MONTANA-DAKOTA
UTILITIES CO.
A Division of MDU Resources Group, Inc.

400 North Fourth Street
Bismarck, ND 58501
(701) 222-7900

January 28, 2011

Mr. Jeffrey Towner
Field Supervisor
U.S. Fish and Wildlife Service
North Dakota Ecological Services
3425 Miriam Ave
Bismarck, North Dakota 58501-7926

RE: Montana-Dakota Utilities Co.'s proposed Merricourt Wind Farm to Ellendale 230 kV transmission line project conservation measures and marking plan

Dear Mr. Towner:

Montana-Dakota Utilities Co. (MDU) is drafting a consolidated application for a Certificate of Corridor Compatibility and Route Permit to the North Dakota Public Service Commission (PSC) for their proposed Merricourt Wind Farm to Ellendale 230 kilovolt (kV) transmission line project (Project). MDU proposes to construct, own, and operate an approximate 30-mile-long 230 kV transmission line from their existing Ellendale Junction Substation to a new Merricourt Wind Farm Interconnect Substation in McIntosh and Dickey counties, North Dakota. Approximately, 17 of the 30 miles will be upgraded transmission system with MDU's existing Ashley to Ellendale 41.6 kV transmission line. In fall 2010, MDU conducted wetlands delineation, whooping crane habitat, and began Class III cultural resources surveys of the proposed route.

As attached for your review, MDU proposes conservation measures and a line marking plan for the Project (Attachment 1). The conservation measures are intended to avoid and minimize potential affects to wildlife. Conservation measure highlights include:

- Minimizing the amount of new transmission line corridor and impacts to previously undisturbed areas by siting the proposed Project with upgrades of the existing transmission system and adjacent to an existing transmission line and state highway.
- Marking the proposed Project in compliance with US Fish and Wildlife Service (USFWS) Region 6 Guidelines dated February 4, 2010.
- Working with the USFWS to remove the existing 41.6 kV transmission line structures from wetlands under USFWS easement on the upgraded line and site new transmission line structures outside of wetland boundaries.

In addition, MDU has provided a memorandum of the cultural resources survey on the LSB Waterfowl Production Area (WPA) for your review as Attachment 2 to this correspondence. MDU's consultant, HDR Engineering, Inc., was able to complete a pedestrian survey of the LSB WPA that identified one site and

52 PU-10-164 Filed 05/12/2011 Pages: 21
MDU Exhibit 3
Montana-Dakota Utilities Co., a Division of MDU Resources Group, Inc.

three areas that would need shovel testing before construction. Shovel testing would occur in the spring 2011 and a Class III survey report prepared and submitted to the State Historic Preservation Office (SHPO) and USFWS for concurrence.

MDU requests that the USFWS provide concurrence with the proposed transmission line conservation measures and marking plan (Attachment 1) and the route proposal, subject to completion of a Class III cultural resources survey, crossed by the upgraded portion of the Project. MDU would like to submit the PSC permit application for this Project by February 1, 2011 and would like to submit a copy of the USFWS' concurrence with the PSC permit application if possible.

MDU appreciates USFWS reviewing the conservation measures and route proposal and also appreciates that the agency has been available at short notice to discuss changes to the conservation measures and marking plan over the past couple months in order for it to be finalized. A timely review of the finalized plan and request for concurrence letter would be greatly appreciated to meet the February 1, 2011 PSC permit application submittal date. If you have questions regarding the proposed Project or require additional information, please contact Tom Crary of MDU at 701-222-7685 or Brian Hunker of HDR Engineering, Inc. at 763-278-5927.

Sincerely,

Henry Ford
Electric Transmission Engineering Manager

Attachment 1: Proposed Conservation Measures and Line Marking Plan
Attachment 2: Cultural Resources Memorandum on the LSB Waterfowl Production Area

cc: Terry Ellsworth, USFWS - North Dakota Ecological Services
Barry Williams, USFWS - North Dakota Ecological Services
Michael "Mick" Erickson, USFWS – Kulm Wetland Management District
Jerry Lien, North Dakota Public Service Commission
Tom Crary, MDU
Chad Miller, MDU
Wayne Bauer, HDR
Jason Brunner, HDR
Brian Hunker, HDR

Attachment 1

Proposed Conservation Measures and Line Marking Plan

Montana-Dakota Utilities Co. Merricourt Wind Farm to Ellendale 230 kV Transmission Line Project

Proposed Conservation Measures and Line Marking Plan

1.0 Introduction

Montana-Dakota Utilities Co. (MDU) has proposed to construct, own, and operate an approximate 30-mile-long 230 kV transmission line from their existing Ellendale Junction Substation near Ellendale, North Dakota in Dickey County to a new Merricourt Wind Farm Interconnect Substation in McIntosh County, North Dakota. This project is called the Merricourt Wind Farm to Ellendale 230 kilovolt (kV) transmission line project (Project). Approximately, 17 of the 30 miles will be upgraded transmission system with MDU's existing Ashley to Ellendale 41.6 kV transmission line. The 17 miles extend from about the intersection of State Highways 56 and 11 to the Ellendale Junction Substation (Figure 1).

Based upon the information received from the U.S. Fish and Wildlife Service (USFWS), North Dakota Ecological Services Field Office, three federally-listed endangered or threatened species may occur in the proposed Project area (June 24, 2010 letter reply from Project notification letter dated May 27, 2010): whooping crane (*Grus americana*), piping plover (*Charadrius melodus*), and gray wolf (*Canis lupus*).

2.0 Project Description

The proposed Project consists of the following three major components. The route for the proposed transmission line is shown in Figure 1.

1. **230 kV High Voltage Transmission Line** – Consisting of about 30 miles of new, high-voltage, three-phase alternating current (AC) electric transmission line from the existing MDU-owned Ellendale Junction Substation, located about 1.5 miles west of Ellendale, North Dakota in Section 10, T129N, R63W, Dickey County to a proposed Interconnect Substation, located in Section 3, T130N, R67W, McIntosh County about 15 miles east-northeast of Ashley, North Dakota. The proposed Project would require a crossing of Pheasant Lake, an impoundment of the Elm River.

   Approximately, 12 of the 30 miles are going to be new right-of-way from the Interconnect Substation east to the intersection of State Highway 56 and MDU's existing Ashley to Ellendale 41.6 kV transmission line in Section 3, T129N, R66W. The remaining 18 of 30 miles will be upgraded transmission system with MDU's existing Ashley to Ellendale 41.6 kV transmission line.

   While final engineering and design has not been completed, the transmission line would likely be constructed from wood H-frame structures (see Diagram 1 below). The upgraded transmission system would require taller structures with shorter spans between structures. Typical, H-frame structures will be approximately 70-90 feet in height with an average span of about 800-feet-long (500-feet-long span for the upgraded line) and a maximum span of approximately 1,000 feet under some circumstances. The right-of-way required for the new line is planned to be 120-feet-wide. The upgraded line will occur within MDU's existing right-of-way.

   The conductor would be 954 MCM ACSR, 45/7, Rail. Two shield wires, also known as lightning protection wires, are planned. One shield wire would be fiber optic ground wire (OPGW) on one

side and extra high strength (EHS) steel cable as the installed shield wire on the other side for the entire 30-mile-long transmission line length. No fiber optic regeneration stations are proposed for this Project.

2. **Ellendale Junction Substation Upgrades** – Substation upgrades would occur within the existing substation's fenced boundary. This would involve the addition of one 230 kV circuit breaker, one 230 kV line termination structure, one 230 kV disconnect switch, associated arresters, Coupling Capacitor Voltage Transformer (CCVTs), buswork and protective relaying, and controls required to support the circuit breaker and the system protection function. The existing 230/115 kV transformer would also be replaced with a new 230/115 kV 90/120/150 MVA auto-transformer. This new transformer requires additional protective relaying and control equipment, and replacement of the existing lightning arrestors.

3. **Interconnect Substation** – A new 230 kV substation would be located adjacent to the Merricourt Wind Farm Collector Substation. This new substation footprint, including the operations and maintenance buildings and fencing, would occupy approximately an area of approximately 5.5 acres (490 ft x 490 ft) within an approximate 10-acre parcel of land.

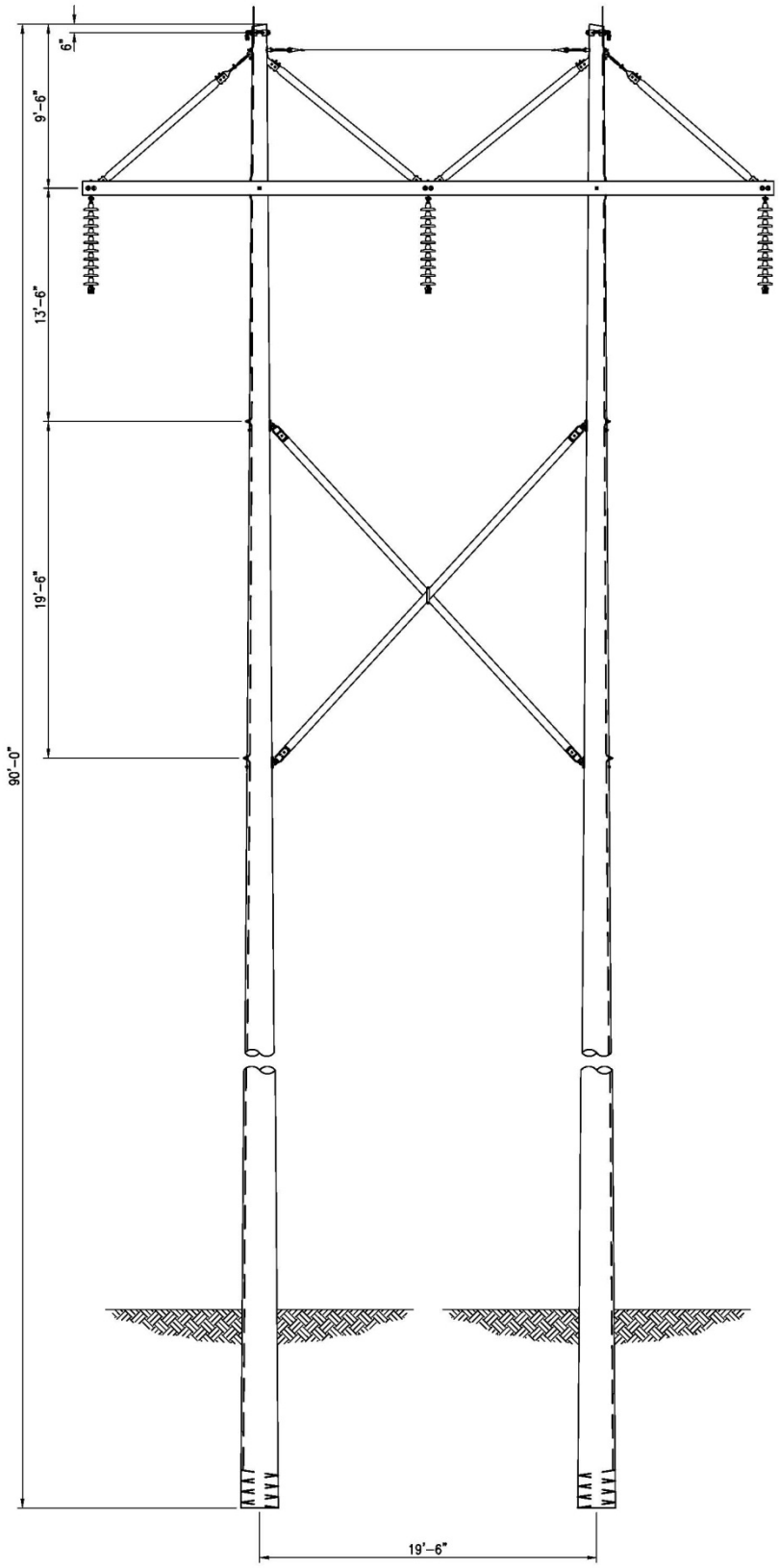
   The new substation would be an open air design that would constructed out of steel structures with aluminum bus conductor. The substation would consist of four 230-kV circuit breakers, 230-kV bus and line switches, buswork, associated arresters, CCVTs and protective relaying devices for four 230kV line terminals – one to the Collector Substation, one to Wishek 230 kV line, one to Tatanka 230 kV line, and one to connect the proposed Project. The site would also have a control house that contains the system protection devices, a System Control and Data Acquisition (SCADA) system and a battery bank.

3.0 Transmission Line Route Description

The following is a description of the route from west to east starting at the Interconnect Substation to the Ellendale Junction Substation (Figure 1). The route proceeds south from the Interconnect Substation for approximately 0.1 miles to MDU's existing Wishek to Tatanka 230 kV transmission line, then turns to parallel the northside of the Wishek to Tatanka 230 kV transmission line for about 6 miles to State Highway 56. The route turns south to parallel State Highway 56 for about 6.5 miles to MDU's existing Ashley to Ellendale 41.6 kV transmission line. The route will be upgraded with MDU's existing Ashley to Ellendale 41.6 kV transmission line for the remainder of the 17.3 of 29.9 miles to the Ellendale Junction Substation.

The existing 41.6 kV transmission line structures will be removed and upgraded with new 230 kV transmission line structures that are slightly larger in size, although the structures would be wood H-frame as currently used. The impacts are expected to be minimal because construction will occur in a previously disturbed corridor and will not create a new transmission line corridor in the area.

Diagram 1



4.0 Construction Techniques

Typical transmission line construction steps:

1. Survey structure locations and identify ingress and egress locations
2. Auger the holes where the structures will be set
3. Assemble the structure on the ground adjacent to the holes
4. Lift structure, place in hole, and backfill with soil or crushed rock
5. Sting wires
6. Restore right-of-way
7. Energize line

MDU will minimize impacts during construction of the transmission line by using existing public and private roads, where possible, and all construction equipment will follow the same two-track to ingress and egress the structure site. The total area that may be temporarily disturbed within the vicinity of each structure is expected to be confined to an area within the right-of-way of about 120-feet-wide by 100-feet-long (12,000 ft^2 or 0.28 acres). No permanent access roads will be constructed for the proposed Project; however, temporary construction access roads will be needed in some locations to access structure locations. Temporary construction access roads will utilize existing public and private roads where possible, and will be up to 20-feet-wide and located within the right-of-way or through disturbed uplands (e.g., farmed land) where no existing roads provide access.

Restoration Procedures

During construction, crews would attempt to limit ground disturbance wherever possible. Upon completion of construction activities, landowners would be contacted to determine if any damage has occurred as a result of the proposed Project. If damage has occurred to crops, fences, or the property, MDU would fairly reimburse the landowner for the damages sustained or repair the damages. Disturbed areas would be restored to their pre-construction condition to the maximum extent practicable or required by landowner. Post-construction reclamation activities include removing and disposing of debris, dismantling all temporary facilities (including staging areas), leveling or filling tire ruts, alleviating

soil compaction, and reseeding non-cultivated areas disturbed by construction activities with vegetation similar to that which was removed.

Erosion control measures (i.e. silt fencing) would be implemented as necessary to minimize runoff during construction. Specific measures would be determined once final design of the route is complete, and a field review is made to determine any areas of concern. Access routes to structure locations would be reviewed prior to the mobilization of equipment so erosion concerns can be avoided or minimized. Construction crews exercise caution when equipment is within 50 feet of streams and rivers.

Maintenance Procedures

Transmission infrastructure has very few mechanical elements and is built to withstand normal weather extremes. With the exception of severe weather, such as tornadoes and heavy ice storms, transmission lines rarely fail. They are automatically taken out of service by the operation of protective relaying equipment when a fault is sensed on the system; such interruptions are usually only momentary. Scheduled maintenance outages are also infrequent. As a result, the average annual availability of transmission infrastructure is very high, in excess of 99 percent.

Transmission line maintenance would be done with existing crews and would be carried out on an as-needed basis. To the extent practical, non-emergency repairs would be scheduled to avoid conflicts with agricultural practices and when the ground is wet or when access would be difficult. MDU would use the right-of-way to perform inspections by fixed wing aircraft or pickups/ATVs, to maintain equipment and to make repairs over the life of the proposed Project. Permanent roads and trails are not required and would not be constructed or maintained. MDU would also conduct routine maintenance to remove undesired vegetation that may interfere with the safe and reliable operation of the proposed line.

Construction Schedule

The schedule duration would be contingent upon design parameters, routing decisions, allocation of construction teams, and other factors (such as adverse weather conditions). Generally, the proposed Project is expected to take approximately 6 months to construct. Construction would begin in the spring of 2011 and the proposed in-service date is December 2011.

5.0 Conservation Measures

To avoid and minimize potential effects to wildlife, the following conservation measures would be implemented:

- Designing and siting the transmission line and structures according to Avian Power Line Interaction Committee's (APLIC) 2006 Suggested Practices for Avian Protection on Power Lines and Mitigating Bird Collisions with Power Lines: The State of the Art in 2006.
- Reduce the number of new corridors by siting the entire length of the transmission line adjacent to existing transmission lines and a state highway. The first approximate 6 miles were sited about 130 feet north of the existing Wishek-Tatanka 230 kV transmission line, the next approximately 6.5 miles were sited parallel to State Highway 56, and the remaining 17.3 miles were upgraded with the existing Ashley to Ellendale 41.6 kV transmission line. MDU believes that there will be fewer impacts to the resources by upgrading the existing corridor and minimizing the creation of a new corridor in the proposed Project area.
- Worked with enXco Development Company to site the Interconnect Substation adjacent to the Collector Substation to eliminate aboveground transmission lines for the wind project site.
- Design the transmission structures to reduce the number of wire planes – the proposed Project will have two planes of wires – One (top) plane for the shield wires and a second (lower) plane

for the conductors on the new section. And three planes of wires – One (top) for the shield wires and two lower planes for the conductors on the 41.6kV rebuilt section.

- Marking both shield wires of the transmission line in an alternating pattern with a spiral-type visual marking device. A line marking plan is discussed in further detail below in Section 6.0.
- MDU would provide the USFWS with a written confirmation that the shield wires were marked and the location of markers per the USFWS Region 6 Guidelines.
- Conducted preconstruction surveys for wetlands and avoiding direct impacts to wetlands.
- Performed a field survey with the USFWS Kulm Wetland Management District to review wetland delineations. Based upon the field survey, the USFWS Kulm Wetland Management District agreed that no piping plover breeding habitat was identified within the proposed Project right-of-way.
- Provided wetland delineation maps to the USFWS Kulm Wetland Management District and will work with USFWS to remove the existing 41.6 kV transmission line structures from wetlands under USFWS easements and site the new transmission line structures outside of wetland boundaries.
- Replace trees at a 2:1 mitigation ratio, per the North Dakota Public Service Commission's requirement and subject to landowner approval.
- Incorporate the proposed Project into MDU's existing Avian Protection Plan.
- To discourage active nesting within parts of the right-of-way expected to be temporarily or permanently disturbed by the proposed Project, tree removal, ground clearing, or mowing would occur in early spring to discourage tree and ground nesting. Typical, nesting season would be from April to August.
- If the ROW is not cleared of vegetation in early spring before the breeding season, a qualified biologist would survey the construction ROW for active ground nests and provide a construction buffer.
- Avoid refueling vehicles within 100 feet of a waterway's edge to minimize the potential for hazardous-materials spills reaching the waterway.
- Refine right-of-way agreements with landowners along 41.6 kV transmission line and would provide the USFWS with written documentation of the new easements.

6.0 Line Marking Plan

The USFWS outlined proposed Project issues and conservation measures within their reply to MDU's Project notification letter dated June 24, 2010. In addition, on June 10, 2010, MDU discussed the proposed Project with North Dakota state and federal agencies at an Interagency Meeting at the US Army Corps of Engineer's office in Bismarck, North Dakota. Specifically, the USFWS mentioned the threat of power lines to migrating whooping cranes, a federally-endangered species. At the June 10, 2010 meeting and within the June 24, 2010 letter, the USFWS discussed line marking as a conservation measure to reduce the potential for whooping cranes and other migratory birds to collide with a transmission line, as follows:

> Conservation measures to avoid or reduce potential impacts to whooping cranes and piping plovers include, but are not limited to: burying all new electrical transmission lines; if new transmission lines cannot be buried, mark all new overhead transmission lines within one mile of suitable whooping crane stopover habitat with visual marking devices such as aviation marker balls, swinging plates, spiral vibration dampeners, or swan flight diverters to make the lines more visible, reducing the potential for avian collision.

The western 70 percent of the proposed Project, approximately 21.3 of 29.9 miles are located within the 85 – 95 percent sighting corridor for the whooping crane. The remaining 30 percent of the proposed Project (about 8.6 miles) is located beyond the 95 percent sighting corridor (Figure 1). MDU proposes to mark the proposed Project per the USFWS Region 6 Guidelines dated February 4, 2010. Table 1 provides a breakdown of the proposed Project's line lengths based upon the "new line" and "upgraded line" designations as stated in the USFWS Region 6 Guidelines. In October 2010, MDU conducted field surveys for suitable whooping crane habitat within one mile of the proposed right-of-way.

Table 1: Project Line Lengths

	Within the 95% Sighting Corridor	Outside of the 95% Sighting Corridor	Total
New Line (mi) (Interconnect Substation to 41.6 kV ROW)	12.6	0	12.6
Upgraded Line (mi) (41.6 kV ROW)	8.7	8.6	17.3
Total	21.3	8.6	29.9

Table 2 summarizes the proposed line marking lengths. Based upon the habitat survey, about 11.3 miles of the proposed Project are designated as new line located within one mile of suitable whooping crane habitat within the 95 percent sighting corridor. According to the USFWS Region 6 Guidelines 3(a)(i), the location of this new line should be marked, and MDU will mark this line. Also, 3(a)(i) indicates that an equal amount to 11.3 miles of existing line should be marked. Within the 95 percent sighting corridor, about 3.3 miles of the proposed Project qualify as upgraded line within one mile of suitable whooping crane habitat to be marked. According to the USFWS Region 6 Guidelines 3(a)(ii), the location of this upgraded line should be marked and MDU will mark this line. About 5.1 miles of the proposed Project are classified as upgraded line within one mile of suitable whooping crane habitat, but this line is beyond the 95 percent sighting corridor and MDU will mark this line.

To meet the USFWS Region 6 Guidelines, MDU proposes to mark 11.3 miles of the existing Wishek to Tatanka 230 kV transmission line as compensatory line marking (refer to Figure 2). MDU proposes to mark 11.3 miles of the company's existing Wishek to Tatanka 230 kV transmission line from 1.2 miles east of the Spring Valley (T130N, R66W) – Grand Valley (T130N, R65W) township line to about 1-mile west of the Merricourt Substation. The existing Wishek to Tatanka 230 kV transmission line is located about 150-feet south of the new line. Note that MDU proposes to mark Pheasant Lake due to its potential use by migratory waterfowl, although it is not suitable habitat for the whooping crane.

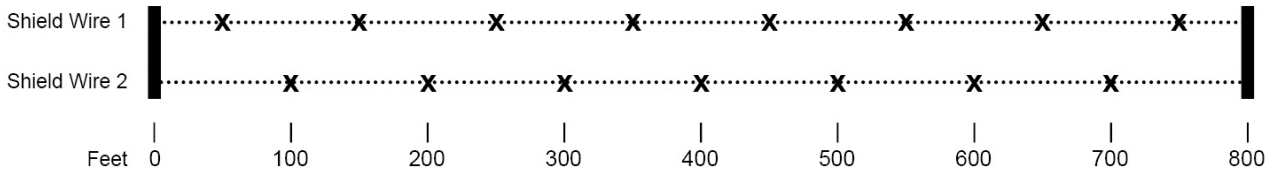
Table 2: Proposed Line Marking Lengths

	Within the 95% Sighting Corridor	Outside of the 95% Sighting Corridor
Marked New Line near Suitable Habitat (Interconnect Substation to 41.6 kV ROW) (mi)	11.3	0
Marked Upgraded Line near Suitable Habitat (41.6 kV ROW) (mi)	3.3	5.1
Existing 230 kV Line That Would Marked As Compensatory (mi)	11.3	0

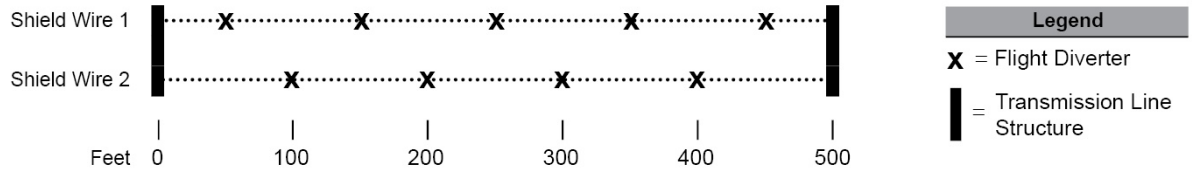
MDU plans to install flight diverters, most likely a swan-type diverter, in an alternating pattern along the shield wires for the length of the proposed Project. Swan flight diverters have shown a reaction from birds at a greater distance from the power line than other bird flight diverters. MDU proposes to mark each shield wire with flight diverters spaced about 100 feet apart. The diverters would be staggered with each other to give the appearance, looking from the side, that they are 50 feet apart and to make the shield wires more visible in a horizontal plane. MDU proposes to begin and end line marking about 50 feet from the structure. Diagram 2 shows the proposed alternating pattern of flight diverters. Bird flight diverters will be mounted on OPGW and EHS shield wires per manufacture instructions.

Diagram 2

800-Foot-Wide Span



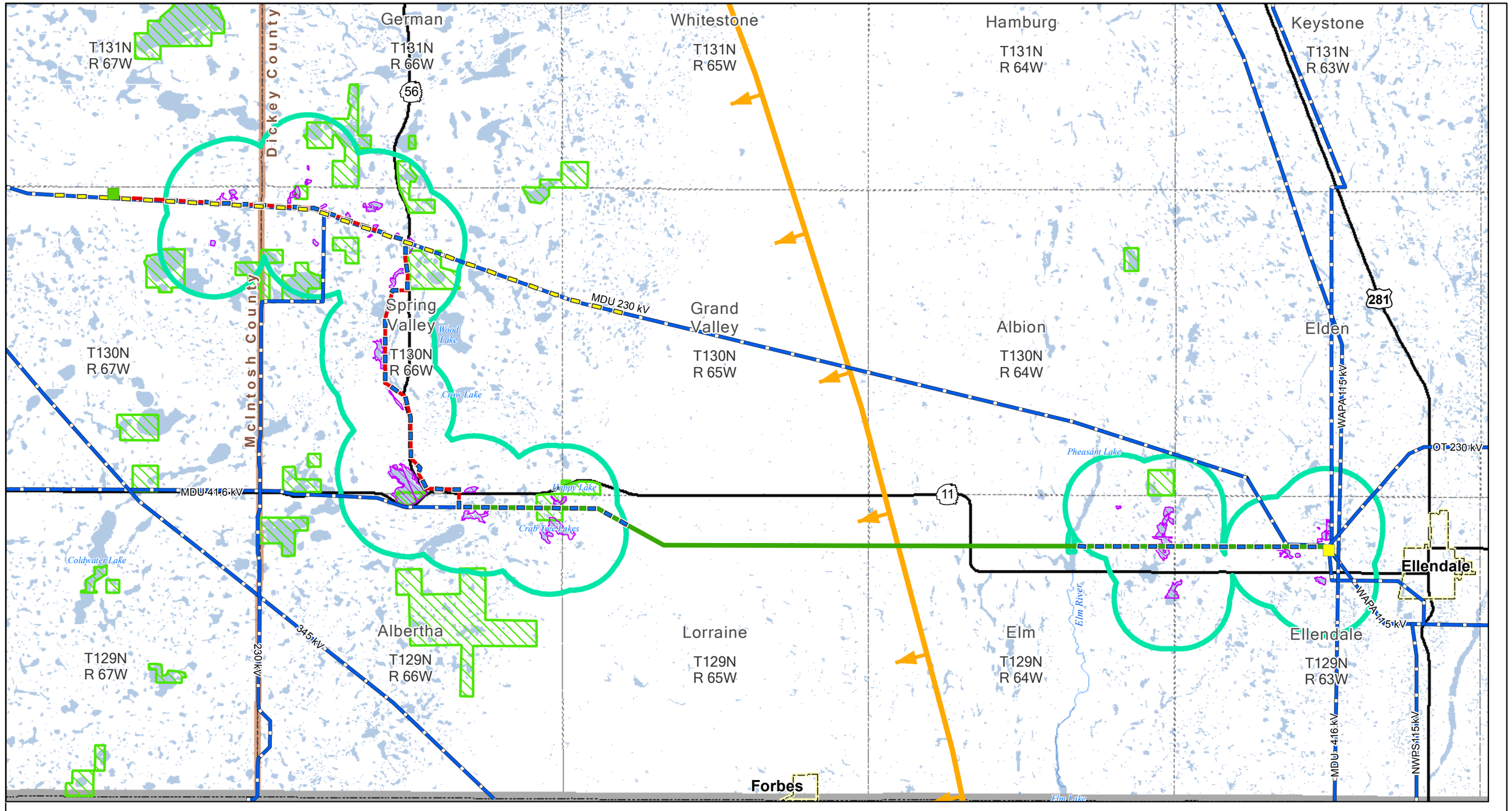
500-Foot-Wide Span



A single, 800-foot-wide span (as proposed for the new line portion of the Project) would have about eight flight diverters on one shield wire and seven flight diverters on the second wire. A single, 500-foot-wide span (as proposed for the upgraded line of the Project) would have five flight diverters on one shield wire and four flight diverters on the second wire. Line marker installation would occur at the end of construction and testing.

MDU will provide the USFWS North Dakota Ecological Services with written confirmation that the shield wires of the transmission lines were marked.

MDU believes that this line marking plan is consistent with the USFWS Region 6 Guidelines and will maintain the baseline condition from the potential affect of the proposed Project to the whooping crane and migratory birds.



- Compensatory Marked Line
- Marked Line
- Upgraded Line
- New Line
- Whooping Crane Habitat Wetlands
- 1 Mile Buffer of Suitable Habitat
- 95% Whooping Crane Sighting Corridor
- Proposed Interconnect Substation
- Existing MDU Ellendale Jct. Substation
- Existing Transmission Line
- USFWS WPA or WDA
- Incorporated Area
- Highway
- Stream
- Wetland

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Note: Total Length of the Proposed Route is 29.9 miles.

Figure 1
Overall Line Marking Plan
Montana-Dakota Utilities Co.
Merricourt Wind Farm to Ellendale Project

0 1 2 Miles

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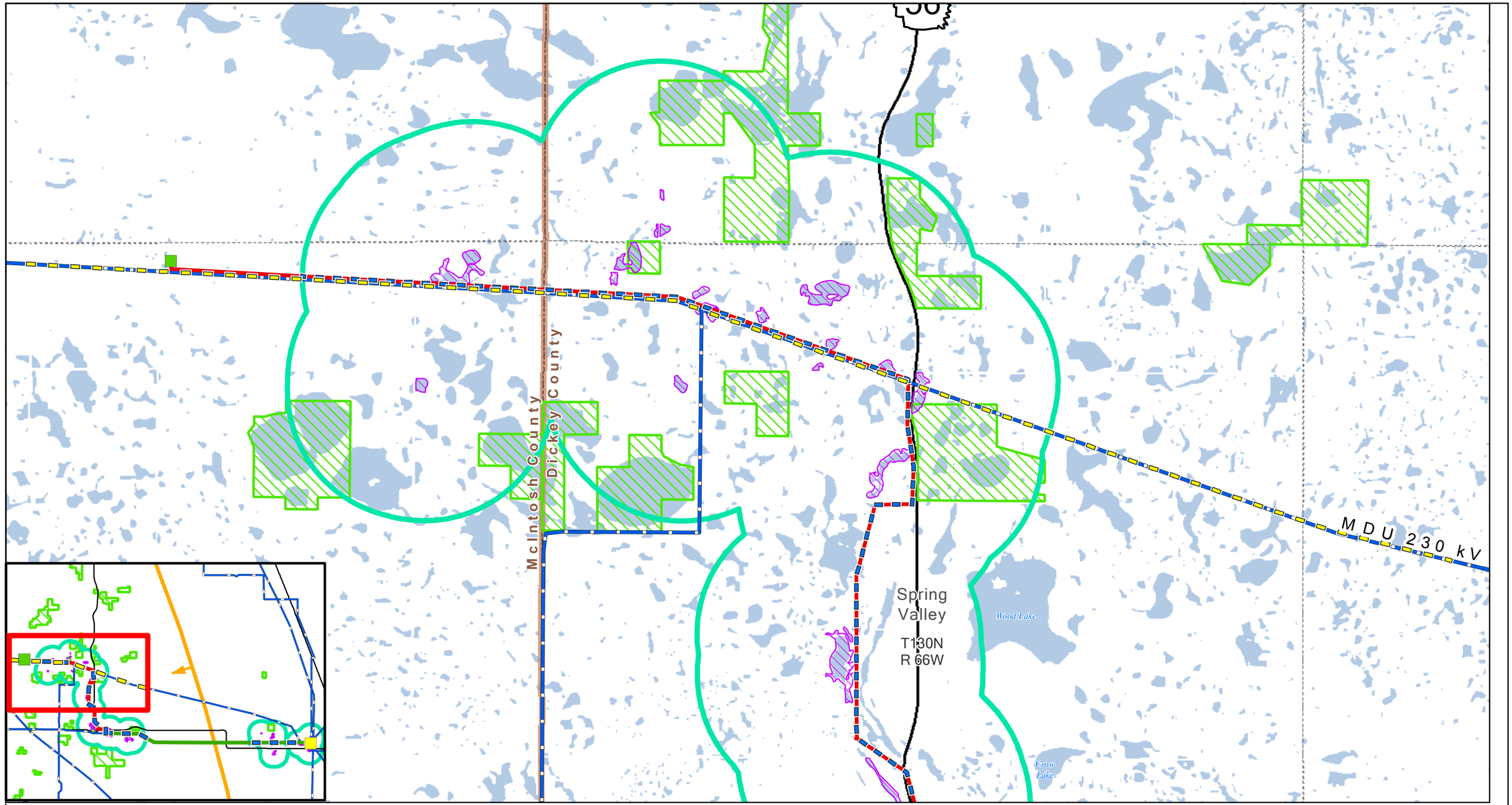

Compensatory Marked Line
Marked Line
Upgraded Line
New Line

Whooping Crane Habitat Wetlands
1 Mile Buffer of Suitable Habitat
95% Whooping Crane Sighting Corridor

Proposed Interconnect Substation
Existing MDU Ellendale Jct. Substation
Existing Transmission Line
USFWS WPA or WDA

Incorporated Area
Highway
Stream
Wetland

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Note: Total Length of the Proposed Route is 29.9 miles.

Figure 2
Compensatory Line Marking Plan
Montana-Dakota Utilities Co.
Merricourt Wind Farm to Ellendale Project

0 0.5 1 Miles

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Attachment 2

Cultural Resources Memorandum on the LSB Waterfowl Production Area

Introduction

The purpose of this memorandum is to provide the United States Fish and Wildlife Service (USFWS) with a summary of the cultural resources survey efforts that have been completed, the findings of those efforts, and the tasks that will be preformed in the spring 2011 as part of the Class III Intensive Archaeological Resource Inventory on the LSB Waterfowl Production Area (WPA). The LSB WPA is located in the northeast quarter of Section 1 of T129N and R66W. Please see figures 1 and 2 for reference.

Montana-Dakota Utilities Co. (MDU) proposes to construct, own, and operate a 230 kV transmission line in McIntosh and Dickey counties, North Dakota (Project). Approximately 17 miles of the proposed Project are being routed on MDU's existing 41.6 kV transmission line right-of-way (ROW) that crosses USFWS fee title land – LSB WPA. MDU proposes a 120-foot-wide ROW for the Project.

MDU contracted HDR Engineering, Inc. (HDR) to complete a Class III Intensive Archaeological Resources Inventory for the Project. On November 10, 2010, HDR completed a pedestrian survey of MDU's existing ROW on the LSB WPA as an initial step to support the Class III Archaeological Inventory effort by identifying and recording, if present, surface archaeological resource features located within the ROW. Resource features identified in this way were used to modify construction plans so as to not impact identified archaeological resources. HDR considered the impact to the parcel from potential access roads and pole locations. At this time no access roads are planned for this area, since the ROW will be used for access.

A United States Department of the Interior Permit for Archaeological Investigations was obtained in October 2010so MDU's archaeological investigation would be in compliance with the Archaeological Resource Protection Act (ARPA) of 1979 (16 U.S.C. 470aa-mm) and its regulations (43 CFR 7). The permit number is FWS.R6.11.002.

Landscape Description of the LSB WPA

This area of the Project is located on the rise of the highest point of the Missouri Coteau. The LSB WPA is characterized by rolling uplands with numerous wetlands of varying sizes (Photograph 1). The area is heavily vegetated with tall grass. Visibility in this area was about 5-10%. No cultural resources were observed in the western portion of the WPA.

Photograph 1: Overview of the ROW as it traverses the LSB WPA from its western edge, looking east.

At the eastern edge of the LSB WPA the ROW pass through fenced cattle pastures. The pastures were heavily grazed offering about 25-35% visibility. Within one of the pastures, HDR identified one cultural resource feature (MDU-11). Please see Photograph 2, below.

Cultural Resource Findings

Site Number: MDU-11

Near the eastern edge of the LSB WPA, HDR identified a stone circle in a low area near wetlands. The stone circle was approximately 3.5 meters in diameter and was made up of approximately 9 visible cobbles (Photograph 2). The location of the circle offered a southern view. Numerous other rocks/field stones were scattered across the area.

No artifacts were collected at this location, but it was photographed and the site location was recorded with GPS, in case reference was needed.

Photograph 2: Overview of MDU-11 looking south.

Resource Recommendation for MDU-11

MDU-11 appears to retain integrity of setting. HDR recommends that this resource be avoided by a 50-foot-wide no construction buffer around the feature (Figure 1). If the construction buffer is utilized, no further data recovery work is planned for this location at this time. If impacts are anticipated, additional work is recommended to further define the horizontal extent of the site and to better articulate the feature. As apart of the additional work, research should be completed to understand if this resource is a significant NRHP eligible or potentially eligible historic property.

Recommendations for Proposed Shovel Testing Areas

HDR recommends that portions of the ROW with limited visibility (5-10%), which will receive impact, and that, have the potential to contain intact buried cultural resources be shovel tested. As a result of the pedestrian survey, three shovel test areas were identified with limited visibility where transmission line structures will be located on the LSB WPA(Figures 1 and 2).

Shovel testing of these areas is planned for spring 2011.

HDR will complete a Class III Archaeological Inventory of the Project in spring 2011. Upon completion of the report, HDR will provide the report to USFWS and the State Historic Preservation Office (SHPO) for review and concurrence.

T130N
R 66W

T130N
R 65W

T129N
R 66W

T129N
R 65W

LSB WPA

LSB WPA

Happy Lake

Crab Tree Lakes

Grassland Easement

32DI85

MDU-11

MDU 41.6 kV

36 31 1 6 11

138 137 136 135 134 133 C 132 131 130 129

A B

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- Proposed Centerline (new)
- Pole Location (new)
- ROW (120 ft)
- Existing Transmission Line
- Planned Shovel Test Area
- Cultural Resource Feature (50 ft buffer)
- NDCRS Site or Lead
- USFWS WPA
- Delineated Wetland
- Lake or Pond
- Wetland

Figure 1
USFWS LSB WPA
Cultural Resource Survey
Montana-Dakota Utilities Co.
Merricourt Wind Farm to Ellendale Project

0 500 Feet

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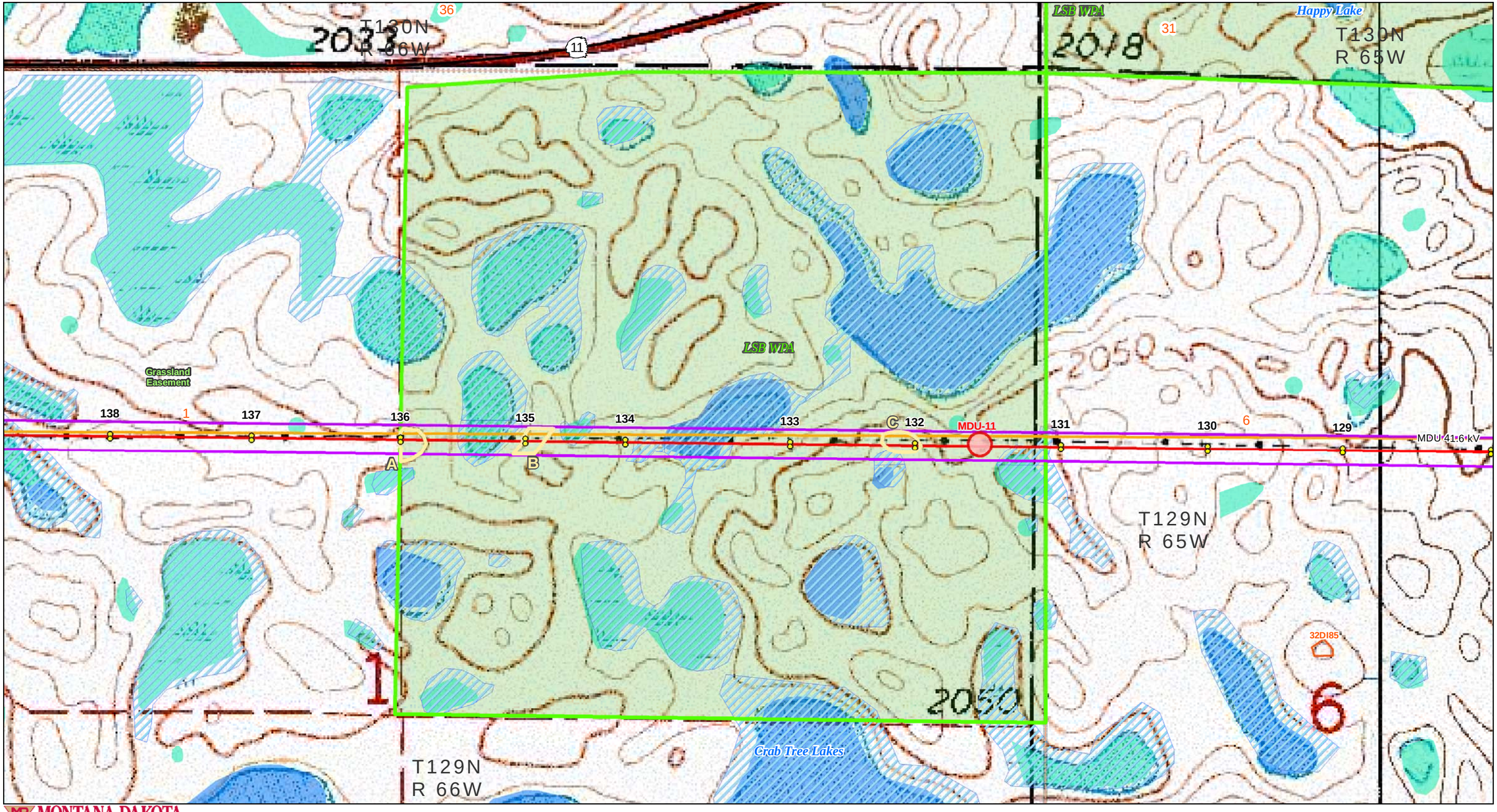

MONTANA-DAKOTA UTILITIES CO.
A Division of MDU Resources Group, Inc.
In the Community to Serve®

- Proposed Centerline (new)
- Pole Location (new)
- ROW (120 ft)
- Existing Transmission Line
- Planned Shovel Test Area
- Cultural Resource Feature (50 ft buffer)
- NDCRS Site or Lead
- USFWS WPA
- Delineated Wetland
- Lake or Pond
- Wetland

Figure 2
USFWS LSB WPA
Cultural Resource Survey
Montana-Dakota Utilities Co.
Merricourt Wind Farm to Ellendale Project

0 500 Feet

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