

TAB 4 – Route Certificate Application Exhibits

- Appendix 4.A Archaeological and Cultural Assessment Reports
(Metcalf Archeological Consultants, Inc.)
- Appendix 4.B Maps of Exclusion and Avoidance Areas
- Appendix 4.C Landowner List
- Appendix 4.D State Sensitive Species & Rankings
- Appendix 4.E Agency Notifications and Responses

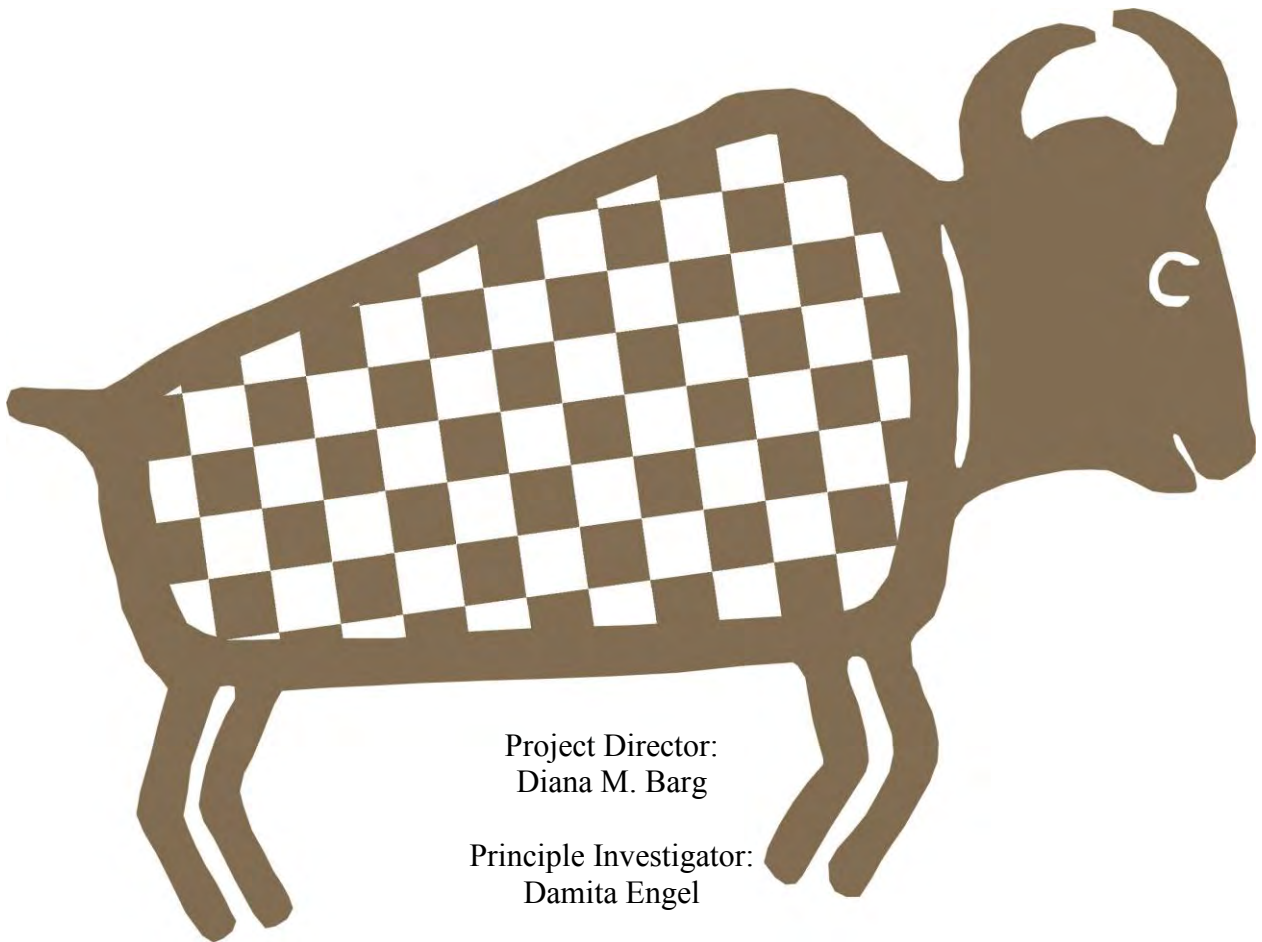
MANUSCRIPT DATA RECORD FORM

- 1. Manuscript Number:
- 2. SHPO Reference #:
- 3. Author(s): Diana M. Barg
- 4. Title: Bridger Pipeline LLC’s Heart River Pipeline: A Class III Cultural Resource Inventory in Stark and Billings Counties, North Dakota
- 5. Report Date: January 2015
- 6. Number of Pages: 32
- 7. Type: I
- 8. Acres: 220
- 9. Legal Location(s):

County	TWP	R	SEC	SU
Billings				HE
Stark				HE
Billings				HE

**BRIDGER PIPELINE LLC'S
HEART RIVER PIPELINE:
A CLASS III CULTURAL RESOURCE INVENTORY IN
STARK AND BILLINGS COUNTIES, NORTH DAKOTA**

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January 2015

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All reports (Class I, II, III, Testing, or Data Recovery) or any loose maps that will be distributed outside the agency or client should not contain site locational information. Site locational information includes the location of a site on a topographic map or aerial photographs, the location of a site in tables, such as Township, Range, and Section, or photographs of sites. It is acceptable to mention the Smithsonian Trinomial designation (e.g., 32EM0123) as this does not contain locational information, other than state and county.



ABSTRACT

Bridger Pipeline LLC. proposes to construct a 15-mile-long stretch of pipeline for the Heart River Pipeline project. The project is located north of the city of Belfield, North Dakota and spans part of Stark and Billings Counties, North Dakota. The North Dakota Public Service Commission is the permitting agency. Due to the North Dakota Public Service Commission's involvement in the project, the applicant consults with North Dakota State Historic Preservation Office/State Historical Society of North Dakota. Metcalf Archaeological Consultants, Inc. was contracted by Keitu Engineers & Consultants, Inc., on behalf of Bridger Pipeline LLC, to conduct a cultural resource inventory to identify any significant resources. Metcalf Archaeological Consultants, Inc conducted a Class III level cultural resource inventory of approximately 220 acres from September 30, 2014 to October 4, 2014. Field personnel included Project Director Diana M. Barg and Field Technicians Gwen Kristy and Paige Goveia. Metcalf Archaeological Consultants, Inc. identified and recorded two cultural resources. The two cultural resources, 32BI1130 and 32SKx379, are recommended *not significant* if evaluated against the criteria for inclusion in the National Register of Historic Places. Provided that the project's scope does not change, Metcalf Archaeological Consultants, Inc. recommends a finding of *No Significant Sites Affected* for the proposed undertaking as surveyed, mapped, and documented herein.



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INTRODUCTION

Bridger Pipeline LLC. (Bridger) proposes to construct a 15-mile stretch of pipeline for the Heart River Pipeline project in parts of Stark and Billings Counties, North Dakota. The North Dakota Public Service Commission is the permitting agency. Due to the North Dakota Public Service Commission’s involvement in the project, the applicant consults with North Dakota State Historic Preservation Office/State Historical Society of North Dakota. Metcalf Archaeological Consultants, Inc. (Metcalf) was contracted by Keitu Engineers & Consultants, Inc. (Keitu), on behalf of Bridger, to conduct a cultural resource inventory of the area of potential effects (APE).

Metcalf archaeologists conducted a Class III cultural resource inventory of the project’s APE from September 30, 2014 to October 4, 2014. The APE measures approximately 15 miles long by 150 feet wide. Metcalf field personnel included Project Director Diana Barg and Field Technicians Gwen Kristy and Paige Goveia. While in the field, Metcalf contacted private landowner, Dan A. Obridgwitch, seeking permission to enter his land. Mr. Obridgwitch granted Metcalf permission on September 1, 2014 to enter his land and his brother’s, Chad Obridgwitch, land for survey purposes. The Class III inventory area encompassed approximately 220 acres. Two cultural resources were identified and recorded in the APE.

DESCRIPTION OF THE UNDERTAKING

The proposed undertaking entails the construction of a 15-mile-long pipeline in Stark and Billings Counties, North Dakota. The APE measures approximately 15 miles long by 150 feet wide, approximately 273 acres. Of the 273 acres, approximately 53 acres were inaccessible for survey due to lack of landowner permission.

THE UNDERTAKING LOCATION

[REDACTED] The project spans parts of Stark and Billings Counties, North Dakota (Figure 1). The legal locations of the project area are listed in Table 1. The APE is depicted on the relevant portions of the USGS 7.5’ Fryburg NE (1962), Belfield (1962, photorevised 1981), Belfield NE (1962, photorevised 1981), Rattlesnake Butte (1963), and Fairfield SE (1963) quadrangle maps (Appendix A).

Table 1: Legal Locations—Bridger—Heart River Pipeline			
County	TWP	R	SEC
Billings	[REDACTED]	[REDACTED]	[REDACTED]
Stark	[REDACTED]	[REDACTED]	[REDACTED]
Billings	[REDACTED]	[REDACTED]	[REDACTED]

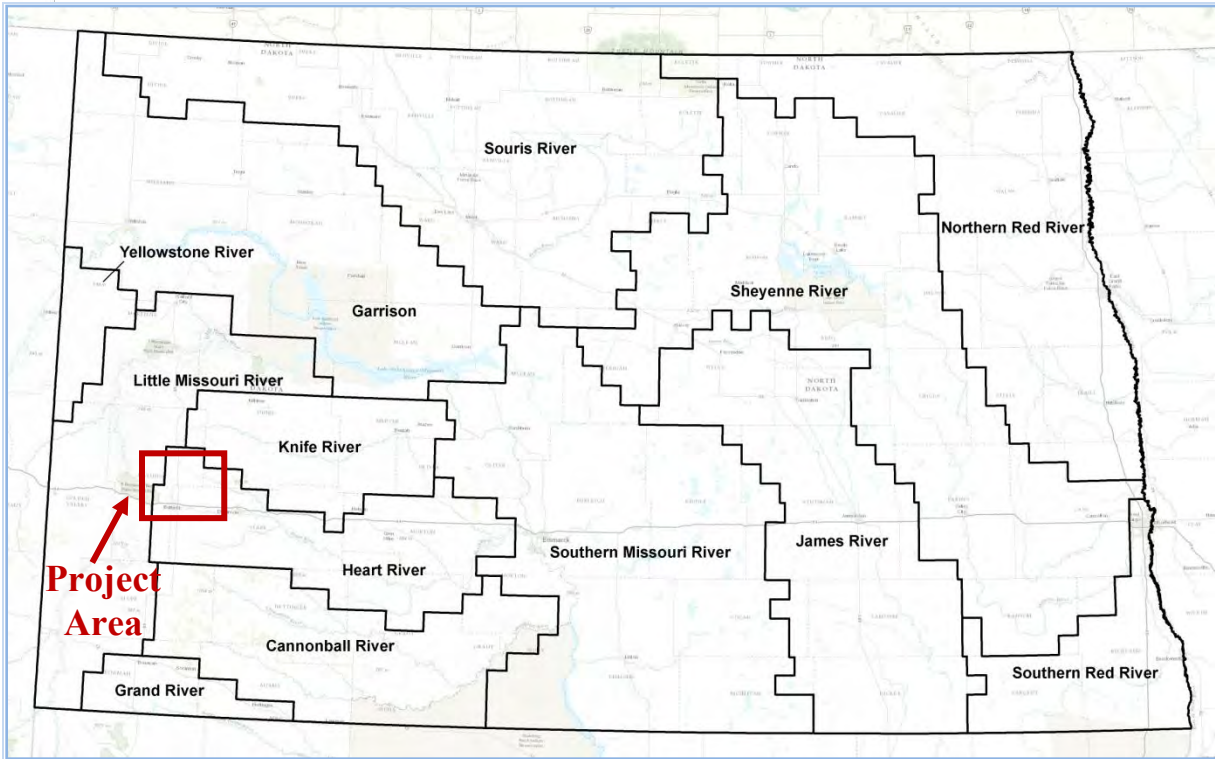


Figure 1: The general location of the project area depicted on a map of North Dakota.

PROJECT SETTING

Physiographically, the project is located in the Missouri Slope Upland portion of the Great Plains Physiographic Region (Bluemle 2000, 2007). The area showcases rolling and hilly topography, badlands, and prominent buttes with local relief between 300 and 500 feet. Areas within this physiographic region slope upwards to the west and often range 200 to 400 feet higher than the more northerly McKenzie Uplands. Fifty to 80 percent of the region contains gentle slopes. Archaeologically, the proposed undertaking is located in the Heart River Study Unit as defined in the *North Dakota Comprehensive Plan for Historic Preservation: Archaeological Component* (SHSND 2008). The reader is referred to Bluemle (2000) and SHSND (2008) for a detailed overview of the area's physiography and archaeology. Overviews of the project area can be seen in Figure 2 through 4.



Figure 2: Overview of the project area [REDACTED] (Image 2928).



Figure 3: Overview of the project area [REDACTED] (Image 2953).



Figure 4: Overview of the project area [REDACTED] (Image 2955).

FILES SEARCH

On August 13, 2014, prior to the Class III inventory, Metcalf staff Erica Scherr conducted a review of the site and manuscript files at the State Historical Society of North Dakota (SHSND). The objective was to determine if any cultural resources have been recorded or if any cultural resource inventories have been conducted within the APE and a one-mile radius. The results of the review are summarized and presented in Tables B-1 and B-2 (Appendix B).

The site files search revealed 39 cultural resources recorded in the search area: 23 in Billings County and 16 in Stark County. These resources include 18 precontact (prehistoric/archaeological) sites and five postcontact (historic) sites in Billings County. The precontact cultural resources include two precontact sites, one site lead, and 15 isolated finds. The postcontact cultural resources include one architectural site with postcontact components, one architectural site, two sites, and one site lead. Of the 16 sites recorded in Stark County, nine are precontact sites and seven are postcontact sites. The precontact cultural resources include two sites with cultural materials and seven as isolated finds. The postcontact cultural resources include two architectural sites, two sites, two site leads, and one isolated find.

Ten cultural resources are located within 0.25-mile of the proposed APE. These resources include seven precontact isolated finds, one postcontact isolated find, one precontact site lead, and one postcontact site lead. Isolated finds are considered *not significant* if evaluated against criteria necessary for inclusion in the National Register of Historic Places (NRHP) and no



avoidance is recommended. The precontact site lead, 32BIx030, is located far enough away from the proposed APE that no further work is recommended. The postcontact site lead, 32SKx130, is a potential coal mine location; no evidence of a mine was encountered during the Class III survey.

The manuscript files search also revealed that 65 cultural resources inventories have been conducted in the search area. The inventories are as follows:

- Oil and gas development (35)
- Telephone cable (2)
- Buried cable lines (1)
- Road improvements (13)
- Medora Grazing Association Projects (1)
- Wrought iron cross cemeteries (1)
- Gravel and borrow (1)
- U.S. Air Force Ground Wave Emergency Network site (1)
- Klem Ducks Unlimited Pond (1)
- Water pipelines (4)
- Dam maintenance project (1)
- Proposed Grasslands Project (1)
- Uranium Industry context statement (1)
- Communications towers (1)
- Electrical transmission line (1)

Four isolated finds, 32SKx350 (chipped stone), 32SKx340 (chipped stone), 32SKx349 (chipped stone), and 32SKx351 (chipped stone) are located within or directly adjacent to the APE. Thirteen surveys cross the APE, including eight inventories for oil and gas, one for a telephone cable, one for buried cable, two for roads, and one for a tank battery.

FIELD METHODS

Metcalf conducted a Class III cultural resource inventory of the project area from September 30, 2014 to October 4, 2014. The inventory conformed to standards outlined in the *North Dakota SHPO Guidelines Manual for Cultural Resource Inventory Projects* (SHSND 2012). Pedestrian transects were spaced no more than 15-meters apart throughout the APE. The weather during the survey was sunny, overcast, dry, wet, and windy.

In accordance with Metcalf procedural guidelines, when encountering a site, archaeologists photographed the site area and features, produced a site sketch map with the aid of the GPS unit, and filled out a North Dakota Cultural Resource Survey site form. The APE boundaries are mapped with a handheld GPS unit, and during the course of the inventory, representative digital photographs and field notes are taken. Copies of the photos, site forms, maps, and field notes are on file at the Metcalf Bismarck office.

Metcalf conducted a Class III level cultural resource inventory of the approximately 15-mile-long (79,200 feet) by 150-foot-wide corridor. The APE encompasses approximately 273 acres. Of the 273 acres, approximately 53 acres were inaccessible for survey due to lack of landowner permission. Metcalf conducted a Class III level inventory of approximately 220 acres.



The vegetation in the APE is composed of cropland; a combination of native grasses, non-native grasses, and other vegetation cover; manicured grasses or road ditches; and inundated areas. The majority of the APE is cropland (51 percent) which includes many fields that have been harvested and some that have been tilled. The ground surface visibility (GSV) in the cropland varied from 0 and 40 percent with one freshly tilled area providing 80 to 100 percent GSV. Areas of native prairie mixed with non-native grasses and other vegetation cover comprised 43 percent of the project area. Many of the native and non-native prairie landscapes are used as pastureland for cattle and horses which has caused disturbance. Large glacial erratics and cobbles are present in some of the native prairie landscapes. Four percent of the APE landscape is vegetated with manicured grasses or is within the road ditch, providing a GSV of 0 to 15 percent. Two percent of the APE consists of areas inundated with water; moist areas and areas with small streams, however, are present throughout the landscape. GSV in the inundated areas is 0 percent. The landscape surrounding the APE is rural and agricultural with farmsteads and oil extraction machinery present. Multiple homes, farms, well pads, cropland, and pastureland are located within the immediate vicinity of the APE.

RESULTS

Metcalf archaeologists identified and recorded two cultural resources during the Class III inventory for the proposed Heart River Pipeline project. The Recommendations section provides a summary of the sites, significance, and recommendations.

32BI1130

32BI1130 is an architectural site with a postcontact component consisting of five features (Figures 5-11). The landscape surrounding the site is a rolling plains environment with small shelterbelts to the east and west. The site is situated on top of a flat hill overlooking a valley/gulley with an abandoned farmhouse, large foundation, and a small pond to the north but outside the current site boundaries. [REDACTED]

Feature 1 is a small shed measuring approximately 5 feet (east-west) by 8 feet (north-south). The structure stands about 5 feet tall; the walls are plywood covered with sheets of corrugated metal. The structure has a slightly sloping shed roof, also covered in corrugated metal with white metal cornering. A large door is located on the east facade. It is covered with corrugated metal, has a latch, and is attached to the structure with metal hinges. No fenestration is present on the other facades. The bottom of the structure is heavily rusted on all sides. Feature 1 is in fair condition. It retains integrity of location, setting, design, workmanship, and feeling. Integrity of materials is reduced by the heavy amounts of rust on the bottom of the structure.



Feature 2 is a gate attached to two pillars constructed of fieldstone. These pillars are positioned on the east and west sides of the gate. Moss and lichen are present on these stones. Each pillar stands approximately 3 feet tall. A small metal gate is attached to the pillars. The gate and pillars stand alone; there is no evidence of a structure or fence. Feature 2 is in fair condition and retains integrity of location and setting. Integrity of design, materials, workmanship, and feeling are profoundly impacted by the loss of the rest of the structure and the general dilapidation of the gate.

Feature 3 is a concrete slab measuring 6 meters (east-west) by 4 meters (north-south). The slab is located approximately 15 meters east of Feature 1. The integrity of Feature 3 is compromised by the lack of any associated structure or details that would determine its original function.

Feature 4 is a postcontact dump. Materials in the dump include logs, lumber, rolls of barbed wire, and sheet metal. The dump is located approximately 15 meters north of Feature 3. The dump at 32BI1130 may contribute to knowledge of the farmstead, but is otherwise not significant and possesses poor integrity due to modern dumping.

Feature 5 is a concrete foundation composed of foundation walls on the south, east, and west sides. A concrete slab is not evident within the foundation walls. The foundation measures 4 meters (east-west) by 5 meters (north-south). Feature 5 is located approximately 30 meters northeast of Feature 1. The integrity of Feature 5 is compromised by the lack of any associated structure.

Site 32BI1130 does not appear to be significant or retain integrity when measured against the criteria necessary for eligibility in the NRHP. Therefore, Metcalf recommends no avoidance necessary for 32BI1130.

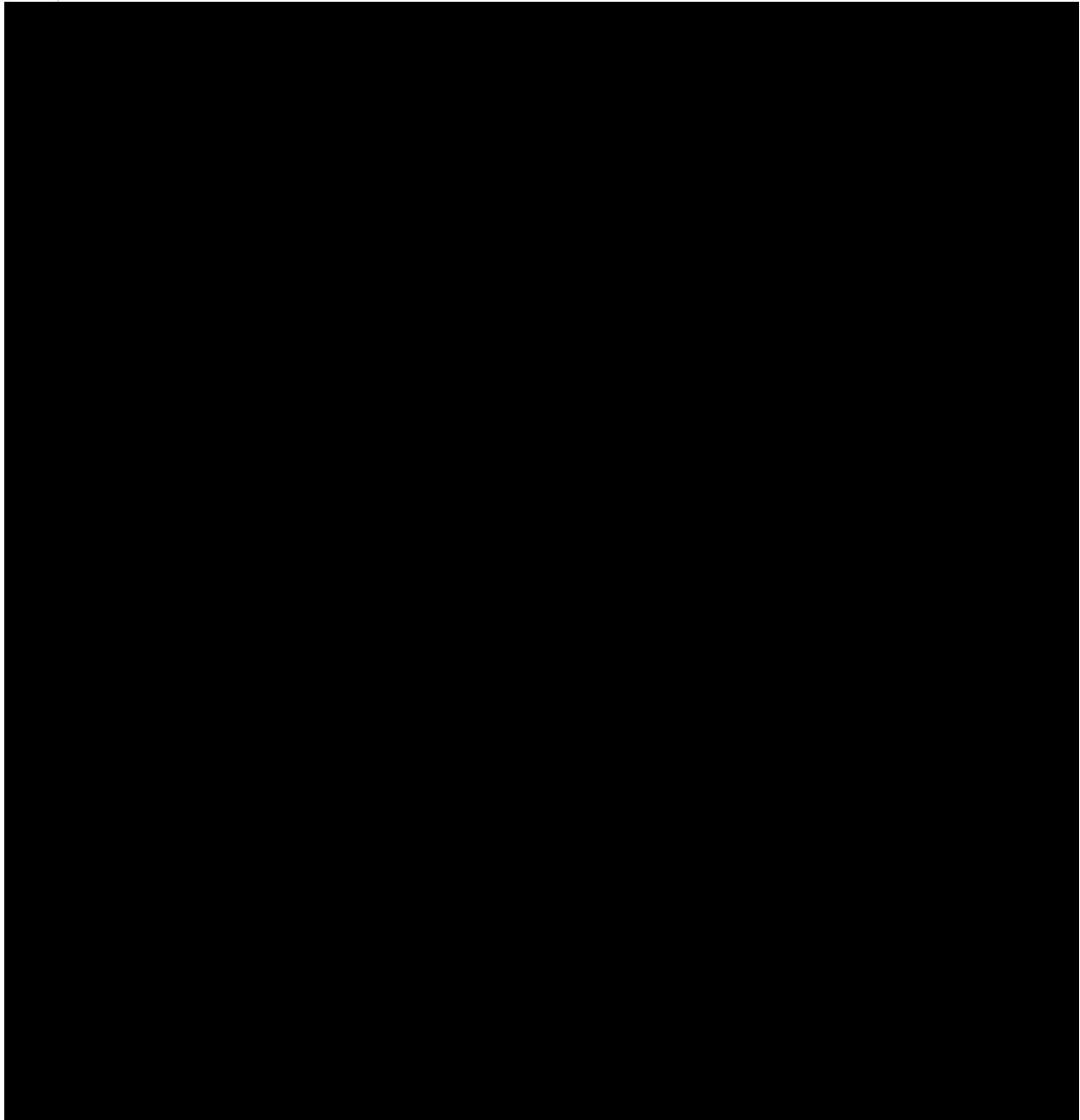


Figure 5: Sketch map of 32BI1130.

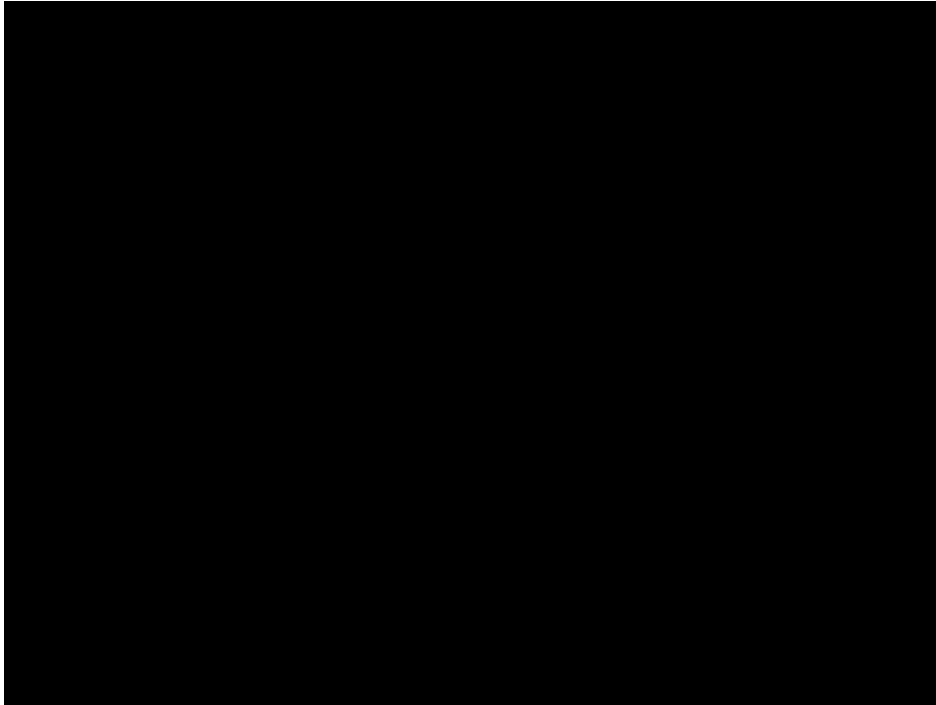


Figure 6: Overview of 32BI1130 [REDACTED] (Image 3021).

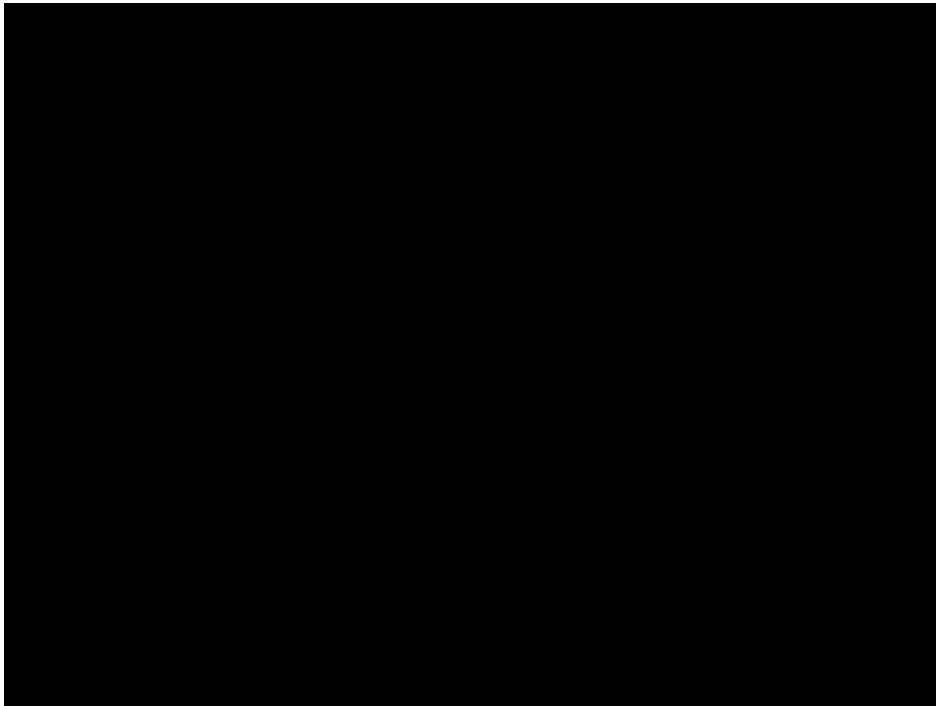


Figure 7: Overview of Feature 1 at 32BI1130 [REDACTED]
(Image 2983).

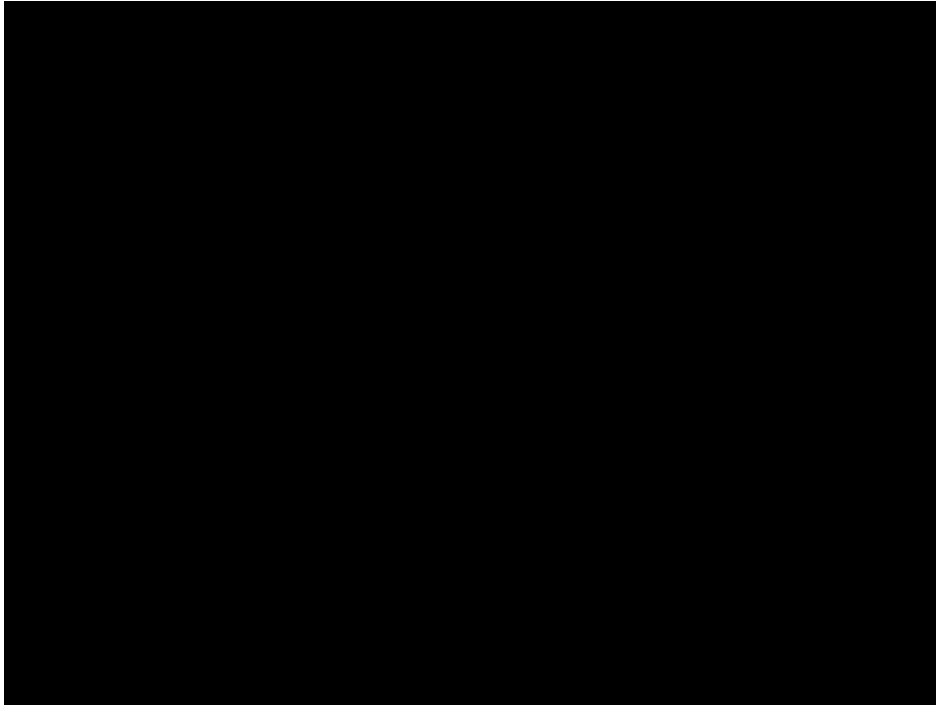


Figure 8: Overview of Feature 2 at 32BI1130 [REDACTED]
(Image 2992).

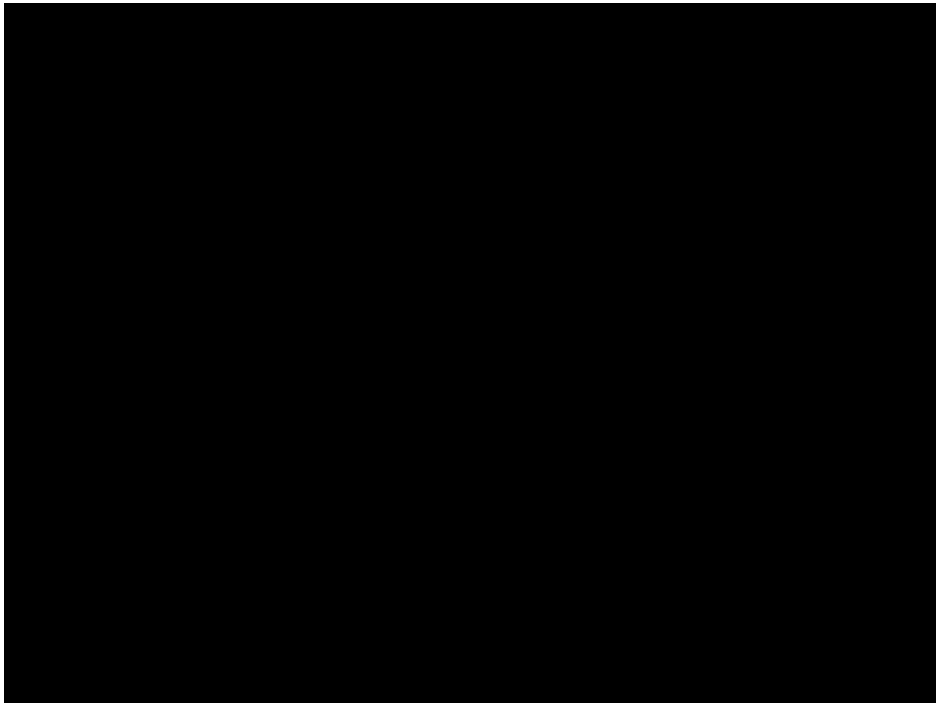


Figure 9: Overview of Feature 3 at 32BI1130 [REDACTED] (Image 2999).

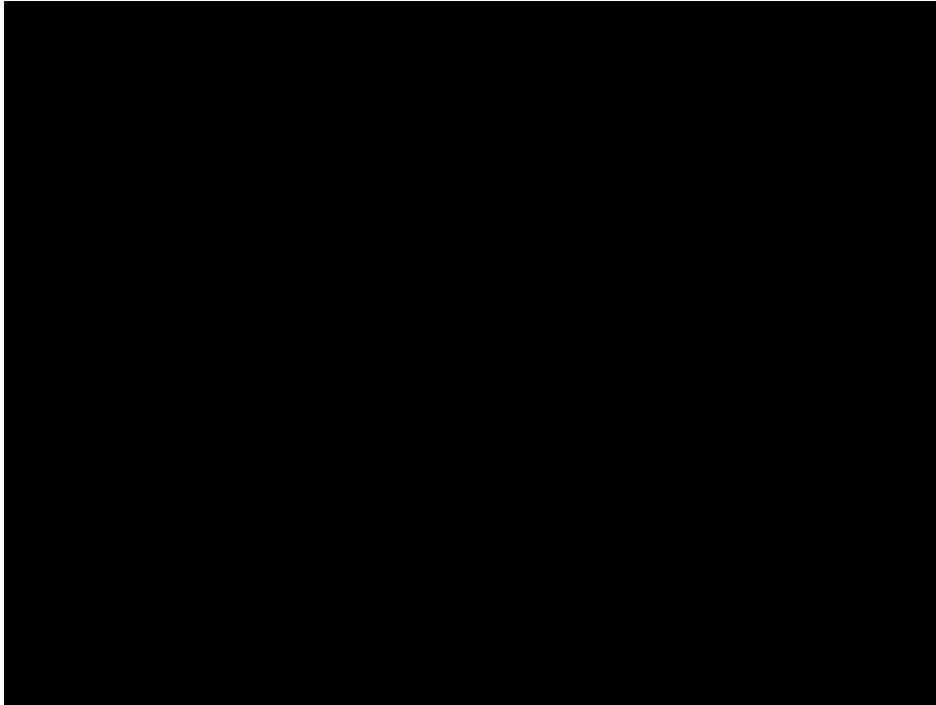


Figure 10: Overview of Feature 4 at 32BI1130 [REDACTED]
(Image 3004).

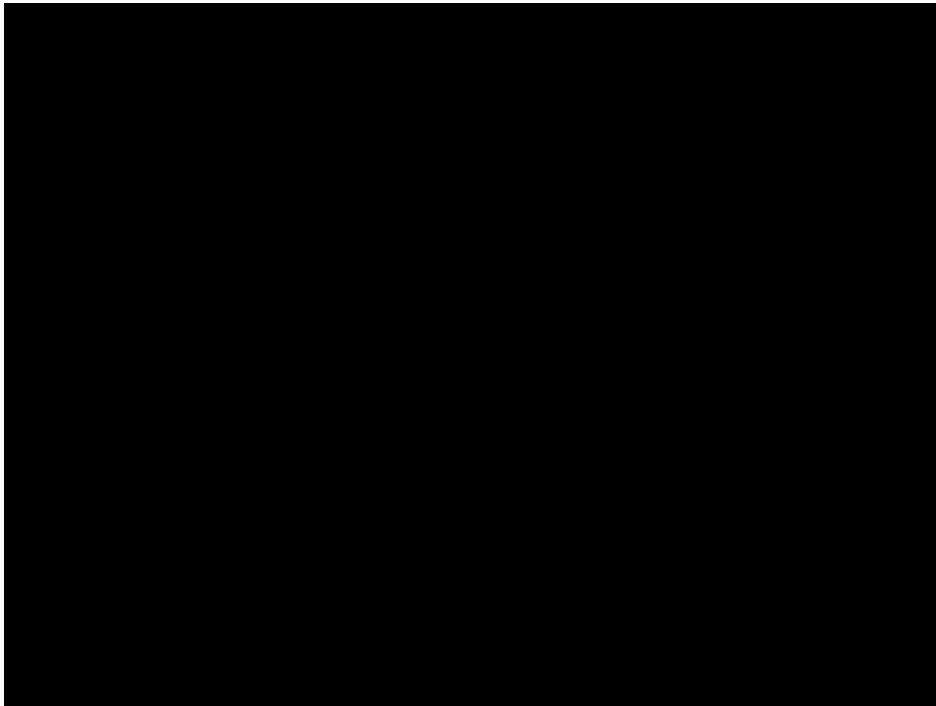


Figure 11: Overview of Feature 5 at 32BI1130 [REDACTED]
(Image 3017).



32SKx379

32SKx379 is a precontact isolated find consisting of a single Knife River flint (KRF) biface fragment. The artifact is likely not *in situ*; it was encountered in a pipeline scar on the landscape. The NDSHPO does not consider isolated finds, such as this, significant. No avoidance measures are necessary for 32SKx379.

RECOMMENDATIONS

Metcalf recorded two sites within the APE for Bridger's proposed Heart River Pipeline project. The potential effect of the project on all recorded and/or relocated cultural resources within the APE were evaluated.

Metcalf recommends the two sites (32BI1130 and 32SKx379) as *not significant* if evaluated against the criteria for inclusion in the NRHP. Metcalf recommends no avoidance required.

Provided that the scope of the project does not change, Metcalf recommends a finding of *No Significant Sites Affected* for the proposed undertaking as surveyed, mapped, and documented herein. Metcalf recommends that the project proceed as planned if the above conditions are met. If there are any changes to the APE, additional cultural resource investigations may be necessary prior to construction. If landowner permission is granted for survey in the areas that currently lack permissions, these areas will also need cultural resource investigations prior to construction. If any cultural materials are encountered during construction, work should be halted and a qualified archaeologist and interested tribes contacted to evaluate the find.



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2007 Glacial Lake Agassiz. North Dakota Geological Survey. North Dakota Note #1. Electronic document, <https://www.dmr.nd.gov/ndgs/NDNotes/Agassiz/Lake%20Agassiz.asp>, accessed August 2014.

NPS (National Park Service, Department of the Interior)

1983 *Archaeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines [as Amended and Annotated]* (48 FR 44716-740, September 29, 1983). Electronic document, http://www.nps.gov/history/local-law/arch_stnds_0.htm, accessed March 2014.

State Historical Society of North Dakota (SHSND)

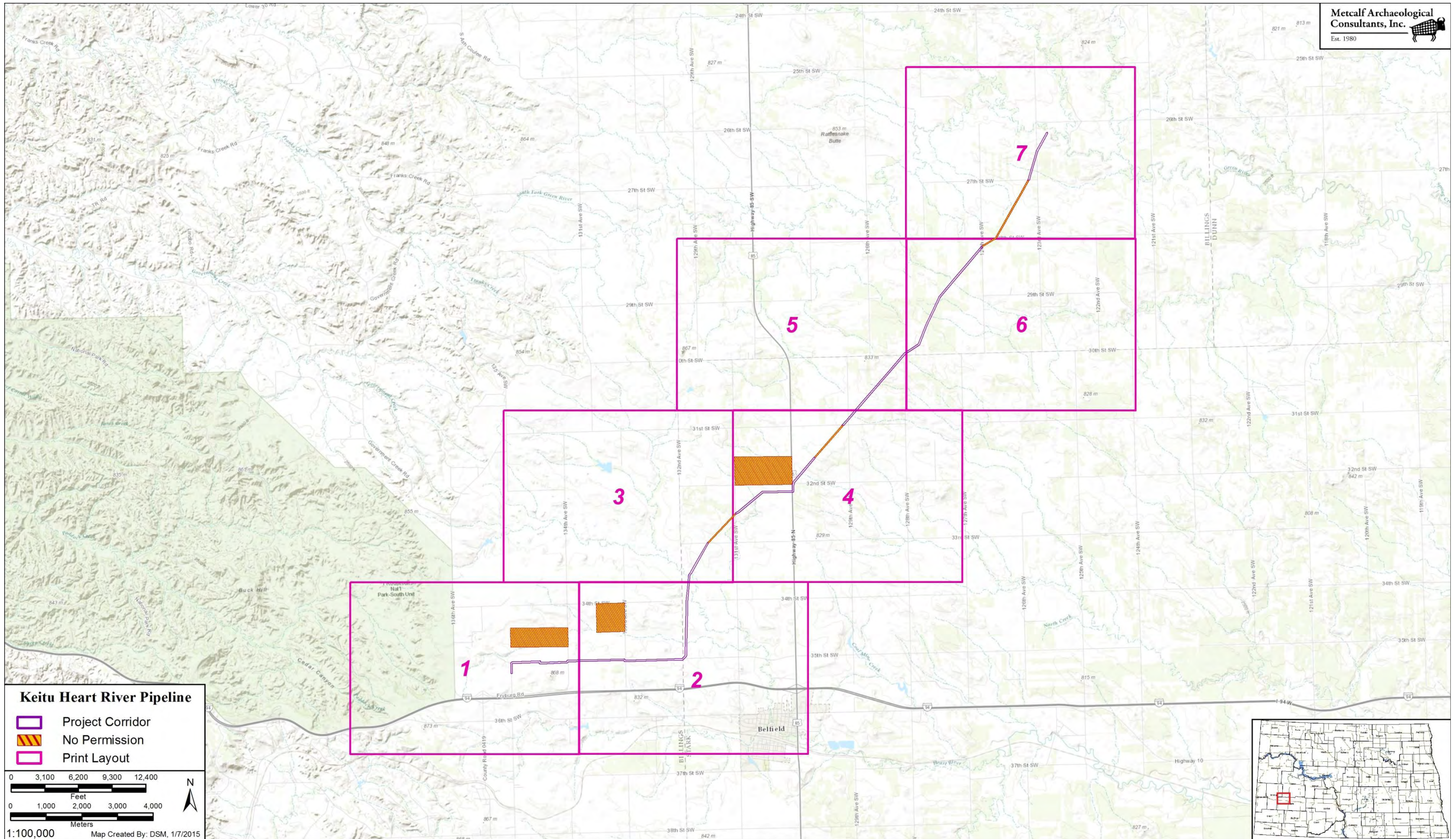
2008 *The North Dakota Comprehensive Plan for Historic Preservation: Archeological Component*. Electronic document, <http://history.nd.gov/hpforms.html>, accessed October 2013.

2012 *North Dakota SHPO Guidelines Manual for Cultural Resource Inventory Projects*. Electronic document, <http://history.nd.gov/hp/PDFinfo/ND%20SHPO%20Guidelines%20Manual.pdf>, accessed May 2013.

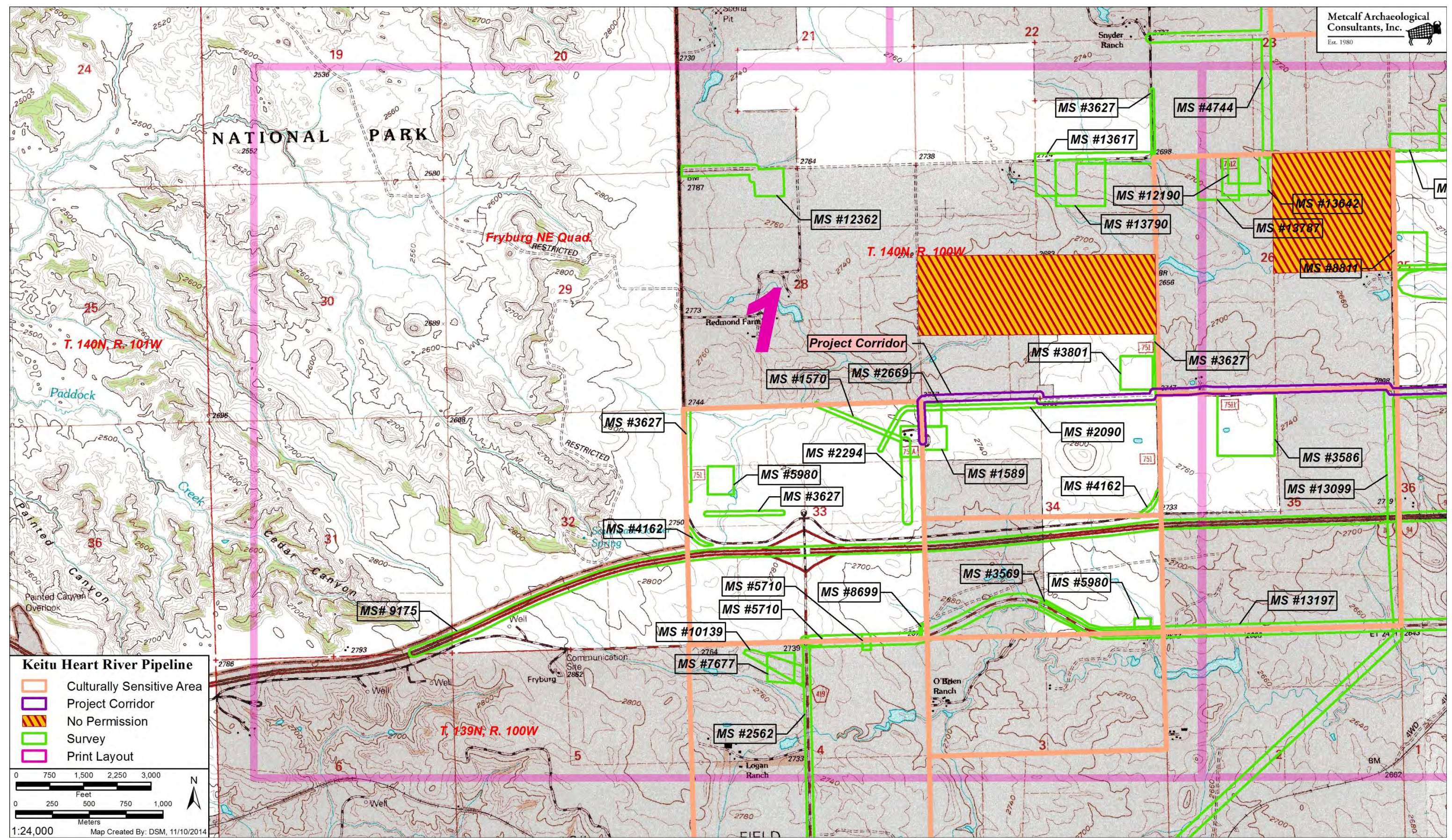


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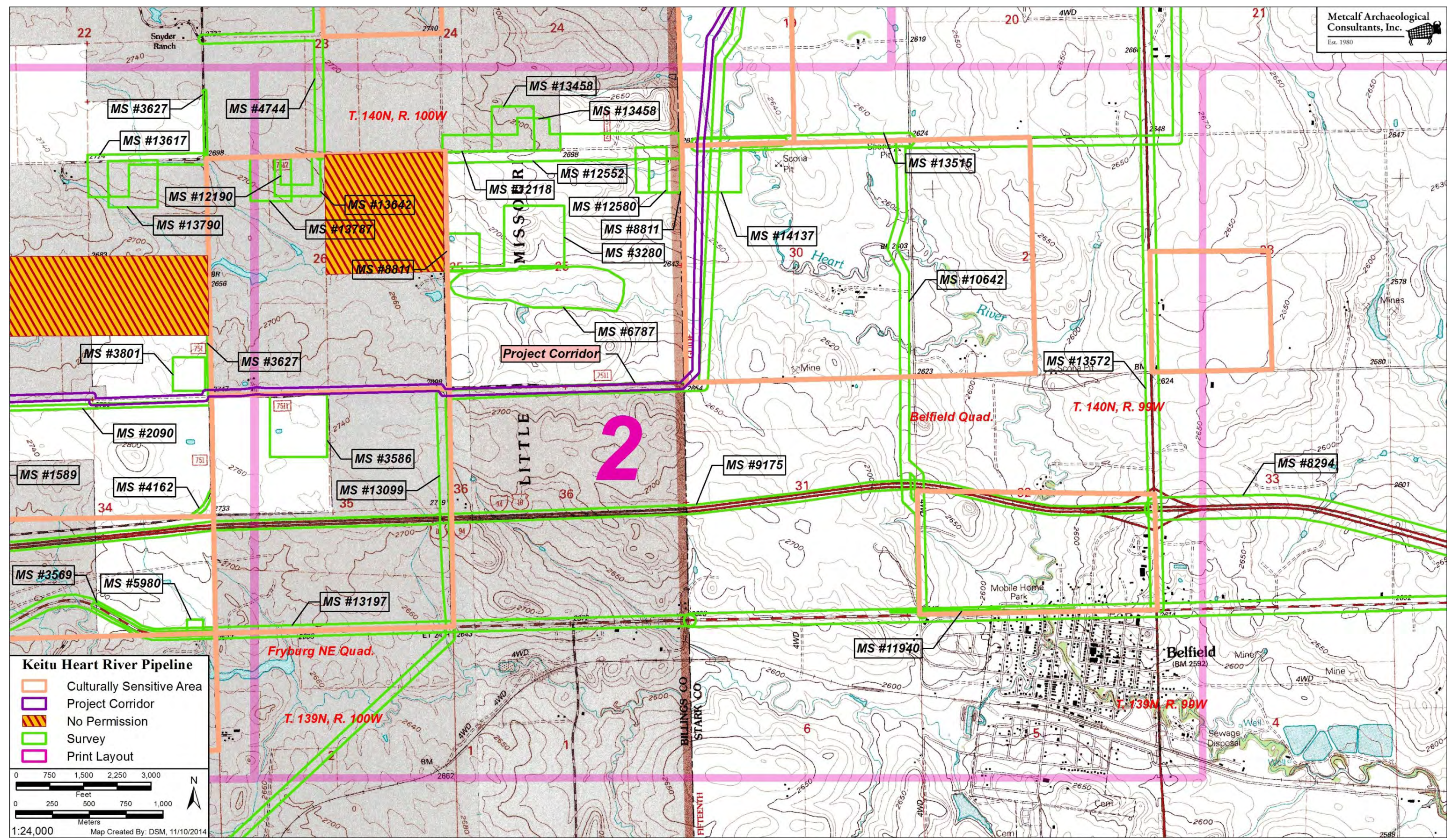
APPENDIX A: TOPOGRAPHIC MAPS



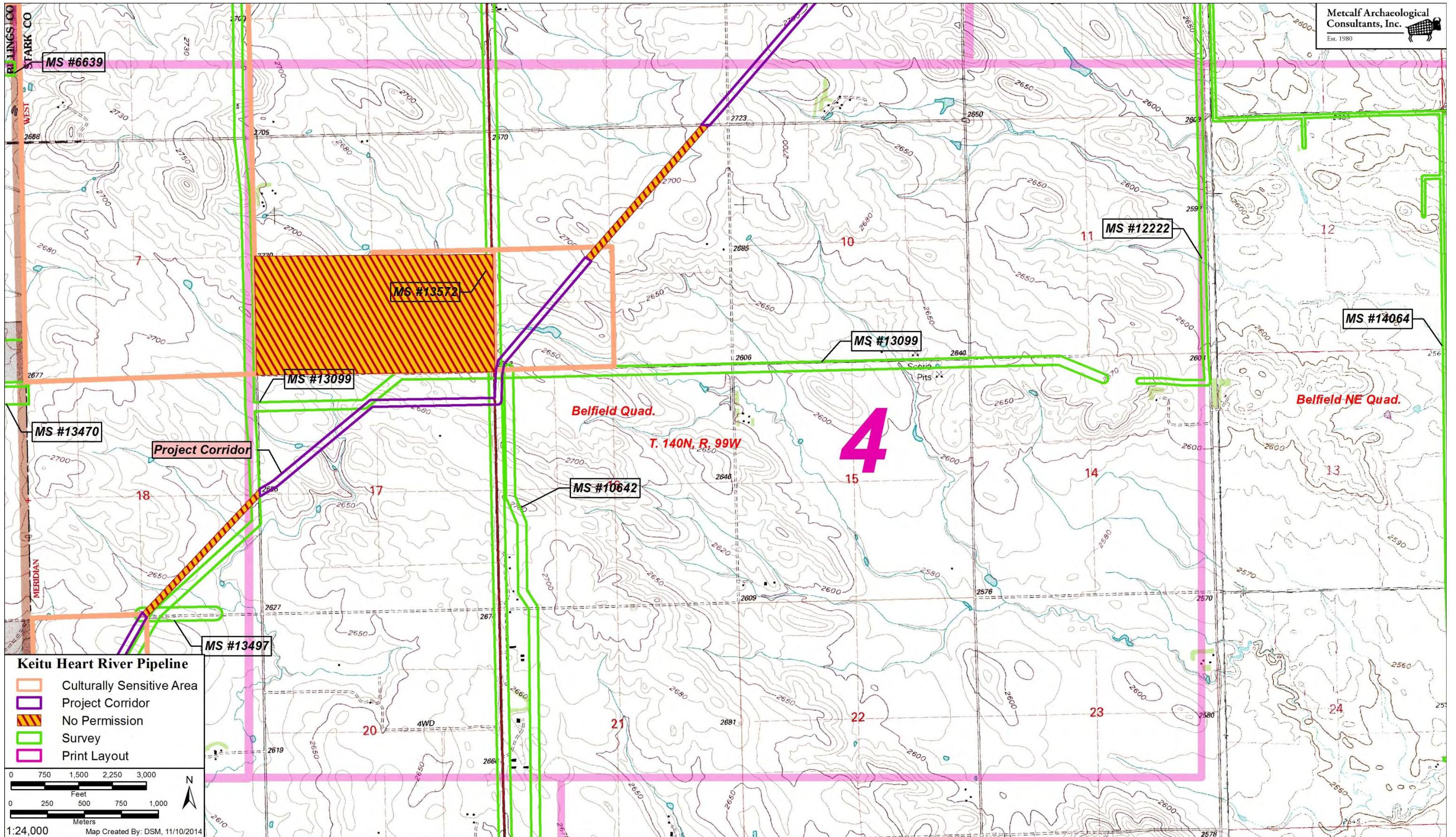
Map 1: The location of the project corridor, cultural resources, and surveys depicted on the USGS 7.5' Fryburg NE (1962), Belfield (1962, photorevised 1981), Belfield NE (1962, photorevised 1981), Rattlesnake Butte (1963), and Fairfield SE (1963) quadrangle maps.



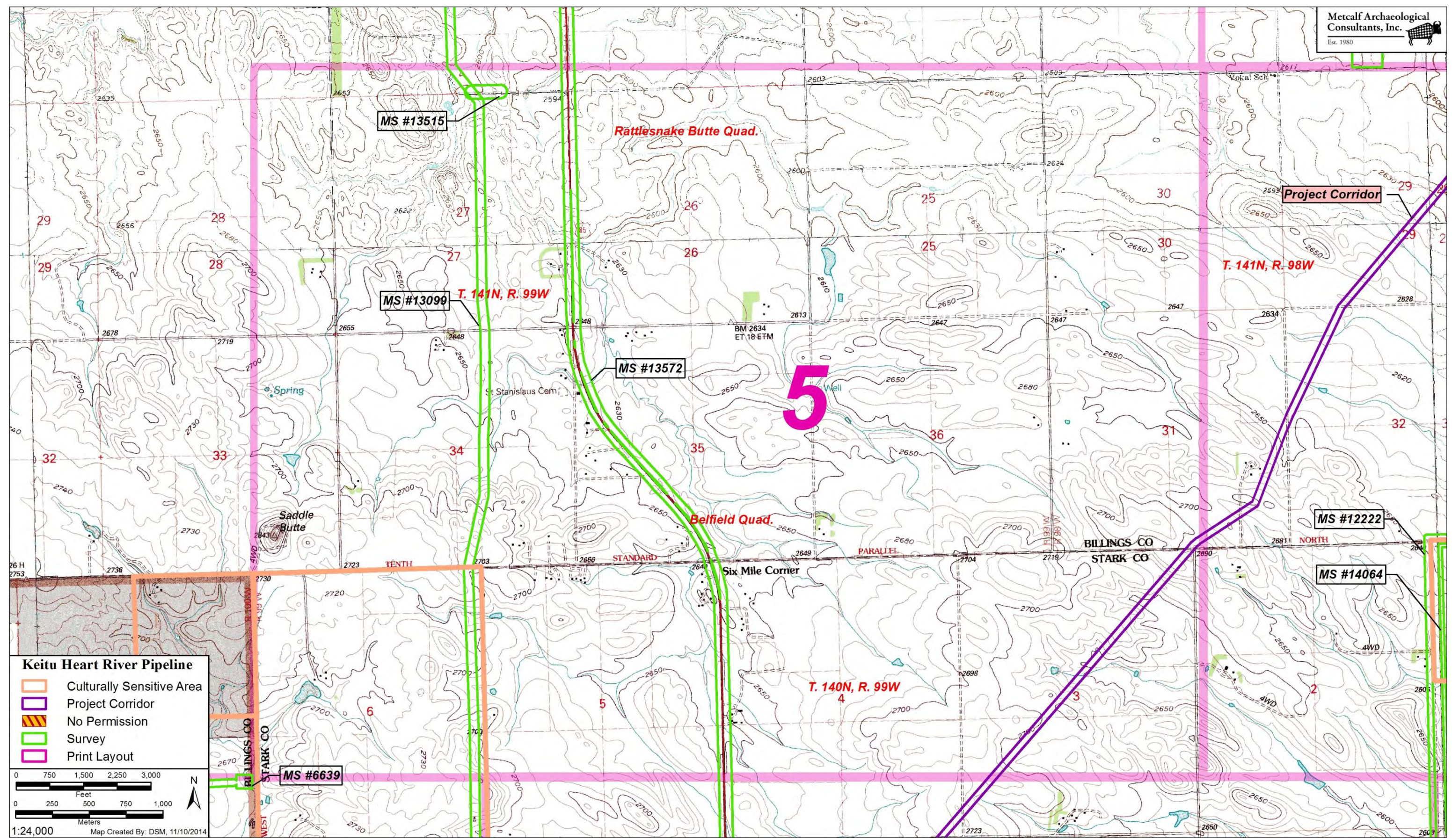
REDACTED Map 2 – Layout 1: The location of the project corridor, cultural resources, and surveys depicted on the USGS 7.5' Fryburg NE (1962) quadrangle map.



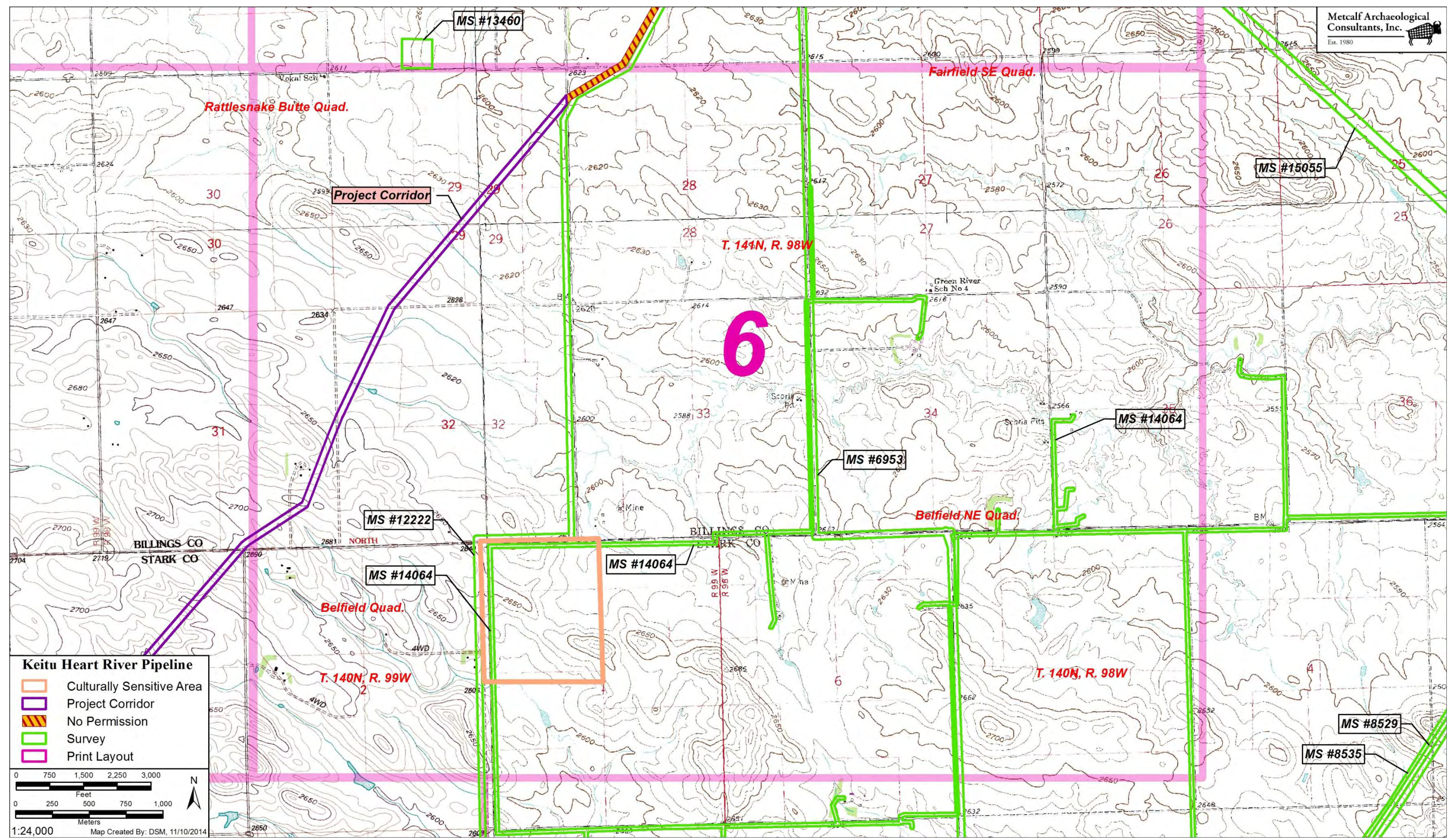
REDACTED Map 3 – Layout 2: The location of the project corridor, cultural resources, and surveys depicted on the USGS 7.5' Fryburg NE (1962) and Belfield (1962, photorevised 1981) quadrangle maps.



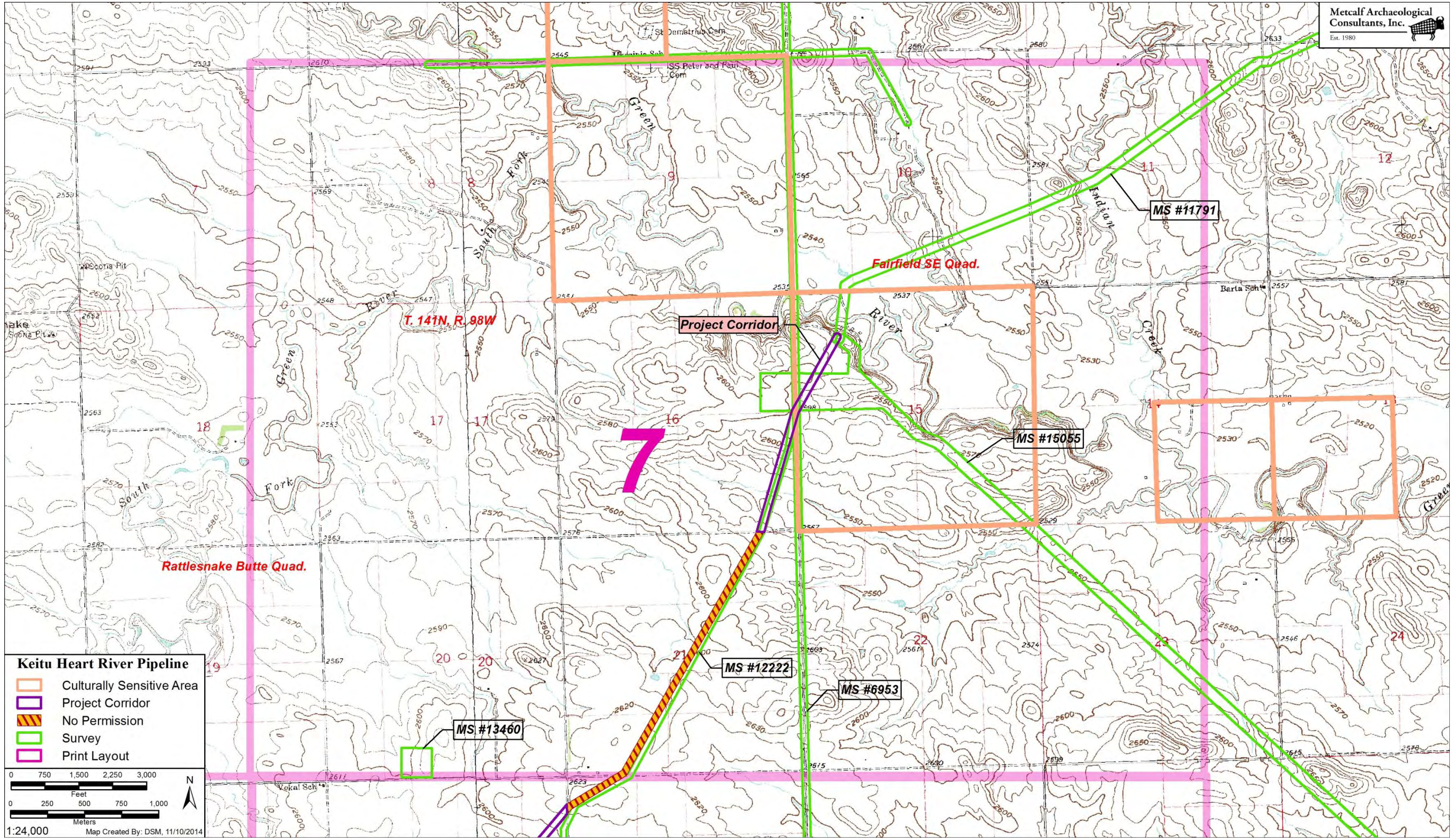
REDACTED Map 5 – Layout 4: The location of the project corridor, cultural resources, and surveys depicted on the USGS 7.5' Belfield (1962, photorevised 1981) and Belfield NE (1962, photorevised 1981) quadrangle maps.



REDACTED Map 6 – Layout 5: The location of the project corridor, cultural resources, and surveys depicted on the USGS 7.5' Belfield (1962, photorevised 1981) and Rattlesnake Butte (1963) quadrangle maps.



REDACTED Map 7 – Layout 6: The location of the project corridor, cultural resources, and surveys depicted on the USGS 7.5' Belfield (1962, photorevised 1981), Belfield NE (1962, photorevised 1981), Rattlesnake Butte (1963), and Fairfield SE (1963) quadrangle maps.



REDACTED Map 8 – Layout 7: The location of the project corridor, cultural resources, and surveys depicted on the USGS 7.5' Rattlesnake Butte (1963) and Fairfield SE (1963) quadrangle maps.



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APPENDIX B: FILES SEARCH RESULTS



REDACTED Table B-1: Site Files Search Results – Bridger – Heart River Pipeline				
T/R-Section	SITS #	Site Type & Description	Recorder, Date	MS #
	32BI1093	Architectural-pump house, Historic-foundation	Klinner, 2011	4247, 13099, 13197, 13497, 13515
	32BI0264	Archaeological-cultural material scatter-chipped stone	Stover/Govarrs, 1981	2455, 2562, 4247, 5710,
	32BIx0467	Archaeological-isolated find: chipped stone	Simon/Borchert, 1981	7677, 10139, 11940, 13197
	32BIx0468	Archaeological-isolated find: chipped stone	Simon/Borchert, 1981	
	32BIx0469	Archaeological-isolated find: chipped stone	Simon/Borchert, 1981	
	32BIx0470	Archaeological-isolated find: chipped stone	Stover, 1981	
	32SK1025	Historic-dump, cultural material scatter-glass, metal (vehicle dump)	Herson/Smith, 2011	124, 5477, 12222, 14064
	No Sites			124, 5477
	No Sites			124, 7633, 13572
	32SKx0125	Historic-site lead: mine	LCT, 1990	4319, 13099, 13515
	32SK1045	Historic-cultural material scatter- glass, masonry, metal	Engel, 2012	7633, 13572
	No Sites			124, 7633, 13572
	No Sites			124
	No Sites			7633, 13099, 13515, 13572
	No Sites			7633, 13099, 13515, 13572
	No Sites			4319, 13099, 13497, 13515
	32SKx0341	Archaeological-isolated find: chipped stone	Stine, 2011	4319, 10642, 13099,
	32SKx0348	Historic-isolated find: dump, cultural material scatter- glass, metal, rubber	Mortensen, 2012	13497, 13515, 14137
	32SKx0349	Archaeological-isolated find: chipped stone	Kulevsky, 2012	
	32SKx0350	Archaeological-isolated find: chipped stone	Kulevsky, 2012	
	No Sites			7633, 13572
	32SK0070	Archaeological-cultural material scatter-chipped stone	MDM, 1985	4319, 10642, 13099, 13515, 14137
	32SK0071	Archaeological-cultural material scatter-chipped stone	MDM, 1985	
	32SK0843	Architectural-bridge	Klinner, 2010	
	32SK0967	Architectural-bridge	Hufstetler/McCormick, 2000; Klinner, 2010	
	32SKx0056	Archaeological-isolated find: chipped stone	Medsker, 1985	
	32SKx0057	Archaeological-isolated find: chipped stone	Medsker, 1985	
	32SKx0130	Historic-site lead: mine	LCT, 1990	
	32SKx0340	Archaeological-isolated find: chipped stone	Kulevsky, 2011	
	32SKx0348	Historic-isolated find: dump, cultural material scatter- glass, metal, rubber	Mortensen, 2012	
	32SKx0351	Archaeological-isolated find: chipped stone	Kulevsky, 2012	
	No Sites			4319, 9175, 10642, 11940, 12882, 13099, 13515
	No Sites			7677, 8294, 8529, 12882



REDACTED Table B-1: Site Files Search Results – Bridger – Heart River Pipeline				
T/R-Section	SITS #	Site Type & Description	Recorder, Date	MS #
	32BIx0255	Archaeological-isolated find: chipped stone	Williams/Andrews/ Killam, 1987	4744, 6639, 6667, 11797, 11800,
	32BIx0256	Archaeological-isolated find: chipped stone	Killam/Williams, 1987	11803, 12093, 13470
	No Sites			12118, 12552, 13458
	No Sites			371, 3280, 6787, 8811,12552, 12580
	32BIx0914	Archaeological-isolated find: projectile point	Mortensen, 2012	12190, 13642, 13787
	32BIx0915	Archaeological-isolated find: projectile point	Mortensen, 2012	
	32BIx0918	Archaeological-isolated find: chipped stone	Mortensen, 2012	
	No Sites			3627, 3801, 13617, 13790
	No Sites			12362
	32BIx0707	Archaeological-isolated find: chipped stone	Kurtz, 1992	371, 1570, 2090, 2294, 2455, 2669, 3627, 4162, 5710, 5980, 8699, 9175, 13197
	32BIx0818	Archaeological-isolated find: chipped stone	Hiemstra, 2005	
	32BI0476	Archaeological-cultural material scatter- fire cracked rock, chipped stone	Haury/Artz, 1986; Hertaus, 2003	1589, 2090, 2669, 3554, 3569, 4162, 5980, 9175, 11940, 13197
	32BI0836	Historic-depression, cultural material scatter- glass, metal	Kurtz, 1992	
	32BIx0621	Archaeological-isolated find: chipped stone	Borchert, 1984	3586, 9175, 11940, 13099, 13197, 13515
	32BIx0796	Archaeological-isolated find: chipped stone	Wermers, 2003	
	No Sites			9175, 11940, 13099, 13197, 13515
	32BI0895	Architectural-Ss Peter and Paul Cemetery	Nesemeier/Isern, 1999	6953, 7725, 14064, 14618
	32BIx0030	Archaeological-site lead: cultural material scatter- projectile point, chipped stone, ground stone	Picha, 2000	
	32BIx0047	Historic-site lead: Ukrania Post Office	Bensons, 1980	
	No Sites			6953, 11791, 14618
	32BI1116	Historic-dump, cultural material scatter- metal, wood	Bluemle, 2012	11791, 14064, 15055
	32BIx0036	Archaeological-isolated find: chipped stone	Flemmer, 2000	
	32BIx0919	Archaeological-isolated find: chipped stone	Bluemle, 2012	
	No Sites			6953, 12222, 14064
	No Sites			13460
	No Sites			6953, 12222
	No Sites/No Surveys			
	No Sites			12222
	No Sites			12222
	No Sites/No Surveys			
	No Sites/No Surveys			
	No Sites			12222



Table B-2: Manuscript Files Search Results – Bridger – Heart River Pipeline

MS #	Reference
124	Lahren, L. 1977 Extensive Cultural Resource Evaluations on Selected Drill Locations in the National Grasslands of North and South Dakota, Slope County, Billings County, and Stark County, North Dakota
371	Robson, L. 1978 Northwestern Bell Underground Telephone Cable (North Belfield Project), Billings County, North Dakota
1570	Simon, A. and L. Loendorf 1980 Wesco Pipeline Company Crude Oil Line and Tank Battery Station, Billings County, North Dakota
1589	Simon, A. and L. Loendorf 1980 Continental Pipeline Company Tank Station Survey, Billings County, North Dakota
2090	Stanley, L. and A. Simon 1981 Northwestern Bell Buried Cable Line Survey, Billings County, North Dakota
2294	Rippeteau, B. 1980 Wesco Pipelines' Crude Oil Line in Golden Valley and Billings Counties, North Dakota, Revised
2455	Rippeteau, B. 1981 Wesco Little Missouri Pipeline Survey Report, Billings, and Golden Valley County, North Dakota
2562	Simon, A. and J. Borchert 1981 A Class III Cultural Resource Inventory for the Proposed Fryburg Highway Improvement Billings County, North Dakota
2669	Simon, A. 1982 Class III Inventory of the Proposed Matador Tank Battery, Billings County, North Dakota
3280	Borchert, J. 1984 Amerada Hess Federal #25-41, Billings County, North Dakota
3554	Gregg, M., C. Kordecki, D. Kuehn, and K. Vander Steen 1985 Southwest Pipeline Archaeology: Initial Survey of Selected Tracts, Adams, Bowman, Hettinger, Grant, Stark, Billings, Golden Valley, Dunn, and Mercer Counties, North Dakota
3569	Kuehn, D. 1984 Southwest Pipeline Project Along ca. 14 Miles on USFS Lands In Billings County and Golden Valley County, East and West of Medora, North Dakota
3586	Borchert, J. 1984 Cultural Resource Survey Amerada Hess Park East 35-21 Location and Access, Billings County, North Dakota (UW #725)
3627	Borchert, J. 1985 Cultural Resource Survey, Park Road Improvements, Billings County, North Dakota (UW#789)
3801	Gnabasik, V. 1984 USAF GWEN Site Near Fryburg, North Dakota, Electronic System Division Air Force Systems Command, USAF Hanscon AFB, MA 01731, Billings County, North Dakota
4162	Borchert, J. 1984 Class III Intensive Inventory Billings County Road Improvements Sections 33 and 34, T140N, R100W
4247	Artz, J., C. Haury, D. Kuehn, R. Fox, Jr., and K. Schweigert 1987 Southwest Pipeline Archaeology: An Intensive Survey for Cultural Resources in Ten Counties of Southwestern North Dakota, Adams, Bowman, Hettinger, Grant, Stark, Billings, Morton, Golden Valley, Dunn, and Mercer
4319	Metcalf, M. and K. Schweigert 1987 Cultural Resources Investigations on the North Dakota Segment of the Exxon Company, USA Bairoil-Dakota CO2 Pipeline Project, Golden Valley, Billings, Stark, Dunn, McKenzie, and Williams Counties, Western North Dakota Volumes 1 and 2



Table B-2: Manuscript Files Search Results – Bridger – Heart River Pipeline	
MS #	Reference
4744	Martorano, M., D. Killam, and P. Friedman 1990 Class I Literature Search and Class III Intensive Inventory Charlie Creek to Belfield 345-KV Transmission Line Project, Stark, McKenzie, Dunn, and Billings Counties, North Dakota
5477	Karsmizki, K. 1991 U308 Uranium Industry Context Statement. Adams, Slope, Golden Valley, Billings, Bowman, Dunn, and Stark Counties, North Dakota
5710	Blikre, L and J. Borchert 1992 Fryburg Interchange-Highway 10 Cultural Resource Inventory Billings County, North Dakota. UW#1503
5980	Kurtz, W. 1993 A Cultural Resource Inventory Report For the 1992 Medora Grazing Association Projects in Billings County, North Dakota
6639	Kurtz, W. 1996 Six 1995 Medora Grazing Association Range Water Pipeline Projects in Billings and Golden Valley County, North Dakota
6667	Kulevsky, A. 1996 Duncan’s Bierstadt Federal 1-13 Well Pad and Access Route: A Class III Cultural Resource Inventory in Billings County, North Dakota
6787	Kurtz, W. 1996 Klem Ducks Unlimited Pond in Section 25, T140N, R100W, Billings County, North Dakota
6953	Klinner, D. 1997 ND533- Consolidated Telephone Cooperative, South Heart Exchange Cable Improvements in Stark, Billings, and Slope Counties, North Dakota UW #1954
7633	Borchert, J. 2000 NH-5-085(040)075. Class II Cultural Resource Inventory for a Hot Bituminous Surfacing Project on Highway 85, Stark and Billings Counties, North Dakota
7677	Rom, L. 2000 Cultural Resources Inventory of Sioux Falls Tower Specialists Inc’s Communication Towers in BA, BI, BL, CS, GV, KD, SK, SN, and MO Counties, ND
7725	Isern, T. and K. Nesemeier 1999 Wrought Iron Cross Cemeteries in North Dakota- Continuing Survey, 1998-99 (Public Report)
8294	Wermers, G. 2002 Interstate 94 Right-of-Way Class III Inventory, Belfield to South Heart, Stark County, North Dakota UW#2337A
8529	Schweigert, K. 2003 Cultural Resources Inventory and Evaluation for the Proposed Grasslands Project in Billings, Dunn, Golden Valley and Stark Counties, North Dakota
8699	Wermers, G. 2003 Addendum to the “Southwest Pipeline Project- Class I and Class III Cultural Resource Investigations for Portions of the Medora to Beach Regional Service Area W.O. 3033.900” Report, Golden Valley County, North Dakota UW#2370
8811	Floodman, M. 2004 Allotment 212 Dam Maintenance Projects, Billings County, North Dakota
9175	Bluemle, W. 2005 Interstate 94 2005 Survey: A Class III Cultural Resource Inventory in Billings and Stark Counties, North Dakota
10139	Hiemstra, D. 2007 Logan Materials Pit: A Class III Cultural Resource Inventory in Billings County, North Dakota
10642	Kordecki, C., C. Jackson, J. Neary, and D. Toom 2008 Southwest Water Pipeline Project, Medora-Beach Regional Service Area, Phase 3, 2007 Cultural Resources Inventories: Report on the South Fryburg Service Area, Fairfield Service Area and the Trotters Pocket, Billings, Dunn, Stark & Golden Valley Counties, North Dakota



Table B-2: Manuscript Files Search Results – Bridger – Heart River Pipeline

MS #	Reference
11791	France, E. and D. Reinhart 2010 Bridger Pipeline Project: Class I and III Cultural Resource Investigations in Western North Dakota, Dunn, Billings, McKenzie Counties
11797	Jakel, G. and C. Burns 2010 Pronghorn Federal 11-13TFH Well Pad and Access Road: A Class III Cultural Resource Inventory in Billings County, North Dakota
11800	Jakel, G. and C. Burns 2010 Smith 34-12TFH Well Pad and Access Road: A Class III Cultural Resource Inventory in Billings County, North Dakota
11803	Jakel, G. and C. Burns 2010 Smith 44-12TFH Well Pad and Access Road: A Class III Cultural Resource Inventory in Billings County, North Dakota
11940	Wermers, G. 2003 Southwest Pipeline Project- Class III Investigations for Portions of the Main Transmission Pipeline (Contract 2-5B) Within the Medora Beach Regional Service Area, Stark, Billings and Golden Valley Counties, North Dakota
12093	Messerli, T. and W. Burns 2011 Pronghorn Federal 21-13TFH Well Pad and Access Road: A Class III Cultural Resources Inventory in Billings County, North Dakota
12118	Messerli, T. 2011 DRS Federal 24-24TFH Well Pad and Access Road: A Class III Cultural Resource Inventory in Billings County, North Dakota
12190	Burns, W. 2011 Talkington Federal 21-26 TFH Well Pad and Access Road: A Class III Cultural Resource Inventory in Billings County, North Dakota
12222	Lechert, S. and C. Herson 2011 A Class I and Class III Cultural Resource Inventory of the Whiting Belfield Oil Pipeline, Stark and Billings Counties, North Dakota
12362	Burns, W. 2011 Redmond Federal 21-28TFH Well Pad and Access Road: A Class III Cultural Resource Inventory in Billings County, North Dakota
12552	Suess, B. and Burns, W. 2011 DRS Federal Pipeline Route: A Class III Cultural Resource Inventory in Billings County, North Dakota
12580	Suess, B. and Burns, W. 2011 DRS Federal 41-25 Well Pad and Access Road: A Class III Cultural Resource Inventory in Billings County, North Dakota
12882	Klinner, D. 2011 Highway 10 Improvements, COI-4510(062), PCN 19429: A Cultural Resource Investigation in Stark County, North Dakota
13099	Kulevsky, A. and E. Stine 2012 BakkenLink Pipeline: A Class II and Class III Cultural Resource Inventory in Billings, Stark, McKenzie, and Williams Counties, North Dakota
13197	Klinner, D. 2011 Highway 10 Improvements, COI-0432(052) PCN 19391: A Cultural Resource Investigation in Billings County, North Dakota
13458	McCann, E. and W. Burns 2012 DRS Federal 11-25PH Well Pad and Access Road: A Class III Cultural Resource Inventory in Billings County, North Dakota
13460	Bauschard, P. and W. Burns 2012 Victoria 1-20H Well Pad and Access Road: A Class III Cultural Resource Inventory in Billings County, North Dakota

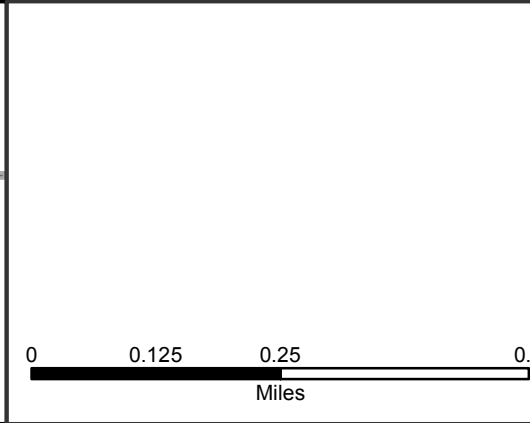
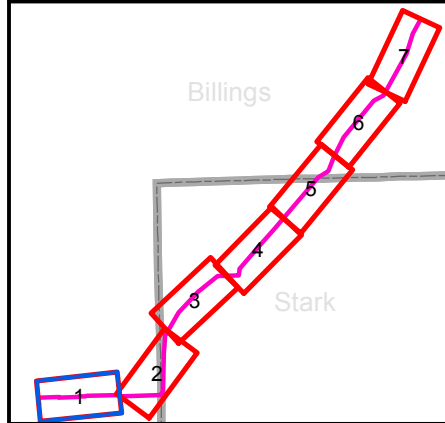
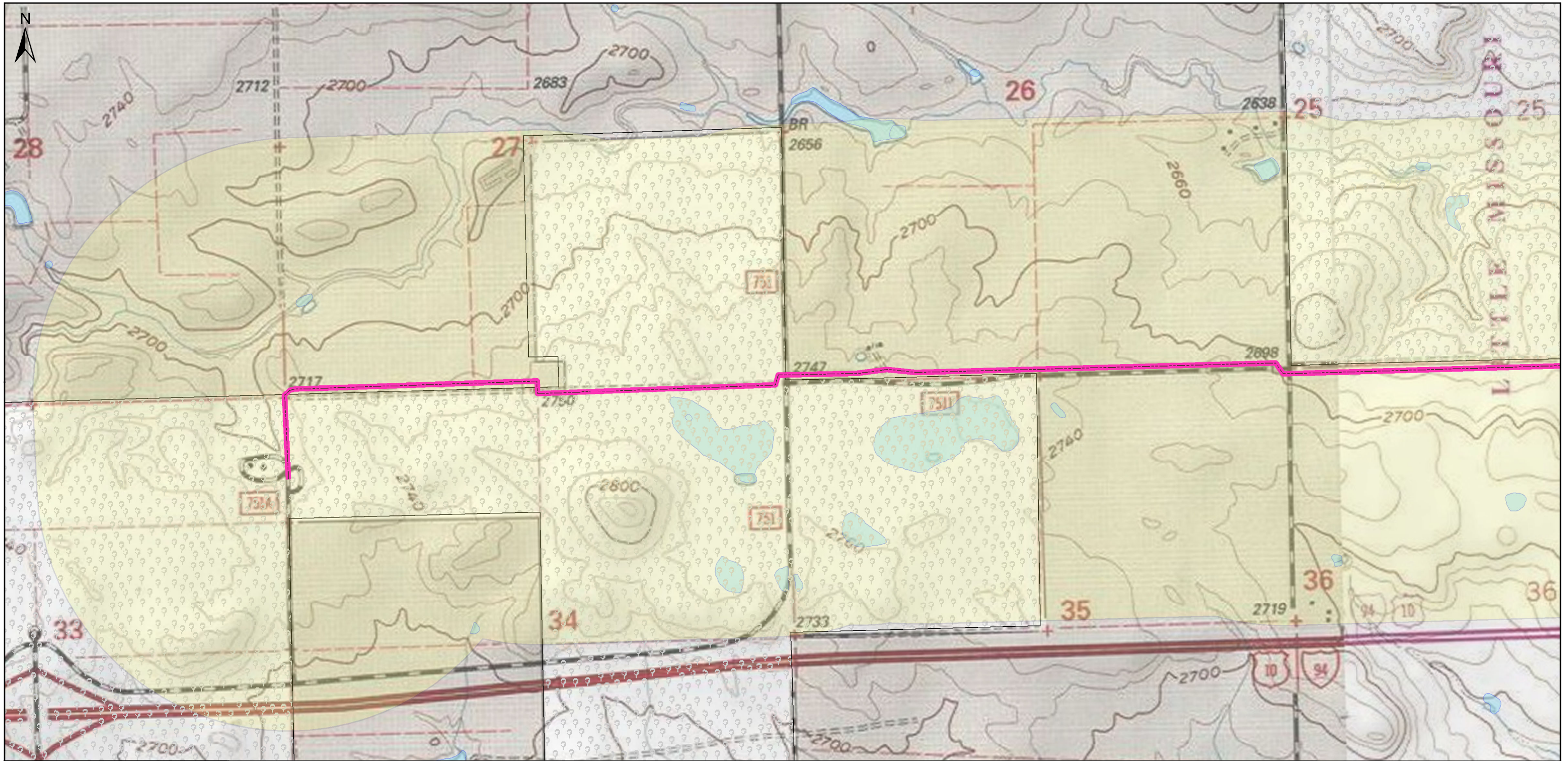


Table B-2: Manuscript Files Search Results – Bridger – Heart River Pipeline




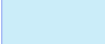
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13470	McCann, E. and W. Burns 2012 Pronghorn Access Road Addendum: A Class III Cultural Resource Inventory in Billings County, North Dakota
13497	Kulevsky, A. 2012 Addendum 2 to BakkenLink Pipeline: A Class II and III Cultural Resource Inventory in Billings, Stark, Dunn, McKenzie, and Williams Counties, North Dakota: Access Roads and Reroutes
13515	Kulevsky, A. 2012 Addendum I to: BakkenLink Pipeline: A Class II and Class III Cultural Resource Inventory in Billings, Stark, Dunn, McKenzie, and Williams Counties, North Dakota
13572	Engel, D. 2012 NDDOT Highway 85 from Belfield North to Mile Marker 90: A Class III Cultural Resource Inventory in Stark and Billings Counties, North Dakota
13617	McCann, E. and W. Burns 2012 Talkington Federal 11-27PH, 21-27PH, 41-27PH Well Pad and Access Road: A Class III Cultural Resource Inventory in Billings County, North Dakota
13642	McCann, E. and W. Burns 2012 Talkington 41-26PH and Talkington Federal 21-26 TFH and Federal 11-26TFH Well Pad and Access Road: A Class III Cultural Resource Inventory in Billings County, North Dakota
13787	Brooks, B. and W. Burns 2012 Talkington Federal 11-26PH Well Pad and Access Road: A Class III Cultural Resources Inventory in Billings County, North Dakota
13790	Brooks, B. and W. Burns 2012 Addendum to Talkington Federal 11-27PH, 21-27PH, and 41-27PH Well Pad and Access Road: A Class III Cultural Resource Inventory in Billings County, North Dakota
14064	Mitchell, M., C. Tinti, A. Robinson, J. Macy, and S. Asbury 2013 Killdeer, Manning, and South Heart Exchanges: Class II and III Cultural Resource Investigations in Billings, Dunn, and Stark Counties, North Dakota Volume I and II
14137	McCann, E. and W. Burns 2012 Talkington 11-30PH & DRS Federal 41-25PH Well Pad and Access Road: A Class III Intensive Cultural Resource Inventory Stark County, North Dakota
14618	Salas, D. 2013 123 rd Ave Southwest SC-0427(051) PCN 14127: A Class III Cultural Resource Inventory in Billings County, North Dakota
15055	Bluemle, W. 2012 Dickinson Loop Pipeline: A Class III Cultural Resource Inventory for a Proposed Pipeline in Billings, Dunn, and Stark Counties, North Dakota

APPENDIX 4.B

Maps of Avoidance and Exclusion Areas



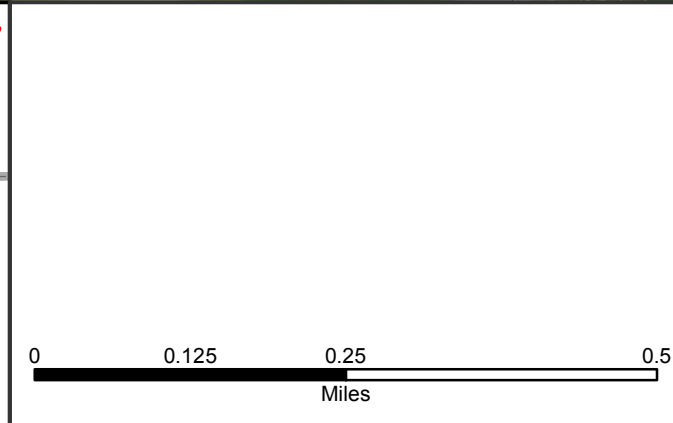
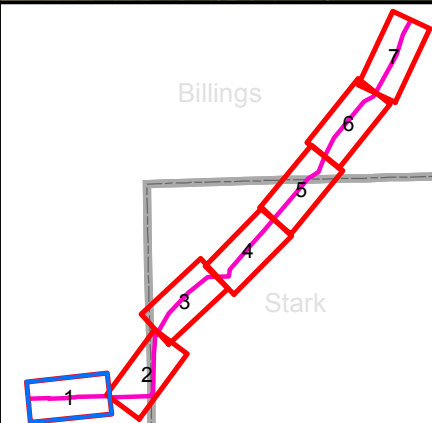
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-  Proposed Centerline
-  Field Survey Corridor
-  USFS Land
-  NWI Wetland



**Heart River Pipeline
Billings and Stark Counties
Figure 4.B.1a - Route Map**

Printed: 11/7/2014



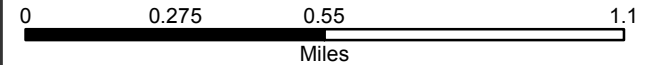
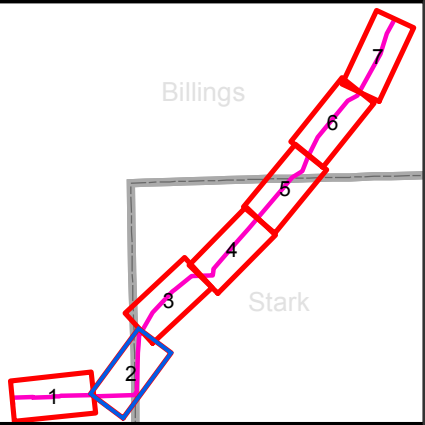
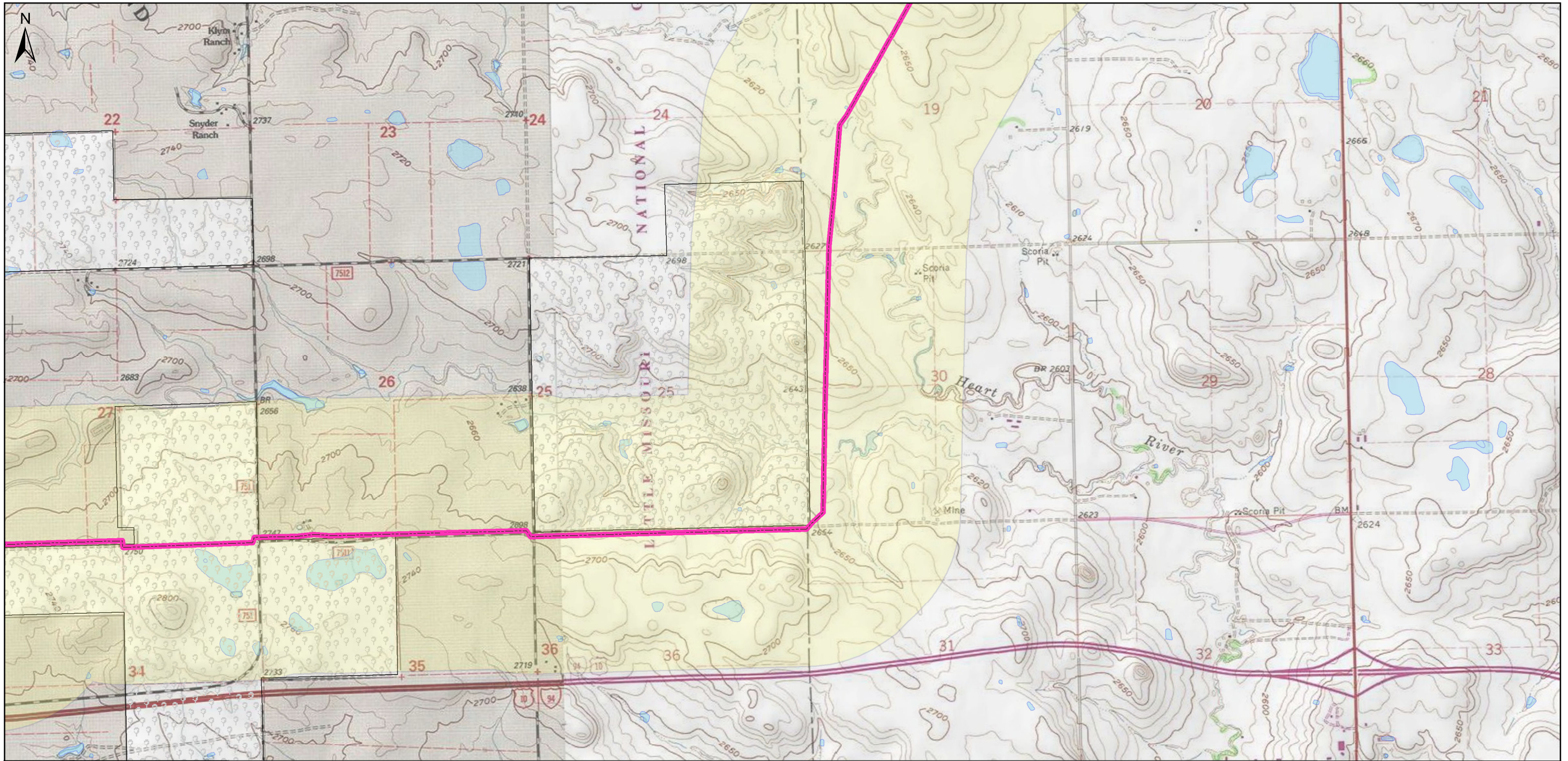
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- Proposed Centerline
- Field Survey Corridor
- Cultural Site - Redacted
- USFS Land
- Black-tailed Prairie Dog
- Northern Pintail




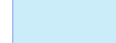


**Heart River Pipeline
Billings and Stark Counties
Figure 4.B.1b - Route Map**

Printed: 11/7/2014



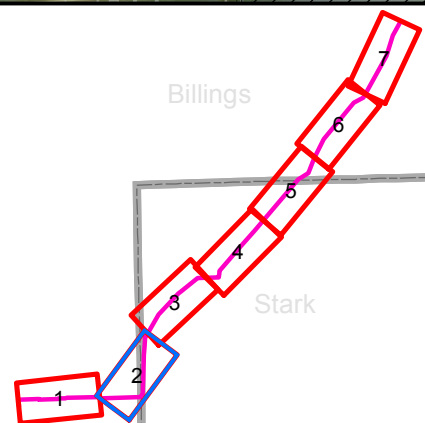
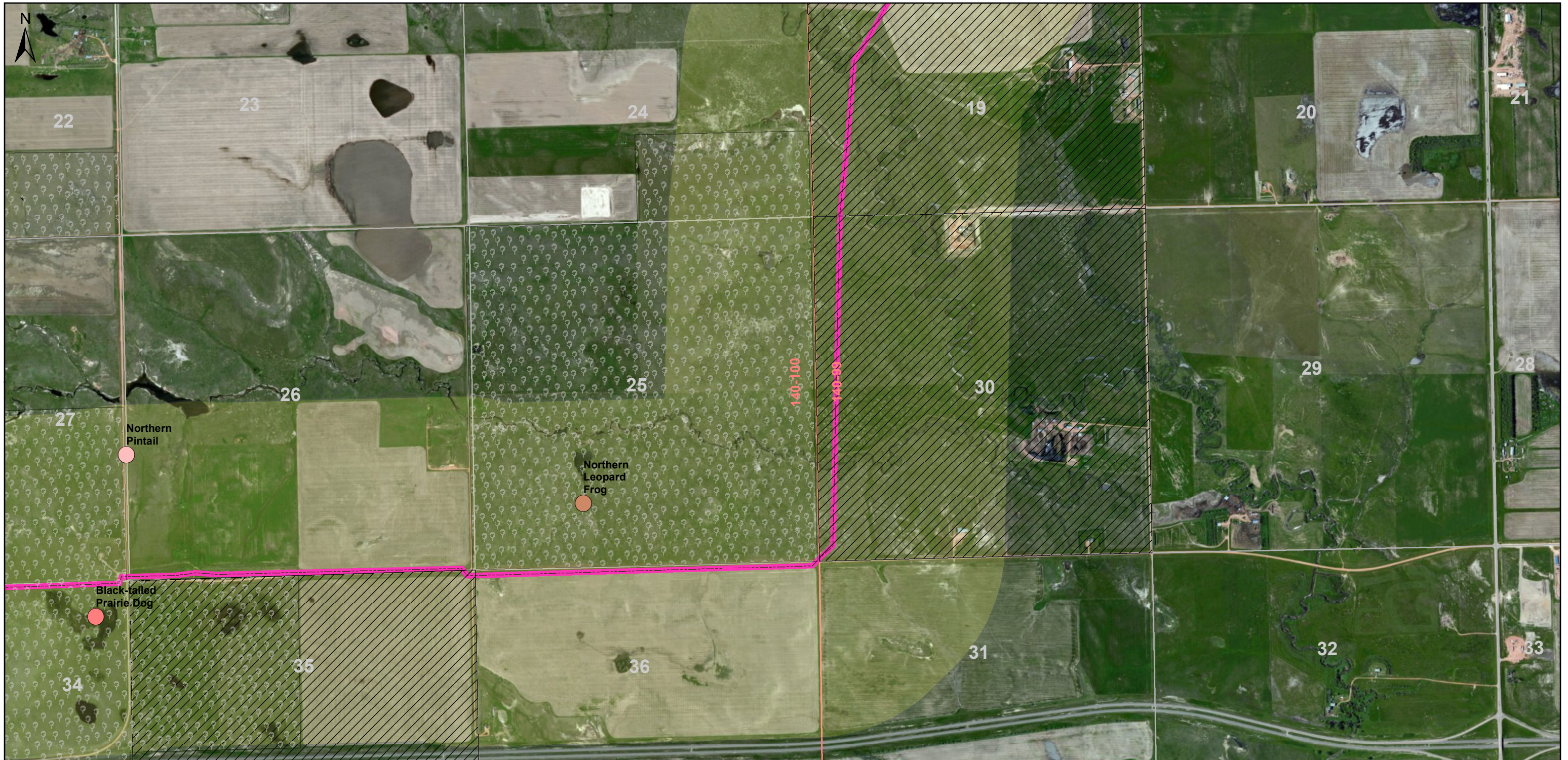
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-  Proposed Centerline
-  Field Survey Corridor
-  USFS Land
-  NWI Wetland










**Heart River Pipeline
Billings and Stark Counties
Figure 4.B.2a - Route Map**


Printed: 11/7/2014



Legend

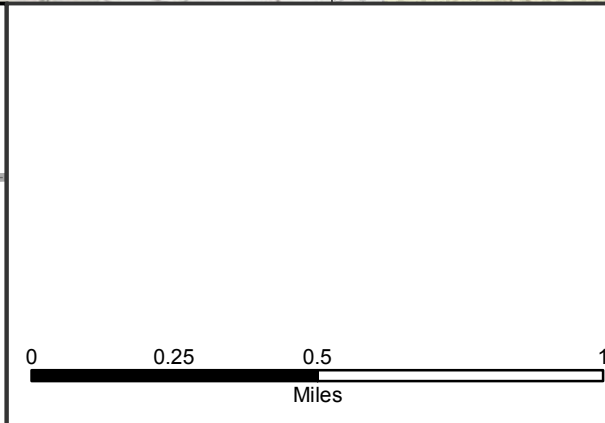
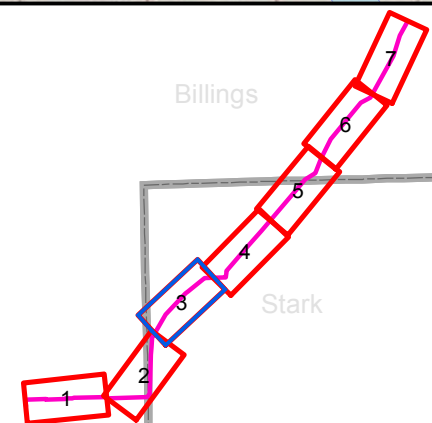
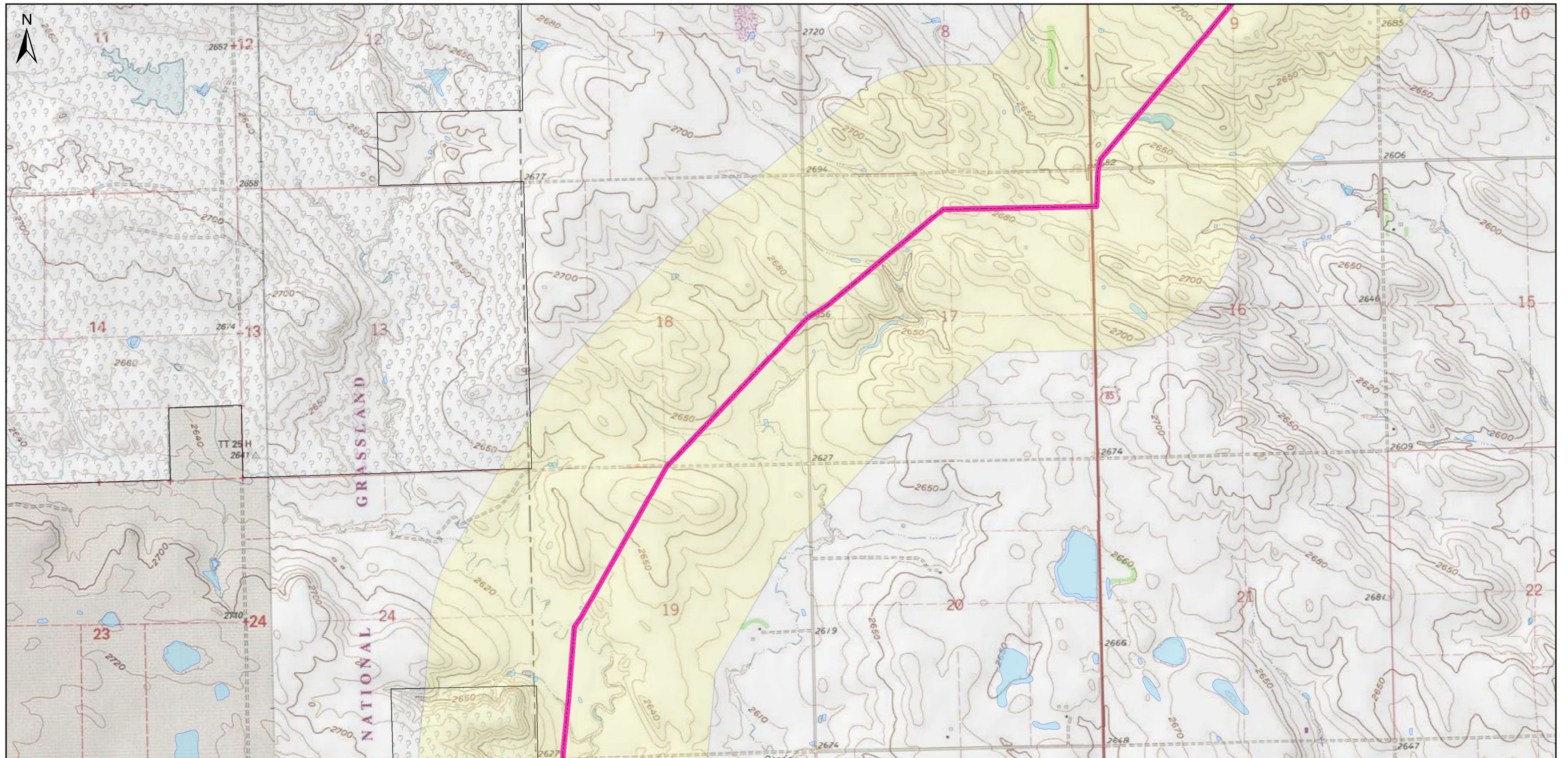
	Proposed Centerline		Black-tailed Prairie Dog
	Field Survey Corridor		Northern Leopard Frog
	Cultural Site - Redacted		Northern Pintail
	USFS Land		

0 0.225 0.45 0.9
Miles




**Heart River Pipeline
Billings and Stark Counties
Figure 4.B.2b - Route Map**

Printed: 11/7/2014



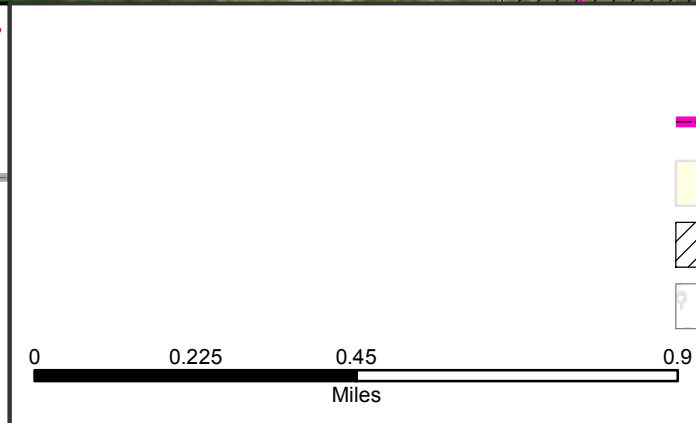
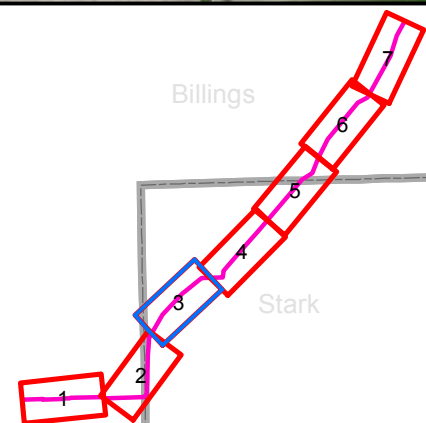
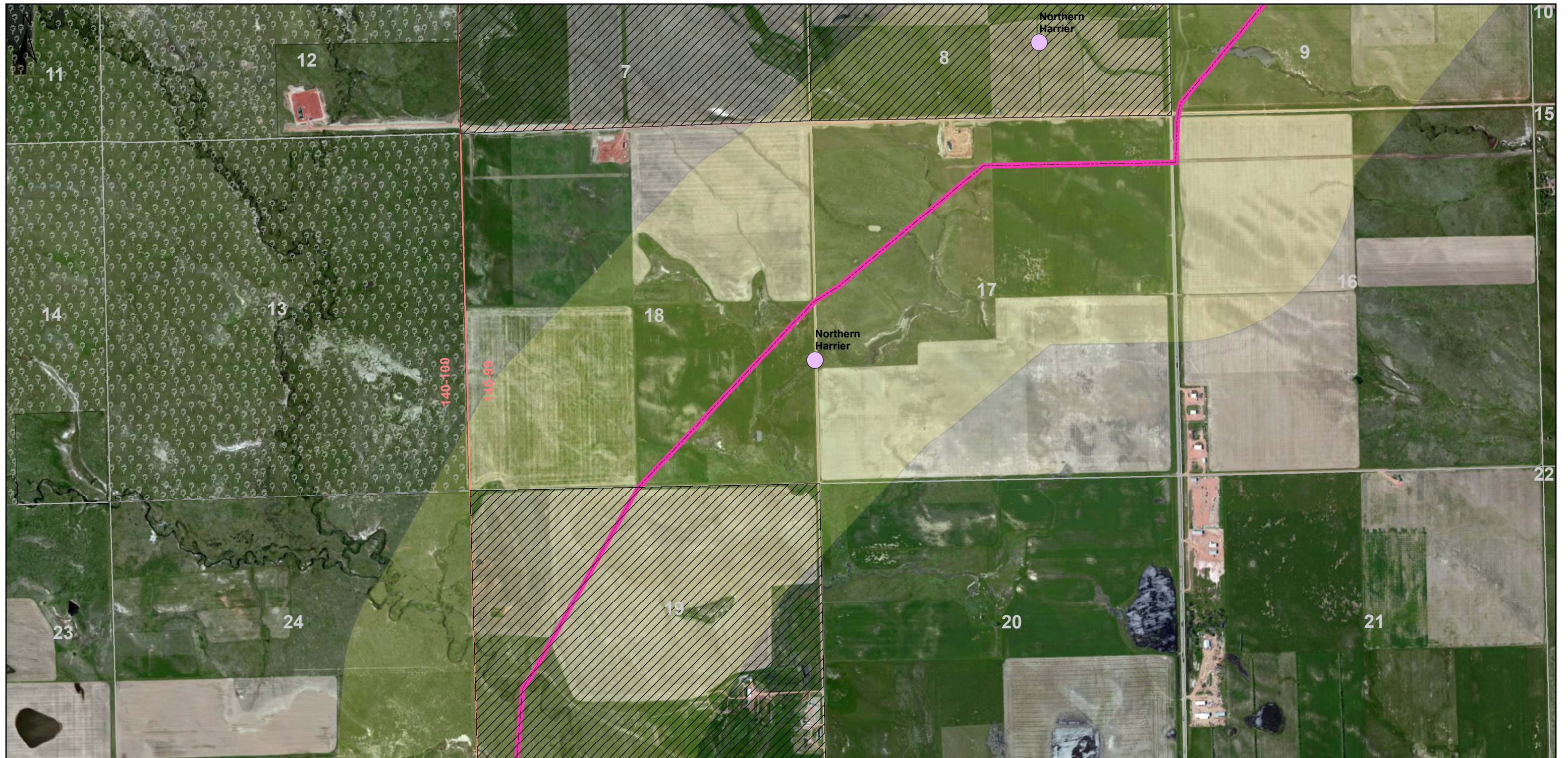
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-  Proposed Centerline
-  Field Survey Corridor
-  USFS Land
-  NWI Wetland








**Heart River Pipeline
Billings and Stark Counties
Figure 4.B.3a - Route Map**

Printed: 11/7/2014



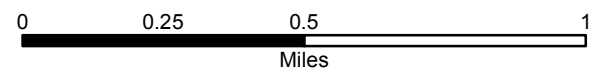
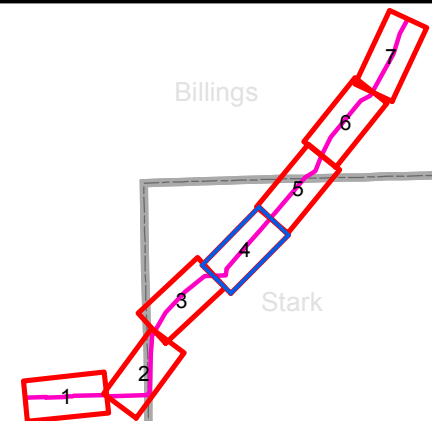
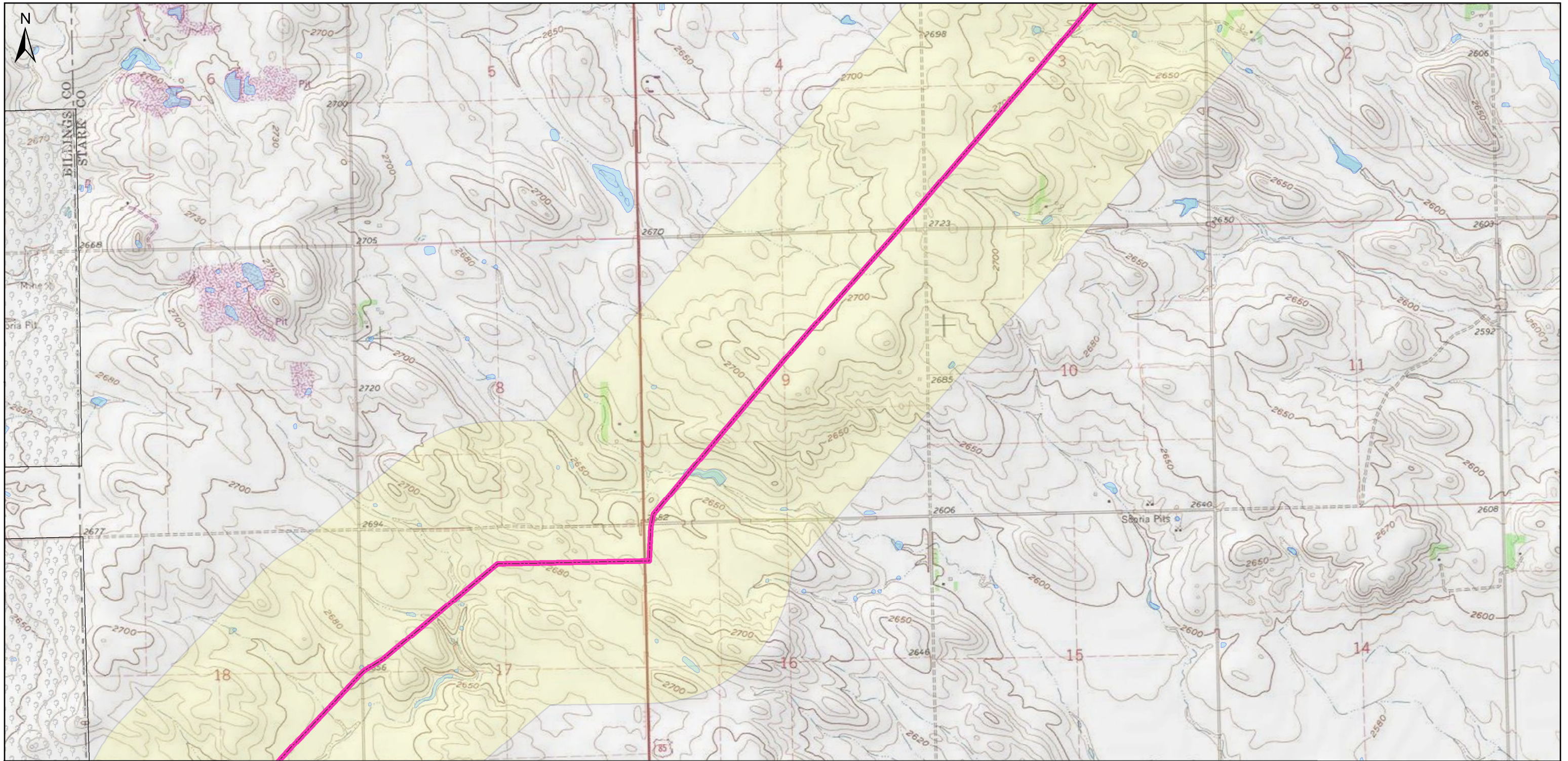
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-  Proposed Centerline
-  Northern Harrier
-  Field Survey Corridor
-  Cultural Site - Redacted
-  USFS Land




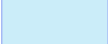


**Heart River Pipeline
Billings and Stark Counties
Figure 4.B.3b - Route Map**

Printed: 11/7/2014



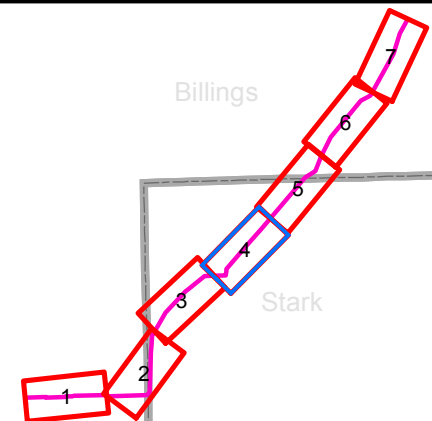
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-  Proposed Centerline
-  Field Survey Corridor
-  USFS Land
-  NWI Wetland







**Heart River Pipeline
Billings and Stark Counties
Figure 4.B.4a - Route Map**


Printed: 11/7/2014



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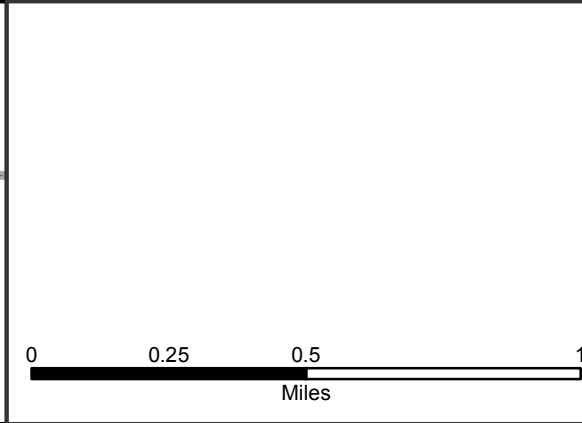
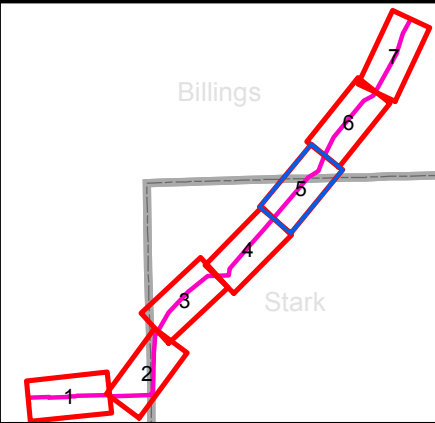
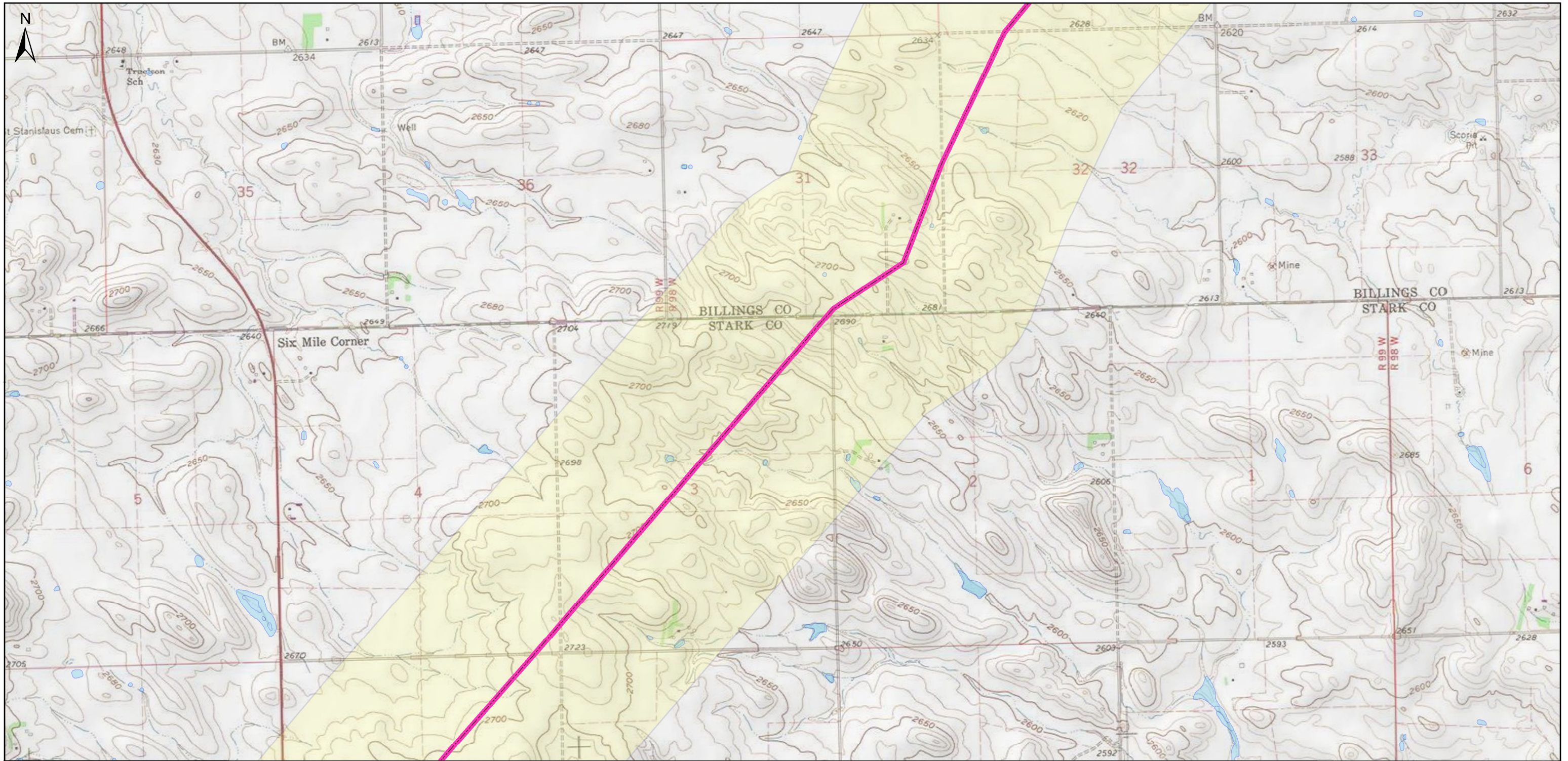
	Proposed Centerline		Northern Harrier
	Field Survey Corridor		
	Cultural Site - Redacted		

0 0.225 0.45 0.9
Miles


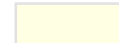
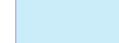


**Heart River Pipeline
Billings and Stark Counties
Figure 4.B.4b - Route Map**

Printed: 11/7/2014



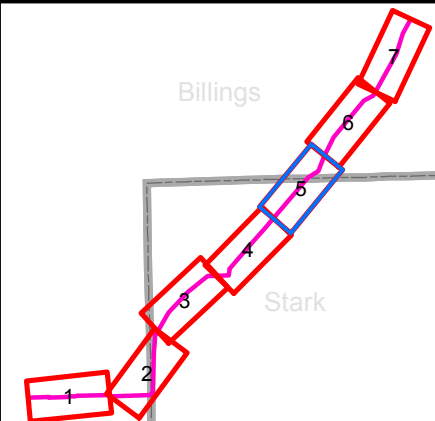
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-  Proposed Centerline
-  Field Survey Corridor
-  NWI Wetland






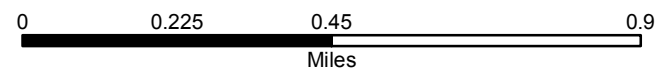
**Heart River Pipeline
Billings and Stark Counties
Figure 4.B.5a - Route Map**

Printed: 11/7/2014



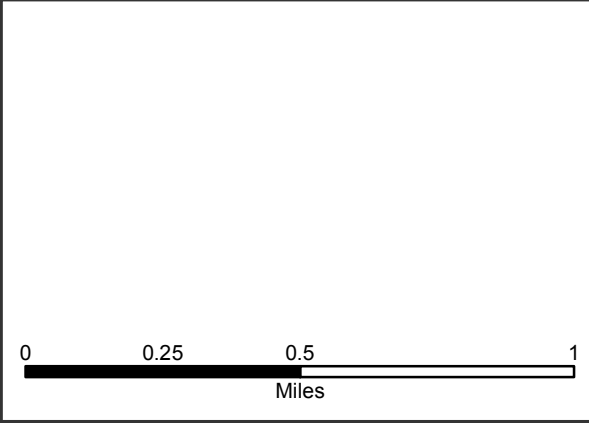
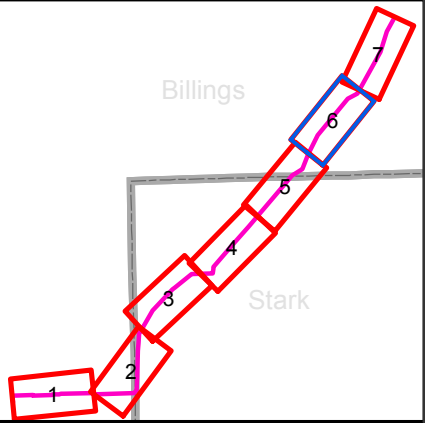
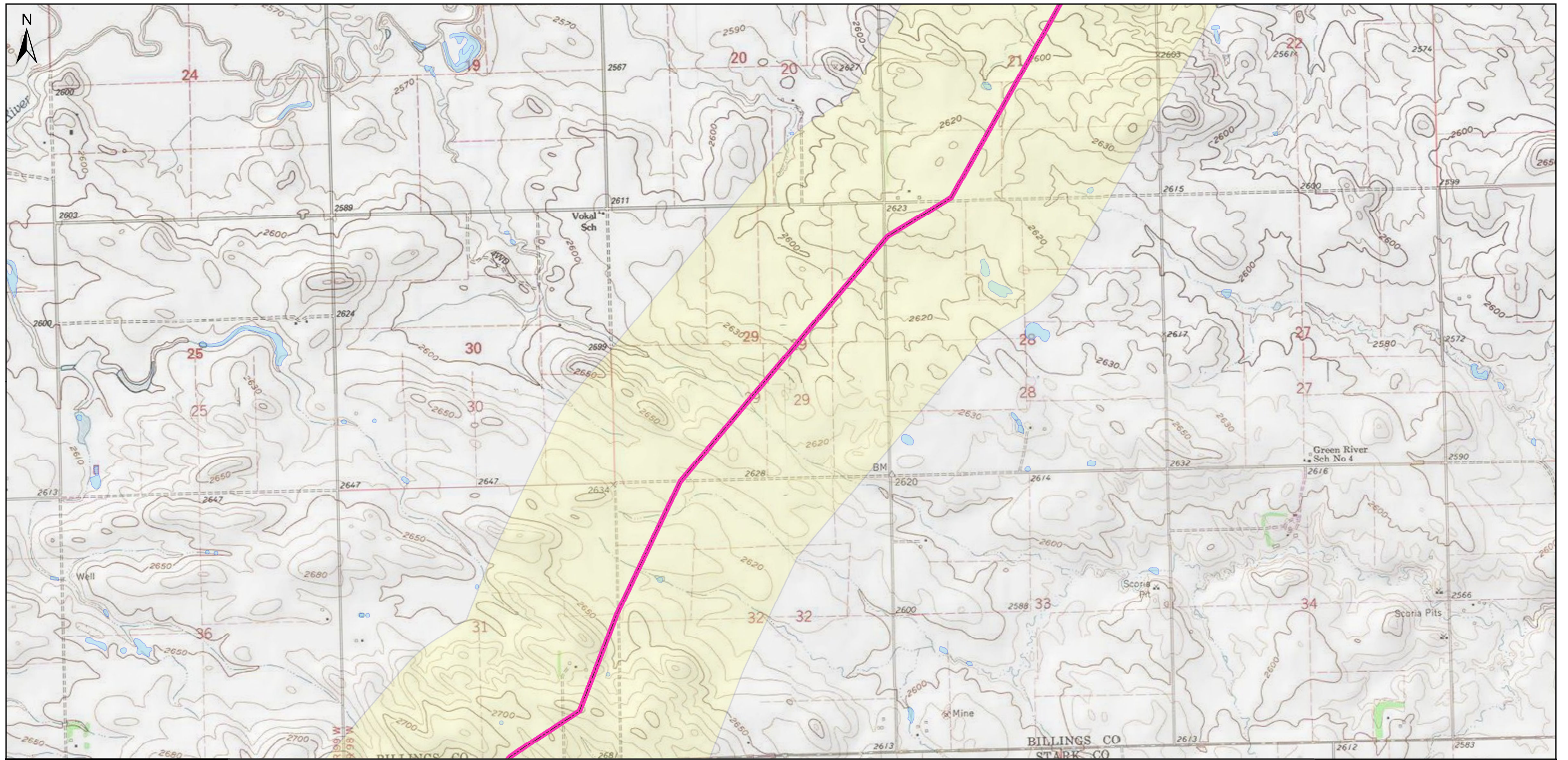
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-  Cultural Site - Redacted



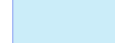


**Heart River Pipeline
Billings and Stark Counties
Figure 4.B.5b - Route Map**

Printed: 1/13/2015



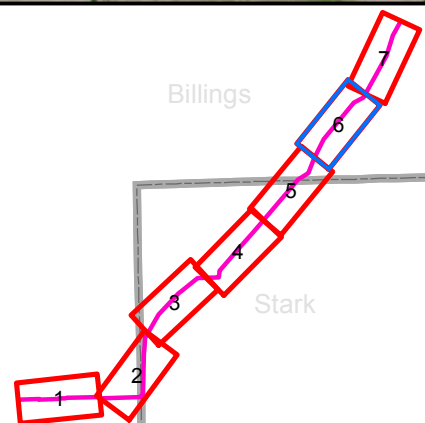
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-  Proposed Centerline
-  Field Survey Corridor
-  NWI Wetland








**Heart River Pipeline
Billings and Stark Counties
Figure 4.B.6a - Route Map**


Printed: 11/7/2014



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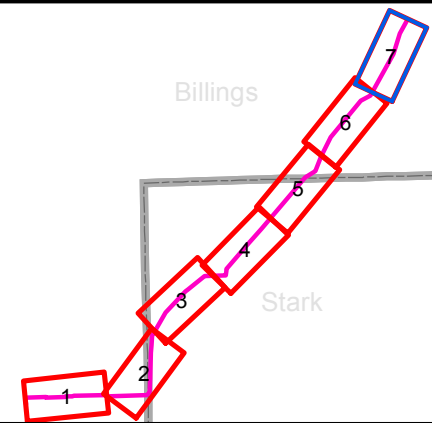
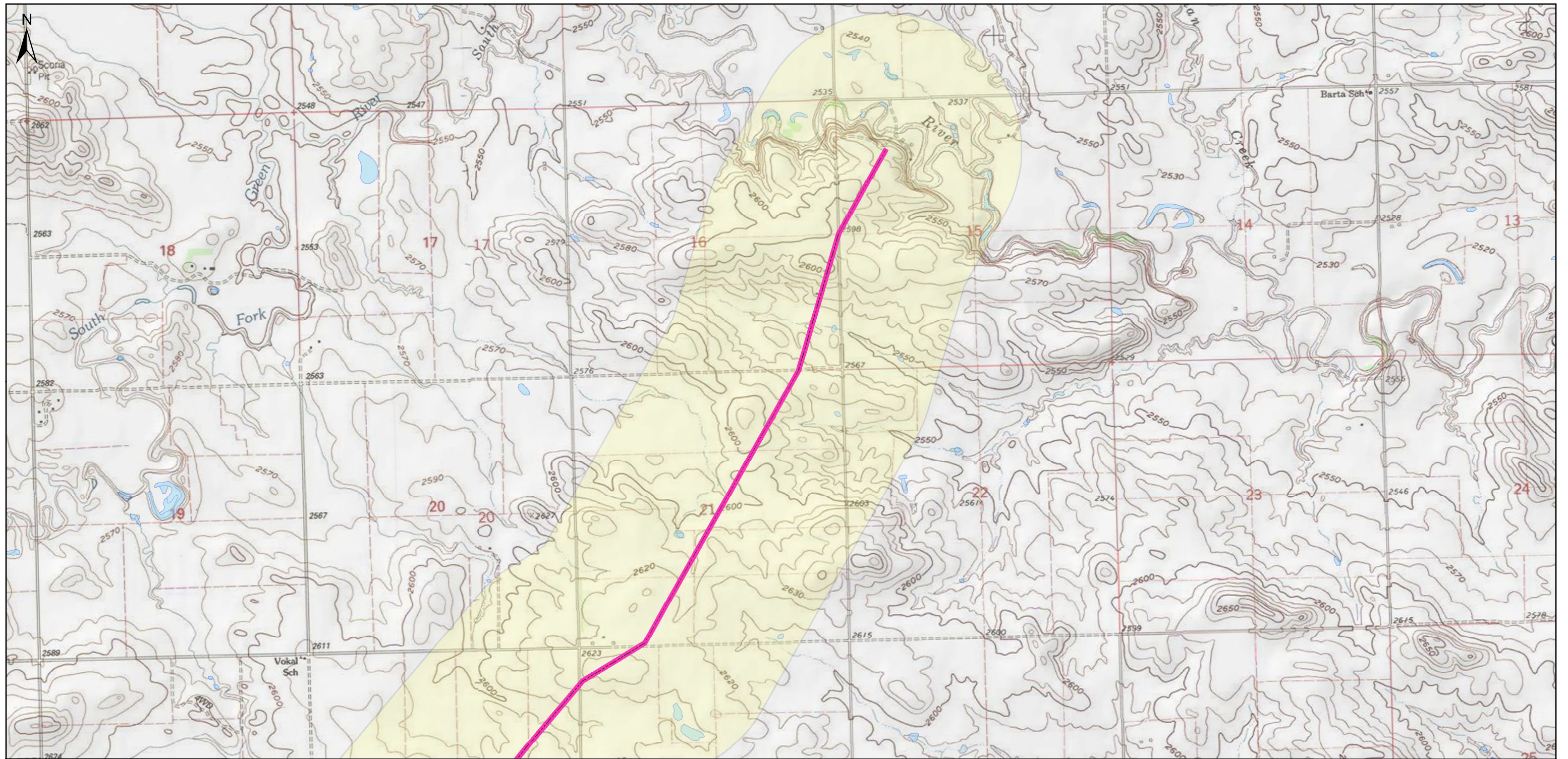
	Proposed Centerline		Northern Harrier
	Field Survey Corridor		Swainson's Hawk
	Residence - within 500ft		

0 0.225 0.45 0.9
Miles



**Heart River Pipeline
Billings and Stark Counties
Figure 4.B.6b - Route Map**


Printed: 11/7/2014



Legend

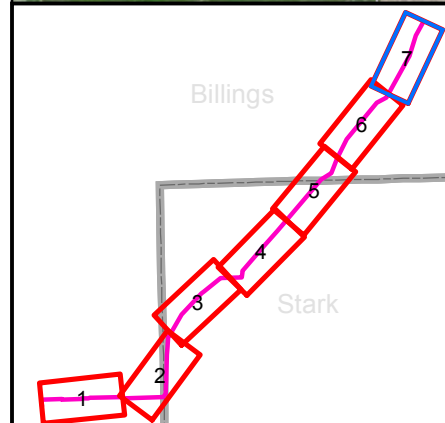
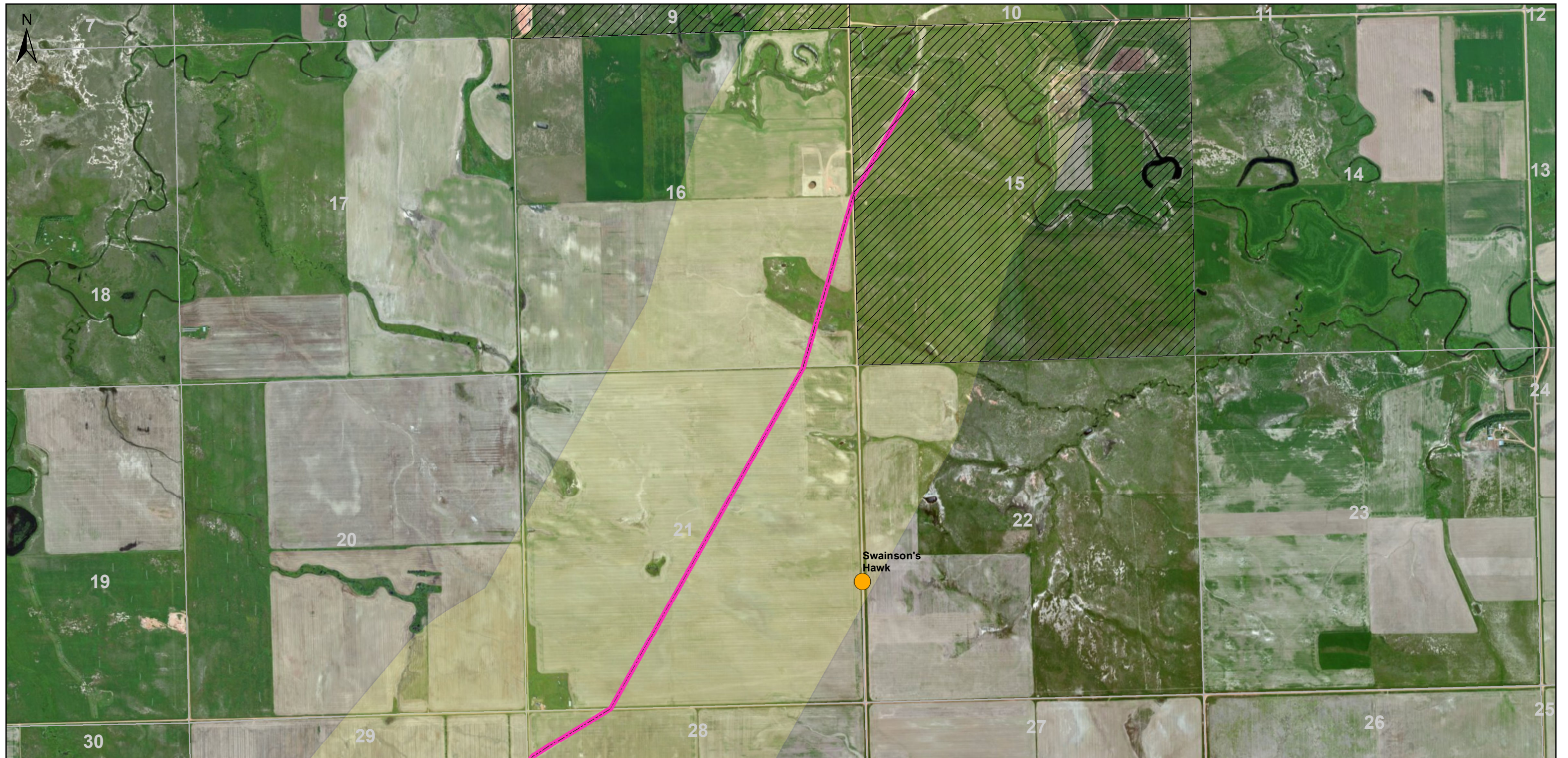
- Proposed Centerline
- Field Survey Corridor
- NWI Wetland

0 0.275 0.55 1.1
Miles







**Heart River Pipeline
Billings and Stark Counties
Figure 4.B.7a - Route Map**


Printed: 11/7/2014



Legend

	Proposed Centerline		Swainson's Hawk
	Field Survey Corridor		
	Cultural Site - Redacted		

0 0.225 0.45 0.9
Miles



**Heart River Pipeline
Billings and Stark Counties
Figure 4.B.7b - Route Map**

Printed: 11/7/2014

APPENDIX 4.C LANDOWNER AND TENANT LIST

Billings County

Section	Twp	Range	Qtr	Owner	Address	City, State, ZIP
15	141N	98W	NW	BENJAMIN F & EVELYN VOLESKY	1171 31ST ST SW	DICKINSON ND 58601
15	141N	98W	NW	BOB & DUANE STEFFAN (TENANT)		
16	141N	98W	SENE	BRIDGER PIPELINE, LLC	455 N POPLAR, PO DRAWER 2360	CASPER, WY 82602
16	141N	98W	S2	LUDWIG & CECILIA BURESH	793 13 th ST E	DICKINSON, ND 58601
16	141N	98W	S2	KENNY RIDL (TENANT)		
21	141N	98W	All	ORVILLE SNIDER IRR. TRUST	640 PALM BEACH RD	DICKINSON, ND 58601
21	141N	98W	All	DON FROEHIL (TENANT)		
28	141N	98W	NW	SARAH J. FROELICH TRUST DONALD J. FROELICH TRUST	PO BOX 415 401 HWY 10 E	BELFIELD, ND 58622
29	141N	98W	All	DELREY & MARCHELL KUBAS	3130 121 ST AVE SW	DICKINSON, ND 58601
32	141N	98W	N2NW SWNW	AGNES FRANK	3040 HWY 85 N	BELFIELD, ND 58622
32	141N	98W	N2NW SWNW	PAUL KUNTZ (TENANT)		
31	141N	98W	E2	AGNES FRANK	3040 HWY 85 N	BELFIELD, ND 58622

Bridger Pipeline LLC
Route Application
Heart River Pipeline – Billings and Stark Counties

Section	Twp	Range	Qtr	Owner	Address	City, State, ZIP
31	141N	98W	E2	PAUL KUNTZ (TENANT)		
36	140N	100W	N2	LYNN KESSEL TRUST AMERICAN BANK CTR – TRUSTEE	1151 3 RD AVE W	DICKINSON, ND 58601
36	140N	100W	N2	DON FROEHLIC (TENANT)		
35	140N	100W	NE	LYNN KESSEL TRUST AMERICAN BANK CTR – TRUSTEE	1151 3 RD AVE W	DICKINSON, ND 58601
35	140N	100W	NE	DON FROEHLIC (TENANT)		
26	140N	100W	SE	LYNN KESSEL TRUST AMERICAN BANK CTR – TRUSTEE	1151 3 RD AVE W	DICKINSON, ND 58601
26	140N	100W	SE	DON FROEHLIC (TENANT)		
26	140N	100W	N2 SW	CURTIS & JUANITA TALKINGTON - LE	13125 35 TH ST SW	BELFIELD, ND 58622
26	140N	100W	N2 SW	SHANE TALKINGTON (TENANT)		
27	140N	100W	SE	U.S. FOREST SERVICE		
27	140N	100W	N2 SW	CURTIS & JUANITA TALKINGTON - LE	13125 35 TH ST SW	BELFIELD, ND 58622
27	140N	100W	N2 SW	SHANE TALKINGTON (TENANT)		
28	140N	100W	All	FRANCIS & ROSE REDMOND	PO BOX 371	BELFIELD, ND 58622
28	140N	100W	All	JERRY REDMOND	3465 136 TH AVE SW	BELFIELD, ND 58622
33	140N	100W	N2	U.S. FOREST SERVICE		

Bridger Pipeline LLC
Route Application
Heart River Pipeline – Billings and Stark Counties

Stark County

Section	Twp	Range	Qtr	Owner	Address	City, State, ZIP
3	140N	99W	NE	LARRY CYMBALUK	3070 128 th AVE SW	BELFIELD, ND 58622
3	140N	99W	NW S2	SCOTT CYMBALUK	12861 31 R ST SW	BELFIELD, ND 58622
4	140N	99W	SE	SCOTT CYMBALUK	12861 31 R ST SW	BELFIELD, ND 58622
9	140N	99W	E2	CURTIS & CINDY BUCKMAN	3712 128 th AVE SW	BELFIELD, ND 58622
9	140N	99W	W2	DAN A. OBRIDGEWITCH	PO BOX 445 3355 131 st AVE SW	BELFIELD, ND 58622
16	140N	99W	NW	DAN A. OBRIDGEWITCH	PO BOX 445 3355 131 st AVE SW	BELFIELD, ND 58622
17	140N	99W	All	CHAD OBRIDGEWITCH	PO BOX 445 3375 131 st AVE SW	BELFIELD, ND 58622
18	140N	99W	SE	THEODORE D FRANK	1266 (1294) SIGNAL BUTTE #77	DICKINSON, ND 58601
19	140N	99W	N2 SW	ANDREW & CHRISTINE KOCH TRUST ARNOLD & ROBERT KOCH CO-TRUSTEES	7615 STEVENS AVE S	RICHFIELD, MN 55423
19	140N	99W	N2 SW	CHAD OBRIDGEWITCH (TENANT)		
30	140N	99W	All	CURTIS & JUANITA TALKINGTON - LE	13125 35 th ST SW	BELFIELD, ND 58622
30	140N	99W	All	SHANE TALKINGTON (TENANT)		
31	140N	99W	All	LOREN N BOCK	13748 40 th ST SW	BELFIELD, ND 58622

APPENDIX 4.D.1

North Dakota Federal and State Plant Species of Concern

Bridger Pipeline LLC
 Plant Species of Concern
 Heart River Pipeline – Billings and Stark Counties

TABLE 4.D.1.A						
NORTH DAKOTA'S PLANT SPECIES OF CONCERN						
<u>Scientific Name</u>	<u>Common Name</u>	<u>Global</u>	<u>State</u>	<u>USFWS</u>	<u>USFS</u>	<u>Habitat</u>
<i>Acorus americanus</i>	Sweetflag	G5	S4			Peatlands, fens, seeps
<i>Agrostis exarata</i>	Spike Bentgrass	G5	S1		W	Moist habitats
<i>Allium canadense</i>	Meadow Onion	G5	S1			Prairies, open woods
<i>Allium tricoccum</i>	Wild Garlic	G5	S3			Rich undisturbed woods
<i>Apios americana</i>	American Groundnut	G5	SH			Moist woods, thickets banks
<i>Arabis canadensis</i>	Sicklepod	G5	S1			Mesic woodlands
<i>Arnica cordifolia</i>	Heart-leaved Arnica	G5	S3			Open woodlands
<i>Asclepias lanuginosa</i>	Woolly Milkweed	G4?	S1			Sandy or rocky calcareous prairie
<i>Asclepias sullivantii</i>	Sullivant's Milkweed	G5	S2			Mesic tallgrass prairies
<i>Astragalus australis</i>	Indian Milkvetch	G5	S2S3		W	Open wooded hillsides, bluffs, limestone
<i>Astragalus drummondii</i>	Drummond's Milkvetch	G5	S1		W	Prairies to open wooded/brushy hillsides/ravines, all soil
<i>Astragalus neglectus</i>	Cooper's Milkvetch	G4	S1			Sandy, gravelly shores, mesic gravelly prairie
<i>Astragalus vexilliflexus</i>	Bent-flowered Milkvetch	G4	S3		W	Rocky knolls and open wooded hillsides
<i>Athyrium filix-femina</i>	Northern Lady-fern	G5	S3			Moist woods, thickets, bogs, along streams
<i>Botrychium campestre</i>	Prarie Grapefern	G3G4	S1			Dry, gravelly or sandy prairies
<i>Botrychium matricariifolium</i>	Chamomile Grapefern	G5	S1			Moist woodlands
<i>Botrychium minganense</i>	Moonwort	G4	S1			Wooded, often north-facing slopes, meadows
<i>Botrychium multifidum</i>	Leathery Grapefern	G5	S1			Wet meadows, rich woodlands
<i>Botrychium simplex</i>	Least Grapefern	G5	S2			Meadows, barrens, woods, subacid soils
<i>Bromus carinatus</i>	Mountain Brome	G5	S1		W	Disturbed, moist woods, dry meadows, sagebrush
<i>Bromus kalmii</i>	Kalm's Brome	G5	S3			Open oak woods, sandy soils
<i>Calla palustris</i>	Water Arum	G5	S2			Northern marshes and swamps

Bridger Pipeline LLC
 Plant Species of Concern
 Heart River Pipeline – Billings and Stark Counties

TABLE 4.D.1.A						
NORTH DAKOTA'S PLANT SPECIES OF CONCERN						
<u>Scientific Name</u>	<u>Common Name</u>	<u>Global</u>	<u>State</u>	<u>USFWS</u>	<u>USFS</u>	<u>Habitat</u>
<i>Campanula aparinoides</i>	Marsh Bellflower	G5	S2S3			Wetland thickets, seepage, peatlands
<i>Cardamine bulbosa</i>	Spring Cress	G5	S1			Wet meadows, wood springs
<i>Carex alopecoidea</i>	Foxtail Sedge	G5	S2			Damp, rich, wooded areas
<i>Carex athrostachya</i>	Jointed-spike Sedge	G5	S3			Low prairie, marsh margins
<i>Carex backii</i>	Back's Sedge	G4	S3			Damp, wooded areas
<i>Carex brunnescens</i>	Brown Sedge	G5	S1			Fens, wet wooded areas
<i>Carex buxbaumii</i>	Buxbaum's Sedge	G5	S2			Wet meadows, fens
<i>Carex capillaris</i>	Hair-like Sedge	G5	S2			Wet meadows, fens
<i>Carex chordorrhiza</i>	Creeping Sedge	G5	S1			Sphagnum bogs, poor fens
<i>Carex convoluta</i>	Spiral Sedge	G5	S2			Rich, deciduous woodlands
<i>Carex diandra</i>	Lesser-panicled Sedge	G5	S3			Swamps, meadows, shores
<i>Carex echinata ssp. echinata</i>	Spiny Sedge	G5T5	S1			Sphagnum bogs
<i>Carex festuceacea</i>	Fescue Sedge	G5	S2			Wooded areas
<i>Carex foenea (Carex siccata)</i>	Dry-spiked Sedge	G5	S3		W	Dry open soil in wooded areas
<i>Carex formosa</i>	Handsome Sedge	G4	S1			Low, moist, eastern woodlands
<i>Carex garberi</i>	Elk Sedge	G5	S1			Fens, swamps, pond margins
<i>Carex gracillima</i>	Graceful Sedge	G5	S1			Moist swampy woods
<i>Carex gynocrates</i>	Pistillate Sedge	G5	S1			Peaty fens
<i>Carex haydenii</i>	Hayden's Sedge	G5	S1			Wet meadows, sloughs
<i>Carex lasiocarpa</i>	Wiregrass Sedge	G5	S3			Sphagnum bogs, seepage-fed peatlands, lake borders
<i>Carex leptalea</i>	Delicate Sedge	G5	S3			Shrubby peatland fens, swampy woods and thickets
<i>Carex limosa</i>	Mud Sedge	G5	S2			Sphagnum bogs, fens
<i>Carex nebrascensis</i>	Nebraska Sedge	G5	S2			Wet meadows, stream margins
<i>Carex pedunculata</i>	Peduncled Sedge	G5	S2			Moist oak or birch woodlands
<i>Carex richardsonii</i>	Richardson's Sedge	G5	S1			Low, usually sandy, prairie

Bridger Pipeline LLC
Plant Species of Concern
Heart River Pipeline – Billings and Stark Counties

TABLE 4.D.1.A						
NORTH DAKOTA'S PLANT SPECIES OF CONCERN						
<u>Scientific Name</u>	<u>Common Name</u>	<u>Global</u>	<u>State</u>	<u>USFWS</u>	<u>USFS</u>	<u>Habitat</u>
<i>Carex scirpoidea</i>	Spikerush Sedge	G5	S2		W	Rocky slopes, wet meadows
<i>Carex scoparia</i>	Pointed Broom Sedge	G5	SH			Damp woods, low prairie, lakeshores
<i>Carex simulata</i>	Copycat Sedge	G5	S2			Calcareous fens, wet meadows
<i>Carex sterilis</i>	Sterile Sedge	G4	S1			Seepage peatland fens, wet meadows
<i>Caulophyllum thalictroides</i>	Blue Cohosh	G4G5	S1			Moist rich woods
<i>Chaenactis douglasii</i>	Douglas' Dusty-maiden	G5	S2			Scoria slopes and buttes
<i>Cheilanthes feei</i>	Slender Lip fern	G5	S1			Dry rocky slopes, sandstone, limestone
<i>Chenopodium subglabrum</i>	Smooth Goosefoot	G3G4	S1		S	Sandy river terraces, sand colluviums, sand blowouts, sand dunes
<i>Clematis columbiana var. tenuiloba</i>	Slender-lobed Clematis	G5? T4?	S1		W	Rocky slopes, limestone soils
<i>Collinsia parviflora</i>	Blue lips	G5	S2		S	Mesic slopes of buttes
<i>Crataegus mollis</i>	Downy Hawthorn	G5	S1			Open mesic woods
<i>Cryptantha torreyana</i>	Torrey's Cryptantha	G5	S1		S	Dry plains, pine slopes, on scoria
<i>Cyperus bipartitus</i>	Brook Flatsedge	G5	S2			Cool, spring-fed streams
<i>Cyperus diandrus</i>	Low Flatsedge	G5	S2			Sandy or muddy shores, stream margins
<i>Cypripedium candidum</i>	White Lady's Slipper	G4	S2			Low prairie, wet meadows
<i>Cypripedium parviflorum</i>	Small Yellow Lady's-slipper orchid	G5	S2			Damp woods, fens, streambanks
<i>Cypripedium parviflorum var. pubescens</i>	Large Yellow Lady's-slipper	G5T5	S2			Boggy areas, wet prairies
<i>Cypripedium reginae</i>	Showy Lady's-slipper	G4	S2			Swampy woodlands, thickets, fens
<i>Dalea enneandra</i>	Nine-anthered Dalea	G5	S3			Sandy or gravelly slopes, dry mixed grass prairies
<i>Desmanthus illinoensis</i>	Prairie Mimosa	G5	S1			Prairies with rocky or sandy soils
<i>Dicentra cucullaria</i>	Dutchman's Breeches	G5	S1			Rich eastern woodlands

Bridger Pipeline LLC
Plant Species of Concern
Heart River Pipeline – Billings and Stark Counties

TABLE 4.D.1.A						
NORTH DAKOTA'S PLANT SPECIES OF CONCERN						
<u>Scientific Name</u>	<u>Common Name</u>	<u>Global</u>	<u>State</u>	<u>USFWS</u>	<u>USFS</u>	<u>Habitat</u>
<i>Diervilla lonicera</i>	Dwarf Honeysuckle	G5	S3			Shady woodlands, usually aspen
<i>Dirca palustris</i>	Leatherwood	G4	S1			Shady, damp woodland slopes
<i>Drosera rotundifolia</i>	Round-leaved Sundew	G5	S1			Acid bogs, swamps
<i>Dryopteris carthusiana</i>	Spinulose Woodfern	G5	S3			Rich, moist woods, ravines, boggy areas, alder thickets
<i>Dryopteris cristata</i>	Crested Woodfern	G5	S3			Swampy woods and thickets, seeps
<i>Eleocharis parvula</i>	Dwarf Spikerush	G5	S2			Brackish, alkaline shores
<i>Eleocharis pauciflora</i>	Few-flowered Spikerush	G5	S3			Calcareous fens, seeps
<i>Eleocharis wolfii</i>	Wolf's Spikerush	G3?	SH			Shores, low, wet prairie
<i>Elymus glaucus</i>	Blue Wildrye	G5	S2			Open woods, prairie slopes
<i>Epilobium coloratum</i>	Purple-leaved Willowherb	G5	S3			Marshes, seeps, shores
<i>Epilobium pygmaeum</i> (<i>Boisduvalia glabella</i>)	Smooth-spike Primrose	G5	S2		W	Small streams, vernal pools
<i>Equisetum palustre</i>	Marsh Horsetail	G5	S2			Willow/alder thickets, swampy woods, streambanks
<i>Equisetum pratense</i>	Meadow Horsetail	G5	S2			Moist woodlands, shady streambanks
<i>Equisetum sylvaticum</i>	Wood Horsetail	G5	S2			Moist aspen or lowland woods, seeps
<i>Equisetum variegatum</i>	Variegated Horsetail	G5	S1			Marl pools of calcareous fens
<i>Erigeron divergens</i>	Spreading Fleabane	G5	S1		W	Dry, open, rocky, sandy, loose soils
<i>Erigeron radicans</i>	Cushion Fleabane	G3G4	S1		W	Exposed hills, slopes, ridges
<i>Eriogonum cernuum</i>	Nodding Buckwheat	G5	S1		S	Erosional breaks in sandy grasslands, sandstone colluvium
<i>Eriogonum visherii</i>	Dakota Buckwheat	G3	S2		S	Barren, erodible, rock outcrops in badland habitat
<i>Eriophorum chamissonis</i>	Chamisson's Cottongrass	G5	S2			Bogs, marshes, peaty fens
<i>Eriophorum gracile</i>	Slender Cottongrass	G5	S1			Seepage fens

Bridger Pipeline LLC
 Plant Species of Concern
 Heart River Pipeline – Billings and Stark Counties

TABLE 4.D.1.A						
NORTH DAKOTA'S PLANT SPECIES OF CONCERN						
<u>Scientific Name</u>	<u>Common Name</u>	<u>Global</u>	<u>State</u>	<u>USFWS</u>	<u>USFS</u>	<u>Habitat</u>
<i>Eriophorum viridicarinatum</i>	Green Keeled Cottongrass	G5	S2			Sphagnum bogs, peaty fens
<i>Escobaria missouriensis</i>	Missouri Foxtail Cactus	G5	SNR		S	Plains, hills, desert edge, grasslands, lower mountains
<i>Euonymus atropurpureus</i>	Wahoo	G5	S3			Rich deciduous woods, woodland edges, river banks
<i>Euphorbia robusta</i>	Rocky Mountain Spurge	G5	S3			Dry, sandy or gravelly prairie slopes
<i>Fraxinus nigra</i>	Black Ash	G5	S2			Swampy or wet lowlands
<i>Fritillaria pudica</i>	Yellow Fritillary	G5	S3			Ephemerally moist areas of buttes
<i>Galium labradoricum</i>	Bog Bedstraw	G5	S3			Wetland thickets, fens, swampy woods
<i>Gentianopsis crinita</i>	Fringed Gentian	G5	S2			Low wet prairies, stream banks
<i>Geranium maculatum</i>	Wild Geranium	G5	SH			Rich, eastern deciduous woods
<i>Geum rivale</i>	Water Avens	G5	S2			Marshes, wet meadows, riverbanks
<i>Gymnocarpium dryopteris</i>	Oakfern	G5	S2			North-facing or shady wooded slopes
<i>Halenia deflexa</i>	Spurred Gentian	G5	S3			Wetland thickets, damp shady woods
<i>Helianthemum bicknellii</i>	Bicknell's Sunrose	G5	S1			Open woods, prairies, usually dry sandy soil
<i>Hudsonia tomentosa</i>	Woolly Beach-heather	G5	S1			Sand prairies, dunes
<i>Iris missouriensis</i>	Rocky Mountain Iris	G5	S2			Mesic areas within mixed grass prairie
<i>Juncus brevicaudatus</i>	Short-tailed Rush	G5	S2			Wet meadows, fens, marshes
<i>Juncus vaseyi</i>	Vasey's Rush	G5?	S2			Wet meadows, shores
<i>Lappula cenchrusoides</i>	Stickseed	G4	S1			Dry soils in open areas
<i>Lechea stricta</i>	Upright Pinweed	G4?	S2			Dry, sandy woods and prairies
<i>Leersia virginica</i>	Whitegrass	G5	S3			Moist woods, stream banks
<i>Leucocrinum montanum</i>	Sand Lily	G5	S2		S	Grass/sagebrush prairies, open conifer woodlands, sandy soils
<i>Linnaea borealis</i>	Twinflower	G5	S4			Moist, wooded, north-facing slopes
<i>Liparis loeselii</i>	Loesel's Twayblade	G5	S2			Damp woods, prairie swales, fens

Bridger Pipeline LLC
 Plant Species of Concern
 Heart River Pipeline – Billings and Stark Counties

TABLE 4.D.1.A						
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<u>Scientific Name</u>	<u>Common Name</u>	<u>Global</u>	<u>State</u>	<u>USFWS</u>	<u>USFS</u>	<u>Habitat</u>
<i>Lipocarpha micrantha</i>	Small-flowered Lipocarpha	G5	S1			Wet sandy areas, sandbars
<i>Mahonia repens</i>	Creeping Barberry	G5	S2			Coulees, slopes of high plains
<i>Mentzelia pumila</i>	Dwarf Mentzelia	G4	S1		S	Dry sandy or clayey soils
<i>Menyanthes trifoliata</i>	Buckbean	G5	S2			Sphagnum bogs, fen peat lands
<i>Mimulus guttatus</i>	Yellow Monkeyflower	G5	S1			Marshes, along streams and lake shores
<i>Minuartia dawsonensis</i>	Stiff Sandwort	G5	S1			Open rocky or gravelly areas on shale
<i>Mitella nuda</i>	Naked Mitrewort	G5	S3			Swampy lowland woods and thickets
<i>Monotropa uniflora</i>	Indianpipe	G5	S3			Rich shady woods
<i>Muhlenbergia filiformis</i>	Pull-up Muhly	G5	S1			Marl pools of calcareous fens
<i>Myosurus apetalus var. montanus</i>	Bristly Mousetail	G5T3 T5	S1		W	Moist areas, vernal pools, lowlands
<i>Myosurus aristatus</i>	Sedge Mousetail	G5	S2			Moist areas, vernal wetlands of mixed grass prairies
<i>Myriophyllum pinnatum</i>	Cutleaf Watermilfoil	G5	S2			Shallows of marshes and shores
<i>Najas guadalupensis</i>	Southern Naiad	G5	S1			Lakes or streams
<i>Najas marina</i>	Spiny Naiad	G5	S1			Alkaline lakes, ponds
<i>Oenothera laciniata</i>	Cutleaf Evening Primrose	G5	SA?		W	Sandy prairie, disturbed pastures, roadsides, stream valleys
<i>Oenothera rhombipetala</i>	Rhombic Evening Primrose	G4G5	S2			Sandy prairies
<i>Onoclea sensibilis</i>	Sensitive Fern	G5	S2			Wetland thickets, fen peat lands, damp, shady woodlands
<i>Ophioglossum pusillum</i>	Adder's-Tongue Fern	G5	S2			Low prairie swales
<i>Orobanche ludoviciana, ssp. multiflora</i>	Manyflowered Broomrape	G5	S1		W	Dry sandy soils, dunes, gypsum ridges
<i>Orobanche uniflora</i>	One-flowered Broomrape	G5	SH			Damp woods, thickets

Bridger Pipeline LLC
 Plant Species of Concern
 Heart River Pipeline – Billings and Stark Counties

TABLE 4.D.1.A						
NORTH DAKOTA'S PLANT SPECIES OF CONCERN						
<u>Scientific Name</u>	<u>Common Name</u>	<u>Global</u>	<u>State</u>	<u>USFWS</u>	<u>USFS</u>	<u>Habitat</u>
<i>Oxytropis deflexa</i>	Drooping Locoweed	G5	S2			Sandy lake shores, low meadows, aspen woodland clearings
<i>Oxytropis sericea</i>	White Locoweed	G5	S1		W	Mixed grass prairie on slopes or buttes
<i>Parnassia palustris var. parviflora</i>	Small-flowered Grass-of-Parnassus	G4	S3			Calcareous fens, bogs
<i>Pellaea glabella</i>	Smooth Cliffbrake	G5	S3			Sandstone caprock of buttes and ledges
<i>Penstemon procerus</i>	Small-flowered Penstemon	G5	S1			Northern prairie slopes
<i>Petasites frigidus</i>	Sweet Coltsfoot	G5	S2			Damp meadows, woods
<i>Phlox alyssifolia</i>	Alyssum-leaved Phlox	G5	S2		S	Sandy/gravelly soil of open prairies, clay banks, limestone ridges
<i>Phlox pilosa</i>	Downy Phlox	G5	S1			Mesic prairies of open woodlands
<i>Pinus flexilis</i>	Limber Pine	G5	S1		S	Arid, exposed rocky ridges, foothills
<i>Piptatherum pungens</i>	Slender Mountain-Ricegrass	G5	S2			Xeric slopes, usually shale
<i>Platanthera clavellata</i>	Green Woodland Orchid	G5	SH			Swampy woods, bogs
<i>Platanthera praeclara</i>	Western Prairie Fringed Orchid	G3	S2	T		Moist prairie swales of sand hills
<i>Pogonia ophioglossoides</i>	Rose pogonia	G5	S1			Swampy woods, bogs
<i>Polygonum hydropiperoides</i>	Swamp Smartweed	G5	S1			Rooted in or near water
<i>Polygonum leptocarpum</i>	Thin-fruited Knotweed	G2G4Q	S1			Damp, dry soils on clay
<i>Polygonum punctatum</i>	Dotted Smartweed	G5	S3			Swampy thickets, wet meadows, riverbanks
<i>Polygonum sagittatum</i>	Arrow-leaved Tearthumb	G5	S2			Marshes, wet meadows
<i>Populus x acuminata</i>	Lanceleaf Cottonwood	GNA	S2		S	Floodplains, stream banks
<i>Populus x jackii</i>	Balm-of-Gilead	GNA	SNR		W	Uplands and bottomlands
<i>Potamogeton diversifolius</i>	Water-thread Pondweed	G5	S3		W	Shallow ponds, marshes
<i>Potamogeton filiformis</i>	Slender Pondweed	G5	S3			Shallow lakes, ponds, streams

Bridger Pipeline LLC
Plant Species of Concern
Heart River Pipeline – Billings and Stark Counties

TABLE 4.D.1.A						
NORTH DAKOTA'S PLANT SPECIES OF CONCERN						
<u>Scientific Name</u>	<u>Common Name</u>	<u>Global</u>	<u>State</u>	<u>USFWS</u>	<u>USFS</u>	<u>Habitat</u>
<i>Potamogeton natans</i>	Floating Pondweed	G5	S2			Cold, shallow to deep lakes and streams
<i>Potamogeton praelongus</i>	White-stemmed Pondweed	G5	S1			Usually cool, deep water of lakes
<i>Potamogeton strictifolius</i>	Narrow-leaved Pondweed	G5	S1			Shallow lakes, streams
<i>Potamogeton vaginatus</i> (<i>Stuckenia vaginata</i>)	Sheathed Pondweed	G5	S3			Usually deep cold lakes, ponds
<i>Potentilla diversifolia</i>	Mountain meadow cinquefoil (Varileaf Potentilla)	G5	S1		W	Drainages, meadows
<i>Potentilla palustris</i>	Purple Cinquefoil	G5	S2			Fens, wet meadows, bogs
<i>Potentilla tridentata</i> (<i>Sibbaldiopsis tridentata</i>)	Three-toothed Cinquefoil (Shrubby Fivefingers)	G5	S1		W	Gravel shores, dry shale outcrops of prairie hillsides, scoria
<i>Primula incana</i>	American Primrose	G4G5	S2			Alkali wet meadows, fens
<i>Psoralea tenuiflora</i>	Slim-flowered Scurfpea	G5	SH			Dry prairie, high plains
<i>Ranunculus cardiophyllus</i>	Heart-leaved Buttercup	G4G5	S1		W	Mountain meadows along streams, seeps
<i>Ranunculus flammula</i>	Acrid Spearwort	G5	S1			Marshes, damp shores
<i>Ranunculus recurvatus</i>	Hooked crowfoot	G5	S1			Wooded ravines, swampy woods
<i>Rhynchospora capillacea</i>	Hair Beakrush	G4	S2			Moist calcareous fens, marsh meadows, seeps, limestone
<i>Ribes cynosbati</i>	Prickly Gooseberry	G5	S3			Moist rich woods
<i>Rorippa calycina</i>	Hayden's Yellowcress	G3	SH		W	Sandy shores of rivers and streams
<i>Salix maccalliana</i>	Swamp Willow	G5?	S1			Bogs, swamps
<i>Salix pedicellaris</i>	Bog Willow	G5	S3			Sphagnum bogs, fens
<i>Sanicula gregaria</i>	Cluster Sanicle	G4Q	SH			Rich, moist woodlands
<i>Scheuchzeria palustris</i>	Scheuchzeria	G5	S1			Sphagnum bogs,
<i>Scirpus cyperinus</i>	Cottongrass Bulrush	GNR	SNR			Wet meadows, fresh marshes, boggy areas, fen wetlands

Bridger Pipeline LLC
 Plant Species of Concern
 Heart River Pipeline – Billings and Stark Counties

TABLE 4.D.1.A						
NORTH DAKOTA'S PLANT SPECIES OF CONCERN						
<u>Scientific Name</u>	<u>Common Name</u>	<u>Global</u>	<u>State</u>	<u>USFWS</u>	<u>USFS</u>	<u>Habitat</u>
<i>Selaginella rupestris</i>	Ledge Spike-moss	G5	S1			Sandy soils near oak woodlands
<i>Senecio eremophilus</i>	Northern Ragwort	G5	S2			Open sites in aspen woodlands
<i>Smilax ecirrhata</i>	Upright Greenbrier (Upright Carrionflower)	G5?	S2		W	Rich deciduous woods and thickets
<i>Solidago flexicaulis</i>	Zigzag Goldenrod	G5	S2			Rich deciduous woodlands
<i>Solidago riddellii</i>	Riddell's Goldenrod	G5	SH			Low prairies, wet meadows
<i>Sphagnum recurvum</i>	Recurved Sphagnum	G5	S1			Bogs, fens, forests, near wetlands
<i>Sphagnum teres</i>	Round-leaved Sphagnum	G5	S1			Bogs, fens, forests, near wetlands
<i>Spiranthes cernua</i>	Nodding Ladies' Tresses	G5	S1			Fens, low prairies
<i>Spiranthes romanzoffiana</i>	Hooded Ladies' Tresses	G5	S1			Fens, wet meadows
<i>Sporobolus airoides</i>	Alkali Sacaton	G5	S3		S	Sandy/gravelly soil, clay outwash, saline conditions
<i>Stephanomeria minor (tenuifolia)</i>	Narrow-leaved Wirelettuce	G5	S3			Dry, clay outcrops
<i>Talinum parviflorum (Phemeranthus parviflorus)</i>	Prairie Fameflower	G5	S2		W	Sandy acidic soil, overlying bedrock
<i>Thelesperma subnudum var. marginatum</i>	Greenthread	G5T5	S2			Sandy prairie, open plains
<i>Thelypteris palustris</i>	Marsh Fern	G5	S3			Wetland thickets, shrubby fens
<i>Townsendia exscapa</i>	Easter Daisy	G5	SNR		S	Dry barren plain, hillsides on gravelly exposures, weathered bedrock
<i>Townsendia hookeri</i>	Hooker's Townsendia	G5	S1		S	Butte summits
<i>Triantha glutinosa</i>	Sticky False-asphodel	G5	S1			Fens, wet meadows
<i>Triplasis purpurea</i>	Purple Sandgrass	G4G5	S1			Sandy prairies, blowouts
<i>Utricularia intermedia</i>	Flat-leaved Bladderwort	G5	S2			Calcareous fens, seepage peatlands

TABLE 4.D.1.A						
NORTH DAKOTA’S PLANT SPECIES OF CONCERN						
<u>Scientific Name</u>	<u>Common Name</u>	<u>Global</u>	<u>State</u>	<u>USFWS</u>	<u>USFS</u>	<u>Habitat</u>
<i>Utricularia minor</i>	Lesser Bladderwort	G5	S2			Calcareous fens, seeps
<i>Uvularia sessilifolia</i>	Sessile-leaved Bellwort	G5	S2			Rich deciduous woods
<i>Veronicastrum virginicum</i>	Culver’s Root	G4	SH			Low prairie, rich woods
<i>Viola conspersa</i> (<i>Viola labradorica</i>)	Bog Violet	G5	S2			Moist woods, streambanks
<i>Viola incognita</i> (<i>Viola blanda</i>)	Large-leaved White Violet	G4G5T 4T5	SH			Moist woods
<i>Wolffia columbiana</i>	Southern Watermeal	G5	S2			Aquatic in quiet waters
* Data provided by the USFWS, USFS, ND Game & Fish Dept., North Dakota Natural Heritage Program, and NatureServe.						

TABLE 4.D.1.B	
USDA FOREST SERVICE SENSITIVE PLANTS LITTLE MISSOURI NATIONAL GRASSLAND	
Common Name	Scientific Name
Smooth Goosefoot	<i>Chenopodium subglabrum</i>
Blue Lips	<i>Collinsia parviflora</i>
Torrey’s Cryptantha	<i>Cryptantha torreyana</i>
Nodding Buckwheat	<i>Eriogonum cernuum</i>
Dakota Buckwheat	<i>Eriogonum visheri</i>
Missouri Foxtail Cactus	<i>Escobaria missouriensis</i>
Sand Lily	<i>Leucocrinum montanum</i>
dwarf mentzelia	<i>Mentzelia pumila</i>
alyssumleaf phlox	<i>Phlox alyssifolia</i>
limber pine	<i>Pinus flexilis</i>
lanceleaf cottonwood	<i>Populus x acuminata</i>
alkali sacaton	<i>Sporobolus airoides</i>
Easter Daisy	<i>Townsendia exscapa</i>
Hooker’s Townsend daisy	<i>Townsendia hookeri</i>

TABLE 4.D.1.C	
BLM SENSITIVE SPECIES – PLANTS	
Common Name	Scientific Name
Cusick's horse-mint	<i>Agastache cusickii</i>
Western boneset	<i>Ageratina occidentalis</i> = <i>Eupatorium occidentale</i>
Tapertip onion	<i>Allium acuminatum</i>
Sitka columbine	<i>Aquilegia formosa</i>
Daggett rock cress	<i>Arabis demissa</i> var. <i>languida</i>
sapphire rockcress	<i>Arabis fecunda</i>
narrowleaf milkweed	<i>Asclepias stenophylla</i>
Sweetwater milkvetch	<i>Astragalus aretioides</i> = <i>Orophaca aretioides</i>
Barr's milkvetch	<i>Astragalus barrii</i>
painted milkvetch	<i>Astragalus ceramicus</i> var. <i>apus</i>
lesser rushy milkvetch	<i>Astragalus convallarius</i> var. <i>convallarius</i> = <i>A. junciformis</i>
Geyer's milkvetch	<i>Astragalus geyeri</i>
Gray's milkvetch	<i>Astragalus grayi</i>
Wind River milkvetch	<i>Astragalus oreganus</i>
Bitterroot milkvetch	<i>Astragalus scaphoides</i>
railhead milkvetch	<i>Astragalus terminalis</i>
large-leafed balsamroot	<i>Balsamorhiza macrophylla</i>
Peculiar moonwort	<i>Botrychium paradoxum</i>
low northern-rockcress	<i>Braya humilis</i>
Mohave brickellbush	<i>Brickellia oblongifolia</i>
Idaho sedge	<i>C. idahoa</i> = <i>C. parryana</i> ssp. <i>idahoa</i>
Small-winged sedge	<i>Carex stenoptila</i>
obscure evening-primrose	<i>Camissonia andina</i> = <i>Oenothera andina</i>
small camissonia	<i>Camissonia parvula</i> = <i>Oenothera parvula</i>
Crawe's sedge	<i>Carex crawei</i>

TABLE 4.D.1.C	
BLM SENSITIVE SPECIES – PLANTS	
Common Name	Scientific Name
annual Indian paintbrush	<i>Castilleja exilis</i>
yellow bee plant	<i>Cleome lutea</i>
Fendler cat's-eye	<i>Cryptantha fendleri</i>
miner's candle	<i>Cryptantha scoparia</i>
Schweinitz' flatsedge	<i>Cyperus schweinitzii</i>
Scribner's panic grass	<i>Dichanthelium oligosanthes</i> <i>var.scribnerianum</i>
beavertip draba	<i>Draba globosa = D. apiculata</i>
Wind River draba	<i>Draba ventosa</i>
long sheath waterweed	<i>Elodea bifoliata = E.longivaginata</i>
beaked spikerush	<i>Eleocharis rostellata</i>
Idaho fleabane	<i>Erigeron asperugineus</i>
linearleaf fleabane	<i>Erigeron linearis</i>
buff fleabane	<i>Erigeron ochroleucus var.</i>
matted buckwheat	<i>Eriogonum caespitosum</i>
Railroad Canyon wild buckwheat	<i>Eriogonum soliceps</i>
Visher's buckwheat	<i>Eriogonum visheri</i>
hiker's gentian	<i>Gentianopsis simplex</i>
spiny hopsage	<i>Grayia spinosa</i>
Howell's gumweed	<i>Grindelia howellii</i>
showy goldeneye	<i>Heliomeris multiflora var.multiflora =</i> <i>Viguiera multiflora</i>
prostrate hutchensia	<i>Hutchinsia procumbens</i>
ballhead ipomopsis	<i>Ipomopsis congesta ssp.crebrifolia</i>
simple bog sedge	<i>Kobresia simpliciuscula</i>
green molly	<i>Kochia americana</i>
mat prickly phlox	<i>Leptodactylon caespitosum</i>

TABLE 4.D.1.C	
BLM SENSITIVE SPECIES – PLANTS	
Common Name	Scientific Name
Idaho bladderpod (same as keeled)	<i>Lesquerella carinata var. languida</i>
Pryor Mountain bladderpod	<i>Lesquerella lesicii</i>
beautiful bladderpod	<i>Lesquerella pulchella</i>
sand wildrye	<i>Leymus flavescens = Elymus flavescens</i>
Pale-spiked lobelia	<i>Lobelia spicata</i>
taper-tip desert-parsley	<i>Lomatium attenuatum</i>
Nuttall desert-parsley	<i>Lomatium nuttallii</i>
marsh felwort	<i>Lomatogonium rotatum</i>
Torrey's desert dandelion	<i>Malacothrix torreyi = M. sonchoides v. torreyi</i>
bractless mentzelia	<i>Mentzelia nuda</i>
dwarf mentzelia	<i>Mentzelia pumila</i>
dwarf purple monkeyflower	<i>Mimulus nanus</i>
primrose monkeyflower	<i>Mimulus primuloides</i>
square-stem monkeyflower	<i>Mimulus ringens</i>
leafy nama	<i>Nama densum</i>
Blue toadflax	<i>Nuttallanthus texanus</i>
meadow lousewort	<i>Pedicularis crenulata</i>
narrowleaf penstemon	<i>Penstemon angustifolius</i>
Lemhi beardtongue	<i>Penstemon lemhiensis</i>
Whipple's beardtongue	<i>Penstemon whippleanus</i>
hoary phacelia	<i>Phacelia incana</i>
Hot Spring phacelia	<i>Phacelia thermalis</i>
plains phlox	<i>Phlox andicola</i>
Missoula phlox	<i>Phlox missoulensis</i>
double bladderpod	<i>Physaria brassicoides</i>

TABLE 4.D.1.C	
BLM SENSITIVE SPECIES – PLANTS	
Common Name	Scientific Name
common twinpod	<i>Physaria didymocarpa v. lanata</i>
slender-branched popcorn flower	<i>Plagiobothrys leptocladus</i>
short-leavedbluegrass	<i>Poa arnowiae = P. curta</i>
Austin's knotweed	<i>Polygonum douglasii sp.Austinae</i>
Platte cinquefoil	<i>Potentilla plattensis</i>
alkali primrose	<i>Primula alcalina</i>
mealy primrose	<i>Primula incana</i>
James stitchwort	<i>Pseudostellaria jamesiana =Stellaria jamesiana</i>
dwarf wooly-heads	<i>Psilocarphus brevissimus</i>
Indian breadroot	<i>Pediomelum hypogaeum</i>
Lemmon's alkaligrass	<i>Puccinellia lemmonii</i>
white-veined wintergreen	<i>Pyrola picta</i>
Beartooth large-flowered goldenweed	<i>Pyrrcoma carthamoides var.subsquarrosa = Haplopappuscarthamoides v. subsquarrosus</i>
bur oak	<i>Quercus macrocarpa</i>
Northern buttercup	<i>Ranunculus pedatifidus</i>
persistent-sepal yellow-cress	<i>Rorippa calycina</i>
slender bulrush	<i>Schoenoplectus heterochaetus =Scirpus heterochaetus</i>
shoshonea	<i>Shoshonea pulvinata</i>
few-flowered goldenrod	<i>Solidago velutina = S. sparsifolia</i>
white-stemmed globe-mallow	<i>Sphaeralcea munroana</i>
silver chicken sage	<i>Sphaeromeria argentea</i>
smooth buckwheat	<i>Stenogonum salsuginosum =Eriogonum salsuginosum</i>
thorn skeletonweed	<i>Stephanomeria spinosa =Lygodesmia spinosa</i>

TABLE 4.D.1.C	
BLM SENSITIVE SPECIES – PLANTS	
Common Name	Scientific Name
Poison suckleya	<i>Suckleya suckleyana</i>
Rocky Mountain dandelion	<i>Taraxacum eriophorum</i>
alpinemeadowrue	<i>Thalictrum alpinum</i>
arrow thelypody	<i>Thelypodium sagittatum ssp.sagittatum</i>
meadow pennycress	<i>Thlaspi parviflorum</i>
showy townsendia	<i>Townsendia florifera</i>
Nannyberry	<i>Viburnum lentago</i>

APPENDIX 4.D.2

North Dakota Federal and State Wildlife Species of Concern

Bridger Pipeline LLC
Wildlife Species of Concern
Heart River Pipeline – Billings and Stark Counties

TABLE 4.D.2.A							
NORTH DAKOTA'S BIRD SPECIES OF CONCERN							
Scientific Name	Common Name	Global	State	USFWS	USFS	CWCS	Habitat
<i>Ammodramus bairdii</i>	Baird's Sparrow	G4	SU		S	I	Native prairies & grasslands
<i>Ammodramus leconteii</i>	Le Conte's Sparrow	G4	SU			II	Fens, wet meadows, marshes, sedges
<i>Ammodramus nelsoni</i>	Nelson's Sharp-tailed Sparrow	G5	SU			I	Fens, shallow marshes, lakes
<i>Ammodramus savannarum</i>	Grasshopper Sparrow	G5	S?B			I	Mixed-grass prairie, meadows, hayfields
<i>Anas acuta</i>	Northern Pintail	G5	S?B			II	Aquatic/wetland habitat
<i>Anthus spragueii</i>	Sprague's Pipit	G4	S3		S	I	Grazed prairie
<i>Asio flammeus</i>	Short-eared Owl	G5	S?B, S?N			II	Prairie, hayfields, stubble fields
<i>Athene cunicularia</i>	Burrowing Owl	G4	SU		S	II	Grasslands with abandoned burrows
<i>Aythya americana</i>	Redhead	G5	S?B			II	Aquatic/wetland habitat
<i>Aythya valisineria</i>	Canvasback	G5	S?B			II	Aquatic/wetland habitat
<i>Bartramia longicauda</i>	Upland Sandpiper	G5	S?B			I	Dry, open mixed-grass prairie
<i>Botaurus lentiginosus</i>	American Bittern	G4	S?B			I	Aquatic/wetland habitat
<i>Buteo regalis</i>	Ferruginous Hawk	G4	SU			I	Native prairie, trees, cliffs
<i>Buteo swainsoni</i>	Swainson's Hawk	G5	SU			I	Open plains and prairies
<i>Calamospiza melanocorys</i>	Lark Bunting	G5	S?B			I	Sagebrush, sage prairie
<i>Calcarius mccownii</i>	McCown's Longspur	G4	S2			III	Arid, grazed, mix-grass prairie,
<i>Calcarius ornatus</i>	Chestnut-collared Longspur	G5	S?B			I	Grazed/hayed mixed-grass prairie
<i>Catoptrophorus semipalmatus</i>	Willet	G5	SU			I	Aquatic/wetland habitat
<i>Centrocercus urophasianus</i>	Greater Sage Grouse	G4	SU		S	II	Sagebrush
<i>Charadrius montanus</i>	Mountain Plover	G2	SX	PT			Dry short grass prairie, sagebrush
<i>Chlidonias niger</i>	Black Tern	G4	S?B			I	Aquatic/wetland habitat

Bridger Pipeline LLC
Wildlife Species of Concern
Heart River Pipeline – Billings and Stark Counties

TABLE 4.D.2.A							
NORTH DAKOTA'S BIRD SPECIES OF CONCERN							
Scientific Name	Common Name	Global	State	USFWS	USFS	CWCS	Habitat
<i>Circus cyaneus</i>	Northern Harrier	G5	S?B, S?N			II	Upland grasses near water
<i>Cistothorus platensis</i>	Sedge Wren	G5	S?B			II	Wet meadows, tall grasses & sedges
<i>Coccyzus erythrophthalmus</i>	Black-billed Cuckoo	G5	S?B			I	Woodlands, thickets, prairie shrub, shelterbelt
<i>Coturnicops noveboracensis</i>	Yellow Rail	G4	S2			I	Aquatic/wetland habitats
<i>Dolichonyx oryzivorus</i>	Bobolink	G5	S?B			II	Tall-grass prairie, hayland, cropland
<i>Falco mexicanus</i>	Prairie Falcon	G5	S3			II	Badlands, cliffs, buttes in west ND
<i>Falco peregrinus</i>	Peregrine Falcon	G4T4	S1		S	III	Undisturbed areas with cliffs and prey
<i>Grus americana</i>	Whooping Crane	G1	SX	E, XN		III	Aquatic/wetland habitats
<i>Haliaeetus leucocephalus</i>	Bald Eagle	G5	S1			II	Forested areas near water
<i>Lanius ludovicianus</i>	Loggerhead Shrike	G4	SU		S	II	Open country, wooded coulees, shelterbelts
<i>Larus pipixcan</i>	Franklin's Gull	G4G5	S?B			I	Aquatic/wetland habitats
<i>Limosa fedoa</i>	Marbled Godwit	G5	SU			I	Aquatic/wetland habitat
<i>Melanerpes erythrocephalus</i>	Red-Headed Woodpecker	G5	S?B			II	Trees by rivers, shelterbelts, wooded areas
<i>Numenius americanus</i>	Long-billed Curlew	G5	S2		S	I	Aquatic/wetland habitats, extreme SW counties
<i>Numenius borealis</i>	Eskimo Curlew	GH	S?	E			Wetlands, grasslands, pastures
<i>Pelecanus erythrorhynchos</i>	American White Pelican	G4	S?B			I	Aquatic/wetland habitat
<i>Phalaropus tricolor</i>	Wilson's Phalarope	G5	S?B			I	Aquatic/wetland habitat
<i>Podiceps auritus</i>	Horned Grebe	G5	S?B			I	Aquatic/wetland habitat
<i>Recurvirostra americana</i>	American Avocet	G5	S?B			II	Aquatic/wetland habitat
<i>Spiza americana</i>	Dickcissel	G5	S?B			II	Alfalfa, sweet clover, brushy grasslands

Bridger Pipeline LLC
 Wildlife Species of Concern
 Heart River Pipeline – Billings and Stark Counties

TABLE 4.D.2.A							
NORTH DAKOTA'S BIRD SPECIES OF CONCERN							
Scientific Name	Common Name	Global	State	USFWS	USFS	CWCS	Habitat
<i>Spizella breweri</i>	Brewer's Sparrow	G5	S3			III	Dense sagebrush, short-grass prairie
<i>Sterna antillarum</i>	Interior Least Tern	G4	S1	E		II	Sparsely vegetated sand bars
<i>Tympanuchus cupido pinnatus</i>	Greater Prairie Chicken	G4T4	S2		S	II	Native tall-grass prairie
<i>Tympanuchus phasianellus</i>	Sharp-tailed Grouse	G4	S?			II	Mixed-grass prairie, patches of woody vegetation
<i>Zonotrichia albicollis</i>	White-throated Sparrow	G5	S3				Mature quaking aspen, dense understory
* Data provided by the USFWS, USFS, ND Game & Fish Dept., North Dakota Natural Heritage Program, and NatureServe.							

Bridger Pipeline LLC
Wildlife Species of Concern
Heart River Pipeline – Billings and Stark Counties

TABLE 4.D.2.B							
NORTH DAKOTA'S MAMMAL SPECIES OF CONCERN							
Scientific Name	Common Name	Global	State	USFWS	USFS	CWCS	Habitat
<i>Canis lupus</i>	Gray Wolf	G4	SX	E		III	Forested areas
<i>Chaetodipus hispidus</i>	Hispid Pocket Mouse	G5	S4			III	Short and mixed-grass prairie
<i>Cynomys ludovicianus</i>	Black-tailed Prairie Dog	G3G4	SU		S	I	Short grass of grazed rangeland in SW North Dakota
<i>Lemmys curtatus</i>	Sagebrush Vole	G5	S4			III	Extreme western North Dakota
<i>Lutra canadensis</i>	Northern River Otter	G5	S1			II	Rivers, streams near wooded areas
<i>Mustela nigripes</i>	Black-footed Ferret	G1	S1	E		II	Short grass prairie where prairie dog towns occur.
<i>Myotis ciliolabrum</i>	Western Small-footed Myotis	G5	SU			III	Extreme western North Dakota
<i>Myotis evotis</i>	Long-eared Myotis	G5	SU			III	Western North Dakota
<i>Myotis volans</i>	Long-legged Myotis	G5	SU			III	Western North Dakota
<i>Ovis canadensis</i>	Bighorn Sheep	G4T4	S2		S		Rugged terrain, rocky slopes, badlands
<i>Perognathus flavescens</i>	Plains Pocket Mouse	G5	SU			III	Sandy areas covered with grass in SE North Dakota
<i>Sorex arcticus</i>	Arctic Shrew	G5	S?			III	Moist, grassy openings in forested areas
<i>Sorex hoyi</i>	Pygmy Shrew	G5	SU			II	Forested areas in drift prairie & Red River Valley
<i>Spermophilus richardsonii</i>	Richardson's Ground Squirrel	G5	S?			II	Open grasslands, cultivated fields, pastures
<i>Spilogale putoris</i>	Eastern Spotted Skunk	G5	S1			III	Riparian woodlands, densely vegetated
<i>Vulpes velox</i>	Swift Fox	G3	S1			II	Short mixed-grass prairie tracts
* Data provided by the USFWS, USFS, ND Game & Fish Dept., North Dakota Natural Heritage Program, and NatureServe.							

Bridger Pipeline LLC
Wildlife Species of Concern
Heart River Pipeline – Billings and Stark Counties

TABLE 4.D.2.C							
NORTH DAKOTA'S REPTILE SPECIES OF CONCERN							
Scientific Name	Common Name	Global	State	USFWS	USFS	CWCS	Habitat
<i>Apalone mutica</i>	Smooth Softshell Turtle	G5	SU			III	Lower Missouri River System
<i>Chelydra serpentina</i>	Common Snapping Turtle	G5	S?			II	Warm water lakes/streams, muddy bottoms
<i>Eumeces septentrionalis</i>	Northern Prairie Skink	G5	S2S3			III	Sandy areas in grasslands
<i>Graptemys pseudogeographica</i>	False Map Turtle	G5	SU			III	Lower Missouri River System
<i>Heterodon nasicus</i>	Western Hognose Snake	G5	S?			I	Sand/gravel habitats near rivers
<i>Liochlorophis vernalis</i>	Smooth Green Snake	G5	S?			I	Grasslands, uplands of hills
<i>Phrynosoma hernandesi</i>	Short-Horned Lizard	G5	S?			II	Badlands
<i>Sceloporus graciosus</i>	Northern Sagebrush Lizard	G5	S4			III	Sagebrush, open flats, forested slopes near water
<i>Storeria occipitomaculata</i>	Redbelly Snake	G5	S?			II	Woodlands in drift prairie, Red River Valley
* Data provided by the USFWS, USFS, ND Game & Fish Dept., North Dakota Natural Heritage Program, and NatureServe.							

TABLE 4.D.2.D							
NORTH DAKOTA'S AMPHIBIAN SPECIES OF CONCERN							
Scientific Name	Common Name	Global	State	USFWS	USFS	CWCS	Habitat
<i>Bufo hemiophrys</i>	Canadian Toad	G4	S?			I	Aquatic/wetland habitat
<i>Rana pipiens</i>	Northern Leopard Frog	G5	S?				Aquatic/wetland habitat
<i>Spea bombifrons</i>	Plains Spadefoot Toad	G5	S?			I	Dry grasslands, loose soils, shallow pools
* Data provided by the USFWS, USFS, ND Game & Fish Dept., North Dakota Natural Heritage Program, and NatureServe.							

Bridger Pipeline LLC
Wildlife Species of Concern
Heart River Pipeline – Billings and Stark Counties

TABLE 4.D.2.E
NORTH DAKOTA’S FISH SPECIES OF CONCERN

Scientific Name	Common Name	Global	State	USFWS	USFS	CWCS	Habitat
<i>Ameiurus natalis</i>	Yellow Bullhead	G5	SX			III	Backwater, slow-moving sections of rivers, soft bottoms
<i>Campostoma anomalum</i>	Central Stoneroller	G5	S3			III	Forest River in NE North Dakota
<i>Cycleptus elongatus</i>	Blue Sucker	G3G4	S3			I	Large rivers, strong current, high turbidity
<i>Ichthyomyzon castaneus</i>	Chestnut Lamprey	G4	S?			III	Red River
<i>Ichthyomyzon unicuspis</i>	Silver Lamprey	G5	S?			III	Red River
<i>Macrhybopsis gelida</i>	Sturgeon Chub	G3	S2		S2	I	Rocky rapids, high turbidity, swift currents
<i>Macrhybopsis meeki</i>	Sicklefin Chub	G3	S2			I	Deep rivers, swift current, muddy waters
<i>Macrhybopsis storeriana</i>	Silver Chub	G5	S?			II	Deeper pools, sandy backwater, large rivers
<i>Margariscus margarita</i>	Pearl Dace	G5	S3			I	Missouri & Red River systems
<i>Nocomis biguttatus</i>	Hornyhead Chub	G5	S3			III	Forest River in NE North Dakota
<i>Notropis anogenus</i>	Pugnose Shiner	G3	S1			III	Clear water with vegetation
<i>Notropis heterolepis</i>	Blacknose Shiner	G4	S3			III	Pools with vegetation
<i>Notropis rubellus</i>	Rosyface Shiner	G5	S3			III	Pools with current
<i>Percina caprodes</i>	Logperch	G5	S3			III	Red River
<i>Percina shumardi</i>	River Darter	G5	SU			III	Red River
<i>Percopsis omiscomaycus</i>	Trout-Perch	G5	S?			II	Deep pools, rivers, streams, sandy bottoms
<i>Phoxinus eos</i>	Northern Redbelly Dace	G5	S4		S2	II	Slower rivers with some vegetation
<i>Phoxinus neogaeus</i>	Finescale Dace	G5	SU			III	Pools, slow moving waters
<i>Platygobio gracilis</i>	Flathead Chub	G5	S?			II	Turbid waters, swift current, sand/gravel bottoms
<i>Polyodon spathula</i>	Paddlefish	G4	S?			II	Large free flowing rivers with zooplankton
<i>Pylodictis olivaris</i>	Flathead Catfish	G5	S4			III	Pools, lakes, slower waters,
<i>Scaphirhynchus albus</i>	Pallid Sturgeon	G2	S1	E		II	Large, turbid rivers with sand/gravel bottom

* Data provided by the USFWS, USFS, ND Game & Fish Dept., North Dakota Natural Heritage Program, and NatureServe.

TABLE 4.D.2.F							
NORTH DAKOTA'S INSECT SPECIES OF CONCERN							
Scientific Name	Common Name	Global	State	USFWS	USFS	CWCS	Habitat
<i>Atrytone arogos iowa</i>	Arogos Skipper	G3G4T3T4	S?		S		Native prairie with purple vetch, Canada thistle, purple coneflower
<i>Euphyes dion</i>	Dion Skipper	G4	S1		S		Sedge marshes, cattails, swamp milkweed
<i>Hesperia dacotae</i>	Dakota Skipper	G2	S2	C	S		Native tall grass prairie with white camass
<i>Hesperia ottoe</i>	Ottoe Skipper	G3G4	S?		S		Native prairie hilltops with coneflower
<i>Oarisma powesheik</i>	Powersheik Skipper	G2G3	S?		S		Undisturbed, tall grass meadows
<i>Phyciodes batesii</i>	Tawny Crescent	G4	S3		S		Woodlands, native prairie with dogbane, leafy spurge
<i>Poanes massasoit</i>	Mulberry Wing	G4	S2		S		Sedge meadows with upright sedge, dogwood
<i>Poanes viator</i>	Broad-Winged Skipper	G5	S2		S		Tall marsh grass with hairy sedge, swamp milkweed
<i>Speyeria idalia</i>	Regal Fritillary	G3	S2		S		Tall grass areas, damp meadows with blazing star, milkweed, thistle
* Data provided by the USFWS, USFS, ND Game & Fish Dept., North Dakota Natural Heritage Program, and NatureServe.							

TABLE 4.D.2.G							
NORTH DAKOTA'S BIVALVE AND GASTROPOD SPECIES OF CONCERN							
Common Name	Scientific Name	Global	State	USFWS	USFS	CWCS	Habitat
<i>Amblema plicata</i>	Threeridge	G5	S?			II	Mud, sand, gravel bottoms
<i>Fusconaia flava</i>	Wabash Pigtoe	G5	S4			II	Mud, sand, gravel bottoms
<i>Lasmigona compressa</i>	Creek Heelsplitter	G5	S?			II	Sandy-bottomed headwaters
<i>Ligumia recta</i>	Black Sandshell	G5	S4			II	Swift current, gravel/sand bottoms
<i>Potamilus alatus</i>	Pink Heelsplitter	G5	S4			II	Mud, gravel bottoms
<i>Potamilus ohioensis</i>	Pink Papershell	G5	SU			III	Sandy bottom of Bois de Sioux River
<i>Quadrula quadrula</i>	Mapleleaf	G5	S3			II	Mud, sand, gravel bottoms
* Data provided by the USFWS, USFS, ND Game & Fish Dept., North Dakota Natural Heritage Program, and NatureServe.							

TABLE 4.D.2.H	
BLM SENSITIVE SPECIES – MAMMALS	
Common Name	Scientific Name
Black-tailed prairie dog	<i>Cynomys ludovicianus</i>
Fisher	<i>Martes pennanti</i>
Fringed myotis	<i>Myotis thysanodes</i>
Fringe-tailed myotis	<i>Myotis thysanodes pahasapensis</i>
Gray Wolf	<i>Canis lupus</i>
Great Basin pocket mouse	<i>Perognathus parvus</i>
Grizzly Bear	<i>Ursus arctos horribilis</i>
Long-eared myotis	<i>Myotis evotis</i>
Long-legged myotis	<i>Myotis volans</i>
Meadow jumping mouse	<i>Zapus hudsonius</i>
North American wolverine	<i>Gulo gulo luscus</i>
Northern myotis	<i>Myotis septentrionalis</i>
Pallid bat	<i>Antrozous pallidus</i>
Pygmy rabbit	<i>Brachylagus idahoensis</i>
Swift fox	<i>Vulpes velox</i>
Townsend's big-eared bat	<i>Corynorhinus townsendii</i>
White-tailed prairie dog	<i>Cynomys leucurus</i>

TABLE 4.D.2.I	
BLM SENSITIVE SPECIES – BIRDS	
Common Name	Scientific Name
Baird's sparrow	<i>Ammodramus bairdii</i>
Bald Eagle	<i>Haliaeetus leucocephalus</i>
Black tern	<i>Chilodoniass niger</i>
Black-backed woodpecker	<i>Picoides arcticus</i>
Black-crowned night heron	<i>Nycticorax nycticorax</i>
Blue-gray gnatcatcher	<i>Poliopitila caerulea</i>
Bobolink	<i>Dolichonyx orysivorus</i>
Brewer's sparrow	<i>Spizella breweri</i>
Burrowing owl	<i>Athene cunicularia</i>
Chestnut-collared longspur	<i>Calcarius ornatus</i>
Common loon	<i>Gavia immer</i>
Dickcissel	<i>Spiza americana</i>
Ferruginous hawk	<i>Buteo regalis</i>
Flammulated owl	<i>Otus flammeolus</i>
Franklin's gull	<i>Larus pipixcan</i>
Golden eagle	<i>Aquila chrysaetos</i>
Great gray owl	<i>Strix nebulosa</i>
Greater sage-grouse	<i>Centrocercus urophasianus</i>
Harlequin duck	<i>Histrionicus histrionicus</i>
LeConte's sparrow	<i>Ammodramus leconteii</i>
Loggerhead shrike	<i>Lanius ludovicianus</i>
Long-billed curlew	<i>Numenius americanus</i>
Marbled godwit	<i>Limosa fedoa</i>
McCown's longspur	<i>Calcarius mccownii</i>
Mountain plover	<i>Charadrius montanus</i>

TABLE 4.D.2.I	
BLM SENSITIVE SPECIES – BIRDS	
Common Name	Scientific Name
Nelson's sharp-tailed sparrow	<i>Ammodramus nelsoni</i>
Northern goshawk	<i>Accipiter gentiles</i>
Peregrine falcon	<i>Falco peregrinus</i>
Red-headed woodpecker	<i>Melanerpes erythrocephalus</i>
Sage sparrow	<i>Amphispiza belli</i>
Sage thrasher	<i>Oreoscoptes montanus</i>
Sedge wren	<i>Cistothorus platensis</i>
Sprague's pipit	<i>Anthus spragueii</i>
Swainson's hawk	<i>Buteo swainsoni</i>
Three-toed woodpecker	<i>Picoides tridactylus</i>
Trumpeter swan	<i>Cygnus buccinator</i>
White-faced ibis	<i>Plegadis chihi</i>
Yellow rail	<i>Coturnicops noveboracensis</i>
Yellow-billed cuckoo	<i>Coccyzus americanus</i>

TABLE 4.D.2.J	
BLM SENSITIVE SPECIES – FISH	
Common Name	Scientific Name
Arctic grayling (fluvial population)	<i>Thymallus arcticus montanus</i>
Northern redbelly X Finescale dace	<i>Phoxinus eos x Phoxinus neogaeus</i>
Paddlefish	<i>Polyodon spathula</i>
Pearl dace	<i>Margariscus margarita</i>
Sauger	<i>Stizostedion canadense</i>
Sturgeon chub	<i>Macrhybopsis gelida</i>
Westslope cutthroat trout	<i>Oncorhynchus clarki lewisi</i>
Yellowstone cutthroat trout	<i>Oncorhynchus clarki bouvieri</i>

TABLE 4.D.2.K	
BLM SENSITIVE SPECIES – REPTILES	
Common Name	Scientific Name
Greater short-horned lizard	<i>Phrynosoma hernandesi</i>
Milk snake	<i>Lampropeltis triangulum</i>
Snapping turtle	<i>Chelydra serpentina</i>
Spiny softshell	<i>Apalone spinifera</i>
Western hog-nosed snake	<i>Heterodon nasicus</i>

TABLE 4.D.2.L	
BLM SENSITIVE SPECIES – AMPHIBIANS	
Common Name	Scientific Name
Coeur d'Alene salamander	<i>Plethodon idahoensis</i>
Great Plains toad	<i>Bufo cognatus</i>
Northern leopard frog	<i>Rana pipiens</i>
Plains spadefoot	<i>Spea bombifrons</i>
Western toad	<i>Bufo boreas</i>

TABLE 4.D.2.M	
BLM SENSITIVE SPECIES – INSECTS	
Common Name	Scientific Name
Dakota skipper	<i>Hesperia dacotae</i>

APPENDIX 4.E
Agency Notifications and Responses

September 24, 2014

Billings County Planning and Zoning
495 4th Street
PO Box 247
Medora, ND 58645

RE: Heart River Crude Oil Pipeline – Billings & Stark Counties

Bridger Pipeline LLC (Bridger) is proposing to construct a 15-mile-long, 12-inch crude oil pipeline in Billings and Stark Counties beginning spring 2015. The Project will interconnect with Bridger facilities at Skunk Hills Station and Fryburg Station. This system is currently connected to Bridger Pipeline's 12-inch Four Bears crude pipeline. The new section of pipeline parallels an existing Bridger 8-inch line from Skunk Hill Station to Fryburg Station and will be operationally integrated into the existing operations of Bridger.

The pipeline will be buried underground. No new pumping facilities will be needed at this time within North Dakota. No new surface facilities will be installed in the State of North Dakota, other than pipeline markers, rectifiers, and block valves. Some small fenced-in enclosures to house associated power and control systems may be installed to allow some valves to be operated remotely. The North Dakota Public Service Commission Utility permit is required to provide the needed capacity to transport the increased production of crude oil from the Bakken and Three Forks formations.

Keitu Engineers and Consultants, Inc. (Keitu) provides the following description of Bridger's pipeline route.

- The pipeline originates two miles north-northeast of Fryburg, North Dakota at Bridger's Fryburg Station and runs approximately 15 miles to the northeast, terminating at Bridger's Skunk Hills Station.
- The pipeline runs through the following legal descriptions:
 - T140N R100W Sections 26, 27, 28, 33, 34, 35, and 36
 - T140N R99W Sections 3, 4, 9, 16, 17, 18, 19, 30, and 31
 - T141W R98W Sections 15, 16, 21, 28, 29, 31, and 32

Enclosed is a map of the entire length of the pipeline route intended for the Billings County Planning and Zoning Department to review. The North Dakota Public Service Commission requires applicants to contact relevant agencies to gain information on planned developments within the vicinity of the Project. We respectfully request that any specific concerns known in the area are brought to our attention to ensure we focus on those items.

As always, Keitu appreciates the opportunity to assist our client and the regulatory agencies with compliance. I will serve as the primary Keitu contact and can be reached at (701) 667-1808 ext 113 or via email at hpatch@keitu.com.

Heather Patch
Staff Engineer

Enclosure: Pipeline Route

Heather Patch

From: Juliana Pemberton <jpemberton@nd.gov>
Sent: Friday, September 26, 2014 9:50 AM
To: hpatch@keitu.com
Subject: Heart River Crude Oil Pipeline in Billings County
Attachments: Application for Pipeline Permit - Billings County - 8-14.pdf

Ms. Patch,

Good morning. Billings County received your letter concerning Bridger Pipeline's proposal for an oil pipeline in Billings County. The Billings County zoning department requires that a pipeline permit application be submitted to our office. This application needs to be completed and approved by the District Road Foreman and the Billings County Commission for each individual project *before* any construction may begin. I have attached a copy of our pipeline application for your convenience. Please note that permits are updated periodically and can also be found on our website at:

<http://www.billingscountynd.gov/zoningapplications.asp>

Please do not hesitate to contact our office with any questions. Thank you.

Juliana Pemberton
Deputy Tax & Zoning Director
Billings County
PO Box 247
Medora, ND 58645
701-623-4810
jpemberton@nd.gov

September 24, 2014

District 5 – Dickinson
North Dakota Department of Transportation
1700 Third Avenue West, Suite 101
Dickinson, ND 58601-3009

RE: Heart River Crude Oil Pipeline – Billings & Stark Counties

Bridger Pipeline LLC (Bridger) is proposing to construct a 15-mile-long, 12-inch crude oil pipeline in Billings and Stark Counties beginning spring 2015. The Project will interconnect with Bridger facilities at Skunk Hills Station and Fryburg Station. This system is currently connected to Bridger Pipeline's 12-inch Four Bears crude pipeline. The new section of pipeline parallels an existing Bridger 8-inch line from Skunk Hill Station to Fryburg Station and will be operationally integrated into the existing operations of Bridger.

The pipeline will be buried underground. No new pumping facilities will be needed at this time within North Dakota. No new surface facilities will be installed in the State of North Dakota, other than pipeline markers, rectifiers, and block valves. Some small fenced-in enclosures to house associated power and control systems may be installed to allow some valves to be operated remotely. The North Dakota Public Service Commission Utility permit is required to provide the needed capacity to transport the increased production of crude oil from the Bakken and Three Forks formations.

Keitu Engineers and Consultants, Inc. (Keitu) provides the following description of Bridger's pipeline route.

- The pipeline originates two miles north-northeast of Fryburg, North Dakota at Bridger's Fryburg Station and runs approximately 15 miles to the northeast, terminating at Bridger's Skunk Hills Station.
- The pipeline runs through the following legal descriptions:
 - T140N R100W Sections 26, 27, 28, 33, 34, 35, and 36
 - T140N R99W Sections 3, 4, 9, 16, 17, 18, 19, 30, and 31
 - T141W R98W Sections 15, 16, 21, 28, 29, 31, and 32

Keitu is contracted by Bridger Pipeline LLC to conduct the biological assessment and prepare the siting application for the 15-mile project (with 1 mile wide study corridor) to be completed in October 2014.

Enclosed is a map of the entire length of the pipeline route intended for the North Dakota Department of Transportation to review. The North Dakota Public Service Commission requires applicants to contact agencies for comment. We respectfully request that any specific areas of concern known in the area are brought to our attention to ensure we focus on those items. Please note, one major highway crossing (US 85 approximately 3.5 miles north of I-94) exits along this proposed route.

As always, Keitu appreciates the opportunity to assist our client and the regulatory agencies with compliance. I will serve as the primary Keitu contact and can be reached at (701) 667-1808 ext 113 or via email at hpatch@keitu.com.

Heather Patch
Staff Engineer

Enclosure: Pipeline Route

September 24, 2014

Mike Brand, Director
Surface Management Division
ND Department of Trust Lands
1707 N 9th Street, PO Box 5523
Bismarck, ND 58506-5523

RE: Heart River Crude Oil Pipeline – Billings & Stark Counties

Bridger Pipeline LLC (Bridger) is proposing to construct a 15-mile-long, 12-inch crude oil pipeline in Billings and Stark Counties beginning spring 2015. The Project will interconnect with Bridger facilities at Skunk Hills Station and Fryburg Station. This system is currently connected to Bridger Pipeline's 12-inch Four Bears crude pipeline. The new section of pipeline parallels an existing Bridger 8-inch line from Skunk Hill Station to Fryburg Station and will be operationally integrated into the existing operations of Bridger.

The pipeline will be buried underground. No new pumping facilities will be needed at this time within North Dakota. No new surface facilities will be installed in the State of North Dakota, other than pipeline markers, rectifiers, and block valves. Some small fenced-in enclosures to house associated power and control systems may be installed to allow some valves to be operated remotely. The North Dakota Public Service Commission Utility permit is required to provide the needed capacity to transport the increased production of crude oil from the Bakken and Three Forks formations.

Keitu Engineers and Consultants, Inc. (Keitu) provides the following description of Bridger's pipeline route.

- The pipeline originates two miles north-northeast of Fryburg, North Dakota at Bridger's Fryburg Station and runs approximately 15 miles to the northeast, terminating at Bridger's Skunk Hills Station.
- The pipeline runs through the following legal descriptions:
 - T140N R100W Sections 26, 27, 28, 33, 34, 35, and 36
 - T140N R99W Sections 3, 4, 9, 16, 17, 18, 19, 30, and 31
 - T141W R98W Sections 15, 16, 21, 28, 29, 31, and 32

Keitu is contracted by Bridger Pipeline LLC to conduct the biological assessment and prepare the siting application for the 15-mile project (with 1 mile wide study corridor) to be completed in October 2014.

Enclosed is a map of the entire length of the pipeline route intended for the ND Department of Trust Lands to review. The North Dakota Public Service Commission requires applicants to contact agencies for comment. We respectfully request that any specific areas of concern known in the area are brought to our attention to ensure we focus on those items.

As always, Keitu appreciates the opportunity to assist our client and the regulatory agencies with compliance. I will serve as the primary Keitu contact and can be reached at (701) 667-1808 ext 113 or via email at hpatch@keitu.com.

Heather Patch
Staff Engineer

Enclosure: Pipeline Route

September 24, 2014

Dave Glatt
North Dakota Department of Health
Environmental Health Section
918 East Divide Avenue
Bismarck, ND 58501-1947

RE: Heart River Crude Oil Pipeline – Billings & Stark Counties

Bridger Pipeline LLC (Bridger) is proposing to construct a 15-mile-long, 12-inch crude oil pipeline in Billings and Stark Counties beginning spring 2015. The Project will interconnect with Bridger facilities at Skunk Hills Station and Fryburg Station. This system is currently connected to Bridger Pipeline's 12-inch Four Bears crude pipeline. The new section of pipeline parallels an existing Bridger 8-inch line from Skunk Hill Station to Fryburg Station and will be operationally integrated into the existing operations of Bridger.

The pipeline will be buried underground. No new pumping facilities will be needed at this time within North Dakota. No new surface facilities will be installed in the State of North Dakota, other than pipeline markers, rectifiers, and block valves. Some small fenced-in enclosures to house associated power and control systems may be installed to allow some valves to be operated remotely. The North Dakota Public Service Commission Utility permit is required to provide the needed capacity to transport the increased production of crude oil from the Bakken and Three Forks formations.

Keitu Engineers and Consultants, Inc. (Keitu) provides the following description of Bridger's pipeline route.

- The pipeline originates two miles north-northeast of Fryburg, North Dakota at Bridger's Fryburg Station and runs approximately 15 miles to the northeast, terminating at Bridger's Skunk Hills Station.
- The pipeline runs through the following legal descriptions:
 - T140N R100W Sections 26, 27, 28, 33, 34, 35, and 36
 - T140N R99W Sections 3, 4, 9, 16, 17, 18, 19, 30, and 31
 - T141W R98W Sections 15, 16, 21, 28, 29, 31, and 32

Keitu is contracted by Bridger Pipeline LLC to conduct the biological assessment and prepare the siting application for the 15-mile project (with 1 mile wide study corridor) to be completed in October 2014.

Enclosed is a map of the entire length of the pipeline route intended for the North Dakota Department of Health to review. The North Dakota Public Service Commission requires applicants to contact agencies for comment. We respectfully request that any specific areas of concern known in the area are brought to our attention to ensure we focus on those items.

As always, Keitu appreciates the opportunity to assist our client and the regulatory agencies with compliance. I will serve as the primary Keitu contact and can be reached at (701) 667-1808 ext 113 or via email at hpatch@keitu.com.

Heather Patch
Staff Engineer

Enclosure: Pipeline Route



October 3, 2014

Ms. Heather Patch, Staff Engineer
Keitu Engineers & Consultants, Inc.
P.O. Box 98
Mandan, ND 58554-0098

Re: Heart River Crude Oil Pipeline
Billings and Stark Counties

Dear Ms. Patch:

This department has reviewed the information concerning the above-referenced project submitted under date of September 24, 2014, with respect to possible environmental impacts.

This department believes that environmental impacts from the proposed construction will be minor and can be controlled by proper construction methods. With respect to construction, we have the following comments:

1. All necessary measures must be taken to minimize fugitive dust emissions created during construction activities. Any complaints that may arise are to be dealt with in an efficient and effective manner.
2. Care is to be taken during construction activity near any water of the state to minimize adverse effects on a water body. This includes minimal disturbance of stream beds and banks to prevent excess siltation, and the replacement and revegetation of any disturbed area as soon as possible after work has been completed. Caution must also be taken to prevent spills of oil and grease that may reach the receiving water from equipment maintenance, and/or the handling of fuels on the site. Guidelines for minimizing degradation to waterways during construction are attached.
3. Oil and gas related construction activities disturbing five or more acres are required to have a permit to discharge storm water runoff until the site is stabilized by the reestablishment of vegetation or other permanent cover. Further information on the storm water permit may be obtained from the Department's website or by calling the Division of Water Quality (701-328-5210). Also, cities may impose additional requirements and/or specific best management practices for construction affecting their storm drainage system. Check with the local officials to be sure any local storm water management considerations are addressed.
4. Noise from construction activities may have adverse effects on persons who live near the construction area. Noise levels can be minimized by ensuring that construction equipment is

Environmental Health
Section Chief's Office
701.328.5150

Division of
Air Quality
701.328.5188

Division of
Municipal Facilities
701.328.5211

Division of
Waste Management
701.328.5166

Division of
Water Quality
701.328.5210

equipped with a recommended muffler in good working order. Noise effects can also be minimized by ensuring that construction activities are not conducted during early morning or late evening hours.

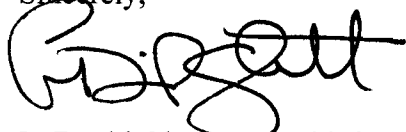
5. Projects that involve construction of pipelines should select locations that minimize the potential for environmental damage during construction, and in the event of a spill, restrict fluids from reaching surface waters. Pipelines that intersect, cross, or lie within the floodplain of I, IA, II and III class streams and rivers or classified lakes and reservoirs should develop a spill response plan that emphasizes rapid deployment of prepositioned assets necessary to contain spills and subsequent cleanup. Proper surveillance and monitoring of pipelines is necessary for the early detection of leaks.

The department owns no land in or adjacent to the proposed improvements, nor does it have any projects scheduled in the area. In addition, we believe the proposed activities are consistent with the State Implementation Plan for the Control of Air Pollution for the State of North Dakota.

These comments are based on the information provided about the project in the above-referenced submittal. The U.S. Army Corps of Engineers may require a water quality certification from this department for the project if the project is subject to their Section 404 permitting process. Any additional information which may be required by the U.S. Army Corps of Engineers under the process will be considered by this department in our determination regarding the issuance of such a certification.

If you have any questions regarding our comments, please feel free to contact this office.

Sincerely,



L. David Glatt, P.E., Chief
Environmental Health Section

LDG:cc
Attach.



Construction and Environmental Disturbance Requirements

These represent the minimum requirements of the North Dakota Department of Health. They ensure that minimal environmental degradation occurs as a result of construction or related work which has the potential to affect the waters of the State of North Dakota. All projects will be designed and implemented to restrict the losses or disturbances of soil, vegetative cover, and pollutants (chemical or biological) from a site.

Soils

Prevent the erosion of exposed soil surfaces and trapping sediments being transported. Examples include, but are not restricted to, sediment dams or berms, diversion dikes, hay bales as erosion checks, riprap, mesh or burlap blankets to hold soil during construction, and immediately establishing vegetative cover on disturbed areas after construction is completed. Fragile and sensitive areas such as wetlands, riparian zones, delicate flora, or land resources will be protected against compaction, vegetation loss, and unnecessary damage.

Surface Waters

All construction which directly or indirectly impacts aquatic systems will be managed to minimize impacts. All attempts will be made to prevent the contamination of water at construction sites from fuel spillage, lubricants, and chemicals, by following safe storage and handling procedures. Stream bank and stream bed disturbances will be controlled to minimize and/or prevent silt movement, nutrient upsurges, plant dislocation, and any physical, chemical, or biological disruption. The use of pesticides or herbicides in or near these systems is forbidden without approval from this Department.

Fill Material

Any fill material placed below the high water mark must be free of top soils, decomposable materials, and persistent synthetic organic compounds (in toxic concentrations). This includes, but is not limited to, asphalt, tires, treated lumber, and construction debris. The Department may require testing of fill materials. All temporary fills must be removed. Debris and solid wastes will be removed from the site and the impacted areas restored as nearly as possible to the original condition.

September 24, 2014

Steve Dyke
Conservation Supervisor
North Dakota Game and Fish Department
100 N. Bismarck Expressway
Bismarck, ND 58501-5095

RE: Heart River Crude Oil Pipeline – Billings & Stark Counties

Bridger Pipeline LLC (Bridger) is proposing to construct a 15-mile-long, 12-inch crude oil pipeline in Billings and Stark Counties beginning spring 2015. The Project will interconnect with Bridger facilities at Skunk Hills Station and Fryburg Station. This system is currently connected to Bridger Pipeline's 12-inch Four Bears crude pipeline. The new section of pipeline parallels an existing Bridger 8-inch line from Skunk Hill Station to Fryburg Station and will be operationally integrated into the existing operations of Bridger.

The pipeline will be buried underground. No new pumping facilities will be needed at this time within North Dakota. No new surface facilities will be installed in the State of North Dakota, other than pipeline markers, rectifiers, and block valves. Some small fenced-in enclosures to house associated power and control systems may be installed to allow some valves to be operated remotely. The North Dakota Public Service Commission Utility permit is required to provide the needed capacity to transport the increased production of crude oil from the Bakken and Three Forks formations.

Keitu Engineers and Consultants, Inc. (Keitu) provides the following description of Bridger's pipeline route.

- The pipeline originates two miles north-northeast of Fryburg, North Dakota at Bridger's Fryburg Station and runs approximately 15 miles to the northeast, terminating at Bridger's Skunk Hills Station.
- The pipeline runs through the following legal descriptions:
 - T140N R100W Sections 26, 27, 28, 33, 34, 35, and 36
 - T140N R99W Sections 3, 4, 9, 16, 17, 18, 19, 30, and 31
 - T141W R98W Sections 15, 16, 21, 28, 29, 31, and 32

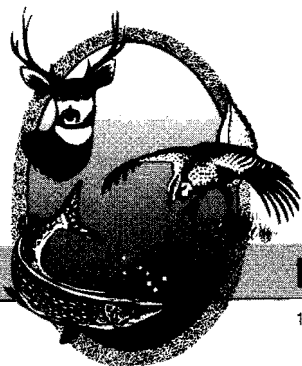
Keitu is contracted by Bridger Pipeline LLC to conduct the biological assessment and prepare the siting application for the 15-mile project (with 1 mile wide study corridor) to be completed in October 2014.

Enclosed is a map of the entire length of the pipeline route intended for the North Dakota Game and Fish Department to review. The North Dakota Public Service Commission, requires applicants to contact agencies for comment. We respectfully request that any specific species of concern known in the area is brought to our attention to ensure we focus on those items.

As always, Keitu appreciates the opportunity to assist our client and the regulatory agencies with compliance. I will serve as the primary Keitu contact and can be reached at (701) 667-1808 ext 113 or via email at hpatch@keitu.com.

Heather Patch
Staff Engineer

Enclosure: Pipeline Route



"VARIETY IN HUNTING AND FISHING"

NORTH DAKOTA GAME AND FISH DEPARTMENT

100 NORTH BISMARCK EXPRESSWAY BISMARCK, NORTH DAKOTA 58501-5095 PHONE 701-328-6300 FAX 701-328-6352

October 20, 2014

Heather Patch
Staff Engineer
Keitu Engineers & Consultants, Inc.
PO Box 98
Mandan, ND 58554-0098

Dear Ms. Patch:

RE: Heart River Crude Oil Pipeline Project
Billings & Stark Counties

Bridger Pipeline LLC is proposing to construct a 15-mile-long, 12-inch crude oil pipeline that will interconnect with Bridger facilities at Skunk Hills Station and Fryburg Station. The North Dakota Game and Fish Department has reviewed this project for wildlife concerns.

The National Wetland Inventory indicates various wetlands within the proposed project corridor. Steps should be taken to protect any wetlands that cannot be avoided, no alterations should be made to existing drainage patterns, and above-ground appurtenances should not be placed in wetland areas.

We do not believe this project will have significant adverse effects on wildlife or wildlife habitat, including species of conservation priority, provided any unavoidable destruction or degradation of wetland acres is mitigated in kind, and disturbed areas are reclaimed to pre-project conditions.

Sincerely,

Greg Link
Chief

Conservation & Communication Division

js

September 24, 2014

Justin Kringstad
North Dakota Industrial Commission
Pipeline Authority
600 E. Boulevard Ave. Dept. 405
Bismarck, ND 58505-0840

RE: Heart River Crude Oil Pipeline – Billings & Stark Counties

Bridger Pipeline LLC (Bridger) is proposing to construct a 15-mile-long, 12-inch crude oil pipeline in Billings and Stark Counties beginning spring 2015. The Project will interconnect with Bridger facilities at Skunk Hills Station and Fryburg Station. This system is currently connected to Bridger Pipeline's 12-inch Four Bears crude pipeline. The new section of pipeline parallels an existing Bridger 8-inch line from Skunk Hill Station to Fryburg Station and will be operationally integrated into the existing operations of Bridger.

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Keitu Engineers and Consultants, Inc. (Keitu) provides the following description of Bridger's pipeline route.

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 - T140N R99W Sections 3, 4, 9, 16, 17, 18, 19, 30, and 31
 - T141W R98W Sections 15, 16, 21, 28, 29, 31, and 32

Keitu is contracted by Bridger Pipeline LLC to conduct the biological assessment and prepare the siting application for the 15-mile project (with 1 mile wide study corridor) to be completed in October 2014.

Enclosed is a map of the entire length of the pipeline route intended for the ND Pipeline Authority to review. The North Dakota Public Service Commission requires applicants to contact agencies for comment. We respectfully request that any specific areas of concern known in the area are brought to our attention to ensure we focus on those items.

As always, Keitu appreciates the opportunity to assist our client and the regulatory agencies with compliance. I will serve as the primary Keitu contact and can be reached at (701) 667-1808 ext 113 or via email at hpatch@keitu.com.

Heather Patch
Staff Engineer

Enclosure: Pipeline Route

September 24, 2014

Mark Zimmerman
North Dakota Parks and Recreation
1600 E. Century Avenue, Suite 3
Bismarck, ND 58503-0649

RE: Heart River Crude Oil Pipeline – Billings & Stark Counties

Bridger Pipeline LLC (Bridger) is proposing to construct a 15-mile-long, 12-inch crude oil pipeline in Billings and Stark Counties beginning spring 2015. The Project will interconnect with Bridger facilities at Skunk Hills Station and Fryburg Station. This system is currently connected to Bridger Pipeline's 12-inch Four Bears crude pipeline. The new section of pipeline parallels an existing Bridger 8-inch line from Skunk Hill Station to Fryburg Station and will be operationally integrated into the existing operations of Bridger.

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Keitu is contracted by Bridger Pipeline LLC to conduct the biological assessment and prepare the siting application for the 15-mile project (with 1 mile wide study corridor) to be completed in October 2014.

Enclosed is a map of the entire length of the pipeline route intended for the North Dakota Parks and Recreation to review. The North Dakota Public Service Commission, requires applicants to contact agencies for comment. We respectfully request that any specific species of concern known in the area is brought to our attention to ensure we focus on those items.

As always, Keitu appreciates the opportunity to assist our client and the regulatory agencies with compliance. I will serve as the primary Keitu contact and can be reached at (701) 667-1808 ext 113 or via email at hpatch@keitu.com.

Heather Patch
Staff Engineer

Enclosure: Pipeline Route



Jack Dalrymple, Governor
Mark A. Zimmerman, Director

1600 East Century Avenue, Suite 3
Bismarck, ND 58503-0649
Phone 701-328-5357
Fax 701-328-5363
E-mail parkrec@nd.gov
www.parkrec.nd.gov

October 3, 2014

Heather Patch
Keitu Engineers and Consulting, Inc.
PO Box 98
Mandan, ND 58554-0098

Re: Heart River Crude Oil Pipeline – Billings and Stark Counties

Dear Ms. Patch:

The North Dakota Parks and Recreation Department (the Department) has reviewed the above referenced proposed construction of a crude oil pipeline in Billings and Stark Counties.

Our agency scope of authority and expertise covers recreation and biological resources (in particular rare plants and ecological communities). The project as defined does not affect state park lands that we manage or Land and Water Conservation Fund recreation projects that we coordinate.

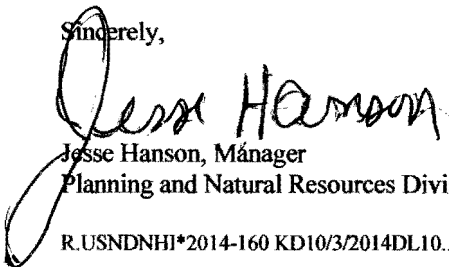
The North Dakota Natural Heritage biological conservation database has been reviewed to determine if any plant or animal species of concern or other significant ecological communities are known to occur within an approximate one-mile radius of the project area. Based on this review, we one animal species of concern and several significant ecological communities documented within sections and in adjacent sections to project area. We defer any additional comments regarding animal species to the ND Game and Fish Department and/or the USFWS. Please see the attached spreadsheet and map for more information on these occurrences.

Because this information is not based on a comprehensive inventory, there may be species of concern or otherwise significant ecological communities in the area that are not represented in the database. The lack of data for any project area cannot be construed to mean that no significant features are present. The absence of data may indicate that the project area has not been surveyed, rather than confirm that the area lacks natural heritage resources.

Regarding any reclamation efforts, we recommend that any impacted areas be revegetated with species native to the project area.

We appreciate your commitment to rare plant, animal and ecological community conservation, management and inter-agency cooperation to date. For additional information please contact Kathy Duttonhefner (701-328-5370 or kgduttonhefner@nd.gov) of our staff. Thank you for the opportunity to comment on this proposed project.

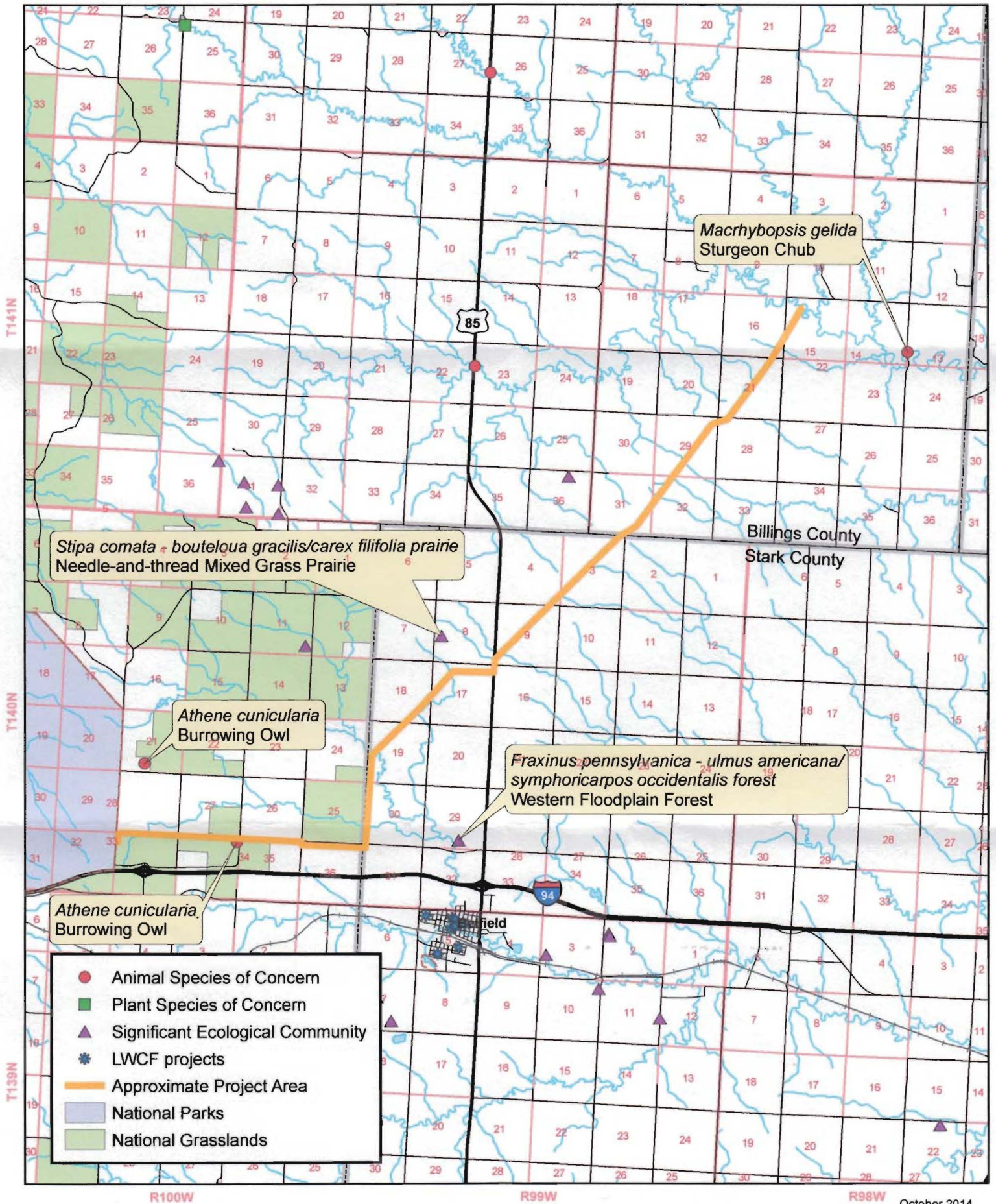
Sincerely,


Jesse Hanson, Manager
Planning and Natural Resources Division

R.USNDNHI*2014-160 KD10/3/2014DL10..10.2014

.....
Play in our backyard!

North Dakota Parks and Recreation Department North Dakota Natural Heritage Inventory



North Dakota Natural Heritage Inventory
Rare Animal and Plant Species and Significant Ecological Communities

State Scientific Name	State Common Name	State Rank	Global Rank	Federal Status	Township Range Section	County	Last Observation	Estimated Representation Accuracy	Precision
<i>Athene cunicularia</i>	Burrowing Owl	SU	G4		140N100W - 34; 140N100W - 27; 140N100W - 35	Billings	1995-07		S
<i>Athene cunicularia</i>	Burrowing Owl	SU	G4		140N100W - 21	Billings	1995-07		S
<i>Fraxinus pennsylvanica</i> - <i>ulmus americana</i> / <i>symphoricarpos occidentalis</i> forest	Western Floodplain Forest	S3	GNR		140N099W - 29; 140N099W - 30; 139N099W - 05; 139N099W - 04; 140N099W - 21; 140N099W - 19; 140N099W - 20; 140N099W - 31; 140N099W - 32; 140N099W - 33; 140N099W - 28	Stark	1976-09-11		M
<i>Macrhybopsis gelida</i>	Sturgeon Chub	S2	G3		141N098W - 13; 141N098W - 14	Billings	1973-07-16		S
<i>Stipa comata</i> - <i>bouteloua gracilis</i> / <i>carex filifolia</i> prairie	Needle-and-thread Mixed Grass Prairie	S2	GNR		140N099W - 08; 140N100W - 01; 140N099W - 05; 140N099W - 04; 140N099W - 09; 140N100W - 13; 140N099W - 07; 140N099W - 17; 140N099W - 18; 140N099W - 06; 140N099W - 16; 140N100W - 12	Billings, Stark	1977		M

North Dakota Natural Heritage Inventory Biological and Conservation Data Disclaimer

The quantity and quality of data collected by the North Dakota Natural Heritage Inventory are dependent on the research and observations of many individuals and organizations. In most cases, this information is not the result of comprehensive or site-specific field surveys; many natural areas in North Dakota have never been thoroughly surveyed, and new species are still being discovered. For these reasons, the Natural Heritage Inventory cannot provide a definite statement on the presence, absence, or condition of biological elements in any part of North Dakota. Natural Heritage data summarize the existing information known at the time of the request. Our data are continually upgraded and information is continually being added to the database. This data should never be regarded as final statements on the elements or areas that are being considered, nor should they be substituted for on-site surveys.

Estimated Representation Accuracy

Value that indicates the approximate percentage of the Element Occurrence Representation (EO Rep) that was observed to be occupied by the species or community (versus buffer area added for locational uncertainty). Use of estimated representation accuracy provides a common index for the consistent comparison of EO reps, thus helping to ensure that aggregated data are correctly analyzed and interpreted.

Very high (>95%)

High (>80%, <= 95%)

Medium (>20%, <= 80%)

Low (>0%, <= 20%)

Unknown

(null) - Not assessed

Precision

A single-letter code for the precision used to map the Element Occurrence (EO) on a U.S. Geological Survey (USGS) 7.5' (or 15') topographic quadrangle map, based on the previous Heritage methodology in which EOs were located on paper maps using dots.

S - Seconds: accuracy of locality mappable within a three-second radius; 100 meters from the centerpoint

M - Minute: accuracy of locality mappable within a one-minute radius; 2 km from the centerpoint

G - General: accuracy of locality mappable to map or place name precision only; 8 km from centerpoint

U - Unmappable

Heather Patch

From: Heather Patch <hpatch@keitu.com>
Sent: Tuesday, October 14, 2014 10:32 AM
To: 'droller@swwater.com'
Subject: Heart River Pipeline
Attachments: HR_Overview.pdf

Bridger Pipeline LLC (Bridger) is proposing to construct a 15-mile-long, 12-inch crude oil pipeline in Billings and Stark Counties beginning spring 2015. The Project will interconnect with Bridger facilities at Skunk Hills Station and Fryburg Station. This system is currently connected to Bridger Pipeline's 12-inch Four Bears crude pipeline. The new section of pipeline parallels an existing Bridger 8-inch line from Skunk Hill Station to Fryburg Station and will be operationally integrated into the existing operations of Bridger.

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Keitu Engineers and Consultants, Inc. (Keitu) provides the following description of Bridger's pipeline route.

- The pipeline originates two miles north-northeast of Fryburg, North Dakota at Bridger's Fryburg Station and runs approximately 15 miles to the northeast, terminating at Bridger's Skunk Hills Station.
- The pipeline runs through the following legal descriptions:
 - T140N R100W Sections 26, 27, 28, 33, 34, 35, and 36
 - T140N R99W Sections 3, 4, 9, 16, 17, 18, 19, 30, and 31
 - T141W R98W Sections 15, 16, 21, 28, 29, 31, and 32

Attached is a map of the entire length of the pipeline route intended for the Southwest Water Authority to review. I am requesting updated locations for current Southwest Pipeline Project infrastructure in the vicinity of the project and any information on the crossing application process.

I will serve as the primary Keitu contact and can be reached at (701) 667-1808 ext 113 or via email at hpatch@keitu.com.

Thank you,

Heather Patch

Staff Engineer - Chemical
Keitu Engineers & Consultants, Inc.
(701) 667-1800
www.keitu.com

September 24, 2014

Steve Josephson
County Planner, Stark County
99 2nd Street East
Dickinson, ND 58601

RE: Heart River Crude Oil Pipeline – Billings & Stark Counties

Bridger Pipeline LLC (Bridger) is proposing to construct a 15-mile-long, 12-inch crude oil pipeline in Billings and Stark Counties beginning spring 2015. The Project will interconnect with Bridger facilities at Skunk Hills Station and Fryburg Station. This system is currently connected to Bridger Pipeline's 12-inch Four Bears crude pipeline. The new section of pipeline parallels an existing Bridger 8-inch line from Skunk Hill Station to Fryburg Station and will be operationally integrated into the existing operations of Bridger.

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Enclosed is a map of the entire length of the pipeline route intended for the Stark County Planning Department to review. The North Dakota Public Service Commission requires applicants to contact relevant agencies to gain information on planned developments within the vicinity of the Project. We respectfully request that any specific concerns known in the area are brought to our attention to ensure we focus on those items.

As always, Keitu appreciates the opportunity to assist our client and the regulatory agencies with compliance. I will serve as the primary Keitu contact and can be reached at (701) 667-1808 ext 113 or via email at hpatch@keitu.com.

Heather Patch
Staff Engineer

Enclosure: Pipeline Route

Heather Patch

From: Bill Fahlsing <BFahlsing@starkcountynd.gov>
Sent: Wednesday, November 19, 2014 3:11 PM
To: Heather Patch
Subject: RE: Bridger Heart River Pipeline

Hello Heather,

I wanted to follow up with you after much research on my end. From the floodplain perspective it doesn't appear that there is an issue unless there would be construction of above ground structures in the floodplain. From my review it doesn't appear this is happening.

Hope this helps and please let me know if you need anything further.

Thank you!

Bill Fahlsing

Stark County
Director of Emergency Services
66 Museum Drive West
Dickinson, ND 58601
(701) 456-7605 (Office)
(701) 456-7602 (Fax)
bfahlsing@starkcountynd.gov
Facebook: www.facebook.com/starkem911
Twitter: <http://twitter.com/starkdes>

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From: Heather Patch [mailto:hpatch@keitu.com]
Sent: Monday, October 13, 2014 3:59 PM
To: Bill Fahlsing
Subject: Bridger Heart River Pipeline

Bridger Pipeline LLC (Bridger) is proposing to construct a 15-mile-long, 12-inch crude oil pipeline in Billings and Stark Counties beginning spring 2015. The Project will interconnect with Bridger facilities at Skunk Hills Station and Fryburg Station. This system is currently connected to Bridger Pipeline's 12-inch Four Bears crude pipeline. The new section of pipeline parallels an existing Bridger 8-inch line from Skunk Hill Station to Fryburg Station and will be operationally integrated into the existing operations of Bridger.

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 - T141W R98W Sections 15, 16, 21, 28, 29, 31, and 32

Attached is a map of the entire length of the pipeline route intended for the Stark County Flood Plain Administrator to review. I have also included a copy of the letter communication from the North Dakota State Water Commission regarding the project.

I will serve as the primary Keitu contact and can be reached at (701) 667-1808 ext 113 or via email at hpatch@keitu.com.

Heather Patch

Staff Engineer - Chemical
Keitu Engineers & Consultants, Inc.
(701) 667-1800
www.keitu.com

From: Bill Fahlsing [<mailto:BFahlsing@starkcountynd.gov>]
Sent: Monday, October 13, 2014 4:51 PM
To: hpatch@keitu.com
Subject: Contact Info

Bill Fahlsing

Stark County
Director of Emergency Services
66 Museum Drive West
Dickinson, ND 58601
(701) 456-7605 (Office)
(701) 456-7602 (Fax)
bfahlsing@starkcountynd.gov
Facebook: www.facebook.com/starkem911
Twitter: <http://twitter.com/starkdes>

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September 24, 2014

Todd Sando
State Engineer
North Dakota State Water Commission
900 East Boulevard Avenue, Dept 770
Bismarck, ND 58505-0850

RE: Heart River Crude Oil Pipeline – Billings & Stark Counties

Bridger Pipeline LLC (Bridger) is proposing to construct a 15-mile-long, 12-inch crude oil pipeline in Billings and Stark Counties beginning spring 2015. The Project will interconnect with Bridger facilities at Skunk Hills Station and Fryburg Station. This system is currently connected to Bridger Pipeline's 12-inch Four Bears crude pipeline. The new section of pipeline parallels an existing Bridger 8-inch line from Skunk Hill Station to Fryburg Station and will be operationally integrated into the existing operations of Bridger.

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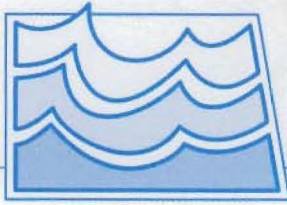
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Enclosed is a map of the entire length of the pipeline route intended for the North Dakota State Water Commission to review. The North Dakota Public Service Commission requires applicants to contact agencies for comment. We respectfully request that any specific areas of concern known in the area are brought to our attention to ensure we focus on those items.

As always, Keitu appreciates the opportunity to assist our client and the regulatory agencies with compliance. I will serve as the primary Keitu contact and can be reached at (701) 667-1808 ext 113 or via email at hpatch@keitu.com.

Heather Patch
Staff Engineer

Enclosure: Pipeline Route



North Dakota State Water Commission

900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850
701-328-2750 • TDD 701-328-2750 • FAX 701-328-3696 • INTERNET: <http://swc.nd.gov>

October 9, 2014

Heather Patch
KEITU Engineers & Consultants, Inc.
PO Box 98
Mandan, ND 58554-0098

Dear Ms. Patch:

This is in response to your request for review of environmental impacts associated with the Heart River Crude Oil Pipeline project located in Billings and Stark Counties, ND.

The proposed project has been reviewed by State Water Commission staff and the following comments are provided:

- There are floodplains identified and/or mapped where this proposed project is to take place. The areas are designated as Zone A. North Dakota has no formal "permitting" authority as a state entity in National Flood Insurance Program (NFIP) identified floodplain areas. The permitting is always done by the local entity, which has jurisdiction in the area in question. Please work closely with the Stark County Floodplain Administrator. The Floodplain Administrator is: Bill Fahlsing; 66 Museum Dr. W; Dickinson, ND 58601; 701-456-7605. The NFIP map used to make this determination is: Panel #38089C0125E, Date: 11/4/2010. A copy of the NFIP map is enclosed.
- The ND State Water Commission (Commission) maintains a network of observation/monitor water wells throughout the state, and many are located close to public right-of-ways. The well location information can be obtained from the Commission's website at: <http://swc.nd.gov>; then click on "Map and Data Resources"; and then click on "Map Services". If water wells may be affected by your project or accidentally damaged, please contact the Water Appropriations Division of the Commission at 701-328-2754. A copy of the map is enclosed.
- There is Southwest Pipeline Project (SWPP) infrastructure in the vicinity of your project. A map is enclosed depicting the location of the SWPP infrastructure in your project area. Please contact the Southwest Water Authority at 701-225-0241 concerning any potential effect to SWPP infrastructure.
- It is the responsibility of the project sponsor to ensure that local, state and federal agencies are contacted for any required approvals, permits, and easements.
- All waste material associated with the project must be disposed of properly and not placed in identified floodway areas.
- No sole-source aquifers have been designated in ND.

Thank you for the opportunity to provide review comments. If you have any questions, please call me at 701-328-4967.

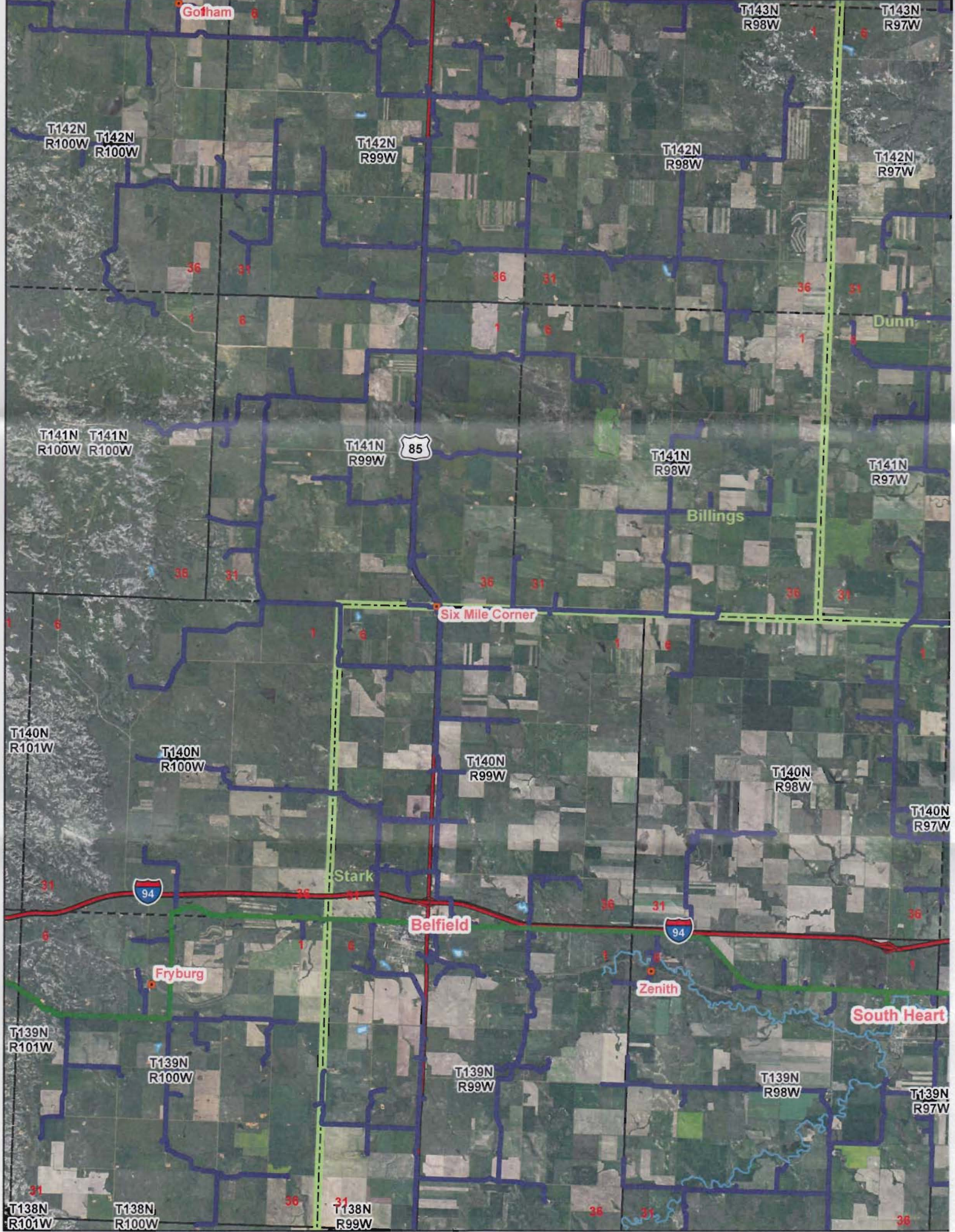
Sincerely,

Linda Weispfenning
Water Resource Planner

LW:dp/1570
Encl.

JACK DALRYMPLE, GOVERNOR
CHAIRMAN

TODD SANDO, P.E.
SECRETARY AND STATE ENGINEER



Gotham

T143N
R98W

T143N
R97W

T142N
R100W

T142N
R100W

T142N
R99W

T142N
R98W

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85

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T140N
R101W

T140N
R100W

T140N
R99W

T140N
R98W

T140N
R97W

94

Stark

Belfield

94

Fryburg

Zenith

South Heart

T139N
R101W

T139N
R100W

T139N
R99W

T139N
R98W

T139N
R97W

T138N
R101W

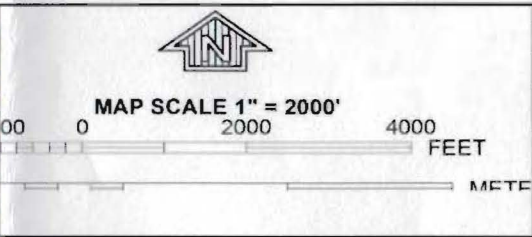
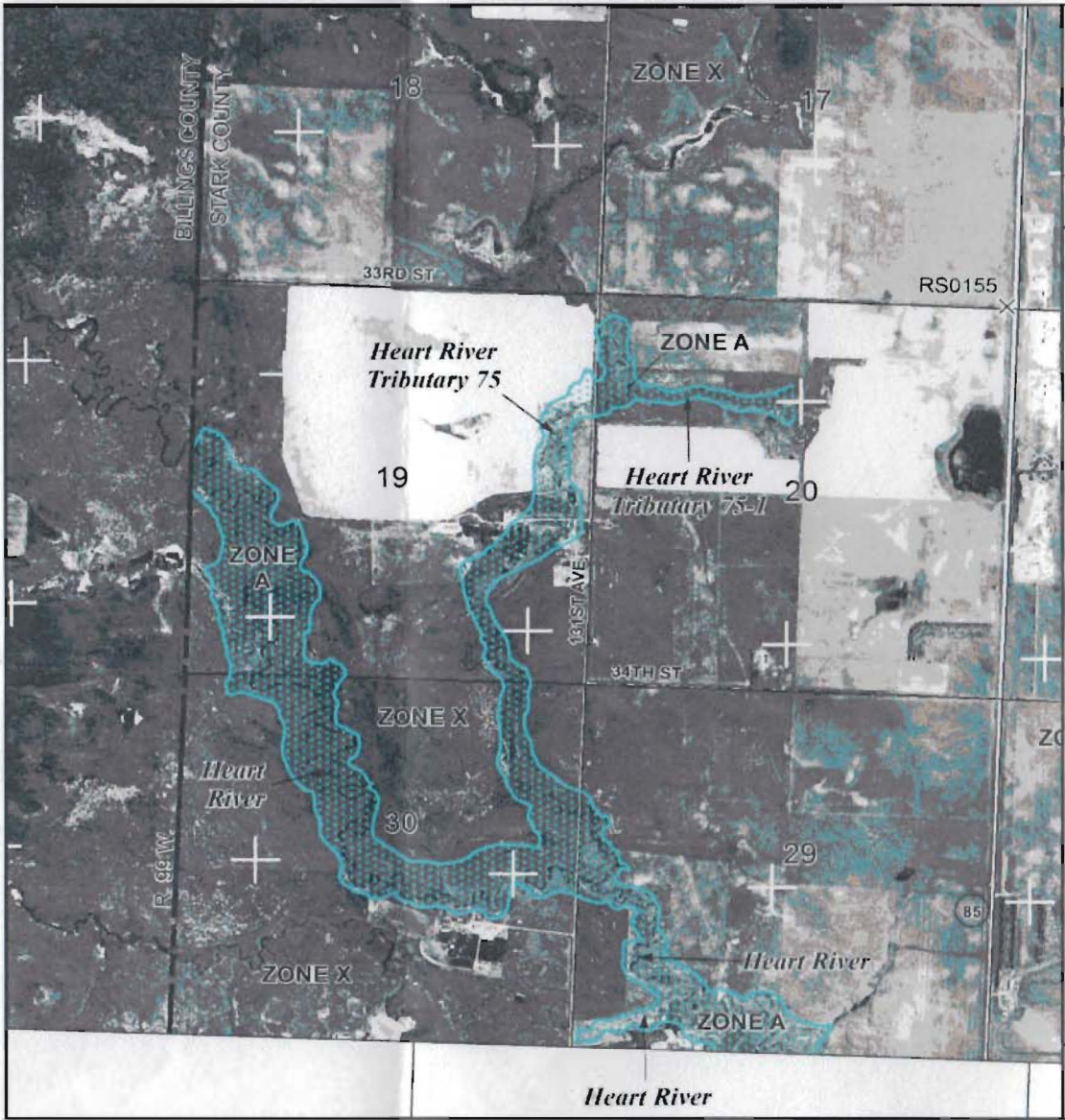
T138N
R100W

T138N
R99W

T138N
R97W

Save your FIRMette

Back



NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0125E

FIRM
FLOOD INSURANCE RATE MAP

**STARK COUNTY,
NORTH DAKOTA
AND INCORPORATED AREAS**

PANEL 125 OF 850
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
STARK COUNTY	38088	0125	E

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.



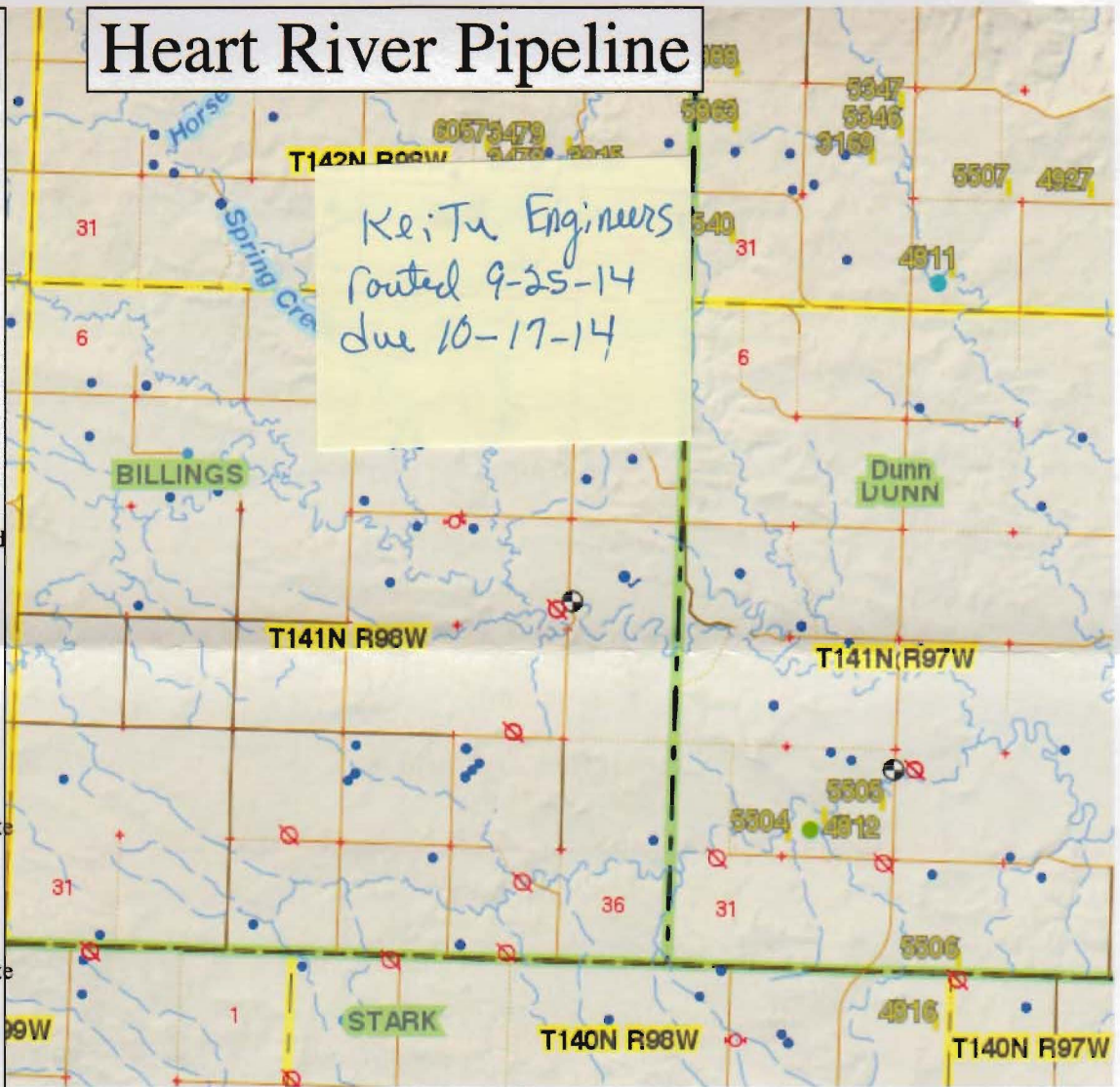
MAP NUMBER
38089C0125E
EFFECTIVE DATE
NOVEMBER 4, 2010

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

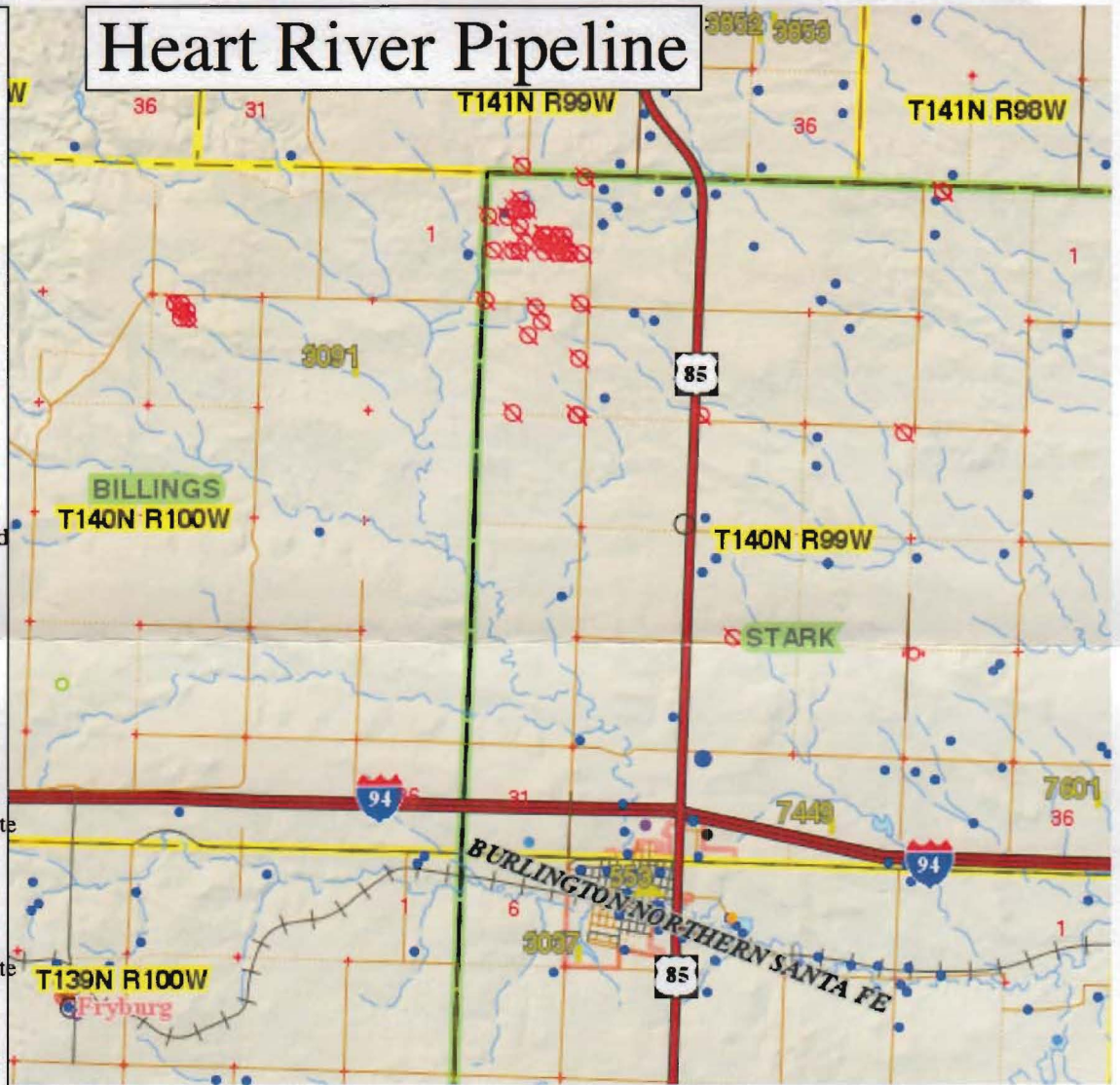
Heart River Pipeline

- ND Corporate Limits
- Tribal Lands
- Section Corners
- Townships_2
- County Boundaries1
- Driller Logs
- usgs_gages
- Domestic Well
- Industrial Well
- Irrigation Well
- Multi-Well Sample
- Municipal Well
- Municipal Well - Plugged
- Observation Well
- Observation Well - Destroyed
- Observation Well - Plugged
- Observation Well - Recorder
- Production Well
- Production Well - Plugged
- Rural Water Well
- Stock Well
- Stock Well - Plugged
- Surface Water Monitoring Site
- Test Hole
- Test Well
- Unknown
- Surface Water Monitoring Site
- Dams
- Approved
- Denied
- Hold
- Pending



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September 24, 2014

Dan Cimarosti
Regulatory Project Manager
US Army Corps of Engineers
1513 South 12th Street
Bismarck, North Dakota 58504

RE: Heart River Crude Oil Pipeline – Billings & Stark Counties

Bridger Pipeline LLC (Bridger) is proposing to construct a 15-mile-long, 12-inch crude oil pipeline in Billings and Stark Counties beginning spring 2015. The Project will interconnect with Bridger facilities at Skunk Hills Station and Fryburg Station. This system is currently connected to Bridger Pipeline's 12-inch Four Bears crude pipeline. The new section of pipeline parallels an existing Bridger 8-inch line from Skunk Hill Station to Fryburg Station and will be operationally integrated into the existing operations of Bridger.

The pipeline will be buried underground. No new pumping facilities will be needed at this time within North Dakota. No new surface facilities will be installed in the State of North Dakota, other than pipeline markers, rectifiers, and block valves. Some small fenced-in enclosures to house associated power and control systems may be installed to allow some valves to be operated remotely. The North Dakota Public Service Commission Utility permit is required to provide the needed capacity to transport the increased production of crude oil from the Bakken and Three Forks formations.

Keitu Engineers and Consultants, Inc. (Keitu) provides the following description of Bridger's pipeline route.

- The pipeline originates two miles north-northeast of Fryburg, North Dakota at Bridger's Fryburg Station and runs approximately 15 miles to the northeast, terminating at Bridger's Skunk Hills Station.
- The pipeline runs through the following legal descriptions:
 - T140N R100W Sections 26, 27, 28, 33, 34, 35, and 36
 - T140N R99W Sections 3, 4, 9, 16, 17, 18, 19, 30, and 31
 - T141W R98W Sections 15, 16, 21, 28, 29, 31, and 32

Keitu is contracted by Bridger Pipeline LLC to conduct the biological assessment and prepare the siting application for the 15-mile project (with 1 mile wide study corridor) to be completed in October 2014.

Enclosed is a map of the entire length of the pipeline route intended for the US Army Corps of Engineers to review. The North Dakota Public Service Commission, requires applicants to contact agencies for comment. We respectfully request that any specific species of concern known in the area is brought to our attention to ensure we focus on those items.

As always, Keitu appreciates the opportunity to assist our client and the regulatory agencies with compliance. I will serve as the primary Keitu contact and can be reached at (701) 667-1808 ext 113 or via email at hpatch@keitu.com.

Heather Patch
Staff Engineer

Enclosure: Pipeline Route



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
NORTH DAKOTA REGULATORY OFFICE
1513 SOUTH 12TH STREET
BISMARCK ND 58504-6640

September 25, 2014

North Dakota Regulatory Office

Ms. Heather Patch
Keitu
PO Box 98
Mandan, North Dakota 58554-00098

Dear Ms. Patch:

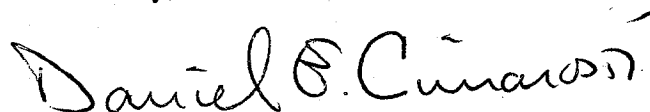
This is in response to your letter dated September 24, 2014, requesting US Army Corps of Engineers (Corps) comments regarding the proposed 15-mile long, 12-inch crude oil pipeline in Billings and Stark Counties.

Based on the information contained within your letter, it appears a Department of the Army permit may be required for part of your proposal. In order for us to fully evaluate your project, please complete and submit the Corps permit application (copy enclosed). Be sure to accurately describe all proposed work and construction methodology. Once the application is complete, please mail it to the letterhead address.

Please be advised, Corps regulatory offices administer Section 10 of the Rivers and Harbors Act (Section 10) and Section 404 of the Clean Water Act (Section 404). Section 10 regulates work impacting navigable waters. Section 10 waters in North Dakota are the Missouri River (including Lake Sakakawea and Lake Oahe), Yellowstone River, James River south of the railroad track in Jamestown, North Dakota, Bois de Sioux River, Red River of the North, and the Upper Des Lacs Lake. Work over, in, or under navigable waters is considered to have an impact. Section 404 of the Clean Water Act regulates the discharge of dredged or fill material (temporarily or permanently) in waters of the United States. Waters of the United States may include, but are not limited to, rivers, streams, ditches, coulees, lakes, ponds, and their adjacent wetlands. Fill material includes, but is not limited to, rock, sand, soil, clay, plastics, construction debris, wood chips, overburden from mines or other excavation activities and materials used to create any structure or infrastructure in waters of the United States.

Do not hesitate to contact this office by letter or telephone (701) 255-0015, if we can be of further assistance.

Sincerely,

A handwritten signature in black ink that reads "Daniel E. Cimarosti". The signature is written in a cursive style with a horizontal line at the end.

Daniel E. Cimarosti
Regulatory Program Manager
North Dakota

Enclosure

**Instructions for Preparing a
Department of the Army Permit Application**

Blocks 1 through 4. To be completed by Corps of Engineers.

Block 5. Applicant's Name. Enter the name and the E-mail address of the responsible party or parties. If the responsible party is an agency, company, corporation, or other organization, indicate the name of the organization and responsible officer and title. If more than one party is associated with the application, please attach a sheet with the necessary information marked Block 5.

Block 6. Address of Applicant. Please provide the full address of the party or parties responsible for the application. If more space is needed, attach an extra sheet of paper marked Block 6.

Block 7. Applicant Telephone Number(s). Please provide the number where you can usually be reached during normal business hours.

Blocks 8 through 11. To be completed, if you choose to have an agent.

Block 8. Authorized Agent's Name and Title. Indicate name of individual or agency, designated by you, to represent you in this process. An agent can be an attorney, builder, contractor, engineer, or any other person or organization. Note: An agent is not required.

Blocks 9 and 10. Agent's Address and Telephone Number. Please provide the complete mailing address of the agent, along with the telephone number where he / she can be reached during normal business hours.

Block 11. Statement of Authorization. To be completed by applicant, if an agent is to be employed.

Block 12. Proposed Project Name or Title. Please provide name identifying the proposed project, e.g., Landmark Plaza, Burned Hills Subdivision, or Edsall Commercial Center.

Block 13. Name of Waterbody. Please provide the name of any stream, lake, marsh, or other waterway to be directly impacted by the activity. If it is a minor (no name) stream, identify the waterbody the minor stream enters.

Block 14. Proposed Project Street Address. If the proposed project is located at a site having a street address (not a box number), please enter it here.

Block 15. Location of Proposed Project. Enter the latitude and longitude of where the proposed project is located. If more space is required, please attach a sheet with the necessary information marked Block 15.

Block 16. Other Location Descriptions. If available, provide the Tax Parcel Identification number of the site, Section, Township, and Range of the site (if known), and / or local Municipality that the site is located in.

Block 17. Directions to the Site. Provide directions to the site from a known location or landmark. Include highway and street numbers as well as names. Also provide distances from known locations and any other information that would assist in locating the site. You may also provide description of the proposed project location, such as lot numbers, tract numbers, or you may choose to locate the proposed project site from a known point (such as the right descending bank of Smith Creek, one mile downstream from the Highway 14 bridge). If a large river or stream, include the river mile of the proposed project site if known

Block 18. Nature of Activity. Describe the overall activity or project. Give appropriate dimensions of structures such as wing walls, dikes (identify the materials to be used in construction, as well as the methods by which the work is to be done), or excavations (length, width, and height). Indicate whether discharge of dredged or fill material is involved. Also, identify any structure to be constructed on a fill, piles, or float-supported platforms.

The written descriptions and illustrations are an important part of the application. Please describe, in detail, what you wish to do. If more space is needed, attach an extra sheet of paper marked Block 18.

Block 19. Proposed Project Purpose. Describe the purpose and need for the proposed project. What will it be used for and why? Also include a brief description of any related activities to be developed as the result of the proposed project. Give the approximate dates you plan to both begin and complete all work.

Block 20. Reasons for Discharge. If the activity involves the discharge of dredged and/or fill material into a wetland or other waterbody, including the temporary placement of material, explain the specific purpose of the placement of the material (such as erosion control).

Block 21. Types of Material Being Discharged and the Amount of Each Type in Cubic Yards. Describe the material to be discharged and amount of each material to be discharged within Corps jurisdiction. Please be sure this description will agree with your illustrations. Discharge material includes: rock, sand, clay, concrete, etc.

Block 22. Surface Areas of Wetlands or Other Waters Filled. Describe the area to be filled at each location. Specifically identify the surface areas, or part thereof, to be filled. Also include the means by which the discharge is to be done (backhoe, dragline, etc.). If dredged material is to be discharged on an upland site, identify the site and the steps to be taken (if necessary) to prevent runoff from the dredged material back into a waterbody. If more space is needed, attach an extra sheet of paper marked Block 22.

Block 23. Description of Avoidance, Minimization, and Compensation. Provide a brief explanation describing how impacts to waters of the United States are being avoided and minimized on the project site. Also provide a brief description of how impacts to waters of the United States will be compensated for, or a brief statement explaining why compensatory mitigation should not be required for those impacts.

Block 24. Is Any Portion of the Work Already Complete? Provide any background on any part of the proposed project already completed. Describe the area already developed, structures completed, any dredged or fill material already discharged, the type of material, volume in cubic yards, acres filled, if a wetland or other waterbody (in acres or square feet). If the work was done under an existing Corps permit, identify the authorization, if possible.

Block 25. Names and Addresses of Adjoining Property Owners, Lessees, etc., Whose Property Adjoins the Project Site. List complete names and full mailing addresses of the adjacent property owners (public and private) lessees, etc., whose property adjoins the waterbody or aquatic site where the work is being proposed so that they may be notified of the proposed activity (usually by public notice). If more space is needed, attach an extra sheet of paper marked Block 24.

Information regarding adjacent landowners is usually available through the office of the tax assessor in the county or counties where the project is to be developed.

Block 26. Information about Approvals or Denials by Other Agencies. You may need the approval of other federal, state, or local agencies for your project. Identify any applications you have submitted and the status, if any (approved or denied) of each application. You need not have obtained all other permits before applying for a Corps permit.

Block 27. Signature of Applicant or Agent. The application must be signed by the owner or other authorized party (agent). This signature shall be an affirmation that the party applying for the permit possesses the requisite property rights to undertake the activity applied for (including compliance with special conditions, mitigation, etc.).

DRAWINGS AND ILLUSTRATIONS

General Information.

Three types of illustrations are needed to properly depict the work to be undertaken. These illustrations or drawings are identified as a Vicinity Map, a Plan View or a Typical Cross-Section Map. Identify each illustration with a figure or attachment number.

Please submit one original, or good quality copy, of all drawings on 8½ x11 inch plain white paper (electronic media may be substituted). Use the fewest number of sheets necessary for your drawings or illustrations.

Each illustration should identify the project, the applicant, and the type of illustration (vicinity map, plan view, or cross-section). **While illustrations need not be professional (many small, private project illustrations are prepared by hand), they should be clear, accurate, and contain all necessary information.**

**U.S. ARMY CORPS OF ENGINEERS
APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT**
33 CFR 325. The proponent agency is CECW-CO-R.

*Form Approved -
OMB No. 0710-0003
Expires: 31-AUGUST-2013*

Public reporting for this collection of information is estimated to average 11 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of the collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters, Executive Services and Communications Directorate, Information Management Division and to the Office of Management and Budget, Paperwork Reduction Project (0710-0003). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DO NOT RETURN your form to either of those addresses. Completed applications must be submitted to the District Engineer having jurisdiction over the location of the proposed activity.

PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and/or instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETE
--------------------	----------------------	------------------	------------------------------

(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME First - Middle - Last - Company - E-mail Address -			8. AUTHORIZED AGENT'S NAME AND TITLE (agent is not required) First - Middle - Last - Company - E-mail Address -		
6. APPLICANT'S ADDRESS: Address- City - State - Zip - Country -			9. AGENT'S ADDRESS: Address- City - State - Zip - Country -		
7. APPLICANT'S PHONE NOS. w/AREA CODE a. Residence b. Business c. Fax			10. AGENTS PHONE NOS. w/AREA CODE a. Residence b. Business c. Fax		

STATEMENT OF AUTHORIZATION

11. I hereby authorize, _____ to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

SIGNATURE OF APPLICANT DATE

NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME OR TITLE (see instructions)	
13. NAME OF WATERBODY, IF KNOWN (if applicable)	14. PROJECT STREET ADDRESS (if applicable) Address
15. LOCATION OF PROJECT Latitude: °N Longitude: °W	City - State- Zip-
16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions) State Tax Parcel ID Municipality Section - Township - Range -	

17. DIRECTIONS TO THE SITE

18. Nature of Activity (Description of project, include all features)

19. Project Purpose (Describe the reason or purpose of the project, see instructions)

USE BLOCKS 20-23 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards:

Type Amount in Cubic Yards	Type Amount in Cubic Yards	Type Amount in Cubic Yards
-------------------------------	-------------------------------	-------------------------------

22. Surface Area in Acres of Wetlands or Other Waters Filled (see instructions)

Acres
or
Linear Feet

23. Description of Avoidance, Minimization, and Compensation (see instructions)

24. Is Any Portion of the Work Already Complete? Yes No IF YES, DESCRIBE THE COMPLETED WORK

25. Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (if more than can be entered here, please attach a supplemental list).

a. Address-

City - State - Zip -

b. Address-

City - State - Zip -

c. Address-

City - State - Zip -

d. Address-

City - State - Zip -

e. Address-

City - State - Zip -

26. List of Other Certificates or Approvals/Denials received from other Federal, State, or Local Agencies for Work Described in This Application.

AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED

* Would include but is not restricted to zoning, building, and flood plain permits

27. Application is hereby made for permit or permits to authorize the work described in this application. I certify that this information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

SIGNATURE OF APPLICANT

DATE

SIGNATURE OF AGENT

DATE

The Application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both.

November 25, 2014

Medora Ranger District
U.S. Forest Service
99 23rd Avenue W, Suite B
Dickinson, ND 58601

RE: Heart River Crude Oil Pipeline – Billings & Stark Counties

Bridger Pipeline LLC (Bridger) is proposing to construct a 15-mile-long, 12-inch crude oil pipeline in Billings and Stark Counties beginning spring 2015. The Project will interconnect with Bridger facilities at Skunk Hills Station and Fryburg Station. This system is currently connected to Bridger Pipeline's 12-inch Four Bears crude pipeline. The new section of pipeline parallels an existing Bridger 8-inch line from Skunk Hill Station to Fryburg Station and will be operationally integrated into the existing operations of Bridger.

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- The pipeline originates two miles north-northeast of Fryburg, North Dakota at Bridger's Fryburg Station and runs approximately 15 miles to the northeast, terminating at Bridger's Skunk Hills Station.
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Keitu is contracted by Bridger Pipeline LLC to conduct the biological assessment and prepare the siting application for the 15-mile project (with 1 mile wide study corridor) completed in October 2014.

Enclosed is a map of the entire length of the pipeline route intended for the U.S. Forest Service to review. The North Dakota Public Service Commission, requires applicants to contact agencies for comment. We respectfully request that any specific species of concern known in the area is brought to our attention to ensure we focus on those items.

As always, Keitu appreciates the opportunity to assist our client and the regulatory agencies with compliance. I will serve as the primary Keitu contact and can be reached at (701) 667-1808 ext 113 or via email at hpatch@keitu.com.

Heather Patch
Staff Engineer

Enclosure: Pipeline Route

September 24, 2014

Scott Larson
Field Supervisor
North Dakota Field Office
U.S. Fish and Wildlife Service
3425 Miriam Avenue
Bismarck, North Dakota 58501-7926

RE: Heart River Crude Oil Pipeline – Billings & Stark Counties

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Keitu is contracted by Bridger Pipeline LLC to conduct the biological assessment and prepare the siting application for the 15-mile project (with 1 mile wide study corridor) to be completed in October 2014.

Enclosed is a map of the entire length of the pipeline route intended for the U.S. Fish and Wildlife Service to review. The North Dakota Public Service Commission, requires applicants to contact agencies for comment. We respectfully request that any specific species of concern known in the area is brought to our attention to ensure we focus on those items.

As always, Keitu appreciates the opportunity to assist our client and the regulatory agencies with compliance. I will serve as the primary Keitu contact and can be reached at (701) 667-1808 ext 113 or via email at hpatch@keitu.com.

Heather Patch
Staff Engineer

Enclosure: Pipeline Route

September 24, 2014

Todd Gallion
Wildlife Refuge Specialist
Lake Ilo National Wildlife Refuge
489 102 Avenue S.W.
Dunn Center, ND 58626

RE: Heart River Crude Oil Pipeline – Billings & Stark Counties

Bridger Pipeline LLC (Bridger) is proposing to construct a 15-mile-long, 12-inch crude oil pipeline in Billings and Stark Counties beginning spring 2015. The Project will interconnect with Bridger facilities at Skunk Hills Station and Fryburg Station. This system is currently connected to Bridger Pipeline's 12-inch Four Bears crude pipeline. The new section of pipeline parallels an existing Bridger 8-inch line from Skunk Hill Station to Fryburg Station and will be operationally integrated into the existing operations of Bridger.

The pipeline will be buried underground. No new pumping facilities will be needed at this time within North Dakota. No new surface facilities will be installed in the State of North Dakota, other than pipeline markers, rectifiers, and block valves. Some small fenced-in enclosures to house associated power and control systems may be installed to allow some valves to be operated remotely. The North Dakota Public Service Commission Utility permit is required to provide the needed capacity to transport the increased production of crude oil from the Bakken and Three Forks formations.

Keitu Engineers and Consultants, Inc. (Keitu) provides the following description of Bridger's pipeline route.

- The pipeline originates two miles north-northeast of Fryburg, North Dakota at Bridger's Fryburg Station and runs approximately 15 miles to the northeast, terminating at Bridger's Skunk Hills Station.
- The pipeline runs through the following legal descriptions:
 - T140N R100W Sections 26, 27, 28, 33, 34, 35, and 36
 - T140N R99W Sections 3, 4, 9, 16, 17, 18, 19, 30, and 31
 - T141W R98W Sections 15, 16, 21, 28, 29, 31, and 32

Keitu is contracted by Bridger Pipeline LLC to conduct the biological assessment and prepare the siting application for the 15-mile project (with 1 mile wide study corridor) to be completed in October 2014.

Enclosed is a map of the entire length of the pipeline route intended for Lake Ilo National Wildlife Refuge to review. The North Dakota Public Service Commission, requires applicants to contact agencies for comment. We respectfully request that any specific species of concern known in the area is brought to our attention to ensure we focus on those items.

As always, Keitu appreciates the opportunity to assist our client and the regulatory agencies with compliance. I will serve as the primary Keitu contact and can be reached at (701) 667-1808 ext 113 or via email at hpatch@keitu.com.

Heather Patch
Staff Engineer

Enclosure: Pipeline Route