rice River[b]	400	11’	5 feet / 53 feet	12	3 to 5	Oahe / River Sediment	Qor	Y	26,135	2,918
41.26	Tree row	300	6’	N/A	12	1 to 2	Oahe / River Sediment	Qor	N	13,067	1,459
42.40	County Rd[a] 4	130	6’	5 feet / 3 feet	12	2 to 3	Oahe / River Sediment	Qor	N	8,494	948
44.41	67th St SE	217	6’	N/A	12	2 to 3	Oahe / River Sediment	Qor	N	14,178	1,583
44.95	Pitcairn Creek	413	10’	68 feet / 93 feet	12	3 to 5	Oahe / River Sediment	Qor	Y	26,984	3.013
45.42	County Rd 6	96	6’	N/A	12	1 to 2	Oahe / River Sediment	Qor	N	6,272	700
46.42	69th St SE	96	6’	N/A	12	1 to 2	Oahe / River Sediment	Qor	N	6,272	700
47.97	Private Driveway	96	6’	N/A	12	1 to 2	Oahe / River Sediment	Qor	N	6,272	700
48.35	70th St SE	96	6’	N/A	12	1 to 2	Oahe / River Sediment	Qor	N	6,272	700
48.89	173rd Ave SE	96	6’	N/A	12	1 to 2	Oahe / River Sediment	Qor	N	6,272	700

Appendix 6C
Wahpeton Expansion Project
Summary of Guided Bore Locations

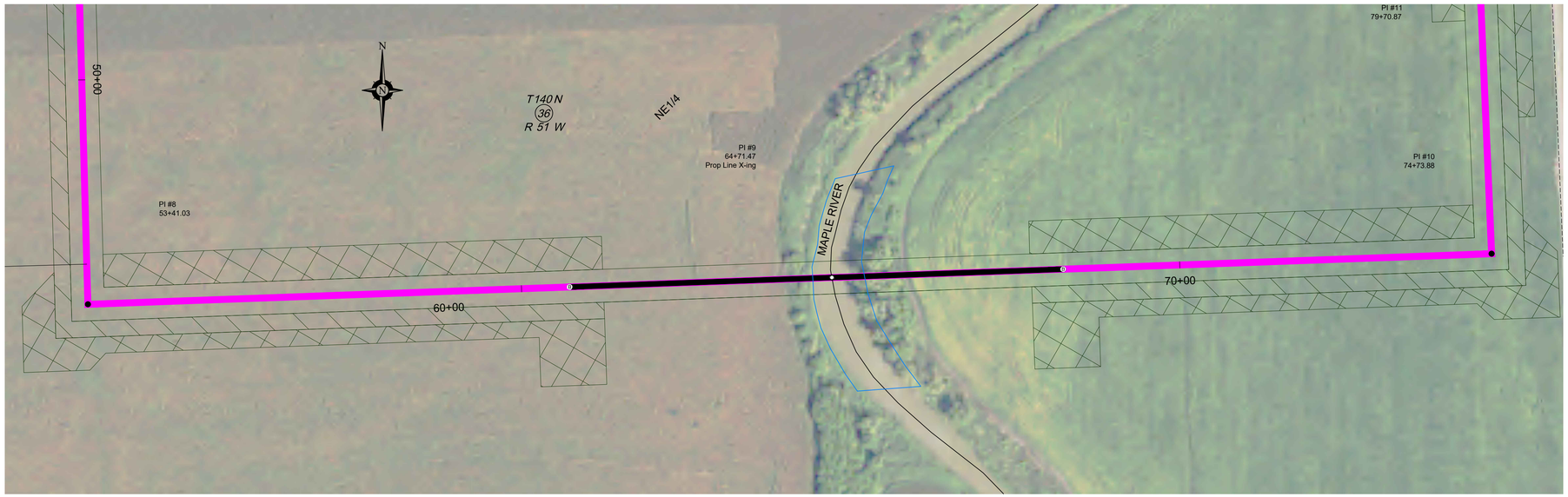
Milepost	Feature Crossed	Length (feet)	Min Depth (feet)	ATWS setbacks from Wetlands/Waterbodies (west or north bank/east or south bank)	Hours per Day of Drilling	Days of Drilling	Geologic Formation / Deposit Type [1]	Map Unit	Site-Specific Plan (Yes/No)	Water Needed for Drilling Fluid (gal)	Water Needed for Hydrostatic Testing (gal)
49.89	174th Ave SE	96	6’	N/A	12	1 to 2	Oahe / River Sediment	Qor	N	6,272	700
51.10	Antelope/Wild Rice River #1-3	2,879	29’ Antelope River & 26-31’ Wild Rice River #1	125 feet / 275 feet	24	12 to 15	Oahe / River Sediment	Qor	Y	188,106	21,005
51.93	County Rd 81[a]	242	6’	144 feet / 30 feet	12	2 to 3	Coleharbor / Proglacial Lake	Qcof	N	15,812	1,766
52.93	177thAve SE	96	6’	N/A	12	1 to 2	Oahe / River Sediment	Qor	N	6,272	700
54.40	71st St SE	130	6’	N/A	12	2 to 3	Oahe / River Sediment	Qor	N	8,494	948
55.41	72nd St SE[b]	96	6’	5 feet / 55 feet	12	1 to 2	Coleharbor / Glacial	Qcew	N	6,272	700
56.41	73rd St SE[b]	110	6’	3 feet / 55 feet	12	2 to 3	Coleharbor / Glacial	Qcew	N	7,187	803
57.00	Wild Rice River #4	630	25’	210 feet / 225 feet	12	4 to 6	Oahe / River Sediment	Qor	Y	41,163	4.596
57.49	74th St SE	96	6’	N/A	12	1 to 2	Oahe / River Sediment	Qor	N	6,272	700
57.57	Wild Rice River #5	640	27’	62 feet / 265 feet	24	4 to 6	Oahe / River Sediment	Qor	Y	41,816	4,669
57.72	178th Ave SE	96	6’	N/A	12	1 to 2	Oahe / River Sediment	Qor	N	6,272	700
58.65	179th Ave SE[b]	148	6’	58 feet / 4 feet	12	2 to 3	Coleharbor / Glacial	Qcew	N	9,670	1,080
60.10	180th Ave SE[a]	257	6’	0 feet/ 0 Feet	12	2 to 3	Coleharbor / Glacial	Qcew	N	16,792	1,875

[a] This guided bore also crosses one or more wetlands.
[b] This guided bore also crosses a waterbody.
[c] The bore at the Red River Railroad has been extended to include 47th Street. The water for the 47th Street bore is included in the Red River bore numbers.

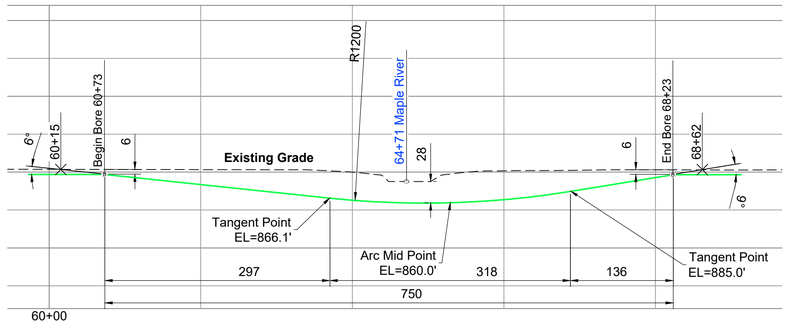
Notes
[1] North Dakota Geological Survey (2021b)

Resource Report 1 Request No. 5 Attachment

Plan and Profile Drawings for Perennial Waterbody and Interstate Crossings



PLAN VIEW



Bore Survey Maple River

Horiz. Bore Length 750'
Actual Bore Length 754'
Radius 1200'
See Alignment Sheet 1

Ref. Dwgs. Aerial Image: USDA-FSA 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
- Fence Line
- UG Fiber Optic
- UG Electric
- Overhead Elec
- Existing Pipeline
- Dirt Road

SUMMARY of MATERIALS

Mark	Quantity	Description
2	754	12.75" OD, .312" WT, X65, FBE w/ARO, TRL

REVISIONS

No.	Date	Description

WAHPETON EXPANSION PROJECT

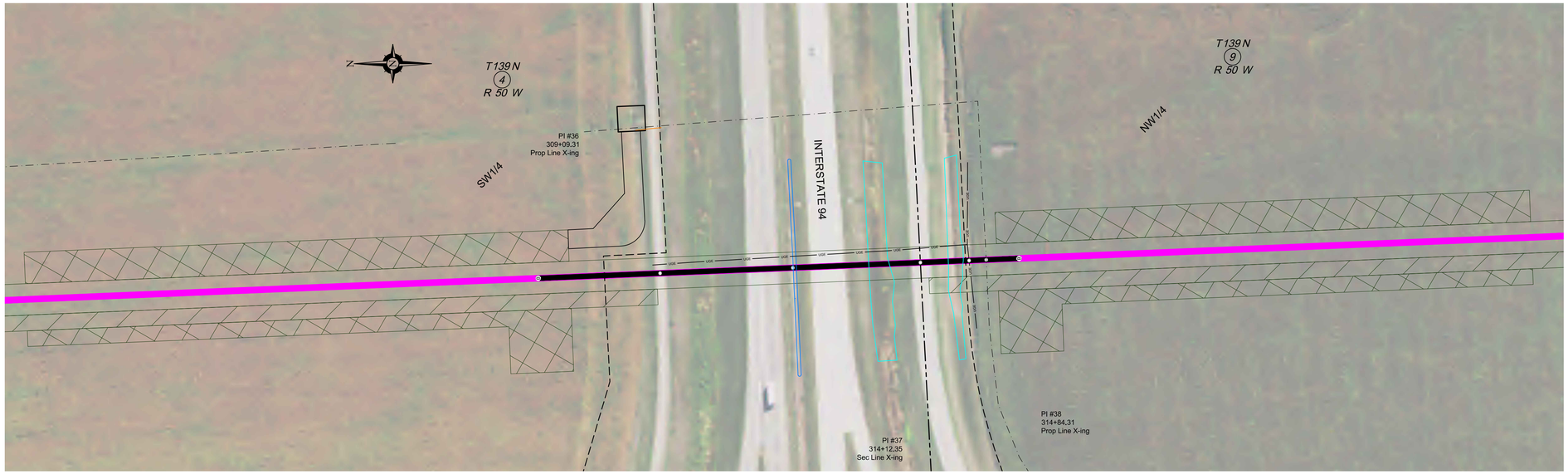
WBI ENERGY TRANSMISSION
An MDU Resources Group company

100 0 100 200
scale 1" = 100' - 22 x 34 feet
1" = 200' - 11 x 17

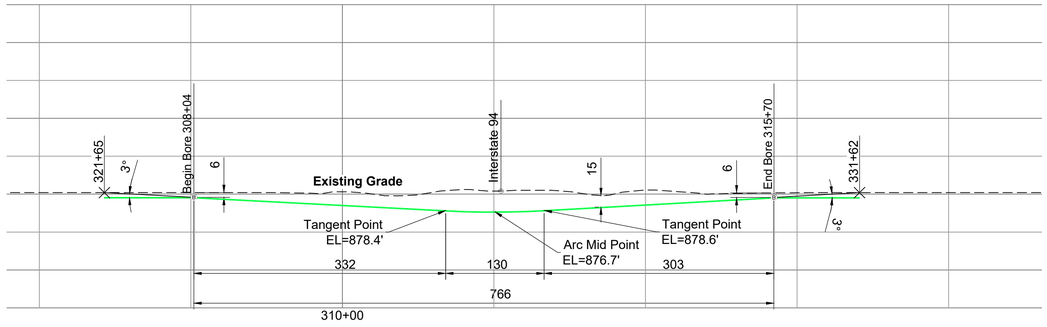
1" = 100' HORIZ.
1" = 100' VERT.

Sec. 36, T140N, R51W,
5th P.M. Cass Co., North Dakota

MAPLE RIVER | R1



PLAN VIEW



Bore Survey Interstate 94

Horiz. Bore Length 766'
Actual Bore Length 767'
Radius 1200'
See Alignment Sheet 3

Ref. Dwgs. Aerial Image: USDA-FSA 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
- Fence Line
- UG Fiber Optic
- UG Electric
- Overhead Elec
- Existing Pipeline
- Dirt Road

SUMMARY of MATERIALS

Mark	Quantity	Description
2	767	12.75" OD, .500" WT, X65, FBE w/ARO, TRL

REVISIONS

No.	Date	Description

WAHPETON EXPANSION PROJECT

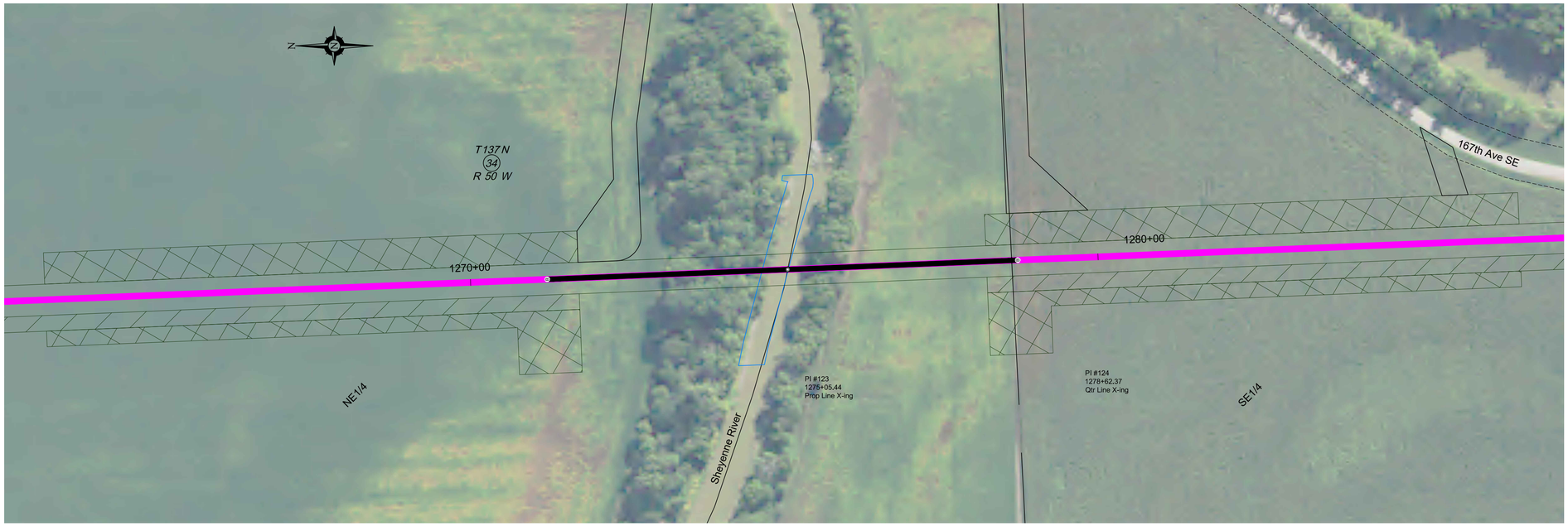
100 0 100 200
scale 1" = 100' - 22 x 34 feet
1" = 200' - 11 x 17

1" = 100' HORIZ.
1" = 100' VERT.

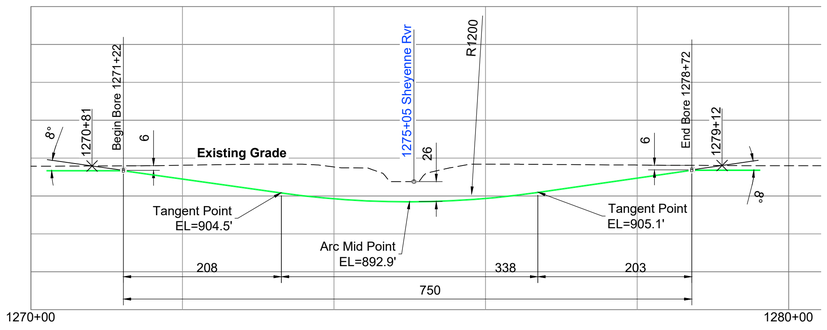
WBI ENERGY TRANSMISSION
An MDU Resources Group company

Sec. 4, 9, T139N, R50W,
5th P.M. Cass Co., North Dakota

INTERSTATE 94 R1



PLAN VIEW



Bore Survey Sheyenne River

Horiz. Bore Length 750'
Actual Bore Length 755'
Radius 1200'
See Alignment Sheet 12

Ref. Dwgs. Aerial Image: USDA-FSA 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
- Fence Line
- UG Fiber Optic
- UG Electric
- Overhead Elec
- Existing Pipeline
- Dirt Road

SUMMARY of MATERIALS

Mark	Quantity	Description
2	755	12.75" OD, .312" WT, X65, FBE w/ARO, TRL

REVISIONS

No.	Date	Description

WAHPETON EXPANSION PROJECT

100 0 100 200
scale 1" = 100' - 22 x 34 feet
1" = 200' - 11 x 17

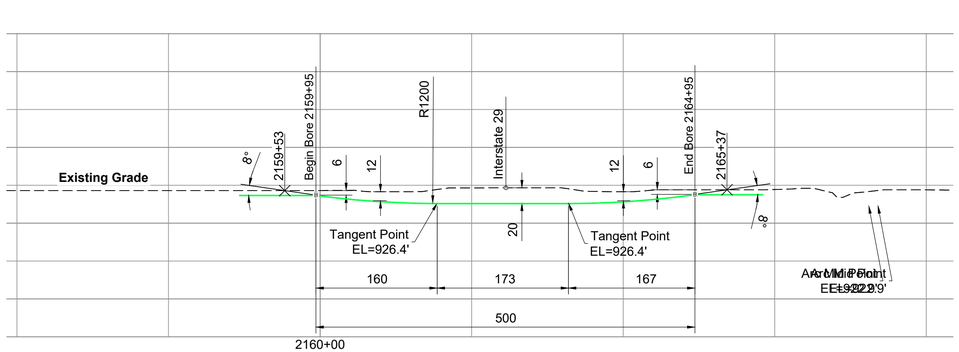
1" = 100' HORIZ.
1" = 100' VERT.

WBI ENERGY TRANSMISSION
An MDU Resources Group company

Sec. 34, T137N, R50W,
5th P.M. Cass Co., North Dakota

Sheyenne River | R1

PLAN VIEW



Bore Survey Interstate 29

Horiz. Bore Length 500'
Actual Bore Length 501'
Radius 1200'
See Alignment Sheet 20

Ref. Dwgs. *Aerial Image: USDA-FSA 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*
- *Fence Line*
- *UG Fiber Optic*
- *UG Electric*
- *Overhead Elec*
- *Existing Pipeline*
- *Dirt Road*

SUMMARY of MATERIALS

Mark	Quantity	Description
2	501	*12.75" OD, .500" WT, X65, FBE w/ARO, TRL*

REVISIONS

No.	Date	Description

WAHPETON EXPANSION PROJECT

100 0 100 200
scale 1" = 100' - 22 x 34 feet
1" = 200' - 11 x 17

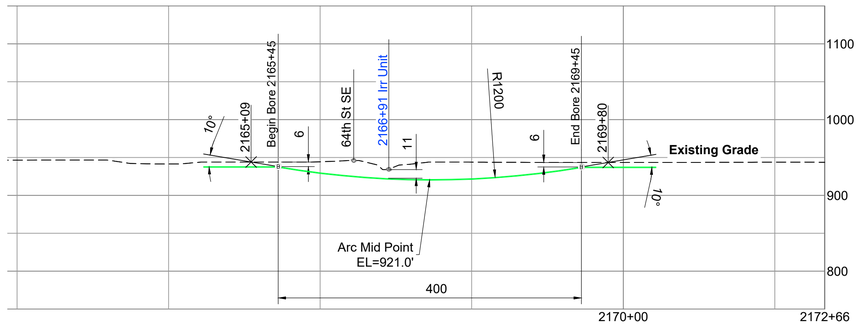
1" = 100' HORIZ.
1" = 100' VERT.

WBI ENERGY TRANSMISSION
An MDU Resources Group company

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

INTERSTATE 29 | *R1*

PLAN VIEW



Bore Survey 64th-Drain

Horiz. Bore Length 400'
Actual Bore Length 402'
Radius 1200'
See Alignment Sheet 20

Ref. Dwgs. Aerial Image: USDA-FSA 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
- Fence Line
- UG Fiber Optic
- UG Electric
- Overhead Elec
- Existing Pipeline
- Dirt Road

SUMMARY of MATERIALS

Mark	Quantity	Description
2	501	12.75" OD, .312" WT, X65, FBE w/ARO, TRL

REVISIONS

No.	Date	Description

WAHPETON EXPANSION PROJECT

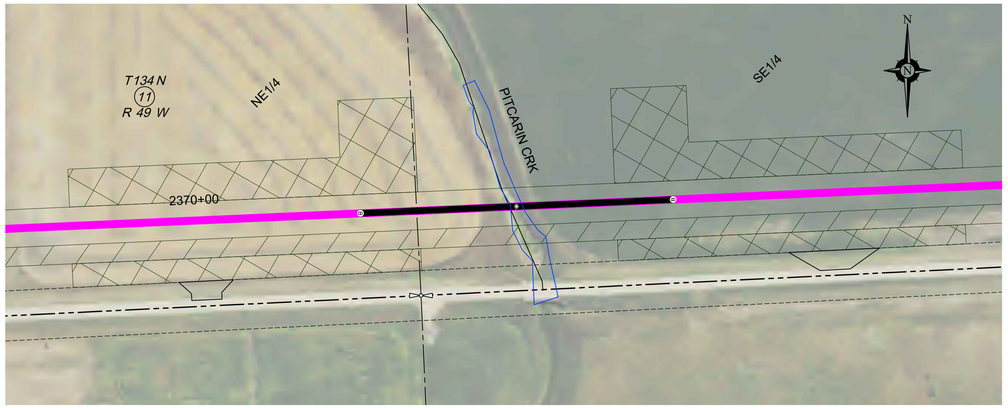
100 0 100 200
scale 1" = 100' - 22 x 34 feet
1" = 200' - 11 x 17

1" = 100' HORIZ.
1" = 100' VERT.

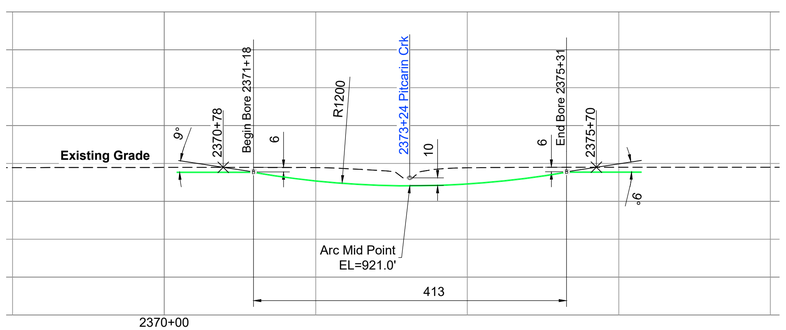
WBI ENERGY TRANSMISSION
An MDU Resources Group company

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

64th-Drain | R1



PLAN VIEW



Bore Survey Pitcarin Crk

Horiz. Bore Length 413'
Actual Bore Length 415'
Radius 1200'
See Alignment Sheet 22

Ref. Dwgs. Aerial Image: USDA-FSA 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
- Fence Line
- UG Fiber Optic
- UG Electric
- Overhead Elec
- Existing Pipeline
- Dirt Road

SUMMARY of MATERIALS

Mark	Quantity	Description
2	501	12.75" OD, .312" WT, X65, FBE w/ARO, TRL

REVISIONS

No.	Date	Description

WAHPETON EXPANSION PROJECT

100 0 100 200
scale 1" = 100' - 22 x 34 feet
1" = 200' - 11 x 17

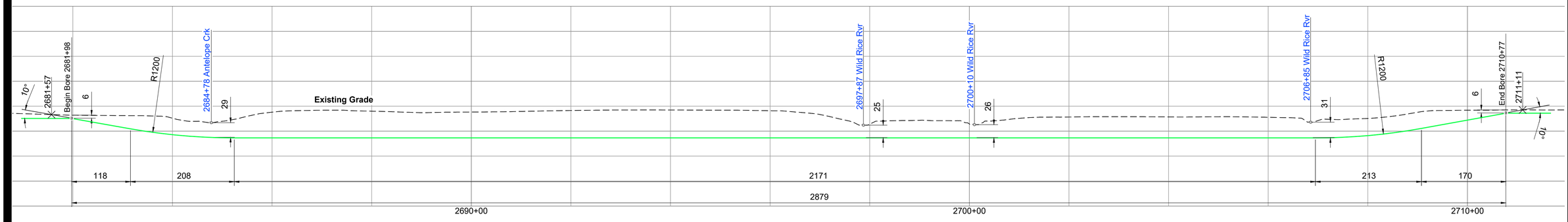
1" = 100' HORIZ.
1" = 100' VERT.

WBI ENERGY TRANSMISSION
An MDU Resources Group company

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

Pitcarin Crk R1

PLAN VIEW



Bore Survey Antelope Crk - Wild Rice River

Horiz. Bore Length 2879'
Actual Bore Length 2886'
Radius 1200'
See Alignment Sheet 25

Ref. Dwgs. Aerial Image: USDA-FSA 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
- Fence Line
- UG Fiber Optic
- UG Electric
- Overhead Elec
- Existing Pipeline
- Dirt Road

SUMMARY of MATERIALS

Mark	Quantity	Description
2	2886	12.75" OD, .312" WT, X65, FBE w/ARO, TRL

REVISIONS

No.	Date	Description

WAHPETON EXPANSION PROJECT

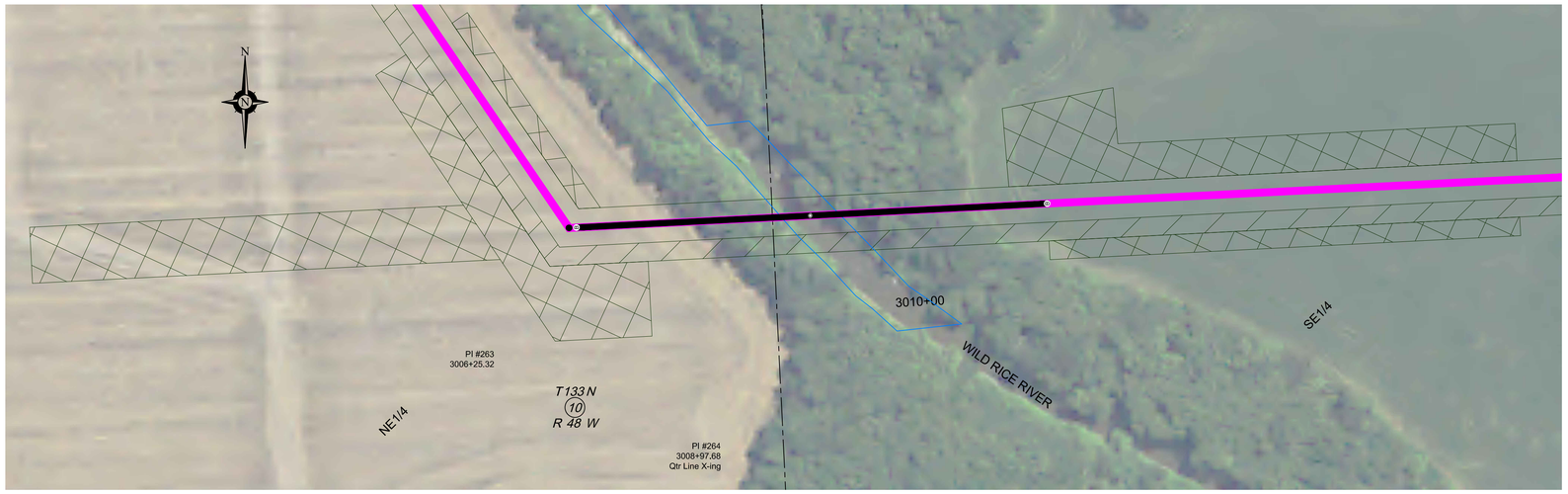
100 0 100 200
scale 1" = 100' - 22 x 34 feet
1" = 200' - 11 x 17

1" = 100' HORIZ.
1" = 100' VERT.

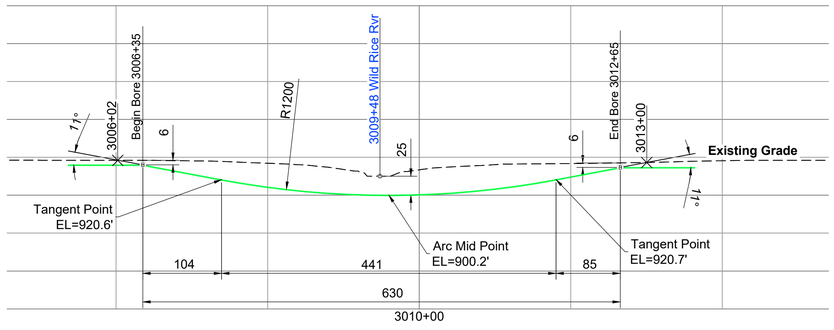
WBI ENERGY TRANSMISSION
An MDU Resources Group company

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

Antelope Creek - Wild Rice River | R1



PLAN VIEW



Bore Survey Wild Rice River-1

Horiz. Bore Length 630'
Actual Bore Length 636'
Radius 1200'
See Alignment Sheet 28

Ref. Dwgs. Aerial Image: USDA-FSA 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
- Fence Line
- UG Fiber Optic
- UG Electric
- Overhead Elec
- Existing Pipeline
- Dirt Road

SUMMARY of MATERIALS

Mark	Quantity	Description
2	636	12.75" OD, .312" WT, X65, FBE w/ARO, TRL

REVISIONS

No.	Date	Description

WAHPETON EXPANSION PROJECT

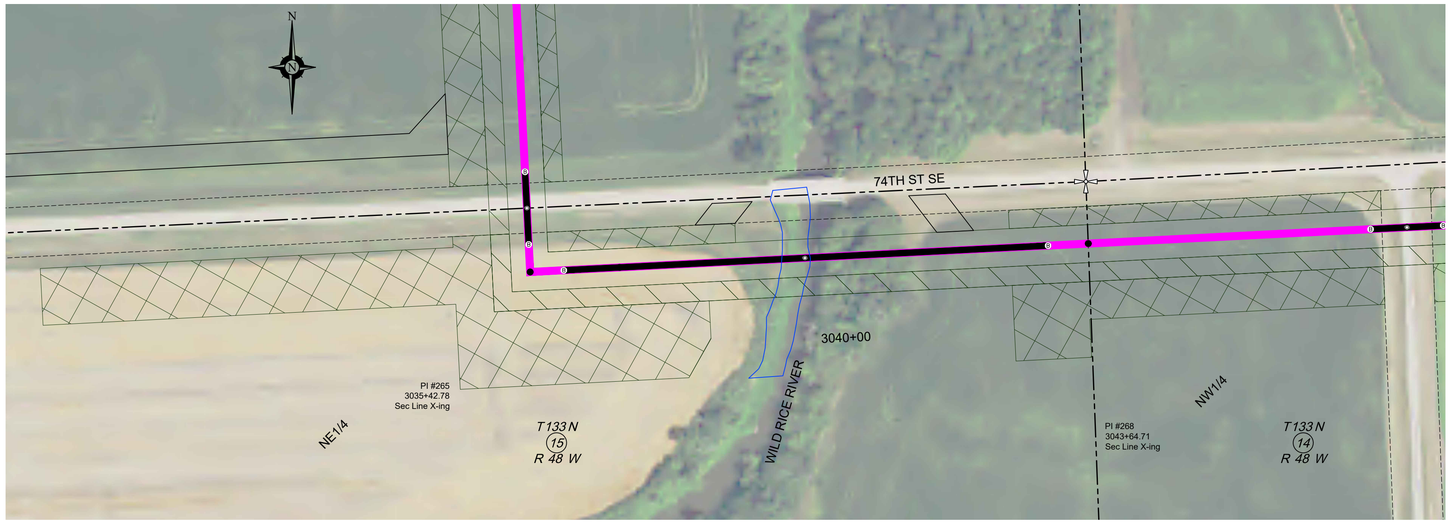
100 0 100 200
scale 1" = 100' - 22 x 34 feet
1" = 200' - 11 x 17

1" = 100' HORIZ.
1" = 100' VERT.

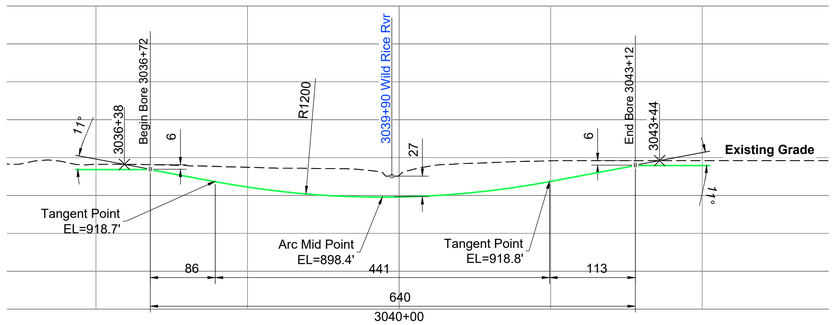
WBI ENERGY TRANSMISSION
An MDU Resources Group company

Sec. 10, T133N, R48W,
5th P.M. Richland Co., North Dakota

WILD RICE RIVER-1 R1



PLAN VIEW



Bore Survey Wild Rice River-2

Horiz. Bore Length 640'
Actual Bore Length 646'
Radius 1200'
See Alignment Sheet 28

Ref. Dwgs. Aerial Image: USDA-FSA 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
- Fence Line
- UG Fiber Optic
- UG Electric
- Overhead Elec
- Existing Pipeline
- Dirt Road

SUMMARY of MATERIALS

Mark	Quantity	Description
2	646	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

100 0 100 200
scale 1" = 100' - 22 x 34 feet
1" = 200' - 11 x 17

1" = 100' HORIZ.
1" = 100' VERT.

Sec. 14, 15, T133N, R48W,
5th P.M. Richland Co., North Dakota

WILD RICE RIVER-2 R1

Resource Report 1 Request No. 12 Attachment

Updated Table 1.8-1 Environmental Permits, Approvals, and Consultations

TABLE 1.8-1
Wahpeton Expansion Project
Environmental Permits, Approvals, and Consultations

Agency	Permit/Approval/Consultation	Anticipated Submittal Date	Anticipated Approval Date
Federal			
FERC	Certificate under Section 7(c) of the Natural Gas Act	May 27,2022*	July 2023
United States Army Corps of Engineers—Omaha District and	Section 404 permit for discharges of dredged or fill material into waters of the United States, including jurisdictional wetlands via Nationwide Permit 12.	May 31, 2022*	November 2022
United States Fish and Wildlife Service—Region 6—North Dakota Field Office and United States Fish and Wildlife Service—Valley City and Tewaukon Wetland Management District	Informal consultations for impacts on federally listed threatened and endangered species and critical habitat under Section 7 of the Endangered Species Act, the Migratory Bird Treaty Act, the Bald and Gold Eagle Protection Act, and the Fish and Wildlife Coordination Act; consultation for impacts on federal conservation easements for grasslands and wetlands	May 27, 2022*	June 29, 2022*
United States Department of Agriculture, Natural Resources Conservation Service—North Dakota	Consultations regarding erosion and sedimentation controls and seed mixes and Agricultural Conservation Easement Program	January 2022*	February 2022*
Federal Aviation Agency	Hazard Determination—MDU—Kindred Border Station site operation and temporary construction crane usage	Revised Application May 23, 2022*	August 2022
North Dakota			
North Dakota Department of Environmental Quality, Division of Water Quality	General Permit for Construction Stormwater Discharge under the National Pollutant Discharge Elimination System	February 2024	April 2024
	General Permit for Construction Dewatering and Discharge of Hydrostatic Test Water under the National Pollutant Discharge Elimination System	February 2024	April 2024
North Dakota State Water Commission	Navigable Water Crossing Permit under North Dakota Century Code Chapter 61–33 (Sovereign Lands)	October 2023	February 2024
	Temporary Water Permit—Water appropriation permit for withdrawals associated with hydrostatic test water and drilling mud		
North Dakota Department of Game and Fish	Consultation for impacts on fisheries and wildlife	May 2022	June 2022
	Approval to use water from designated waters of the state known to be infested with aquatic nuisance species	February 2024	March 2024
North Dakota Parks and Recreation Department	Consultation under the North Dakota Natural Heritage Program	September 2021*	January 2022*
State Historical Society of North Dakota	Consultation for impacts on historic properties under Section 106 of the National Historic Preservation Act	August 2022	December 2022
North Dakota Department of Transportation	Utility Crossing permits for state highway right-of-way	January 2024	March 2024
Local and County			
Cass and Richland Counties	County Road, Section Line, Building and above ground facilities, and Legal Drain Crossing Permits	January 2024	March 2024

TABLE 1.8-1
Wahpeton Expansion Project
Environmental Permits, Approvals, and Consultations

Agency	Permit/Approval/Consultation	Anticipated Submittal Date	Anticipated Approval Date
BNSF Railway Company	Railroad Crossing Permits	January 2024	March 2024
Red River Valley and Western Railroad	Railroad Crossing Permits	January 2024	March 2024
Cass County—Mapleton Township	Conditional Use Permit and Floodplain Permit	January 2024	April 2024
Cass County—Normanna Township	Building Permit and Floodplain Permit	January 2024	April 2024

* - Actual submittal or received date

Resource Report 1 Request No. 13 Attachment

Updated Appendix 1B, Alignment Sheets (Filed separately due to FERC eFiling file size limitations)

Resource Report 2 Request No. 9 Attachment

Updated *Plan for Unanticipated Discovery of Contaminated Environmental Media*

WBI ENERGY TRANSMISSION, INC.

Wahpeton Expansion Project

Appendix 2A

Plan for Unanticipated Discovery of Contaminated Environmental Media

Draft

Docket No.
CP22-466-000

July 2022

WBI ENERGY TRANSMISSION, INC.
WAHPETON EXPANSION PROJECT
APPENDIX 2A
PLAN FOR UNANTICIPATED DISCOVERY OF CONTAMINATED ENVIRONMENTAL MEDIA

TABLE OF CONTENTS

ACRONYMS AND ABBREVIATIONS

EI	Environmental Inspector
Project	Wahpeton Expansion Project
WBI Energy	WBI Energy Transmission, Inc.

1.0 INTRODUCTION

WBI Energy Transmission, Inc. (WBI Energy) has developed this Plan for Unanticipated Discovery of Contaminated Environmental Media for its proposed Wahpeton Expansion Project (Project). WBI Energy recognizes that there is the potential to encounter contaminated soil or sediment during construction activities associated with the Project. This plan describes the steps that WBI Energy and its contractors will implement in the unanticipated event that contaminated environmental media is encountered during construction.

2.0 IDENTIFICATION OF CONTAMINATED MEDIA AND INITIAL RESPONSE

During Project activities, construction personnel and WBI Energy's Environmental Inspectors (EI) will observe work areas for signs of potential contamination such as the following:

- discoloration of soils;
- chemical-like odors from soils or water;
- oily sheens on soils or water;
- buried drums or other waste containers; and
- buried waste such as garbage and debris.

If signs of contamination are encountered, the contractors will stop work in the vicinity of the suspected contamination, restrict access to the suspected contamination site, and immediately notify the EI and Spill Coordinator of the find. The EI will contact the WBI Energy Designated Representative as soon as possible after discovery of the site. The WBI Energy Designated Representative or Land Agent will inform the landowner of the site.

Environmental Inspector:	To Be Determined
Phone:	To Be Determined
Spill Coordinator:	To Be Determined
Phone:	To Be Determined
WBI Energy Designated Representative:	To Be Determined
Office Phone:	To Be Determined
Cell Phone:	To Be Determined
Land Agent:	To Be Determined
Phone:	To Be Determined
FERC Representative	David Hanobic
Phone:	(202) 502-8312

3.0 CONTAMINATED MEDIA CONTAINMENT, TESTING, AND NOTIFICATION PROCEDURES

The EI and contractor will initiate measures to avoid the spread of contaminants until the nature and type of contamination is properly evaluated. Work in the area will not resume until an assessment of the types and levels of contaminants have been determined by qualified personnel. Measures to avoid the spread of potential contamination will vary depending on the situation. The following measures will be implemented as appropriate:

- If potentially contaminated soil or groundwater is exposed during excavation, work will stop in the area of contamination and the EI will take measures (if it is safe to do so) to flag the area.

- If potentially contaminated soil has been excavated and stockpiled, it may be transferred to a bermed area lined with a sheet of impervious plastic, with a second sheet of impervious plastic placed over the new stockpile and berm. These measures will be implemented to prevent surface water or precipitation from carrying contaminants off the site. The contaminated media will not be removed from the site unless approved to do so by the EI or by WBI Energy.

- If groundwater is draining from the sides of the excavation and standing in the trench, temporary trench plugs may be installed to avoid migration of the groundwater and the spread of contaminants through water.

- In the unlikely event that groundwater is to rise above the surface of the trench berms or spill control booms will be placed around the open portion of the trench to contain the water and prevent the spread of contaminants.

- All potentially contaminated media will be handled in accordance with all federal, state, and local regulations.

The potential contaminant will be characterized concurrently with the installation of containment measures. Representative samples of soils or groundwater will be collected and analyzed as necessary. Appropriate tests or analyses will be conducted by a qualified laboratory based on field observations, the suspected nature of the contaminants, and any recommendations from qualified environmental contractors and regulatory agencies if consulted. Laboratory analyses may include: total petroleum hydrocarbons, oil & grease, volatile hydrocarbons, semi-volatile hydrocarbons, metals, polychlorinated biphenyls, and pH.

Depending on the nature of the contamination, WBI Energy will notify the appropriate federal, state, and local regulatory agencies. Appropriate agencies include, but may not be limited to, the following:

- North Dakota Department of Health—Spill Investigation Program
  Bill Suess, Spill Investigation Program Manager
  Phone: 1-701-328-5216
  Email: bsuess@nd.gov

- The National Response Center (Washington, D.C.)
  Phone: 1-800-424-8802 (24 hours)

4.0 AVOIDANCE OR RESPONSE PLANS

If the contaminant identified is found to be a health or safety hazard, the area of contamination will be evacuated and secured until trained personnel are on-site and mitigation measures are implemented to allow the safe installation of Project facilities. Alternatively, reroutes or new aboveground facility sites may be considered to avoid the area of contamination. Applicable permits and regulatory approvals will be obtained prior to proceeding with a reroute.

If the contaminant does not pose a health or safety concern and will not otherwise interfere with the Project, a plan for completing construction within the contaminated area will be prepared. Test pits or borings may be excavated within the right-of-way or aboveground facility site to assess the extent of the contamination. Depending on the nature and extent of the contaminated media, site-specific measures will be identified to complete construction across the contaminated area. These measures may include the following:

- storing excavated soil on a sheet of impervious plastic;
- avoiding water withdrawals from the trench;
- removing and properly disposing of contaminated media;
- replacing contaminated soil with clean backfill; and/or
- implementing staged withdrawal and disposal of standing trench water during backfilling to avoid overflow and runoff.

Contaminated soil will not be placed back in the trench unless approved in writing by the appropriate regulatory agency and by WBI Energy. Special construction plans developed for areas of contamination will be in compliance with environmental regulations and approval of the plans by appropriate jurisdictional agencies will be obtained prior to implementation.

Resource Report 3 Request No. 6 Attachment

Updated Appendix 3B, *Aquatic Nuisance Species Prevention Plan*

WBI ENERGY TRANSMISSION, INC.

Wahpeton Expansion Project

Appendix 3B

Aquatic Nuisance Species Prevention Plan

Final

Docket No.
CP22-466-000

July 2022

WAHPETON EXPANSION PROJECT
WBI ENERGY TRANSMISSION, INC.
DRAFT AQUATIC NUISANCE SPECIES PREVENTION PLAN

TABLE OF CONTENTS

ACRONYMS AND ABBREVIATIONS

ANS	aquatic nuisance species
NDGFD	North Dakota Game and Fish Department
Project	Wahpeton Expansion Project
WBI Energy	WBI Energy Transmission, Inc.

1.0 AQUATIC NUISANCE SPECIES

WBI Energy Transmission, Inc. (WBI Energy) anticipates the crossing of multiple waterbodies during the construction of the Wahpeton Expansion Project (Project). During waterbody crossings, WBI Energy will implement the control measures described in this document to prevent the spread of aquatic nuisance species (ANS) such as zebra mussels (*Dreissena polymorpha*).

The zebra mussel is an invasive, fingernail-sized mollusk that is native to fresh waters in Eurasia. The species attaches in great numbers to solid surfaces such as rocks, boat docks, and bridge pilings, and can clog pipes such as those used for municipal or industrial water supply systems. Free-swimming larvae in water are hard to detect and can be transported into other waterbodies if water is not drained properly.[1] Zebra mussels and other ANS have been documented to reduce overall species diversity, increase benthification, degrade water quality, increase detritus buildup, and change sediment chemistry.[2]

The North Dakota Game and Fish Department (NDGFD) classifies ANS species into three categories depending on the severity of the threat posed by each species. Zebra mussel infestations are considered a Class 1: Prohibited ANS. Class 1 ANS are present in few waterbodies throughout the state but have the high potential for causing ecological and economic harm when invading and establishing themselves in new waterbodies. Additionally, there are no known management strategies to control the zebra mussel without also harming other non-ANS species.[2]

WBI Energy consulted with NDGFD to identify waterbodies what will be crossed by the Project that should be subject to this ANS Plan. Project waterbody crossings of particular concern are the Sheyenne and Red Rivers and their tributaries, as these rivers and a majority of their tributaries are documented as waterbodies with zebra mussel infestation as of July 2021[3]. All perennial waterbodies crossed by the Project are considered infested with zebra mussels by the NDGFD. Guided bore crossing methods are planned for each of the waterbodies, and no in-water crossing by any equipment is anticipated at those locations.

At other waterbodies, WBI Energy may utilize a variety of waterbody crossing methods depending on permits and what method best fits the circumstances at each crossing. Potential methods may include open cut, guided bore, flume, or dam and pump. In each case and for each method, WBI Energy will adhere to measures specified in the Federal Energy Regulatory Commission's *Wetland and Waterbody Construction and Mitigation Procedures* and other plans as well as any additional requirements that may be specified in federal or state waterbody crossing permits.

[1] North Dakota Game and Fish. 2015. Some ANS of Immediate Concern Brochure. Accessed December 2021. Available online: https://gf.nd.gov/gnf/fishing/docs/ans-brochure.pdf.

[2] North Dakota Game and Fish. 2018. North Dakota Aquatic Nuisance Species Management Plan. North Dakota Aquatic Invasive Species Committee, Bismarck, North Dakota. Accessed December 2021. Available online: https://gf.nd.gov/gnf/fishing/docs/ndansmgmtplan.pdf.

[3] North Dakota Game and Fish. 2021. ANS Infested Waters in North Dakota. Accessed December 2021. Available online: https://gf.nd.gov/ans/infested-waters.

2.0 REGULATORY SETTING

2.1 NORTH DAKOTA RULES AND REGULATIONS

In North Dakota, an ANS is defined as any nonindigenous, obligate aquatic species of plant or animal which is injurious to native and desirable aquatic species or which has a negative effect on aquatic habitats, environment, or the economy of the state.[4]

The North Dakota ANS Regulations (North Dakota Administrative Code Title 30-03-06)[5] require:

- Any recreational or commercial equipment used in fishing, hunting, watercrafting, or construction shall be free of prohibited or regulated ANS and aquatic vegetation upon leaving any waterbody or while in transit. All equipment is subject to inspection by a duly appointed agent of the director.

- All water must be drained from all watercraft and recreational, commercial, and construction equipment when out of water or upon entering the state.

- Water may not be transported away from waters of the state designated as infested with Class 1 prohibited ANS unless permitted by the state water commission or otherwise authorized.

- Additionally, the North Dakota ANS regulations (North Dakota Century Code Title 20.1-17-06) states that a person may not possess import, purchase, sell, propagate, transport, or introduce a prohibited ANS except:

1. under a permit issued by the director;

2. when being transported to the department, or another destination as the director may direct, in a sealed container for purposes of identifying the species or reporting the presence of the species;

3. when being transported for disposal as part of a harvest or control activity under a permit issued by the director or when being transported as specified by the director;

4. when the specimen has been lawfully acquired dead and, in the case of plant species, all seeds are removed or are otherwise secured in a sealed container;

5. when being removed from watercraft or equipment, or caught while angling, and immediately returned to the water from which it came; or

6. as the director otherwise may prescribe by rule.

[4] North Dakota Aquatic Nuisance Species Management Plan. 2018. Available online: https://gf.nd.gov/gnf/fishing/docs/ndansmgmtplan.pdf.

[5] North Dakota Administrative Code. ND. North Dakota Administrative Code Title 30-03-06. Accessed December 2021. Available online: https://www.legis.nd.gov/information/acdata/pdf/30-03-06.pdf.

The NDGFD also recommends the following to clean, drain, and dry equipment[6]:

7. Clean—Inspect and remove any plants or animals that may be present prior to leaving the immediate access area. If possible, also remove excessive mud that may harbor seeds or organisms. It is illegal to have ANS or vegetation on your equipment when leaving a waterbody or when entering North Dakota. Removed weeds can be discarded along the shore, and/or in trash receptacles.

8. Drain—Remove all water from equipment prior to leaving the immediate access area to prevent the transportation of microscopic organisms. Leave drain plugs out and draining devices open during transport into or within North Dakota

9. Dry—Dry equipment completely (drying times vary by season and daily conditions), set equipment in frozen conditions for 48 hours, or decontaminated before using in waters again.

2.2 AGENCY INPUT

In a letter to WBI Energy regarding the Project, the NDGFD specified that state law requires the contractor, including all subcontractors involved in the Project, take appropriate precautions to prevent the introduction or movement of ANS within the state. And as such, the contractor should provide the department a reasonable opportunity to inspect any equipment prior to these items being launched or placed into waters of the state.[7]

Additionally the NDGFD ANS coordinator specified that the Project would need to acquire an ANS transport permit that would exempt the Project from regulations under North Dakota Administrative Code Title 30-03-06 and North Dakota Century Code 20.1-17-06 (see Resource Report 3,appendix 3A). WBI Energy will acquire this permit prior to construction to ensure compliance under North Dakota state law.

3.0 MITIGITATION MEASURES AND BEST MANAGEMENT PRACTICES

WBI Energy will implement the best management practices described below to prevent the spread of ANS.

1. Equipment will satisfy the North Dakota ANS Regulations and, when applicable, the recommended clean, drain, and dry procedures prior to entering the Project construction right-of-way.

2. WBI Energy will be informed by the equipment owner/operator if equipment will enter perennial waterbodies crossed by the Project considered infested with zebra mussels. This will be done with sufficient time for WBI Energy to notify the NDGFD no less than 2 weeks prior to the start of construction at those sites, to allow the NDGFD the opportunity to inspect equipment prior to contact with surface water. In the event of an inadvertent return during a guided bore crossing, WBI Energy will immediately

[6] North Dakota Game and Fish. 2019. Aquatic Nuisance Species Webpage. Accessed December 2021. Available online: https://gf.nd.gov/ans.

[7] North Dakota Game and Fish. 2021. Response Letter to the Proposed Wahpeton Expansion Project Cass & Richland Counties, North Dakota.

implement the response measures in the Guided Bore Drilling Fluid Monitoring and Operations Plan and notify NDGFD of the need to enter the waterbody as soon as possible.

3. Surface water taken from infested waterbodies will not be discharged into other waterbodies, including water used for hydrostatic testing. Water will be discharged back into the water it was sourced from or into upland areas within the same 5th level (12-digit Hydrological Unit Code) watershed it was withdrawn from. Water withdrawn for dust control will only be discharged onto upland areas. Drilling mud produced using water sourced from infested waterbodies may be mixed with soil and other materials to backfill upland trenches, but will not be used to backfill trenched waterbodies.

4. If equipment is used in perennial waterbodies crossed by the Project considered infested with zebra mussels, the equipment will be cleaned (physical removal of mud, vegetation, debris), drained, and dried before use in another water.

5. When equipment that has been in contact with any surface water is moved from one 5th level watershed (12-digit Hydrological Unit Code) to another, the equipment will be cleaned (physical removal of mud, vegetation, debris), drained, and dried.

6. If ANS are found on any equipment, the equipment will be decontaminated by the equipment owner/operator and inspected by the Project Environmental Inspector or an authorized aquatic invasive species inspector. Decontamination methods may include the following:

    - For vegetation, physical removal and collection of vegetation and dirt/mud for disposal as solid waste.

    - Equipment will be sprayed/soaked with water greater than 140 degrees Fahrenheit for at least 10 minutes.

    - Equipment will be sprayed/soaked with a disinfection solution used in accordance with the manufacturer's label.

Resource Report 3 Request No. 8 Attachment

USFWS Concurrence Letter

United States Department of the Interior

FISH AND WILDLIFE SERVICE
North Dakota Ecological Services

IN REPLY REFER TO:
2022-Wahpeton
Expansion Project

3425 Miriam Avenue
Bismarck, North Dakota 58501

June 29, 2022

Ms. Jill Lynn
Environmental Affairs
WBI Energy Transmission, Inc.
2010 Montana Avenue
Glendive, Montana 59330

Dear Ms. Lynn:

Thank you for your correspondence from May 27, 2022 requesting consultation on the WBI Energy Transmission, Inc.'s (WBI's) Wahpeton Expansion project on behalf of the Federal Energy Regulatory Commission. The proposal is to construct approximately 60.5 miles of 12 inch diameter natural gas transmission pipeline from Mapleton, North Dakota to near Wahpeton, North Dakota. The project will include minor modifications of the Mapleton compressor station, new block valves and pig launcher/receiver settings and newly constructed farm taps. The U.S. Fish and Wildlife Service (FWS) has the following comments.

You requested FWS concurrence with your "may affect, not likely to adversely affect" determinations for the threatened Dakota skipper (*Hesperia dacotae*), northern long-eared bat (*Myotis septentrionalis*) and Western prairie fringed orchid (*Platanthera praeclara*). In accordance with Section 7 of the Endangered Species Act of 1973, as amended (ESA) (16 U.S.C. 1531 *et seq*.), we concur with your determination.

The letter also includes a "no effect" determination for the Poweshiek skipperling (*Oarisma poweshiek*). There is no requirement under the implementing regulations of the ESA (50 CFR Part 402) for action agencies to receive FWS concurrence with "no effect" determinations, therefore the responsibility for "no effect" determinations remains with the federal action agency. Accordingly, we recommend the federal action agency retain the documentation for these listed resources in the decisional record for this federal action.

The FWS's concurrence is based on the information provided. Pursuant to the implementing regulations of the ESA (50 CFR 402.13), this letter concludes informal consultation on the project. If changes are made in the project plans or operating criteria, or if additional information, including new species listings, becomes available, the FWS should be informed so

that the above determinations can be reconsidered. If you have any additional questions or comments, please contact Jessica Johnson of my staff at (701) 355-8507 or via email at jessica_n_johnson@fws.gov or contact me at (701) 355-8512 or drew_becker@fws.gov.

Sincerely,

Drew Becker
ND Ecological Services Supervisor

Resource Report 8 Request No. 1 Attachment

Revised Appendix 8D, Road and Railroad Crossings

APPENDIX 8D
Wahpeton Expansion Project
Road and Railroad Crossings

Facility/ Milepost	Type	Existing Road Type	Name	Crossing Method	Approximate Width of Road and Railroad at Crossing [a] (feet)
0.7	Road	Paved	35 St SE	Bore	25.1
1.5	Road	Paved	163rd Ave SE	Bore	23.5
2.7	Road	Dirt	164th Ave SE	Bore	13.4
3.7	Road	Dirt	165th Ave SE	Bore	25.8
4.9	Road	Paved	36th St SE	Bore	35.1
5.1	Railroad	N/A	Burlington Northern Santa Fe	Bore	20.8
5.9	Road	Dirt	Local Neighborhood Road, Rural Road	Bore	17.4
5.9	Road	Paved	I-94	Bore	49.5
5.9	Road	Paved	I-94	Bore	53.3
5.9	Road	Paved	37th St SE	Bore	30.1
6.5	Road	Paved	165th Ave SE	Bore	25.7
7.2	Road	Dirt	38th St SE	Bore	23.5
8.2	Road	Dirt	39th St SE	Bore	17.2
8.4	Road	Paved	165th Ave SE	Bore	35.2
9.2	Road	Dirt	40th St SE	Bore	20.3
10.7	Road	Dirt	41st St SE	Bore	40.4
10.7	Road	Dirt	166th Ave SE	Bore	18.2
11.7	Road	Dirt	42nd St SE	Bore	20.4
12.2	Road	Dirt	166th Ave SE	Bore	25.9
12.7	Road	Dirt	43rd St SE	Bore	12.9
13.7	Road	Dirt	44th St SE	Bore	49.4
13.7	Road	Dirt	166th Ave SE	Bore	15.7
14.7	Road	Dirt	45th St SE	Bore	25.7
14.7	Road	Dirt	166th Ave SE	Bore	12.3
15.7	Road	Dirt	46th St SE	Bore	29.8
16.7	Railroad	N/A	Red River Valley and Western	Bore	20.1
16.7	Road	Dirt	47th St SE	Bore	15.6
17.7	Road	Paved	48th St SE	Bore	28.2
18.8	Road	Dirt	49th St SE	Bore	19.3
19.8	Road	Dirt	50th St SE	Bore	17.1
19.8	Road	Dirt	166th Ave SE	Bore	13.4
20.8	Road	Gravel	51st St SE	Bore	14.9
21.8	Road	Dirt	52nd St SE	Bore	30.2
23.3	Road	Dirt	53rd St SE	Bore	20.4
24.7	Road	Paved	54th St SE	Bore	24.9
26.6	Road	Paved	166th Ave SE	Bore	25.6
27.7	Road	Paved	167th Ave SE	Bore	20.2

APPENDIX 8D
Wahpeton Expansion Project
Road and Railroad Crossings

Facility/ Milepost	Type	Existing Road Type	Name	Crossing Method	Approximate Width of Road and Railroad at Crossing [a] (feet)
28.3	Road	Two-track	55th St SE	Bore	8.2
29.3	Road	Dirt	Local Neighborhood Road, Rural Road	Bore	19.5
30.3	Road	Dirt	57th St SE	Bore	28.1
31.4	Road	Dirt	58th St SE	Bore	17.8
32.4	Road	Dirt	59th St SE	Bore	16.5
32.6	Road	Two-track	Local Neighborhood Road, Rural Road	Open-cut	12.8
33.4	Road	Paved	60th St SE	Bore	27.6
34.5	Road	Dirt	61st St SE	Bore	14.8
35.6	Road	Dirt	62nd St SE	Bore	19.7
36.1	Road	Dirt	168th Ave SE	Bore	39.5
36.2	Road	Dirt	Local Neighborhood Road, Rural Road	Open-cut	24.8
36.8	Road	Dirt	63rd St SE	Bore	21.3
37.5	Road	Dirt	169th Ave SE	Bore	29.4
38.5	Road	Dirt	170th Ave SE	Bore	18.4
40.5	Road	Dirt	171st Ave SE	Bore	20.8
40.9	Road	Paved	I-29	Bore	38.5
41.0	Road	Paved	I-29	Bore	38.5
41.0	Road	Dirt	64th St SE	Bore	36.7
42.4	Road	Paved	65th St SE	Bore	23.6
44.4	Road	Dirt	67th St SE	Bore	24.2
44.4	Road	Dirt	172nd Ave SE	Bore	31.9
45.4	Road	Dirt	68th St SE	Bore	25.3
46.4	Road	Two-track	69th St SE	Bore	12.8
48.0	Road	Dirt	Private Road for service vehicles (logging, oil fields, ranches, etc.)	Bore	22.3
48.3	Road	Dirt	70th St SE	Bore	24.3
48.9	Road	Dirt	173rd Ave SE	Bore	21.7
49.9	Road	Dirt	174th Ave SE	Bore	20.6
51.9	Road	Gravel	176th Ave SE	Bore	21.4
52.9	Road	Dirt	177th Ave SE	Bore	32.8
53.2	Railroad [b]	N/A	Historic – MILW	Open-cut	N/A
54.4	Road	Dirt	71st St SE	Bore	28.7
54.2	Railroad [b]	N/A	Historic – MILW	Open-cut	N/A
55.4	Road	Two-track	72nd St SE	Bore	37.8
56.4	Road	Dirt	73rd St SE	Bore	22.3
57.5	Road	Dirt	74th St SE	Bore	24.3
57.7	Road	Dirt	178th Ave SE	Bore	13.9
58.6	Road	Dirt	179th Ave SE	Bore	25.1

APPENDIX 8D

Wahpeton Expansion Project
Road and Railroad Crossings

Facility/ Milepost	Type	Existing Road Type	Name	Crossing Method	Approximate Width of Road and Railroad at Crossing [a] (feet)
60.1	Road	Paved	180th Ave SE	Bore	68.9

[a] For bore crossings, refer to Appendix 6C for bore length from pit to pit.

[b] Construction across the three historic railroad crossings will be conducted using conventional open-cut methods in accordance with the FERC Plan and other site-specific plans and permits. All three crossings are in agricultural lands. Backhoe type excavators will be used to open a trench. Spoil materials excavated from the trench will be placed along the construction ROW, with topsoil and subsoil materials clearly segregated within approved workspace boundaries. A prefabricated segment of pipeline will then be placed into the trench using side-boom tractors. Once the pipe has successfully been installed across the historic railroad crossing, the trench will be backfilled, contours will be restored as near as practicable to preconstruction contours, and the site will be stabilized/reclaimed. Stabilization measures may include seeding and installation of erosion controls as appropriate. Each open-cut historic railroad crossing is proposed to be completed and restored within a few days.

Resource Report 8 Request No. 2 Attachment

Revised Appendix 8A, Additional Temporary Workspaces

APPENDIX 8A
Wahpeton Expansion Project
Additional Temporary Workspaces (ATWS) [a]

Project Facility	Additional Temporary Workspaces	Milepost	Existing Land Uses	Area Affected by Construction (acres)	Width (feet)	Length (feet)	Reason for ATWS	County	Land Owner
Pipeline Facility	ATWS_001	0.7	Agriculture, Developed	0.2	25.0	300.5	Bore	Cass	Private
Pipeline Facility	ATWS_001_a	0.4	Agriculture, Developed	0.2	140.2	142.6	Point of Inflection	Cass	Private
Pipeline Facility	ATWS_002	0.8	Agriculture	0.2	25.0	300.0	Bore	Cass	Private
Pipeline Facility	ATWS_003	0.7	Agriculture, Developed	0.3	50.0	300.0	Bore	Cass	Private
Pipeline Facility	ATWS_004	0.8	Agriculture	0.3	50.0	301.4	Bore	Cass	Private
Pipeline Facility	ATWS_005	1.1	Agriculture	0.9	50.0	756.8	Bore	Cass	Private
Pipeline Facility	ATWS_006	1.1	Agriculture	0.8	153.0	890.9	Point of Inflection, Bore	Cass	Private
Pipeline Facility	ATWS_007	1.3	Agriculture	0.8	153.3	808.0	Bore, Point of Inflection	Cass	Private
Pipeline Facility	ATWS_008	1.4	Agriculture	0.8	50.0	675.7	Bore	Cass	Private
Pipeline Facility	ATWS_009	1.5	Agriculture	0.7	216.6	351.9	Point of Inflection, Bore	Cass	Private
Pipeline Facility	ATWS_010	1.5	Agriculture	0.2	58.4	241.6	Point of Inflection, Bore	Cass	Private
Pipeline Facility	ATWS_011	1.6	Agriculture	0.3	77.3	222.8	Bore, Point of Inflection	Cass	Private
Pipeline Facility	ATWS_012	1.6	Agriculture, Developed	0.4	172.7	319.3	Bore, Point of Inflection	Cass	Private
Pipeline Facility	ATWS_012_b	1.7	Agriculture	0.2	142.3	149.6	Point of Inflection	Cass	Private
Pipeline Facility	ATWS_012_c	1.8	Agriculture	0.2	92.6	184.6	Point of Inflection	Cass	Private
Pipeline Facility	ATWS_012_d	1.9	Agriculture	0.2	92.4	184.8	Point of Inflection	Cass	Private
Pipeline Facility	ATWS_013	2.6	Agriculture	0.3	50.0	301.2	Bore	Cass	Private
Pipeline Facility	ATWS_014	2.6	Agriculture	0.2	25.0	300.0	Bore	Cass	Private
Pipeline Facility	ATWS_015	2.7	Agriculture, Developed	0.3	50.0	300.5	Bore	Cass	Private

APPENDIX 8A
Wahpeton Expansion Project
Additional Temporary Workspaces (ATWS) [a]

Project Facility	Additional Temporary Workspaces	Milepost	Existing Land Uses	Area Affected by Construction (acres)	Width (feet)	Length (feet)	Reason for ATWS	County	Land Owner
Pipeline Facility	ATWS_016	2.7	Agriculture	0.2	25.0	300.6	Bore	Cass	Private
Pipeline Facility	ATWS_017	3.6	Agriculture	0.3	50.2	301.0	Bore	Cass	Private
Pipeline Facility	ATWS_018	3.6	Agriculture	0.2	25.0	300.0	Bore	Cass	Private
Pipeline Facility	ATWS_019_b	3.8	Agriculture	0.3	23.0	629.6	Bore, Point of Inflection,	Cass	Private
Pipeline Facility	ATWS_019_c	3.9	Agriculture	0.6	50.0	551.3	Bore	Cass	Private
Pipeline Facility	ATWS_019_d	3.9	Agriculture	0.2	23.0	300.0	Bore	Cass	Private
Pipeline Facility	ATWS_019_e	4.4	Agriculture	0.2	124.2	140.9	Point of Inflection	Cass	Private
Pipeline Facility	ATWS_019_f	4.6	Agriculture	0.2	140.5	142.1	Point of Inflection	Cass	Private
Pipeline Facility	ATWS_020	3.7	Agriculture, Developed	1.2	248.0	709.3	Bore, Point of Inflection,	Cass	Private
Pipeline Facility	ATWS_021	6.5	Agriculture, Developed	1.3	265.0	730.5	Bore, Point of Inflection	Cass	Private
Pipeline Facility	ATWS_022	6.5	Agriculture, Developed	0.2	20.0	410.8	Bore, Point of Inflection	Cass	Private
Pipeline Facility	ATWS_022_c	6.7	Agriculture	0.2	20.0	380.3	Bore	Cass	Private
Pipeline Facility	ATWS_022_d	6.7	Agriculture	0.6	50.0	550.0	Bore	Cass	Private
Pipeline Facility	ATWS_023	7.2	Agriculture, Developed	0.3	50.0	300.4	Bore	Cass	Private
Pipeline Facility	ATWS_024	7.2	Agriculture, Developed	0.3	50.0	300.4	Bore	Cass	Private
Pipeline Facility	ATWS_025	7.2	Agriculture, Developed	0.1	20.0	300.0	Bore	Cass	Private
Pipeline Facility	ATWS_026	7.2	Agriculture, Developed	0.1	20.0	300.1	Bore	Cass	Private
Pipeline Facility	ATWS_027	8.2	Agriculture	0.3	50.0	300.6	Bore	Cass	Private
Pipeline Facility	ATWS_028	8.2	Agriculture, Developed	0.3	50.0	300.4	Bore	Cass	Private
Pipeline Facility	ATWS_029	6.4	Agriculture	0.3	50.0	300.0	Bore	Cass	Private
Pipeline Facility	ATWS_030	6.4	Agriculture	0.2	25.0	300.0	Bore	Cass	Private

APPENDIX 8A
Wahpeton Expansion Project
Additional Temporary Workspaces (ATWS) [a]

Project Facility	Additional Temporary Workspaces	Milepost	Existing Land Uses	Area Affected by Construction (acres)	Width (feet)	Length (feet)	Reason for ATWS	County	Land Owner
Pipeline Facility	ATWS_031	8.3	Agriculture, Developed	0.5	167.7	290.7	Bore, Point of Inflection	Cass	Private
Pipeline Facility	ATWS_032	8.2	Agriculture, Developed	0.1	20.0	300.0	Bore	Cass	Private
Pipeline Facility	ATWS_033	8.2	Agriculture, Developed	0.2	25.0	300.3	Bore	Cass	Private
Pipeline Facility	ATWS_034	8.3	Agriculture, Developed	0.2	25.0	300.1	Point of Inflection, Bore	Cass	Private
Pipeline Facility	ATWS_035	8.4	Agriculture	0.2	25.0	299.8	Bore, Point of Inflection	Cass	Private
Pipeline Facility	ATWS_036	8.4	Agriculture	0.5	225.0	249.8	Bore, Point of Inflection	Cass	Private
Pipeline Facility	ATWS_037	9.2	Agriculture, Developed	0.2	24.8	300.3	Bore	Cass	Private
Pipeline Facility	ATWS_038	9.3	Agriculture, Developed	0.4	186.9	238.0	Bore, Point of Inflection	Cass	Private
Pipeline Facility	ATWS_039	9.2	Agriculture, Developed	0.3	50.0	300.6	Bore	Cass	Private
Pipeline Facility	ATWS_040	5.4	Agriculture	0.3	50.0	300.5	Bore	Cass	Private
Pipeline Facility	ATWS_041	5.5	Agriculture	0.3	50.0	300.5	Bore	Cass	Private
Pipeline Facility	ATWS_042	9.3	Agriculture, Developed	0.3	76.7	279.0	Bore, Point of Inflection	Cass	Private
Pipeline Facility	ATWS_043	5.8	Agriculture	0.7	100.0	866.1	Bore	Cass	Private
Pipeline Facility	ATWS_044	5.4	Agriculture	0.2	25.0	300.0	Bore	Cass	Private
Pipeline Facility	ATWS_045	4.9	Agriculture	0.2	25.0	300.0	Bore	Cass	Private
Pipeline Facility	ATWS_046	6.1	Agriculture	0.7	100.0	850.6	Bore	Cass	Private
Pipeline Facility	ATWS_047	5.5	Agriculture	0.2	25.0	300.0	Bore	Cass	Private
Pipeline Facility	ATWS_048	5	Agriculture	0.4	25.0	740.6	Bore	Cass	Private
Pipeline Facility	ATWS_050	5.2	Agriculture	0.4	100.0	463.3	Bore	Cass	Private
Pipeline Facility	ATWS_051	5.7	Agriculture	1.0	50.0	866.1	Bore	Cass	Private
Pipeline Facility	ATWS_052	4.9	Agriculture	0.3	50.0	300.5	Bore	Cass	Private
Pipeline Facility	ATWS_053	6.1	Agriculture	1.0	50.0	851.1	Bore	Cass	Private

APPENDIX 8A
Wahpeton Expansion Project
Additional Temporary Workspaces (ATWS) [a]

Project Facility	Additional Temporary Workspaces	Milepost	Existing Land Uses	Area Affected by Construction (acres)	Width (feet)	Length (feet)	Reason for ATWS	County	Land Owner
Pipeline Facility	ATWS_053_b	6.3	Agriculture	0.2	99.9	141.7	Point of Inflection	Cass	Private
Pipeline Facility	ATWS_054	5.0	Agriculture	0.9	50.0	802.7	Bore	Cass	Private
Pipeline Facility	ATWS_056	5.2	Agriculture	0.7	150.0	547.7	Bore, Point of Inflection	Cass	Private
Pipeline Facility	ATWS_056_b	5.3	Agriculture	0.2	140.9	141.4	Point of Inflection	Cass	Private
Pipeline Facility	ATWS_057	10.0	Agriculture	1.6	254.1	505.0	Bore	Cass	Private
Pipeline Facility	ATWS_058	10.0	Agriculture	0.7	104.7	424.8	Bore	Cass	Private
Pipeline Facility	ATWS_059	10.1	Agriculture	0.2	25.0	300.0	Bore	Cass	Private
Pipeline Facility	ATWS_060	10.1	Agriculture	0.3	50.0	300.9	Bore	Cass	Private
Pipeline Facility	ATWS_061	10.6	Agriculture, Developed	0.2	25.0	300.0	Bore	Cass	Private
Pipeline Facility	ATWS_062	10.6	Agriculture, Developed	0.3	50.0	309.3	Bore	Cass	Private
Pipeline Facility	ATWS_063	10.7	Agriculture	0.2	32.5	297.8	Bore, Point of Inflection	Cass	Private
Pipeline Facility	ATWS_064	10.7	Agriculture	0.5	144.4	376.8	Bore, Point of Inflection	Cass	Private
Pipeline Facility	ATWS_065	12.2	Agriculture	0.4	96.5	369.2	Bore, Point of Inflection	Cass	Private
Pipeline Facility	ATWS_066	12.2	Agriculture	0.2	68.6	277.8	Bore, Point of Inflection	Cass	Private
Pipeline Facility	ATWS_067	12.6	Agriculture, Developed	0.2	25.0	300.0	Bore	Cass	Private
Pipeline Facility	ATWS_068	11.6	Agriculture	0.1	25.0	300.0	Bore	Cass	Private
Pipeline Facility	ATWS_069	12.7	Agriculture	0.2	25.0	300.3	Bore	Cass	Private
Pipeline Facility	ATWS_070	11.7	Agriculture	0.2	25.0	300.0	Bore	Cass	Private
Pipeline Facility	ATWS_071	12.6	Agriculture, Developed	0.3	50.0	301.3	Bore	Cass	Private
Pipeline Facility	ATWS_072	12.1	Agriculture	0.2	26.8	324.9	Bore, Point of Inflection	Cass	Private
Pipeline Facility	ATWS_073	11.6	Agriculture	0.3	50.0	300.6	Bore	Cass	Private

APPENDIX 8A
Wahpeton Expansion Project
Additional Temporary Workspaces (ATWS) [a]

Project Facility	Additional Temporary Workspaces	Milepost	Existing Land Uses	Area Affected by Construction (acres)	Width (feet)	Length (feet)	Reason for ATWS	County	Land Owner
Pipeline Facility	ATWS_074	12.7	Agriculture	0.3	50.0	300.6	Bore	Cass	Private
Pipeline Facility	ATWS_075	11.7	Agriculture	0.3	50.0	300.9	Bore	Cass	Private
Pipeline Facility	ATWS_076	12.1	Agriculture	0.4	110.9	361.9	Bore, Point of Inflection	Cass	Private
Pipeline Facility	ATWS_077	13.6	Agriculture	1.2	250.3	383.9	Bore, Point of Inflection	Cass	Private
Pipeline Facility	ATWS_078	13.6	Agriculture	0.3	50.0	307.6	Bore, Point of Inflection	Cass	Private
Pipeline Facility	ATWS_079	13.8	Agriculture	0.1	15.0	315.4	Bore, Point of Inflection	Cass	Private
Pipeline Facility	ATWS_080	14.8	Agriculture	0.6	101.9	440.7	Bore, Point of Inflection	Cass	Private
Pipeline Facility	ATWS_081	13.7	Agriculture	1.1	250.2	392.4	Bore, Point of Inflection	Cass	Private
Pipeline Facility	ATWS_082	14.8	Agriculture	0.2	29.3	303.9	Bore, Point of Inflection	Cass	Private
Pipeline Facility	ATWS_083	15.7	Agriculture, Developed	0.3	50.0	301.3	Bore	Cass	Private
Pipeline Facility	ATWS_084	15.8	Agriculture	0.3	50.0	301.5	Bore	Cass	Private
Pipeline Facility	ATWS_085	14.7	Agriculture	0.1	15.0	329.9	Bore, point of Inflection	Cass	Private
Pipeline Facility	ATWS_086	15.7	Agriculture, Developed	0.2	25.0	299.7	Bore	Cass	Private
Pipeline Facility	ATWS_087	15.8	Agriculture	0.2	25.0	299.7	Bore	Cass	Private
Pipeline Facility	ATWS_088	14.7	Agriculture	0.7	149.4	378.3	Bore, Point of Inflection	Cass	Private
Pipeline Facility	ATWS_089	16.7	Agriculture	0.3	100.0	337.3	Bore	Cass	Private
Pipeline Facility	ATWS_091	16.8	Agriculture	0.2	24.9	299.7	Bore	Cass	Private
Pipeline Facility	ATWS_092	16.6	Agriculture	0.3	50.0	301.2	Bore	Cass	Private
Pipeline Facility	ATWS_094	16.8	Agriculture	0.3	50.0	301.5	Bore	Cass	Private
Pipeline Facility	ATWS_095	17.7	Agriculture	0.2	25.0	299.7	Bore	Cass	Private

APPENDIX 8A
Wahpeton Expansion Project
Additional Temporary Workspaces (ATWS) [a]

Project Facility	Additional Temporary Workspaces	Milepost	Existing Land Uses	Area Affected by Construction (acres)	Width (feet)	Length (feet)	Reason for ATWS	County	Land Owner
Pipeline Facility	ATWS_096	17.8	Agriculture	0.2	25.0	299.7	Bore	Cass	Private
Pipeline Facility	ATWS_097	17.7	Agriculture	0.3	49.7	301.3	Bore	Cass	Private
Pipeline Facility	ATWS_098	17.8	Agriculture, Developed	0.3	50.0	301.5	Bore	Cass	Private
Pipeline Facility	ATWS_099	18.7	Agriculture	0.2	25.0	299.7	Bore	Cass	Private
Pipeline Facility	ATWS_100	18.8	Agriculture	0.2	25.0	299.7	Bore	Cass	Private
Pipeline Facility	ATWS_101	18.7	Agriculture	0.3	50.0	301.3	Bore	Cass	Private
Pipeline Facility	ATWS_102	18.8	Agriculture, Developed	0.4	50.0	367.1	Bore	Cass	Private
Pipeline Facility	ATWS_103	19.7	Agriculture	0.5	102.1	416.6	Bore, Point of Inflection	Cass	Private
Pipeline Facility	ATWS_105	19.7	Agriculture	0.2	25.0	290.0	Bore, Point of Inflection	Cass	Private
Pipeline Facility	ATWS_107	19.8	Agriculture, Developed	0.2	25.0	339.6	Bore, Point of Inflection	Cass	Private
Pipeline Facility	ATWS_108	19.8	Agriculture, Developed	0.7	173.1	372.8	Bore, Point of Inflection	Cass	Private
Pipeline Facility	ATWS_109	20.8	Agriculture	0.2	25.0	300.0	Bore	Cass	Private
Pipeline Facility	ATWS_110	20.9	Agriculture	0.2	25.0	299.6	Bore	Cass	Private
Pipeline Facility	ATWS_111	20.8	Agriculture	0.3	50.0	301.1	Bore	Cass	Private
Pipeline Facility	ATWS_112	20.9	Agriculture	0.3	50.0	301.2	Bore	Cass	Private
Pipeline Facility	ATWS_113	21.8	Agriculture	0.2	25.0	299.8	Bore	Cass	Private
Pipeline Facility	ATWS_114	21.8	Agriculture	0.2	160.9	207.7	Bore, Point of Inflection	Cass	Private
Pipeline Facility	ATWS_115	21.8	Agriculture	0.3	50.0	301.1	Bore	Cass	Private
Pipeline Facility	ATWS_116	21.9	Agriculture, Developed	0.3	42.0	300.7	Bore, Point of Inflection	Cass	Private
Pipeline Facility	ATWS_116_b	22.3	Agriculture, Developed	0.2	142.3	156.7	Point of Inflection	Cass	Private
Pipeline Facility	ATWS_117	23.3	Agriculture	0.2	25.0	299.9	Bore	Cass	Private

APPENDIX 8A
Wahpeton Expansion Project
Additional Temporary Workspaces (ATWS) [a]

Project Facility	Additional Temporary Workspaces	Milepost	Existing Land Uses	Area Affected by Construction (acres)	Width (feet)	Length (feet)	Reason for ATWS	County	Land Owner
Pipeline Facility	ATWS_119	23.3	Agriculture	0.3	50.0	300.8	Bore	Cass	Private
Kindred Border Station	ATWS_121	23.4	Agriculture	2.5	359.5	564.1	Bore, Kindred Border Station	Cass	Private
Pipeline Facility	ATWS_121_b	23.7	Agriculture, Developed	0.2	141.4	142.5	Point of Inflection	Cass	Private
Pipeline Facility	ATWS_123	24.0	Agriculture	0.7	100.0	850.0	Bore	Cass	Private
Pipeline Facility	ATWS_124	24.3	Agriculture	0.7	100.0	850.0	Bore	Cass	Private
Pipeline Facility	ATWS_125	24.0	Agriculture	1.0	50.0	850.5	Bore	Cass	Private
Pipeline Facility	ATWS_126	24.3	Agriculture	1.0	50.0	850.5	Bore	Cass	Private
Pipeline Facility	ATWS_127	24.7	Agriculture	0.2	30.1	299.3	Bore	Cass	Private
Pipeline Facility	ATWS_128	24.8	Agriculture	0.2	25.0	299.8	Bore	Richland	Private
Pipeline Facility	ATWS_129	24.7	Agriculture	0.3	55.9	307.5	Bore	Richland	Private
Pipeline Facility	ATWS_130	24.8	Agriculture	0.3	50.0	300.9	Bore	Richland	Private
Pipeline Facility	ATWS_130_b	25.7	Agriculture	0.1	116.3	141.3	Point of inflection	Richland	Private
Pipeline Facility	ATWS_131	26.6	Agriculture	0.3	50.0	301.1	Bore	Richland	Private
Pipeline Facility	ATWS_132	26.6	Agriculture	0.1	14.2	299.9	Bore	Richland	Private
Pipeline Facility	ATWS_133	26.7	Agriculture	0.3	50.0	301.5	Bore	Richland	Private
Pipeline Facility	ATWS_134	26.7	Agriculture	0.1	14.5	299.6	Bore	Richland	Private
Pipeline Facility	ATWS_135	27.6	Agriculture	0.3	50.0	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_136	27.6	Agriculture	0.1	21.8	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_137	27.7	Agriculture	0.3	50.0	300.7	Bore	Richland	Private
Pipeline Facility	ATWS_138	27.7	Agriculture	0.1	21.9	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_138_b	28.2	Agriculture	0.2	140.6	141.4	Point of Inflection	Richland	Private
Pipeline Facility	ATWS_139	28.3	Agriculture	0.2	25.0	418.8	Bore	Richland	Private
Pipeline Facility	ATWS_140	28.4	Agriculture	0.2	25.0	401.5	Bore	Richland	Private

APPENDIX 8A
Wahpeton Expansion Project
Additional Temporary Workspaces (ATWS) [a]

Project Facility	Additional Temporary Workspaces	Milepost	Existing Land Uses	Area Affected by Construction (acres)	Width (feet)	Length (feet)	Reason for ATWS	County	Land Owner
Pipeline Facility	ATWS_141	28.3	Agriculture	0.5	50.0	420.3	Bore	Richland	Private
Pipeline Facility	ATWS_142	28.4	Agriculture	0.5	50.0	400.0	Bore	Richland	Private
Pipeline Facility	ATWS_143	30.4	Agriculture, Developed	0.3	104.8	288.0	Bore, Point of Inflection	Richland	Private
Pipeline Facility	ATWS_144	29.3	Agriculture	0.2	25.0	299.8	Bore	Richland	Private
Pipeline Facility	ATWS_145	29.3	Agriculture	0.2	25.0	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_146	30.4	Agriculture	0.3	105.5	308.6	Bore, Point of Inflection	Richland	Private
Pipeline Facility	ATWS_146_b	30.8	Agriculture	0.2	90.8	183.1	Point of Inflection	Richland	Private
Pipeline Facility	ATWS_146_c	30.9	Agriculture	0.2	90.6	183.3	Point of Inflection	Richland	Private
Pipeline Facility	ATWS_147	29.3	Agriculture	0.3	50.0	301.8	Bore	Richland	Private
Pipeline Facility	ATWS_148	29.3	Agriculture	0.3	50.0	300.9	Bore	Richland	Private
Pipeline Facility	ATWS_149	30.3	Agriculture	0.2	25.0	321.7	Bore	Richland	Private
Pipeline Facility	ATWS_150	30.3	Agriculture	0.4	104.6	383.9	Bore, Point of Inflection	Richland	Private
Pipeline Facility	ATWS_151	31.3	Agriculture, Forest	0.3	25.0	512.0	Bore, Valve Site #4	Richland	Private
Pipeline Facility	ATWS_152	31.4	Agriculture	0.3	25.0	512.0	Bore	Richland	Private
Pipeline Facility	ATWS_153	31.3	Agriculture, Developed	0.9	205.8	566.3	Bore, Valve Site #4	Richland	Private
Pipeline Facility	ATWS_154	31.4	Agriculture	0.6	50.0	511.6	Bore	Richland	Private
Pipeline Facility	ATWS_155	33.4	Agriculture	0.2	25.0	299.7	Bore	Richland	Private
Pipeline Facility	ATWS_156	33.5	Agriculture, Open Water	0.2	25.0	299.8	Bore	Richland	Private
Pipeline Facility	ATWS_157	32.3	Agriculture, Developed	0.2	25.0	299.8	Bore	Richland	Private
Pipeline Facility	ATWS_158	32.4	Agriculture	0.2	25.1	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_159	33.4	Agriculture	0.3	50.0	301.6	Bore	Richland	Private

APPENDIX 8A
Wahpeton Expansion Project
Additional Temporary Workspaces (ATWS) [a]

Project Facility	Additional Temporary Workspaces	Milepost	Existing Land Uses	Area Affected by Construction (acres)	Width (feet)	Length (feet)	Reason for ATWS	County	Land Owner
Pipeline Facility	ATWS_160	33.5	Agriculture, Open Water	0.3	50.0	300.9	Bore	Richland	Private
Pipeline Facility	ATWS_160_b	34.4	Agriculture, Developed	0.2	140.6	141.4	Point of Inflection	Richland	Private
Pipeline Facility	ATWS_160_c	34.5	Agriculture	0.8	151.2	398.0	Point of Inflection	Richland	Private
Pipeline Facility	ATWS_160_e	34.9	Agriculture	0.2	85.1	188.3	Point of Inflection	Richland	Private
Pipeline Facility	ATWS_160_f	35.0	Open Land	0.4	100.0	306.2	Point of Inflection	Richland	Private
Pipeline Facility	ATWS_161	32.3	Agriculture	0.3	50.0	301.6	Bore	Richland	Private
Pipeline Facility	ATWS_162	32.4	Agriculture	0.3	50.0	300.9	Bore	Richland	Private
Pipeline Facility	ATWS_162_b	32.6	Agriculture	0.2	141.8	141.9	Point of Inflection	Richland	Private
Pipeline Facility	ATWS_162_c	32.6	Agriculture, Open Water	0.7	148.5	281.5	Point of Inflection	Richland	Private
Pipeline Facility	ATWS_163	35.6	Open Land	0.2	25.0	294.0	Bore	Richland	Private
Pipeline Facility	ATWS_164	35.6	Open Land	0.4	50.0	323.1	Bore	Richland	Private
Pipeline Facility	ATWS_165	35.7	Open Land	0.1	25.0	114.3	Bore	Richland	Private
Pipeline Facility	ATWS_166	35.7	Developed, Open Land	0.1	50.1	129.0	Bore	Richland	Private
Pipeline Facility	ATWS_167	36.1	Open Water	0.2	25.0	299.7	Bore	Richland	Private
Pipeline Facility	ATWS_169	36.2	Open Land	0.2	28.0	312.5	Bore	Richland	Private
Pipeline Facility	ATWS_170	36.2	Agriculture, Open Land	0.3	58.6	298.7	Bore	Richland	Private
Pipeline Facility	ATWS_171	36.7	Agriculture, Developed, Open Land	0.2	25.0	299.8	Bore	Richland	Private
Pipeline Facility	ATWS_172	36.7	Agriculture, Developed	0.4	50.0	327.3	Bore	Richland	Private
Pipeline Facility	ATWS_173	36.8	Agriculture, Forest, Open Land	0.5	124.0	448.3	Bore	Richland	Private
Pipeline Facility	ATWS_174	36.8	Agriculture, Forest	0.3	50.0	289.1	Bore	Richland	Private
Pipeline Facility	ATWS_175	37.5	Agriculture	0.3	50.0	300.0	Bore	Richland	Private

APPENDIX 8A
Wahpeton Expansion Project
Additional Temporary Workspaces (ATWS) [a]

Project Facility	Additional Temporary Workspaces	Milepost	Existing Land Uses	Area Affected by Construction (acres)	Width (feet)	Length (feet)	Reason for ATWS	County	Land Owner
Pipeline Facility	ATWS_176	37.5	Agriculture	0.2	25.0	300.3	Bore	Richland	Private
Pipeline Facility	ATWS_177	37.6	Agriculture	0.3	50.0	300.6	Bore	Richland	Private
Pipeline Facility	ATWS_178	37.6	Agriculture	0.2	25.0	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_179	38.5	Agriculture	0.3	50.0	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_180	38.5	Agriculture	0.2	25.0	300.3	Bore	Richland	Private
Pipeline Facility	ATWS_181	38.6	Agriculture	0.2	130.2	171.5	Bore, Point of Inflection	Richland	Private
Pipeline Facility	ATWS_182	38.6	Agriculture	0.6	255.2	296.5	Bore, Point of Inflection	Richland	Private
Pipeline Facility	ATWS_182_a	39.8	Agriculture	0.3	50.0	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_182_b	39.8	Agriculture, Developed	0.1	18.4	300.2	Bore	Richland	Private
Pipeline Facility	ATWS_182_c	39.9	Agriculture	0.3	50.0	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_182_d	39.9	Agriculture, Developed	0.1	18.9	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_183	40.4	Agriculture	0.3	50.0	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_184	40.4	Agriculture	0.1	20.9	300.2	Bore	Richland	Private
Pipeline Facility	ATWS_185	40.5	Agriculture	0.3	50.0	300.6	Bore	Richland	Private
Pipeline Facility	ATWS_186	40.5	Agriculture	0.1	20.9	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_187	40.9	Agriculture	0.2	18.3	600.8	Bore	Richland	Private
Pipeline Facility	ATWS_188	40.9	Agriculture	0.9	125.0	599.8	Bore	Richland	Private
Pipeline Facility	ATWS_189	41.0	Agriculture	0.0	16.8	50.2	Bore, Point of Inflection	Richland	Private
Pipeline Facility	ATWS_190	41.1	Agriculture	0.5	25.0	953.4	Bore	Richland	Private
Pipeline Facility	ATWS_191	41.0	Agriculture, Developed	1.9	432.6	730.3	Bores, Point of Inflection	Richland	Private
Pipeline Facility	ATWS_191_b	41.1	Agriculture, Developed	0.1	65.0	100.1	Bore	Richland	Private
Pipeline Facility	ATWS_192	41.2	Agriculture	1.3	125.0	953.4	Bore	Richland	Private

APPENDIX 8A
Wahpeton Expansion Project
Additional Temporary Workspaces (ATWS) [a]

Project Facility	Additional Temporary Workspaces	Milepost	Existing Land Uses	Area Affected by Construction (acres)	Width (feet)	Length (feet)	Reason for ATWS	County	Land Owner
Pipeline Facility	ATWS_192_b	41.9	Agriculture, Developed	0.2	69.6	195.4	Point of Inflection	Richland	Private
Pipeline Facility	ATWS_192_c	42.0	Agriculture	0.2	93.4	183.4	Point of Inflection	Richland	Private
Pipeline Facility	ATWS_192_d	41.3	Agriculture	0.2	25.0	300.3	Bore	Richland	Private
Pipeline Facility	ATWS_192_e	41.3	Agriculture	0.5	125.0	300.8	Bore	Richland	Private
Pipeline Facility	ATWS_193	42.4	Agriculture, Developed	0.3	70.6	230.1	Bore, Point of Inflection	Richland	Private
Pipeline Facility	ATWS_194	42.4	Agriculture	0.3	50.0	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_195	42.4	Agriculture, Developed	0.2	170.0	180.2	Bore, Point of Inflection	Richland	Private
Pipeline Facility	ATWS_196	42.4	Agriculture	0.2	25.0	300.3	Bore	Richland	Private
Pipeline Facility	ATWS_197	44.4	Agriculture, Developed	0.7	123.3	286.2	Bore, Point of Inflection	Richland	Private
Pipeline Facility	ATWS_198	44.4	Agriculture	0.2	40.7	290.1	Bore, Point of Inflection	Richland	Private
Pipeline Facility	ATWS_199	44.5	Agriculture	0.2	40.7	288.8	Bore, Point of Inflection	Richland	Private
Pipeline Facility	ATWS_200	44.5	Agriculture	0.4	91.6	337.0	Bore, Point of Inflection	Richland	Private
Pipeline Facility	ATWS_201	44.9	Agriculture, Developed	0.3	31.4	460.7	Bore	Richland	Private
Pipeline Facility	ATWS_202	45.0	Agriculture, Developed	0.3	27.6	459.3	Bore	Richland	Private
Pipeline Facility	ATWS_203	45.4	Agriculture	0.1	16.3	300.1	Bore	Richland	Private
Pipeline Facility	ATWS_204	45.5	Agriculture, Developed	0.1	16.5	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_205	44.9	Agriculture	0.7	124.9	460.0	Bore	Richland	Private
Pipeline Facility	ATWS_206	45.0	Agriculture	0.7	124.8	460.0	Bore	Richland	Private
Pipeline Facility	ATWS_207	45.4	Agriculture	0.3	48.8	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_208	45.5	Agriculture, Developed	0.3	48.6	300.5	Bore	Richland	Private
Pipeline Facility	ATWS_209	46.4	Agriculture	0.2	25.0	300.1	Bore	Richland	Private

APPENDIX 8A
Wahpeton Expansion Project
Additional Temporary Workspaces (ATWS) [a]

Project Facility	Additional Temporary Workspaces	Milepost	Existing Land Uses	Area Affected by Construction (acres)	Width (feet)	Length (feet)	Reason for ATWS	County	Land Owner
Pipeline Facility	ATWS_210	46.5	Agriculture	0.2	25.0	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_211	46.4	Agriculture	0.3	50.0	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_212	46.5	Agriculture	0.3	50.0	300.3	Bore	Richland	Private
Pipeline Facility	ATWS_212_d	47.4	Agriculture	0.1	62.2	140.3	Point of Inflection	Richland	Private
Pipeline Facility	ATWS_212_e	47.3	Agriculture	0.2	54.9	187.3	Point of Inflection	Richland	Private
Pipeline Facility	ATWS_213	47.9	Agriculture	0.4	51.8	300.1	Bore	Richland	Private
Pipeline Facility	ATWS_214	47.9	Developed	0.1	15.2	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_215	48.0	Agriculture	0.3	50.0	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_216	48.0	Developed	0.1	16.5	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_217	48.3	Agriculture, Developed	0.1	17.0	300.0	Bore, Point of Inflection	Richland	Private
Pipeline Facility	ATWS_218	48.4	Agriculture	0.2	25.0	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_219	48.3	Agriculture, Developed	0.4	142.0	255.7	Bore, Point of Inflection	Richland	Private
Pipeline Facility	ATWS_220	48.4	Agriculture	0.3	46.6	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_221	48.9	Agriculture	0.4	171.8	228.3	Point of Inflection, Valve Site #6, Bore	Richland	Private
Pipeline Facility	ATWS_222	48.8	Agriculture	0.2	46.8	253.2	Point of Inflection, Valve Site #6, Bore	Richland	Private
Pipeline Facility	ATWS_223	48.9	Agriculture	0.2	25.0	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_224	48.9	Agriculture	0.3	50.0	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_225	49.9	Agriculture	0.3	50.0	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_226	49.9	Agriculture	0.2	25.0	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_227	49.9	Agriculture	0.3	50.0	300.1	Bore	Richland	Private
Pipeline Facility	ATWS_228	49.9	Agriculture	0.2	25.0	300.0	Bore	Richland	Private

APPENDIX 8A
Wahpeton Expansion Project
Additional Temporary Workspaces (ATWS) [a]

Project Facility	Additional Temporary Workspaces	Milepost	Existing Land Uses	Area Affected by Construction (acres)	Width (feet)	Length (feet)	Reason for ATWS	County	Land Owner
Pipeline Facility	ATWS_228_b	50.4	Agriculture, Open Water	3.8	112.7	2979.3	Bore	Richland	Private
Pipeline Facility	ATWS_228_c	50.8	Agriculture, Forest, Open Water	1.5	25.0	2979.3	Bore	Richland	Private
Pipeline Facility	ATWS_228_d	51.8	Agriculture	3.2	112.6	2539.9	Bore	Richland	Private
Pipeline Facility	ATWS_228_e	51.4	Agriculture, Open Water	1.7	35.0	2540.3	Bore	Richland	Private
Pipeline Facility	ATWS_235	51.9	Agriculture	0.3	50.0	300.5	Bore	Richland	Private
Pipeline Facility	ATWS_236	51.9	Agriculture	0.2	24.8	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_237	52.0	Agriculture	0.3	50.0	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_238	52	Agriculture	0.2	75.0	300.2	Bore	Richland	Private
Pipeline Facility	ATWS_239	52.9	Agriculture, Developed	0.3	50.0	300.5	Bore	Richland	Private
Pipeline Facility	ATWS_240	52.9	Agriculture, Developed	0.2	25.0	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_241	53	Agriculture, Developed	0.3	59.9	319.8	Bore	Richland	Private
Pipeline Facility	ATWS_242	53	Agriculture, Developed	0.2	25.0	300.2	Bore	Richland	Private
Pipeline Facility	ATWS_242_b	53.9	Agriculture	0.2	127.5	142.3	Point of Inflection	Richland	Private
Pipeline Facility	ATWS_243	57.1	Agriculture, Forest	0.4	25.0	630.0	Bore	Richland	Private
Pipeline Facility	ATWS_244	56.9	Agriculture	1.8	358.4	842.8	Bore, Point of Inflection	Richland	Private
Pipeline Facility	ATWS_245	57.5	Agriculture	0.3	50.0	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_246	57.1	Agriculture	1.0	125.0	683.5	Bore	Richland	Private
Pipeline Facility	ATWS_247	56.9	Agriculture	0.2	25.0	315.3	Bore, Point of Inflection	Richland	Private
Pipeline Facility	ATWS_248	57.5	Agriculture	0.2	25.0	300.1	Bore	Richland	Private
Pipeline Facility	ATWS_249	54.4	Agriculture	0.3	50.0	300.1	Bore	Richland	Private
Pipeline Facility	ATWS_250	54.4	Agriculture, Developed	0.3	50.0	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_251	57.5	Agriculture, Developed	1.8	201.7	879.6	Bore, Point of Inflection	Richland	Private

APPENDIX 8A
Wahpeton Expansion Project
Additional Temporary Workspaces (ATWS) [a]

Project Facility	Additional Temporary Workspaces	Milepost	Existing Land Uses	Area Affected by Construction (acres)	Width (feet)	Length (feet)	Reason for ATWS	County	Land Owner
Pipeline Facility	ATWS_252	57.5	Agriculture, Developed	0.1	26.3	248.2	Bore, Point of Inflection	Richland	Private
Pipeline Facility	ATWS_253	54.4	Agriculture	0.1	20.8	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_254	54.4	Agriculture	0.1	20.8	300.1	Bore	Richland	Private
Pipeline Facility	ATWS_255	55.4	Agriculture	0.3	50.0	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_256	55.4	Agriculture	0.3	50.0	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_257	56.4	Agriculture	0.3	50.0	301.3	Bore	Richland	Private
Pipeline Facility	ATWS_258	56.4	Agriculture	0.3	50.0	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_259	55.4	Agriculture	0.2	25.0	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_260	55.4	Agriculture	0.2	25.0	300.9	Bore	Richland	Private
Pipeline Facility	ATWS_261	56.4	Agriculture, Developed	0.1	17.1	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_262	56.4	Agriculture	0.1	20.8	300.5	Bore	Richland	Private
Pipeline Facility	ATWS_263	57.7	Agriculture	0.7	100.0	490.6	Bore	Richland	Private
Pipeline Facility	ATWS_264	57.7	Agriculture	0.3	25.2	491.9	Bore	Richland	Private
Pipeline Facility	ATWS_267	57.8	Agriculture	0.2	26.6	300.1	Bore	Richland	Private
Pipeline Facility	ATWS_268	57.8	Agriculture	0.3	50.0	300.5	Bore	Richland	Private
Pipeline Facility	ATWS_269	58.6	Agriculture, Developed	0.2	25.0	350.0	Bore	Richland	Private
Pipeline Facility	ATWS_270	58.6	Agriculture	0.3	50.0	300.5	Bore	Richland	Private
Pipeline Facility	ATWS_271	58.7	Agriculture	0.2	25.1	300.2	Bore	Richland	Private
Pipeline Facility	ATWS_272	58.7	Agriculture	0.3	50.0	300.0	Bore	Richland	Private
Pipeline Facility	ATWS_272_b	59.6	Agriculture	0.1	113.0	142.0	Point of Inflection	Richland	Private
Pipeline Facility	ATWS_273	60.1	Agriculture, Developed, Open Water	0.7	125.9	551.2	Point of Inflection, Bore	Richland	Private
Pipeline Facility	ATWS_274	60.1	Agriculture, Developed, Open Water	0.2	40.3	291.0	Point of Inflection, Bore	Richland	Private

APPENDIX 8A
Wahpeton Expansion Project
Additional Temporary Workspaces (ATWS) [a]

Project Facility	Additional Temporary Workspaces	Milepost	Existing Land Uses	Area Affected by Construction (acres)	Width (feet)	Length (feet)	Reason for ATWS	County	Land Owner
Pipeline Facility	ATWS_275	60.2	Agriculture, Open Water	0.2	32.0	329.3	Bore, Point of Inflection	Richland	Private
Pipeline Facility	ATWS_276	60.1	Agriculture	0.9	183.3	531.0	Bore, Point of Inflection	Richland	Private
Wahpeton Border Station	ATWS_277	60.5	Agriculture, Developed, Open Water	2.4	365.0	516.1	Wahpeton Border Station	Richland	Private

[a] ATWS outside of the 75-foot-wide construction right-of-way will be required for certain road crossings, points of inflection along the route, areas where special construction methods will be implemented (e.g., the guided bore method), and areas where additional space is needed for storage of stripped topsoil.

Resource Report 9 Request No. 3 Attachment

Mapleton Compressor Station Post-Construction Noise Survey

1250 West Century Avenue
Mailing Address:
P.O. Box 5601
Bismarck, ND 58506-5601
(701) 530-1600

November 16, 2018

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E., Room 1A
Washington, D.C. 20426

Re: WBI Energy Transmission, Inc.
Docket No. CP17-257-000
Valley Expansion Project
Post Construction Noise Survey – Mapleton Compressor Station

Dear Ms. Bose:

On February 15, 2018, the Federal Energy Regulatory Commission (FERC or Commission) issued a Certificate of Public Convenience and Necessity (Certificate) in the above-referenced docket authorizing WBI Energy Transmission, Inc. (WBI Energy) to construct and operate the Valley Expansion Project (Project). On March 23, 2018 and May 17, 2018, the Commission granted notices to proceed with construction of all Project facilities. On November 7, 2018, WBI Energy notified the Commission that the Project facilities were placed in-service on November 1, 2018.

Pursuant to Environmental Condition No. 14 of the Appendix to the Certificate, WBI Energy is required to file with the Commission a noise survey within 60 days of placing the Mapleton Compressor Station into service and demonstrate noise attributable to that the compressor station operation does not exceed an Ldn of 55 dBA at nearby noise sensitive areas. The Mapleton Compressor Station was placed into service on November 1, 2018. The applicable noise survey was conducted on November 8, 2018 with the unit operating at full load. WBI Energy is herein filing the full load post construction noise survey results.

The post construction noise survey, provided in Appendix A, shows that the noise levels at the two noise-sensitive areas nearest to the Mapleton Compressor Station do not exceed an Ldn of 55 dBA. The compressor station is therefore operating in compliance with the FERC sound level requirements. An aerial map showing the locations of the two noise-sensitive areas is included in Appendix B.

Should you have any questions or comments regarding this filing, please call the undersigned at (701) 530-1563.

Sincerely,

/s/ Lori Myerchin

Lori Myerchin
Manager, Regulatory Affairs

Attachments

Cc: Robin Griffin, FERC Project Manager

MAPLETON COMPRESSOR STATION - POST CONSTRUCTION

Sound Survey with station running at full load

Day

DATE: 11/8/2018 **WEATHER: Mostly Sunny**

TEMP. 14 F **WIND: 0-5 mph**

TIME START 1:00 PM **TIME END: 1:30 PM**

LOCATION	NSA 1		
dbA	**41.8**	**43.4**	**44.2**
31.5	14.9	11.2	5.3
63	26.9	36.3	24.3
125	31.4	27.1	27.3
250	32.4	30.3	25.3
500	35.5	34.4	30.6
1K	35.5	34.4	41.7
2K	34.6	30.4	39.3
4K	34.1	31.5	26.3
8K	26.3	26.3	26.3
16K	26.3	26.3	26.3

LOCATION	NSA 2		
dbA	**40.2**	**42.6**	**43.2**
31.5	15.6	11.3	24.9
63	15.3	11.7	18.6
125	22.1	20.7	19.5
250	30.0	22.4	17.2
500	36.3	35	30.3
1K	35.7	37.5	39.1
2K	29.4	30.9	29.4
4K	26.2	37.9	27.7
8K	26.3	26.3	26.3
16K	26.3	26.3	26.3

Night

DATE: 11/8/2018 **WEATHER: Clear**

TEMP. 10 F **WIND: 10-13 mph**

TIME START 10:02 PM **TIME END: 10:25 PM**

LOCATION	NSA 1		
dbA	**40.3**	**40.5**	**41.5**
31.5	17.4	16.5	17.4
63	14.9	13.3	15.2
125	25.4	24.2	25.9
250	31.2	25.3	28.6
500	34.7	30.8	33.5
1K	37.3	39.2	39.5
2K	25.7	25.8	30.0
4K	23.3	23.3	24.5
8K	26.3	26.3	26.3
16K	26.3	26.3	26.3

LOCATION	NSA 2		
dbA	**38.8**	**39**	**42.7**
31.5	17.9	12.5	17.8
63	19.0	15.6	15.6
125	20.4	12.8	14.5
250	25.2	16.2	28.8
500	23.7	24.5	41.2
1K	25.3	26.9	37.1
2K	20.3	36.7	31.0
4K	23.3	25.2	26.3
8K	26.2	26.3	26.3
16K	26.3	26.3	26.3

NSA 1 L_{dn} = 47.0 47.5 48.4 **NSA 2 L_{dn} = 45.4 46.1 49.2**

Ldn = 10LOG(1/24(15(10^(Ld/10))+9(10^((Ln+10)/10)))

Notes: Unit ran at capacity

INSTRUMENT DATA: Quest Technologies: 3M SoundPro SE/DL

SETTINGS: RESPONSE - SLOW
WEIGHTING - A
MODE - SPL
RANGE - 0 to 90
Calibration - Pre: Day: 114.0 dBA Night: 114.0 dBA

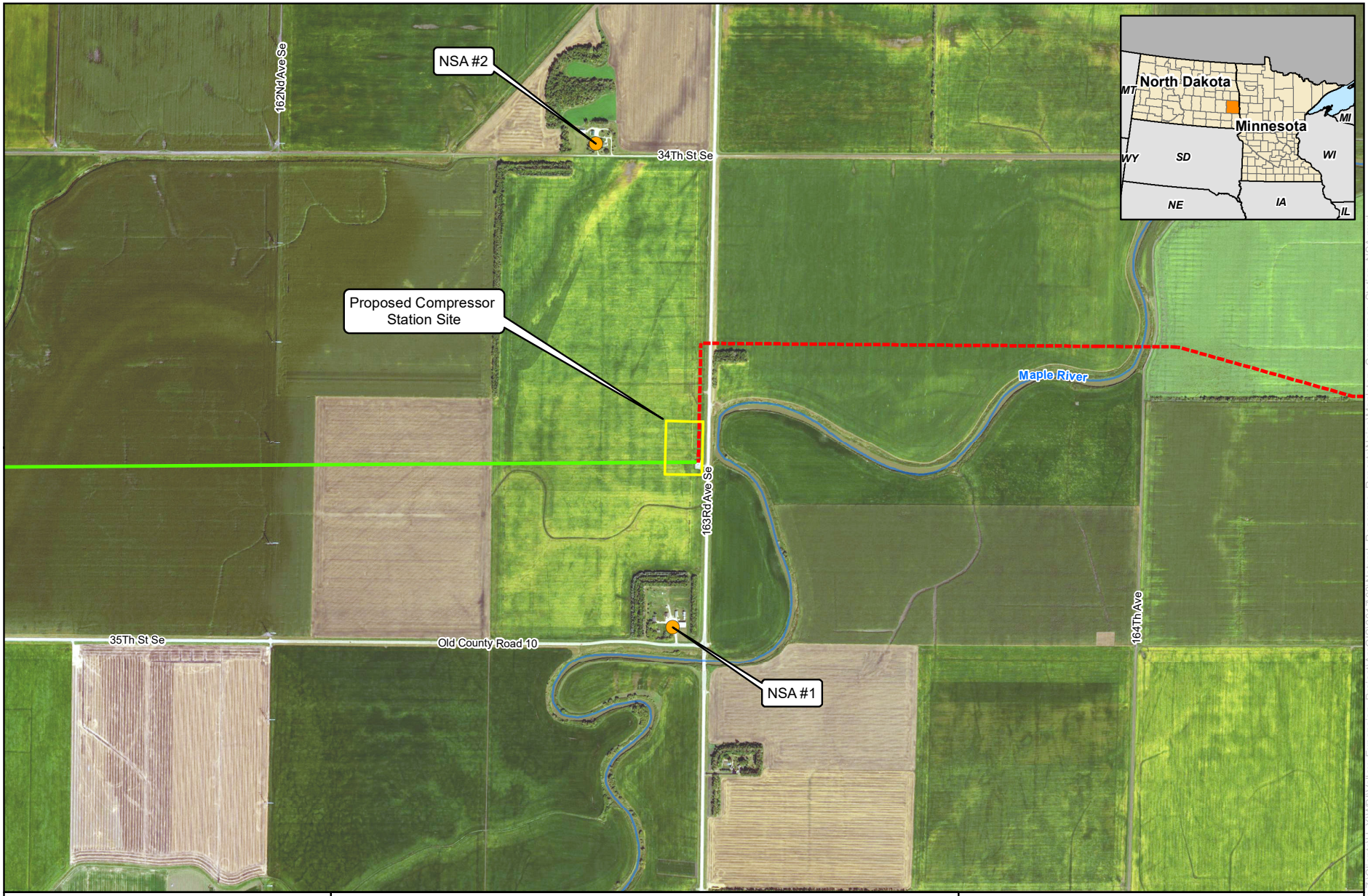


Figure 1

Location of Noise Measurements
Mapleton Compressor Station

Source: Z:\Clients\D_X\WBI\Valley_Expansion_Project\ArcGIS\2017\03\Natural_Resource_Reports\Noise\Mapleton_Compressor_Station_NSA.mxd
Date: (4/7/2017)

Appendix B
Page 1 of 1

Resource Report 9 Request No. 10 Attachment

Revised Construction Emissions Total for the Entire Project Table within Appendix 9C – Construction Emission Calculations

Project: Wahpeton Expansion Project
Subject: Construction Emissions
Task: Construction Emission Totals for Entire Project - Appendix 9B

Prepared by: CGW
Reviewed by: AMC
Date: 7/8/2022

Total Emissions	Pollutant (Tons)[1]										
	CO	NO_X	PM_{10}	$PM_{2.5}$	SO_2	VOC	HAP	CO_2	CH_4	N_2O	CO_2e[2]
Mapleton Compressor Station - Cass County											
Diesel Non-Road Equipment	0.025	0.064	0.004	0.004	0.000	0.007	0.003	24.61	0.000	0.000	24.64
Diesel and Gas On-Road Equipment	0.064	0.011	0.000	0.000	0.000	0.002	0.001	6.34	0.000	0.000	6.36
Construction Activity Fugitive Dust	---	---	0.365	0.054	---	---	---	---	---	---	---
Unpaved Roadway Fugitive Dust	---	---	0.003	0.000	---	---	---	---	---	---	---
Emissions Total:	**0.089**	**0.076**	**0.372**	**0.058**	**0.000**	**0.009**	**0.004**	**30.96**	**0.000**	**0.000**	**30.997**
Kindred Border Station - Cass County											
Diesel Non-Road Equipment	0.156	0.325	0.032	0.031	0.000	0.037	0.019	133.73	0.001	0.000	133.82
Diesel and Gas On-Road Equipment	0.123	0.027	0.001	0.001	0.000	0.004	0.001	15.05	0.000	0.000	15.08
Construction Activity Fugitive Dust	---	---	0.494	0.074	---	---	---	---	---	---	---
Unpaved Roadway Fugitive Dust	---	---	0.005	0.000	---	---	---	---	---	---	---
Emissions Total:	**0.280**	**0.353**	**0.532**	**0.106**	**0.000**	**0.041**	**0.020**	**148.77**	**0.001**	**0.000**	**148.89**
Wahpeton Border Station - Richland County											
Diesel Non-Road Equipment	0.147	0.303	0.030	0.030	0.000	0.035	0.018	129.13	0.001	0.000	129.21
Diesel and Gas On-Road Equipment	0.125	0.027	0.001	0.001	0.000	0.004	0.001	15.06	0.000	0.000	15.09
Construction Activity Fugitive Dust	---	---	0.480	0.072	---	---	---	---	---	---	---
Unpaved Roadway Fugitive Dust	---	---	0.003	0.000	---	---	---	---	---	---	---
Emissions Total:	**0.272**	**0.330**	**0.514**	**0.102**	**0.000**	**0.039**	**0.019**	**144.19**	**0.001**	**0.000**	**144.30**
Cass County Pipeline Segment											
Diesel Non-Road Equipment	29.586	12.483	1.388	1.332	0.020	10.058	3.405	6,482.20	1.476	0.295	6,607.07
Diesel and Gas On-Road Equipment	11.796	1.024	0.024	0.021	0.004	0.346	0.090	575.65	0.015	0.003	576.89
Construction Activity Fugitive Dust	---	---	44.572	6.259	---	---	---	---	---	---	---
Unpaved Roadway Fugitive Dust	---	---	4.331	0.433	---	---	---	---	---	---	---
Emissions Total:	**41.382**	**13.507**	**50.314**	**8.046**	**0.024**	**10.405**	**3.494**	**7,057.85**	**1.491**	**0.298**	**7,183.96**
Richland County Pipeline Segment											
Diesel Non-Road Equipment	42.101	17.662	1.971	1.892	0.028	14.315	4.844	9,191.89	2.100	0.420	9,369.59
Diesel and Gas On-Road Equipment	16.976	1.459	0.034	0.030	0.005	0.495	0.128	821.77	0.021	0.004	823.53
Construction Activity Fugitive Dust	---	---	66.121	9.300	---	---	---	---	---	---	---
Unpaved Roadway Fugitive Dust	---	---	7.453	0.745	---	---	---	---	---	---	---
Emissions Total:	**59.08**	**19.12**	**75.58**	**11.97**	**0.03**	**14.81**	**4.97**	**10,014**	**2.12**	**0.42**	**10,193**
Project Emission Totals:	**101.10**	**33.39**	**127.31**	**20.28**	**0.06**	**25.30**	**8.51**	**17,395**	**3.62**	**0.72**	**17,701**

1 Valve Station emissions are included in the other emissions categories as follows:
Valve Station #1 - Mapleton Compressor Station
Valve Station #2 - Cass County Pipeline
Valve Station #3 - Kindred Border Station
Valve Stations #4-6 - Richland County Pipeline
Valve Station #7 - Wahpeton Border Station

2 CO_2e is the sum of CO_2, CH_4, and N_2O multiplied by the applicable global warming potential expressed in tons.

Resource Report 10 Request No. 2 Attachment

Updated Appendix 10A, Aboveground Facility Alternative Figures

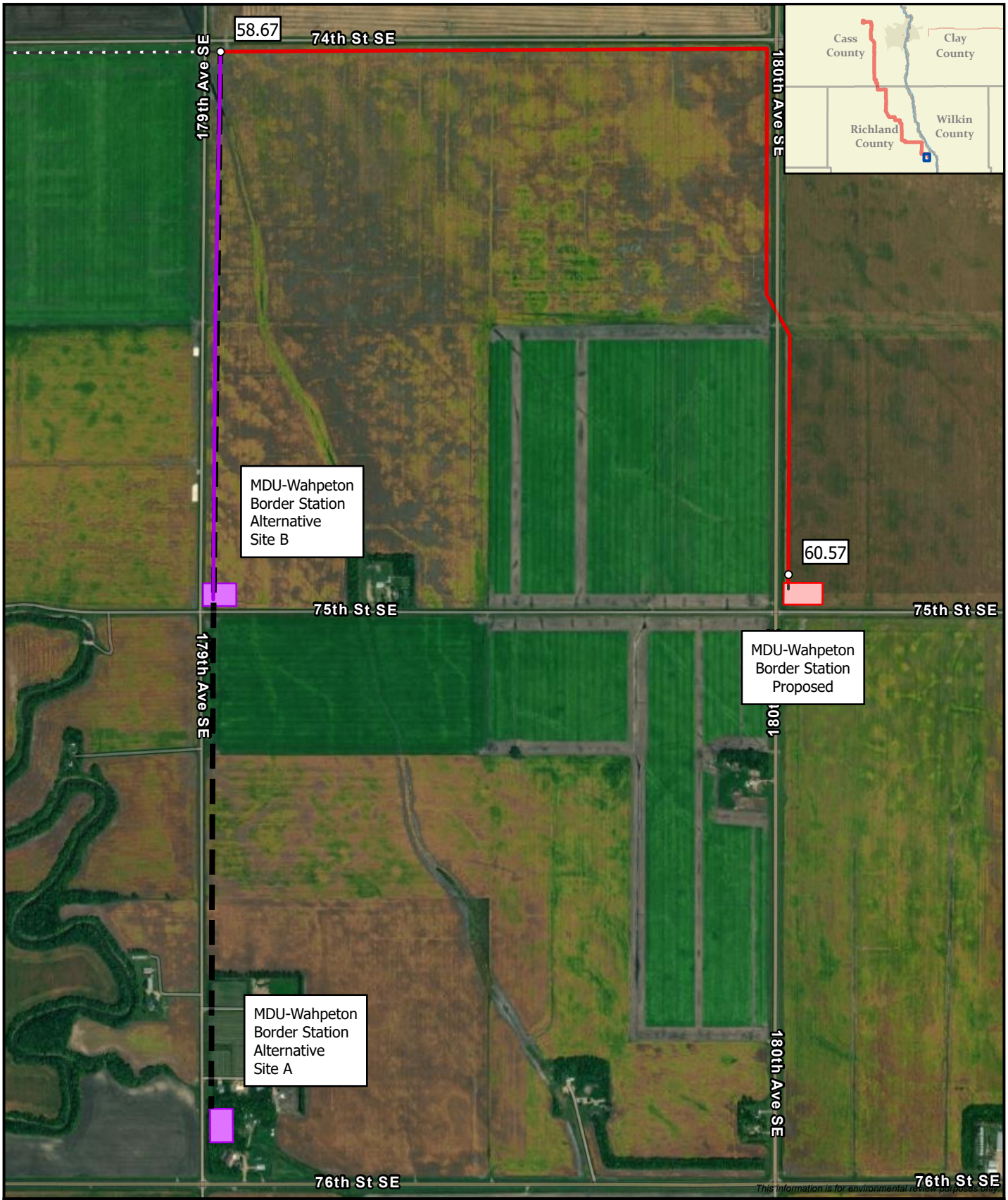
Milepost
Proposed Route
Alternative Site B
Corresponding Segment of Proposed Route
Alternative
Preferred

1:9,000
0 0.04 0.07 0.14 Miles

Figure 10.7-1
MDU-Kindred Border Station and Pipeline Alternatives
Wahpeton Expansion Project
WBI Energy Transmission, Inc.
Cass County, North Dakota

ERM

MPLS M:\Clients\V-X\WBI\Mapleton_to_Wahpeton\ArcGIS\M2W_FERC_Filing_Report\M2W_FERC_Filing_Report.aprx | REVISED: 04/22/2022 | SCALE: 1:3,677,839 DRAWN BY: RJC



Milepost
Proposed Route
Alternative Site A
Alternative Site B
Corresponding Segment of Proposed Route
Alternative
Preferred

1:15,000

0 0.05 0.1 0.2 Miles

Figure 10.7-2
MDU-Wahpeton Border Station and Pipeline Alternatives
Wahpeton Expansion Project
WBI Energy Transmission, Inc.
Richland County, North Dakota

ERM

MPLS M:\Clients\V-X\WBI\Mapleton_to_Wahpeton\ArcGIS\M2W_FERC_Filing_Report\M2W_FERC_Filing_Report.aprx | REVISED: 04/22/2022 | SCALE: 1:3,677,839 DRAWN BY: RJC