

**Archaeological Survey Memo
for a
Proposed 230kV Transmission Line Project in Dickey
and McIntosh Counties, North Dakota**

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Prepared for

Montana-Dakota Utilities Co.

Prepared by



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Introduction

In October 2010, Montana-Dakota Utilities Co. (Montana-Dakota) contracted HDR Engineering Inc. (HDR) to complete a Class III Intensive Archaeological Resources Inventory for the Merricourt Wind Farm to Ellendale 230 kV Transmission Line Project in Dickey and McIntosh counties, North Dakota (Figure 1). The transmission line project consists of an approximate 30-mile-long, 120-foot-wide project route, and will require the construction of a new substation at its western terminus. The transmission line will connect the new substation with the existing Ellendale substation.

In May 2010, Montana-Dakota contacted the North Dakota State Historic Preservation Office (SHPO) to inform them of Montana-Dakota's proposed transmission line project. SHPO responded with a letter (NDSHPO REF.: 10-1440) in May 2010 stating that the potential for recorded and unrecorded properties exists within the project corridor. SHPO recommended that Montana-Dakota complete a Class I Literature Search for the project corridor. The initial project area was defined as an approximately 8-mile-by-27-mile polygon. Route selection was finalized in October 2010 and the project corridor has been refined. The corridor is approximately 30 miles long and 3 miles wide (1 ½ miles to either side of the centerline). Within the corridor there is a 120-foot project route. It is within this route that field survey took place. SHPO further recommended that Montana-Dakota complete a Class III Intensive Archaeological Resource Inventory of the project route, with pedestrian survey being the preferred method. SHPO recommended the inventory focus on areas where ground disturbing activity is likely to occur, such as pole locations and at ancillary facility locations. SHPO also recognized that, as it is currently defined, the project is not a federal undertaking subject to Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations (36CFR 800).

In October 2010, Montana-Dakota had a conference call with SHPO to discuss the project route, Montana-Dakota's proposed methodology for the current survey, regulatory framework, existing environment, and the possibility of types of unknown resources within the project corridor. SHPO commented that they understood the project route, agreed with Montana-Dakota's proposed methodology for survey, and that they understood the regulatory framework of the project. Further, SHPO shared specific knowledge about the types of sites already inventoried in the vicinity of the project corridor and about possible types of sites that may be encountered within the project route.

The intent of the Class III inventory was to identify and record archaeological resources located in the project route. Investigators considered the impact to high probability archaeological areas from access roads, pole locations and ancillary facilities. Archaeological investigations were in compliance with state and federal guidelines, such as the *North Dakota Century Code* and the secretary of the interior's *Standards and Guidelines for Archeology and Historic Preservation*. Survey was conducted from November 2 to November 12, 2010. Archaeologist Dylan Eigenberger acted as Principal Investigator, assisted by Archaeologist Stephen Sabatke and Archaeological Technician

Michelle Porvoll. Approximately 26 miles of the project route were pedestrian surveyed before fieldwork was halted for the year due to the onset of winter.

Literature Search

In September of 2010, Montana-Dakota reviewed information on file at the SHPO located in Bismarck, ND, to ensure that relevant cultural properties in the project corridor were considered during project planning. The project corridor consists of the approximate 30-mile-long, 120-foot project route and includes a 1½-mile buffer on either side of the route centerline. The project corridor traverses several townships in Dickey and McIntosh counties in North Dakota (Table 1). The topography of the project corridor is split between the dramatic rolling hills of the Missouri Coteau and the cultivated fields of the flat prairie land located to the east of the Coteau (Photo 1). Prairie pot-hole lakes, wetlands, and seasonal drainages are intermixed throughout the project corridor.

Cultural resource data, housed at the SHPO, consisted of cultural resource site files, cultural resource site leads, and previous professional cultural resource surveys and reports. In addition, Montana-Dakota reviewed 19th Century Public Land Survey (PLS) maps to identify potential historic-period cultural features in the project corridor. Montana-Dakota also reviewed the National Park Service's National Register of Historic Places (NRHP) online database to identify NRHP registered sites and districts located within the project corridor.



Photo 1: Typical topography of the project corridor facing west from the intersection of 97th Street SE and 76th Ave SE. This photo captures the eastern portion of the route in the foreground and the western portion of the route in the background.

Table 1: Project Corridor			
County	Township	Range	Sections
Dickey	T129N	R63W	2-11, 14-18
Dickey	T129N	R64W	1-18
Dickey	T129N	R65W	1-18
Dickey	T129N	R66W	1-5, 9-12
Dickey	T130N	R63W	31-35
Dickey	T130N	R64W	31-36
Dickey	T130N	R65W	31-36
Dickey	T130N	R66W	2-6, 7-11, 14-17, 20-23, 25-29, 32-36
Dickey	T131N	R66W	29, 30, 31-35
McIntosh	T130N	R67W	1-5, 8-12
McIntosh	T131N	R67W	25-29, 32-36

Recorded Archaeological and Historic Facility Resources

The cultural records search of the area within and in the vicinity of the project corridor identified 64 archaeological sites, 18 archaeological site leads/isolated finds, and two historic buildings/structures (Table 2).

County	Site Number	Site Type	Location			NRHP Status
			T	R	S	
Dickey	# 32DI43	Stone Circle	130	65	31	Not Evaluated
Dickey	# 32DI85	Stone Circle	129	65	6	Not Evaluated
Dickey	# 32DI86	Pit/Other Rock Feature	129	65	6	Not Evaluated
Dickey	32DI87	Pit/Other Rock Feature	129	65	7	Not Evaluated
Dickey	32DI88	Pit/Other Rock Feature	129	66	12	Not Evaluated
Dickey	32DI89	Pit/Other Rock Feature	129	66	12	Not Evaluated
Dickey	32DI107	Reinforced Concrete T Beam Bridge	129	64	10	Recommended eligible under C
Dickey	32DI112	Stone Circle/Other Rock Feature, CM Scatter, Faunal Remains, Chipped Stone	130	66	35	Not Evaluated
Dickey	32DI113	Stone Circle/Other rock Feature	130	65	30	Not Evaluated
Dickey	32DI138	Stone Circle	130	65	30	Not Evaluated
Dickey	32DI149	Cairn	130	66	4	Not Evaluated
Dickey	32DI150	Cairn	130	66	4	Not Evaluated
Dickey	32DIX12	Lorraine Post Office	130	66	36	Not Evaluated
Dickey	32DIX18	Albertha Post Office	129	66	5	Not Evaluated
Dickey	# 32DIX29	Wirch Post Office	130	66	15	Not Evaluated
Dickey	32DIX103	Farmstead	130	66	26	Not Evaluated
Dickey	* 32DIX107					
Dickey	32DIX108	Pit/Stone Circle	130	65	31	Not Evaluated
Dickey	32DIX109	Stone Circle	130	65	31	Not Evaluated
Dickey	32DIX110	Stone Circle	130	65	32	Not Evaluated
Dickey	32DIX111	Stone Circle	130	65	31	Not Evaluated
Dickey	32DIX112	Stone Circle	130	66	36	Not Evaluated
Dickey	# 32DIX115	Stone Circle	129	65	6	Not Evaluated
Dickey	32DIX116	Rock Shelter	130	65	32	Not Evaluated
Dickey	# 32DIX117	Stone Circle/Pit/Graves	130	65	31	Not Evaluated
Dickey	# 32DIX118	Stone Circle	130	65	31	Not Evaluated
Dickey	32DIX119	Stone Circle	130	65	32	Not Evaluated
Dickey	32DIX121	Stone Circle	130	65	31	Not Evaluated
Dickey	*# 32DIX218					
McIntosh	32MT119	Other Rock Feature	130	67	4	Not Evaluated
McIntosh	32MT120	Other Rock Feature	130	67	4	Not Evaluated
McIntosh	# 32MT121	Stone Circle/Other Rock Feature	130	67	4	Not Evaluated
McIntosh	# 32MT122	Cairn/Other Rock Feature	130	67	4	Not Evaluated
McIntosh	32MT123	Cairn	130	67	4	Not Evaluated
McIntosh	32MT124	Foundation/CM Scatter/Glass/Masonry/Metal/Wood	130	67	4	Not Evaluated
McIntosh	32MT125	Cairn/Other Rock Feature	130	67	4	Not Evaluated
McIntosh	32MT126	CM Scatter/Glass/Metal/Wood	130	67	4	Not Evaluated

Table 2: Previously Identified Cultural Resources located in the Project Corridor

County	Site Number	Site Type	Location			NRHP Status
			T	R	S	
McIntosh	# 32MT127	Cairn/Other Rock Feature/Stone Circle	130	67	4	Not Evaluated
McIntosh	32MT128	Cairn/Other Rock Feature	130	67	4	Not Evaluated
McIntosh	32MT129	Other Rock Feature	130	67	4	Not Evaluated
McIntosh	# 32MT130	Other Rock Feature	130	67	4	Not Evaluated
McIntosh	# 32MT131	Cairn	130	67	4	Not Evaluated
McIntosh	# 32MT132	Cairn	130	67	4	Not Evaluated
McIntosh	# 32MT134	Cairn/Other Rock Feature/Stone Circle	130	67	3	Not Evaluated
McIntosh	*# 32MT135					
McIntosh	*# 32MT136					
McIntosh	*# 32MT137					
McIntosh	# 32MT138	Cairn/Other Rock Feature/Stone Circle	130	67	3	Not Evaluated
McIntosh	# 32MT139	Cairn/Other Rock Feature/Stone Circle	130	67	3	Not Evaluated
McIntosh	# 32MT140	Stone Circle	130	67	2	Not Evaluated
McIntosh	# 32MT151	Stone Circle/Other Rock Feature	130	67	4	Not Evaluated
McIntosh	* 32MT152					
McIntosh	* 32MT153					
McIntosh	32MT171	Cairn/Other Stone Feature/Stone Circle	130	67	5	Not Evaluated
McIntosh	* 32MT172					
McIntosh	32MT174	Cairn/Other Rock Feature/Stone Circle	130	67	5	Not Evaluated
McIntosh	# 32MT182	Other Rock Feature	130	67	2	Not Evaluated
McIntosh	# 32MT183	Cairn/Other Rock Feature/Stone Circle	130	67	2	Not Evaluated
McIntosh	# 32MT184	Cairn/Other Rock Feature	130	67	2	Not Evaluated
McIntosh	# 32MT185	Other Rock Feature	130	67	2	Not Evaluated
McIntosh	32MT186	Stone Circle/Other Rock Feature	130	67	5	Not Evaluated
McIntosh	32MT187	Cairn/Other Rock Feature/Stone Circle	130	67	5	Not Evaluated
McIntosh	32MT188	Cairn/Other Rock Feature/Stone Circle	130	67	4	Not Evaluated
McIntosh	# 32MT190	Stone Circle/Other Rock Feature	130 and 131	67	3 and 34	Not Evaluated
McIntosh	# 32MT191	Cairn/Other Rock Feature/Stone Circle	130	67	3	Not Evaluated
McIntosh	# 32MT192	Cairn/Other Rock Feature/Stone Circle	130	67	4	Not Evaluated
McIntosh	# 32MT193	Cairn/Other Rock Feature	130	67	3	Not Evaluated
McIntosh	# 32MT194	Cairn/Other Rock Feature	130	67	4	Not Evaluated

Table 2: Previously Identified Cultural Resources located in the Project Corridor

County	Site Number	Site Type	Location			NRHP Status
			T	R	S	
McIntosh	# 32MT198	Stone Circle	130	67	4	Not Evaluated
McIntosh	# 32MT203	Mound	130	67	3	Not Evaluated
McIntosh	# 32MT204	Cairn	130	67	3	Not Evaluated
McIntosh	# 32MT205	Other Rock Feature	130	67	3	Not Evaluated
McIntosh	# 32MT206	Stone Circle/Other Rock Feature	130	67	3	Not Evaluated
McIntosh	*# 32MT207					
McIntosh	# 32MT209	Cairn/Other Rock Feature	130	67	3	Not Evaluated
McIntosh	# 32MT210	Other Rock Feature	130	67	3	Not Evaluated
McIntosh	32MT233	Cairn/Other Rock Feature/Stone Circle/Grave	130	67	5	Not Evaluated
McIntosh	32MT234	Stone Circle/Other Rock Feature	130	67	5	Not Evaluated
McIntosh	*# 32MT239					
McIntosh	*# 32MT244					
McIntosh	* 32MT256					
McIntosh	*# 32MTX62					

* items marked with an asterisk represent sites forms that were not obtained during the initial data gather, but will be reviewed and summarized in the Class III Inventory Report
 # represents sites within a half mile of the transmission line and represents the sites SHPO will most likely consider

Previous Cultural Resources Investigations

The archival report inventory documented 14 previous cultural resource investigations within and in the vicinity of the project corridor (Table 3). These reports illustrate a wide variety of investigations that were done in the area, including those conducted in support of road reconstruction and proposed borrow areas.

Table 3: Previous Cultural Resource Investigations in the Project Corridor

Manuscript Number	Report Date	Manuscript Title	Author(s)/ Association
005496	1991	A Cultural Resources Inventory of WEB (Phase 7) Construction in Dickey Co., North Dakota and South Dakota Vol. 1 and 2	Buechler, J.
005920	1996	Historic Bridges in North Dakota	Johnson, L.
006090	1993	Cultural Resources Survey Report Class III Cultural Resource Inventory Item No. 1, Ten Microwave Repeater Sites, ND	Martorano, M.
006391	1994	Dickey County Rural Water Distribution System: A Class II and Class III Cultural Resource Inventory in Dickey County, North Dakota	Stine, E.
006441	1995	Nesting Islands Survey of 43 Borrow Areas in an 11 County Area of Central North Dakota	Kordecki, C.

Table 3: Previous Cultural Resource Investigations in the Project Corridor

Manuscript Number	Report Date	Manuscript Title	Author(s)/ Association
006631	1995	Interstate Engineering's Dickey County Rural Water Pipeline Phase 2, Plan B: A Class II and Class III Cultural Resource Inventory in Dickey and LaMoure Counties, North Dakota	Kulevsky, A.
006732	1996	Gravel Products' Ashley Pit: A Class III Cultural Resource Inventory in Dickey County, North Dakota	Stine, E.
006817	1996	Addendum to Interstate Engineering's Dickey County Rural Pipeline Phase 2, Plan B: A Class II and Class III Cultural Resource Inventory in Dickey and LaMoure Counties, North Dakota	Stine, E.
008091	2002	Zahn Borrow Area and Access Road: A Class III Cultural Resources Inventory, Dickey, Co., ND	Bluemle, W.
008093	2002	Highway 11, Pleasant Lake, Class III Inventory Report, Dickey, Co., ND	Borchert, J.
008364	2002	Two Zahn Borrow Areas: A Class III Cultural Resource Inventory, Dickey Co., ND	Morrison, J.
008390	2002	Dakota 1 Windtower Survey: A Class III Cultural Resource Inventory, Dickey Co., ND	Bluemle, W.
009309	2005	An Archaeological Survey of a Proposed Communications Tower Site in the Township of Ellendale, Dickey Co., ND	Salkin, P.
010501	2008	A Cultural Resource Re-Inventory of the Ellendale Microwave Facility in Dickey Co., ND	Kluth, D.

Public Land Survey Map Review

Official Government Land Office survey plat maps (GLOs) corresponding with the project corridor were examined to identify areas that may have potential for containing historical era cultural resources. Archaeological sites may be present in locations where historic resources have been documented on the GLO maps. The most common resource identified on the GLO maps consisted of structures, often with associated cultivated fields, representing farmsteads. The majority of these farmsteads were located within the eastern portion of the siting corridor, on the relatively flat terrain east of the Missouri Coteau. Detailed information regarding the location and resource types found within the project corridor is presented in Table 4.

Table 4. Public Land Survey Data

Township	Range	Section	Public Land Survey Publish Date	Cultural Feature/Locations
129	64	1	May 1883	Structure (Annie McCall) in NW 1/4 of SW 1/4

Table 4. Public Land Survey Data				
Township	Range	Section	Public Land Survey Publish Date	Cultural Feature/Locations
129	64	2	May 1883	Structure (McDonald) in NE1/4 of NE 1/4. Structure (W.H. Batson) in NE 1/4 of SE 1/4
129	64	6	May 1883	Structure (Townsend) in NW 1/4 of NE 1/4. Structure (McNulty) in NE 1/4 of NW 1/4
129	64	7	May 1883	Structure (W.H. Gray) in SW 1/4 of NW1/4. Structure (S.G. Gray) in NW 1/4 of SW 1/4. Structure and cultivated field (Jennie Johnson) in NE 1/4 of SE 1/4
129	64	9	May 1883	Structure (Joseph Kelly) in SE 1/4 of SE 1/4
129	64	10	May 1883	Structure (Alex Snyder) in SW 1/4 of SW 1/4
129	64	11	May 1883	Structure (Jno. Purvey) in SW 1/4 of SW 1/4. Structure (M.L. Riley) in NE 1/4 of NE 1/4. Structure and cultivated field (J.F. Wilson) in E 1/2 of SE 1/4
129	64	13	May 1883	Structure (M.T. Russel) in SE 1/4 of SE 1/4. Structure (Jno. Dickson) in SE 1/4 of SW 1/4
129	64	14	May 1883	Structure (Geo. West) in SE 1/4 of SE 1/4
129	64	17	May 1883	Structure (Jno. Jorgenson) in NW 1/4 of NW 1/4
129	65	3	May 1883	Structure and cultivated field (L. McDermond) in NE 1/4 of NE 1/4. Structure and cultivated field (Kept ?) in NW 1/4 of NW 1/4. Structure and cultivated field (John Ingram) in SW 1/4 of SW 1/4
129	65	4	May 1883	Structure and cultivated field (J.I. Ivngenfelt?) in NE 1/4 of NE 1/4 (field extends south into E 1/2 of SE 1/4 of NE 1/4). Structure (Geo. H. Kayes) in SE 1/4 of SE 1/4. Cultivated field (Geo. H. Kayes) takes up SE 1/4 east of drainage.
129	65	9	May 1883	Structure (Ole Christianson) in NW 1/4 of NW 1/4
129	65	10	May 1883	Structure and cultivated field (W.H. Finley?) in S 1/2 of NW 1/4. Structure and cultivated field (Geo. Morton) in S 1/2 of SW 1/4. Structure and cultivated field (Lucy Carrich) in S 1/2 of SE 1/4).
129	65	13	May 1883	Structure (Henry Karvey?) in SE 1/4 of SE 1/4. Structure and cultivated field (C.H. Haynes) in SW 1/4 of SW 1/4

Table 4. Public Land Survey Data				
Township	Range	Section	Public Land Survey Publish Date	Cultural Feature/Locations
129	65	14	May 1883	Structure (A.W. Sutley) in SW 1/4 of SE 1/4. Structure (J.H. McCarty) in SE 1/4 of SW 1/4.
129	65	16	May 1883	Structure and cultivated field (S.H. Batson) in NW 1/4 of NW 1/4
130	63	34	August-Sept. 1881	Structure (J. Hart) in NE 1/4 of NW 1/4
130	64	31	May -June 1883	Structure (G. Dagget) and associated cultivated field in SE 1/4 of SE 1/4
130	64	33	May -June 1883	Structure (C. Dickenson) in SE 1/4 of NE 1/4 and associated cultivated field in E 1/2 of NE 1/4
130	64	34	May -June 1883	Structure (J. Roberts) in SW 1/4 of NW 1/4 and associated cultivated field in W 1/2 of NW 1/4
130	64	35	May -June 1883	Structure (F. Tyler) in SE 1/4 of NE 1/4 and associated cultivated field in E 1/2 of NE 1/4. Structure and cultivated field (J.Keough) in SE 1/4 of SE 1/4. Structure (Eastwood) in SE 1/4 of SW 1/4 and associated cultivated field in S 1/2 of SW 1/4
130	64	36	May -June 1883	Structure (L.M. Hammond) in SW 1/4 of SW 1/4 and associated cultivated field in SE 1/4 of SW 1/4 and SW 1/4 of SE 1/4
130	65	33	May 1883	Structure (Henry Green) in SW 1/4 of NW 1/4. Structure (E. Mattie) in NW 1/4 of SW 1/4. Structure and cultivated field (R. Gabby) in SE 1/4 of NE 1/4. Structure and cultivated field (H.M. McConville) in SE 1/4 of SE 1/4
130	65	34	May 1883	Structure (T.C. Rice) in SW 1/4 of NW 1/4 and associated cultivated field in W 1/2 of NW 1/4. Structure and cultivated field (J. McConville) in SW 1/4 of SW 1/4
130	65	35	May 1883	Structure (L. Heminway) in NW 1/4 of NW 1/4. Structure (Alice E. Cochran) in NE 1/4 of NE 1/4
130	65	36	May 1883	Structure (Glover) in NW 1/4 of NW 1/4
130	66	23	August 1884	Unnamed road/trail begins/terminates in the NE 1/4 of the SE 1/4 and runs SW to NE through the SE 1/4 of the NE 1/4.
130	66	27	August 1884	Unnamed cultivated field in the NE 1/4 of the SE 1/4

Research Goals

Objectives/Methodology

The archaeological investigation consisted of a field review of specific locations within the project route that had high potential for archaeological deposits and had not been previously surveyed. Wetland areas and moderate to extreme slopes were not surveyed. The following methodology applies to investigations of the project route completed to date as well as to future investigations:

- Pedestrian walkover survey was completed of 26 of the approximate 30 miles of the 120-foot-wide project route.
- During the pedestrian walkover survey, locations along the route with surface visibility less than 25 percent were marked for potential shovel testing. If final design plans show that construction activity will impact one of these marked areas, it will be surveyed using shovel test techniques before any construction activity occurs at the identified location. These locations were identified as high to moderate potential areas for buried cultural deposits and not anticipated to extend beyond a depth of one meter. If cultural material is identified in any of these marked areas, shovel tests will be placed at 5 meter intervals in the four cardinal directions (where feasible) from the positive test in order to identify the extent of the site area. All excavated soils will be screened through a quarter-inch mesh hardware cloth. All shovel test locations will be recorded using Trimble GeoXT and Trimble Geo XH Global Positioning System units with sub meter accuracy. Shovel tests will be backfilled after all information is recorded.
- Soil profiles of each shovel test will be recorded using Munsell soil color charts.
- Digital photographs will be taken to record existing conditions.
- In general, artifacts will not be collected during survey. Photos of artifacts will be taken in the field. Additionally, non-diagnostic artifacts will be roughly sorted in the field according to material type, count, and manufacturing type. Diagnostic artifacts will be photographed, measured, and described as to material type, construction technique, and other important characteristics determined at the time of the find.

Montana-Dakota 230kV Transmission Line Work Summary

Montana-Dakota surveyed a total of 26 miles of the project route for the proposed 230 kV transmission line. The proposed route follows an existing 41.6-kV transmission line for approximately seventeen miles starting just west of Ellendale and heading west. (The 41.6 kV structures will be removed and new 230 kV structures will be constructed. The new structures will be double circuited and also house the existing 41.6 kV transmission line). At the junction of HWY 56 and HWY 11, the transmission line route turns north for five miles. At the junction of HWY 56 and 91st SE, the transmission line route turns west and parallels six miles of existing 230-kV transmission line. The proposed transmission line route will deviate from HWY 56 for approximately two miles as it bypasses the village of Wirch.

No shovel tests were performed during the fall survey. Pedestrian survey was conducted on approximately 26 miles of the proposed transmission line route. Potential shovel test locations were marked using a GPS unit, and if project plans indicate any of these areas will be impacted by construction, they will be shovel tested before construction activity occurs. Pedestrian survey was completed in 15 meter transects paralleling the route. If a cultural feature was identified, a close interval survey with transects of 1 meter or less was conducted surrounding the cultural feature. The close interval survey was conducted in an approximately 50 meter area surrounding the feature, or until the extent of the land form was encountered.

A summary of the cultural survey completed for the Montana-Dakota 230kV transmission line to date is presented below. Areas along the proposed transmission line route that were pedestrian surveyed are outlined with descriptions of the location and type of landform(s) present, a description of any cultural features observed, and associated corresponding pictures if appropriate.

Township 130N Range 67W Section 3

The route passes through the northern portion of this section. The route in this section was not surveyed yet as access was still being negotiated with the landowner. The section was visually inspected from a public road in order to strategize for field survey once access is granted.

At this time, the route in this section is heavily vegetated (primarily tall grass) and is located along a prominent east/west running ridge. Previous survey of the section has identified several sites consisting of surface rock features such as stone circles, rock alignments, cairns, other types of stone features, as well as cultural material scatters. Montana-Dakota anticipates any additional sites discovered during field survey for the proposed transmission line will be of a type and nature akin to those already identified during previous surveys.

In the northwest corner of this section, Montana-Dakota plans to build an interconnection substation for proposed adjacent wind project. The wind project is known as the Merricourt Wind Power Project (SHPO Reference Number: 09-1186B). Survey of the interconnect-substation location was completed by Kadrmas Lee & Jackson in the fall of 2010. At the time of that survey, no cultural resources were identified in the interconnect-substation location. This report has been reviewed by SHPO and recently SHPO has found that the survey and report are accurate and complete and that further survey for the interconnect-substation location will not be necessary as it has already undergone adequate cultural resource survey (ND SHPO REF: 09-1186B).

Township 130N Range 67W Section 2

The route passes through the northern portions of this section. The route in this section was not surveyed yet as access was still being negotiated with the landowner. The section was visually inspected from a public road in order to strategize for field survey once access is granted.

At this time, the route in this section is heavily vegetated (primarily tall grass) and is located along a prominent east/west running ridge. Previous survey of the section has identified several sites consisting of surface rock features such as stone circles, rock alignments, cairns, other types of stone features, as well as cultural material scatters. Montana-Dakota anticipates any additional sites discovered during field survey for the proposed transmission line will be of a type and nature akin to those already identified during previous surveys.

Township 130N Range 67W Section 1

The route passes through the northern portion of this section. The route in this section received pedestrian survey and is located at the eastern edge of a prominent east/west running ridge. The eastern end of the ridge is located approximately 0.3 miles to the north of the proposed route.

At the time of survey, the western portion of the proposed route in this section was in a cultivated hayfield. During the time of survey, 0 to 15 percent of the hayfield surface was visible. During survey of the proposed route in this portion of the section, the field crew was able to document obvious signs of cultivation and no distinctive landform features. Montana-Dakota has concluded that this field has a low probability to contain intact cultural resources and suggests no need for further work.

To the east of the hayfield, the proposed route in this section was in a recently planted winter wheat field. Visibility in this area was 80 to 90 percent. The field crew was able to document obvious signs of cultivation, and no prominent landforms were noted. Near the very eastern end of this field a few historic artifacts were noted (MDU-1). Montana-Dakota has concluded that this field has a low probability to contain intact cultural resources and suggests no need for further work.

In the last portion of this section, near the border of the field where the historic artifacts were identified, the proposed route traversed a disturbed grassy area located on a slight rise (MDU-1). Associated with the grassy disturbed area was a very large rock pile surrounding a tree. The grassy disturbed area is relatively small and the rest of the section is a hay field. Visibility in this area was 10 to 20 percent. The field crew observed that this area had been used as a hayfield for some time. Montana-Dakota has concluded that the field outside of the disturbed grassy area has a low probability to contain intact cultural resources and suggests no need for further work.

MDU 1

At the very eastern edge of the planted winter wheat field, on the boarder of the grassy area, a historic cultural material scatter was observed. The artifacts present were identified as multiple pieces of glass (cobalt), 2 pieces crockery/potter (one piece was wheel constructed and the other was slab constructed), a few fragments of white-ware, and cut bone.

In addition to the historic cultural material scatter, the grassy area contained five historic surface features, along with one brick fragment. No markings or words could be made out on the brick fragment. Feature 1 is a square shaped shallow depression measuring

approximately 4 meters by 4 meters. Feature 2 is a foundation/wall and depression located 15 meters south of feature 1. The depression is surrounded by a field stone foundation/wall. Feature 2 is square shaped and measures approximately 4 meters by 4 meters, and is approximately 30 to 50 centimeters deep. Feature 3 is a shallow, irregularly shaped depression located 5 meters east of Feature 2. Feature 3 measures 8 meters by 8 meters. An earthen berm surrounds Feature 3 and parts of the berm consist of fieldstone, especially on the eastern side of the depression. Feature 4 consists of a shallow depression approximately 1 meter in diameter and is located southwest of Feature 2. Feature 5 is located 2 meters east of Feature 4 and consists of a shallow depression with an approximate 50 centimeter diameter.

No artifacts were collected from this site, but a sample of the artifacts was photographed in case reference was needed.

Recommendation

MDU-1 appears to retain integrity of setting. If construction plans show that impact to this resource will occur, additional work is recommended here to further define the horizontal extent of the site and to better articulate the features and artifacts present. As a part of any additional work, further research should be completed to understand if this resource is significant under any of the NRHP eligibility criteria. At this time, Montana-Dakota is recommending that this resource be avoided by a 50-foot no construction buffer.

A conversation was held with Paul Picha (Chief Archaeologist from the North Dakota State Historic Preservation Office) on 1/13/2011 regarding this site. After the site location was described to him, he stated that he agreed with the treatment plan Montana-Dakota has proposed for the area. Montana-Dakota's treatment plan states that pole locations should be modified in the area so they will not affect the integrity of the site within this area and will avoid impact to this site. Montana-Dakota has accomplished this task by moving and lengthening the span between the poles in this section to avoid the site and 50-foot no construction buffer.

Township 130N Range 66W Section 6

The route passes through the middle of this section. The route in this section received pedestrian survey and is located at the eastern edge of a prominent east/west running ridge. The eastern end of the ridge is located approximately 1/2 mile to the north of the proposed route.

The western portion of the proposed route in this section was in a harvested wheat field. Visibility was 70 to 80 percent in the field. The field crew was able to see obvious signs of cultivation, and there were no distinctive landform features in this portion of the section. Montana-Dakota has concluded that this field has a low probability to contain intact cultural resources and suggests no need for further work.

To the east of the harvested wheat field, the proposed route crosses a brome grass/hay field approximately 100 meters wide. The brome grass field had 10 percent visibility, but it was obvious to the field crew that the ground had been disturbed through cultivation.

On the other side of the brome grass/hay field, the route enters a prairie grass field. The prairie grass field had 25 percent visibility. It is not believed by the field crew that this prairie field is original as plow scarring could be observed in some locations of the field and along the edges of the field. Montana-Dakota has concluded that this field has a low probability to contain intact cultural resources and suggests no need for further work.

During field survey of the eastern portion of this section, Montana-Dakota noticed two potential rock piles/cultural features located 75 meters to the north and 75 meters to the south of the project route. Montana-Dakota does not plan to disturb these areas.

Township 130N Range 66W Section 5

The route passes diagonally through the middle of this section. The route in this section received pedestrian survey and is located to the southeast of the prominent east/west running ridge, and the rise to the east of the highest point of the Coteau edge. The proposed route in this section goes through four different field types.

At the time of survey, the western portion of the proposed route was in a Private Land Open To Sportsmen (PLOTS) brome grass field. Visibility in this area was 0 to 15 percent. However, the field crew was able to observe signs of cultivation and there were no distinct landform features within this field. The field crew did not identify any cultural resource within this field. Montana-Dakota has concluded that this field has a low probability to contain intact cultural resources and suggests no need for further work.

To the east of the PLOTS brome grass field, the proposed route passes through a harvested soybean field. Visibility in this area was 70 to 90 percent. The field crew was able to document obvious signs of cultivation and there were no prominent landforms within this field. The field crew did not identify any cultural resources within this field. Montana-Dakota has concluded that this field has a low probability to contain intact cultural resources and suggests no need for further work.

To the east of the harvested soybean field, the proposed route passes through a prairie field. The field crew believed that this prairie field retains integrity and recommended that specific pole locations located within this area be shovel tested before construction activity occurs. Montana-Dakota did not identify any surface cultural resources within this field.

In the last field in this section, the proposed route passes through a harvested soybean field. Visibility in this area was 50 to 60 percent. The field crew observed obvious signs of cultivation and there were no prominent landforms within this field. The field crew did not identify any cultural resource within this field. Montana-Dakota has concluded that this field has a low probability to contain intact cultural resources and does not anticipate the need for further work.

Township 130N Range 66W Section 4

The route passes through the southwestern quarter of this section. The route in this section received a pedestrian survey and is located to the southeast of the prominent

east/west running ridge and the rise to the east of the highest point of the Coteau edge. The proposed route in this section goes through two different field types.

The western portion of the proposed route in this section was in a heavily cattle grazed prairie field. Visibility was 15 to 25 percent in the field. Montana-Dakota did not observe any surface cultural resources in the field. This field may contain intact buried cultural resources and specific pole locations should receive further survey through shovel testing before construction activity occurs.

The eastern portion of the proposed route in this section was in a heavily cattle grazed prairie field. Visibility was 15 to 25 percent in the field. Montana-Dakota did not observe any surface cultural resources in the field. This field may contain intact buried cultural resources and specific pole locations should receive further survey through shovel testing before construction activity occurs.

Township 130N Range 66W Section 9

The route follows the eastern border of this section. The route in this section was not surveyed yet as access was still being negotiated with the landowner. The section was visually inspected from a public road in order to strategize for field survey once access is granted. The route in this section is located to the southeast of the prominent east/west running ridge and the rise to the east of the highest point of the Coteau edge. It is also within this section that the proposed route stops heading east/west and instead heads north/south.

It appears as if the proposed route in this section is in a heavily cattle grazed prairie field. Visibility is suspected to be low in the field. This field may contain intact buried cultural resources and specific pole locations should receive further survey through shovel testing before construction activity occurs.

Township 130N Range 66W Section 16

The route passes through the middle of this section. The route in this section received pedestrian survey and is located to the southeast of the prominent east/west running ridge and the rise to the east of the highest point of the Coteau edge. The proposed route in this section goes through four different field types.

The very northern portion of the proposed route seems to be in a disturbed grassy area that is often used for grazing and is most likely associated with the house approximately 300 meters to the south. The grassy area was grazed heavily at the time and since horses could be seen in the near vicinity, it is suspected that this area is a horse pasture. At the very edge of the pasture, where it abuts 92nd Street, many large boulders are present. Visibility in the pasture was 25 percent. The field crew feels that the presence of the large rocks is not a natural feature for the area and that the rock/boulders could be associated with the road construction of 92nd Street or HWY 56. The field crew did not identify any distinct landform features or cultural resources within this field. Montana-Dakota has concluded that this field has a low probability to contain intact cultural resources and does not anticipate the need for further work.

Just to the west of the horse pasture, the proposed route passes through a narrow hayfield that had been cut within the last 4 to 6 weeks. The grass was short during the time of the pedestrian survey. Visibility in this area was 25 percent. The field crew could not determine any obvious signs of cultivation within the field. However, this location is situated at the high spot between an unnamed lake to the east and an unnamed lake to the west. The field crew did not identify any cultural resources within this field. This field may contain intact buried cultural resources and specific pole locations should receive further survey through shovel testing before construction activity occurs.

To the east and south of the hayfield the proposed route traverses a large horse grazed prairie pasture. The pasture extends from 92nd Street SE south for a half mile to the half section line. At the time of survey, approximately 30 to 50 horses were present in the field. Visibility in the area was 25 percent. The field crew could not determine any obvious signs of cultivation in this field, but a few areas of uncovered vegetative ground could be seen. The exact nature of what caused these open ground areas could not be determined. The soil matrix in these open areas was gravelly and sandy. The field crew located one cultural resource feature (MDU-2) in the middle of this field and two collapsed historic structures (MDU-3) at the southern end of this field. The field crew believed that this grazed prairie field retains integrity and recommends that specific pole locations receive further survey through shovel testing before construction activity occurs.

The last field in this section that the route passes through covers the entire southeast quarter section and consisted of a brome grass hayfield. The hayfield appeared to be part of a larger cattle grazing field as cattle could be seen in the distance within the field. Visibility in this area was 25 percent. The field crew could identify obvious signs of cultivation within this field. The field crew did not identify any cultural resources within this field. MDU has concluded that this field has a low probability to contain intact cultural resources and does not anticipate the need for further work.

MDU 2

In the middle of a large horse-grazed prairie pasture and within the proposed route, the field crew identified a stone circle on a relatively flat terrace adjacent to an unnamed, moderate sized pothole lake. The stone circle was approximately 7 meters in diameter and was made up of approximately 50 cobbles. The location of the circle offered good views to the south and west. Numerous other rocks and field stones were scattered across the terrace the feature is located on.

No artifacts were collected at this location, but it was photographed in case reference was needed.

Recommendation

MDU-2 appears to retain integrity of setting. If construction plans show that impact to this resource will occur, additional work is recommended here to further define the horizontal extent of the site and to better articulate the feature present. As apart of the additional work, further research should be completed to understand if this resource is significant under any of the NRHP eligibility criteria. At this time, Montana-Dakota has

modified the pole locations within this area to avoid impact to this site. Montana-Dakota has accomplished this task by moving and lengthening the span between the poles in this section to avoid the site and 50-foot no construction buffer.

MDU 3

Near the southern edge of the large horse-grazed prairie pasture, the field crew observed two collapsed buildings very near the shore of the unnamed pothole lake. The first structure was small in size and from the construction style, suggested that it may have been a one room cabin. The collapsed structure had shiplap siding, was held together via wire nail construction, and had green colored composite shingles on its roof. A few other pieces of metal could be seen strewn around the collapsed building.

The second collapsed structure was located approximately 10 meters to the south of the first structure. The second structure was very small in size, but had a gabled roof, shiplap siding, was held together with wire nails, and had wood singles on its roof.

No artifacts were collected at this location, but the collapsed structures were photographed in case reference was needed.

Recommendation

MDU-3 appears to retain integrity of setting, but because of construction techniques present and the types of materials used in the construction it does not seem to be old enough to qualify to be a historic property. Probable dates of construction and use of the structures is between 1960 and 1980. Montana-Dakota does not plan any further work for these structures and suggests that the ruins do not represent a significant historic property.

Township 130N Range 66W Section 21

The route passes through the middle of this section. The route in this section received pedestrian survey and is located to the southeast of the prominent east/west running ridge and the rise to the east of the highest point of the Coteau edge. The proposed route in this section goes through two different field types.

The northern portion of the proposed route passes through a rolling grass field with some long north/south trending wetlands/small lakes on either side of it. This field is large in size and is comprised of almost the entire northeast quarter section. The proposed route crosses over several small knolls in this area with wide low swales between them. The field was cut at the time of survey. The field crew could not determine any obvious signs of cultivation within this field. Visibility in this area was 25 percent. This field may contain intact buried cultural resources and specific pole locations should receive further survey through shovel testing before construction activity occurs.

South of the rolling grass field, the proposed route passes through a cattle-grazed pasture that covers the whole southeast quarter section plus a little more along its northern edge. That pasture appears to be comprised of native prairie, but in some locations it appears there are some very old disturbances. The disturbance areas could be associated with the large archaeological resource site at the southern edge of this section. Visibility in this area was 25 percent. The field crew did not identify any cultural resources within the

northern portions of this field, but did identify one cultural feature within the southern portion of this field (MDU-4). This field may contain intact buried cultural resources and specific pole locations should receive further survey through shovel testing before construction activity occurs.

The very southern portion of this field (the portion adjacent to 94th Street SE and HWY 56) is associated with the cattle pasture detailed above, but this area contains a large archaeological resource site, comprised of two individual elements (MDU-5 and MDU-6), and is spread over approximately 30 acres. Numerous disturbances can be seen in this area. Visibility in this area is 25 percent. Montana-Dakota has documented this area and has modified the placement of the poles in this section to retain resource integrity.

MDU 4

Near the middle of the large cattle grazed prairie pasture and within the proposed route, the field crew identified a stone circle on a relatively flat knoll adjacent to moderate sized wetland. The stone circle was approximately 5 meters in diameter and was made up of approximately 30 cobbles. The location of the circle offered good views in all directions. Numerous other rocks/field stones were scattered across the area where the feature is located.

No artifacts were collected at this location, but it was photographed in case reference was needed.

Recommendation

MDU-4 appears to retain integrity of setting. If construction plans show that impact to this resource will occur, additional work is recommended here to further define the horizontal extent of the site and to better articulate the feature present. As a part of the additional work, further research should be completed to understand if this resource is significant under any of the NRHP eligibility criteria. At this time, Montana-Dakota has modified the pole locations within this area to avoid impact to this site. Montana-Dakota has accomplished this task by moving and lengthening the span between the poles in this section to avoid the site and 50-foot no construction buffer.

MDU 5

The Wirch cemetery site is located just to the west of the proposed route. Within this small, assumed to be family, cemetery there are six clearly marked graves. However, the field crew visiting the site believes there may be unmarked graves present within the small cemetery. The cemetery is located on the side of a larger ridge and offers good views to the east which incorporates the ruins found at MDU-6. Because of this obvious view, it is believed that these two sites are potentially related to each other. The six clearly marked grave markers read:

- Johanness Wirch 4-10-1846 to 1-16-1933 Father
- Maria C. Wirch 10-17-1848 to 10-12-1921 Mother
- Herbert (G. C. F. ?) Wirch 5-15-1904 to 5-25-1904
- Nathaniel Zahn 4-15-1896 to 12-28-1898
- Margaretha Wirch 7-21-1883 to 11-12-1897

- Gottfried Zahn 9-14-1875 to 9-14-1918

Recommendation

A conversation was held with Paul Picha (Chief Archaeologist from the North Dakota State Historic Preservation Office) on 1/13/2011 at 9am regarding this site. After the site location was described to him, he stated that he also believed the cemetery and farmstead locations were related. He also agreed with the treatment plan Montana-Dakota has proposed for the area which states that pole locations should be modified in the area so they will not effect the visual connection between the cemetery (MDU-5) and the farmstead (MDU-6) and will, therefore, avoid impact to this site and retain an unimpeded visual connection between the sites. Montana-Dakota has accomplishing this task by moving and lengthening the span between the poles in this section to avoid the site and 50-foot no construction buffer.

MDU 6

A farmstead ruin (possibly the Wirch farmstead and/or possibly the original village of Wirch) site is located just to the east of the proposed route. The farm site is located on a rise of land surrounded by wetlands. The site contains 23 surface features and is spread over approximately 30 acres. This farmstead location has good views in all directions, and in particular, it has an obvious view of the Wirch Cemetery (MDU-5). Because of this obvious view, it is believed that these two sites are potentially related to each other. Montana-Dakota plans to give a detailed description of this area as apart of the Class III Inventory, but in brief, the farmstead site contains these resources: multiple structure/building ruins/foundations, numerous depressions, buried metal pipes, and old road beds.

Recommendation

A conversation was held with Paul Picha (Chief Archaeologist from the North Dakota State Historic Preservation Office) on 1/13/2011 at 9am regarding this site. After the site location was described to him, he stated that he also believed the farmstead and cemetery locations were related. He also agreed with the treatment plan Montana-Dakota has proposed for the area which states that pole locations should be modified in the area so they will not effect the visual connection between the cemetery (MDU-5) and the farmstead (MDU-6) and will, therefore, avoid impact to this site and retain an unimpeded visual connection between the sites. Montana-Dakota has accomplished this task by moving and lengthening the span between the poles in this section to avoid the site and 50-foot no construction buffer.

Township 130N Range 66W Section 28

The route follows the eastern border of the section. The route in this section received pedestrian survey and is located to the southeast of the prominent east/west running ridge and the rise to the east of the highest point of the Coteau edge. The proposed route in this section goes through two different field types and crosses HWY 56.

The field on the west side of HWY 56 that contains the route is a cattle pasture. The route passes through the northwest portion of this section. This cattle pasture is large in size and comprises almost the entire northeast quarter of this section. The field in this area trends down in elevation to HWY 56 and does not contain any prominent features. The field crew could not determine any obvious signs of cultivation within this field.

Visibility in this area was 25 to 30 percent. Montana-Dakota has concluded that this field has a low probability to contain intact cultural resources and suggests no need for further work.

The field on the east side of HWY 56 that contains the route is a cattle pasture. At the time of survey, no animals could be seen in the field and it appeared as though it may not have been used for this purpose for some time. The cattle pasture is large in size and takes up the entire northwest section of township 130N Range 66W Section 27 plus more along the section's north and west edge. Just south of where the route crosses HWY 56 in this section, on the eastern edge of the HWY, the field crew encountered what appeared to be an old road bed. This road bed was fairly well defined, fairly long, and fairly wide. It is suspected by the field crew that this road bed represents an old alignment of HWY 56. Visibility in this area was 25 percent. The field crew did not identify any cultural resources within this field. It is thought that only one small area of this field, located south of the wetland and before the old road bed, has potential to contain intact buried cultural resources. This field may contain intact buried cultural resources and specific pole locations should receive further survey through shovel testing before construction activity occurs.

Township 130N Range 66W Section 27

The route follows the western border of the section. The route in this section received pedestrian survey and is located to the southeast of the prominent east/west running ridge and the rise to the east of the highest point of the Coteau edge. The proposed route in this section goes through one field type.

The field on the east side of HWY 56 that contains the route is a cattle pasture. The route passes through the southwest portion of this section. This cattle pasture is large in size and comprises almost the entire southwest quarter of the section. The field in this area trends upward in elevation from HWY 56 and does not contain any prominent features. The landscape here is rolling with small knolls and low swales. Along a narrow ridge near the northwest corner of the section, the field crews observed an old road leading to some standing structures approximately a quarter mile to the east. The field crew could not determine any obvious signs of cultivation within this field. Visibility in this area was 25 to 30 percent. Montana-Dakota has concluded that this field has a low probability to contain intact cultural resources and suggests no need for further work.

At the very southern edge of this field, within the proposed route, the field crews identified a U.S. Coast and Geodetic Survey Azimuth Marker dated to 1963. At this time Montana-Dakota will provide a 50-foot no disturbance buffer around the marker. Montana-Dakota contacted the U.S. National Geodetic Survey Agency (Mark Aughtman, State Geodetic Coordinator) to see if any special restrictions or regulations should be followed in relation to the marker. He responded stating, "The agency asks that you don't

disturb the marker, but other than that, no special considerations apply to the marker (personal communication: Mark Aughtman, 02/04/2011).”

Township 130N Range 66W Section 34

The route passes through the western portion of this section. The route in this section received pedestrian survey and is located to the southeast of the prominent east/west running ridge and the rise to the east of the highest point of the Coteau edge. In addition, in the southwest quarter of the section, the proposed route turns and heads east towards the Ellendale substation. The proposed route in this section goes through four field types and one gravel pit.

The northern portion of this section that the proposed route passes through is a large cattle grazing pasture. The cattle pasture encompasses almost the entire northwest quarter of this section. Visibility in the pasture was 25 percent. The field crew did identify a prominent ridge and one cultural resource feature within this field (MDU-7). This field may contain intact buried cultural resources and specific pole locations should receive further survey through shovel testing before construction activity occurs.

To the south of the cattle pasture, the proposed route passes through a narrow hayfield that had been cut within the last 4 to 6 weeks. The grass was short at the time of the pedestrian survey. Visibility in this area was 25 percent. The field crew could determine obvious signs of cultivation within the field. The field crew did not identify any cultural resources within this field. Montana-Dakota has concluded that this field has a low probability to contain intact cultural resources and suggests no need for further work.

To the south of the hayfield, the proposed route traverses a moderately sized gravel pit. Surface visibility in this area was excellent, generally around 90 to 100 percent. The field crew observed obvious signs of disturbance caused by heavy equipment used in excavating gravel. Because of the exposed nature of the area, the field crew took a little time to try and identify appropriate material types for lithic tools that may have been contained in the subsurface matrix. The field crew was only able to identify a very limited amount of appropriate lithic tool material. Montana-Dakota has concluded that this field has a low probability to contain intact cultural resources and suggests no need for further work.

To the south of the gravel pit, the proposed route passes through a narrow cattle pasture and hayfield that had been cut within the last 4 to 6 weeks. The cattle pasture was very small and adjoined a barn/farmstead location. The hayfield was also small and the grass was short. Visibility in this area was 25 to 35 percent. The field crew could not determine obvious signs of cultivation within the hayfield. The field crew did not identify any cultural resources within this hayfield or cattle pasture. Montana-Dakota has concluded that this field has a low probability to contain intact cultural resources and suggests no need for further work.

To the south of the cut hayfield, the proposed route turns east and trends upward in elevation. This field is a cattle pasture and extends east to the section line. Visibility in this area was 15 to 20 percent. The field crew could not determine obvious signs of

cultivation within the field. Because the route passes very near a moderately sized pothole lake, shovel testing is recommended at specific pole locations near the lake where construction activity will occur. Just east of the half section line, the field crews identified a cultural feature (MDU-8). Just to the east of feature MDU-8, the crew identified two cultural features in association with each other (MDU-9). In addition, in the very south east corner of the field, the crew identified two cultural features in close association with each other composed of larger rocks and boulders (MDU-10).

MDU-7

Near the northern end of the route in this section, the field crew identified a stone rock alignment near the base of a knoll slope. The stone alignment was approximately 2 meters long and was made up of approximately 10 larger cobbles. The location of the alignment offered good views to the south and southeast. Few other rocks/field stones could be seen in the area.

No artifacts were collected at this location, but it was photographed in case reference was needed.

Recommendation

MDU-7 appears to retain integrity of setting. If construction plans show that impact to this resource will occur, additional work is recommended here to further define the horizontal extent of the site and to better articulate the feature present. As a part of the additional work, further research should be completed to understand if this resource is significant under any of the NRHP eligibility criteria. At this time, Montana-Dakota has modified the pole locations within this area to avoid impact to this site. Montana-Dakota has accomplished this task by moving and lengthening the span between the poles in this section to avoid the site and 50-foot no construction buffer.

MDU-8

Near HWY 11 at the half section line where the route passes through this area, the field crew identified a cairn on the southeast slope of a knoll. The cairn was approximately 2 meters long and was made up of approximately 50 cobbles. The location of the cairn offered good views to the south and southeast. Few other rocks/field stones could be seen in the area.

No artifacts were collected at this location, but it was photographed in case reference was needed.

Recommendation

MDU-8 appears to retain integrity of setting. If construction plans show that impact to this resource will occur, additional work is recommended here to further define the horizontal extent of the site and to better articulate the feature present. As a part of the additional work, further research should be completed to understand if this resource is significant under any of the NRHP eligibility criteria. At this time, Montana-Dakota has modified the pole locations within this area to avoid impact to this site. Montana-Dakota has accomplishing this task by moving and lengthening the span between the poles in this section to avoid the site and 50-foot no construction buffer.

MDU-9

Near HWY 11 just east of the half section line and MDU-8 where the route passes through this area, the field crew identified a cairn and a large rock alignment. The cairn is located on a small flat knoll and comprised of approximately 75 cobbles and covering approximately a 2 meter area. The large rock alignment is located just to the east of the cairn and is approximately 100 meters long and comprised of numerous large rocks/boulders. The long rock alignment trends in a north/south direction. The location of these features offers good views in all directions. No obvious signs of mechanical disturbance could be found to explain the rock alignment. Few other rocks/field stones could be seen in the area.

No artifacts were collected at this location, but it was photographed in case reference was needed.

Recommendation

MDU-9 appears to retain integrity of setting. If construction plans show that impact to this resource will occur, additional work is recommended here to further define the horizontal extent of the site and to better articulate the features present. As a part of the additional work, further research should be completed to understand if this resource is significant under any of the NRHP eligibility criteria. At this time, Montana-Dakota has modified the pole locations within this area to avoid impact to this site. Montana-Dakota has accomplished this task by moving and lengthening the span between the poles in this section to avoid the site and 50-foot no construction buffer.

MDU-10

Near HWY 11 just east of MDU-9 where the route passes through this area, the field crew identified two rock alignments. The rock alignments are on a slight southeast facing slope over a wetland and are comprised of approximately 50 cobbles each and cover approximately 3 to 8 meters in area. No obvious signs of mechanical disturbance could be found to explain the rock alignments. Few other rocks/field stones could be seen in the area.

No artifacts were collected at this location, but it was photographed in case reference was needed.

Recommendation

MDU-10 appears to retain integrity of setting. If construction plans show that impact to this resource will occur, additional work is recommended here to further define the horizontal extent of the site and to better articulate the features present. As a part of the additional work, further research should be completed to understand if this resource is significant under any of the NRHP eligibility criteria. At this time, Montana-Dakota has modified the route and pole locations within this area to avoid impact to this site. Montana-Dakota has accomplished this task by shifting the route to the west.

Township 129N Range 66W Section 3

The route follows the eastern border of this section. The original proposed route alignment in this section received pedestrian survey. Since the pedestrian survey, the

route has shifted slightly to the west. The new route has not received pedestrian survey. The route in this section is located just to the west of the rise of the highest point of the Coteau edge. The proposed route in this section goes through one field type.

The field that a small portion of the proposed route passes through is a sheep grazing pasture. The sheep pasture encompasses almost the entire northeast quarter of this section. The route in this field travels along generally sloped land and/or low land. Visibility in the pasture was 25 to 40 percent. The field crew plans to assess this field as a part of the spring survey to ascertain if additional pedestrian and/or shovel test survey is needed for the re-route portion. Any work completed in the re-route will be documented in the Class III report.

Township 129N Range 66W Section 2

The route passes through the northern portion of the section. The route in this section received pedestrian survey and is located just to the west of the rise of the highest point of the Coteau edge. The proposed route in this section goes through one field type.

The field the route passes through in this section is rolling uplands. To the north and south are some moderately sized wetlands. The field itself consisted of tall grass, but did not appear to be natural prairie. Visibility in this area was 5 to 10 percent. No cultural resources were observed during survey. This field may contain intact buried cultural resources and specific pole locations should receive further survey through shovel testing before construction activity occurs.

At the very eastern edge of this section, the route passes into a grassland easement. At the time of survey the property owner did not allow access for survey. Montana-Dakota plans to survey this area when access is granted.

Township 129N Range 66W Section 1

The route passes through the northern portion of this section. The route in this section received pedestrian survey and is located on the rise of the highest point of the Coteau edge. The proposed route in this section goes through two field types.

At the northwest quarter of this section the route is in grassland easement. At the time of survey the property owner did not allow access for survey. Montana-Dakota plans to survey this area when access is granted.

In the northeast quarter of this section, the route is in Waterfowl Protection Area (WPA) land. The field the route passes through in this section is rolling uplands. Numerous wetlands of varying size are located in this quarter. The area is heavily vegetated with tall grass. Visibility in this area was 5 to 10 percent. No cultural resources were observed in the western portions of this field. This field may contain intact buried cultural resources and specific pole locations should receive further survey through shovel testing before construction activity occurs.

At the eastern edge of this section, the route pass through some oddly shaped cattle pastures. The pastures were heavily grazed offering 25 to 35 percent visibility. Within the pasture, the field crew identified one cultural resource feature (MDU-11).

MDU-11

Near the eastern edge of the section, in an oddly shaped cattle pasture and within the proposed route, the field crew identified a stone circle in a low area near some wetlands. The stone circle was approximately 3.5 meters in diameter and was made up of approximately 9 cobbles. The location of the circle offered a northern view. Numerous other rocks/field stones were scattered across the area.

No artifacts were collected at this location, but it was photographed in case reference was needed.

Recommendation

MDU-11 appears to retain integrity of setting. If construction plans show that impact to this resource will occur, additional work is recommended here to further define the horizontal extent of the site and to better articulate the feature present. As a part of the additional work, further research should be completed to understand if this resource is significant under any of the NRHP eligibility criteria. At this time, Montana-Dakota has modifying the pole locations within this area to avoid impact to this site. Montana-Dakota has accomplished this task by moving and lengthening the span between the poles in this section to avoid the site and 50-foot no construction buffer.

Township 129N Range 65W Section 6

The route passes through the northern portion of this section. The route in this section received pedestrian survey and is located just to the east of the rise of the highest point of the Coteau edge. On the eastern edge of this section is the lip of the Coteau. The proposed route in this section goes through one field type.

The field the route passes through in this section consists of rolling uplands that lead to a more dramatic topography as the field reaches the lip of the Coteau. Few wetlands can be found in this area, but small springs and streams can be found coming out of the Coteau edge. The area is heavily vegetated with tall grass. Visibility in this area was 5 to 10 percent. Cultural resource features were observed in the western portions of this field (MDU-12). This field may contain intact buried cultural resources and specific pole locations should receive further survey through shovel testing before construction activity occurs.

MDU-12

Near the western edge of the section, in a cattle pasture and within the proposed route, the field crew identified a stone circle and two cairns in close proximity to each other. The features were identified on top of some small rises near each other. The stone circle was approximately 2 meters in diameter and was made up of approximately 15 cobbles. One of the cairns was approximately 1 meter in size and made up of approximately 8 cobbles (it is believed that a portion of this cairn be buried). The other cairn is large, approximately 15 meters in diameter and composed of approximately 40 cobbles. The

location of the features offered a northern view. Numerous other rocks/field stones were scattered across the area.

No artifacts were collected at this location, but it was photographed in case reference was needed.

Recommendation

MDU-12 appears to retain integrity of setting. If construction plans show that impact to this resource will occur, additional work is recommended here to further define the horizontal extent of the site and to better articulate the features present. As a part of the additional work, further research should be completed to understand if this resource is significant under any of the NRHP eligibility criteria. At this time, Montana-Dakota has modified the pole locations within this area to avoid impact to this site. Montana-Dakota has accomplished this task by moving and lengthening the span between the poles in this section to avoid the site and 50-foot no construction buffer.

Township 129N Range 65W Section 5

The route passes through the southern half of this section in a diagonal direction. The route in this section received pedestrian survey. The section is located just to the east of the Coteau lip edge. The proposed route in this section goes through one field type.

The field the route passes through in this section is mostly sloped, as it is right at the edge of the Coteau edge. The field was being used as cattle pasture at the time of survey. Few wetlands can be found in this area, but small springs and streams can be found coming out of the Coteau edge. The area is heavily vegetated with tall grass. Visibility in this area was 20 to 25 percent. Cultural resource features were observed in the western portions of this field (MDU-13). This field may contain intact buried cultural resources and specific pole locations should receive further survey through shovel testing before construction activity occurs.

MDU-13

Near the western edge of the section, in a cattle pasture and within the proposed route, the field crew identified two small stone circles and one stone arc in close proximity to each other. The features were identified at the base of the Coteau slope. One stone circle was approximately 1 meter in diameter and made up of approximately 30 cobbles. The other stone circle was approximately 4 meters in diameter and made up of approximately 50 cobbles. The stone arc was approximately 4 meters in size and made up of approximately 25 cobbles. The location of the features offered a view to the north, east, and south. Few other rocks/field stones were scattered across the area.

No artifacts were collected at this location, but it was photographed in case reference was needed.

Recommendation

MDU-13 appears to retain integrity of setting. If construction plans show that impact to this resource will occur, additional work is recommended here to further define the horizontal extent of the site and to better articulate the features present. As a part of the

additional work, further research should be completed to understand if this resource is significant under any of the NRHP eligibility criteria. At this time, Montana-Dakota has modified the pole locations within this area to avoid impact to this site. Montana-Dakota has accomplished this task by moving and lengthening the span between the poles in this section to avoid the site and 50-foot no construction buffer.

Township 129N Range 65W Section 8

The route touches the northeastern border of this section. The route in this section received pedestrian survey and is located just to the east of the Coteau edge. The proposed route in this section goes through one field type.

The proposed route actually only impacts the very northeast corner of this field. The location where construction activity is planned has already been disturbed by previous transmission line construction and road construction. Visibility in this area was 25 percent and no cultural resource features or material were observed when surveyed. Montana-Dakota has concluded that this field has a low probability to contain intact cultural resources and does not anticipate the need for further work.

Township 129N Range 65W Section 9

The route follows the northern border of this section. The route in this section received pedestrian survey and is located to the east of the Coteau edge out on the flats. The proposed route in this section goes through four field types.

The proposed route passes through the very northern edge of this section. The first field in this section had 25 percent visibility and was a cut hayfield that showed previous signs of cultivation. The second field in this section had 25 percent visibility and was grazed pasture that showed previous signs of cultivation. The third field in this section was fallow with 20 percent visibility, but surveyors could determine obvious signs of prior cultivation. The fourth field in this section consisted of planted wheat and had 70 to 80 percent visibility. No cultural resource features or materials were observed in any of these fields. Montana-Dakota has concluded that these fields have a low probability to contain intact cultural resources and does not anticipate the need for further work.

Township 129N Range 65W Section 10

The route follows the northern border of this section and received pedestrian survey. This section is located to the east of the Coteau edge out on the flats. The proposed route in this section goes through four field types.

The proposed route passes through the very northern edge of this section. The first field in this section had 50 to 70 percent visibility and consisted of a harvest hayfield. The second field in this section had 90 to 100 percent visibility and consisted of harvest wheat. The third field in this section had 70 to 80 percent visibility and consisted of planted wheat. The fourth field in this section consisted of a tilled wheat field and had 60 to 70 percent visibility. No cultural resource features or materials were observed in any of these fields. Montana-Dakota has concluded that these fields have a low probability to contain intact cultural resources and does not anticipate the need for further work.

Township 129N Range 65W Section 11

The route follows the northern border of this section and received pedestrian survey. This section is located to the east of the Coteau edge out on the flats. The proposed route in this section goes through two field types.

The proposed route passes through the very northern edge of this section. The first field in this section had 50 to 70 percent visibility and consisted of harvest corn. The second field in this section had 25 percent visibility and consisted of harvest soybean. No cultural resource features or materials were observed in any of these fields. Montana-Dakota has concluded that these fields have a low probability to contain intact cultural resources and does not anticipate the need for further work.

Township 129N Range 65W Section 12

The route follows the northern border of this section and received pedestrian survey. This section is located to the east of the Coteau edge out on the flats. The proposed route in this section goes through five field types.

The proposed route passes through the very northern edge of this section. The first field in this section had 15 to 20 percent visibility and consisted of a prairie field. It could not be determined if this field had received previous cultivation. The second field in this section had 80 to 90 percent visibility and consisted of harvest wheat. This field in this location that the route passes through is very narrow, as it is encroached upon by a stream. The third field in this section had 70 to 80 percent visibility and consisted of a tilled wheat field. The fourth field in this section consisted of a harvest soybean field and had 70 to 90 percent visibility. No cultural resource features or materials were observed in any of these fields. These fields may contain intact buried cultural resources and specific pole locations should receive further survey through shovel testing before construction activity occurs.

Township 129N Range 64W Section 7

The route follows the northern border of this section and received pedestrian survey. This section is located to the east of the Coteau edge out on the flats. The proposed route in this section goes through four field types.

The proposed route passes through the very northern edge of this section. The first field in this section had 70 to 80 percent visibility and consisted of a tilled wheat field. The second field in this section had 80 percent visibility and consisted of standing corn. The third field in this section had 25 percent visibility and consisted of a fallow field that showed obvious signs of cultivation. The fourth field in this section consisted of a tilled wheat field and had 70 to 80 percent visibility. No cultural resource features or materials were observed in any of these fields. Montana-Dakota has concluded that these fields have a low probability to contain intact cultural resources and does not anticipate the need for further work.

Township 129N Range 64W Section 8

The route follows the northern border of this section and received pedestrian survey. This section is located to the east of the Coteau edge out on the flats. The proposed route in this section goes through three field types.

The proposed route passes through the very northern edge of this section. The first field in this section had 25 to 50 percent visibility and consisted of planted wheat. The second field in this section had 25 percent visibility and consisted of harvested soybeans. The third field in this section had 25 to 50 percent visibility and consisted of planted wheat. No cultural resource features or materials were observed in any of these fields. Montana-Dakota has concluded that these fields have a low probability to contain intact cultural resources and does not anticipate the need for further work.

Township 129N Range 64W Section 9

The route follows the northern border of this section and received pedestrian survey. This section is located to the west of Pheasant Lake, out on the flats. The proposed route in this section goes through three field types.

The proposed route crosses HWY 11 at this point, and passes through the very northern edge of this section. The first field in this section had 40 to 50 percent visibility and consisted of planted wheat. The second field in this section had 15 to 20 percent visibility and consisted of prairie pasture. At the eastern edge of this field, the route crosses a stream. The third field in this section had 60 to 70 percent visibility and consisted of a harvested soybean field. No cultural resource features or materials were observed in any of these fields. These fields may contain intact buried cultural resources and specific pole locations should receive further survey through shovel testing before construction activity occurs.

Township 129N Range 64W Section 10

The route follows the northern border of this section and received pedestrian survey. This section is located just to the west of Pheasant Lake, out on the flats. The proposed route in this section goes through four field types.

The proposed route passes through the very northern edge of this section. The first field in this section had 10 percent visibility and consisted of an uncut hayfield that showed obvious signs of prior cultivation. The second field in this section had 10 percent visibility and consisted of a pasture with an old abandoned farmstead and yard associated with one part of it. In addition, a stream is present at the field's eastern edge. The third field in this section had 70 to 100 percent visibility and consisted of a harvested soybean field. The fourth field in this section had 10 to 25 percent visibility and consisted of hayfield with signs of cultivation and at some prior time was part of a farmstead yard. No cultural resource features or materials were observed in any of these fields. These fields may contain intact buried cultural resources and specific pole locations should receive further survey through shovel testing before construction activity occurs.

On this section's east edge, adjacent to the lake and within the route, there were four grain bins. Two of the grain bins were constructed of wood, while the other two were

constructed of steel. At this time, Montana-Dakota does not consider these structures as historic properties and has no plans to further evaluate them.

Township 129N Range 64W Section 11

The route follows the northern border of this section and received pedestrian survey. This section is located just to the east of Pheasant Lake, out on the flats. The proposed route in this section goes through two field types.

The proposed route passes through the very northern edge of this section. The first field in this section had 90 to 100 percent visibility and consisted of tilled soybeans. The second field in this section had 50 percent visibility and consisted of harvested corn. No cultural resource features or materials were observed in any of these fields. Montana-Dakota has concluded that these fields have a low probability to contain intact cultural resources and does not anticipate the need for further work.

Township 129N Range 64W Section 12

The route follows the northern border of this section and received pedestrian survey. This section is located to the east of Pheasant Lake, out on the flats. The proposed route in this section goes through one field type.

The proposed route passes through the very northern edge of this section. The only field in this section had 15 to 25 percent visibility and consisted of a large prairie cattle pasture. The pasture seems to take up the entire northern half of this section. A large wetland splits the northeastern quarter of this section. No cultural resource features or materials were observed in any of these fields. This field may contain intact buried cultural resources and specific pole locations should receive further survey through shovel testing before construction activity occurs.

Township 129N Range 63W Section 7

The route follows the northern border of this section and received pedestrian survey. This section is located to the east of Pheasant Lake, out on the flats. The proposed route in this section goes through three field types.

The proposed route passes through the very northern edge of this section. The first field in this section had 60 to 70 percent visibility and consisted of harvested soybeans. The second field in this section had 35 to 50 percent visibility and consisted of harvested corn. The third field in this section had 25 percent visibility and consisted of harvested soybeans. No cultural resource features or materials were observed in any of these fields. Montana-Dakota has concluded that these fields have a low probability to contain intact cultural resources and does not anticipate the need for further work.

Township 129N Range 63W Section 8

The route follows the northern border of this section and received pedestrian survey. This section is located to the west of the Ellendale substation, out on the flats. The proposed route in this section goes through three field types.

The proposed route passes through the very northern edge of this section. The first field in this section had 90 to 100 percent visibility and consisted of a tilled soybean field. The second field in this section had 15 to 20 percent visibility and consisted of a pasture field that showed previous signs of cultivation. The third field in this section had 50 to 60 percent visibility and consisted of a harvested corn field. No cultural resource features or materials were observed in any of these fields. Montana-Dakota has concluded that these fields have a low probability to contain intact cultural resources and does not anticipate the need for further work.

Township 129N Range 63W Section 9

The route follows the northern border of this section and received pedestrian survey. This section is located just to the west of the Ellendale substation, out on the flats. The proposed route in this section goes through two field types.

The proposed route passes through the very northern edge of this section. The first field in this section had 15 to 25 percent visibility and consisted of a cattle grazed pasture that showed signs of previous cultivation. The second field in this section had 10 to 15 percent visibility and consisted of a fallow field that showed previous signs of cultivation. No cultural resource features or materials were observed in any of these fields. Montana-Dakota has concluded that these fields have a low probability to contain intact cultural resources and does not anticipate the need for further work.

Township 129N Range 63W Section 10

The route touches the northwestern corner of the section and has received pedestrian survey. This section is located adjacent to the Ellendale substation, out on the flats. The proposed route in this section goes through one field type.

The proposed route passes through the very northwestern corner of this section. The field in this section had 15 to 25 percent visibility and consisted of a graded, tall grass field. The soil in this area was compact, gravelly, and uniform. Since the Ellendale substation is relatively new and obvious signs of construction could be seen in the area, Montana-Dakota believes this area has received prior disturbance. No cultural resource features or materials were observed in any of these fields. Montana-Dakota has concluded that this field has a low probability to contain intact cultural resources and does not anticipate the need for further work.

Summary Table of Resources Identified

Table 5: Archaeological Sites Identified During Class III Survey					
Site Number	Field Number	Site Type	Cultural Affiliation	NRHP Eligibility Recommendation	Management Recommendation
	MDU 1	Farmstead	Euroamerican	Unevaluated	Avoidance. If site cannot be avoided, further work will be needed

Table 5: Archaeological Sites Identified During Class III Survey

Site Number	Field Number	Site Type	Cultural Affiliation	NRHP Eligibility Recommendation	Management Recommendation
	MDU 2	Stone Feature	Precontact	Unevaluated	Avoidance. If site cannot be avoided, further work will be needed
	MDU 3	Historic Resource	Euroamerican	Unevaluated	No further work
	MDU 4	Stone Feature	Precontact	Unevaluated	Avoidance. If site cannot be avoided, further work will be needed
	MDU 5	Cemetery	Euroamerican	Unevaluated	Avoidance. If site cannot be avoided, further work will be needed
	MDU 6	Farmstead	Euroamerican	Unevaluated	Avoidance. If site cannot be avoided, further work will be needed
	MDU 7	Stone Feature	Precontact/	Unevaluated	Avoidance. If site cannot be avoided, further work will be needed
	MDU 8	Stone Feature	Precontact	Unevaluated	Avoidance. If site cannot be avoided, further work will be needed
	MDU 9	Stone Feature	Precontact	Unevaluated	Avoidance. If site cannot be avoided, further work will be needed
	MDU 10	Stone Feature	Precontact	Unevaluated	Avoidance. If site cannot be avoided, further work will be needed
	MDU 11	Stone Feature	Precontact	Unevaluated	Avoidance. If site cannot be avoided, further work will be needed
	MDU 12	Stone Feature	Precontact	Unevaluated	Avoidance. If site cannot be avoided, further work will be needed
	MDU 13	Stone Feature	Precontact	Unevaluated	Avoidance. If site cannot be avoided, further work will be needed