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

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

July 26, 2021

Executive Secretary
North Dakota Public Service Commission
600 East Boulevard Ave. Department 408
Bismarck, ND 58505-0480

Re: Case No. PU-21-151
Combined Application for a
Certificate of Corridor Compatibility
and Route Permit

The attached Combined Application for a Certificate of Corridor Compatibility and Route Permit shall replace the previous Application in full.

Please contact me at 701.222.7855 or travis.jacobson@mdu.com if you have questions.

Sincerely,

/s/ *Travis R. Jacobson*

Travis R. Jacobson
Director of Regulatory Affairs

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

MONTANA-DAKOTA UTILITIES CO.

MANDAN REROUTE PROJECT

CASE NO. PU-21-151

Combined Application for a

Certificate of Corridor

Compatibility and Route Permit

Contents

Exhibits

Exhibit 1. Project Location Maps

Exhibit 2. Black and White Project Location Map

Exhibit 3. Natural Resource Survey Mapping

Exhibit 4. Avoidance, Exclusion and Siting Criteria Mapping

Exhibit 5. Engineering Layouts

Exhibit 6. Environmental Resource Impacts Assessment

Exhibit 7. Aquatic Resources Delineation Report

Exhibit 8. State Historical Preservation Office Response

Exhibit 9. Revegetation Plan

Exhibit 10. Environmental Training Plan

Exhibit 11. Qualifications

Exhibit 12. Unanticipated Discovery Plan

Exhibit 13. US Fish and Wildlife Service Response

Exhibit 14. Avian Protection Plan

Exhibit 15. Safety and Emergency Plan – Redacted Public Copy

Exhibit 16. Environmental Training Plan

Exhibit 17. Exclusion and Avoidance Survey Information

Exhibit 18. North Dakota Geological Survey Agency Correspondence

1.0 Introduction

Montana-Dakota Utilities Co. (Montana-Dakota) submits this combined application (Application) for a Certificate of Corridor Compatibility (Certificate) and Transmission Facility Route Permit to the North Dakota Public Service Commission (Commission) for the proposed Mandan Reroute Project (Project).

Montana-Dakota proposed to construct, own and operate an approximately 1.5 mile long, 230-kilovolt (kV) electrical transmission line within the city of Mandan, Morton County, North Dakota. The Project includes the three segments of 230-kilovolt (kV) electrical transmission and will involve construction of two new proposed segments of of 230-kilovolt (kV) electrical transmission line connected by an existing 230-kilovolt (kV) segment. An overview of the Project is shown in Exhibit 1, page 1. The Project is identified as well as the Mandan and Heskett Transmission Substations to which the Project will originate and terminate, respectively.

The first proposed segment (first segment) to be constructed is approximately 0.6 mile long and originates at the Mandan Substation. It will subsequently connect with the existing 230-kV transmission line (existing segment) approximately 900 feet south of the substation. The first segment will include the addition (stringing) of conductors to six pole structures (Poles 1 through 6). The first segment will connect to the existing segment that is 0.4 mile in length. The second proposed segment (second segment) of the transmission line to be constructed will begin at Pole 10 and continue south for 0.13 mile and east for 0.28 mile before turning north for 0.06 mile to connect with the existing transmission line that crosses the Missouri River. Poles 11 through 15 are proposed to be placed as shown on the Project location map Exhibit 1, page 2. Pole placement will include limited surface disturbance and stringing conductors between the poles to tie into and energize the line. Exhibit 2 is a black and white map depicting the site area and is suitable for newspaper publication.

1.1 Compliance with the Energy Conversion and Transmission Facility Siting Act, North Dakota Century Code Chapter 49-22

The North Dakota Energy Conversion and Transmission Facility Siting Act, North Dakota Century Code (NDCC) Chapter 49-22 (Siting Act) requires the proponent of an electric transmission facility with a design in excess of 115-kV to obtain a Corridor Certificate and Transmission Facility Route Permit from the Commission in order to locate, construct, and operate the facility in the state of North Dakota. An application must meet certain criteria set forth in the Siting Act, as well as in North Dakota Administrative Code (NDAC) Article 69-06 (Siting Rules). The siting of a transmission facility is to be made in an orderly manner compatible with environmental preservation and the efficient use of resources (NDCC 49-22-02).

In this Application, Montana-Dakota presents the information required by the Siting Act and the Siting Rules. Montana-Dakota has considered the exclusion and avoidance areas, the selection criteria, and the policy criteria in the design of the Project, in accordance with NDCC 49-22 and NDAC 69-06-05, Chapter 69-06-06 and Chapter 69-06-08. Information regarding Project design and technical information has been included in this Application to allow a thorough understanding of the Project and to aid in review by the Commission, regulatory agencies and the public. The checklist below provides a summary of information included in this Application and the section of the document in which each siting requirement is addressed.

Montana-Dakota Utilities Co.
Mandan Reroute Project

Certificate and Route Permit Completion Checklist

State Authority	Description	Section
NDCC 49-22-08	**Description of Application Requirements**	
Section 1	**An application for a certificate must be in such form as the commission may prescribe, containing the following information:**	
a.	A description of the size and type of facility.	1.0, 4.0
b.	A summary of any studies which have been made of the environmental impact of the facility.	6.0-6.16
c.	A statement explaining the need for the facility.	2.1
d.	An identification of the location of the preferred site for any electric energy conversion facility.	1.2, 2.1
e.	An identification of the location of the preferred corridor for any electric transmission facility.	1.2, 2.1
f.	A description of the merits and detriments of any location identified and a comprehensive analysis with supporting data showing the reasons why the preferred location is best suited for the facility.	1.2, 2.1
g.	A description of mitigative measures that will be taken to minimize all foreseen adverse impacts resulting from the location, construction, and operation of the proposed facility.	6.0-.6.16
h.	An evaluation of the proposed site or corridor with regard to the applicable considerations set out in section 49-22-09 and the criteria established pursuant to section 49-22-05.1.	1.2, 3.1-3.6
NDAC 69-06-05	**Transmission Facility Permit**	
Section 01, #2	**Contents**	
a. (1)	A description of the type of facility proposed.	1.2, 2.1, 4.1
a. (2)	A description of the purpose of the facility.	1.2, 2.1, 4.1
a. (3)	A description of the technology to be deployed.	1.2, 4.1
a. (4)	A description of the type of product to be transmitted.	1.2, 4.1
a. (5)	A description of the source of the product to be transmitted.	1.2, 4.1
a. (6)	A description of the final destination of the product to be transmitted.	1.2, 4.1
a. (7) a	The proposed size and design and any alternate size or design that was considered, including the width of right of way.	1.2, 4.1

State Authority	Description	Section
a. (7) b	The proposed size and design and any alternate size or design that was considered, including the approximate length of facility.	1.2, 4.1
a. (7) c	The proposed size and design and any alternate size or design that was considered, including the estimated span length for electric facilities.	1.2, 4.1
a. (7) d	The proposed size and design and any alternate size or design that was considered, including the anticipated type of structure for electric facilities.	1.2, 4.1
a. (7) e	The proposed size and design and any alternate size or design that was considered, including the voltage for electric facilities.	1.2, 4.1
a. (7) f	The proposed size and design and any alternate size or design that was considered, including the requirement for and general location of any new associated facilities.	1.2, 4.1
a. (7) g	The proposed size and design and any alternate size or design that was considered, including the estimated distance between surface structures for pipeline facilities.	Not Applicable (NA)
a. (7) h	The proposed size and design and any alternate size or design that was considered, including the pipe size for pipeline facilities.	NA
a. (7) i	The proposed size and design and any alternate size or design that was considered, including the maximum design operation pressure and temperature for pipeline facilities.	NA
a. (7) j	The proposed size and design and any alternate size or design that was considered, including the maximum design flow rate for pipeline facilities.	NA
a. (7) k	The proposed size and design and any alternate size or design that was considered, including the number and general location of compressor or pumping stations.	NA
b. (1)	The anticipated time schedule for accomplishing major events including obtaining the certificate of corridor compatibility.	1.3
b. (2)	The anticipated time schedule for accomplishing major events including obtaining the route permit.	1.3
b. (3)	The anticipated time schedule for accomplishing major events including completing right of way acquisition.	1.3
b. (4)	The anticipated time schedule for accomplishing major events including starting construction.	1.3
b. (5)	The anticipated time schedule for accomplishing major events including completing construction.	1.3
b. (6)	The anticipated time schedule for accomplishing major events including testing operations.	1.3
b. (7)	The anticipated time schedule for accomplishing major events including commencing operations.	1.3
c.	A copy of each evaluative study or assessment of the environmental impact of the proposed facility submitted to the agencies listed in section 69-06-01-05 and each response received.	Exhibits 6-7

State Authority	Description	Section
d.	An analysis of the need for the proposed facility based on present and projected demand for the product transmitted, including the most recent system studies supporting the analysis of the need.	2.1
e.	A description of any feasible alternative methods for serving the need.	2.2
f.	The width of a corridor must be at least ten percent of its length, but not less than one mile or greater than six miles unless another appropriate width is determined by the commission.	1.2.1
g.	A study area that includes a proposed corridor of sufficient width to enable the commission to evaluate the factors addressed in North Dakota Century Code section 49-22-09.	1.2
h.	A discussion of the factors in North Dakota Century Code section 49-22-09 to aid the commission's evaluation of the proposed route.	8.1-8.11
i.	A discussion of the applicant's policies and commitments to limit the environmental impact of its facilities, including copies of board resolutions and management directives.	6.0
j.	Identification and map of the criteria that led to the proposed route location within the designated corridor, including exclusion areas, avoidance areas, selection criteria, policy criteria, design construction limitations, and economic considerations.	3.1-3.6, Exhibit 1
k.	A discussion of the relative value of each criteria and how the applicant selected the proposed corridor location, giving consideration to all criteria and how the location, construction, and operation of the facility will affect each criteria.	3.1-3.6
l.	A discussion of the general mitigative measures that the applicant will take to minimize adverse impacts that result from a route location in the proposed corridor and the construction and operation of the facility.	6.0-6.16
m.	The qualifications of each person involved in the corridor location study.	10.0
n.	A map identifying the criteria that led to the proposed route location within the designated corridor and the location of any new associated facilities. Several different criteria may be shown on each map depending on the map scale and the density and nature of the criteria.	Exhibits 1, 3-4
o.	An eight and one-half-inch by eleven-inch black and white map suitable for newspaper publication depicting the site area.	Exhibit 2
p.	A discussion of present and future natural resource development in the area.	6.0, 6.1-6.16
q.	Map and GIS requirements. The applicant shall provide information that is complete, current, presented clearly and concisely, and supported by appropriate references to technical and other written material available to the commission. (Electronic GIS files were provided July 23, 2021)	Exhibit 1,
NDAC 69-06-06	**Waiver of Procedures and Time Schedules**	
Section 01, #2	**Contents**	
a.	A description of the type of facility addressed in the application, including the purpose and the technology to be employed.	1.0, 2.1, 4.1
b.	A description of the products to be produced or transmitted by the proposed facility.	1.0

State Authority	Description	Section
c.	The capacity and design of the proposed facility.	1.2, 4.1
d.	The location of the proposed facility and a map showing the location of the proposed facility.	1.2, Exhibit 1
e.	A description of the general area to be served by the facility.	1.2, 2.1
f.	The anticipated time schedule for major events.	1.3
g.	Any plans for future expansion of the proposed facility.	1.5
h.	The need for the proposed facility based on the present and projected demand for the product or products to be produced by the proposed facility, including the most recent system studies supporting the analysis of the need.	2.1
i.	Any reasonable alternative methods of serving the need.	2.2
j.	Justification for any deviations from the applicant's most recent ten-year plan that the proposed facility may present.	NA
k.	The estimated total cost of construction of the facility.	1.4
l.	Any specific provisions of law that the applicant requests the commission waive or modify, with a separate justification for each provision.	NA
m.	The factual basis demonstrating that the proposed facility is of such length, design, location, or purpose that it will produce minimal adverse effects.	6.0-6.16
n.	The nature of the emergency justifying immediate authority, if the application is based on an emergency situation.	NA
NDCC 49-22-08.1	**Description of Application Requirements**	
Section 1	An application for a route permit for a transmission facility within a designated corridor shall be filed no later than two years after the issuance of the certificate and shall be in such form as the commission may prescribe, containing the following information:	
a.	A description of the type, size and design of the proposed facility.	1.2, 4.1
b.	A description of the location of the proposed facility.	1.2
c.	An evaluation of the proposed route with regard to the applicable considerations set out in section 49-22-09 and the criteria established pursuant to section 49-22-05.1.	3.1-3.6, 8.1-8.10
d.	A description of mitigative measures that will be taken to minimize all foreseen adverse impacts resulting from the location, construction, and operation of the proposed facility.	6.0-.6.16
e.	A description of the right-of-way preparation and construction and reclamation procedures.	5.1
f. (1)	A statement setting forth the manner in which the utility will inform affected landowners of easement acquisition, and necessary easement conditions and restrictions.	1.2.1, 3.6
f. (2)	A statement setting forth the manner in which the utility will compensate landowners for easements, without reference to the actual consideration to be paid.	1.2.1, 3.6

State Authority	Description	Section
g.	Such other information as the utility may consider relevant or the commission may require.	4.1-4.3
NDCC 49-22-09	**Factors to be considered in evaluating applications and the designation of sites, corridors, and routes.**	
1.	Available research and investigations relating to the effects of the location, construction, and operation of the proposed facility on public health and welfare, natural resources, and the environment.	8.1
2.	The effects of new energy conversion and transmission technologies and systems designed to minimize adverse environmental effects.	8.2
3.	The potential for beneficial uses of waste energy from a proposed energy conversion facility.	8.3
4.	Adverse direct and indirect environmental effects which cannot be avoided should the proposed site or route be designed.	8.4
5.	Alternatives to the proposed site, corridor, or route which are developed during the hearing process and which minimize adverse effects.	8.5
6.	Irreversible and irretrievable commitments of natural resources should the proposed site, corridor, or route be designed.	8.6
7.	The direct and indirect economic impacts of the proposed facility.	8.7
8.	Existing plans of the state, local government, and private entities for other developments at or in the vicinity of the proposed site, corridor, or route.	8.8
9.	The effect of the proposed site or route on existing scenic areas, historic sites and structures, and paleontological or archaeological sites.	8.9
10.	The effect of the proposed site or route on areas which are unique because of biological wealth or because they are habitats for rare and endangered species.	8.10
11.	Problems raised by federal agencies, other state agencies, and local entities.	8.11, 9.0, Exhibit 6

1.2 Project Summary

The Project includes the three segments of 230-kilovolt (kV) electrical transmission and will involve construction of two new proposed segments of of 230-kilovolt (kV) electrical transmission line connected by an existing 230-kilovolt (kV) segment. An overview of the Project is shown in Exhibit 1, page 1. The Project is identified as well as the Mandan and Heskett Transmission Substations to which the Project will originate and terminate, respectively.

The first proposed segment (first segment) to be constructed is approximately 0.6 mile long and originates at the Mandan Substation. It will subsequently connect with the existing 230-kV transmission line (existing segment) approximately 900 feet south of the substation. The first segment will include the addition (stringing) of conductors to six pole structures (Poles 1 through 6). The first segment will connect to the existing segment that is 0.4 mile in length. The second proposed segment (second segment) of the transmission line to be constructed will begin at Pole 10 and continue south for 0.13 mile and east for 0.28 mile before turning north for 0.06 mile to connect with the existing transmission line that crosses the Missouri River. Poles 11 through 15 are proposed to be placed as shown on the Project location map Exhibit 1, page 2. Pole placement will include limited surface disturbance and stringing conductors between the poles to tie into and energize the line. Specific criteria is presented below.

NDAC Section 69-06-05-01(2)(a)(7)

Question	Answer
a. The width of the ROW	100 feet wide except at dead-end structures, where it will be 160 × 160 feet.
b. The approximate length of facility	1.5-mile-long section, 0.4 mile not being reroute.
c. The estimated span length	512 feet
d. The anticipated type of structure for electric facilities	H-frame structure, wooden pole
e. The voltage of electric facilities	230 kV
f. The requirement and the general location of any associated facilities	See Exhibit 1.
g. The estimated distance between surface structures for pipeline facilities	N/A
h. The pipe size for pipeline facilities	N/A
i. The maximum design operating pressure and temperature for pipeline facilities	N/A
j. The maximum design flow rate for pipeline facilities	N/A
k. The number and general location of compressor or pumping stations.	N/A

1.2.1 Project Corridor

The Project will be located on privately owned land in Sections 10 and 15, Township 139 North, Range 81 West. The project is located primarily on land owned by Montana-Dakota near the Heskett Station north of Mandan in Morton County. There is one additional landowner on the southern end of the project. All easements have been acquired.

SWCA Environmental Consultants (SWCA), on behalf of Montana-Dakota, conducted an assessment that included a natural resource desktop review and Class I cultural resource inventory of a 1-mile-wide study area, followed by natural and cultural resources field surveys across a generally 200-foot-wide area centered on the Project route as shown in Exhibit 1, page 2 and identified precisely by the associated GIS map data (Survey Area). SWCA conducted surveys for wildlife, threatened and endangered species, critical habitats, wetlands, waterbodies, and trees/saplings/shrubs.

Class III cultural resource field surveys were conducted for the entire corridor on October 6, 2020, within the 200-foot-wide survey area for the proposed segments. The existing segment was within a previous study. The SHSND determined the report acceptable and that there had been a good faith effort to avoid impacts to impacts to significant sites.

The corridor is 200 feet wide and consists of the survey area used for the cultural resources field studies. The permanent right of way (ROW) is typically 100 feet wide, except at dead-end structures, where it will be 160 × 160 feet. No temporary ROW is needed, as all work will be conducted within the permanent ROW. It is Montana-Dakota's understanding that a ROW is not required for the portions of the project located on land owned and managed by Montana-Dakota.

1.2.2 Project Route

The Project Route is the same as the Corridor and was determined based on multiple considerations, such as:

- Primarily on owned land with the remainder on one property owner that was amenable to an easement;
- Compliance with county and/or township ordinances;
- Minimizing effects on archaeological and historic resources;
- Minimizing impacts on wetlands and surface waters;
- Minimizing effects on wildlife, including threatened and endangered species and their habitat; and
- Minimizing total length and construction costs.

1.3 Project Schedule

Following is the anticipated time schedule for accomplishing major events:

- Certificate of corridor compatibility – October 2021
- Route Permit – October 2021
- Right of way acquisition – Complete
- Starting construction – October/November 2021
- Completing construction - October/November 2021
- Testing – November 2021
- Commencing operations – December 2021

1.4 Project Cost

The estimated total cost to construct the Project is approximately $1.3 million.

1.5 Project Expansion

There are currently no plans for addition or expansion.

2.0 Need for Facility

2.1 Need Analysis

The Project is a replacement of existing facilities and will be performing the same function as the current facilities. The line relocation is necessary to build new substation facilities because of the Heskett Units 1 and 2 coal-fired generating stations closure. In addition, the replacement of the current facilities will improve the reliability of the system.

2.2 Alternatives

There are no reasonable alternatives.

2.3 Ten-Year Plan

This project is consistent with the July 1, 2020 10-year plan on file with the Commission.

3.0 Site Selection Criteria

The Project is a replacement of existing facilities and will be performing the same function as the current facilities. SWCA conducted an Environmental Resource Impacts Assessment associated with the project on behalf of Montana-Dakota. The full Assessment report is included in full as Exhibit 6. Site Selection was also based upon the criteria described in NDAC 69-06-08 as summarized below. Section 3.1 will summarize certain geographical areas that shall be excluded from transmission facility siting considerations and Section 3.2 will summarize certain geographical areas that may not be approved for transmission facility siting unless the applicant can demonstrate there are no reasonable alternatives.

An Environmental Resource Impacts Assessment was prepared in February 2021, as supporting material for a Transmission Facility Permit application per NDAC 69-06-05. The assessment included a natural resource desktop review and Class I cultural resource inventory of a 1-mile-wide study area, followed by natural and cultural resources field surveys within the 200-foot project corridor.

Class III cultural resource field surveys were conducted on October 6, 2020 for the new line segments, from proposed poles 1–7 and 10–15. Portions of the existing line segment, from poles 7–10, were located in previous cultural resource inventory. The Class I and Class III Cultural Resource Inventory Report can be found in Exhibit 6, Appendix D.

Natural resource field surveys were conducted on June 29, 2021, for the new and existing line segments, encompassing the totality of the line, poles 1–15. The Environmental Resource Impacts Assessment can be found in Exhibit 6. The Aquatic Resources Delineation Report can be found in Exhibit 7. See Exhibit 17 for survey dates and locations.

3.1 Exclusion Areas

Exclusion Area Summary

Exclusion Area	Present within 1-mile-wide Study Area	Present within 200-foot-wide Survey Area	Crossed by Route and Section Addressed
Designated or registered national: parks; memorial parks; historic sites and landmarks; natural landmarks; monuments; and wilderness areas.	Yes, multiple historic sites are located within the Study Area.	Yes, one previously recorded historic site is located within the Survey Area.	One historic site is located within the Survey Corridor and crossed by the route. A Class III (Intensive) Inventory was conducted, and the results provided to the State Historical Society of North Dakota (SHPO). Project impacts within the site area will be superficial and not in excess of existing disturbance. The SHPO responded and agreed that there has been a good faith effort to avoid impacts to significant sites. **6.2**
Designated or registered state: parks; historic sites; monuments; historical markers; archaeological sites; and nature preserves.	Yes, multiple historic sites are located within the Study Area.	Yes, one previously recorded historic site is located within the Survey Area.	One historic site is located within the Survey Corridor. A Class III (Intensive) Inventory was conducted and the results provided to the SHPO. Project impacts within the site area will be superficial and not in excess of existing disturbance. The SHPO provided a response agreeing that there has been a good faith effort to avoid impacts to significant sites. **6.2**
County parks and recreational areas; municipal parks; and parks owned or administered by other governmental subdivisions.	No	No	No. **6.2**
Areas critical to the life stages of threatened or endangered animal or plant species.	No	N/A	No. **6.16**
Areas where animal or plant species that are unique or rare to this state would be irreversibly damaged.	No	N/A	No. **6.16**

Exclusion Area	Present within 1-mile-wide Study Area	Present within 200-foot-wide Survey Area	Crossed by Route and Section Addressed
Areas within 1,200 feet of the geographic center of an intercontinental ballistic missile (ICBM) launch or launch control facility.	No	No	No. 6.2
Areas within 30 feet on either side of a direct line between ICBM launch or launch control facility.	No	No	No. 6.2

3.2 Avoidance Areas

Avoidance Area Summary

Avoidance Area	Present within 1-mile-wide Study Area	Present within 200-foot-wide Survey Area	Crossed by Route and Section Addressed	>50% of Area Corridor Width
Designated or registered national: historic districts; wildlife areas; wild, scenic, or recreational rivers; wildlife refuges; and grasslands.	No	No	No. 6.2	No
Designated or registered state: wild, scenic, or recreational rivers; game refuges; game management areas; management areas; forests; forest management lands; and grasslands.	Yes, the Missouri River is located within the Study Area.	No	No. 6.2	No
Historical resources which are not specifically designated as exclusion or avoidance areas.	No	No	No. 6.7	No
Areas that are geologically unstable.	Yes. An historic land slide area is present.	No	No. 6.11	No
Within five hundred feet of a residence, school, or place of business.	Yes	Yes	Yes, six residences are located between 475 and 500 feet of the route. Montana-Dakota is working with landowners to obtain waiver of the 500-foot setback. 6.1	No
Reservoirs and municipal water supplies	No	No	No. 6.8	No

Avoidance Area	Present within 1-mile-wide Study Area	Present within 200-foot-wide Survey Area	Crossed by Route and Section Addressed	>50% of Area Corridor Width
Water sources for organized rural water districts.	No	No	No. 6.3	No
Irrigated land. This criterion shall not apply to an underground transmission facility.	No	No	No. 6.3	No
Areas of recreational significance which are not designated as exclusion areas	No	No	No. 6.8	No

3.3 Selection Criteria

Per NDAC 69-06-08-02(3), a corridor or route shall be designated only when it is demonstrated to the Commission by the applicant that any significant adverse effects resulting from the location, construction, and operation of the facility in that area, as they relate to specified selection criteria, will be at an acceptable minimum, or that those effects will be managed and maintained at an acceptable minimum[1].

[1] As defined in NDAC 69-06-01-01, selection criteria is defined as "criteria" that guide and govern the selection of energy conversion facility sites and transmission facility corridors and routes in order to minimize adverse human and environmental impact after the exclusion and avoidance criteria have been applied.

Summary of Selection Criteria

Selection Criteria	Potential Adverse Effects from Project	Section Addressed
The impact upon agriculture:		
(1) Agricultural production.	No new permanent impacts are proposed within active cropland.	1.2.1, 6.1, 6.10
(2) Family farms and ranches.	No impacts to family farms or ranches are anticipated.	1.2.1, 3.0, 4.3, 6.9
(3) Land which the owner demonstrates has soil, topography, drainage, and an available water supply that cause the land to be economically suitable for irrigation.	No permanent impacts are anticipated to land suitable for irrigation.	6.9
(4) Surface drainage patterns and ground water flow patterns.	No impacts to surface drainage patterns or groundwater flow patterns are anticipated.	6.11, 6.12, 6.13
The impact upon:		
(1) Sound-sensitive land uses.	Residences near the project are understood to be noise sensitive. Minimal noise will occur during construction, but no long-term noise impacts are anticipated.	6.5
(2) The visual effect on the adjacent area.	Minimal impacts are anticipated to the viewshed of nearby residences; however, the line is located in proximity to existing overhead electrical transmission line corridors and will result in no net change to the viewshed.	6.6

Selection Criteria	Potential Adverse Effects from Project	Section Addressed
(3) Extractive and storage resources.	No adverse impacts anticipated for any type of extractive or storage resources.	NA
(4) Wetlands, woodlands, and wooded areas.	One pole structure (Pole 11) will be placed within a potential wetland area. Impacts are anticipated to be minimal and consistent with use of USACE Nationwide Permit 57, with self-reporting. Montana Dakota will span one waterbody, which will not be temporarily or permanently impacted.	6.13, 6.14
(5) Radio and television reception, and other communication or electronic control facilities.	No impacts to radio and television reception or other communication or electronic facilities are anticipated.	6.3
(6) Human health and safety.	No impacts to human health and safety are anticipated from the operation of the transmission line.	5.2, 6.4
(7) Animal health and safety.	No impacts to livestock are anticipated from the operation of the transmission line. Raptors, waterfowl, and other bird species may be minimally affected by the construction and placement of the transmission lines. Avian collisions are a possibility after completion of the transmission line. Waterfowl are typically more susceptible to transmission line collision, especially if the line is placed between agricultural fields that serve as feeding areas, or between wetlands and open water, which serve as resting areas. Generally, the most difficult part of the structure for the bird to see is the shield wire. Mitigation measures such as co-locating the line next to existent transmission lines, will help increase visibility of the line, which will help minimize these impacts.	5.1, 6.15
(8) Plant life.	Impacts to plant life are anticipated to be minimal and limited. Temporary impacts are associated with the traversing of the corridor by vehicles and equipment and the staging of materials adjacent to pole locations. Permanent impacts will be minimal at pole locations.	6.14

3.4 Policy Criteria

Per NDAC 69-06-08-02(4), the Commission may give preference to an applicant that will maximize benefits that result from the adoption of 10 specified criteria related to the

applicant's policies and practices (the Commission may also require the adoption of such policies and practices)[2].

Summary of Policy Criteria

Policy Criteria	Applicant's Policies and Practices	Section Addressed
Location and design.	Montana-Dakota's policy is to locate and design the proposed transmission line to minimize environmental impacts and utilize existing corridors where practical.	1.0, 1.2, 4.1
Training and utilization of available labor in this state for the general and specialized skills required.	Montana-Dakota will use local labor to the extent practicable.	6.1
Economies of construction and operation.	Montana-Dakota will utilize local contractors to the extent practicable.	3.6, 6.1
Use of citizen coordinating committees.	Montana-Dakota has and will continue to work with landowners on development of the project.	1.2.1
A commitment of a portion of the transmitted product for use in this state.	Montana-Dakota has and will continue to provide reliable power to customers throughout North Dakota using thousands of miles of transmission lines.	2.1
Labor relations.	No labor relations will be affected.	NA
The coordination of facilities.	Existing facilities and facility corridors were considered in the location of the transmission line and its associated facility.	1.2.2, 6.3, 6.4
Policy Criteria	**Applicant's Policies and Practices**	**Section Addressed**
Monitoring of impacts.	Montana-Dakota and the construction contractor will employ best management practices during construction to minimize environmental impacts. Upon completion of the project, Montana-Dakota will monitor and address impacts as necessary.	5.1, 5.2, 6.0

[2] As defined in NDAC 69-06-01-01, policy criteria are "criteria" that guide and govern the selection of energy conversion facility sits and transmission facility corridors and routes in order to maximize benefits during the construction and operation of a facility.

Utilization of existing and proposed rights of way and corridors.	One of the primary goals in locating the route was to maximize use of existing transmission and roadway corridors and ROWs The proposed transmission line location is consistent with this policy and is the best location when considering the factors identified by the PSC, Montana-Dakota's policies, and project design.	3.5
Other existing or proposed transmission facilities.	N/A.	1.2.2, 2.1

3.5 Design and Construction Limitations

Pursuant to NDAC 69-06-05-01(2)(j), the Project is designed to minimize impacts on exclusion areas, avoidance areas, selection and policy criteria identified in NDAC 69-06-08-02. The Project utilizes a portion of the existing transmission line to minimize the overall impacts. The Project is replacing existing structures within the 1-mile study area.

3.6 Economic Considerations

Montana-Dakota minimized the length of a transmission line to the extent possible to reduce costs. The Project will be built primarily on owned property; therefore, the cost to acquire easements/rights of way are minimized. An easement has been acquired from the single landowner upon which the Project will cross.

4.0 Description of Proposed Facility

4.1 Project Design

The Project includes the construction of two segments of 230-kilovolt (kV) electrical transmission line within the city of Mandan, Morton County, North Dakota. The first segment is approximately 0.6 mile long and originates at the Mandan Substation. It will subsequently connect with an existing 230-kV transmission line approximately 900 feet south of the substation. Project activities associated with this segment will include the addition (stringing) of conductors to six existing pole structures (Poles 1 through 6). The second proposed segment of the transmission line will begin at Pole 10 and continue south for 0.13 mile and east for 0.28 mile before turning north for 0.06 mile to connect with the existing transmission line that crosses the Missouri River. Poles 11 through 15 are proposed to be placed as shown on the Project location map (Exhibit A). Pole placement will include limited surface disturbance and stringing conductors between the poles to tie into and energize the line.

4.1.1 Transmission Structure Design

H-frame, three-pole guyed suspension, and dead-end structures will be used. Poles 7, 10, and 14 will require guy wires (dead-end structures). It is anticipated that 20 guys (and associated anchors) will be required for each of the dead-end structures and will extend 50 to 85 feet from the structure. Pole 15 is being placed as a temporary structure and is expected to be removed in 2022 when the transmission line crossing of the Missouri River

is reconductored with permanent structure replacement. The maximum span is 714 feet. See Exhibit 5 for engineering design layouts for the Project.

4.1.2 Conductor and Communication Systems

Modifications will be required on the existing line including removing existing 3/8" EHS static wire from the Mandan substation to existing structure 7 and replacing it with DNO-7695 along with all associated suspension clamps and dead ends. The replacement of the OPGW will require two OPGW splices using the existing hardware. A phase swap will be required ahead span of existing structure 5 and will require the existing 795 kcmil 45/7 ACSS Tern conductor to be cut or splice in more conductor to maintain existing tensions and sag along with new compression dead ends.

4.1.3 Temporary Workspace

During construction, equipment and worker vehicles would travel to and from site. Temporary access roads would parallel the Project Route where existing public roads or section lines cannot be utilized. No permanent access roads would be built to maintain the Project. Temporary access roads would generally require no grading or vegetation clearing and consist of driving vehicles across land from the nearest public road, section line or private driveway.

Areas temporarily disturbed would be revegetated, if applicable, and returned to preconstruction conditions.

4.2 Estimated Project Facility Impacts

The Project would impact less than one acre permanently. Temporary impacts of wheeled vehicles during construction are expected to be minimal and would be monitored by the Company.

4.3 Setback Requirements

The Project's route is located within 500 feet of six residences and Montana-Dakota is actively reaching out to those landowners. As set forth in NDCC 49-22-05.1(2), the residence setback requirement may be waived in writing by the owner of the residence and the Company is attempting to get waivers from the impacted landowners.

5.0 Project Construction, Operation and Maintenance

5.1 Project Construction

ROW Preparation

The project is located primarily within active agricultural field, along existing electrical transmission line corridors, and along existing road ROWs. Preparation will be minimal as no vegetation clearing is anticipated. No grading is anticipated for the preparation of the ROW.

Transmission Construction

Construction of the transmission line will begin once all approvals are obtained. All easements have been acquired. A construction schedule has been developed based on availability of materials, equipment, and construction labor. The schedule considers anticipated weather conditions.

Construction of the transmission line will require minimal preparation of the ROW and minimal grading or leveling. Transmission structures will be placed at existing grade elevations. Limited grading may be required to provide level and stable access paths and working surfaces for construction crews at selected structure and wire stringing locations. No extensive grading or leveling is anticipated at this time. Once construction is completed, the graded areas will be restored and blended with the pre-construction contours to the extent practicable.

Structures' components will be delivered either to the staked location or to Montana-Dakota's existing Heskett facility. They will be placed on the ROW out of the clear zone of any adjacent roadways or designated pathways. Insulators and other hardware will be attached while the structure is on the ground. After the ROW is prepared, structures will be assembled and erected at the structure site using a crane or similar heavy-duty equipment. Each pole will be directly embedded and will require a hole dug 12 to 15 feet deep and 3 to 5 feet in diameter. The poles will be set into the excavated hole and backfilled with soil or crushed rock. Structures in poor or wet soil conditions may require specially engineered foundations such as a steel culvert or cast in place with reinforced concrete foundations. Most of the construction activity would be limited to the area immediately around each structure. Little additional ground disturbance is necessary at the structure sites. No permanent access roads will be constructed for the project. Temporary access roads would generally require no grading or vegetation clearing and consist of driving vehicles across land from the nearest public road, section line or private driveway.

Once the structures have been erected, conductors will be installed by establishing stringing setup areas within the ROW. These areas are usually established every 2 miles along the route. Conductor stringing operations will require brief access to each structure to secure the conductor wire to the insulators or to install shield wire clamps once final sag is established. Stringing equipment generally consists of sheaves or stringing blocks, wire pullers, tensioners, rope and wire trailers, and a bulldozer used for sagging. Stringing operations involve pulling lightweight cables or ropes through the stringing sheaves located at every structure site. This cable or rope is then used to pull the conductors through the sheaves under sufficient tension to keep the conductor from coming into contact with the ground. Temporary guard structures or clearance poles will be installed as needed over existing distribution or communication lines, streets, roads, highways, or other obstructions after any necessary notifications are made and permits obtained. This ensures that conductors will not obstruct traffic or contact existing energized conductors or other cables. After pulling the conductor, shield wire, and optical ground wire (OPGW) to the proper tensions, construction crews access each structure to secure or clip the conductors to the insulators and clamp the shield wire and/or OPGW to the supporting hardware.

Reclamation/Restoration Procedures

During construction, crews will attempt to limit ground disturbance wherever possible and will employ appropriate erosion control measures. Disturbed areas will be restored to their pre-construction condition to the maximum extent practicable and as negotiated with the

landowner. Post-construction reclamation activities include removing and disposing of debris, dismantling all temporary facilities (including laydown areas), leveling or filling tire ruts, and reseeding areas disturbed by construction activities with vegetation similar to that which was removed.

Erosion control measures will be implemented as necessary to minimize runoff during construction. Specific measures will be determined once a field review is made to determine any areas of concern. Erosion control measures such as silt fencing, straw wattle, mulching, seeding, or mesh fabric overlay will be installed as appropriate. Access routes to structure locations will be reviewed prior to the mobilization of equipment so that erosion can be avoided or minimized. Construction crews exercise caution when equipment is within 50 feet of streams and rivers and will not drive equipment through streams or rivers that the transmission line crosses.

5.2 Project Operation and Maintenance

The Project would be serviced and maintained by the same staff that operates Montana-Dakota's transmission facilities.

6.0 Environmental Analysis

This section describes the existing conditions within the Project Corridor. The existing conditions, or affected environment, are the baseline conditions that may be affected by the Project. This section discusses the potential direct environmental impacts of the Project. Potential indirect impacts are identified in the resource discussions where applicable. Measures to avoid, minimize, or mitigate impacts are discussed where appropriate.

Regarding present and future development, over the past 30 years, the project area and vicinity have been impacted by agricultural practices, residential development, and industrial development. The location is currently used for industrial purposes with residential development along the river and limited agricultural use on terraces overlooking the river, which is similar to past land use. The route has been sited along or adjacent to industrial facilities, and the soils and vegetation appear to have been disturbed for the purposes of cultivation or facility management and operation. Two segments of 230-kilovolt (kV) electrical transmission line are located within the city of Mandan, Morton County, North Dakota. The first segment is approximately 0.6 mile long and originates at the Mandan Substation. It will subsequently connect with an existing 230-kV transmission line approximately 900 feet south of the substation. Montana Dakota does not anticipate future development changes in the area. In the event that Montana-Dakota anticipates future development, they will engage the Commission.

An Environmental Resource Impacts Assessment was prepared in February 2021, as supporting material for a Transmission Facility Permit application per NDAC 69-06-05. The assessment included a natural resource desktop review completed for potential wetlands, federally listed threatened and endangered species, and species managed under the North Dakota State Wildlife Action Plan, as well as a Class I cultural resource inventory of a 1-mile-wide study area, followed by natural and cultural resources field surveys within the 200-foot project corridor. The full Assessment report is included in this application as Exhibit 6.

Class III cultural resource field surveys were conducted on October 6, 2020 for the new line segments, from proposed poles 1–7 and 10–15. Portions of the existing line segment, from poles 7–10, were located in previous cultural resource inventory. The Class I and Class III Cultural Resource Inventory Report can be found in Exhibit 6, Appendix D.

Natural resource field surveys were conducted on June 29, 2021, for the new and existing line segments, encompassing the totality of the line, poles 1–15. The Project area is in an upland setting, overlooking terraces and the Missouri River to the east. The northern section of proposed new transmission line is almost entirely within a level agricultural field that is immediately east and south of the existing North Heskett Substation. The southern section of proposed new transmission line is along an existing crown and ditch road and spans a wetland complex and hay field. The topography within the Project area is generally level, ranging from approximately 1,600 to 1,700 feet in elevation. There are very few trees, shrubs, and saplings within the project corridor, with the bulk of these species being near aquatic resources. There are no anticipated impacts to trees, shrubs, and saplings, as there will be no clearing of the project corridor and pole structures will avoid these areas. The Environmental Resource Impacts Assessment can be found in Exhibit 6. The Aquatic Resources Delineation Report can be found in Exhibit 7.

Montana-Dakota's Policies and Commitments to Limit Environmental Impacts

Montana-Dakota strives to maintain compliance and operate in an environmentally proactive manner, while taking into consideration the cost to customers. The company has an overarching Environmental Policy that supports and provides direction on environmental compliance. The policy states:

"The Company will operate efficiently to meet the needs of the present without compromising the ability of future generations to meet their own needs. Our environmental goals are:

- To minimize waste and maximize resources;
- To be a good steward of the environment while providing high quality and reasonably priced products and services; and
- To comply with or surpass all applicable environmental laws, regulations and permit requirements."

Also, Montana-Dakota has a Protected Bird Management Policy that provides direction to the company on protecting and managing protected bird species, including reporting of bird mortalities associated with company infrastructure, provides direction to consult appropriately for permitting and nest management, and establishes an Avian Protection Plan. The Avian Protection Plan (Exhibit 14) contains additional guidance and commitment from Montana-Dakota's electric transmission and distribution operations on minimizing and reducing protected bird mortality in a manner that is consistent with the company's need to provide reliable and cost-effective electric service to customers.

The Company also has directives and/or procedures for other environmental compliance areas including, but not limited to, water discharge and infrastructure permitting, hazardous materials transportation, hazardous materials management and disposal, and spill response and remediation.

6.1 Demographics

The Project Corridor is located in central North Dakota within Morton County. The Project is located in Mandan within Morton County. The United States Census Bureau estimated the population of Morton County at approximately 31,400 as of July 1, 2019.

6.1.1 Demographic Impacts/Mitigation

The Project would include six residences within 500 feet of the project. The Company is currently seeking waivers from those landowners.

During construction of the Project, the use of local contractors, suppliers, and laborers would be utilized to the extent possible and could potentially provide temporary revenue increases.

6.2 Land Use

The Project area is situated within the northwestern Great Plains ecoregion, characterized by native grasslands over rolling plains. The parcels of land themselves are part of industrial facilities, and the soils and vegetation appear to have been disturbed for the purposes of cultivation or facility management and operation. Native vegetation within this ecoregion typically contains such species as western wheatgrass (Pascopyrum smithii), little bluestem (Schizachyrium scoparium), and prairie sandreed (Calamovilfalongifolia) (Bryce et al. 1998). The western portion of the Project area is within a recently harvested sunflower (Helianthus annuus) field, allowing for 90% to 100% bare ground visibility. The easternportion of the Project area is dominated by smooth brome (Bromusinermis) and Kentucky bluegrass (Poa pratensis) with prairie cordgrass (Spartina pectinata) and a small portion of hay field, which reduced the bare ground surface visibility to 30%. In the area of the southern segment, there is a mixture of upland and wetland vegetation due to enhanced hydrology..

6.2.1 Land Use Impacts/Mitigation

The Project Corridor is located primarily on Company owned property or on the owner of an industrial property on the southern end of the Project. A portion of the route will be constructed on agricultural land. Temporary impacts will be minimal during construction and no permanent changes in land use are anticipated. Disturbed areas of land near the base of the poles will be reclaimed to their preexisting land use conditions.

6.3 Public Services

No impacts to radio and television reception or other communication or electronic facilities are anticipated.

6.3.1 Public Service Impacts/Mitigation

The Project is not anticipated to have direct impacts on local services, electrical service, transportation, communications, and /or water supply.

6.4 Human Health and Safety

No impacts to human health or safety are anticipated from the operation of the transmission line, including any impacts from electromagnetic fields, hazardous waste, or security. Electromagnetic fields (EMF) generated from the transmission lines will not impact human

health as the closest residences are approximately 475 feet from the project. There are no known USEPA-regulated hazardous waste facilities within the Project corridor. There are no residences within the project corridor, and security measures maintained would include fencing, signage, locks, etc.

6.4.1 Human Health and Safety Impacts/Mitigation

The project will not result in significant exposure of EMF to the public. The project will not impact landfills or hazardous waste. The project will not impact the security of surrounding residents or communities.

6.5 Sound

The Project is not anticipated to result in any changes in current sound patterns which include road traffic, transmission buzz, farm machinery, recreational activity from the Missouri River, and operational activity at RM Heskett station. The Project will perform similar functions as the existing transmission facilities. Minimal noise will occur during construction, but no long-term noise impacts are anticipated.

6.5.1 Sound Impacts/Mitigation

Montana-Dakota will limit construction activities to normal business hours to the extent possible. The expected work activities will result in minimal noise.

6.6 Visual

The Project will perform similar functions as the existing transmission facilities. Minimal impacts are anticipated to the viewshed of nearby residences; however, the line is located in proximity to existing overhead electrical transmission line corridors and will result in no net change to the viewshed.

6.6.1 Visual Impacts/Mitigation

The extent to which the visual quality would be impacted would depend on the preferences of the viewers. The projects colocation with existing transmission lines and placement within a primarily industrialized area will help mitigate the limited visual impacts normally associated with placement of new transmission lines.

6.7 Cultural and Archaeological Resources

Class III cultural resource field surveys were conducted on October 6, 2020 for the new line segments, from proposed poles 1–7 and 10–15. Portions of the existing line segment, from poles 7–10, were located in previous cultural resource inventory. During the inventory, SWCA personnel revisited one previously recorded site (32MO0035). Site 32MO0035 is a previously recorded cultural material scatter and possible earth lodge village site that has been recommended eligible for inclusion in the National Register of Historic Places. The results of the current inventory and previous visits to the site indicate that there is a low potential for intact deposits within the area of potential effects (APE). Additionally, Project impacts within the mapped site boundary will be minimal and will be limited to the traversing of an existing right-of-way with wheeled and tracked equipment and the addition of

conductors to existing pole structures. These activities will not result in impacts in excess of previous agricultural activities within the site area. Provided that all proposed work activities remain within the current APE, SWCA recommends a finding of No Historic Properties Adversely Affected, and that the Project proceed as planned. On January 11, 2021, ND SHPO sent a response to SWCA that there has been a good faith effort ot avoid impacts to significant sites. The Class I and Class III Cultural Resource Inventory Report and the response from ND SHPO can be found in Exhibit 6, Appendix D. The identified areas have been avoided within the route.

6.7.1 Cultural and Archaeological Resources Impacts/Mitigation

Cultural and archeological resources identified within the survey area have been avoided; therefore, there impacts are not expected. SWCA has prepared an Unanticipated Discovery Plan, which is included as Exhibit 12.

6.8 Recreational Resources

The Project area is in an upland setting, overlooking terraces and the Missouri River to the east. The Missouri River is used for boating, fishing, kayaking, and other various forms of recreation.

6.8.1 Recreational Resources Impacts/Mitigation

Due to the project's location on private land in an upland area adjacent to the Missouri River, there are no anticipated impacts to recreational resources.

6.9 Effects on Land-based Economics

Agriculture

The northern section of proposed new transmission line is almost entirely within a level agricultural field that is immediately east and south of the existing North Heskett Substation. Minimal temporary impacts would occur during construction as a result of ground disturbance associated with placement of pole structures. The southern section of proposed new transmission line is along an existing crown and ditch road and spans a wetland complex and hay field.

Woodlands

There are no economically significant forestry resources within the Project Corridor.

6.9.1 Land-based Economics Impacts/Mitigation

Temporarily disturbed areas would be reclaimed at the conclusion of construction activities and returned to agricultural land. The land lease will be updated to reflect any changes in acreage as applicable.

6.10 Soils

The Natural Resources Conservation Service (NRCS) Web Soil Survey (NRCS 2020) identified seven soil series within the Project area (see table below). Three of the soil series—Shambo Loam, Farland Silt Loam, and Femvik-Wilton Silt Loams—represent

approximately 70% of the Project area. These soil series represent areas that are generally flat, with slopes of less than 3 percent, and are all well-drained. The route is not classified as prime farmland or farmland of statewide importance.

Map Unit Symbol	Map Unit Name	Percent Slope	Percent of APE	Landform	Drainage Class	Parent Material
E2145A	Shambo Loam	0 to 2	27.9	Hillslopes	Well drained	Alluvium derived from mudstone
E2203A	Farland Silt Loam	0 to 2	25.6	Alluvial fans	Well drained	Fine-silty alluvium
E3755A	Femvik-Wilton Silt Loams	0 to 3	17.4	Rises	Well drained	Fine-silty loess over till
E3801A	Mandan-Linton Silt Loams	0 to 2	4.0	Flats	Well drained	Coarse-silty loess
E3802B	Linton-Mandan Silt Loams	2 to 6	13.9	Alluvial fans	Well drained	Coarse-silty loess
E4139A	Korchea-Fluvaquents Complex	0 to 2	1.3	Floodplains	Somewhat poorly drained	Stratified fine-loamy alluvium derived from sedimentary rock
E4569F	Wabek-Cabba-Shambo Complex	6 to 35	0.5	Escarpments	Excessively drained	Sandy and gravelly alluvium

APE = area of potential effects

6.10.1 Soils Impacts/Mitigation

The following commonly used erosion controls and practices will be implemented, as appropriate:

- Grade or extend terraces across slopes to prevent stormwater from flowing into the construction area and plant open areas with native grasses or low-growing plants soon after work is completed.
- Place energy-dissipating material, such as riprap, check dams, straw bales, wattles, and/or gabions, at stormwater outfalls to slow water runoff, thereby minimizing erosion and preventing entrained sediments from entering waterways.
- Prevent erosion damage by using geotextiles or energy-dissipating devices such as check dams, gabions, or riprap along stream courses or their banks that are impacted by the construction.
- Protect culverts with inlet controls to prevent suspended particles from entering stormwater drainages.
- Maintain gravel entrance/exit pads at each construction site entrance/exit location to provide a buffer to reduce the amount of mud and soil transported on vehicle tires from the site to paved public roadways.
- Immediately implement temporary or permanent erosion protection and stabilization (e.g., cover crop or mulching) for all exposed soil surface areas where activities have been completed or temporarily stopped.

Dust Control

Wind can cause erosion, particularly in dry climates or during the dry season. Wind erosion can occur where surface soil is loose and dry. Wind erosion may also occur in areas where vegetation is sparse or absent and can transport sediments to where they can be washed into receiving waters during the next storm event or snowmelt runoff.

The prevailing winds in central North Dakota are generally from the northwest, although a southeasterly wind direction occurs occasionally. Project impacts are anticipated to be minimal with limited cut or topsoil removal. Any excavated topsoil, ground cover, or overburden materials resulting from project construction will be stockpiled for use in final site reclamation. If necessary, any stockpiles would be laid out perpendicular to the predominant

wind direction to serve as wind breaks, and vegetated cover would be established to minimize erosion.

During construction, disturbed areas, excavated materials, soil piles, and stockpiled materials will be watered to minimize fugitive dust.

6.11 Geologic and Groundwater Resources

The surface geology of the Project area consists of the Oahe Formation-River Sediment from the Holocene epoch, which is described as dark, obscurely bedded clay and silt (overbank sediment). The Oahe Formation-River Sediment is up to 30 feet (10 meters) thick, generally overlying cross-bedded sand (channel sediment) (Clayton 1980). One area within the 1-mile study area was shown as a historic landslide area. However, the area is not within the survey area or the project corridor. No other geologic or groundwater resource impacts have been identified.

6.11.1 Geologic and Groundwater Impacts/Mitigation

The Project will avoid the historic landslide area and there are no permanent impacts.

6.12 Surface Water and Floodplain Resources

The Project area is situated within the Missouri River drainage system (North Dakota Geographic Information Systems 2020). The Project area generally drains into Rock Haven Creek, which is between the two proposed segments of new transmission line. Rock Haven Creek flows east, draining into the Missouri River approximately 725 feet east-southeast of the Project area. Several artificial (i.e., human-made) drainage features, small retaining ponds or reservoirs, and wetlands associated with the construction of the Montana-Dakota RM Heskett Station are within the Project area. Due to the size of the Project, a stormwater pollution prevention plan (SWPPP) is not required. Project disturbance is anticipated to be less than 0.5 acre.

6.12.1 Surface Water and Floodplain Resources Impacts/Mitigation

Erosion control measures will be implemented as necessary to minimize runoff during construction. Erosion control measures such as silt fencing, straw wattle, mulching, seeding, or mesh fabric overlay will be installed as appropriate. Access routes to structure locations will be reviewed prior to the mobilization of equipment so that erosion can be avoided or minimized. Construction crews exercise caution when equipment is within 50 feet of streams and rivers and will not drive equipment through streams or rivers that the transmission line crosses.

6.13 Wetlands

The Project is designed to have minimal impacts on wetlands. Results of desktop analysis and the Aquatic Resources Delineation Report (Exhibit 7) were used to identify potential avoidance areas and wetlands. Pole structures were placed to maximize avoidance to the extent possible. One pole structure (Pole 11) will be placed within a potential wetland area. Impacts are anticipated to be minimal and consistent with use of USACE Nationwide Permit

57, with self-reporting. Montana-Dakota will span one waterbody, which will not be temporarily or permanently impacted.

6.13.1 Wetland Impacts/Mitigation

Wetlands will be avoided to the extent practicable during the construction phase of the project. Montana-Dakota will use best management practices during construction and operation of the transmission line to protect topsoil and adjacent wetland resources and to minimize soil erosion. Practices may include containing excavated material, protecting exposed soil, stabilizing restored material, and revegetating disturbed areas with native species.

Pole structures 8 and 9 were placed to span a waterbody, and poles 11 and 12 were placed to maximize the span over potential wetlands and limit temporary and permanent impacts to wetlands resulting from the projects construction. There were no reasonable alternatives and the impact to the area is expected to be minimal.

6.14 Vegetation

The Project would permanently and temporarily impact vegetation. However, the total impact is limited to holes for new pole locations and wheeled vehicle traffic during construction.

6.14.1 Vegetation Impacts/Mitigation

Disturbance resulting in the loss of vegetation is anticipated to be minimal for the project, and typically limited to access roads within the route and workspace surrounding pole structures. The workspace will not be prepared prior to construction, meaning topsoil will not be removed. Montana-Dakota will limit ground surface disturbance during construction. Temporary best management practices implemented during and after construction, such as fiber rolls or mulch, will be weed free. After construction, Montana-Dakota will use a weed-free regionally specific seed mixture for revegetation in non-agricultural areas. Agricultural fields will be de-compacted and returned to their pre-construction agriculture use. During operation, Montana-Dakota will employ standard monitoring and maintenance procedures to limit the spread of noxious weeds. See Exhibit 9 for the Company's Revegetation Plan.

6.15 Wildlife

Natural resource evaluations were completed for potential wetlands, federally listed threatened and endangered species, and species managed under the North Dakota State Wildlife Action Plan. The completed evaluations were transmitted to the U.S. Army Corps of Engineers (USACE), the U.S. Fish and Wildlife Service (USFWS), and the North Dakota Game and Fish Department (NDGFD). In addition, a summary of Agency Responses can be found in Exhibit 6, Appendix B.

- USACE provided concurrence that jurisdictional wetlands may be located within the Project area and Project permitting under Section 404 of the Clean Water Act should be pursued as needed.
- USFWS provided concurrence that no impacts to federally listed threatened and endangered species are anticipated from Project activities. See Exhibit 13.
- NDGFD provided concurrence that no impacts to state-managed species are anticipated from Project activities.

6.15.1 Wildlife Impacts/Mitigation

The transmission line has been co-located near existing poles to reduce avian collisions. The Company's Avian Protection Plan (Exhibit 14) incorporates mitigation strategies to reduce avian interactions on powerlines.

6.16 Rare and Unique Natural Resources

SWCA evaluated rare and unique natural resources in its Environmental Resource Impacts Assessment (Exhibit 6). None were identified within the Survey area.

6.16.1 Rare and Unique Natural Resources Impacts/Mitigation

There are no anticipated impacts to rare and unique natural resources.

7.0 Identification of Potential Permits/Approvals

Please refer to the table below for a list of potential federal, state, and local permits associated with the Project.

Permit Required	Status
Morton County Utility Occupancy Permit	Obtained 5/25/2021
Nationwide Permit 57 (Clean Water Act)	Self-reporting

8.0 Factors Guiding the Commission

The Siting Act (see NDCC 49-22-09) lists the factors in the following subsections as those that guide the Commission in evaluating applications and designations of corridors and routes.

8.1 Available Research and Investigations pertaining to Public Health and Welfare, Natural Resources, and the Environment

Available research and investigation were utilized throughout ***Section 6.0*** to assess the effects of the Project on public health and welfare, natural resources, and the environment. Project-specific research and investigation reports include: Environmental Resource Impacts Assessment, natural resource surveys, Aquatic Resource Delineation Report, and Class I and Class III Cultural Resource Reports.

8.2 New Electric Transmission Technologies and Systems

The Project will utilize the most current technologies and systems available to site, construct, and operate the Project to optimize electricity transmission while minimizing potential adverse environmental effects.

8.3 Potential for Beneficial Uses of Waste Energy

The Project is not anticipated to generate waste energy. As such, there would be no use of waste energy, beneficial or otherwise, associated with the Project.

8.4 Unavoidable Adverse Direct and Indirect Environmental Effects

Unavoidable adverse direct and indirect environmental effects are discussed throughout ***Section 6.0***.

8.5 Alternatives to the Proposed Corridor or Route

Alternatives to the Project are discussed in ***Section 2.2***.

8.6 Irreversible and Irretrievable Commitment of Natural Resources

The Project would result in the irreversible and irretrievable commitment of resources due to utilization of construction materials (e.g., concrete, steel) as well as hydrocarbon fuel consumed by construction equipment and vehicles transporting workers and materials to and from the Project Corridor. Consumption of materials and fuel during maintenance of the Project would be minor. Some of the resources utilized during construction may be reclaimed upon decommissioning of the Project (e.g., steel); however, consumption of most of these resources would be irreversible and irretrievable. The resources that would be utilized are not in short supply and their use would not have an adverse effect on their overall availability.

8.7 Direct and Indirect Economic Impacts

Direct and indirect impacts and mitigation associated with demographics and land-based economics are discussed in ***Section 6.1*** and ***Section 6.9***, respectively.

8.8 Existing Development Plans

Known land use plans and considerations applicable to development within and adjacent to the Project Corridor are discussed in ***Section 6.2***.

8.9 Scenic Areas, Historic Sites and Structures, and Paleontological or Archaeological Sites

The effect of the Project on visual (including scenic areas), cultural and archaeological (including historical sites and structures), and paleontological resources are discussed in ***Section 6.6***, ***Section 6.7***, and ***Section 6.11***, respectively.

8.10 Areas of Unique Biological Wealth or Habitats for Rare and Endangered Species

The effect of the Project on rare and unique natural resources is discussed in ***Section 6.16***.

8.11 Problems Raised by Federal, State and Local Entities

Comments from Federal, State and Local Entities are summarized in ***Section 9.0*** and have been referenced and incorporated throughout this Application where appropriate.

9.0 Agency Comments

The following table lists the agencies and responses. See all correspondence agencies in Exhibit 6 - Environmental Resources Impacts Assessment, Appendix B and C.

Agency	Date Notified	Response Received	Response Summary
North Dakota Aeronautics Commission	12/18/2020	No	Not applicable
Office of Attorney General	12/18/2020	No	Not applicable
North Dakota Department of Agriculture	12/18/2020	No	Not applicable
North Dakota Department of Environmental Quality	12/18/2020	Yes	Adverse impacts expected to be minor and can be minimized by recommended construction practices
North Dakota Department of Human Services	12/18/2020	No	Not applicable
North Dakota Department of Labor	12/18/2020	No	Not applicable
North Dakota Department of Career and Technical Education	12/18/2020	No	Not applicable
North Dakota Department of Commerce	12/18/2020	No	Not applicable
North Dakota Energy Development Impact Office	12/18/2020	No	Not applicable
North Dakota Game and Fish Department	12/18/2020	Yes	No adverse impacts anticipated
North Dakota Industrial Commission	12/18/2020	No	Not applicable
North Dakota Office of the Governor	12/18/2020	No	Not applicable
North Dakota Department of Transportation	12/18/2020	Yes	No adverse impact on ND DOT anticipated
State Historical Society of North Dakota	12/18/2020	Yes	No Historic Properties Adversely Affected
Indian Affairs Commission	12/18/2020	No	Not applicable
Job Service North Dakota	12/18/2020	No	Not applicable
Department of Trust Lands	12/18/2020	No	Not applicable
Parks and Recreation Department	12/18/2020	Yes	No adverse impacts expected
North Dakota State University Extension Service, North Dakota State Soil Conservation Committee	12/18/2020	No	Not applicable
North Dakota State Water Commission	12/18/2020	No	Not applicable
U.S. Department of Defense	12/18/2020	Yes	No comment
U.S. Fish and Wildlife Service	12/18/2020	Yes	No concerns with project as described
U.S. Army Corps of Engineers	12/18/2020	Yes	Guidance to obtain Nationwide Permit 12 as needed
U.S. Federal Aviation Administration	12/18/2020	No	Not applicable
County Commission of Morton County, North Dakota	12/18/2020	Yes	No comment
North Dakota Transmission Authority	12/18/2020	No	Not applicable
North Dakota Pipeline Authority	12/18/2020	No	Not applicable

Although the North Dakota Geological Survey is not listed as a designated state agency entitled to notice under 69-06-01-05, the Commission requested that Montana-Dakota notify them in a May 19, 2021 request for additional information. Montana-Dakota subsequently sent the project information to the North Dakota Geological Survey in late May and has received no response at this time.

Project notifications providing information on the project were sent to the USACE, USFWS, and NDGFD on December 18, 2020. These notifications including a map of the project, a description of project location and anticipated impacts of the project.

Montana-Dakota received responses from USACE, USFWS, and NDGFD, which are included in the Combined Corridor Certificate and Route Permit for the Mandan Transmission Reroute Project for a 230 kV Transmission Line (PU-21-151) Exhibit A, Appendix C, and noted here for reference:

- **USACE –** Letter received from Patricia L. McQueary, State Program Manager North Dakota on December 30, 2020, which indicates the following:

- Utility lines are authorized under Nationwide Permit 12 provided that the utility line can be placed without any change to pre-construction contours and all other proposed construction activities and facilities are in compliance with the Nationwide's permit conditions and 401 Water Quality Certification. On Tribal Lands, Water Quality Certification is denied for all Nationwide Permits. Applicants must work with EPA to obtain individual water quality certification. Please note the pre-construction notification requirements on page 2 of the fact sheet. If a project involves any one of the seven notification requirements, the project proponent must submit a DA application. Furthermore, a project must also be in compliance with the "Regional Conditions for Nationwide Permits within the State of North Dakota", found on pages 18 thru 21 of the fact sheet. In the event your project(s) requires approval from the U.S. Army Corps of Engineers and cannot be authorized by Nationwide Permit(s), a Standard or Individual Permit will be required."
- As of 2021, Nationwide Permit 12 now relates solely to oil or natural gas pipeline activities, and this project now falls under Nationwide Permit 57 for electric utility line and telecommunications activities. The project can meet and comply with the conditions of Nationwide Permit 57, and no further correspondence with the USACE is required.
- One pole structure (Pole 11) will be placed within a potential wetland area. Impacts are anticipated to be minimal and consistent with use of USACE Nationwide Permit 12 [Nationwide 57], with self-reporting. Montana Dakota will span one waterbody, which will not be temporarily or permanently impacted. Wetlands will be avoided to the extent practicable during the construction phase of the project. If USACE jurisdictional wetland impacts are unavoidable, then a Section 404 and 401 permit application will be submitted to the USACE and state of North Dakota, respectively. Permanent impacts to wetlands and waters will be mitigated according to regulatory requirements. Montana-Dakota will use best management practices during construction and operation of the transmission line to protect topsoil and adjacent wetland resources and to minimize soil erosion. Practices may include containing excavated material, protecting exposed soil, stabilizing restored material, and revegetating disturbed areas with native species."

- **USFWS –** Email received from Drew Becker, Field Supervisor, who digitally signed the notification letter on December 21, 2020, states: "This Constitutes a report of the Department of the Interior prepared in accordance with the Fish and Wildlife Coordination Act (16 U. S. C. 661 et seq). We have reviewed and have NO OBJECTION to this proposed project." See Exhibit 13.
- **NDGFD** - Email received from J. D. Schumacher, Resource Biologist on February 8, 2021, states: "The North Dakota Game and Fish Department has reviewed this project for wildlife concerns. We do not believe it will have significant adverse effects on wildlife or wildlife habitat based on the information provided." As this project is not a Federal undertaking, or action, and no additional Federal or state agency concurrence is anticipated in support of the project.

10.0 Qualifications of Contributors to Siting Study

Following is a list of contributors:

Montana-Dakota

- Robert Frank, Electric Transmission Engineering Director

- Andy McDonald, Environmental Specialist III
- Travis Jacobson, Director of Regulatory Affairs

SWCA Environmental Consultants

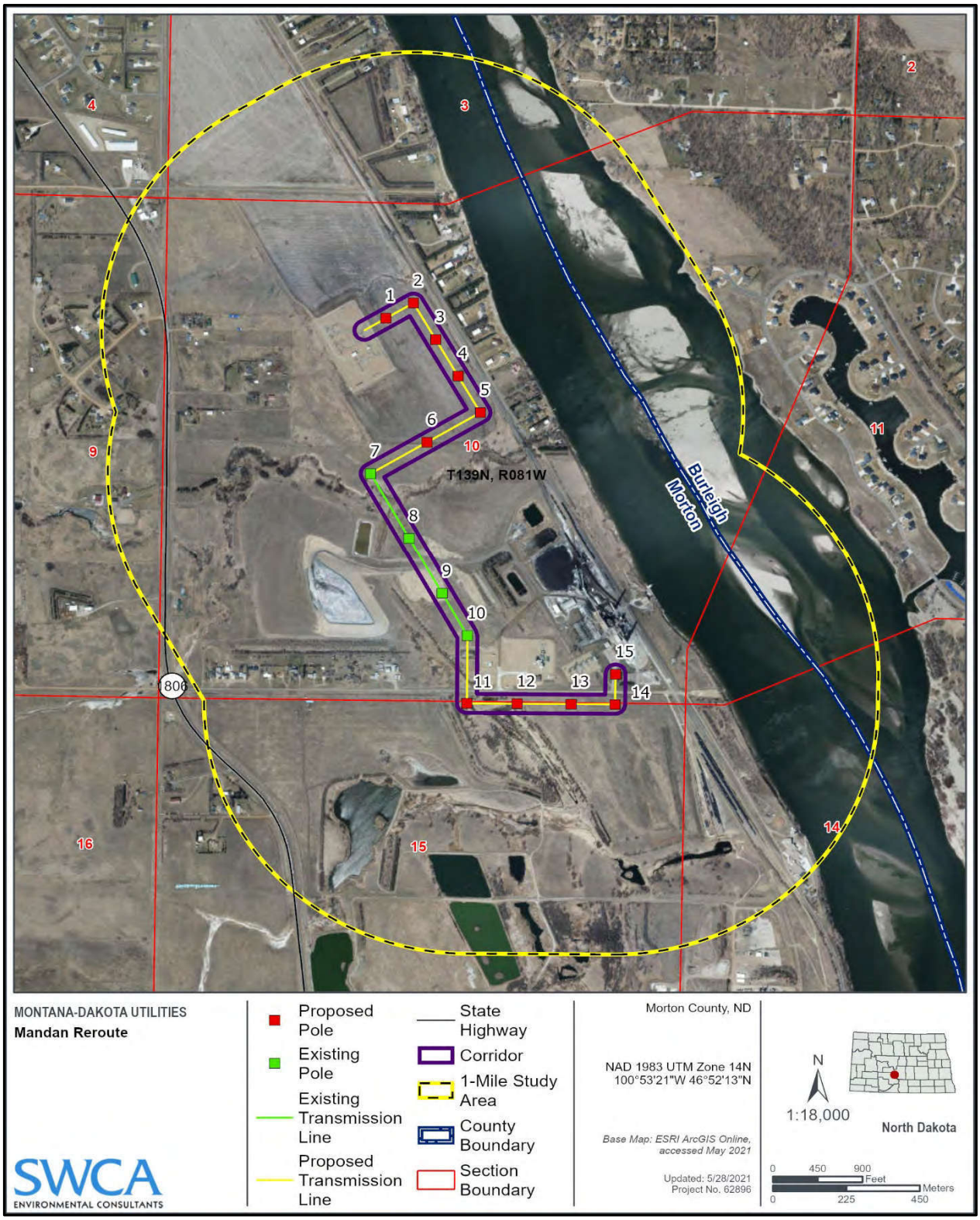
- Michael Retter, Cultural Resources Principal Investigator
- Jana Heisler-White, Natural Resources Team Lead
- Sarah Sappington, Environmental PSC Expert
- Michael Endicott, GIS Specialist

See each contributor's qualifications in Exhibit 11.

Exhibit 1

Project Location Maps


Mandan-Heskett
Legend
Mandan Transmission Substation
Yellow Line New - Reroute
Red Line Existing - Remove
Heskett Transmission Substation
Easement on Marathon Petroleum Property
Google Earth
© 2021 Google
N
1000 ft



Project location map.

Exhibit 2

Black & White Map

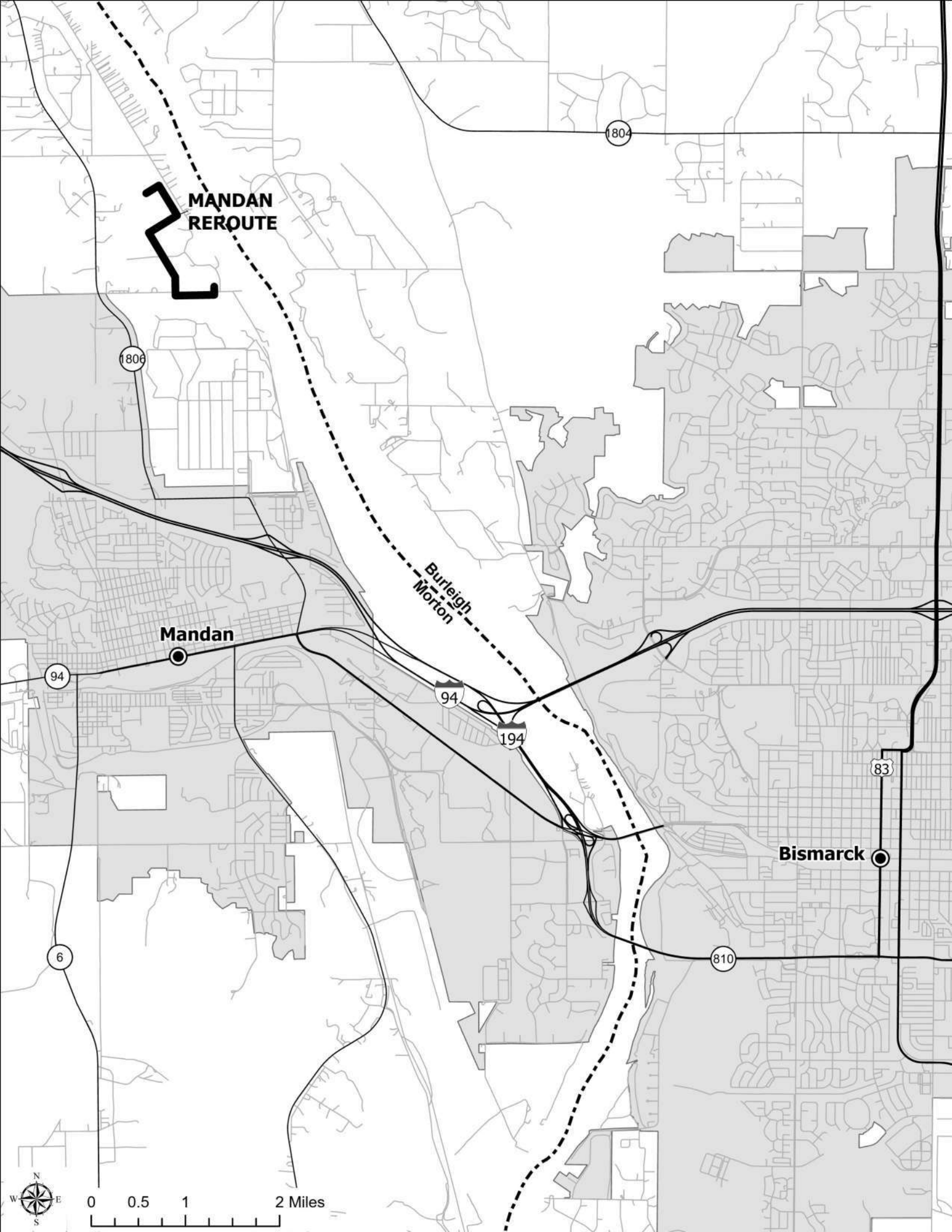

MANDAN
REROUTE
1804
1806
Burleigh
Morton
Mandan
94
94
194
83
Bismarck
6
810
N
W
E
S
0
0.5
1
2 Miles

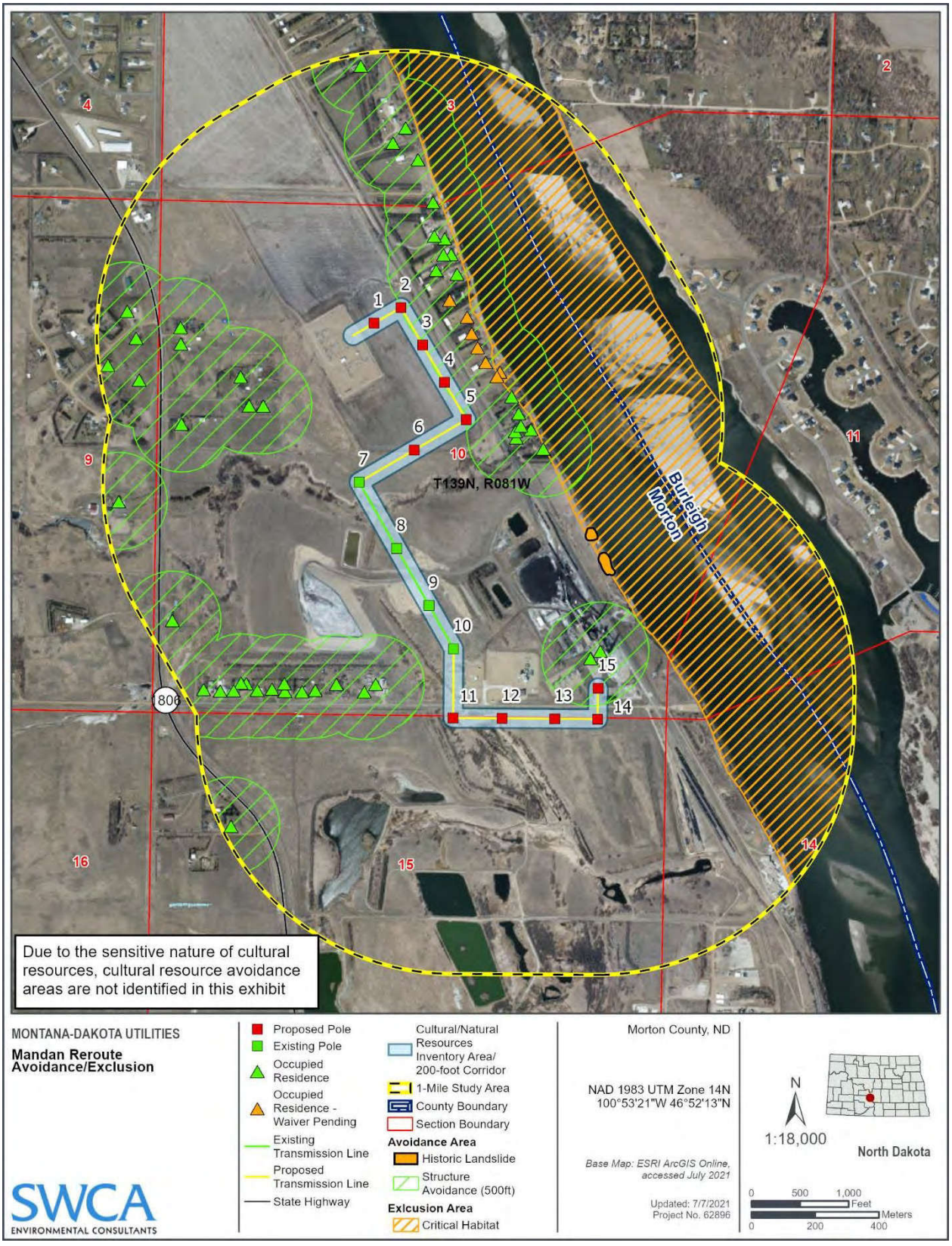
Exhibit 3

Natural Resources Survey Mapping

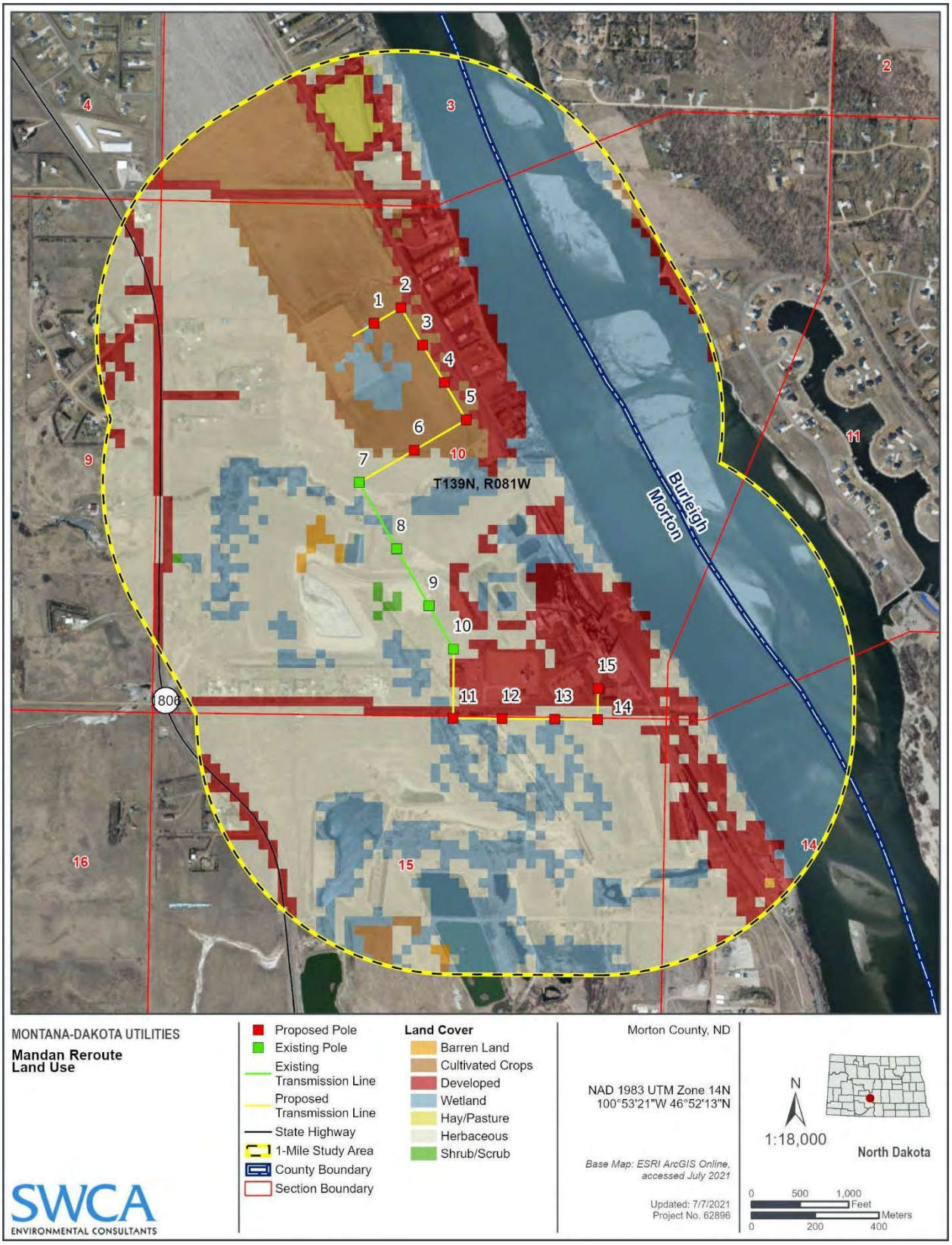
Attachment C. Mandan Reroute Natural Resources Inventory.

Exhibit 4

Avoidance, Exclusion, and Siting Criteria Mapping

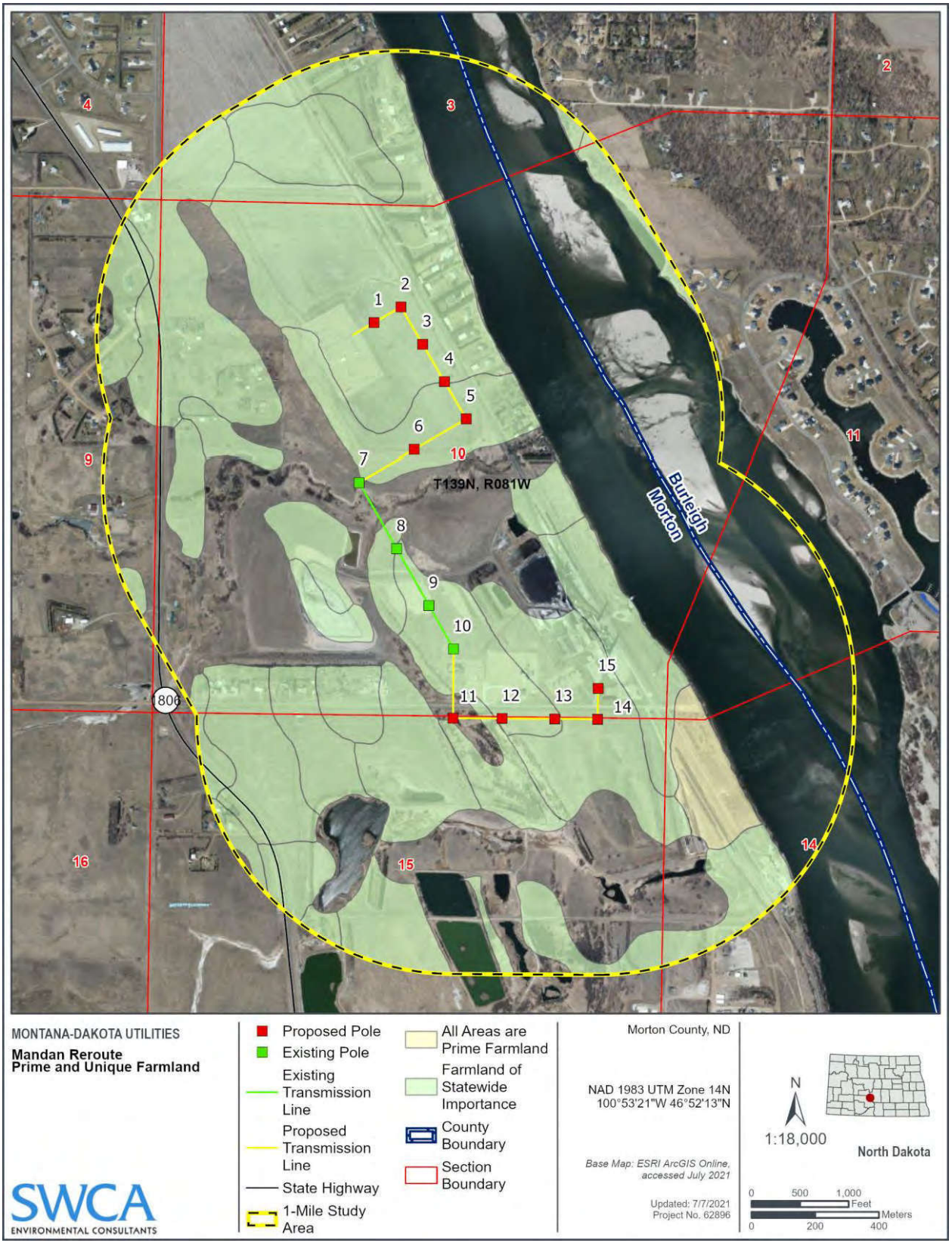


Attachment D1. Mandan Reroute Avoidance/Exclusion Map 1 of 6 showing avoidance and exclusion areas including occupied residences with 500 feet of the route.

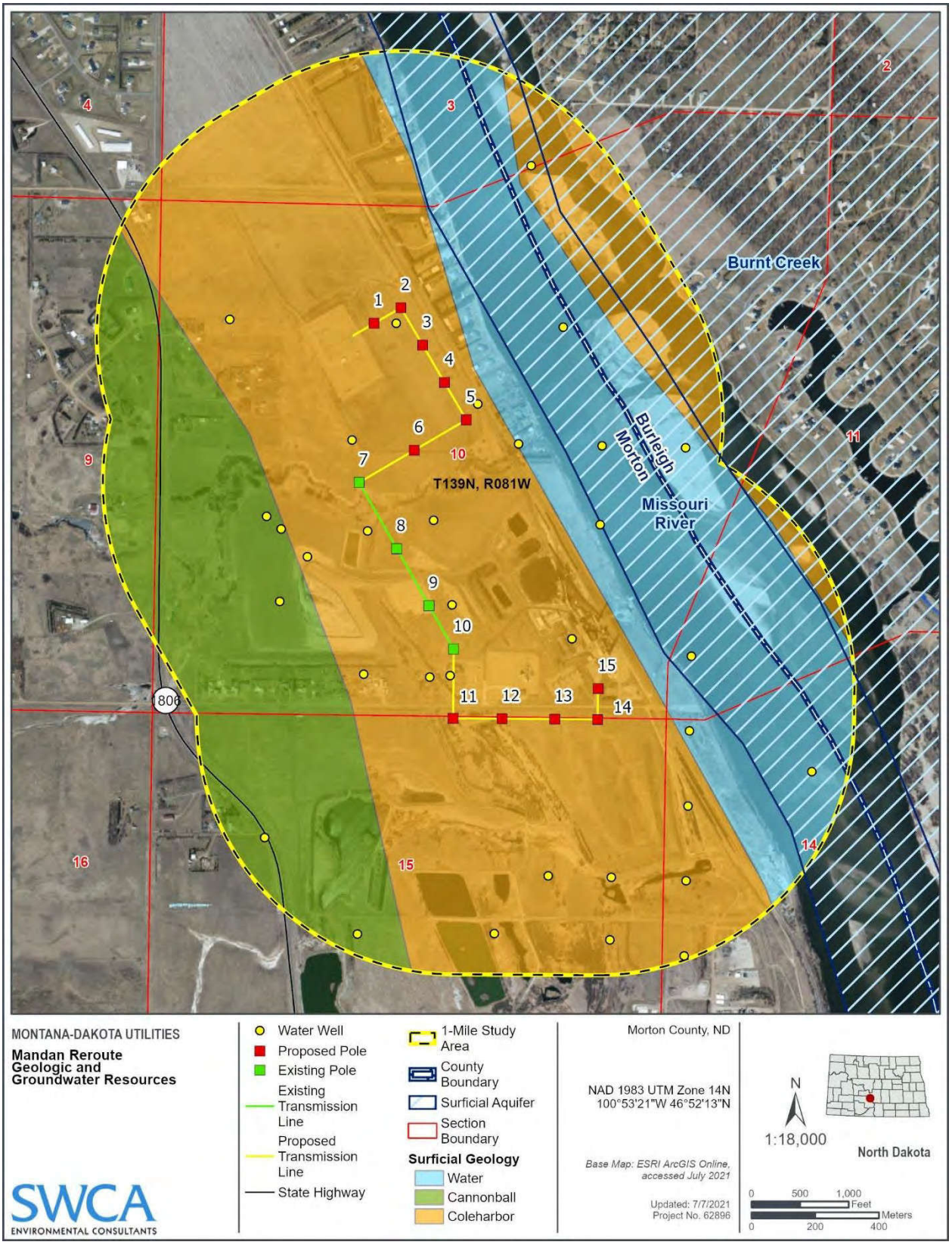


Attachment D2. Mandan Reroute Avoidance/Exclusion Map 2 of 6 showing land use / land cover.

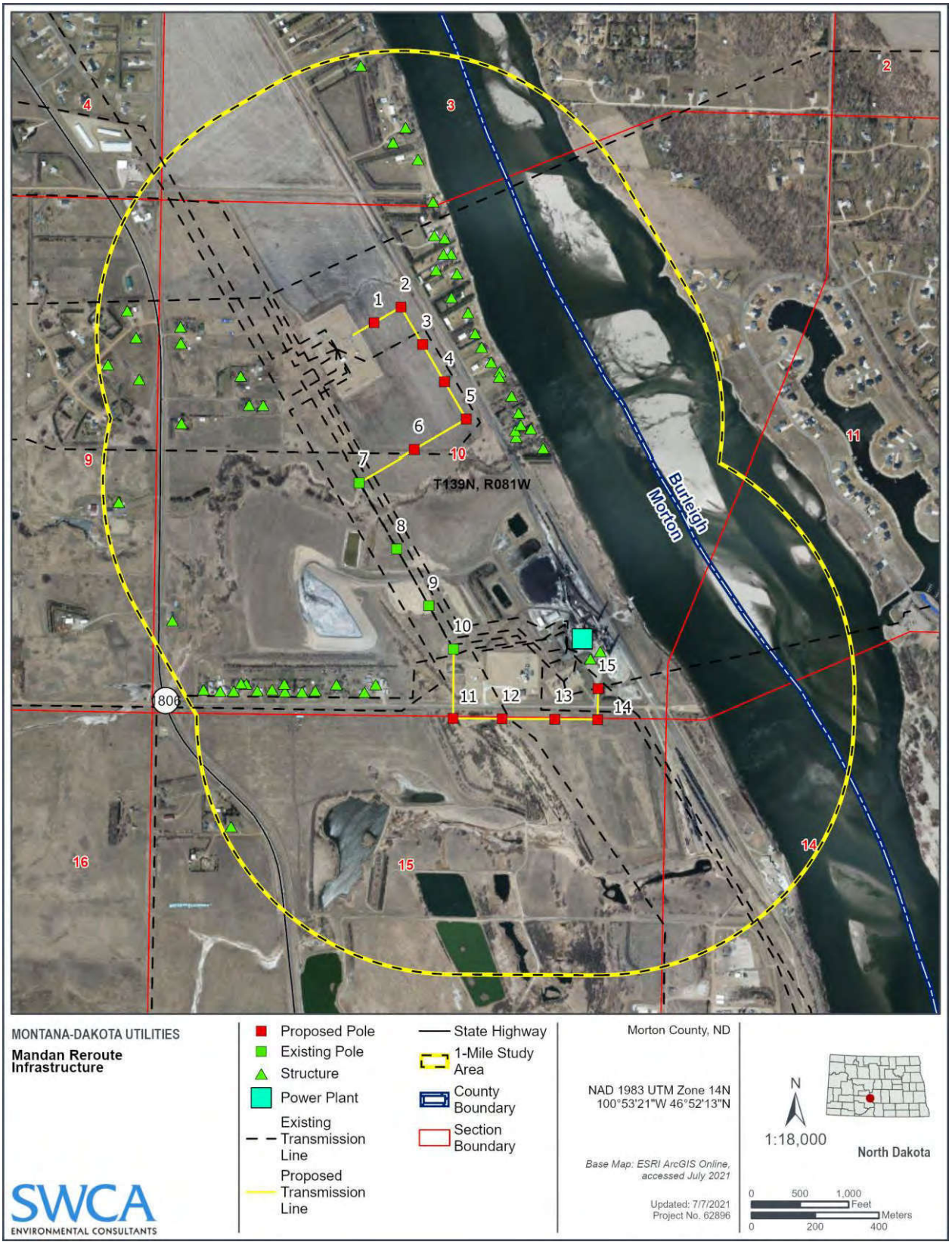
Attachment D3. Mandan Reroute Avoidance/Exclusion Map 3 of 6 showing surface waters and wetlands.



Attachment D4. Mandan Reroute Avoidance/Exclusion Map 4 of 6 showing prime and unique farmland.



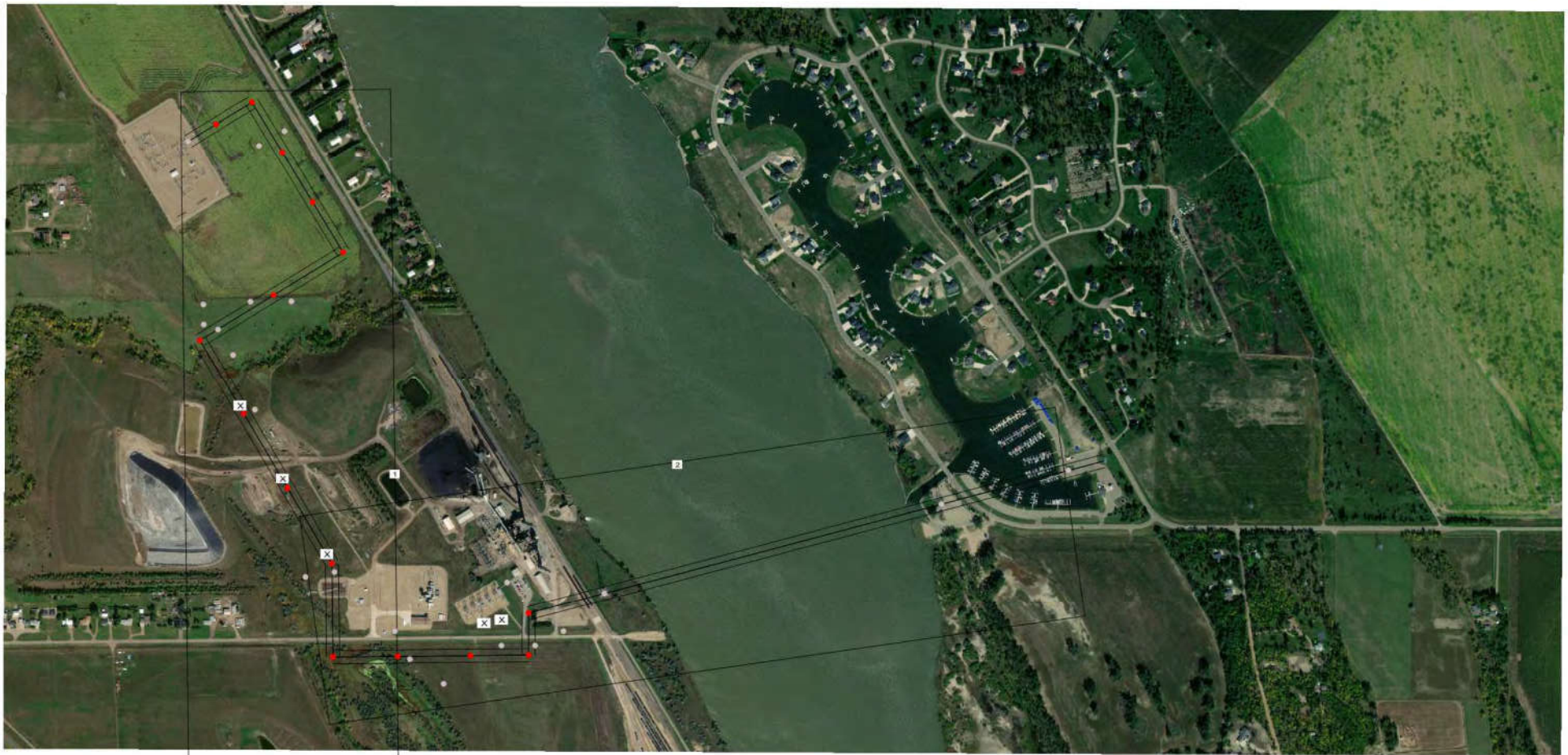
Attachment D5. Mandan Reroute Avoidance/Exclusion Map 5 of 6 showing geologic and groundwater resources.



Attachment D6. Mandan Reroute Avoidance/Exclusion Map 6 of 6 showing infrastructure.

Exhibit 5

Engineering Layouts



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

REV	DESCRIPTION	DWN	DGN	CHK	DATE
2	ISSUED FOR CONSTRUCTION - PHASE II	BB	BB	JDB	04/23/21
1	ISSUED FOR BID - PHASE II	BB	BB	JDB	02/26/21
0	ISSUED FOR CONSTRUCTION - PHASE I	JDB	JDB	TAH	06/17/20

REVISIONS

APPROVALS	DATE
DRAWN BY: JDB	06/17/20
DESIGN BY: JDB	06/17/20
CHECKED BY: TAH	06/17/20
APPROVED BY: CS	06/17/20

DESIGN DATA
CONDUCTOR: 795 KCMIL 45/7 TERN ACSS
PRIMARY OHGW: 1-DN0-7695 OPGW
SECONDARY OHGW: 1-3/8" 7 STRAND EHS STEEL

GROUND CLEARANCE LINE: 28 FT
COORDINATES: SPS NORTH DAKOTA SOUTH, US FT

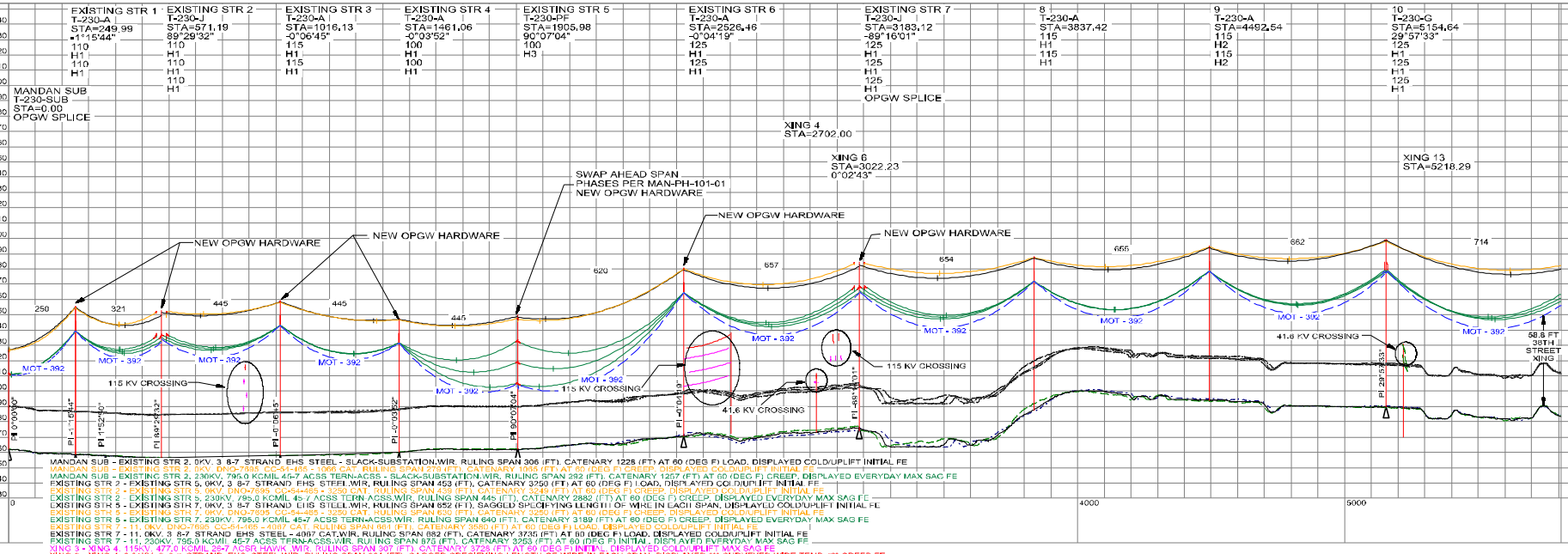
POWER ENGINEERS

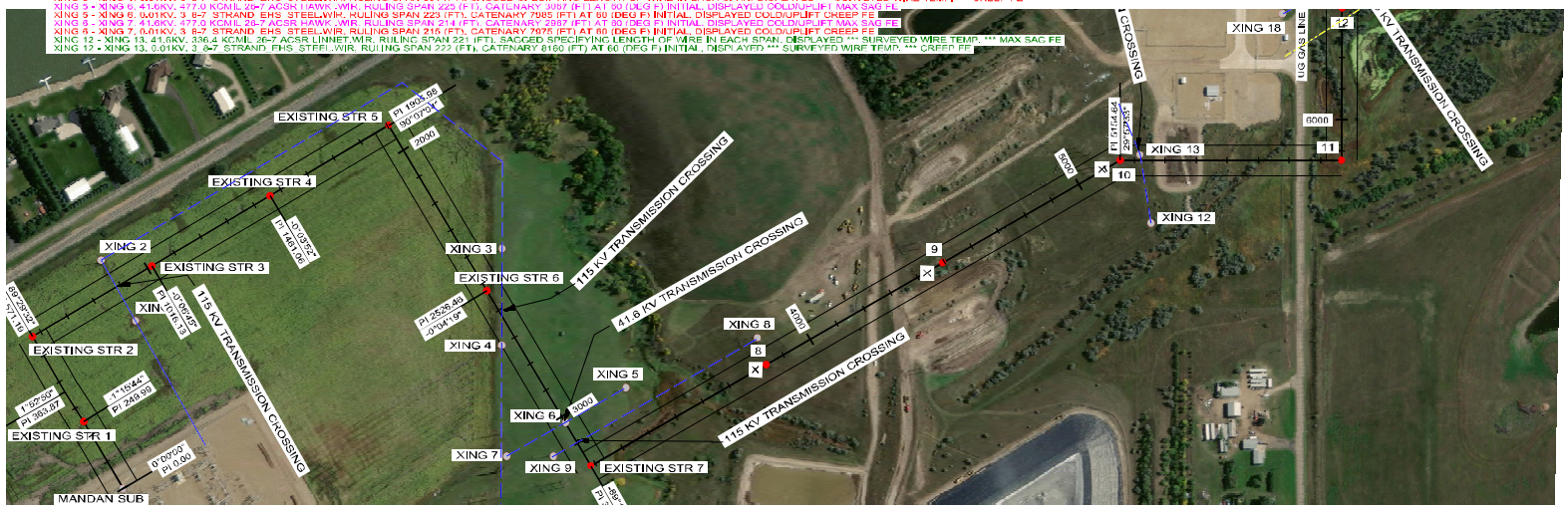
MANDAN SUBSTATION REROUTE
230 KV TRANSMISSION LINE

NORTH

DWG. NO.
MAN-PP-101-01
REVISION: 2
164319

PLS-CADD DRAWING





REVISIONS						
2	ISSUED FOR CONSTRUCTION - PHASE II	BB	BB	JDB	04/23/21
1	ISSUED FOR BID - PHASE II	BB	BB	JDB	02/26/21
0	ISSUED FOR CONSTRUCTION - PHASE I	JDB	JDB	TAH	06/17/20
REV	DESCRIPTION	DWN	DCN	CHK	DATE

APPROVALS	DATE
DRAWN BY: JDB	06/17/20
DESIGN BY: JDB	06/17/20
CHECKED BY: TAH	06/17/20
APPROVED BY: CS	06/17/20

DESIGN DATA

CONDUCTOR: 795 KCMIL 45/7 TERN ACSS
PRIMARY OHGW: 1-DN0-7895 OPGW
SECONDARY OHGW: 1-3/8" 7 STRAND EHS STEEL

GROUND CLEARANCE LINE: 28 FT
COORDINATES: SPS NORTH DAKOTA SOUTH, US FT

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

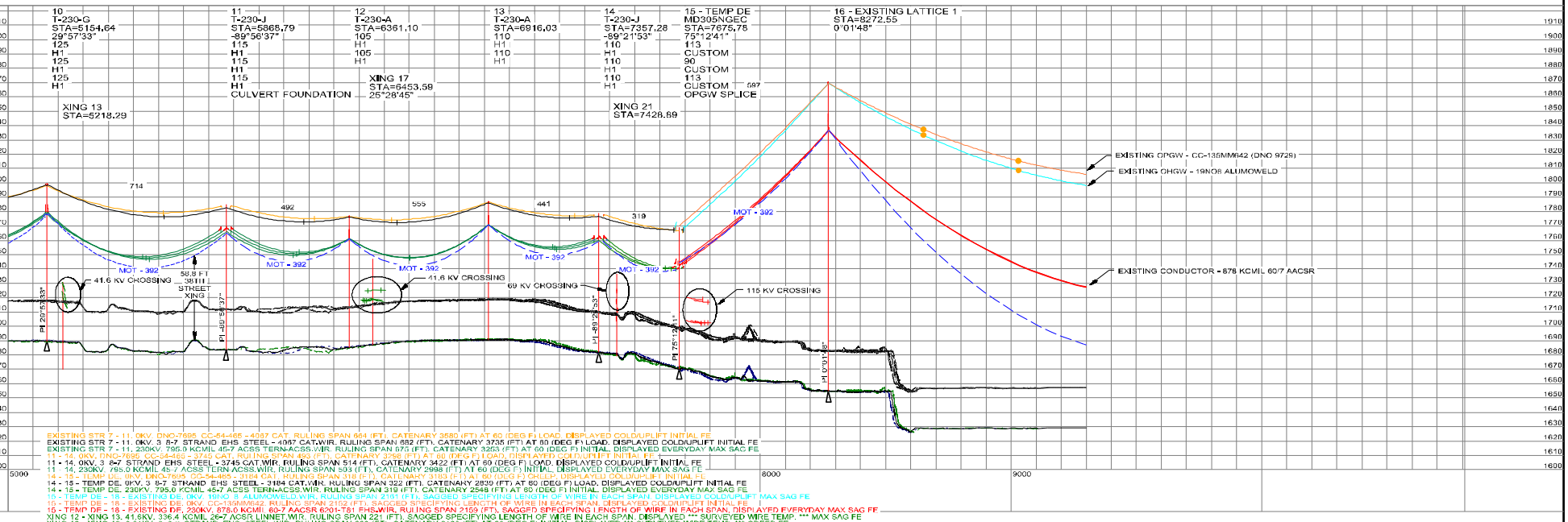
POWER ENGINEERS

MANDAN SUBSTATION REROUTE
230 KV TRANSMISSION LINE

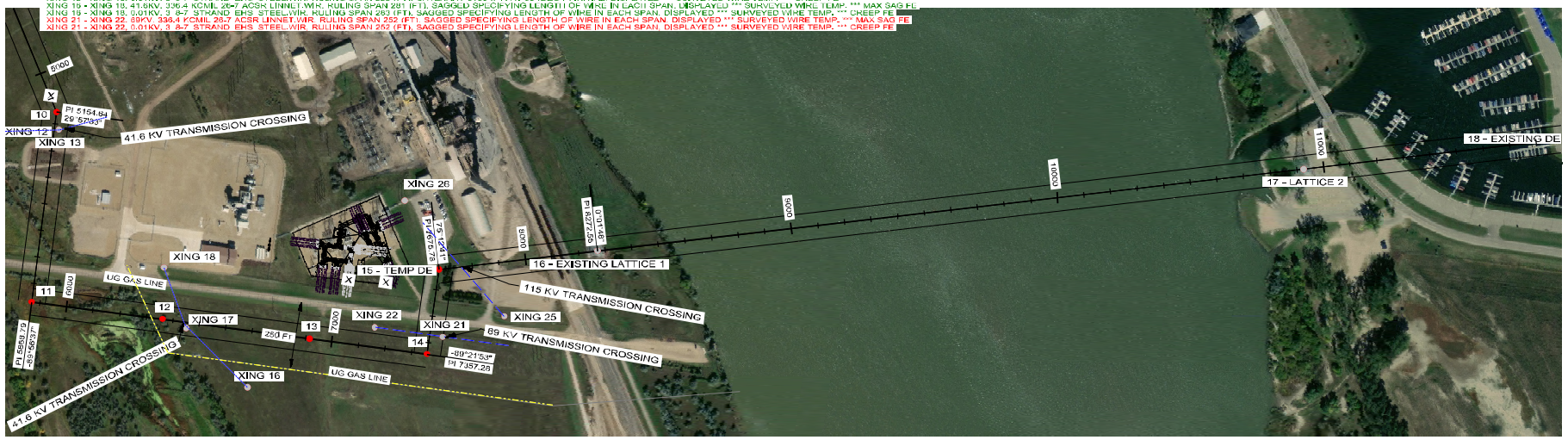
200.0 FT. HORIZ. SCALE
35.0 FT. VERT. SCALE
NORTH

DWG. NO.
MAN-PP-101-02
REVISION: 2
164319

PLS-CADD DRAWING



EXISTING STR 7 - 11, 0KV, DNO-7695, CC-54-465 - 4087 CAT, RULING SPAN 664 (FT), CATENARY 3580 (FT) AT 60 (DEG F) LOAD, DISPLAYED COLD/UPLIFT INITIAL FE
EXISTING STR 7 - 11, 0KV, 3 8-7 STRAND EHS STEEL - 4087 CAT.WIR, RULING SPAN 882 (FT), CATENARY 3735 (FT) AT 60 (DEG F) LOAD, DISPLAYED COLD/UPLIFT INITIAL FE
EXISTING STR 7 - 11, 230KV, 795.0 KCMIL 45-7 ACSS TERN-ACSS.WIR, RULING SPAN 675 (FT), CATENARY 3253 (FT) AT 60 (DEG F) INITIAL, DISPLAYED EVERYDAY MAX SAG FE
11 - 12, 0KV, DNO-7695, CC-54-465 - 3745 CAT, RULING SPAN 490 (FT), CATENARY 3256 (FT) AT 60 (DEG F) LOAD, DISPLAYED COLD/UPLIFT INITIAL FE
11 - 12, 0KV, 3 8-7 STRAND EHS STEEL - 3745 CAT.WIR, RULING SPAN 514 (FT), CATENARY 3422 (FT) AT 60 (DEG F) LOAD, DISPLAYED COLD/UPLIFT INITIAL FE
11 - 12, 230KV, 795.0 KCMIL 45-7 ACSS TERN-ACSS.WIR, RULING SPAN 593 (FT), CATENARY 2998 (FT) AT 60 (DEG F) INITIAL, DISPLAYED EVERYDAY MAX SAG FE
14 - 15 - TEMP DE, 0KV, DNO-7695, CC-54-465 - 3184 CAT, RULING SPAN 319 (FT), CATENARY 3180 (FT) AT 60 (DEG F) UNDER DISPLAYED COLD/UPLIFT INITIAL FE
14 - 15 - TEMP DE, 0KV, 3 8-7 STRAND EHS STEEL - 3184 CAT.WIR, RULING SPAN 322 (FT), CATENARY 2839 (FT) AT 60 (DEG F) LOAD, DISPLAYED COLD/UPLIFT INITIAL FE
14 - 15 - TEMP DE, 230KV, 795.0 KCMIL 45-7 ACSS TERN-ACSS.WIR, RULING SPAN 319 (FT), CATENARY 2548 (FT) AT 60 (DEG F) INITIAL, DISPLAYED EVERYDAY MAX SAG FE
15 - TEMP DE - 18 - EXISTING DE, 0KV, 19NO 3 ALUMOWELD.WIR, RULING SPAN 2161 (FT), SAGGED SPECIFYING LENGTH OF WIRE IN EACH SPAN, DISPLAYED COLD/UPLIFT MAX SAG FE
15 - TEMP DE - 18 - EXISTING DE, 0KV, CC-135MM642, RULING SPAN 2152 (FT), SAGGED SPECIFYING LENGTH OF WIRE IN EACH SPAN, DISPLAYED COLD/UPLIFT INITIAL FE
15 - TEMP DE - 18 - EXISTING DE, 230KV, 875.0 KCMIL 60-7 AACSR 6201-T81 FHS.WIR, RULING SPAN 2159 (FT), SAGGED SPECIFYING LENGTH OF WIRE IN EACH SPAN, DISPLAYED EVERYDAY MAX SAG FE
XING 12 - XING 13, 41.6KV, 336.4 KCMIL 26-7 ACSR LINNET.WIR, RULING SPAN 221 (FT), SAGGED SPECIFYING LENGTH OF WIRE IN EACH SPAN, DISPLAYED *** SURVEYED WIRE TEMP, *** MAX SAG FE
XING 12 - XING 13, 0.01KV, 3 8-7 STRAND EHS STEEL.WIR, RULING SPAN 222 (FT), CATENARY 8160 (FT) AT 60 (DEG F) INITIAL, DISPLAYED *** SURVEYED WIRE TEMP, *** CREEP FE
XING 18 - XING 18, 41.6KV, 336.4 KCMIL 26-7 ACSR LINNET.WIR, RULING SPAN 281 (FT), SAGGED SPECIFYING LENGTH OF WIRE IN EACH SPAN, DISPLAYED *** SURVEYED WIRE TEMP, *** MAX SAG FE
XING 18 - XING 18, 0.01KV, 3 8-7 STRAND EHS STEEL.WIR, RULING SPAN 283 (FT), SAGGED SPECIFYING LENGTH OF WIRE IN EACH SPAN, DISPLAYED *** SURVEYED WIRE TEMP, *** CREEP FE
XING 21 - XING 22, 69KV, 336.4 KCMIL 26-7 ACSR LINNET.WIR, RULING SPAN 252 (FT), SAGGED SPECIFYING LENGTH OF WIRE IN EACH SPAN, DISPLAYED *** SURVEYED WIRE TEMP, *** MAX SAG FE
XING 21 - XING 22, 0.01KV, 3 8-7 STRAND EHS STEEL.WIR, RULING SPAN 252 (FT), SAGGED SPECIFYING LENGTH OF WIRE IN EACH SPAN, DISPLAYED *** SURVEYED WIRE TEMP, *** CREEP FE



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

REV	DESCRIPTION	DWN	DCN	CHK	DATE
2	ISSUED FOR CONSTRUCTION - PHASE II	BB	BB	JDB	04/23/21
1	ISSUED FOR BID - PHASE II	BB	BB	JDB	02/26/21
0	ISSUED FOR CONSTRUCTION - PHASE I	JDB	JDB	TAH	06/17/20

REVISIONS

APPROVALS	DATE
DRAWN BY: JDB	06/17/20
DESIGN BY: JDB	06/17/20
CHECKED BY: TAH	06/17/20
APPROVED BY: CS	06/17/20

DESIGN DATA
CONDUCTOR: 79o KCMIL 45/7 TERN ACSS
PRIMARY OHGW: 1-DN0-7695 OPGW
SECONDARY OHGW: 1-3/8" 7 STRAND EHS STEEL
GROUND CLEARANCE LINE: 28 FT
COORDINATES: SPS NORTH DAKOTA SOUTH, US FT

POWER ENGINEERS

MANDAN SUBSTATION REROUTE
230 KV TRANSMISSION LINE

200.0 FT. HORIZ. SCALE
35.0 FT. VERT. SCALE
NORTH

DWG. NO.
MAN-PP-101-03
REVISION: 2
164319

Exhibit 6

Environmental Resource Impacts Assessment

Environmental Resource Impacts Assessment for the Montana-Dakota Utilities Co. Mandan Reroute, Morton County, North Dakota

FEBRUARY 2021

PREPARED FOR

Montana-Dakota Utilities Co.

PREPARED BY

SWCA Environmental Consultants

ENVIRONMENTAL RESOURCE IMPACTS ASSESSMENT FOR THE MONTANA-DAKOTA UTILITIES CO. MANDAN REROUTE, MORTON COUNTY, NORTH DAKOTA

Prepared for

Montana-Dakota Utilities Co.
400 North 4th Street
Bismarck, North Dakota 58501

SWCA Environmental Consultants
201 Slate Drive, Suite 8
Bismarck, North Dakota 58503
(701) 258-6622
www.swca.com

SWCA Project No. 62896

February 2021

CONTENTS

Appendices

Figures

Tables

This page intentionally left blank.

INTRODUCTION

SWCA Environmental Consultants (SWCA) is assisting Montana-Dakota Utilities Co. (Montana-Dakota) with an assessment of environmental resource impacts associated with the proposed Mandan Reroute Project (Project) (Figure 1). This assessment was completed to fulfill the requirements of Part 2c for a Transmission Facility Permit under North Dakota Administrative Code (NDAC) Chapter 69-06-05. The assessment addressed potential impacts to natural and cultural resources that may be in the Project area.

The Project includes the construction of two segments of 230-kilovolt (kV) electrical transmission line within the city of Mandan, Morton County, North Dakota (see Figure 1). The first segment is approximately 0.6 mile long and originates at the Mandan Substation. It will subsequently connect with an existing 230-kV transmission line approximately 900 feet south of the substation. Project activities associated with this segment will include the addition (stringing) of conductors to six existing pole structures (Poles 1 through 6). The second proposed segment of the transmission line will begin at Pole 10 and continue south for 0.13 mile and east for 0.28 mile before turning north for 0.60 mile to connect with the existing transmission line that crosses the Missouri River. Poles 11 through 15 are proposed to be placed as shown on the Project location map (see Figure 1). Pole placement will include limited surface disturbance and stringing conductors between the poles to tie into and energize the line.

The Project will be privately funded and is located on privately owned land in Sections 10 and 15, Township (T) 139 North (N), Range (R) 81 West (W). The Project will have a 200-foot-wide right-of-way easement on property not owned by Montana-Dakota.

Project construction is scheduled to begin in the spring of 2021. H-frame, three-pole guyed suspension, and dead-end structures will be used. Pole 15 is being placed as a temporary structure and is expected to be removed in 2022 when the transmission line crossing of the Missouri River is reconductored with permanent structure replacement.

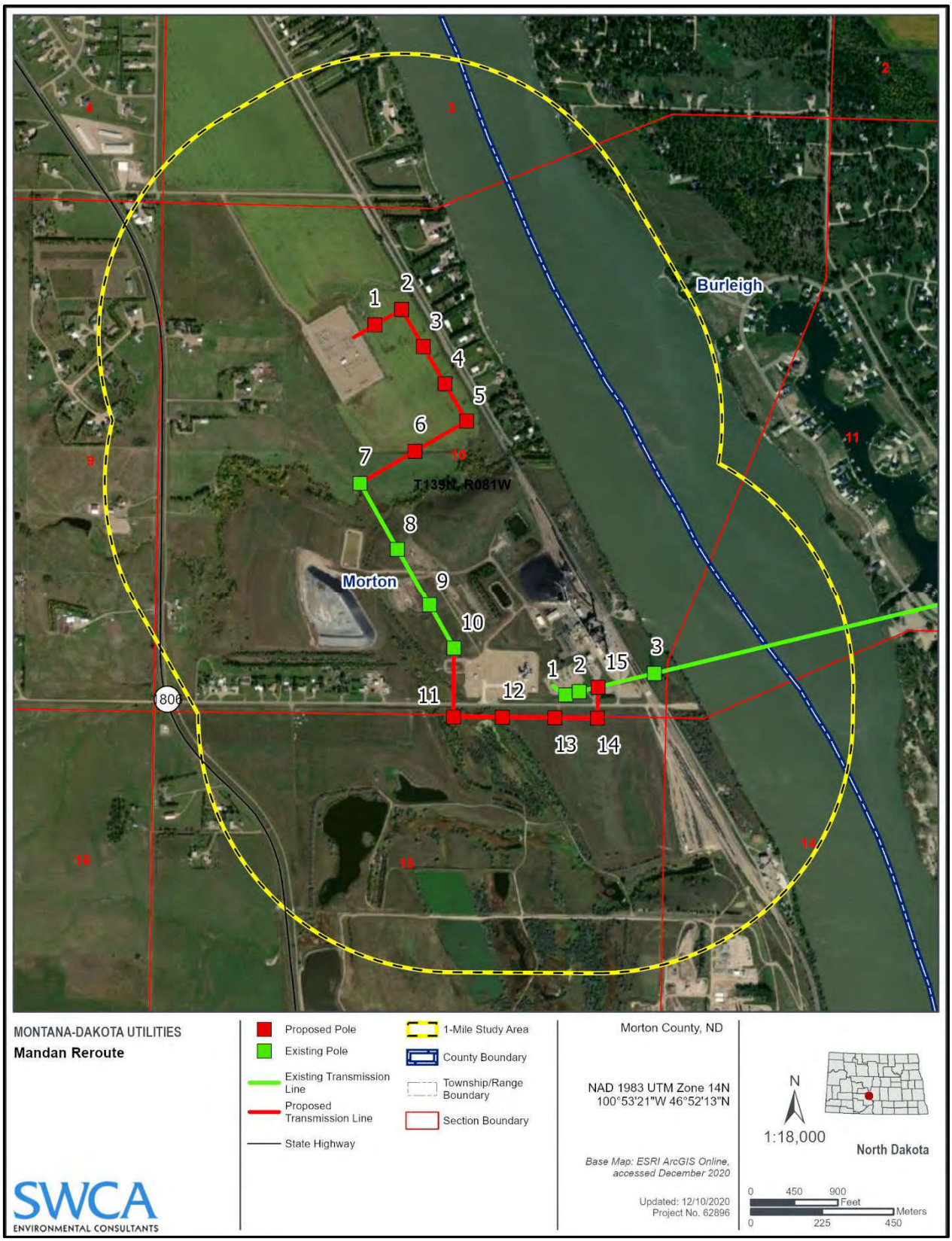


Figure 1. Project location map.

ASSESSMENT OF ENVIRONMENTAL IMPACTS

This assessment was prepared as supporting material for a Transmission Facility Permit application per NDAC 69-06-05. The assessment included a natural resource desktop review and Class I cultural resource inventory of a 1-mile-wide study area, followed by natural and cultural resources field surveys. A summary of each step in the assessment process is described in the sections that follow.

Project Setting

The Project area is in the Missouri Plateau section of the Great Plains physiographic province in west-central North Dakota (Fenneman 1931). This area is within the River Breaks ecoregion, which is characterized by broken terraces and uplands formed from erodible soil strata (Bryce et al. 1998). Photographs from the site visit to the Project area are provided in Appendix A. The site visit consisted of general reconnaissance to identify natural resources and a Class III cultural resource survey. The Project area is in an upland setting, overlooking terraces and the Missouri River to the east. The northern section of proposed new transmission line is almost entirely within a level agricultural field that is immediately east and south of the existing North Heskett Substation. The southern section of proposed new transmission line is along an existing crown and ditch road and spans a wetland complex and hay field. The topography within the Project area is generally level, ranging from approximately 1,600 to 1,700 feet in elevation.

Hydrology

The Project area is situated within the Missouri River drainage system (North Dakota Geographic Information Systems 2020). The Project area generally drains into Rock Haven Creek, which is between the two proposed segments of new transmission line. Rock Haven Creek flows east, draining into the Missouri River approximately 725 feet east-southeast of the Project area. Several artificial (i.e., human-made) drainage features, small retaining ponds or reservoirs, and wetlands associated with the construction of the Montana-Dakota RM Heskett Station are within the Project area.

Geology

The surface geology of the Project area consists of the Oahe Formation-River Sediment from the Holocene epoch, which is described as dark, obscurely bedded clay and silt (overbank sediment). The Oahe Formation-River Sediment is up to 30 feet (10 meters) thick, generally overlying cross-bedded sand (channel sediment) (Clayton 1980).

Soils

The Natural Resources Conservation Service (NRCS) Web Soil Survey (NRCS 2020) identified seven soil series within the Project area (Table 1). Three of the soil series—Shambo Loam, Farland Silt Loam, and Femvik-Wilton Silt Loams—represent approximately 70% of the Project area. These soil series represent areas that are generally flat, with slopes of less than 3 percent, and are all well-drained.

Table 1. Soils within the Project Area

Map Unit Symbol	Map Unit Name	Percent Slope	Percent of APE	Landform	Drainage Class	Parent Material
E2145A	Shambo Loam	0 to 2	27.9	Hillslopes	Well drained	Alluvium derived from mudstone
E2203A	Farland Silt Loam	0 to 2	25.6	Alluvial fans	Well drained	Fine-silty alluvium
E3755A	Femvik-Wilton Silt Loams	0 to 3	17.4	Rises	Well drained	Fine-silty loess over till
E3801A	Mandan-Linton Silt Loams	0 to 2	4.0	Flats	Well drained	Coarse-silty loess
E3802B	Linton-Mandan Silt Loams	2 to 6	13.9	Alluvial fans	Well drained	Coarse-silty loess
E4139A	Korchea-Fluvaquents Complex	0 to 2	1.3	Floodplains	Somewhat poorly drained	Stratified fine-loamy alluvium derived from sedimentary rock
E4569F	Wabek-Cabba-Shambo Complex	6 to 35	0.5	Escarpments	Excessively drained	Sandy and gravelly alluvium

APE = area of potential effects

General Ecology

The Project area is situated within the northwestern Great Plains ecoregion, characterized by native grasslands over rolling plains. The parcels of land themselves are part of industrial facilities, and the soils and vegetation appear to have been disturbed for the purposes of cultivation or facility management and operation. Native vegetation within this ecoregion typically contains such species as western wheatgrass (*Pascopyrum smithii*), little bluestem (*Schizachyrium scoparium*), and prairie sandreed (*Calamovilfa longifolia*) (Bryce et al. 1998). The western portion of the Project area is within a recently harvested sunflower (*Helianthus annuus*) field, allowing for 90% to 100% bare ground visibility. The eastern portion of the Project area is dominated by smooth brome (*Bromus inermis*) and Kentucky bluegrass (*Poa pratensis*) with prairie cordgrass (*Spartina pectinata*) and a small portion of hay field, which reduced the bare ground surface visibility to 30%. In the area of the southern segment, there is a mixture of upland and wetland vegetation due to enhanced hydrology.

Agency Notification

As required by NDAC 69-06-01-05, 27 agencies are entitled to notice and an opportunity to provide feedback and comment on perceived potential impacts on resources under their jurisdiction. Notification letters that included a Project description and construction right-of-way map were sent to all of the agencies on December 18, 2020. The notified agencies and received responses are summarized in Table B1 of Appendix B. Also included in Appendix B are copies of the correspondence received, as well as the notification letter.

Natural Resource Impacts Evaluation

Natural resource evaluations were completed for potential wetlands, federally listed threatened and endangered species, and species managed under the North Dakota State Wildlife Action Plan. The completed evaluations were transmitted to the U.S. Army Corps of Engineers (USACE), the U.S. Fish and Wildlife Service (USFWS), and the North Dakota Game and Fish Department (NDGFD); copies of the agency letters and correspondence are presented in Appendix C. Below is a summary of agency responses.

- USACE provided concurrence that jurisdictional wetlands may be located within the Project area and Project permitting under Section 404 of the Clean Water Act should be pursued as needed.

- USFWS provided concurrence that no impacts to federally listed threatened and endangered species are anticipated from Project activities.
- NDGFD provided concurrence that no impacts to state-managed species are anticipated from Project activities.

Cultural Resource Impacts Evaluation

The Class I and Class III cultural resource inventories were completed for the Project study area and proposed route and SWCA's report was submitted to the State Historical Society of North Dakota (SHSND) on December 23, 2020, with a recommended finding of No Historic Properties Adversely Affected and that the Project should proceed as planned. The SHSND concurred with that finding in a letter dated January 11, 2021. Both the report and SHSND correspondence are included in Appendix D.

CONCLUSION

SWCA completed an environmental resource impacts assessment for Montana-Dakota's proposed Mandan Reroute Project to fulfill the requirements of Part 2c for a Transmission Facility Permit under NDAC 69-06-05. The 27 agencies designated in NDAC 60-06-01-05 were notified of the proposed Project in December 2020 and nine agencies provided responses. The natural resource environmental impacts assessment was provided to the USACE, USFWS, and NDGFD. The USFWS and NDGFD provided concurrence that impacts to federally listed threatened and endangered species and state-managed species from Project activities are not anticipated. With regard to the USACE response, Montana-Dakota understands that potentially jurisdictional wetlands and waterbodies are present in the project area. In the event that the Project impacts exceed regulatory thresholds Montana-Dakota will seek the appropriate approvals with the USACE to ensure compliance with Section 404 of the Clean Water Act. Class I and Class III cultural resource inventories were completed for the Project study area and route and submitted to the SHSND for concurrence. SHSND concurred that a good faith effort had been made to avoid significant cultural resources during Project construction. All other agencies who provided comments expressed no objections to the Project and/or indicated that impacts to resources under their jurisdiction were expected to be minimal to none.

LITERATURE CITED

Bryce, S., J.M. Omernik, D.E. Pater, M. Ulmer, J. Schaar, J. Freeouf, R. Johnson, P. Kuck, and S.H. Azevedo. 1998. Ecoregions of North Dakota and South Dakota. Jamestown, North Dakota: Northern Prairie Wildlife Research Center Online. Available at: http://www.npwrc.usgs.gov/resource/habitat/ndsdeco/index.htm (Version 30NOV1998). Accessed September 30, 2020.

Clayton, L. 1980. Geologic Map of North Dakota, U.S. Geological Survey, scale 1:500,000. Available at: http://tin.er.usgs.gov/geology/state/state.php?state=ND. Accessed September 30, 2020.

Fenneman, N.M. 1931. *Physiography of Western United States*. New York, New York: McGraw-Hill.

Natural Resources Conservation Service. 2020. Web Soil Survey – Morton County, ND. Available at: http://websoilsurvey.nrcs.usda.gov. Accessed September 30, 2020.

North Dakota Geographic Information Systems. 2020. North Dakota Geographic Information Systems. Available at: http://www.nd.gov/gis/. Accessed September 30, 2020.

APPENDIX A

Site Overview Photographs

Photo A1. Survey area overview, southern segment, facing west.

Photo A2. Southern segment, overview from western edge of the Project area facing east. Wetland mosaic is present within and adjacent to the construction right-of-way.

Photo A3. Overview of the southern segment of the Project area facing south. The adjacent road to the north of the proposed new section of transmission line is shown.

Photo A4. Overview of Project area showing wetland south of east–west-trending improved road, southern segment, facing south.

Photo A5. Overview of agricultural field within the Project area for the proposed northern segment, facing east.

Photo A6. Overview of two-track road surface disturbance in agricultural field of northern segment of the Project area, facing southeast.

Photo A7. Overview of survey area from the western extent of the southern segment of the Project area, facing east.

Photo A8. Overview of surface disturbance and vegetation in the northern segment of the Project area, facing northwest.

Photo A9. Overview of agricultural field along the eastern side of northern segment of the Project area, facing north.

This page intentionally left blank.

APPENDIX B

Agencies Notified and Response Summary

Table B1. Summary of Notified Agencies and Responses

Agency	Date Notified	Response Received	Response Summary
North Dakota Aeronautics Commission	12/18/2020	No	Not applicable
Office of Attorney General	12/18/2020	No	Not applicable
North Dakota Department of Agriculture	12/18/2020	No	Not applicable
North Dakota Department of Environmental Quality	12/18/2020	Yes	Adverse impacts expected to be minor and can be minimized by recommended construction practices
North Dakota Department of Human Services	12/18/2020	No	Not applicable
North Dakota Department of Labor	12/18/2020	No	Not applicable
North Dakota Department of Career and Technical Education	12/18/2020	No	Not applicable
North Dakota Department of Commerce	12/18/2020	No	Not applicable
North Dakota Energy Development Impact Office	12/18/2020	No	Not applicable
North Dakota Game and Fish Department	12/18/2020	Yes	No adverse impacts anticipated
North Dakota Industrial Commission	12/18/2020	No	Not applicable
North Dakota Office of the Governor	12/18/2020	No	Not applicable
North Dakota Department of Transportation	12/18/2020	Yes	No adverse impact on ND DOT anticipated
State Historical Society of North Dakota	12/18/2020	Yes	No Historic Properties Adversely Affected
Indian Affairs Commission	12/18/2020	No	Not applicable
Job Service North Dakota	12/18/2020	No	Not applicable
Department of Trust Lands	12/18/2020	No	Not applicable
Parks and Recreation Department	12/18/2020	Yes	No adverse impacts expected
North Dakota State University Extension Service, North Dakota State Soil Conservation Committee	12/18/2020	No	Not applicable
North Dakota State Water Commission	12/18/2020	No	Not applicable
U.S. Department of Defense	12/18/2020	Yes	No comment
U.S. Fish and Wildlife Service	12/18/2020	Yes	No concerns with project as described
U.S. Army Corps of Engineers	12/18/2020	Yes	Guidance to obtain Nationwide Permit 12 as needed
U.S. Federal Aviation Administration	12/18/2020	No	Not applicable
County Commission of Morton County, North Dakota	12/18/2020	Yes	No comment
North Dakota Transmission Authority	12/18/2020	No	Not applicable
North Dakota Pipeline Authority	12/18/2020	No	Not applicable

This page intentionally left blank.

SWCA
ENVIRONMENTAL CONSULTANTS
Sound Science. Creative Solutions.®

201 Slate Drive, Suite 8
Bismarck, North Dakota 58503
Tel 701.258.6622 Fax 701.258.5957
www.swca.com

December 18, 2020

Andy Zachmeier
County Commission of Morton County, ND
210 2nd Ave NW
Mandan, ND 58554

Re: Montana-Dakota Utilities Co. Mandan Transmission Line Reroute Project
Morton County, North Dakota

Dear Andy Zachmeier,

Montana-Dakota Utilities Co. (Montana-Dakota) is proposing to construct two new segments of 230-kilovolt transmission line as part of the Mandan Transmission Line Reroute project (Project). The lengths of the two proposed segments are 0.60 and 0.47 mile. As shown on the enclosed Project location map, the first proposed segment of the transmission line will originate at the North Heskett substation and continue northeast for 0.11 mile before turning southeast for 0.25 mile and then southwest for 0.24 mile where it will connect to the existing transmission line. Poles 1 through 6 have already been placed as shown on the Project location map and are proposed to be conductored and wired in the future. The second proposed segment of the transmission line will begin at pole 10 and continue south for 0.13 mile and then east for 0.28 mile before turning north for 0.60 mile to connect with the existing line that crosses the Missouri River. Poles 11 through 15 are proposed to be placed and constructed as shown on the Project location map.

A Transmission Facility Permit Application will be submitted to the North Dakota Public Service Commission (PSC) under North Dakota Administrative Code Chapter 69-06-05. The Project study area is a 1-mile-wide corridor centered on the transmission line centerline in Morton County, Sections 10 and 15, Township 139 North, Range 81 West. Construction of the Project is scheduled to begin in the spring 2021. Although the anticipated area required for placing the poles and conductoring and stringing the line is estimated to be a maximum of 200 feet on either side of the centerline, this area likely will be less and typically averages 50 to 100 feet. The pole structures themselves will be approximately 80 to 100 feet in height, with the wires strung approximately 60 to 80 feet above the ground surface. Both H-frame and 3-pole guyed suspension and deadened structures will be used. Pole 15 is being placed as a temporary structure and is expected to be removed in 2022 when the transmission line crossing of the Missouri River is reconductored with some pole replacement.

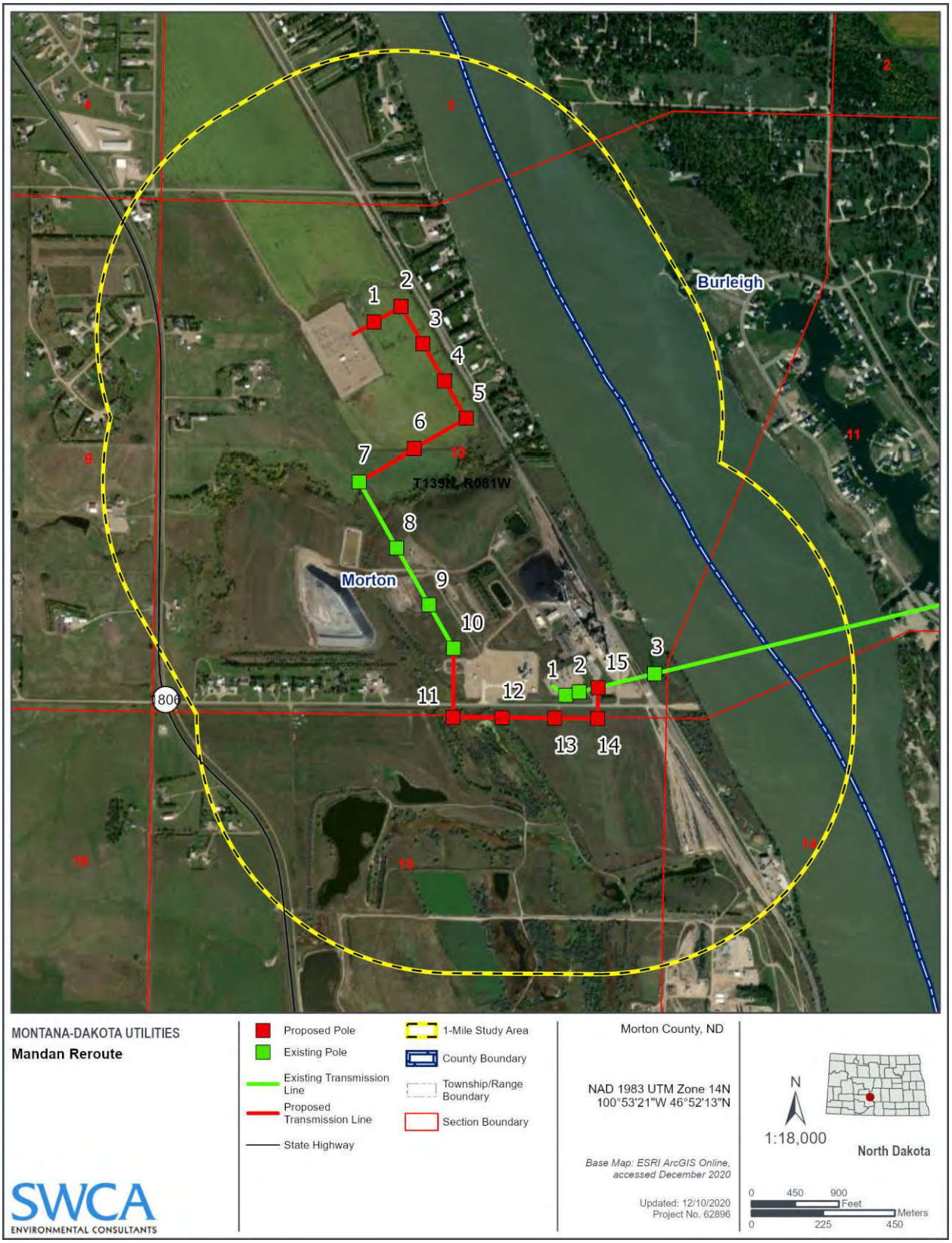
SWCA Environmental Consultants is notifying County Commission of Morton County, ND of the proposed Project and offering the opportunity for comments. Information received from County Commission of Morton County, ND will be used in a North Dakota PSC application being prepared for the Project. Please send your replies and/or requests for additional Project information within 30 days of receipt of this letter to:

Jana Heisler-White, Project Manager
SWCA Environmental Consultants
201 Slate Drive, Suite 8
Bismarck, North Dakota 58503
(307) 655-1152
jana.heislerwhite@swca.com

Sincerely,

Jana Heisler-White

Enclosure: Project Location Map



Proposed Mandan Transmission Line Reroute Project location map.

SWCA
ENVIRONMENTAL CONSULTANTS
Sound Science. Creative Solutions.®

201 Slate Drive, Suite 8
Bismarck, North Dakota 58503
Tel 701.258.6622 Fax 701.258.5957
www.swca.com

December 18, 2020

Andy Zachmeier
County Commission of Morton County, ND
210 2nd Ave NW
Mandan, ND 58554

Re: Montana-Dakota Utilities Co. Mandan Transmission Line Reroute Project
Morton County, North Dakota

Dear Andy Zachmeier,

Montana-Dakota Utilities Co. (Montana-Dakota) is proposing to construct two new segments of 230-kilovolt transmission line as part of the Mandan Transmission Line Reroute project (Project). The lengths of the two proposed segments are 0.60 and 0.47 mile. As shown on the enclosed Project location map, the first proposed segment of the transmission line will originate at the North Heskett substation and continue northeast for 0.11 mile before turning southeast for 0.25 mile and then southwest for 0.24 mile where it will connect to the existing transmission line. Poles 1 through 6 have already been placed as shown on the Project location map and are proposed to be conductored and wired in the future. The second proposed segment of the transmission line will begin at pole 10 and continue south for 0.13 mile and then east for 0.28 mile before turning north for 0.60 mile to connect with the existing line that crosses the Missouri River. Poles 11 through 15 are proposed to be placed and constructed as shown on the Project location map.

A Transmission Facility Permit Application will be submitted to the North Dakota Public Service Commission (PSC) under North Dakota Administrative Code Chapter 69-06-05. The Project study area is a 1-mile-wide corridor centered on the transmission line centerline in Morton County, Sections 10 and 15, Township 139 North, Range 81 West. Construction of the Project is scheduled to begin in the spring 2021. Although the anticipated area required for placing the poles and conductoring and stringing the line is estimated to be a maximum of 200 feet on either side of the centerline, this area likely will be less and typically averages 50 to 100 feet. The pole structures themselves will be approximately 80 to 100 feet in height, with the wires strung approximately 60 to 80 feet above the ground surface. Both H-frame and 3-pole guyed suspension and deadened structures will be used. Pole 15 is being placed as a temporary structure and is expected to be removed in 2022 when the transmission line crossing of the Missouri River is reconductored with some pole replacement.

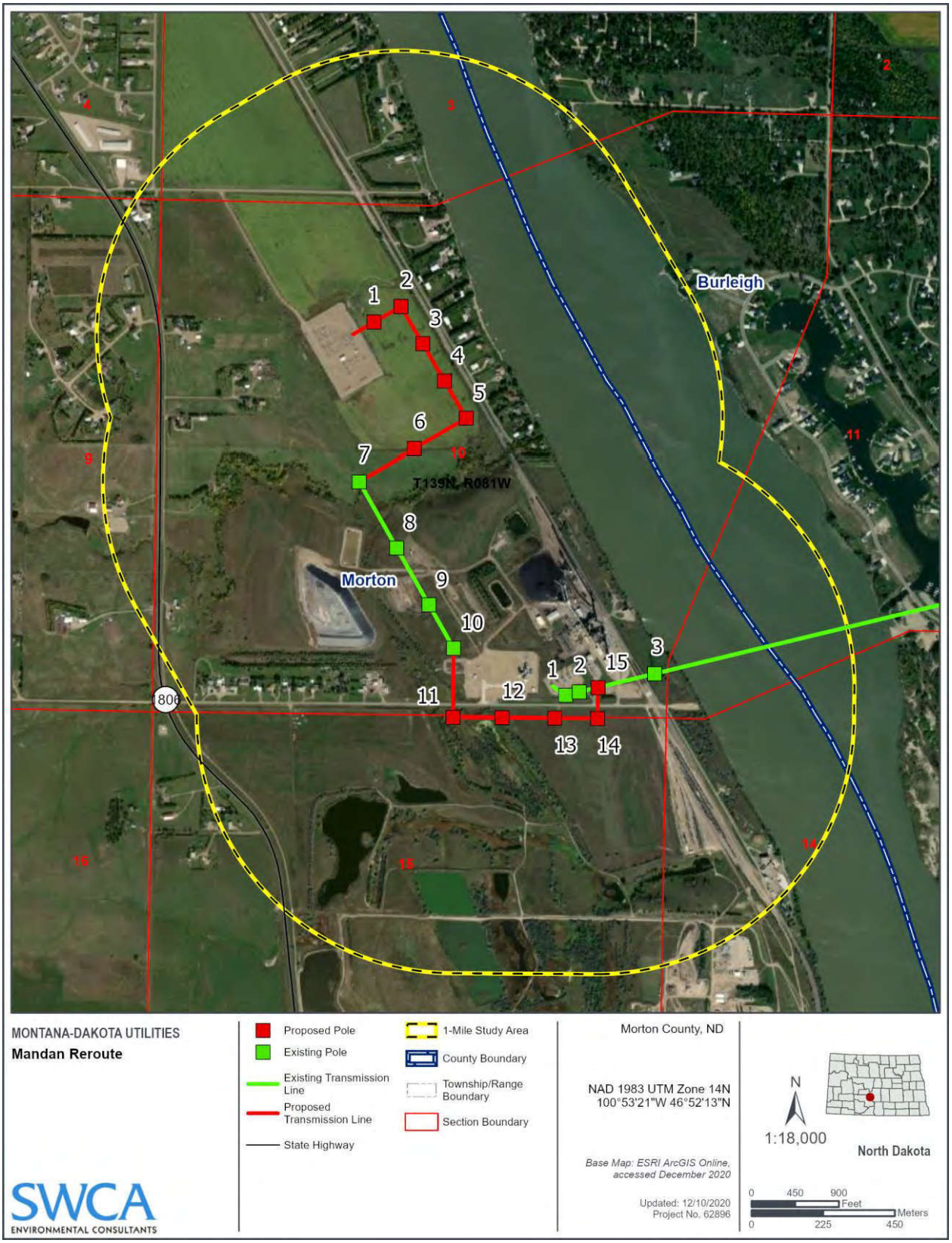
SWCA Environmental Consultants is notifying County Commission of Morton County, ND of the proposed Project and offering the opportunity for comments. Information received from County Commission of Morton County, ND will be used in a North Dakota PSC application being prepared for the Project. Please send your replies and/or requests for additional Project information within 30 days of receipt of this letter to:

Jana Heisler-White, Project Manager
SWCA Environmental Consultants
201 Slate Drive, Suite 8
Bismarck, North Dakota 58503
(307) 655-1152
jana.heislerwhite@swca.com

Sincerely,

Jana Heisler-White

Enclosure: Project Location Map



Proposed Mandan Transmission Line Reroute Project location map.

January 7, 2021

Jana Heisler-White
Project Manager
SWCA- Environmental Consulting
201 Slate Drive, Suite 8
Bismarck, ND 58503

Re: MDU Mandan Transmission Line Reroute in Morton County

Dear Ms. Heisler-White:

The North Dakota Department of Environmental Quality has reviewed the information concerning the above-referenced project received at the department on December 23, 2020 with respect to possible environmental impacts.

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

1. Care is to be taken during construction activity near any water of the state to minimize adverse effects on a water body. This includes minimal disturbance of stream beds and banks to prevent excess siltation, and the replacement and revegetation of any disturbed area as soon as possible after work has been completed. Caution must also be taken to prevent spills of oil and grease that may reach the receiving water from equipment maintenance, and/or the handling of fuels on the site. Guidelines for minimizing degradation to waterways during construction are attached.

2. Projects disturbing one or more acres are required to have a permit to discharge stormwater runoff until the site is stabilized by the reestablishment of vegetation or other permanent cover. Further information on the stormwater permit may be obtained from the department's website or by calling the Division of Water Quality (701-328-5210). Also, cities may impose additional requirements and/or specific best management practices for construction affecting their storm drainage system. Check with the local officials to be sure any local stormwater management considerations are addressed.

3. The construction project is located within Bismarck's and Mandan's source water protection areas. Care should be taken to avoid spills of any materials that may have an adverse effect on groundwater quality. All spills must be immediately reported to this department and appropriate remedial actions performed.

4. All solid waste materials must be managed and transported in accordance with the state's solid and hazardous waste rules. Appropriate efforts to reduce, reuse and/or recycle waste materials are strongly encouraged. As appropriate, segregation of inert waste from non-inert waste can generally reduce the cost of waste management. Further information on waste

management and recycling is available from the department's Division of Waste Management at (701) 328-5166.

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

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

Sincerely,

L. David Glatt, P.E., Director
North Dakota Department of Environmental Quality

LDG:csc
Attach.

Construction and Environmental Disturbance Requirements

The following are the minimum requirements of the North Dakota Department of Environmental Quality for projects that involve construction or environmental disturbance in or near waters of the State of North Dakota. They ensure that minimal environmental degradation occurs as a result of construction or related work which has the potential to affect waters of the state. All projects must be constructed to minimize the loss of soil, vegetative cover, and pollutants (chemical or biological) from a site.

Soils

Prevent the erosion of soil and sediment loss using erosion and sediment controls. Fragile and sensitive areas such as wetlands, riparian zones, delicate flora, and land resources must be protected against compaction, vegetation loss, and unnecessary damage.

Surface Waters

All construction must be managed to minimize impacts to aquatic systems. Follow safe storage and handling procedures to prevent the contamination of water from fuel spills, lubricants, and chemicals. Stream bank and stream bed disturbances must be controlled to minimize slit movement, nutrient upsurges, plant dislocations, and any physical, chemicals, or biological disruption. The use of pesticides or herbicides in or near surface waters is allowed under the department's pesticide application permit with notification to the department.

Fill Material

Any fill material placed below the ordinary high-water mark must be free of topsoil, decomposable materials, and persistent synthetic organic compounds; including, but not limited to, asphalt, tires, treated lumber, and construction debris. The department may require testing of fill materials. All temporary fill must be removed. Debris and solid wastes must be properly disposed or recycled. Impacted areas must be restored to near original condition.

NORTH Dakota | Transportation
Be Legendary.℠

December 31, 2020

Jana Heisler-White
SWCA
201 Slate Drive, Suite 8
Bismarck ND 58503

MONTANA DAKOTA UTILITIES CO TO CONSTRUCT TWO NEW SEGMENTS OF 230-KILOVOLT TRANSMISSION LINE AS PART OF MANDAN TRANSMISSION LINE REROUTE PROJECT, MORTON COUNTY, MANDAN, NORTH DAKOTA

We have reviewed your December 18, 2020, letter.

This project should have no adverse effect on the North Dakota Department of Transportation highways.

However, if because of this project any work needs to be done on highway right of way, appropriate permits and risk management documents will need to be obtained from the Department of Transportation District Engineers, Larry Gangl at 701-328-6955.

CHAD M. ORN, P.E., DIRECTOR – OFFICE OF PROJECT DEVELOPMENT

57/cmo/js
c: Larry Gangl, Bismarck District Engineer

NORTH Dakota | Parks & Recreation
Be Legendary.

January 21, 2021

Jan Heisler-White
SWCA
201 Slate Drive, Suite 8
Bismarck, ND 58503

Re: MDU Mandan Transmission Line Reroute Project – Morton County

Dear Ms. Heisler-White:

The North Dakota Parks and Recreation Department (NDPRD) has reviewed the above-referenced Montana-Dakota Utilities Mandan Transmission Line in Morton County, North Dakota.

NDPRD's scope of authority and expertise covers properties that NDPRD owns, leases, or manages; properties protected under Section 6(f) of the Land and Water Conservation Fund (LWCF); and rare plants and ecological communities established through the Natural Heritage Program.

The project does not appear to affect properties that NDPRD owns, leases, or manages.

The project does not appear to affect any properties protected under Section 6(f) of the LWCF.

The North Dakota Natural Heritage biological conservation database has reviewed the project to determine if any current or historical plant or animal species of concern or other significant ecological communities are known to occur within an approximate one-mile radius of the project area. Based on this review, we have no known rare species or significant ecological communities documented within or immediately adjacent to the project site. Because the Natural Heritage information is not based on a comprehensive inventory, there may be species of concern or otherwise significant ecological communities in the area that are not represented in the database. The absence of data may indicate that the project area has not been surveyed, rather than confirm that it lacks natural heritage resources.

We appreciate your commitment to rare plant, animal, and ecological community conservation, management, and inter-agency cooperation to date. For additional information, please contact Natural Resources Coordinator Kathy Duttenhefner at 701-328-5370, 701-220-3377 (cell), or kgduttenhefner@nd.gov.

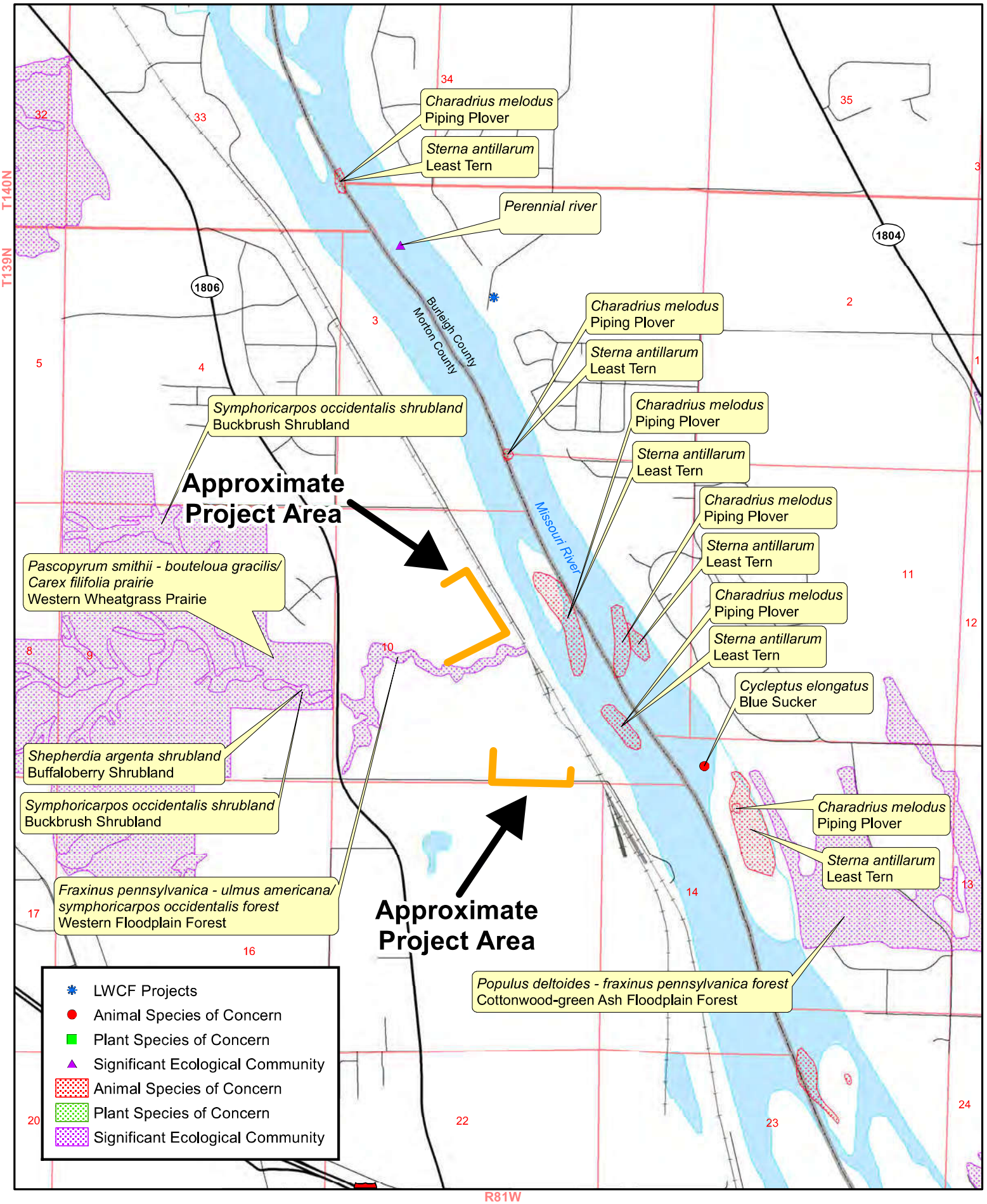
Thank you for the opportunity to comment on the proposed project.

Kathy Duttenhefner

Kathy Duttenhefner
Coordinator/Biologist II, Natural Resources Division

1600 East Century Ave. Ste. 3 | Bismarck, ND 58503
PHONE: 701-328-5357 | FAX: 701-328-5363 | EMAIL: parkrec@nd.gov | WEBSITE: www.parkrec.nd.gov

North Dakota Parks and Recreation Department
North Dakota Natural Heritage Inventory



January 2021

North Dakota Natural Heritage Inventory

Rare Animal and Plant Species and Significant Ecological Communities

State Scientific Name	State Common Name	State Rank	Global Rank	Federal Status	Township Range Section	County	Last Observation	Estimated Representation Accuracy	Precision
Charadrius melodus	Piping Plover	S1S2	G3	LE,LT	139N081W - 03; 139N081W - 10	Burleigh, M	1991	High	S
Charadrius melodus	Piping Plover	S1S2	G3	LE,LT	139N081W - 10	Morton	2003-05-28	Medium	S
Charadrius melodus	Piping Plover	S1S2	G3	LE,LT	139N081W - 10	Morton	2003-06-09	Medium	
Charadrius melodus	Piping Plover	S1S2	G3	LE,LT	139N081W - 10	Burleigh, Morton	2002-06-11	Medium	
Charadrius melodus	Piping Plover	S1S2	G3	LE,LT	139N081W - 14	Burleigh	1999-06-22	Medium	S
Charadrius melodus	Piping Plover	S1S2	G3	LE,LT	140N081W - 33; 139N081W - 03	Burleigh, M	1993-07-14	Medium	S
Cycleptus elongatus	Blue Sucker	S3	G3G4		139N081W - 14	Burleigh	1994-08-17		S
Fraxinus pennsylvanica - ulmus americana/symphoricarpos occidentalis forest	Western Floodplain Forest	S3	GNR		139N081W - 10	Morton	2007-06-22	Very High	
Pascopyrum smithii - bouteloua gracilis/carex filifolia prairie	Western Wheatgrass Prairie	S3S4	GNR		139N081W - 09; 139N081W - 17; 139N081W - 04; 139N081W - 16; 139N081W - 08	Morton	2007-06-22	Medium	
Perennial river		S1	GNR		139N081W - 03	Burleigh, Morton	1986		S
Polyodon spathula	Paddlefish	SNR	G4		139N081W - 14	Burleigh	1994-06-15		S
Populus deltoides - fraxinus pennsylvanica forest	Cottonwood-green Ash Floodplain Forest	S3	GNR		139N081W - 14; 139N081W - 11; 139N081W - 13	Burleigh	2007-09-18	Medium	
Shepherdia argenta shrubland	Buffaloberry Shrubland	S4	GNR		139N081W - 09; 139N081W - 04; 139N081W - 16; 139N081W - 08	Morton	2007-06-22	Medium	
Sterna antillarum	Least Tern	S1	G4	PS:LE	139N081W - 03; 139N081W - 10	Burleigh, Morton	1993-07-14	Medium	S
Sterna antillarum	Least Tern	S1	G4	PS:LE	139N081W - 10	Burleigh	1993-07-14	Medium	S
Sterna antillarum	Least Tern	S1	G4	PS:LE	139N081W - 10	Morton			
Sterna antillarum	Least Tern	S1	G4	PS:LE	139N081W - 10	Morton			
Sterna antillarum	Least Tern	S1	G4	PS:LE	139N081W - 14	Burleigh	1998	Medium	S
Sterna antillarum	Least Tern	S1	G4	PS:LE	140N081W - 33; 139N081W - 03	Burleigh, Morton	1993-07-14	Medium	S
Symphoricarpos occidentalis shrubland	Buckbrush Shrubland	S4	GNR		139N081W - 08; 139N081W - 16; 139N081W - 09; 139N081W - 04	Morton	2007-06-22	Medium	

From:	MCCULLOUGH, DAVID D GS-13 USAF ACC 319 CES/CEI
To:	Jana Heisler-White
Cc:	STROM, DIANE M GS-11 USAF ACC 319 CES/CENPL; FUQUA, JEFFREY M GS-12 USAF ACC 319 CES/CENP; LANDON, LANCE E GS-13 USAF ACC 319 CES/CD
Subject:	RE: Notification of proposed transmission line reroute in Mandan, ND
Date:	Monday, December 21, 2020 1:39:27 PM
Attachments:	image001.png

Ms Heisler White,

Thanks for the opportunity to review and comment on the proposed rerouting of the transmission line in Mandan. We have reviewed and no comment.

If you have questions, please let me know.

Thanks,
Dave McCullough
Chief, Installation Management Flight
Grand Forks AFB, ND 58205
701-747-6154

From: Jana Heisler-White <Jana.HeislerWhite@swca.com>
Sent: Friday, December 18, 2020 6:24 PM
To: MCCULLOUGH, DAVID D GS-13 USAF ACC 319 CES/CEI <david.mccullough@us.af.mil>
Subject: [Non-DoD Source] Notification of proposed transmission line reroute in Mandan, ND

Dear Mr. McCullough,
Please see the attached letter that SWCA Environmental Consultants is submitting on behalf of Montana-Dakota Utilities Co. for a proposed transmission line reroute in Mandan, North Dakota. This letter serves as notification of the project under North Dakota Administrative Code Chapter 69-06-05. We respectively request any comments on the project from your agency within 30 days of receiving this letter.

Sincerely,
Jana

Jana Heisler White, Ph.D. | she, her, hers
Senior Ecologist
Natural Resources Lead | Sheridan, WY and Bismarck, ND

SWCA Environmental Consultants
Direct: 307.655.1152

Mobile: 970.988.9360
jana.heislerwhite@swca.com

From: Natalie Pierce
To: Jana Heisler-White
Cc: Andy Zachmeier
Subject: RE: MDU reroute in Mandan, ND
Date: Wednesday, December 30, 2020 1:31:56 PM
Attachments: image001.png

EXTERNAL: This email originated from outside SWCA. Please use caution when replying.

Hi Jana,

Thanks for the response. I see. So all the comments you're looking for are regarding the thick red and green lines (punctuated with square points), all on the west side of the river, correct? If that is the case, we have no comment. We'll have comments on the river crossing, assuming that is coming later. Do you know who that communication would be coming from so I can watch out for it?

Thanks,

Natalie Pierce, CFM
Morton County
Director of Planning & Zoning
2916 37th Street NW
Mandan, ND 58554
Direct: 701-667-3361

From: Jana Heisler-White [mailto:Jana.HeislerWhite@swca.com]
Sent: Wednesday, December 23, 2020 10:46 AM
To: Natalie Pierce
Subject: RE: MDU reroute in Mandan, ND

Hi Natalie,
Thanks for reaching out for clarification on this. Please note, that the map is a little confusing in that the section line as it crosses the Missouri River is shown with a thin red line and this should not be interpreted as the proposed River crossing. The two proposed new sections of transmission line are indicated by the thicker red lines. I apologize for the confusion, and please let me know if you have any additional questions or want to further discuss. New pole and line locations for the Missouri River crossing will be permitted separately.

Thanks,
Jana

From: Natalie Pierce <natalie.pierce@mortonnd.org>
Sent: Monday, December 21, 2020 8:33 AM

To: Jana Heisler-White <Jana.HeislerWhite@swca.com>
Subject: MDU reroute in Mandan, ND

Hi Jana,

I received the attached letter from Morton County Commissioner Zachmeier. On October 16, representatives from Morton, Mandan, Bismarck and the MPO had a conference call with MDU representatives and their engineers regarding the proposed route for the power line over the Missouri. I thought we had come to an understanding that the parties involved did not want the power line to intersect with the proposed Northern Bridge corridor. The diagram you provided to Commissioner Zachmeier does not seem to reflect that October 16th conversation.

Could you give me a call at your convenience so that I can understand where this reroute project is at in the planning process?

Thank you,
Natalie Pierce, CFM
Morton County
Director of Planning & Zoning
2916 37th Street NW
Mandan, ND 58554
Direct: 701-667-3361

> **From:** Jana Heisler-White <Jana.HeislerWhite@swca.com>
> **Date:** December 18, 2020 at 6:26:08 PM CST
> **To:** azachmeier@bis.midco.net
> **Subject: Notification of proposed transmission line reroute in Mandan, ND**
>
> Dear Mr. Zachmeier,
> Please see the attached letter that SWCA Environmental Consultants is submitting on behalf of Montana-Dakota Utilities Co. for a proposed transmission line reroute in Mandan, North Dakota. This letter serves as notification of the project under North Dakota Administrative Code Chapter 69-06-05. We respectively request any comments on the project from your agency within 30 days of receiving this letter.
>
> Sincerely,
> Jana
>
> **Jana Heisler White, Ph.D. |** she, her, hers
> Senior Ecologist

Natural Resources Lead | Sheridan, WY and Bismarck, ND

SWCA Environmental Consultants
Direct: 307.655.1152
Mobile: 970.988.9360
jana.heislerwhite@swca.com

APPENDIX C

Natural Resource Agency Evaluation Letters and Responses

SWCA®
ENVIRONMENTAL CONSULTANTS
Sound Science. Creative Solutions.®

201 Slate Drive, Suite 8
Bismarck, North Dakota 58503
Tel 701.258.6622 Fax 701.258.5957
www.swca.com

December 18, 2020

Greg Link
Chief, Conservation and Communication Division
North Dakota Game and Fish Department
100 North Bismarck Expressway
Bismarck, North Dakota 58501

Re: Montana-Dakota Utilities Co. Mandan Transmission Line Reroute Project
Morton County, North Dakota

Dear Mr. Link:

Montana-Dakota Utilities Co. (Montana-Dakota) is proposing to construct two new segments of 230-kilovolt transmission line as part of the Mandan Transmission Line Reroute project (Project). The lengths of the two proposed segments are 0.60 and 0.47 mile. As shown on the enclosed Project location map, the first proposed segment of the transmission line will originate at the North Heskett substation and continue northeast for 0.11 mile before turning southeast for 0.25 mile and then southwest for 0.24 mile where it will connect to the existing transmission line. Poles 1 through 6 have already been placed as shown on the Project location map and are proposed to be conductored and wired in the future. The second proposed segment of the transmission line will begin at pole 10 and continue south for 0.13 mile and then east for 0.28 mile before turning north for 0.60 mile to connect with the existing line that crosses the Missouri River. Poles 11 through 15 are proposed to be placed and constructed as shown on the Project location map.

A Transmission Facility Permit Application will be submitted to the North Dakota Public Service Commission (PSC) under North Dakota Administrative Code Chapter 69-06-05. The Project study area is a 1-mile-wide corridor centered on the transmission line centerline in Morton County, Sections 10 and 15, Township 139 North, Range 81 West. Construction of the Project is scheduled to begin in the spring 2021. Although the anticipated area required for placing the poles and conductoring and stringing the line is estimated to be a maximum of 200 feet on either side of the centerline, this area likely will be less and typically averages 50 to 100 feet. The pole structures themselves will be approximately 80 to 100 feet in height, with the wires strung approximately 60 to 80 feet above the ground surface. Both H-frame and 3-pole guyed suspension and deadened structures will be used. Pole 15 is being placed as a temporary structure and is expected to be removed in 2022 when the transmission line crossing of the Missouri River is reconductored with some pole replacement.

Due to the highly developed nature of the study area, which includes two existing substations, industrial buildings, a housing development, and other previously disturbed land, SWCA Environmental Consultants (SWCA) does not believe that the proposed Project poses a risk to threatened or endangered plant or animal species, species of conservation priority, or their habitats.

SWCA is notifying the North Dakota Game and Fish Department of the proposed Project and offering the opportunity for comments. Information received from the North Dakota Game and Fish Department will

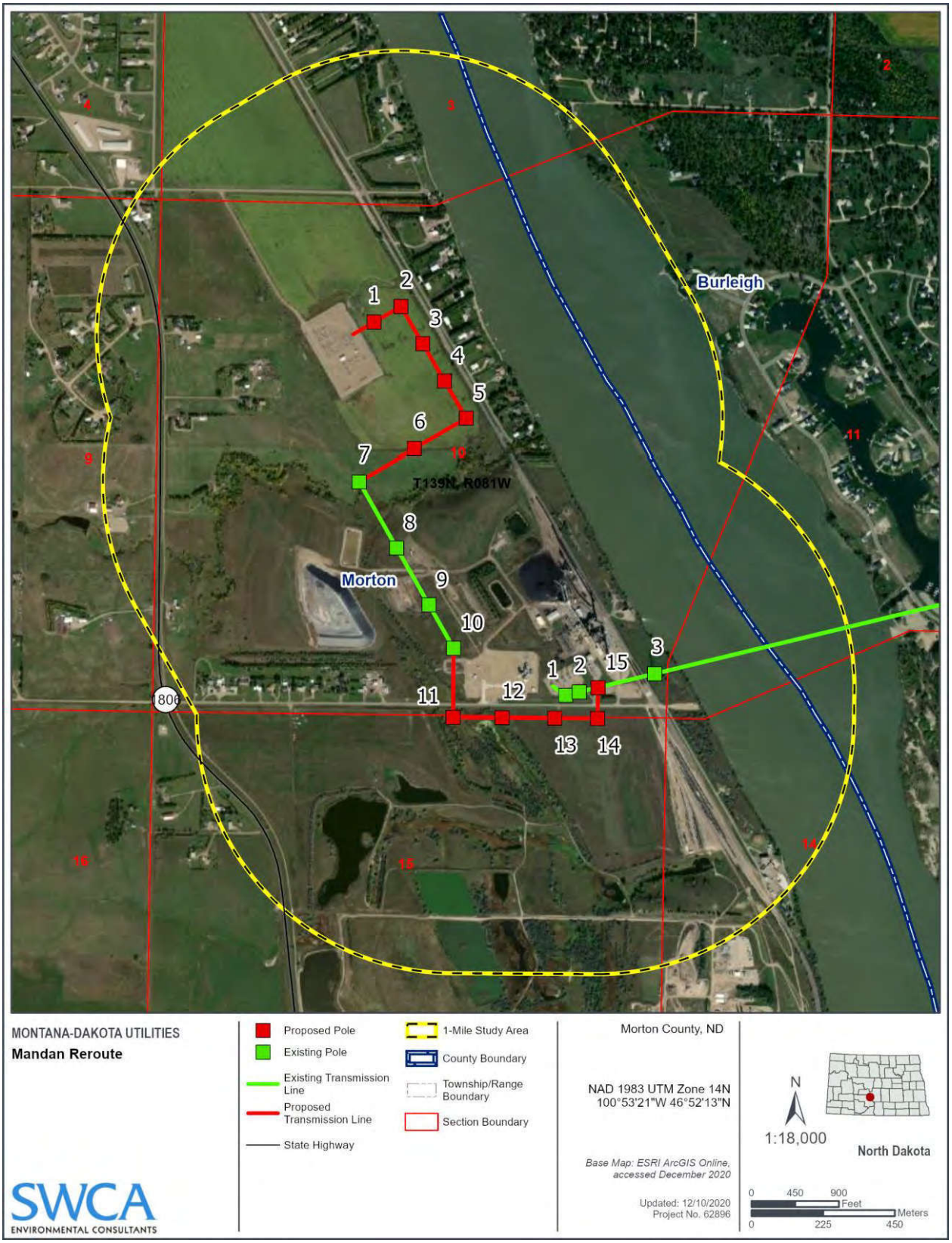
be used in a North Dakota PSC application that is being prepared for the Project. Please send your replies and/or requests for additional Project information within 30 days to:

Jana Heisler-White, Project Manager
SWCA Environmental Consultants
201 Slate Drive, Suite 8
Bismarck, North Dakota 58503
(307) 655-1152
jana.heislerwhite@swca.com

Sincerely,

Jana Heisler-White

Enclosure: Project Location Map



Proposed Mandan Transmission Line Reroute Project location map.

Jana Heisler-White

From: Schumacher, John D. <jdschumacher@nd.gov>
Sent: Monday, February 8, 2021 5:16 PM
To: Jana Heisler-White
Subject: RE: Notification of proposed transmission line reroute in Mandan, ND

Jana Heisler-White
Project Manager
SWCA Environmental Consultants

RE: Montana-Dakota Utilities Co. – Mandan Transmission Line Reroute Project

The North Dakota Game and Fish Department has reviewed this project for wildlife concerns. We do not believe it will have significant adverse effects on wildlife or wildlife habitat based on the information provided.

J.D. Schumacher
Resource Biologist

701.328.6321 • jdschumacher@nd.gov • gf.nd.gov

NORTH Dakota | Gar

From: Jana Heisler-White <Jana.HeislerWhite@swca.com>
Sent: Sunday, February 7, 2021 4:04 PM
To: Link, Greg W. <glink@nd.gov>
Subject: RE: Notification of proposed transmission line reroute in Mandan, ND

Mr. Link,
I wanted to check back in with you to determine if North Dakota Game and Fish Department was indeed going to provide a comment on the Montana-Dakota Utilities' proposed transmission line reroute in Mandan.

Please let me know if you have a comment and/or comments are forthcoming.

Sincerely,
Jana

From: Link, Greg W. <glink@nd.gov>
Sent: Monday, December 21, 2020 7:54 AM
To: Jana Heisler-White <Jana.HeislerWhite@swca.com>
Subject: RE: Notification of proposed transmission line reroute in Mandan, ND

Jana,

We have received your request for our agency's review of the proposed Montana-Dakota Utilities Co. transmission line reroute in Mandan, North Dakota. I have forwarded this request on to our project review team; they will assess the project for potential wildlife impacts and provide you with our avoidance, minimization, and mitigation recommendations.

Thank you.
G. Link

Greg Link
Division Chief, Conservation and Communications

701.328.6331 • glink@nd.gov • gf.nd.gov

NORTH Dakota | Game and Fish
Be Legendary.

From: Jana Heisler-White <Jana.HeislerWhite@swca.com>
Sent: Friday, December 18, 2020 6:30 PM
To: Link, Greg W. <glink@nd.gov>
Subject: Notification of proposed transmission line reroute in Mandan, ND

Dear Mr. Link,
Please see the attached letter that SWCA Environmental Consultants is submitting on behalf of Montana-Dakota Utilities Co. for a proposed transmission line reroute in Mandan, North Dakota. This letter serves as notification of the project under North Dakota Administrative Code Chapter 69-06-05. We respectively request any comments on the project from your agency within 30 days of receiving this letter.

Sincerely,
Jana

Jana Heisler White, Ph.D. | she, her, hers
Senior Ecologist

Natural Resources Lead | Sheridan, WY and Bismarck, ND

SWCA Environmental Consultants
Direct: 307.655.1152
Mobile: 970.988.9360
jana.heislerwhite@swca.com

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
NORTH DAKOTA REGULATORY OFFICE
3319 UNIVERSITY DRIVE
BISMARCK, NORTH DAKOTA 58504-7565

December 30, 2020

NWO-2020-02304-BIS

SWCA
Attn: Ms. Jana Heisler-White
201 Slate Drive, Suite 8
Bismarck, North Dakota 58503

Dear Ms. Heisler-White:

This is in response to your solicitation letter received on December 18, 2020 requesting Department of the Army (DA), United States Army Corps of Engineers (Corps) comments on the proposed Montana-Dakota Utilities Co. Mandan Transmission Line Reroute Project. The project site is located in Section 10, Township 139 North, Range 81 West, City of Mandan, Morton County, North Dakota.

Corps Regulatory Offices administers Section 404 of the Clean Water Act. Section 404 of the Clean Water Act regulates the discharge of dredge or fill material (temporarily or permanently) in waters of the United States. Waters of the United States may include, but are not limited to, rivers, streams, ditches, coulees, lakes, ponds, and their adjacent wetlands. Fill material includes, but is not limited to, rock, sand, soil, clay, plastics, construction debris, wood chips, overburden from mines or other excavation activities and materials used to create any structure or infrastructure in waters of the United States.

Enclosed for your information is the fact sheet for Nationwide Permit 12, Utility Line Activities. Utility lines are already authorized by Nationwide Permit 12 provided the utility line can be placed without any change to pre-construction contours and all other proposed construction activities and facilities are in compliance with the Nationwide's permit conditions and 401 Water Quality Certification. On Tribal Lands, Water Quality Certification is denied for all Nationwide Permits. Applicants must work with EPA to obtain individual water quality certification. Please note the pre-construction notification requirements on page 2 of the fact sheet. If a project involves any one of the seven notification requirements, the project proponent must submit a DA application. Furthermore, a project must also be in compliance with the "Regional Conditions for Nationwide Permits within the State of North Dakota", found on pages 18 thru 21 of the fact sheet.

In the event your project(s) requires approval from the U.S. Army Corps of Engineers and cannot be authorized by Nationwide Permit(s), a Standard or Individual Permit will be required. A project that requires a Standard or Individual Permit is intensely

reviewed and will require the issuance of a public notice. A Standard or Individual Permit generally requires a minimum of 120 days for processing but based on the project impacts and comments received through the public notice may extend well beyond 120 days.

This correspondence letter does not approve the proposed construction work or does not verify the proposed project complies with the Nationwide Permit(s).

If any of these projects require a Section 404 permit, please complete and submit the enclosed Department of the Army permit application (ENG Form 6082) to the U.S. Army Corps of Engineers, North Dakota Regulatory Office, 3319 University Drive, North Dakota 58504 or to the email address (preferred) below. If you are unsure if a permit is required, you may submit an application; include a project location map, description of work, and construction methodology.

Due to precautions taken in response to the COVID-19 pandemic, The North Dakota Regulatory office prefers that all submissions are sent electronically to the following email address: CENWO-OD-RND@usace.army.mil instead of a hard copy by mail. Please split large attachments (>25 MB) into multiple emails if needed.

If we can be of further assistance or should you have any questions regarding our program, please do not hesitate to contact this office by letter of phone at (701) 255-0015.

Sincerely,

Patricia L. McQueary
State Program Manager
North Dakota

Enclosure
ENG Form 6082
Fact Sheet NWP 12

SWCA
ENVIRONMENTAL CONSULTANTS
Sound Science. Creative Solutions.®

201 Slate Drive, Suite 8
Bismarck, North Dakota 58503
Tel 701.258.6622 Fax 701.258.5957
www.swca.com

December 18, 2020

Jerry Reinisch
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
3425 Miriam Drive
Bismarck, North Dakota 58501

Re: Montana-Dakota Utilities Co. Mandan Transmission Line Reroute Project
Morton County, North Dakota

Dear Mr. Reinisch:

Montana-Dakota Utilities Co. (Montana-Dakota) is proposing to construct two new segments of 230-kilovolt transmission line as part of the Mandan Transmission Line Reroute project (Project). The lengths of the two proposed segments are 0.60 and 0.47 mile. As shown on the enclosed Project location map, the first proposed segment of the new transmission line will originate at the North Heskett substation and continue northeast for 0.11 mile before turning southeast for 0.25 mile and then southwest for 0.24 mile where it will connect to the existing transmission line. Poles 1 through 6 have already been placed as shown on the Project location map and are proposed to be conductored and wired in the future. The second proposed segment of the transmission line will begin at pole 10 and continue south for 0.13 mile and then east for 0.28 mile before turning north for 0.60 mile to connect with the existing line that crosses the Missouri River. Poles 11 through 15 are proposed to be placed and constructed as shown on the Project location map.

A Transmission Facility Permit Application will be submitted to the North Dakota Public Service Commission (PSC) under North Dakota Administrative Code Chapter 69-06-05. The Project study area is a 1-mile-wide corridor centered on the transmission line centerline in Morton County, Sections 10 and 15, Township 139 North, Range 81 West. Construction of the Project is scheduled to begin in the spring 2021. Although the anticipated area required for placing the poles and conductoring and stringing the line is estimated to be a maximum of 200 feet on either side of the centerline, this area likely will be less and typically averages 50 to 100 feet. The pole structures themselves will be approximately 80 to 100 feet in height, with the wires strung approximately 60 to 80 feet above the ground surface. Both H-frame and 3-pole guyed suspension and deadened structures will be used. Pole 15 is being placed as a temporary structure and is expected to be removed in 2022 when the transmission line crossing of the Missouri River is reconductored with some pole replacement.

SWCA Environmental Consultants (SWCA) requested a U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) report for the study area (enclosed). Six federally listed species were identified in the IPaC report: northern long-eared bat (*Myotis septentrionalis*; threatened); least tern (*Sterna antillarum*; endangered); piping plover (*Charadrius melodus*; threatened); rufa red knot (*Calidris canutus rufa*; threatened); whooping crane (*Grus americana*; endangered); and pallid sturgeon (*Scaphirhynchus albus*; endangered). Due to the highly developed nature of the study area, which includes two existing substations, an existing transmission line, industrial buildings, a housing

development, and other previously disturbed land, SWCA does not believe that the proposed Project poses a risk to threatened or endangered species or their habitats.

SWCA is notifying the USFWS of the proposed Project and offering the opportunity for comments. Information received from the USFWS will be used in a North Dakota PSC application being prepared for the Project. Please send your replies and/or requests for additional Project information within 30 days to:

Jana Heisler-White, Project Manager
SWCA Environmental Consultants
201 Slate Drive, Suite 8
Bismarck, North Dakota 58503
(307) 655-1152
jana.heislerwhite@swca.com

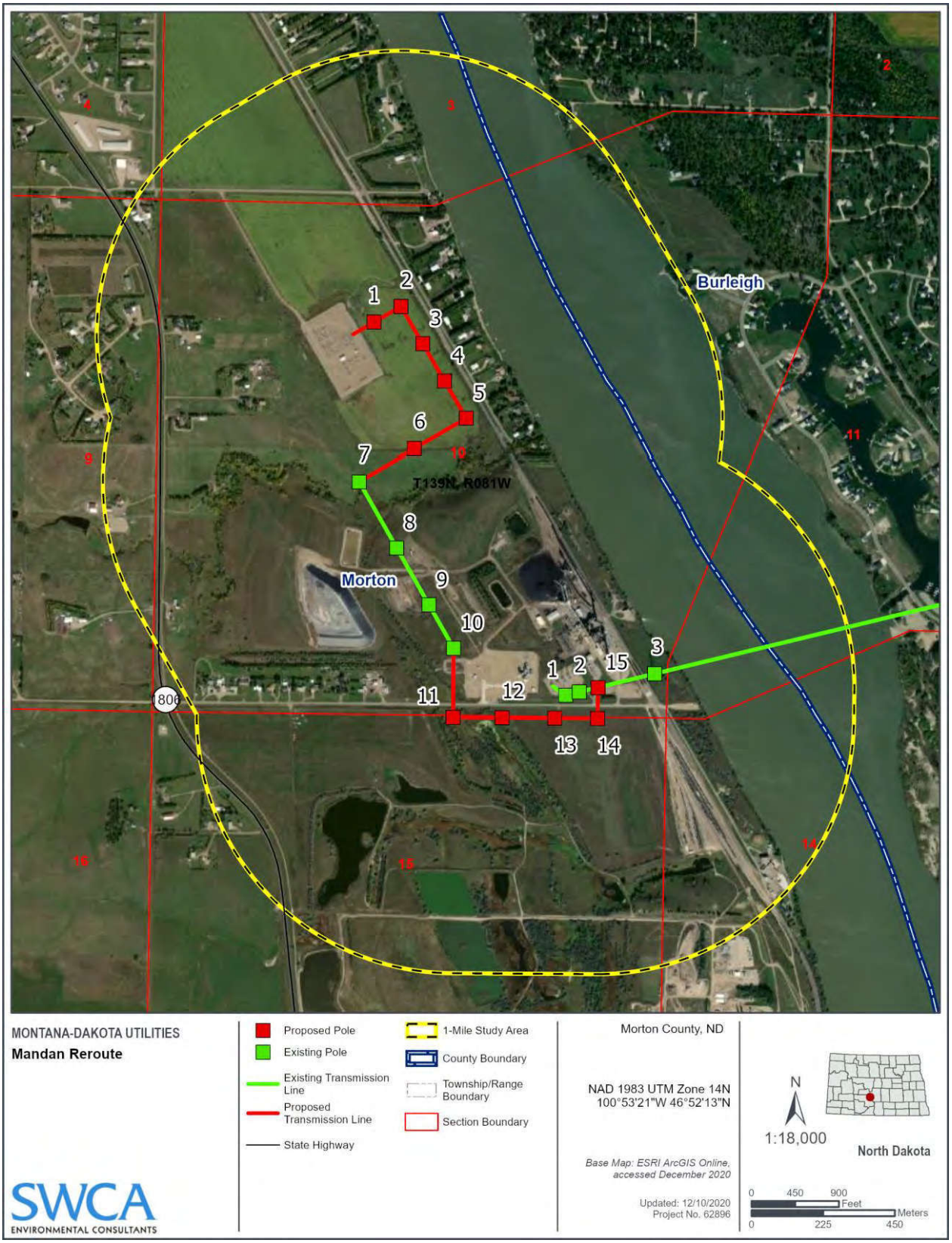
This Constitutes a report of the Department of the Interior prepared in accordance with the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq). We have reviewed and have NO OBJECTION to this proposed project.

_____
Field Supervisor

Sincerely,

Jana Heisler-White

Enclosure: Project Location Map
IPaC Report



Proposed Mandan Transmission Line Reroute Project location map.

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Burleigh and Morton counties, North Dakota

Local office

North Dakota Ecological Services Field Office

(701) 250-4481
(701) 355-8513

3425 Miriam Avenue
Bismarck, ND 58501-7926

http://www.fws.gov/northdakotafieldoffice/endspecies/endangered_species.htm

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS

NAME	STATUS
Northern Long-eared Bat Myotis septentrionalis No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9045	Threatened

Birds

NAME	STATUS
Least Tern Sterna antillarum No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8505	Endangered
Piping Plover Charadrius melodus There is **final** critical habitat for this species. Your location overlaps the critical habitat. https://ecos.fws.gov/ecp/species/6039	Threatened
Red Knot Calidris canutus rufa No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1864	Threatened
Whooping Crane Grus americana There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/758	Endangered

Fishes

NAME	STATUS
Pallid Sturgeon Scaphirhynchus albus No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/7162	Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

This location overlaps the critical habitat for the following species:

NAME	TYPE
Piping Plover Charadrius melodus https://ecos.fws.gov/ecp/species/6039#crithab	Final

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE.

"BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Bald Eagle Haliaeetus leucocephalus — Breeds Dec 1 to Aug 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1626

Lewis's Woodpecker Melanerpes lewis — Breeds Apr 20 to Sep 30
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9408

Red-headed Woodpecker Melanerpes erythrocephalus — Breeds May 10 to Sep 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence ( )

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of

presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (▬)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER EMERGENT WETLAND
- PEM1A
- PEM1C
- PEM1Cx

FRESHWATER POND
- PABFx
- PABFh
- PUSCx

RIVERINE
- R2UBH
- R4SBC
- R2USC
- R5UBH

A full description for each wetland code can be found at the National Wetlands Inventory website

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

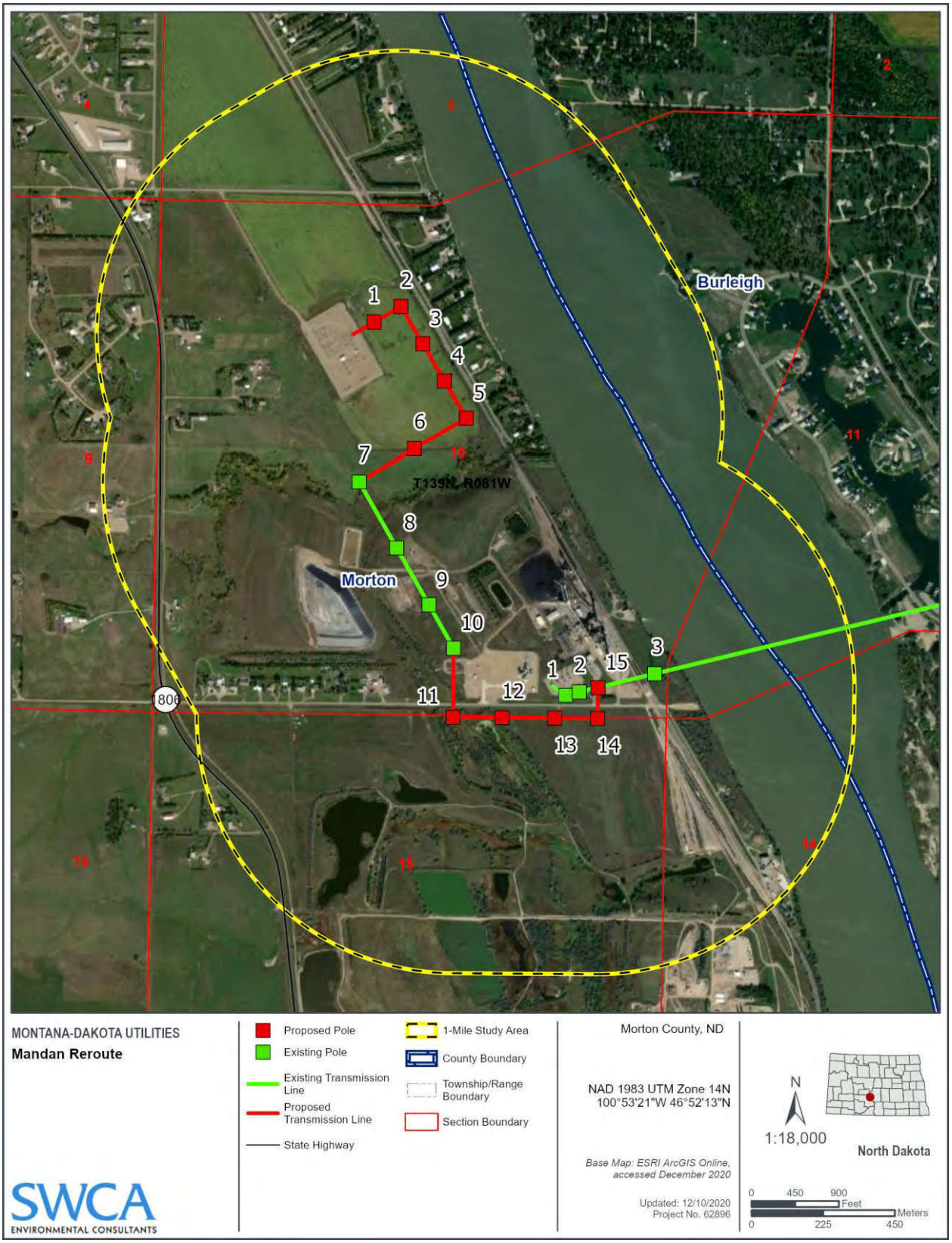
Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.



Proposed Mandan Transmission Line Reroute Project location map.

APPENDIX B
(Detached)

North Dakota Cultural Resource Site Form

January 11, 2021

Mr. Michael J Retter
Principal Investigator
SWCA Bismarck Office
116 N 4th Street Suite 200
Bismarck, ND 58501

ND SHPO Ref: 21-5331 "A Class I and Class III Cultural Resource Inventory for the Montana-Dakota Utilities Co. Mandan Reroute, Morton County, North Dakota" in portions of [T139N R81W Sections 10 & 15]

Dear Mr. Retter,

We reviewed ND SHPO Ref: 21-5331 "A Class I and Class III Cultural Resource Inventory for the Montana-Dakota Utilities Co. Mandan Reroute, Morton County, North Dakota" in portions of [T139N R81W Sections 10 & 15]and find the report by Laci Paul and Aidan McCarty acceptable. We find that there has been a good faith effort to avoid impacts to significant sites.

Thank you for the opportunity to review this project under North Dakota cultural resources consultation. This letter does not serve as federal agency consultation or SHPO consultation for compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, (36 CFR Part 800), or the National Environmental Policy Act, as amended, (42 U.S.C. §§ 4321- 4347).

If you have any questions please contact Lisa Steckler, Historic Preservation Specialist at (701) 328-3577 or lsteckler@nd.gov

Sincerely,

for William D. Peterson, PhD
Director, State Historical Society of North Dakota

21-5331