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**APPLICATION TO THE MINNESOTA PUBLIC UTILITIES COMMISSION  
FOR A ROUTE PERMIT FOR THE  
ALEXANDRIA TO BIG OAKS 345 KV TRANSMISSION PROJECT**

*MPUC Docket No. E002, E017, ET2, E015, ET10/TL-23-159*

September 29, 2023

Submitted by  
Northern States Power Company  
Great River Energy  
Minnesota Power  
Otter Tail Power Company  
Western Minnesota Municipal Power Agency

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Alexandria to Big Oaks 345 kV Transmission Project

September 29, 2023

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## Abbreviations and Acronyms

°F	degrees Fahrenheit
AIMP	Agricultural Impact Mitigation Plan
AM	amplitude modulation
APLIC	Avian Power Line Interaction Committee
AQI	Air Quality Index
BCC	Birds of Conservation Concern
BMP	best management practice
CCCL	Center for Corporate Climate Leadership
CFR	Code of Federal Regulations
CH <sub>4</sub>	methane
CO <sub>2</sub>	carbon dioxide
CO <sub>2</sub> e	carbon dioxide equivalent
Commission	Minnesota Public Utilities Commission
CSAH	County State-Aid Highway
CWA	Clean Water Act
dBA	A-weighted decibel
MDNR	Minnesota Department of Natural Resources
ECS	Ecological Classification System
EERA	Energy Environmental Review and Analysis
EMF	electric and magnetic field
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act of 1973
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulation
FEMA	Federal Emergency Management Administration
FM	frequency modulation
FPPA	Farmland Protection Policy Act
GBCA	Grassland Bird Conservation Areas
GHG	greenhouse gas
GIS	Geographic Information System
GPS	Global Positioning System
GWP	Global Warming Potential
HVTL	high voltage transmission line
IBA	Important Bird Areas

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IPaC	Information for Planning and Consultation
ISD	Independent School District
kV	kilovolt
LGU	local government unit
LRTP	Long-Range Transmission Planning
MDH	Minnesota Department of Health
mG	milligauss
MHz	megahertz
MISO	Midcontinent Independent System Operator, Inc.
MnDOT	Minnesota Department of Transportation
MPCA	Minnesota Pollution Control Agency
N <sub>2</sub> O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAC	Noise Area Classification
NESC	National Electric Safety Code
NHIS	Natural Heritage Inventory System
NLR	Northern Lines Railway
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resource Conservation Service
NWI	National Wetlands Inventory
PWI	Public Waters Inventory
SBS	Sites of Biodiversity Significance
SF <sub>6</sub>	sulfur hexafluoride
SHPO	State Historic Preservation Office
SOO	SOO Line Railroad
SPCC	Spill Prevention, Control, and Countermeasure
SSURGO	Soil Survey Geographic
SWPPP	Stormwater Pollution Prevention Plan
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
VMP	Vegetation Management Plan
VOR	Very High Frequency Omnidirectional Radio Range
WMA	Wildlife Management Areas
WPA	Waterfowl Production Areas

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## 1 Introduction

Northern States Power Company, doing business as Xcel Energy (Xcel Energy), along with Great River Energy, Minnesota Power, Otter Tail Power Company (Otter Tail), and Missouri River Energy Services, on behalf of Western Minnesota Municipal Power Agency (Western Minnesota), (collectively, the Applicants) are applying for a Route Permit from the Minnesota Public Utilities Commission (Commission) for approval to construct the Alexandria to Big Oaks 345 kilovolt (kV) Transmission Project (Project or Alexandria to Big Oaks Project) in Douglas, Todd, Stearns, Sherburne, and Wright counties in Minnesota. The Project involves construction of an approximately 105 to 108-mile long, 345 kV transmission line from the existing Alexandria Substation located in Alexandria, Douglas County to the new Big Oaks Substation that will be constructed on the north side of the Mississippi River in Becker, Sherburne County (Map 1). The majority of the Applicants' Proposed Route for the new 345 kV transmission line from the existing Alexandria Substation to the new Big Oaks Substation follows existing transmission line right-of-way as the Project involves placing this new 345 kV transmission circuit on existing CapX2020 transmission line structures that were previously permitted and constructed as double-circuit capable as part of the Monticello to St. Cloud 345 kV Transmission Project (E002, ET2/TL-09-246) and the Fargo to St. Cloud 345 kV Transmission Project (E002, ET2/TL-09-1056).

At four locations, the Proposed Route deviates from the existing transmission line right-of-way. New right-of-way will be required for the new 345 kV transmission line to tap into the Alexandria Substation, a reconfiguration of the existing 345 kV circuit from Alexandria (to the Quarry Substation) to bypass the Riverview Substation near the city of Freeport, and to bypass the Quarry Substation near the city of Waite Park (Map 1). The cumulative length of these three areas of new right-of-way is less than one mile total. Additionally, new right-of-way will be required for a new crossing over the Mississippi River to connect the new 345 kV transmission line near Monticello to the new Big Oaks Substation located northwest of the Monticello Nuclear Generating Plant in Becker. Two options are currently being considered by the Applicants for this river crossing (Map 1), the length of this new transmission line right-of-way will range from 0.7 miles to 2.1 miles. The new 345 kV transmission line from the Alexandria Substation to the Big Oaks Substation, Alexandria Substation Tap, Riverview Substation Bypass, Quarry Substation Bypass, Mississippi River Crossing Options and



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the Big Oaks Substation Siting Area are collectively referred to as the Project Components.

## **1.1 Project Need**

The Alexandria to Big Oaks Project is one segment of the larger Big Stone South – Alexandria – Big Oaks 345 kV Transmission Project. The Project comprises the Eastern Segment of the Big Stone South – Alexandria – Big Oaks 345 kV Transmission Project. A separate Route Permit application will be filed for the Western Segment.

The Big Stone South – Alexandria – Big Oaks 345 kV Transmission Project was studied, reviewed, and approved as part of the Long-Range Transmission Planning (LRTP) Tranche 1 Portfolio by the Midcontinent Independent System Operator, Inc.’s (MISO) Board of Directors in July 2022 as part of its 2021 Transmission Expansion Plan.

The LRTP Tranche 1 Portfolio will provide significant benefits to the Midwest subregion of the MISO footprint by facilitating more reliable, safe, and affordable energy delivery. The Big Stone South – Alexandria – Big Oaks 345 kV Transmission Project, designated as LRTP2 in 2021 Transmission Expansion Plan, is a key part of the LRTP Tranche 1 Portfolio. More specifically, the existing 230 kV transmission system in eastern North Dakota and South Dakota plays a key role in transporting and delivering energy into Minnesota. The 230 kV system is at its capacity leading to a number of reliability concerns that could affect customers’ service. The Big Stone South – Alexandria – Big Oaks 345 kV Transmission Project is needed to provide additional transmission capacity, to mitigate current capacity issues, and to improve electric system reliability throughout the region as more renewable energy resources are added to the electric system in and around the region.

## **1.2 Project Ownership**

The Project will be jointly owned by Xcel Energy, Great River Energy, Minnesota Power, Otter Tail and Western Minnesota.

Xcel Energy, a Minnesota corporation headquartered in Minneapolis, is a wholly owned subsidiary of Xcel Energy Inc., a utility holding company with its headquarters in Minneapolis. Xcel Energy will be responsible for the construction of the proposed 345 kV transmission circuit and for the maintenance of the 345 kV transmission

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circuit from the Quarry Substation to the Big Oaks Substation. The equipment and improvements required inside the Quarry Substation and the new Big Oaks Substation will be owned solely by Xcel Energy.

Great River Energy is a not-for-profit wholesale electric power cooperative based in Maple Grove, Minnesota and is a member of MISO and the MRO. Great River Energy is anticipated to be responsible for the maintenance of the 345 kV transmission circuit from the Alexandria Substation to the Quarry Substation. The equipment and improvements required inside the Riverview Substation will be owned solely by Great River Energy.

Minnesota Power is an investor-owned public utility headquartered in Duluth, Minnesota and is a member of MISO.

Otter Tail Power Company is an investor-owned electric utility headquartered in Fergus Falls, Minnesota, and is a transmission-owning member of MISO.

Western Minnesota is a municipal corporation and political subdivision of the State of Minnesota, headquartered in Ortonville, Minnesota. The equipment and improvements required inside the Alexandria Substation will be owned solely by Western Minnesota.

Each party will be responsible for the construction and maintenance of its own substation.

### **1.3 Permittee**

Xcel Energy, Great River Energy, Minnesota Power, Otter Tail and Western Minnesota are the requested permittees for the Project. Contact information is provided below.

Xcel Energy  
Matthew Langan  
Principal Agent, Siting and Land Rights  
414 Nicollet Mall, 414-6A  
Minneapolis, MN 55401  
612.330.6954  
[matthew.a.langan@xcelenergy.com](mailto:matthew.a.langan@xcelenergy.com)

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Great River Energy  
Dan Lesher  
Manager, Transmission Permitting and Land Rights  
12300 Elm Creek Boulevard  
Maple Grove, MN 55369  
763.445.5975  
[dlesher@GREnergy.com](mailto:dlesher@GREnergy.com)

Minnesota Power  
Jim Atkinson  
Manager, Environmental and Real Estate  
30 West Superior Street  
Duluth, MN 55802  
218.355.3561  
[jbatkinson@mnpower.com](mailto:jbatkinson@mnpower.com)

Otter Tail  
Jason Weiers  
Manager, Transmission Project Development  
215 South Cascade Street  
Fergus Falls, MN 56537  
218.739.8311  
[jweiers@otpc.com](mailto:jweiers@otpc.com)

Western Minnesota  
Brian Zavesky, P.E.  
Senior Transmission Engineer  
Missouri River Energy Services  
3724 West Avera Drive  
Sioux Falls, SD 57108  
[brian.zavesky@mrenergy.com](mailto:brian.zavesky@mrenergy.com)

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## 1.4 Certificate of Need Process

Minn. Stat. § 216B.243 dictates that a Certificate of Need is required for a “large energy facility”. A large energy facility as defined in Minn. Stat. § 216B.2421 includes “any high-voltage transmission line with a capacity of 200 kVs or more and greater than 1,500 feet in length” and “any high-voltage transmission line with a capacity of 100 kVs or more with more than ten miles of its length in Minnesota or that crosses a state line”. The Applicants filed an application for a Certificate of Need to construct the Big Stone South – Alexandria – Big Oaks 345 kV Project on September 29, 2023, in Docket No. E002, E017, ET2, E015, ET10/CN-22-538.

## 1.5 State Routing Process

This Route Permit Application (Application) is submitted under the alternative review process set forth by Minnesota law, specifically, Minn. Stat. § 216E.04 and Minn. R. 7850.2800 to 7850.3900 and contains the information required under Minn. R. 7850.1900. A Route Permit completeness checklist is provided in Appendix A with cross references indicating where the information required by Minnesota Statutes and Rules can be found in this Application. As provided for in Minn. Stat. § 216E.04, subd. 2(5), a high-voltage transmission line designed and capable of operation above 200 kV is eligible for the alternative permitting process if at least 80 percent of the distance of the line in Minnesota will be located along existing high-voltage transmission line right-of-way. The Project qualifies for review under the alternative permitting process authorized by Minn. Stat. § 216E.04, subd. 2(5) and Minn. R. 7850.2800, subp. 1(E) because at least 80 percent of the Proposed Route is along existing high-voltage transmission line rights-of-way.

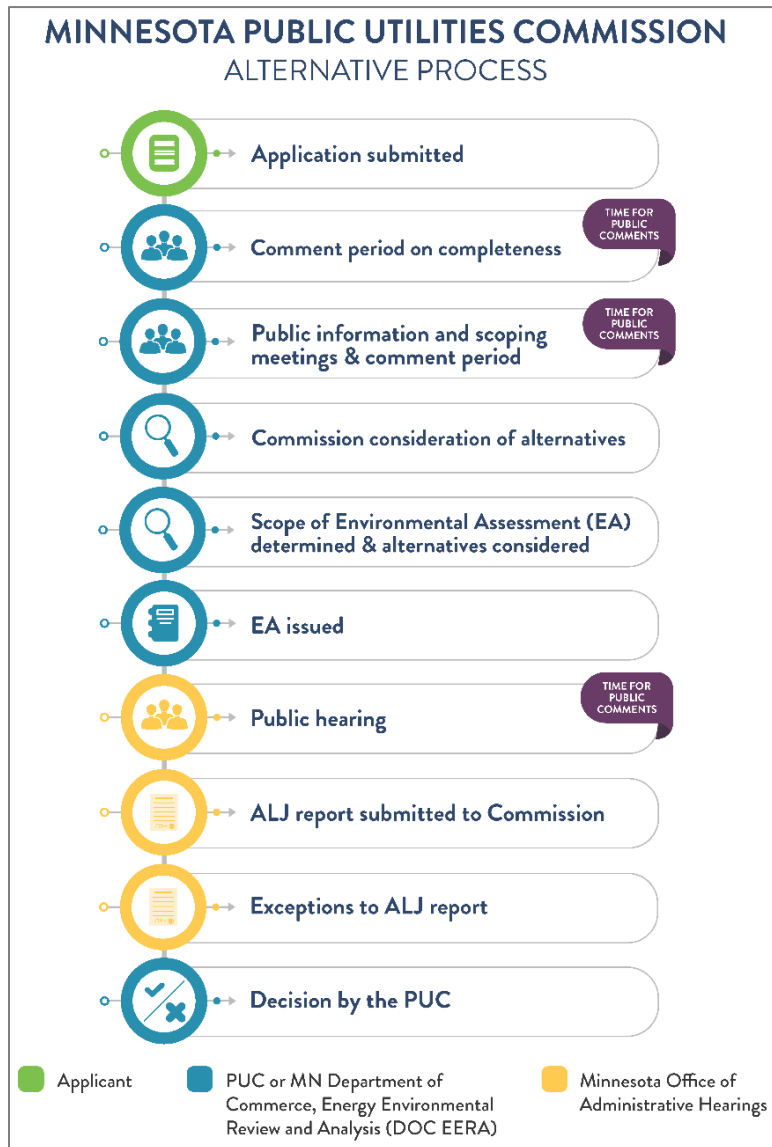
The Applicants notified the Commission on September 1, 2023, that the Applicants intended to use the alternative permitting process for the Project. This letter complied with the requirements of Minn. R. 7850.2800, subp. 2, to notify the Commission of this election at least 10 days prior to submitting an application for a Route Permit. A copy of this letter is attached as Appendix B.

Under the alternative review process, the applicant is not required to propose a second site or route for the project but should include in their application any other sites or routes that were rejected by the applicant. The Commission may identify additional sites or routes to consider during their review of the application as necessary. A “route” is defined in Minn. R. 7850.1000 as “the location of a high

voltage transmission line between two end points... [with] a variable width of up to 1.25 miles”. The route being proposed by the Applicants and the Applicants’ route development process (Route or Project Route) are described in Sections 3 and 4.

In this Route Permit proceeding, the Commission staff, the Department of Commerce-Energy and Environmental Review and Analysis (EERA) staff, and an administrative law judge from the Office of Administrative Hearings will oversee evaluation and review of the Project through the gathering of input from agencies, local government units (LGUs), and the public (Figure 1.5-1).

**Figure 1.5-1 Minnesota Public Utilities Commission Alternative Process**



Source: Reference (1)

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After the application is submitted, the Commission will review the application for completeness; this stage also includes a public comment period. Next, a public information and scoping meeting is held to gather comments and information from stakeholders in the Project Study Area (as shown in Map 1) and those on the Project contact list.

Interested parties may find additional information on how to get involved here: <https://mn.gov/puc/get-involved/>. To subscribe to the Project’s dockets (Certificate of Need and/or Route Permit) and to receive email notifications when information is filed in the dockets, visit: <https://www.edockets.state.mn.us/>, and select “Subscribe to Dockets”, enter your email address and select “Docket Number” from the Type of Subscriptions dropdown box. For the Certificate of Need, select “22” for the first Docket number drop down box and enter “538” in the second box. For the Route Permit, select “23” for the first Docket number drop down box and enter “159” in the second box. Then click on the “Add to List” button. You must then click the “Save” button at the bottom of the page to submit your subscription request. You should receive an email from Efiling.Admin@state.mn.us to the e-mail address you provided; you must click the link in this email to confirm your subscription to the Project’s docket.

If you would like to have your name added to the Project mailing list, send an email to [docketing.puc@state.mn.us](mailto:docketing.puc@state.mn.us) or call 651.201.2204 (800.657.3782). If you send an email or leave a phone message, please include: (1) how you would like to receive mail (regular mail or email) and (2) the docket number (CN-22-538 for the Certificate of Need or TL-23-159 for the Route Permit), your name, and your complete mailing address or email address.

The public can review this Application and submit comments on the Project to the Commission. A copy of the Application is available at the Commission’s website: <https://mn.gov/puc/>. On the Commission’s homepage, click on the eDockets link in the menu at the top of the page, click on “Go to eDockets” and then enter the docket number information; “23” for the Year and “159” for the Number in the “Basic Search” section. A copy of the Application is also available on the Project websites: [www.AlexandriatoBigOaks.com](http://www.AlexandriatoBigOaks.com). This Application will also be available at the following locations for the public to review:

- Monticello Great River Regional Library, 200 W. 6th St. Monticello, MN
- Clearwater Great River Regional Library, 740 Clearwater Center, Clearwater, MN
- Douglas County Library, 720 Fillmore St., Alexandria, MN
- Glenwood Public Library, 108 1st Ave. SE, Glenwood, MN

Following the scoping meeting and public comment period, the Commission will consider alternatives for the Project, and EERA will gather information to prepare an Environmental Assessment (EA) for the Project and alternatives considered. EERA will then issue an EA for the Project.

A public hearing will then be held for the Project, conducted by an administrative law judge from the Office of Administrative Hearings. After the hearing and public comment period, the administrative law judge will prepare and submit a report to the Commission. The Commission will issue a final decision on an application after receipt of the report from the administrative law judge.

If you have questions about the state regulatory process, you may contact the Minnesota state regulatory staff listed below:

Minnesota Public Utilities Commission	Minnesota Department of Commerce EERA
Craig Janezich	Jenna Ness
121 7 <sup>th</sup> Place East, Suite 350	85 7 <sup>th</sup> Place East, Suite 280
St. Paul, Minnesota 55101	St. Paul, Minnesota 55101
651.296.0406	651.296.1500
800.657.3782	800.657.3602
Email: <a href="mailto:craig.janezich@state.mn.us">craig.janezich@state.mn.us</a>	Email: <a href="mailto:jenna.ness@state.mn.us">jenna.ness@state.mn.us</a>
Website: <a href="http://www.mn.gov/puc/">www.mn.gov/puc/</a>	Website: <a href="http://www.mn.gov/commerce">www.mn.gov/commerce</a>

### 1.6 Request for Joint Proceeding with Certificate of Need Application

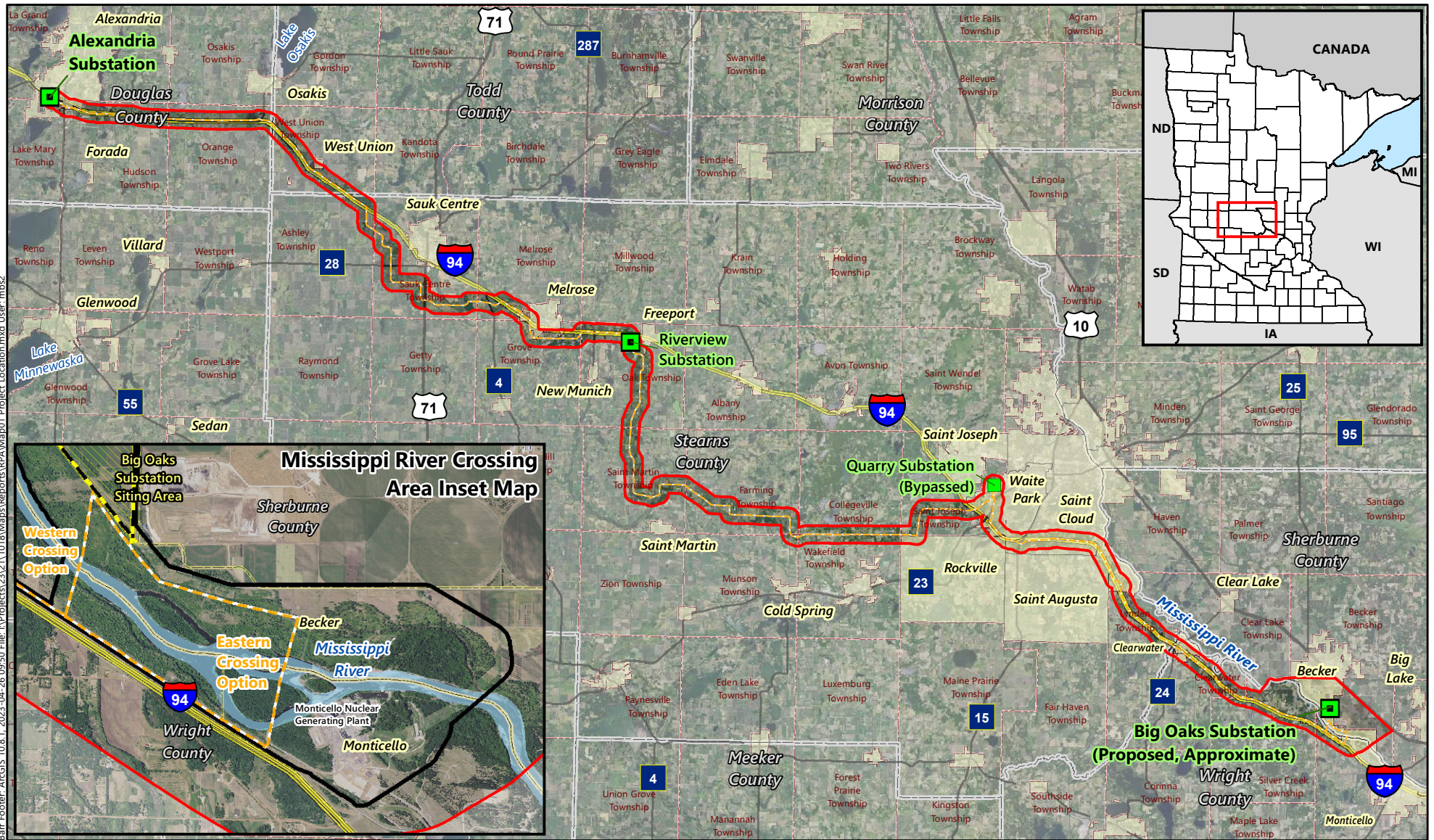
Minn. Stat. § 216B.243, subd. 4 and Minn. R. 7849.1900, subp. 4 permit the Commission to hold joint proceedings for the Certificate of Need and Route Permit in circumstances where a joint hearing is feasible, more efficient, and may further the public interest.

The Applicants respectfully requests that the Commission order a joint regulatory review process for the Route Permit and Certificate of Need applications. Given the

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timing of submittal for the Certificate of Need and Route Permit applications, a joint hearing makes sense and would provide efficiencies, allowing for consolidated public information sharing and input opportunities on both the Project need and Proposed Route.





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**Map 1**

**PROJECT LOCATION**  
 ALEXANDRIA TO BIG OAKS  
 MISO LRTP-2 Route Permit Application

## 2 Project Information

### 2.1 Project Location

The Project is between the city of Alexandria in Douglas County and the city of Becker, Sherburne County, Minnesota (Map 1). The Proposed Route is partially located within the following municipalities: Alexandria, Becker, Clearwater, Freeport, Melrose, Monticello, Rockville, Saint Cloud and Waite Park, Minnesota. Table 2.1-1 identifies the townships and sections crossed by the Proposed Route.

**Table 2.1-1 Townships within the Proposed Route**

City or Township Name	Township and Range	Sections
Alexandria	T127N R37W	6
Alexandria	T127N R38W	1
Alexandria	T128N R38W	36
Ashley Township	T126N R35W	1,12
Ashley Township	T127N R35W	35,36
Becker	T33N R28W	7,16,17,18,19,20,21
Becker	T33N R29W	12,13
Becker Township	T33N R28W	16,17,18
Clearwater	T122N R27W	2,3
Clearwater Township	T122N R26W	7,17,18,20
Clearwater Township	T122N R27W	1,2,3,12
Clearwater Township	T123N R27W	34
Collegeville Township	T124N R30W	33,34,35,36
Farming Township	T124N R31W	19,25,26,28,29,30,32,33,34,35,36
Farming Township	T124N R32W	24
Freeport	T125N R32W	3,4,9,10,10
Grove Township	T125N R33W	1,2,3,10,11,12
Hudson Township	T127N R37W	1,2,3,4,5,6
La Grand Township	T127N R38W	1
La Grand Township	T128N R38W	35,36
Lake Mary Township	T127N R37W	6
Lake Mary Township	T127N R38W	1
Lake Mary Township	T128N R38W	36
Lynden Township	T122N R27W	3
Lynden Township	T123N R27W	19,20,28,29,33,34
Melrose	T125N R33W	3,10
Melrose	T126N R33W	33,34
Melrose Township	T126N R33W	29,30,31,32,33,34

City or Township Name	Township and Range	Sections
Melrose Township	T126N R34W	25,36
Monticello	T122N R25W	32,33,33
Monticello	T33N R28W	19,20,20
Monticello Township	T122N R25W	30,31,32,32
Monticello Township	T33N R28W	19
Munson Township	T123N R30W	6
Munson Township	T123N R31W	1
Munson Township	T124N R31W	36
Oak Township	T124N R32W	4
Oak Township	T125N R32W	4,5,6,9,10,15,22,27,33,34
Oak Township	T125N R33W	1
Orange Township	T127N R35W	7
Orange Township	T127N R36W	1,2,3,4,5,6,12
Orange Township	T127N R37W	1
Rockville	T123N R29W	1,6
Rockville	T123N R30W	1
Rockville	T124N R29W	31
Rockville	T124N R30W	36
St. Cloud	T123N R27W	7,18,19
St. Cloud	T123N R28W	1,2,3,4,5,6,12
St. Cloud	T123N R29W	1
St. Joseph Township	T124N R29W	26,27,28,29,31,32,36
St. Joseph Township	T124N R30W	36
St. Martin Township	T124N R32W	4,9,10,15,16,21,22,23,24,26,27
Sauk Centre Township	T126N R34W	7,17,18,19,20,21,25,27,28,29,33,34,35,36
Sauk Centre Township	T126N R35W	12
Silver Creek Township	T122N R25W	30
Silver Creek Township	T122N R26W	16,17,20,21,22,23,25,26
Waite Park	T123N R28W	6
Waite Park	T123N R29W	1
Waite Park	T124N R29W	13,23,24,25,26,36
Wakefield Township	T123N R30W	1,2,3,4,5,6
Wakefield Township	T124N R30W	33,34,35,36
West Union Township	T127N R35W	7,8,17,18,20,21,26,27,28,35

## 2.2 Project Description

The Project involves construction of an approximately 105 to 108-mile long, new 345 kV transmission line on existing infrastructure from the Western Minnesota Municipal

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Power Agency’s existing Alexandria Substation located in Alexandria, Douglas County to the new Big Oaks Substation that will be constructed on the north side of the Mississippi River in Becker, Sherburne County (Map 1).

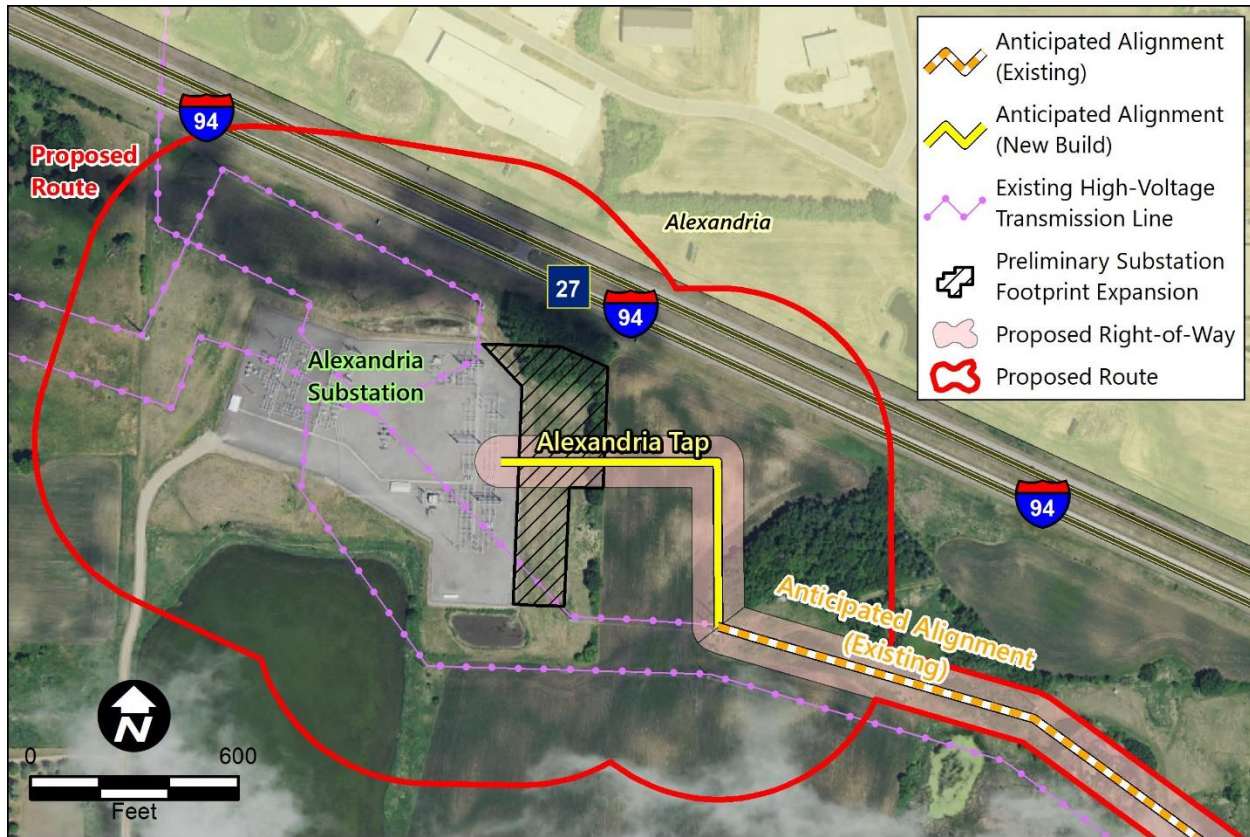
The Project involves placing this new 345 kV transmission circuit on existing CapX2020 transmission line structures that were previously permitted and constructed as double-circuit capable as part of the Monticello to St. Cloud 345 kV Transmission Project (E002, ET2/TL-09-246) and the Fargo to St. Cloud 345 kV Transmission Project (E002, ET2/TL-09-1056).

At four locations along the Project, the new transmission line is proposed to deviate from existing infrastructure as described in the following sections. For purposes of evaluating potential impacts of the Project, the Applicants have developed what they currently believe to be the likely alignments that minimize the overall potential impacts based on the routing factors identified in Minn. Stat. § 216E.03, subd. 7(b) and Minn. R. 7850.4100. These alignments are referred to as the “anticipated alignment(s)”. These anticipated alignments may require modifications within the Proposed Route corridor after a Route Permit is issued due to limitations inherent in identifying an alignment absent detailed survey and engineering work, site review, and design. The anticipated alignments are available on the detailed maps in Appendix C.

### **2.2.1 Alexandria Substation Tap**

The existing Alexandria Substation is on the southern edge of the City of Alexandria just south of Interstate 94. The Proposed Route will follow the existing right-of-way to the Alexandria Substation, at which point it would deviate and require the installation of approximately 0.2 miles of new transmission right-of-way to “tap” into the Alexandria Substation (Map 2).

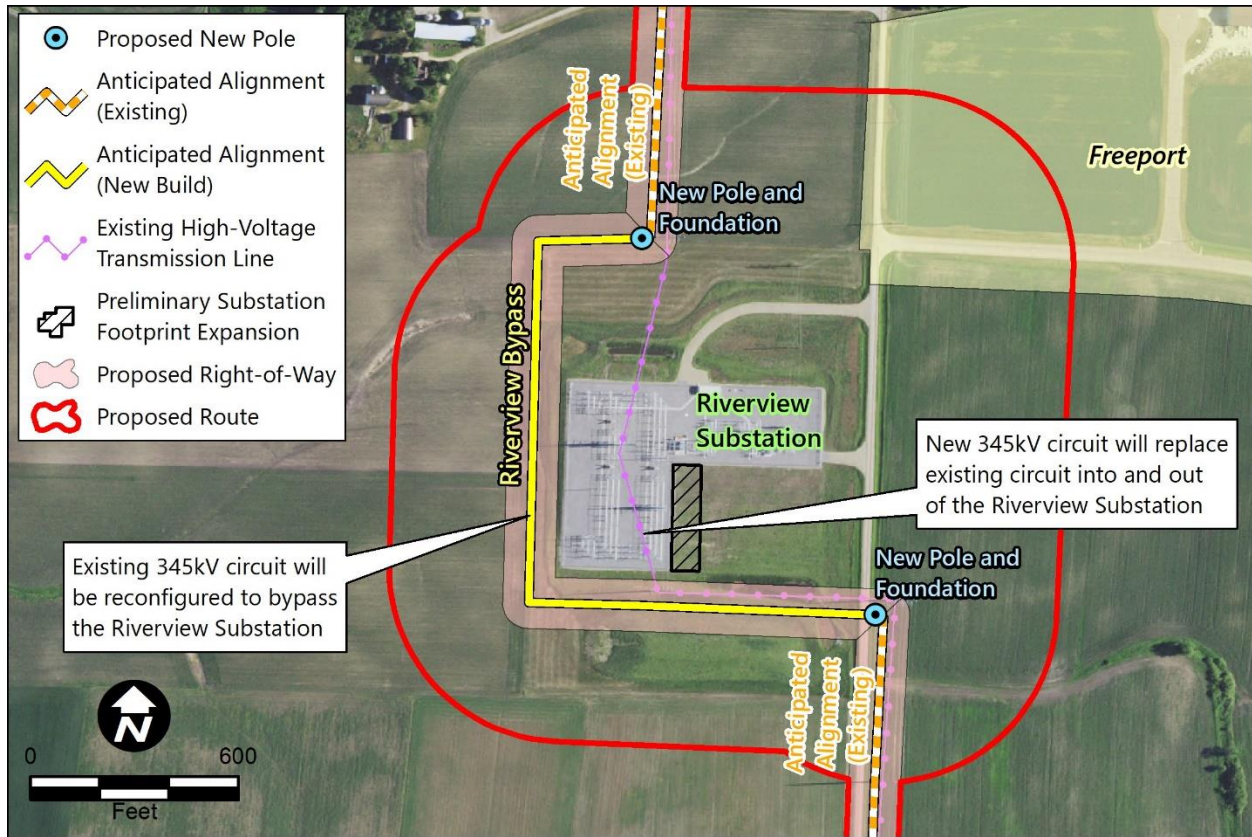
## Map 2 Alexandria Substation Tap Detail



### 2.2.2 Riverview Substation Bypass

The existing Riverview Substation is in Stearns County, Minnesota. The Proposed Route will follow the existing right-of-way to the Riverview Substation. The existing circuit into the Riverview Substation will be reconfigured to bypass the Riverview Substation and the new circuit from the Alexandria Substation will connect to the Riverview Substation before its ultimate destination to the Big Oaks Substation. The bypass is required because if both circuits are brought into the Riverview Substation, an outage of both circuits south of the substation causes increased overloads to the underlying 69 kV system. For this reason, one circuit will bypass the substation. This bypass would result in approximately 0.5 miles of new transmission right-of-way around the Riverview Substation (Map 3).

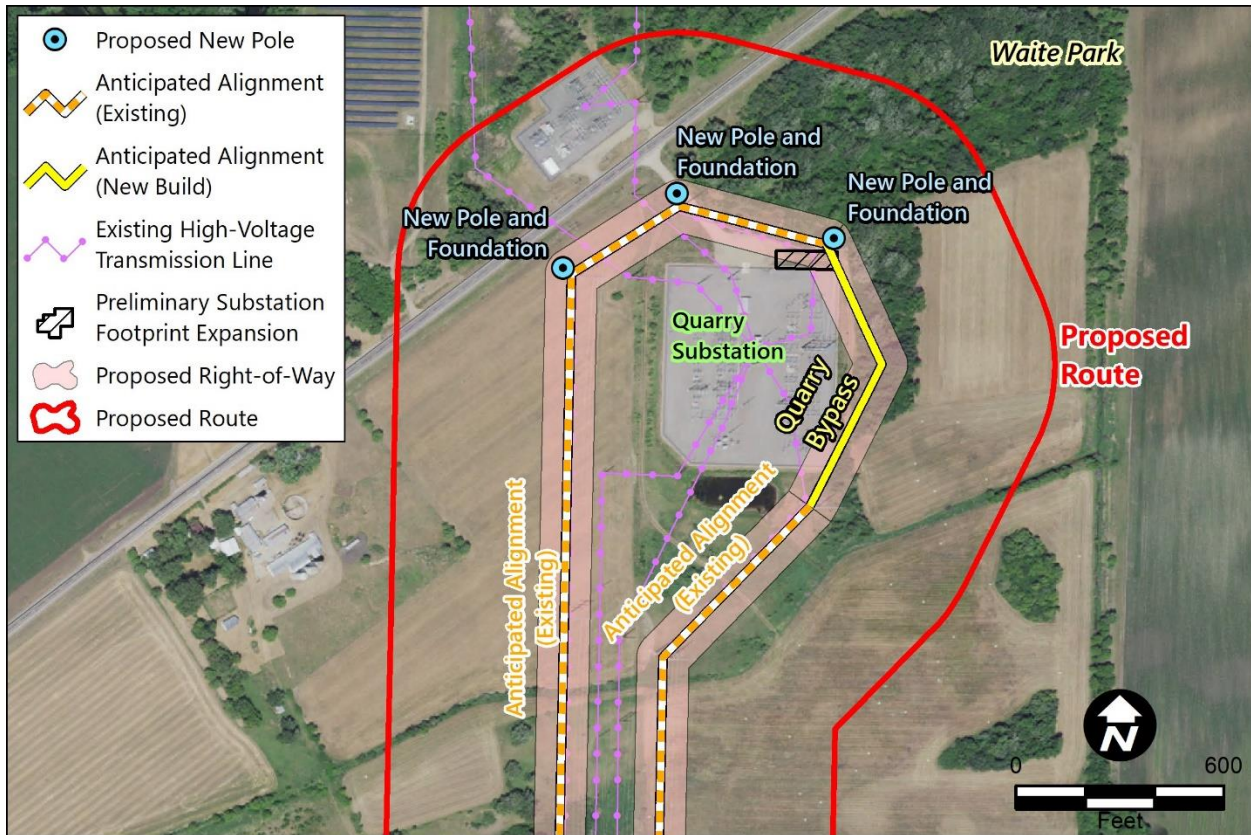
### Map 3 Riverview Substation Bypass Detail



#### 2.2.3 Quarry Substation Bypass

The Proposed Route will follow the existing infrastructure from the Riverview Substation to the Quarry Substation where it would then bypass the Quarry Substation. The bypass is required because if both circuits are brought into the Quarry Substation, an outage of both circuits south of the substation causes increased overloads to the underlying 69 kV system. For this reason, one circuit will bypass the substation. This bypass would result in approximately 0.2 miles of new transmission right-of-way around the Quarry Substation (Map 4).

## Map 4 Quarry Substation Bypass Detail



### 2.2.4 Mississippi River Crossing Alignment Options

The easternmost portion of the Project will deviate from the existing infrastructure to connect to the new Big Oaks Substation, which is northwest of the existing high voltage transmission line (HVTL) infrastructure. A new crossing over the Mississippi River near the city of Monticello will be constructed to connect to the new Big Oaks Substation located northwest of the Monticello Nuclear Generating Plant in Becker. Two options are currently being considered by the Applicants for this river crossing (Table 2.2-1). The total length and percentage of new transmission line right-of-way varies depending on the Mississippi River Crossing Option (Table 2.2-1).

Western Crossing Option: The Western Crossing Option would construct a new crossing of the Mississippi River directly south of the proposed Big Oaks Substation and would be approximately 0.7 miles long (Table 2.2-1). This alignment would include new right-of-way located entirely on Xcel Energy-owned land.

Eastern Crossing Option: The Eastern Crossing Option would construct a new crossing of the Mississippi River just west of the Monticello Nuclear Generating

Plant. This option would be approximately 3.4 miles and would parallel an existing 115 kV transmission line (Table 2.2-1). This option would include 2.1 miles of new transmission line right-of-way and be located entirely on Xcel Energy-owned land; it would require two separate structures be placed on an island in the Mississippi River.

**Table 2.2-1 Mississippi River Crossing Options**

Option	Total Project Length (miles)	Option Length (miles) <sup>[1]</sup>	Option Length, New Right-of-way (miles) <sup>[2]</sup>	River Crossing Length (feet) <sup>[3]</sup>	Total New Right-of-way Length (miles) <sup>[4]</sup>	Percent New Right-of-way
Western Crossing Option	105.3	0.7	0.7	450	1.5	1.4%
Eastern Crossing Option	108.0	3.4	2.1	2,200	2.9	2.7%

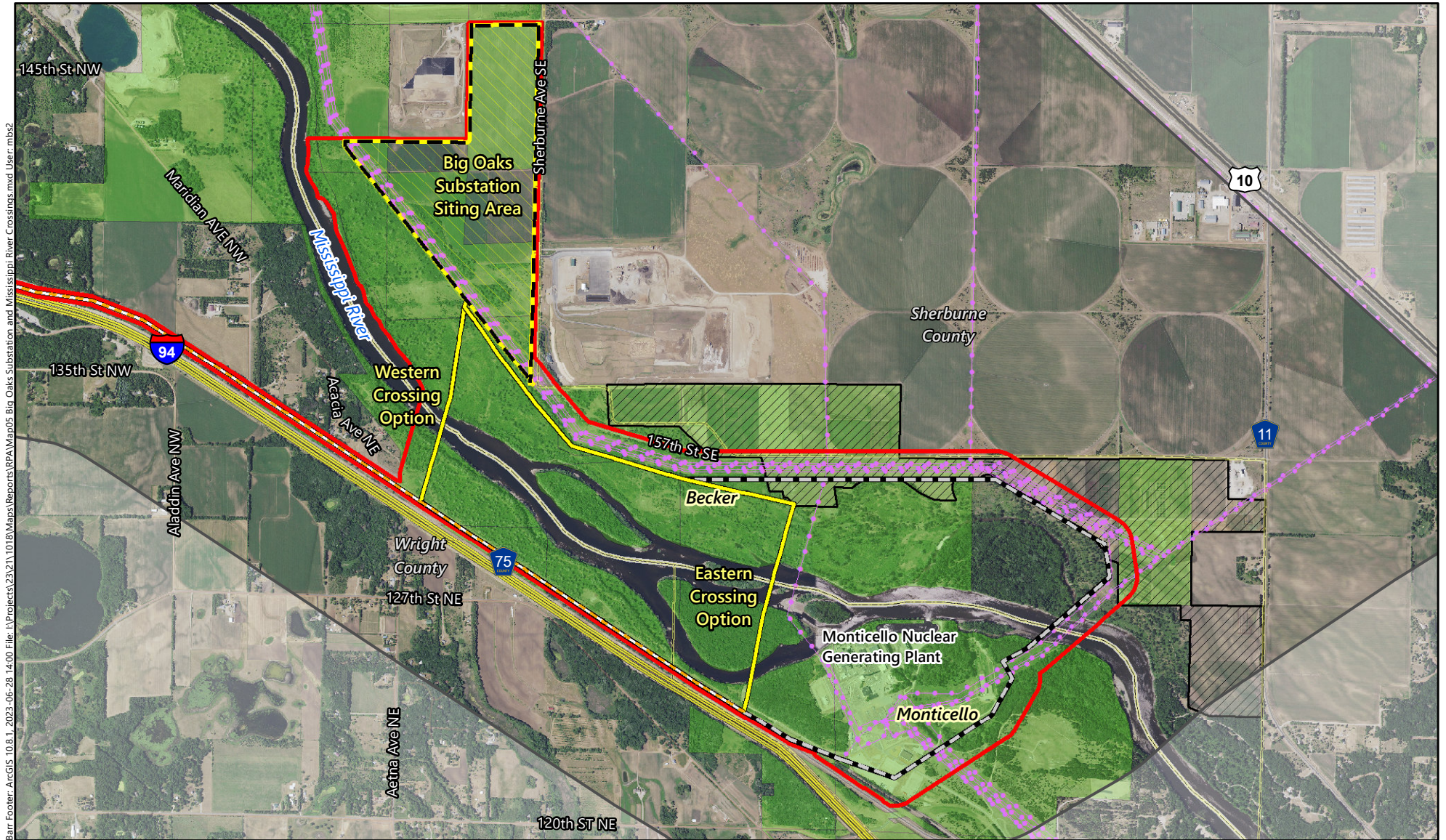
[1] Length of the Option including both new and existing right-of-way.

[2] Length of portion of the Option that is new right-of-way.











[3] Length of portion of the Option that spans the Mississippi River.

[4] The total length of new right-of-way for the entire project including all substation taps, bypasses and the Mississippi River crossing.





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-  Proposed Route
-  Project Study Area
-  Anticipated Alignment (Existing)
-  Anticipated Alignment (New Build)
-  Alignment Considered But Rejected
-  Existing High-Voltage Transmission Line
-  University of Minnesota Sand Plain Research Farm
-  Xcel Energy Owned Parcel
-  Municipal Boundary
-  County Boundary



**Map 5**

**BIG OAKS SUBSTATION AND MISSISSIPPI RIVER CROSSINGS**  
 ALEXANDRIA TO BIG OAKS  
 MISO LRTP-2 Route Permit Application

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## **2.3 Associated Facilities**

The associated facilities for the Project include expansion of the existing Alexandria Substation, expansion of the existing Riverview Substation, expansion of the existing Quarry substation and construction of the new Big Oaks Substation.

### **2.3.1 Alexandria Substation Expansion**

The existing Alexandria Substation is on the southern edge of the City of Alexandria just south of Interstate 94 (Map 2). New substation equipment necessary to accommodate the proposed 345 kV transmission line will be installed at the Alexandria Substation. Equipment will include new termination structures, circuit breakers, relays and associated control equipment. An expansion of approximately 2 to 4 acres from the current fenced area will be required to accommodate the new substation equipment and will require the purchase of additional land.

### **2.3.2 Riverview Substation Expansion**

The existing Riverview Substation is in Stearns County, Minnesota (Map 3). The existing 345 kV circuit from the Alexandria Substation (to the Quarry Substation) will be reconfigured to bypass the Riverview Substation and the new 345 kV circuit from the Alexandria Substation to the Big Oaks Substation will connect to the Riverview Substation. New substation equipment necessary to provide reactive power support will be installed at the Riverview Substation. The current fenced area of the Riverview Substation will be expanded by approximately 0.5 acres on Great River Energy owned property to accommodate this new substation equipment.

### **2.3.3 Quarry Substation Expansion**

The existing Quarry Substation is in Stearns County, Minnesota (Map 4). New substation equipment necessary to provide reactive power support will be installed at the Quarry Substation. The current fenced area of the Quarry Substation will be expanded by approximately 0.3 acres on Xcel Energy owned property to accommodate this new substation equipment.

### **2.3.4 Big Oaks Substation Construction**

The Big Oaks Substation will be a 345 kV switching station located northwest of the Monticello Nuclear Generating Plant in Becker, Minnesota. The exact location of the substation has not yet been determined, but a 250-acre portion of land owned primarily by the Xcel Energy has been identified as the location for the substation;

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this area is being referred to as the “Big Oaks Substation Siting Area” (Map 5). The Applicants are evaluating the Big Oaks Substation Siting Area to confirm adequate space for planned facilities, future transmission line interconnections, and an additional area surrounding the proposed facility to minimize immediate encroachment with other existing or new land uses (Map 1).

Big Oaks Substation will include eighteen 345 kV circuit breakers configured to accommodate the connection of up to twelve 345 kV transmission lines. Substation equipment necessary to provide reactive power support will also be installed. The Big Oaks Substation will be located on a graded and fenced area of approximately 10 acres. The following transmission lines are proposed to connect to the Big Oaks Substation:

- Four existing 345 kV transmission lines originating at the Sherburne County Substation;
- The Eastern Segment of the Project: the 345 kV transmission line from Alexandria Substation to Big Oaks Substation; and
- Two 345 kV transmission lines proposed as part of LRTP3 (Benton County – Big Oaks Line #1, Benton County – Big Oaks Line #2).

The Applicants are evaluating a 250-acre property for the proposed Big Oaks Substation to confirm adequate space for planned facilities, future transmission line interconnections, and an additional area surrounding the proposed facility to minimize immediate encroachment with other existing or new land uses (Map 5).

## **2.4 Route Width**

The route width is the area in which the Commission authorizes a permittee to place the proposed transmission line facilities. The route may have “a variable width of up to 1.25 miles,” within which the right-of-way for the facilities can be located (Minn. Stat. § 216E.01, subd. 8). The right-of-way is the specific area that is required for the easement for the transmission line. By requesting a route width that is wider than the right-of-way, the Applicants will have some flexibility to make alignment adjustments during final design to work with landowners, avoid sensitive natural resources, and to manage construction constraints as practical.

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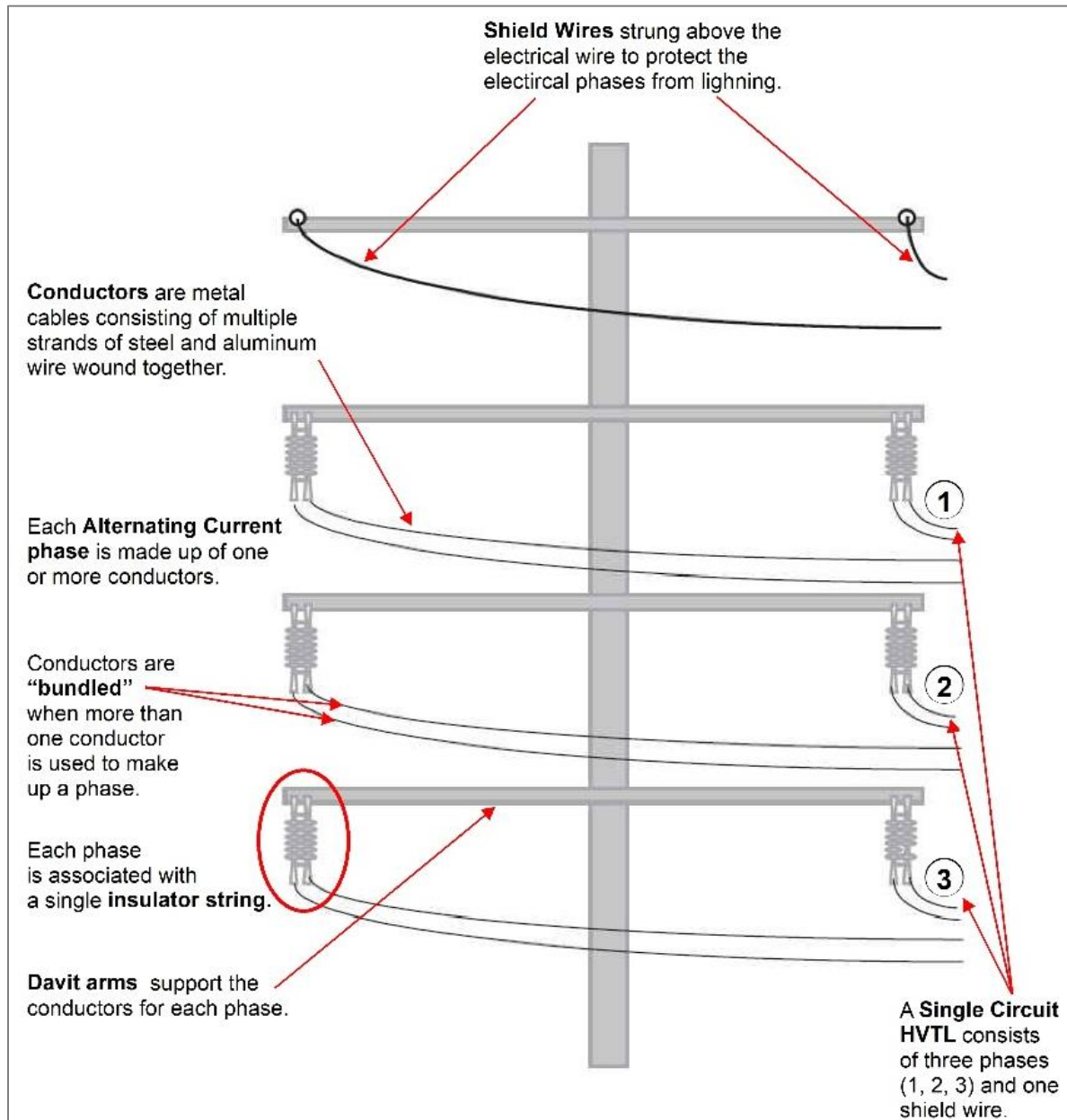
For this Project, the Applicants proposes a route width ranging from approximately 150 feet to 1,000 feet along proposed alignments, and up to 1 mile around the proposed Big Oaks Substation and Mississippi River crossing locations. For the portion of the Project where the Applicants plan to add the second 345 kV circuit to the existing infrastructure, the Applicants are requesting a route width of 150 feet centered on the right-of-way of the existing double-circuit capable structures. For the portions of the Project that will deviate from the existing right-of-way, the Applicants are requesting a route width of 1,000 feet centered on the anticipated alignment of the new 345 kV transmission line (i.e., 500 feet on either side of the line). The Applicants are also requesting a route width of 500 feet around the Alexandria, Riverview, and Quarry substations.

The Applicants are requesting a route width of 600 feet to almost 2,000 feet extending west from the Big Oaks Substation Siting Area to the Mississippi River, creating a wider route width ranging from 0.75 to 1.0 miles in this area. The Applicants are requesting the larger route in this area due to site-specific considerations and to accommodate both the Big Oaks Substation interconnection and Mississippi River crossing.

## **2.5 Transmission Structure and Conductor Design**

A HVTL consists of three phases (conductors), each at the end of a separate insulator string, and all physically supported by structures. Conductors are metal cables consisting of multiple strands of steel and aluminum wire wound together. There are also two shield wires strung above the electrical phases to prevent damage from lightning strikes (Figure 2.5-1). These cables are typically less than one inch in diameter. The shield wire can also include fiber optic cable which provides a communication path between substations for transmission line protection equipment. The majority of this Project involves adding a second 345 kV circuit to an existing single-circuit (double-circuit capable) transmission line, creating a double-circuit transmission line (six phases) and two shield wires.

Figure 2.5-1 Typical Double-Circuit Transmission Line



The new conductors will be strung primarily on existing monopole, galvanized steel, double-circuit structures (Figure 2.5-2).

**Figure 2.5-2 Typical 345 kV Structures**



**Figure 2.5-3 Existing 345 kV Double-Circuit Capable Monopole Structure with Single Circuit Strung**



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When these structures were originally installed, they left space for this future second circuit, allowing electrical capacity to be increased without additional structure installation. For this Project, there are certain locations where new structures will be required. Approximately 67 to 78 new structures are proposed depending on the Mississippi River Crossing selected for the Project. New structures are needed in select areas along the existing infrastructure to accommodate angles (i.e., where the alignment turns), highway crossings, or where the anticipated alignment deviates from the existing infrastructure (e.g., substation bypasses, new substation taps and the Mississippi River crossing). The angle structures were originally designed as 2-pole structures, typical for double circuit 345kV lines; one full circuit and a shield wire attached to each pole. When the first circuit was installed, there was no need for the second monopole; also, without wires attached, the second monopole would have been susceptible to damage from vibration. As part of this Project, the second monopole will be installed. The approximate location of new structures along the existing transmission line infrastructure and other areas where detailed engineering has been completed are shown in Appendix C maps; structures are not shown for areas where detailed design has not been completed including portions of the Proposed Route at the Mississippi River Crossing. New structures will primarily be monopole structures; however, H-frame structures may be used at the Mississippi River crossing or if needed to accommodate longer spans. Where a second monopole structure is required next to an existing structure, it will be placed within the existing right-of-way, 40 to 60 feet from the existing structure (Figure 2.5-4).

**Figure 2.5-4 Typical Configuration of Two Monopole Structures Side-by-side**



The proposed new structures will range in height from 75 feet to 160 feet tall. The typical span between structures is about 1,000 feet. A single pole structure is typically installed on a concrete foundation while an H-frame structure can either be installed on two concrete foundations or directly embedded in the ground. Table 2.5-1 and Appendix D summarizes the typical structure designs for the Project.

**Table 2.5-1 Typical Structure Design Summary**

Line Type	Structure Type	Structure material	Typical Right-of-Way Width (feet)	Structure Height (feet)	Foundation Diameter (feet)	Average Span Between Structure (feet)
345 kV Double-Circuit	Monopole w/ Davit Arms	Galvanized or Self-Weathering Steel	150	90-160	7-12	1,000
345 kV Single-Circuit	Monopole with Davit Arms	Galvanized or Self-Weathering steel	150	90-150	7-12	1,000
345 kV Single-Circuit	H-Frame	Self-Weathering steel	150	75-150	5-8	1,000



The Applicants are currently evaluating two different conductor types for the new 345 kV transmission line which include: a double bundled 2x397.5 kcmil 26/7 ZTACSR “Ibis” conductor and a double bundled round (non-twisted pair) 954 kcmil 20/7 ACSS/TW “Cardinal” conductor.

The proposed transmission line will be designed to meet or surpass relevant local and state codes including the National Electric Safety Code (NESC) and the Applicants’ standards. Applicable standards will be met for construction and installation, and applicable safety procedures will be followed during design, construction, and after installation.

## 2.6 Transmission Line Right-of-Way

The majority of the new 345 kV transmission circuit will be strung on existing infrastructure, using existing double-circuit capable structures already present within an existing 150-foot-wide transmission line right-of-way. The Applicants will require new 150-foot right-of-way for construction of the new structures and transmission lines in areas where the Proposed Route deviates from the existing transmission line right-of-way.

## 2.7 Project Schedule

Construction for the Project is expected to begin in the fourth quarter of 2024 or first quarter of 2025. The Applicants anticipate Project construction to be completed in the fourth quarter of 2027. Table 2.7-1 provides a permitting and construction schedule summary, with anticipated end dates identified.

**Table 2.7-1 Anticipated Project Schedule**

Activity	Estimated Dates
Minnesota Certificate of Need and Route Permit for Eastern Segment Issued	Second/Third Quarter 2024
Land Acquisition Begins	Third Quarter 2024
Survey and Transmission Line Design Begins	Second Quarter 2024
Other Federal, State, and Local Permits Issued	First Quarter 2025
Start Right-of-Way Clearing	Second Quarter 2025
Start Project Construction	Second Quarter 2025
Project In-Service	Fourth Quarter 2027

This schedule is based on information known as of the date of this filing and upon planning assumptions that balance the timing of implementation with the availability of crews, materials and other practical and seasonal considerations. This schedule may be subject to adjustment and revision as further information is developed.

## 2.8 Project Costs

Table 2.8-1 summarizes the Project will cost between \$209.5 million and \$238.2 million (in 2022 dollars) depending on the alignment selected.

**Table 2.8-1 Current Construction Cost Estimates**

Project Component	Capital Expenditures (\$millions) (in 2022 dollars)	
	Low	High
Alexandria – Big Oaks 345 kV Transmission Line	\$123.1	\$130.9
Alexandria Substation Modifications	\$20.0	\$28.0
Riverview Substation Modifications	\$3.0	\$3.0
Quarry Substation Modifications	\$3.0	\$4.0
New Big Oaks Substation	\$60.4	\$72.3
<b>Total Project Costs*</b>	\$209.5	\$238.2

There may be differences between the sum of the individual component amounts and Total Project Costs due to rounding.

The Applicants note that Table 2.8-1 includes cost estimates (in 2022 dollars) to be consistent with MISO’s estimates approved as part of MTEP21. These estimates will increase over time for any number of reasons such as, but not limited to escalation, inflation and commodity pricing, especially for these types of large-scale 345 kV transmission projects that have multi-year schedules. Therefore, the Applicants are also developing escalated cost estimates for each component of the Project in nominal dollars that will be shared during the course of this proceeding once they are available.

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### 3 Route Selection Process

The Applicants conducted a route selection process beginning in late 2022 and extending through the middle of 2023. This process included consideration of statutory and rule requirements, information gathering, public outreach and input, and comparison of route alignment options around the Project substations. The main consideration during the route selection process was maximizing the use of the existing right-of-way between the Alexandria and Monticello Substations. As the majority of the new 345 kV transmission circuit will be placed on existing transmission line structures, the Proposed Route will follow existing transmission line right-of-way for over 95 percent of its length. As a result, the Proposed Route was already well defined for most of the Project. The focus of the route selection process centered on areas around the Big Oaks Substation Siting Area and the Mississippi River Crossing Options, as well as Project substation taps and bypasses.

The Applicants met with federal, state, and local agencies as part of the outreach program for the Project. The Applicants developed a Geographic Information System (GIS) database that contained information gathered from publicly available data resources as well as input from the public and agencies. This process resulted in the identification of a single route, and two options for the Mississippi River crossing.

#### 3.1 Summary of Route Selection Process and Guiding Factors

Minn. Stat. § 216E.03, subd. 7(a) provides that the Commission’s route permit determinations “must be guided by the state’s goals to conserve resources, minimize environmental impacts, minimize human settlement and other land use conflicts, and ensure the state’s electric energy security through efficient, cost-effective power supply and electric transmission infrastructure.” Subdivision 7(e) of the same section requires the Commission to “make specific findings that it has considered locating a route for a high-voltage transmission line on an existing high voltage transmission route and the use of parallel existing highway right-of-way and, to the extent those are not used for the route, the Commission must state the reasons.”

In addition to the statutory criteria noted above, Minn. Stat. § 216E.03, subd. 7(b) and Minn. R. 7850.4100 provide factors the Commission will consider in determining whether to issue a route permit for a HVTL. These factors are:

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- A. Effects on human settlement, including, but not limited to, displacement, noise, aesthetics, cultural values, recreation, and public services;
  - B. Effects on public health and safety;
  - C. Effects on land-based economies, including, but not limited to, agriculture, forestry, tourism, and mining;
  - D. Effects on archaeological and historic resources;
  - E. Effects on the natural environment, including effects on air and water quality resources and flora and fauna;
  - F. Effects on rare and unique natural resources;
  - G. Application of design options that maximize energy efficiencies, mitigate adverse environmental effects, and could accommodate expansion of transmission or generating capacity;
  - H. Use or paralleling of existing rights-of-way, survey lines, natural division lines, and agricultural field boundaries;
  - I. Use of existing large electric power generating plant sites;
  - J. Use of existing transportation, pipeline, and electrical transmission systems or rights-of-way;
  - K. Electrical system reliability;
  - L. Costs of constructing, operating, and maintaining the facility which are dependent on design and route;
  - M. Adverse human and natural environmental effects which cannot be avoided;  
and
  - N. Irreversible and irretrievable commitments of resources.

In 2023, the Minnesota Legislature amended Minn. Stat. § 216E.03, subd. 7(b) to also include the following considerations when designating routes:

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- Evaluation of the benefits of the proposed facility with respect to (i) the protection and enhancement of environmental quality, and (ii) the reliability of state and regional energy supplies;
  - Evaluation of the proposed facility’s impact on socioeconomic factors; and
  - Evaluation of the proposed facility’s employment and economic impacts in the vicinity of the facility site and throughout Minnesota, including the quantity and quality of construction and permanent jobs and their compensation levels. The commission must consider a facility’s local employment and economic impacts and may reject or place conditions on a site or route permit based on the local employment and economic impacts.

### **3.1.1 Project Study Area**

The Project Study Area was designed to establish boundaries and limits for the information-gathering process (e.g., identifying environmental and land use resources, routing constraints, and routing opportunities) and the subsequent development of route options for the Project (Map 1). The Project Study Area was also used as the Project Notice Area for public outreach and developing mailing lists for Project updates and invitations to public open houses.

The Applicants developed the Project Study Area boundary by buffering the existing infrastructure alignment between the Alexandria Substation and the new proposed Big Oaks Substation by 0.5 mile, creating an area that covers approximately 120 square miles. The Project Study Area is approximately 100 miles long and 1 mile wide along the length of the of the existing infrastructure; it extends to 3 miles wide around the Big Oaks Substation Siting Area and around the Mississippi River Crossing Options (Map 1).

### **3.1.2 Identify Routing Opportunities and Constraints**

The process of identifying potential routes started by first identifying areas where deviation from the existing infrastructure and right-of-way would be required. For the portions of the Project where the new 345 kV transmission line would be double-circuited on existing structures, it was determined there was no need for additional right-of-way; therefore, the proposed route width was established as identical to the existing 150-foot right-of-way.

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In locations where the Project would deviate from the existing infrastructure, the Applicants identified alignments that would meet the Project needs of either bypassing an existing substation or tapping into a new or existing substation. These deviations were constrained to the start/end points along the existing infrastructure and limited the potential areas of new right-of-way.

To minimize impacts on the environment and affected landowners, the Applicants looked for routing opportunities on Applicants-owned land or that would share rights-of-way with existing transmission lines and field and section lines. The Applicants also examined the Project Study Area to identify routing constraints that should be avoided if practicable (e.g., airports, Wildlife Management Areas (WMAs), Waterfowl Production Areas (WPAs), residential subdivisions, lakes, etc.).

Based on an examination of routing opportunities and constraints, the Applicants developed a total of five proposed alignments at the four locations where deviations from the existing infrastructure is required; this includes one alignment at each of the existing substations (Alexandria, Riverview, and Quarry) and two alignment options at the Mississippi River crossing and tap into the new Big Oaks Substation.

A third Mississippi River Crossing Option east of the Monticello Nuclear Generating Plant was considered but rejected (Map 5). The alignment was rejected based on evaluation against the guiding factors outlined in Section 3.1 including effect on human settlement, recreation, tourism and costs of constructing, operating, and maintaining the facility. The rejected alignment is longer than the other two options, has greater linear impacts on the Mississippi Wild & Scenic River District and is more expensive. It also bisects and would disrupt long-standing research at the University of Minnesota Sand Plain Research Farm. Additionally, challenges and costs related to the construction, operation and maintenance of the alignment associated with crossing up to seven different existing transmission lines near the Monticello Substation and Monticello Nuclear Generating Plant led to the alignment's rejection by the Applicants.

### **3.1.3 Public Open House Meetings**

Following the development of the Project Study Area and alignment options, the Applicants conducted four public open houses: one in-person in Alexandria, Minnesota at the Alexandria Holiday Inn, on April 11, 2023, from 4:00 to 7:00 p.m.;

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one in-person in Becker, Minnesota at the Becker Community Center, on April 12, 2023, from 4:00 to 7:00 p.m.; and two virtual open houses on April 13, 2023 at 1:00 p.m. and 6:00 p.m. Notices for these open houses were provided via newspaper and direct mail to residents, landowners, public officials, tribes, and other potential stakeholders (Appendix E). The open house invitation provided information such as a general Project description, a map of the Project Study Area and anticipated alignments, the Project’s website address, and Applicants’ contact information to submit questions and comments.

The in-person open house format included several stations to display and communicate information about the Project to the attendees. Large-scale, poster-sized maps were on display depicting the Project Study Area and anticipated alignments. GIS stations were also available for meeting attendees to review specific locations in more detail and to print maps of areas of interest. Meeting attendees were encouraged to submit written comments either at the meeting or by email until April 30, 2023.

The virtual open house format included a 30-minute formal presentation and a 30-minute question and answer session. Meeting attendees were encouraged to ask questions or leave comments by either typing into the online system or calling and speaking directly to an Applicants representative. Virtual meeting attendees were also informed they could submit comments until April 30, 2023.

Landowner feedback from these open houses included comments and concerns regarding the following: proximity to residences; minimizing impacts to farm operations, and crop damage. The Applicants received two written comments during the in-person open houses. More information on the feedback received is available in Section 7.2.

### **3.1.4 Initial Local Government and Agency Outreach**

Following development of the Project Study Area and Proposed Route, several meetings were held with federal, state, county, and local agencies and various county and local administrators. The purpose of these meetings was to gather feedback on the Proposed Route and alignment options and identify potential concerns. More details of the discussions with agency and county staff may be found in Section 7 of this Application.

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## 4 Description of Proposed Route

The sections below provide a brief description of the Route, and Map 1 depicts the Project Route. Refer to Appendix C for detailed Route maps.

### 4.1 Project Route

#### 4.1.1 Alexandria Substation Tap

The Proposed Route begins at the Alexandria Substation and includes a 500-foot buffer around the Alexandria Substation, as well as around a new tap line into the substation. The proposed tap line includes approximately 0.2 miles of new right-of-way and placement of one new structure.

#### 4.1.2 Existing Transmission Line Second Circuit (Alexandria to Riverview Substation)

The Proposed Route narrows to 150 feet wide as it follows the existing transmission line right-of-way east then southeast for approximately 42 miles during which it crosses Interstate 94 four times and passes the cities of West Union and Melrose to the Riverview Substation near Freeport. Along this section, new 345 kV transmission line will primarily be double-circuited on existing structures. Approximately 25 new monopole structures will be needed, and the line will be strung on the new structures instead of double-circuiting on existing structures. These new structures will be built in the existing transmission line right-of-way and within 40-60 feet of an existing structure.

#### 4.1.3 Riverview Substation Bypass

The Proposed Route widens to include a 500-foot buffer around the Riverview Substation and around a new bypass of the substation. The bypass includes approximately 0.5 miles of new right-of-way around the substation and placement of up to five new structures.

#### 4.1.4 Existing Transmission Line Second Circuit (Riverview Substation to Quarry Substation)

The Proposed Route narrows back to 150 feet wide as it proceeds south from the Riverview Substation. It follows the existing transmission line right-of-way for approximately 9 miles then continues east for 26 miles, following the existing transmission line right-of-way past Rockville to the Quarry Substation at Waite Park.



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Along this section, new 345 kV line will primarily be double-circuited on existing structures. This section requires construction of approximately 30 new monopole structures, and the line will be strung on the new structures instead of double-circuited on existing structures. These new structures will be built in the existing transmission line right-of-way and within 40-60 feet of an existing structure.

#### **4.1.5 Quarry Substation Bypass**

The Proposed Route widens to include a 500-foot buffer around the Quarry Substation, the existing infrastructure in and out of the Quarry Substation north of Old Hwy Road North, and around a new substation bypass. The bypass includes approximately 0.2 miles of new right-of-way around the substation and up to six new structures.

#### **4.1.6 Existing Transmission Line Second Circuit (Quarry Substation to Big Oaks Substation Siting Area)**

The Proposed Route narrows back to 150 feet as it proceeds south from the Quarry Substation, following the existing transmission line right-of-way to Interstate 94. The Proposed Route continues east for approximately 29 miles following the existing transmission line right-of-way past St. Cloud, St. Augusta, and Clearwater. It crosses Interstate 94 four times before reaching an area south of the Big Oaks Substation Siting Area, located west of the Monticello Nuclear Generating Plant. Along this section, new 345 kV transmission line will be double-circuited on existing structures; no new structures are required.

#### **4.1.7 Big Oaks Substation Siting Area and Mississippi River Crossing Options**

The Proposed Route widens to include 500-foot buffers around the two Mississippi River Crossing Options. The Proposed Route encompasses the area along the Mississippi River from the Western Crossing Option to east of the Monticello Nuclear Generating Plant and includes the 150-foot right-of-way of the existing infrastructure. The Proposed Route also includes the Big Oaks Substation Siting Area as well as a buffer ranging from 600 feet to almost 2,000 feet extending west from the Big Oaks Substation Siting Area to the Mississippi River.

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## **5 Right-of-Way Acquisition, Construction, Restoration, and Maintenance Procedures**

The Applicants developed right-of-way acquisition, construction, restoration, and maintenance procedures for the Project. Although certain procedures will be site-specific based upon the final route design, general procedures are discussed in some detail in this Application.

### **5.1 Right-of-Way Acquisition**

Early in the detailed design process, typically after the route permit is obtained, the right-of-way acquisition process begins. For transmission lines, utilities typically acquire easement rights across the parcels to accommodate the transmission line. The evaluation and acquisition process includes title examination, initial owner contacts, survey work, document preparation, and acquisition of easement rights.

In areas of the Project that will use existing rights-of-way and the terms of the existing easement are sufficient, the Applicants' right-of-way agent will work with the landowner to address any short-term construction needs, impacts, or restoration.

For portions of the Project where a new or expanded right-of-way will be necessary, the Applicants' right-of-way agent will identify all persons and entities that may have a legal interest in the identified real estate. The Applicants' right-of-way agent contacts each property owner to describe the need for the transmission facilities and how the Project may affect each parcel. The Applicants' right-of-way agent also seeks information from the property owner about any specific concerns that they may have with the Project.

To aid in the design and routing of the Project, Applicants may request permission to enter the property to conduct preliminary survey and geotechnical work. During this process, the location of the proposed transmission line or substation facility may be staked with permission of the property owner.

The agent will discuss the construction schedule and construction requirements with the property owner. Special consideration may be needed for fences, crops, or livestock. Fences and livestock may need to be moved; temporary or permanent gates may need to be installed; and crops may need to be harvested early. In each case, the

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right-of-way agent and construction personnel coordinate these processes with the property owner.

Land value data will be collected to assist in determining the fair market value of the easement needed for the lands to be crossed by the Project as well as the impact the easement may have on the market value of those parcels. A fair market value offer will be developed that recognizes the impact of the easement to each parcel. Sometimes, a negotiated easement agreement cannot be reached. In those cases, the Applicants may exercise eminent domain pursuant to Minnesota law. The process of exercising the right of eminent domain is called condemnation.

Before commencing a condemnation proceeding, typically, the Applicants must obtain at least one appraisal and provide a copy to the property owner. The property owner may also obtain another property appraisal and the Applicants must reimburse the property owner for the cost of the appraisal according to the requirements and limits set forth in Minn. Stat. § 117.036. To start the formal condemnation process, the Applicants file a petition in the district court where the property is and serves that petition on all owners with an interest in each of the properties identified in the petition.

If the district court grants the petition, the court then appoints a three-person condemnation commission that will determine a just compensation amount for the easement. The three people appointed to the condemnation commission must be knowledgeable of applicable real estate matters. The commissioners schedule a viewing of the property and then schedule a valuation hearing where the utilities and property owners offer their evidence, such as testimony by appraisers, as to the fair market value of the property interests required for the Project. The condemnation commission then makes an award as to the value of the property acquired for the easement and that award is filed with the court. Each party has the right to appeal the award to the district court for a jury trial. A jury trial typically occurs in the event of an appeal in which the jury considers the parties' evidence and renders a verdict. At any point in this process, the case can be dismissed if the parties reach a settlement.

There may be instances where a property owner elects to require the Applicants to purchase their entire property rather than acquiring only an easement for the transmission line. The property owner is granted this right under Minn. Stat. § 216E.12, subd. 4, which is sometimes referred to as the "Buy-the-Farm

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Statute.” The Buy-the-Farm Statute applies only to transmission lines that are 200 kV or more; thus, the Buy-the-Farm Statute may apply to parcels crossed by the proposed 345 kV transmission lines.

## **5.2 Construction Procedures**

Construction will last approximately 18 to 20 months from start to finish and will employ approximately 100 to 150 construction workers.

Construction will begin after necessary federal, state, and local approvals are obtained and property rights are acquired for each respective segment. Construction in areas where new easements are not needed or have already been obtained may proceed while right-of-way acquisition for other areas are still in process. The precise timing of construction will consider various requirements of permit conditions, environmental restrictions, availability of outages for existing transmission lines (if required), available workforce, and materials.

Construction will follow the Applicants’ best practices for construction and mitigation to minimize temporary and permanent impacts to land and the environment.

Construction typically progresses as follows:

- survey marking of the right-of-way;
- right-of-way clearing and access preparation;
- grading or filling if necessary;
- installation of culverts or concrete foundations;
- installation of poles, insulators, and hardware;
- conductor stringing;
- installation of any aerial markers required by state or federal permits; and
- restoration / clean-up.

The Applicants will design the transmission line structures for installations at the existing grades. Where a site slope is required (typically on slopes exceeding 10 percent), working areas may be graded or leveled with fill. If acceptable to the

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property owner, the Applicants proposes to leave the graded/leveled areas after construction to allow access for future maintenance activities. If not acceptable to the property owner, the Applicants will, to the best of its ability, return the grade of the site back to its original condition.

Construction will require the use of many different types of construction equipment including tree removal equipment, mowers, cranes, backhoes, digger-derrick line trucks, drill rigs, dump trucks, front-end loaders, bucket trucks, bulldozers, flatbed tractor-trailers, flatbed trucks, pickup trucks, concrete trucks, helicopters, and various trailers or other hauling equipment. Excavation equipment is often on wheeled or track-driven vehicles. Construction crews will attempt to use equipment, when opportunities are available, that minimizes impacts to land, including the use of ground mats if required.

Construction staging areas/laydown yards are usually established for transmission projects. Staging involves delivering the equipment and materials necessary to construct the new transmission line facilities. Construction of each segment will likely include two or more staging areas. Structures, conductor, matting and other materials are delivered to staging areas and stored until they are needed for the Project.

The Applicants will evaluate construction access opportunities by identifying existing transmission line easements, roads, or trails that are near the approved route. When feasible, the Applicants will limit construction activities to the easement area. In certain circumstances, additional off-easement access may be required on a temporary basis. Permission will be obtained from property owners prior to using off-easement access.

Improvements to existing access or construction of new access may be required to accommodate construction equipment. Field approaches and roads may be constructed or improved. Where applicable, the Applicants will obtain permits for new access from local road authorities. The Applicants will also work with appropriate road authorities to ensure proper maintenance of roadways traversed by construction equipment.

After right-of-way clearing and access preparation has been completed, pole and foundation installation will begin. Structures for the Project will require drilled pier concrete foundations.

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Drilled pier foundations are typically between eight to ten feet in diameter and are typically 20 to 60 feet deep, depending on soil conditions. An angle or dead-end structure may require a foundation up to 12 feet in diameter. The actual diameter and depth of the hole (and foundation) depend on structure design and soil conditions that are determined during the initial survey and soil testing phases. Concrete is brought to the site by concrete trucks from a local concrete batch plant and filled around a steel rebar support cage and anchor bolts. Once the foundation is cured, the structure is bolted to the foundation.

Structures will be moved from staging areas and delivered to the site of each foundation where they are assembled. Using a crane, the structure is lifted and placed into position. Insulators and other hardware are attached to the structure prior to placing it on the foundation.

Conductor stringing is the last major step of transmission line construction. Stringing setup areas are typically located at two-mile intervals. These sites are located within the right-of-way, when possible, or within temporary construction easements. Conductor stringing often use helicopters to start the process by pulling a “sock-line” or high strength rope through pulleys attached to the insulators on each structure that is attached to the conductors which are pulled into place and sagged to meet design requirements that are compliant with good utility practice and minimum code clearances. This process requires brief access to each structure to secure the conductor wire to the insulator hardware and to fasten the shield wire on each structure. After conductor installation is complete, conductor marking devices will be installed if required. These marking devices may include bird flight diverters or air navigational markers. The Applicants will work with the appropriate agencies to identify locations where marking devices need to be installed.

Where the transmission line crosses streets, roads, highways, or other energized conductors or obstructions, temporary guard or clearance poles may be installed before conductor stringing. The temporary guard or clearance poles ensure that conductors will not obstruct traffic or contact existing energized conductors or other cables during stringing operations and also protects the conductors from damage if they were to fall during stringing.

Some soil conditions and environmentally sensitive areas will require special construction techniques. The most effective way to minimize impacts to these areas

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will be to avoid placing poles in the sensitive areas by spanning over wetlands, streams, and rivers. When it is not feasible to avoid traversing sensitive areas, one or more of the following options will be used to minimize impacts, in consultation with the appropriate agencies:

- When possible, construction will be scheduled during frozen ground conditions;
- When construction during winter is not possible and conditions require, construction mats will be used where wetlands and other sensitive areas would be impacted;
- Equipment fueling and other maintenance will occur away from environmentally sensitive and wet areas. These construction practices help ensure that fuel and lubricants do not enter waterways or impact environmentally sensitive areas; and
- Various best management practices (BMPs) will be identified in the Project's Stormwater Pollution Prevention Plan (SWPPP), including the use of silt fences, bio logs, erosion control blankets with embedded seeds, and other sound water and soil conservation practices to protect topsoil and adjacent water resources and to minimize soil erosion.

These techniques are also used to reduce impacts to private property including driveways, yards, and drain tile.

### **5.3 Restoration and Clean-up Procedures**

Crews will attempt to minimize ground disturbance whenever feasible, but areas will be disturbed during the normal course of work. Once construction is completed in an area, disturbed areas will be restored to their original condition to the maximum extent feasible. Temporary restoration before the completion of construction in some areas along the right-of-way may be required per National Pollutant Discharge Elimination System (NPDES) and Minnesota Pollution Control Agency (MPCA) construction permit requirements.

After construction activities have been completed, a utility representative will contact the property owner to discuss any damage that has occurred as a result of the Project.

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This contact may not occur until after the Applicants have started restoration activities. If fences, drain tile, or other property have been damaged, the Applicants will repair damages or reimburse the landowner to repair the damages.

Farmers will be compensated for crop losses caused by Project construction. The compensation will be based upon the area(s) affected, the typical yield for the crops lost, and the market rates for those crops. Following an approved Agricultural Impact Mitigation Plan (AIMP) (Appendix F), a utility representative will measure the area(s) in which planted crops were damaged or destroyed, or not planted at the Applicants' request. The lost yields will be determined in coordination with the property owner. The market rate will also be determined in coordination with the property owner and local elevator and/or other evidence to determine the appropriate rate of payment. The Applicants will also make a payment for future year crop loss due to soil compaction. In addition, property owners will be compensated for their expense to deep rip compacted areas. If an individual does not have access to deep ripping equipment, the Applicants will provide this service or access to such equipment.

Ground-level vegetation disturbed or removed from the right-of-way during construction of the Project will naturally reestablish to pre-construction conditions. Additionally, vegetation that is consistent with substation site operation outside the fenced area will be allowed to reestablish naturally at substation sites. Areas where significant soil compaction or other disturbance from construction activities occur will require additional assistance in reestablishing the vegetation stratum and controlling soil erosion. In these areas, the Applicants will use seed that is noxious weed free to reestablish vegetation.

Another aspect of restoration relates to the roads used to access staging areas or construction sites. After construction activities are complete, the Applicants will ensure that township, city, and county roads used for purposes of access during construction will be restored to their prior condition. The Applicants will meet with township road supervisors, city road personnel, or county highway departments to address any issues that arise during construction with roadways to ensure the roads are adequately restored, if necessary, after construction is complete.



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## 5.4 Maintenance Procedures

Transmission lines and substations are designed to operate for decades and require only moderate maintenance, particularly in the first few years of operation. The Applicants will be responsible for the operation and maintenance of this Project. The Applicants perform aerial annual inspections of the existing infrastructure and inspects the line from the ground every six years. Typically, one to two workers are required to perform aerial inspections and three workers are required to perform the ground inspections. Any defects identified during these inspections will be assessed and corrected. The Applicants will also perform necessary vegetation management for the line. Vegetation maintenance generally occurs every four years.

Line inspections are the principal operating and maintenance cost for transmission facilities. The aerial inspections cost approximately \$75-\$100 per mile and the ground inspections cost approximately \$200-\$400 per mile. Actual line specific maintenance costs depend on the setting, the amount of vegetation management necessary, storm damage occurrences, structure types, materials used, and the age of the line.

The estimated service life of the proposed transmission line for accounting purposes varies among utilities. The Applicants use an approximately 60-year service life for its transmission assets. However, practically speaking, HVTLs are seldom completely retired.

Substations require a certain amount of maintenance to keep them functioning in accordance with accepted operating parameters and the NESC requirements. Transformers, circuit breakers, batteries, protective relays, and other equipment need to be serviced periodically in accordance with the manufacturer's recommendations. The substation site must be kept free of vegetation and adequate drainage must be maintained.

Western Minnesota will be responsible for the operation and maintenance of the Alexandria Substation, Great River Energy will be responsible for the operation and maintenance of the Riverview Substation, and Xcel Energy will be responsible for the operation and maintenance of the new Big Oaks Substation.

## 5.5 Storm and Emergency Response and Restoration

Transmission infrastructure has very few mechanical elements and is built to withstand weather extremes that are normally encountered. With the exception of

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outages due to severe weather such as tornadoes and heavy ice storms, transmission lines rarely fail. Transmission lines are automatically taken out of service by the operation of protective relaying equipment when a fault is sensed on the line. Such interruptions are usually only momentary. Scheduled maintenance outages are also infrequent. As a result, the average annual availability of transmission infrastructure is very high, in excess of 99%.

However, unplanned outages of transmission facilities can happen for a variety of reasons. Unplanned outages can occur due to mechanical failures or severe weather like heavy ice, wind, and lightning. In the event an unplanned outage of any facility along the Project occurs, Applicants have the necessary infrastructure and crews in place in order to respond quickly and safely to return these facilities to service.

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## 6 Environmental Information

This section provides a general description of the environmental and human setting of the Applicants' Proposed Route. Topics discussed in the following subsections include environmental setting, existing land cover and land use, soils, human settlement, land-based economies, archaeological and historical resources, hydrologic features, vegetation and wildlife, and rare and unique natural resources that are known to occur or may potentially occur along the Proposed Route.

In addition to identifying existing resources, the potential effect(s) on those resources are discussed, and measures that can be used to avoid, minimize, or mitigate effects are included where possible. Where specific, quantified, impacts are discussed, the Applicants reports these for each of the Project Components discussed in Section 2.2 and named accordingly below. The associated facilities are accounted for within the Proposed Route requested in this Application.

- Existing Transmission Line Second Circuit
- Alexandria Substation Tap
- Riverview Substation Bypass
- Quarry Substation Bypass
- Big Oaks Substation
- Mississippi River Crossing Options

For purposes of evaluating potential impacts of the Proposed Route, the Applicants have developed what they currently believe to be the likely alignments that minimize the overall potential impacts based on the routing factors identified in Minn. Stat. § 216E.03, subdivision 7(b), and Minn. R. 7850.4100. These alignments are referred to as the “anticipated alignment(s)”. These anticipated alignments may require modifications after a Route Permit is issued due to limitations inherent in identifying an alignment absent detailed survey and engineering work, site review, and design. The anticipated alignments are detailed in Appendix C.

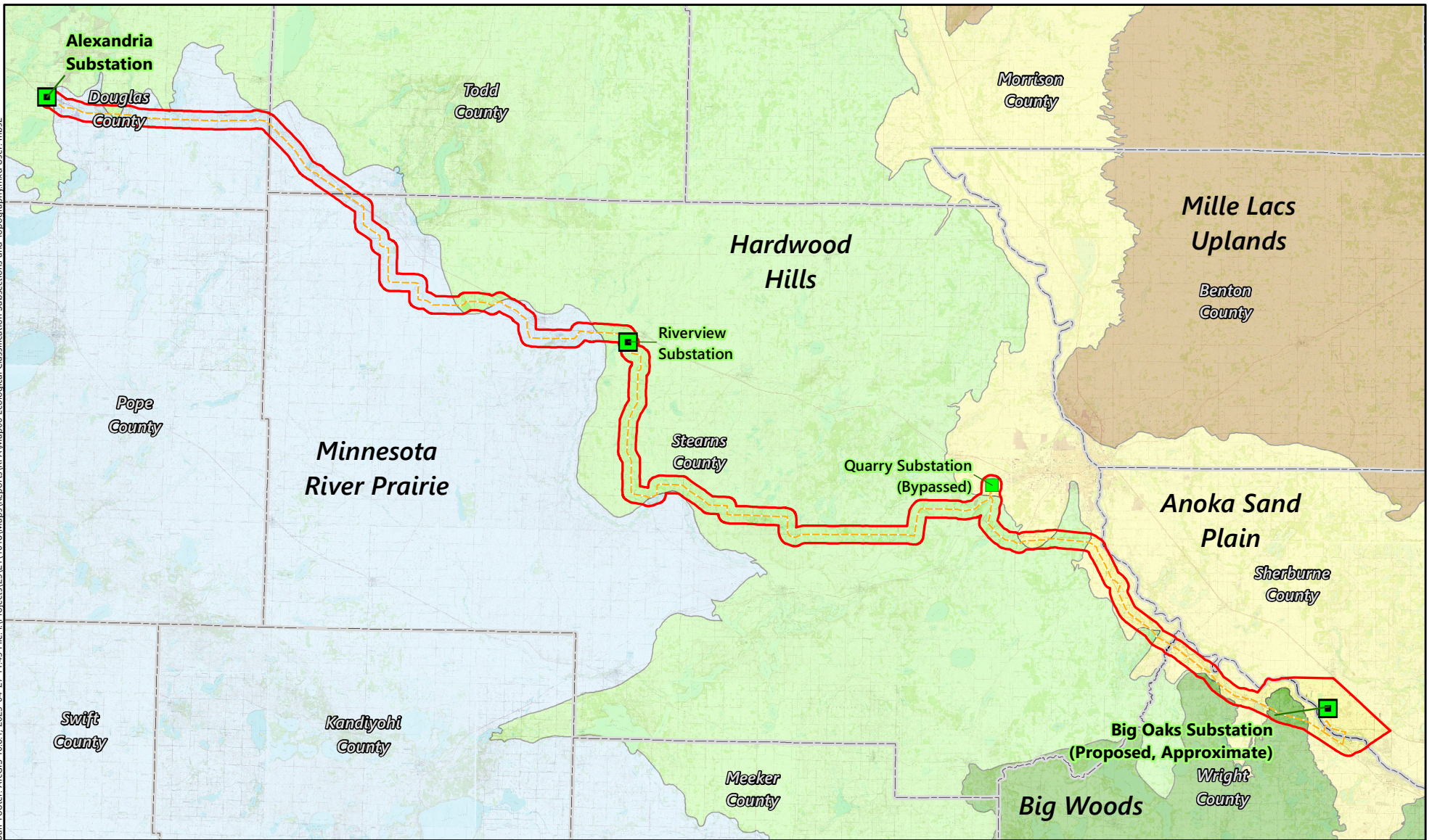
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## 6.1 Environmental Setting

The Minnesota Department of Natural Resources (MDNR) and the U.S. Fish and Wildlife Service (USFWS) have developed an Ecological Classification System (ECS) for ecological mapping and landscape classification in Minnesota that is used to identify, describe, and map progressively smaller areas of land with increasingly uniform ecological features (reference (2)). Through the ECS, the state of Minnesota is split into Ecological Provinces, Sections, and Subsections.

Under this classification system, the Proposed Route is mainly located in the Minnesota and NE Iowa Morainal Section of the Eastern Broadleaf Forest Province. A portion of the Proposed Route is also located in the North Central Glaciated Plains Section of the Prairie Parkland Province. These sections are further broken down into subsections. Those subsections crossed by the Proposed Route include the Hardwood Hills, Anoka Sand Plain, Big Woods, and Minnesota River Prairie (Map 6). General physiography and geomorphology for each subsection is outlined below.

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- |                                                                                    |                       |                                                                                     |                                      |
|------------------------------------------------------------------------------------|-----------------------|-------------------------------------------------------------------------------------|--------------------------------------|
|  | Project Study Area    |  | Ecological Classification Subsection |
|  | Anticipated Alignment |  | Anoka Sand Plain                     |
|  | Project Substation    |  | Big Woods                            |
|  | Bypassed Substation   |  | Hardwood Hills                       |
|  | County Boundary       |  | Mille Lacs Uplands                   |
|                                                                                    |                       |                                                                                     | Minnesota River Prairie              |



Miles



Map 6

**ECOLOGICAL CLASSIFICATION  
SUBSECTIONS AND TOPOGRAPHY**  
ALEXANDRIA TO BIG OAKS  
MISO LRTP-2 Route Permit Application

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### 6.1.1 Existing Transmission Line Second Circuit

The Project consists mainly of adding a second 345 kV transmission line circuit to existing 345 kV double-circuit capable structures. Within the Eastern Broadleaf Forest Province, the Proposed Route begins in the Hardwood Hills Subsection of the Minnesota and NE Iowa Morainal Section. The Proposed Route then travels eastward, crossing into the Minnesota River Prairie Subsection of the North Central Glaciated Plains Section, within the Prairie Parkland Province. The Proposed Route continues eastward, crossing back and forth between the Harwood Hills and Minnesota River Prairie Subsections several times. Eventually, the Proposed Route passes into the Anoka Sand Plain Subsection of the Minnesota and NE Iowa Morainal Section within the Eastern Broadleaf Forest Province. A small portion (approximately 2.5 miles) of the eastern end of the Proposed Route crosses the Big Woods Subsection of the Minnesota and NE Iowa Morainal Section within the Eastern Broadleaf Forest Province. The Proposed Route then terminates within the Anoka Sand Plain Subsection.

The Hardwood Hills subsection is characterized by steep slopes, high hills, and lakes formed in glacial end moraines and outwash plains (reference (2)). During the Wisconsin age glaciation, ice stagnation moraines, end moraines, ground moraines, and outwash plains were formed in this subsection. Kettle lakes are abundant within the moraines and outwash deposits and there are over 400 lakes greater than 160 acres in size within this subsection. Most of this subsection is covered in 100 to 500 feet of glacial drift over diverse bedrock. Loamy soils are dominant, with loamy sands and sandy loams on outwash plains to loams and clay loams on moraines.

The Minnesota River Prairie subsection is characterized by large till plains that are bisected by the broad valley of the Minnesota River (reference (2)). The Minnesota River was formed by Glacial River Warren, which drained Glacial Lake Agassiz. Topography is steepest along the Minnesota River and the Big Stone Moraine, which has steep kames and broad slopes, while topography outside of the river valley consists of level to gently rolling ground moraine. Glacial drift generally ranges between 100 and 400 feet throughout this subsection. Soils are predominantly well-to-moderately well-drained loams formed in gray calcareous till of the Des Moines lobe with some localized inclusions of clayey, sandy, and gravelly soils. Wetlands were common within this subsection prior to Euro-American settlement, and most have been drained to establish usable cropland.

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The Anoka Sand Plain subsection is characterized by flat, sandy lake plains and terraces along the Mississippi River, which forms the western boundary of the subsection, separating it from the Hardwood Hills and Big Woods subsections (reference (2)). Landforms in the Anoka Sand Plain consist of small dunes, kettle lakes, and tunnel valleys that create a level to gently rolling topography. Sandy terraces are found along the Mississippi River and its tributaries throughout the subsection. Bedrock outcrops can be found near St. Cloud and, in general, surface glacial deposits are less than 200 feet thick. Soils in the subsection are generally sandy, droughty upland soils with some organic soils in ice block depressions and tunnel valleys and poorly drained prairie soils along the Mississippi River.

The Big Woods subsection is characterized by a large block of deciduous forest present at the time of Euro-American settlement (reference (2)). Topography is gently to moderately rolling, and the primary landform is a loamy mantled moraine formed by the Des Moines lobe of the late Wisconsin glaciation. Circular, level-topped hills with smooth side slopes dominate the landscape, with broad level areas between the hills that contain closed depressions with lakes and peat bogs. Soils are predominantly loamy and range from loam to clay loam formed by the calcareous glacial till of the Des Moines lobe, with depth to bedrock ranging between 100 and 400 feet.

#### **6.1.1.1 Alexandria Substation Tap**

The Alexandria Substation Tap is within the Hardwood Hills Subsection of the Minnesota and NE Iowa Morainal Section, in the Eastern Broadleaf Forest Province. As discussed above, the Hardwood Hills Subsection is characterized by steep slopes, high hills, and lakes formed in glacial end moraines and outwash plains (reference (2)). Loamy soils are dominant, with loamy sands and sandy loams on outwash plains to loams and clay loams on moraines.

#### **6.1.1.2 Riverview Substation Bypass**

The Riverview Substation Bypass is within the Hardwood Hills Subsection of the Minnesota and NE Iowa Morainal Section, in the Eastern Broadleaf Forest Province. As the Riverview Substation Bypass is in the same ecological province, section, and subsection as the Alexandria Substation Tap, the description of the environmental setting provided in the Alexandria Substation Tap heading also applies here.

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### **6.1.1.3 Quarry Substation Bypass**

The Quarry Substation Bypass is within the Anoka Sand Plain subsection of the Minnesota and NE Iowa Morainal section, in the Eastern Broadleaf Forest Province. As discussed above, the Anoka Sand Plain subsection is characterized by flat, sandy lake plains and terraces along the Mississippi River. Soils in the subsection are generally sandy, droughty upland soils with some organic soils in ice block depressions and tunnel valleys and poorly drained prairie soils along the Mississippi River.

### **6.1.1.4 Big Oaks Substation**

The Big Oaks Substation is within the Anoka Sand Plain subsection of the Minnesota and NE Iowa Morainal section, in the Eastern Broadleaf Forest Province. As the Big Oaks Substation is also in the same ecological province, section, and subsection as the Quarry Substation Bypass, the description of the environmental setting provided in the Quarry Substation Bypass heading also applies here.

### **6.1.1.5 Mississippi River Crossing Options**

The Mississippi River Crossing Options are located within the Anoka Sand Plain subsection of the Minnesota and NE Iowa Morainal section, in the Eastern Broadleaf Forest Province. As the Mississippi River Crossing Options are also in the same ecological province, section, and subsection as the Quarry Substation Bypass, the description of the environmental setting provided in the Quarry Substation Bypass heading also applies here.

## **6.2 Land Cover and Land Use**

According to the 2019 National Landcover Database – Land Use-Land Cover dataset, cultivated cropland is the dominant land cover making up 35 percent of the Proposed Route (Table 6.2-1, Map 7), indicating that the property within the Proposed Route is primarily used for agricultural purposes. Deciduous forest and hay/pastureland are the second and third most dominant land cover categories accounting for 19 percent and 14 percent of the Proposed Route. The remaining 13 land cover classifications collectively make up 32 percent of the Proposed Route.

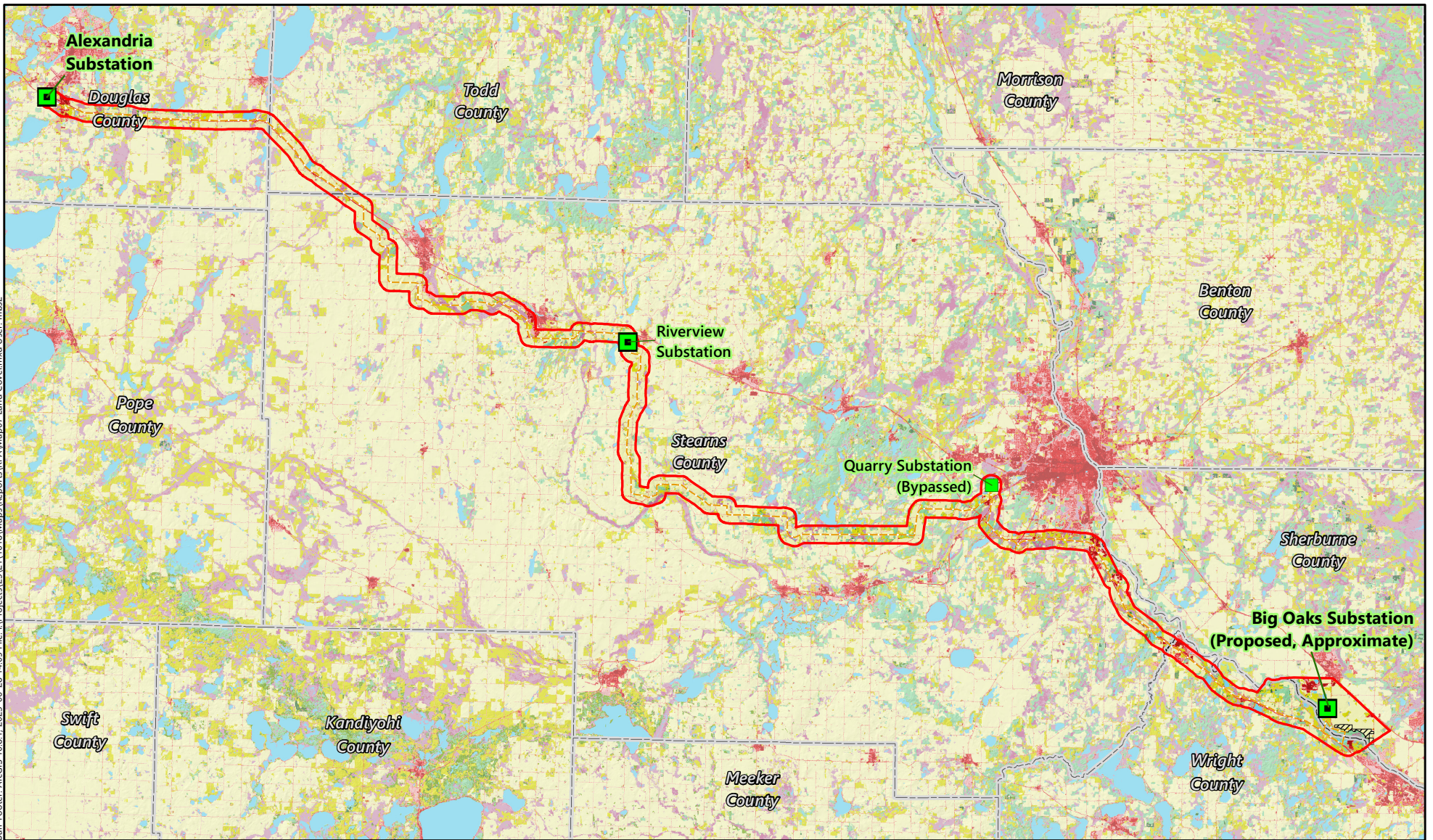


**Table 6.2-1 Land Cover in the Proposed Route**

Land Use Category	Proposed Route
	Acres (Percent) <sup>[1]</sup>
Barren Land	3.7 (<1%)
Cultivated Crops	1,348.9 (35.3%)
Deciduous Forest	739.8 (19.3%)
Developed, High Intensity	83.1 (2.2%)
Developed, Low Intensity	222.7 (5.8%)
Developed, Medium Intensity	127.0 (3.3%)
Developed, Open Space	98.4 (2.6%)
Emergent Herbaceous Wetlands	211.4 (5.5%)
Evergreen Forest	7.3 (<1%)
Hay/Pasture	549.2 (14.4%)
Herbaceous	66.01 (1.7%)
Mixed Forest	4.5 (<1%)
Open Water	246.4 (6.4%)
Shrub/Scrub	13.9 (<1%)
Woody Wetlands	102.8 (2.7%)

[1] Values have been rounded and may not equal 100 percent.

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Land Cover (NLCD, 2019)

- Open Water
- Developed, Open Space
- Developed, Low Intensity
- Developed, Med. Intensity
- Developed, High Intensity
- Barren Land
- Deciduous Forest

- Evergreen Forest
- Mixed Forest
- Shrub/Scrub
- Grassland/Herbaceous
- Pasture/Hay
- Cultivated Crops
- Woody Wetlands
- Emergent Herbaceous Wetlands

- Project Study Area
- Anticipated Alignment
- Project Substation
- Bypassed Substation
- University of Minnesota Sand Plain Research Farm
- County Boundary



Miles



Data Source:  
Multi-Resolution Land Characteristics  
(MRLC) Consortium, University of Minnesota

Map 7

**LAND COVER**  
ALEXANDRIA TO BIG OAKS  
MISO LRTP-2 Route Permit Application

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## **6.2.1 Impacts and Mitigation**

The Project is not anticipated to significantly alter the existing land use or land cover within the Proposed Route. The Proposed Route follows existing transmission line right-of-way for approximately 95 to 99 percent of the Project length depending on the Mississippi River Crossing Option selected. The majority of the Project will also not require any new transmission line structures as the new 345 kV transmission line circuit will be double-circuited on existing double-circuit capable structures that currently hold only one 345 kV circuit. Impacts associated with each Project Component are described below.

### **6.2.1.1 Existing Transmission Line Second Circuit**

Because the Project consists largely of stringing a second circuit onto existing infrastructure, there will be no changes in the land cover or land use along the Proposed Route.

### **6.2.1.2 Alexandria Substation Tap**

The existing substation is surrounded by cultivated cropland. A small, forested area is east of the substation, and a lake is directly south of the substation (Map 2). Additional impacts to land use/land cover may occur in order to accommodate expansion of the Alexandria Substation.

The new transmission line connection into the Alexandria Substation will result in the installation or relocation of structures within the adjacent agricultural field and will require some tree removal within the adjacent wooded area. It is estimated that the new structure would result in a loss of approximately 115 square feet of cultivated cropland. These impacts are anticipated to be minimal and will result in negligible loss of cultivated cropland and wooded habitat.

### **6.2.1.3 Riverview Substation Bypass**

The Riverview Substation is surrounded by cultivated cropland. The existing circuit will be reconfigured to bypass the Riverview Substation and the new circuit will connect to the Riverview Substation (Map 3). The substation bypass will result in temporary disturbance of cultivated cropland from construction of the new transmission line, including the addition of five new structures resulting in the loss of approximately 575 square feet of cultivated cropland. In addition, the Riverview Substation will be expanded approximately 0.5 acres on Great River Energy-owned

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property to accommodate new substation equipment. Additional impacts to land use/land cover may occur in order to accommodate this expansion.

#### **6.2.1.4 Quarry Substation Bypass**

The Quarry Substation bypass area consists of wooded shelterbelts surrounded by cultivated cropland. The new transmission line would be routed around the eastern edge of the Quarry Substation (Map 4). This substation bypass would require the removal of approximately 1.2 acres of woody vegetation within the 150-foot right-of-way. In addition, the Quarry Substation will be expanded approximately 0.3 acres on Xcel Energy-owned property to accommodate new substation equipment. Additional impacts to land use/land cover may occur in order to accommodate this expansion. Once construction is complete the Applicants will be responsible for maintenance of the permanent right-of-way and would conduct regular tree trimming to remove large woody debris from the right-of-way, resulting in a permanent conversion of this land use from idled woodland to a utility corridor.

#### **6.2.1.5 Big Oaks Substation**

The proposed Big Oaks Substation would be located within land owned primarily by Xcel Energy on what is now used as cultivated cropland (Map 5). Construction of the Big Oaks Substation would result in the conversion of 10 acres of cultivated cropland owned primarily by Xcel Energy into industrial land use.

#### **6.2.1.6 Mississippi River Crossing Options**

The Western Crossing Option spans approximately 0.7 miles of land adjacent to the Mississippi River and would disturb grassland with a mix of trees and shrubs. Similarly, the Eastern Crossing Option would include construction of approximately 2.1 miles of new transmission line and would disturb grassland and floodplain forest adjacent to the Mississippi River (Map 5).

Once construction is complete, the permanent rights-of-way of the selected Route option would be maintained as a utility right-of-way corridor, resulting in a permanent conversion of land use.

## 6.3 Human Settlement

Transmission lines have the potential to impact human settlements during their construction and operation. Resources related to human settlement and their potential impacts are discussed in more detail below.

### 6.3.1 Proximity to Residences

#### 6.3.1.1 Existing Transmission Line Second Circuit

NESC and Applicants' standards require certain clearances between transmission line facilities and buildings for safe operation of a transmission line. In areas where the Project will require new right-of-way, the Applicants will acquire additional right-of-way that is sufficient to maintain these clearances. Displacement can occur when an existing structure is within the right-of-way for a new transmission facility.

Barr Engineering Co. (Barr) completed a desktop review to identify any residences located within 500 feet of the anticipated alignment. The review identified 154 residences within 500 feet of the anticipated alignment (Table 6.3-1). There are no residences located within 500 feet of the new segments of right-of-way for the proposed 345 kV transmission line. Map 8 identifies the locations of known residences within various distances from the maximum corridor sharing alignment within the Proposed Route.

There is one residence located approximately 75 feet from the existing 345 kV transmission line in Saint Cloud, Minnesota. This residence would not be displaced from stringing the additional circuit at this location.

**Table 6.3-1 Proximity of Residences to the Anticipated Alignment**

Proximity to Anticipated Alignment (ft)	Number of Residences from Anticipated Alignment					
	Existing Transmission line	Alexandria Substation Tap	Riverview Substation Bypass	Quarry Substation Bypass	Big Oaks Substation	Mississippi River Crossing
<75	1	0	0	0	0	0
75-300	76	0	0	0	0	0
300-500	77	0	0	0	0	0
<b>Total Residences</b>	154	0	0	0	0	0

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#### **6.3.1.1.1 Alexandria Substation Tap**

There are no residences within 500 feet of the Alexandria Substation Tap (Table 6.3-1). The nearest residence within the Proposed Route is 0.9 miles southeast of the Alexandria Substation (Map 8).

#### **6.3.1.1.2 Riverview Substation Bypass**

There are no residences within 500 feet of the Riverview Substation Bypass (Table 6.3-1). The nearest residence within the Proposed Route is 2 miles south of the Riverview Substation Bypass (Map 8).

#### **6.3.1.1.3 Quarry Substation Bypass**

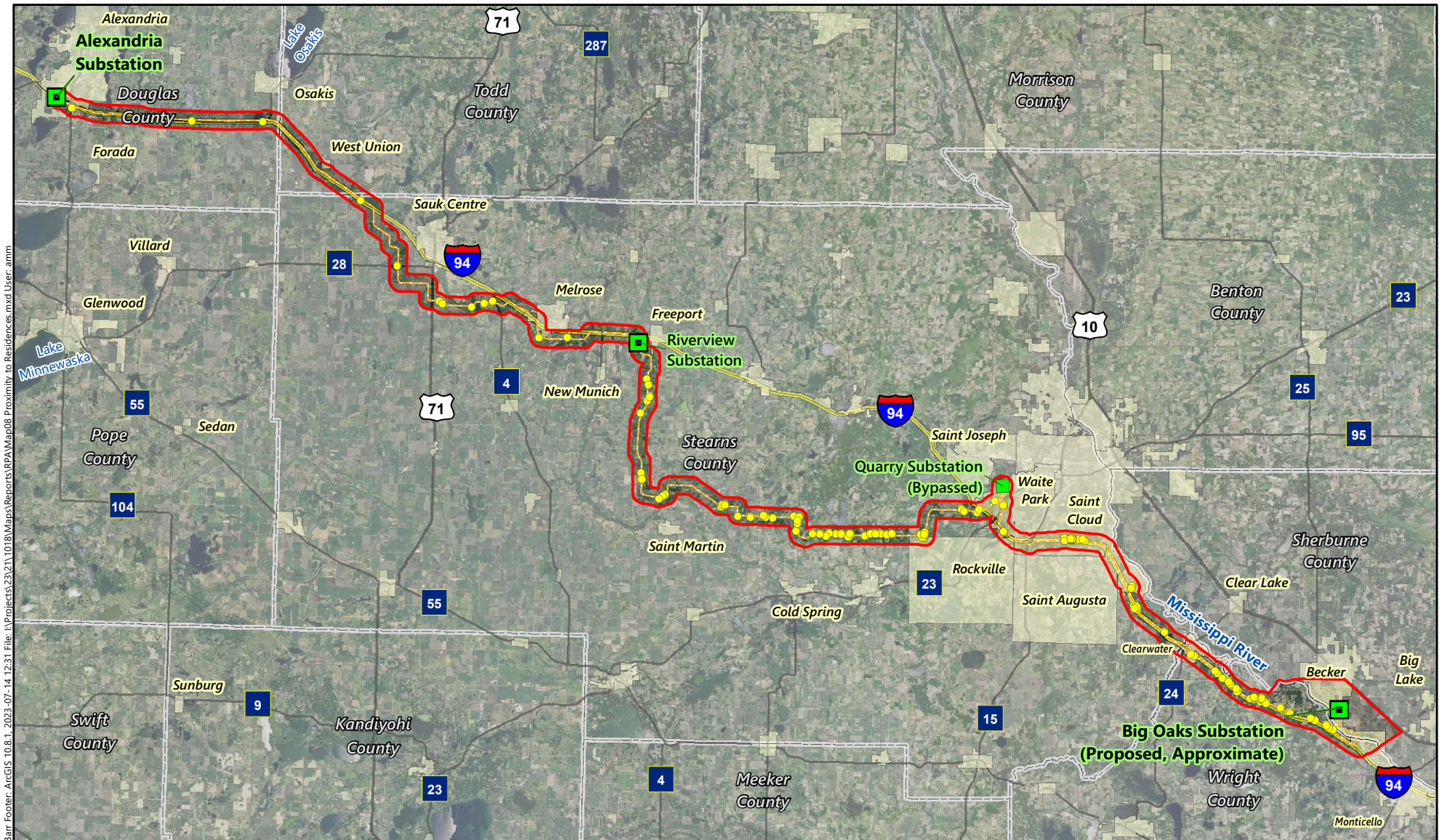
There are no residences within 500 feet of the Quarry Substation Bypass (Table 6.3-1). The nearest residence within the Proposed Route is 0.9 miles southwest of the Quarry Substation Bypass (Map 8).

#### **6.3.1.1.4 Big Oaks Substation**

The Big Oaks Substation will be located on land owned primarily by Xcel Energy. There are no residences within 500 feet of the substation and siting the final location of the substation will not result in any displacement of residences (Table 6.3-1, Map 8).

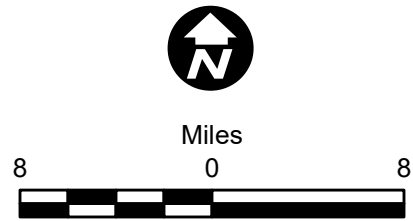
#### **6.3.1.1.5 Mississippi River Crossing Options**

There are no residences within 500 feet of the Mississippi River Crossing Options (Table 6.3-1). The nearest residence to the river crossing options is 800 feet west of the Western Crossing Option (Map 8).



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- Residence within 500 Feet of Application Alignment
- Project Study Area
- Anticipated Alignment
- Project Substation
- Bypassed Substation
- Interstate Highway
- US Highway
- State Highway
- County State-Aid Highway
- + Municipal Boundary
- County Boundary
- State Boundary



**Map 8**

**PROXIMITY TO RESIDENCES**  
 ALEXANDRIA TO BIG OAKS  
 MISO LRTP-2 Route Permit Application

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### **6.3.1.2 Impacts and Mitigation**

Most of the Project transmission line will be double-circuited along existing infrastructure and will not affect residences within the surrounding area. The new segments of the 345 kV transmission line will be designed so that all existing residences will be located outside of the required right-of-way, to the extent feasible. The Project is not anticipated to displace any residences.

### **6.3.2 Public Health and Safety**

Public health and safety will be a priority during the construction, operation, and maintenance of the Project. The Project will be designed according to local, state, and NESC standards regarding ground clearance, crossing utilities clearance, building clearance, strength of materials and right-of-way widths. Construction crews and/or contract crews will comply with local, state, and NESC standards regarding facility installation and standard construction practices. Established Applicants' and industry safety procedures will be followed during and after installation of the transmission line, including clear signage during all construction activities.

The proposed transmission line will be equipped with protective devices (circuit breakers and relays located in substations where transmission lines terminate) to safeguard the public in the event of an accident, or if the structure or conductor falls to the ground. The protective equipment will de-energize the transmission line should such an event occur. In addition, the substation facilities will be properly fenced and accessible only by authorized personnel.

#### **6.3.2.1 Electric and Magnetic Fields and Stray Voltage**

Electric and magnetic fields (EMF)s are invisible areas of energy associated with use of electrical power. For the lower frequencies associated with power lines (referred to as ELF), EMF should be considered separately – electric fields and magnetic fields, measured in kV/m and milligauss (mG), respectively. Electric fields are dependent on the voltage of a transmission line and magnetic fields are dependent on the current carried by a transmission line. The strength of the electric field is proportional to the voltage of the line, and the intensity of the magnetic field is proportional to the current flow through the conductors. Transmission lines operate at a power frequency of 60 hertz (cycles per second).



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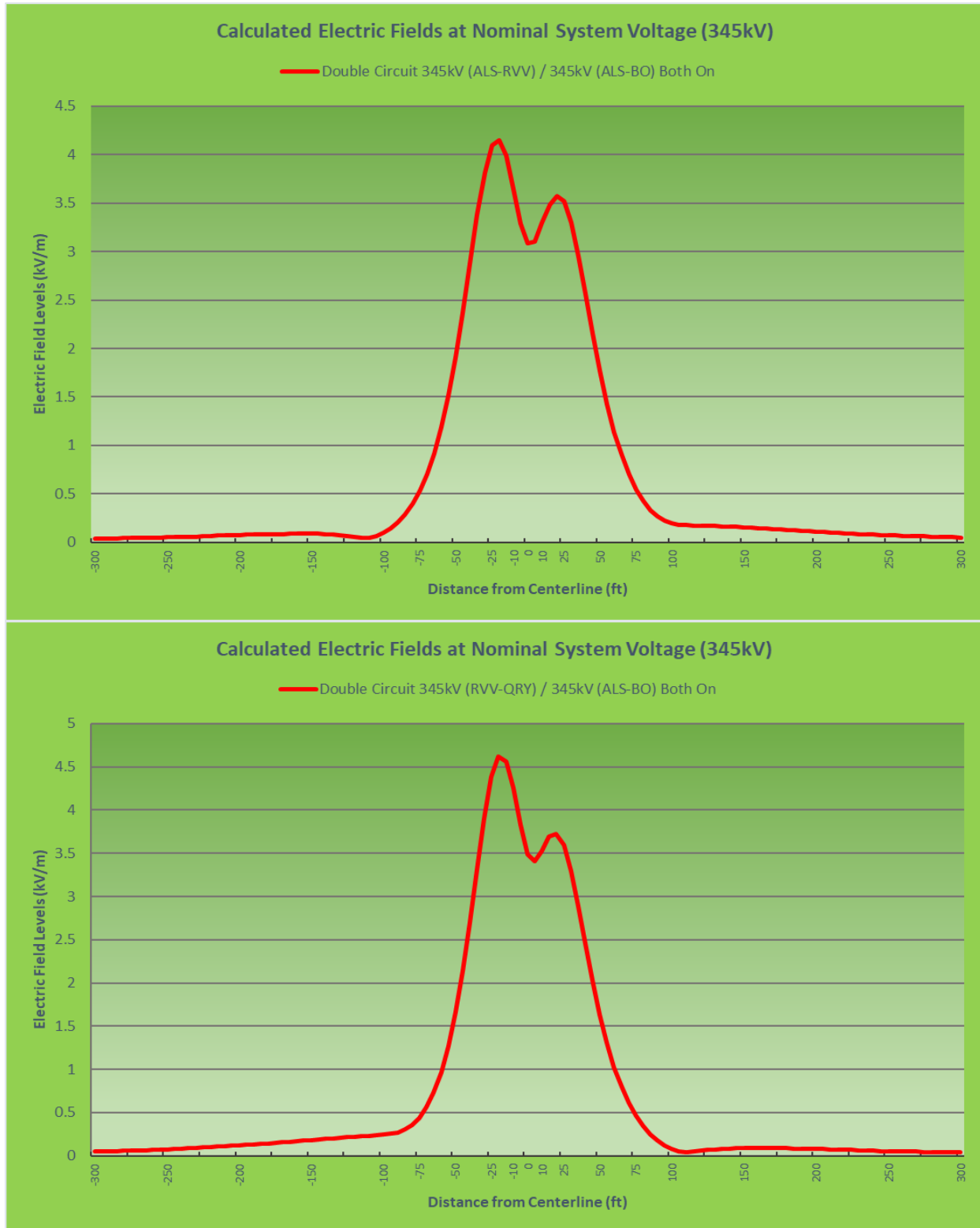
### 6.3.2.2 Electric Fields

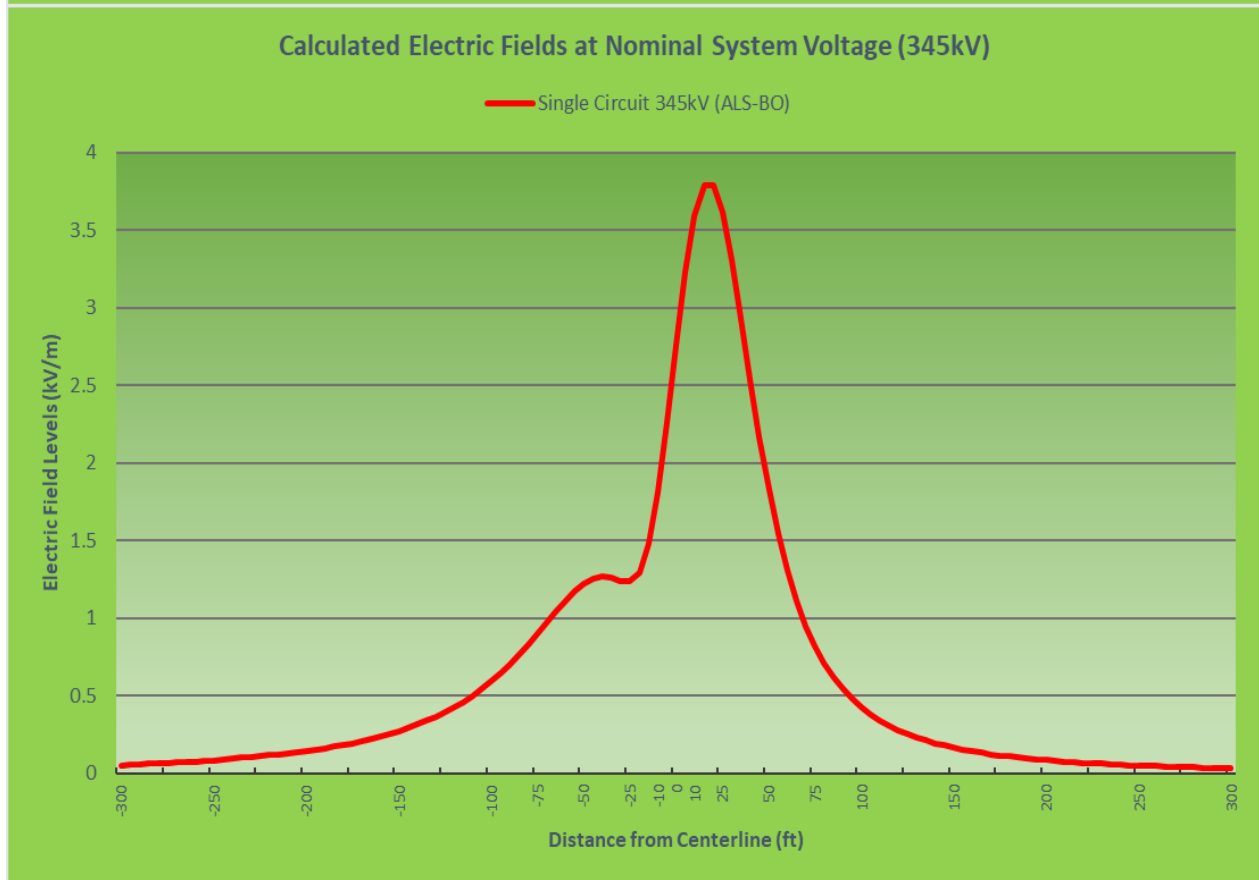
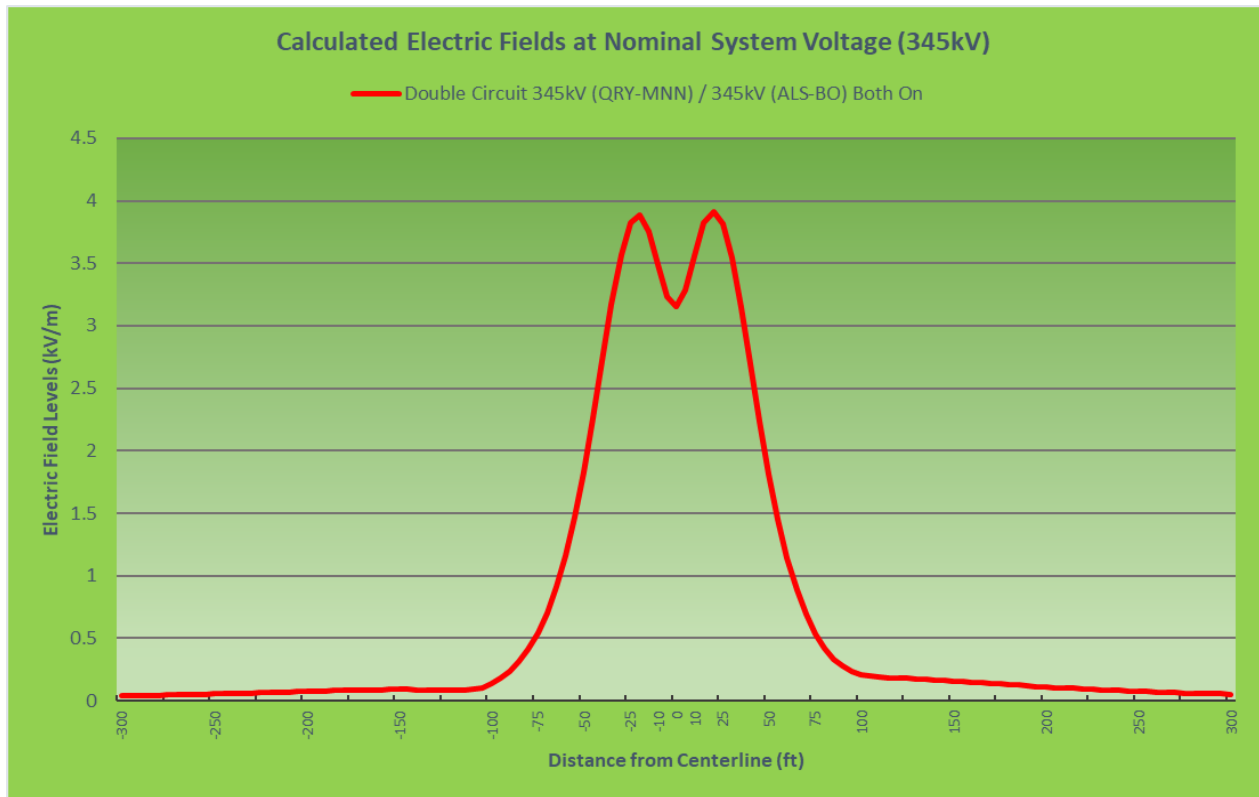
There is no federal standard for transmission line electric fields. The Commission, however, has imposed a maximum electric field limit of 8 kV/m measured at one meter above the ground (reference (3)). The standard was designed to prevent serious hazards from shocks when touching large objects parked under alternating current transmission lines of 500 kV or greater. Figure 6.3-1 provides the electric fields at maximum conductor voltage for the proposed 345 kV transmission line. Maximum conductor voltage is defined as the nominal voltage plus five percent. The maximum electric field, measured at one meter (3.28 feet) above ground, associated with the Project is calculated to be 4.62 kV/m. As shown in Figure 6.3-1, the strength of electric fields diminishes rapidly as the distance from the conductor increases. The electric field values of the 345 kV/345 kV double-circuit monopole design option at the edge of the transmission line right-of-way and sample points beyond are shown in Table 6.3-2.

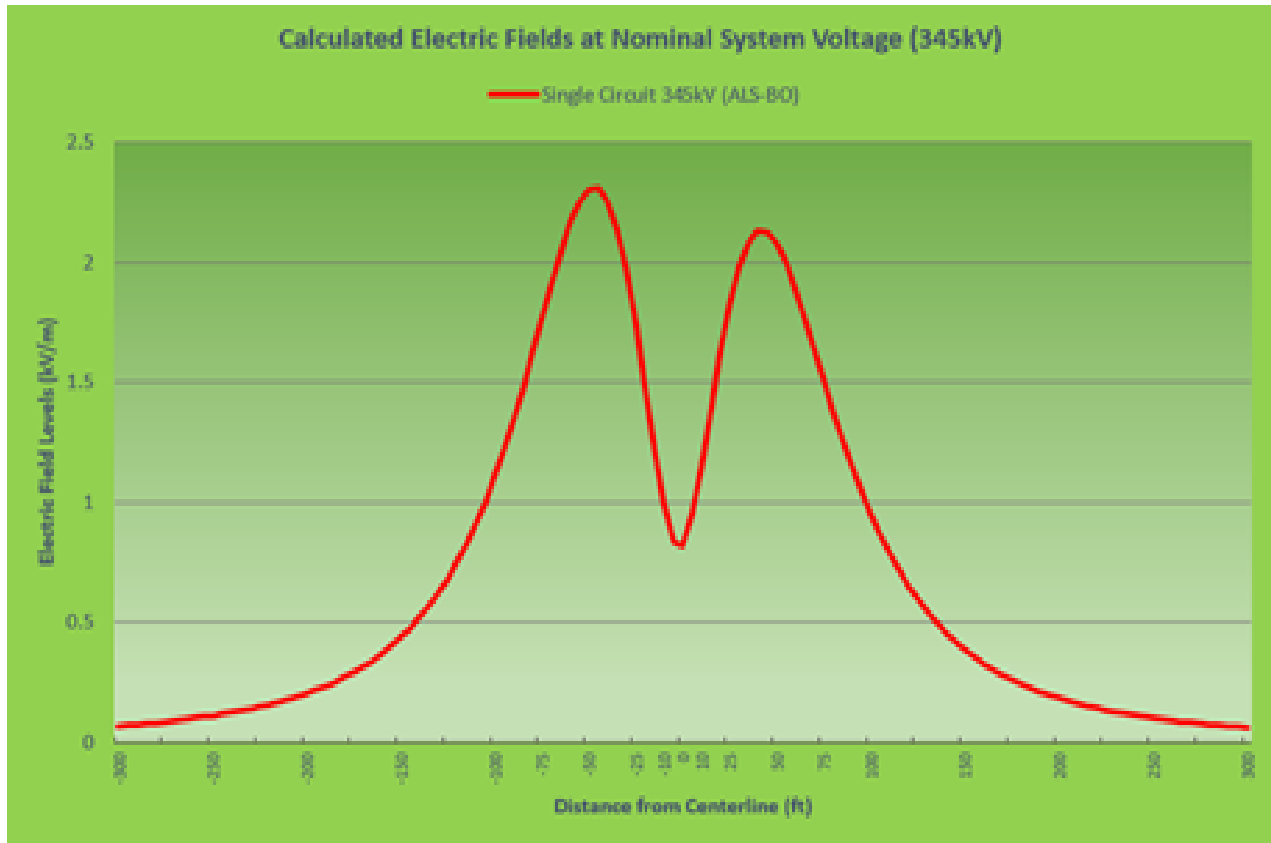
**Table 6.3-2 Electric Field Calculations Summary (kV/m)**

Structure Type	Circuits Present	Maximum Voltage	Distance to Proposed Alignment (feet)												
			-300	-200	-100	-75	-50	-25	0	25	50	75	100	200	300
345 kV/345 kV Double-Circuit Monopole	Alexandria (ALS) – Riverview (RVV)	362 kV	0.04	0.08	0.10	0.53	1.91	4.10	3.08	3.52	1.77	0.54	0.20	0.11	0.05
	Alexandria (ALS) – Big Oaks														
345 kV/345 kV Double-Circuit Monopole	Riverview (RVV) – Quarry (QRY)	362 kV	0.05	0.12	0.24	0.44	1.66	4.39	3.49	3.59	1.64	0.46	0.08	0.08	0.04
	Alexandria (ALS) – Big Oaks														
345 kV/345 kV Double-Circuit Monopole	Quarry (QRY) – Monticello (MNN)	362 kV	0.04	0.07	0.14	0.54	1.83	3.82	3.15	3.82	1.82	0.54	0.21	0.11	0.05
	Alexandria (ALS) – Big Oaks														
345 kV Single-Circuit Monopole	Alexandria (ALS) – Big Oaks	362 kV	0.05	0.14	0.59	0.90	1.22	1.23	2.76	3.61	1.83	0.82	0.43	0.08	0.03
345 kV Single-Circuit H-Frame River Crossing	Alexandria (ALS) – Big Oaks	362 kV	0.07	0.20	1.11	1.76	2.30	1.74	0.82	1.82	2.08	1.51	0.95	0.18	0.06

**Figure 6.3-1 Calculated Electric Fields (kV/m) for Proposed 345 Kilovolt Transmission Line Designs**







### 6.3.2.3 Magnetic Fields

The projected magnetic fields for different structure and conductor configurations for the Project are provided in Figure 6.3-2 and Table 6.3-3. Because magnetic fields are dependent on the current flowing on the line, magnetic fields were calculated for two different estimated typical system conditions during the Project’s first year in service (2026). These two scenarios are: (1) System Peak Energy Demand and (2) System Average Energy Demand. The “System Peak Energy Demand” current flow (estimated loading of 580 MVA) represents the current flow on the line during the peak hour of system-wide energy demand. The “System Average Energy Demand” current flow (estimated loading of 185 MVA) represents the current flow on the line during a non-peak time of the year.

The magnetic field values for the two scenarios were calculated at a point where the conductor is closest to the ground. The magnetic field data shows that magnetic field levels decrease rapidly as the distance from the centerline increases (proportional to the inverse square of the distance from source). In addition, since the magnetic field

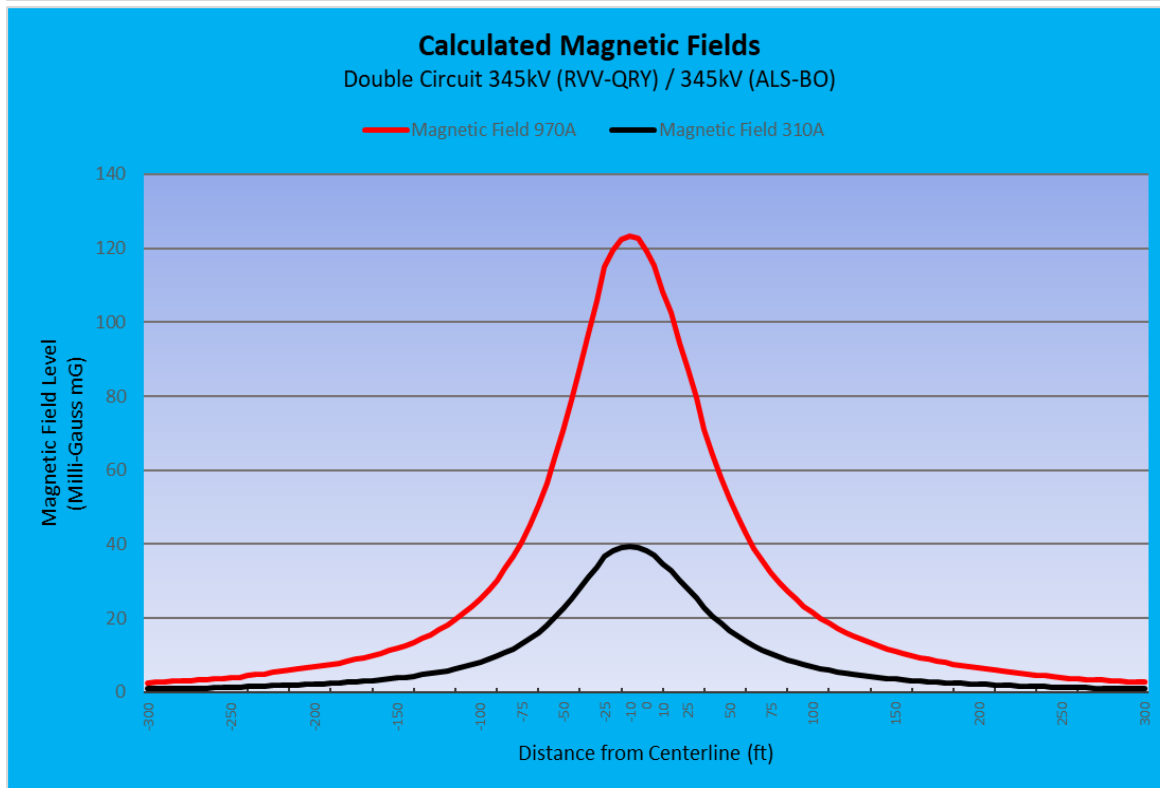
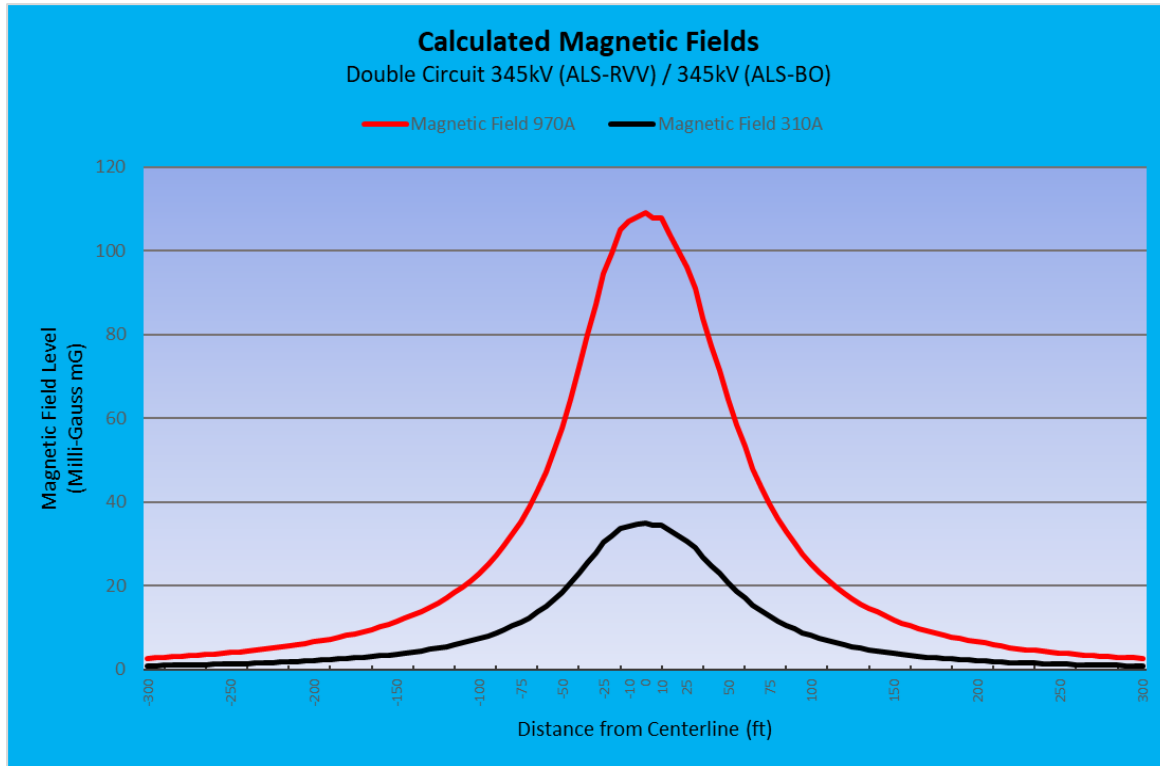
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produced by the transmission lines is dependent on the current flow, the actual magnetic fields when the Project is placed in service will vary as the current flow on the line changes throughout the day. Magnetic field calculations for the Project substations are not provided here because the specific physical design of a substation is required to calculate representative magnetic fields, and that level of design is not yet available for the Project substations. Magnetic fields associated with the Project's substations are anticipated to be similar to other existing 345 kV substations in Minnesota.

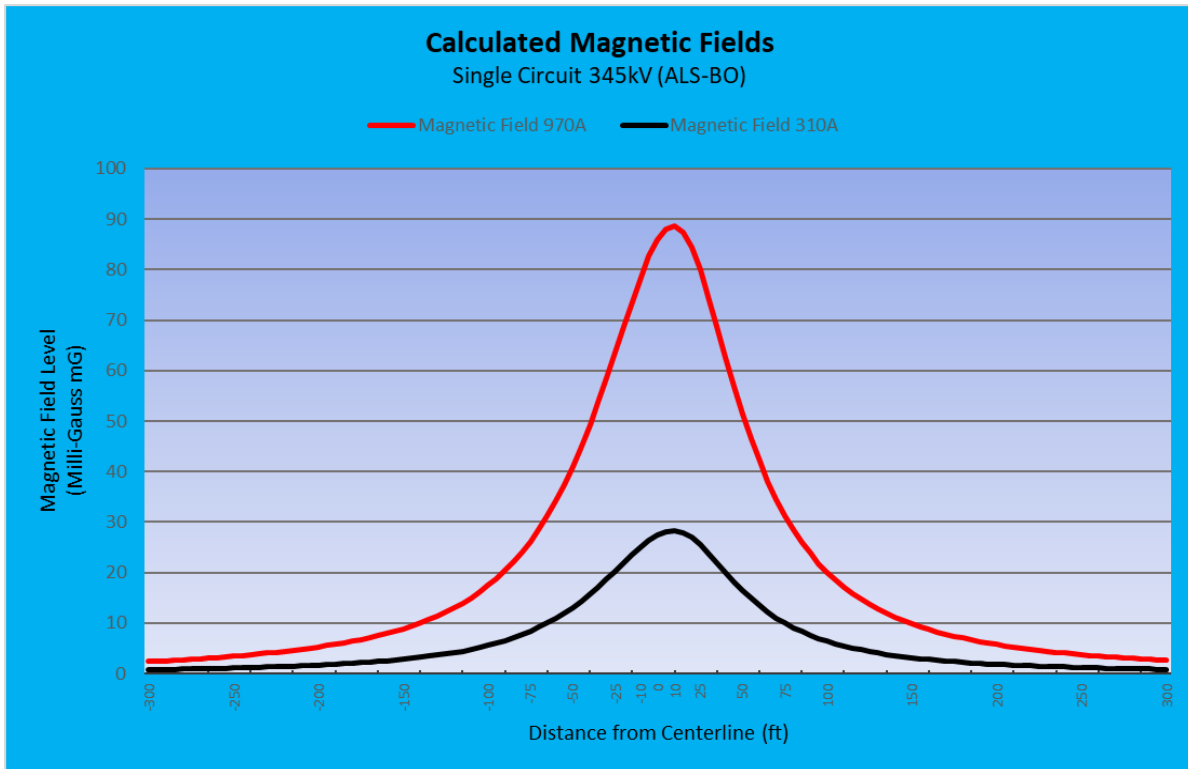
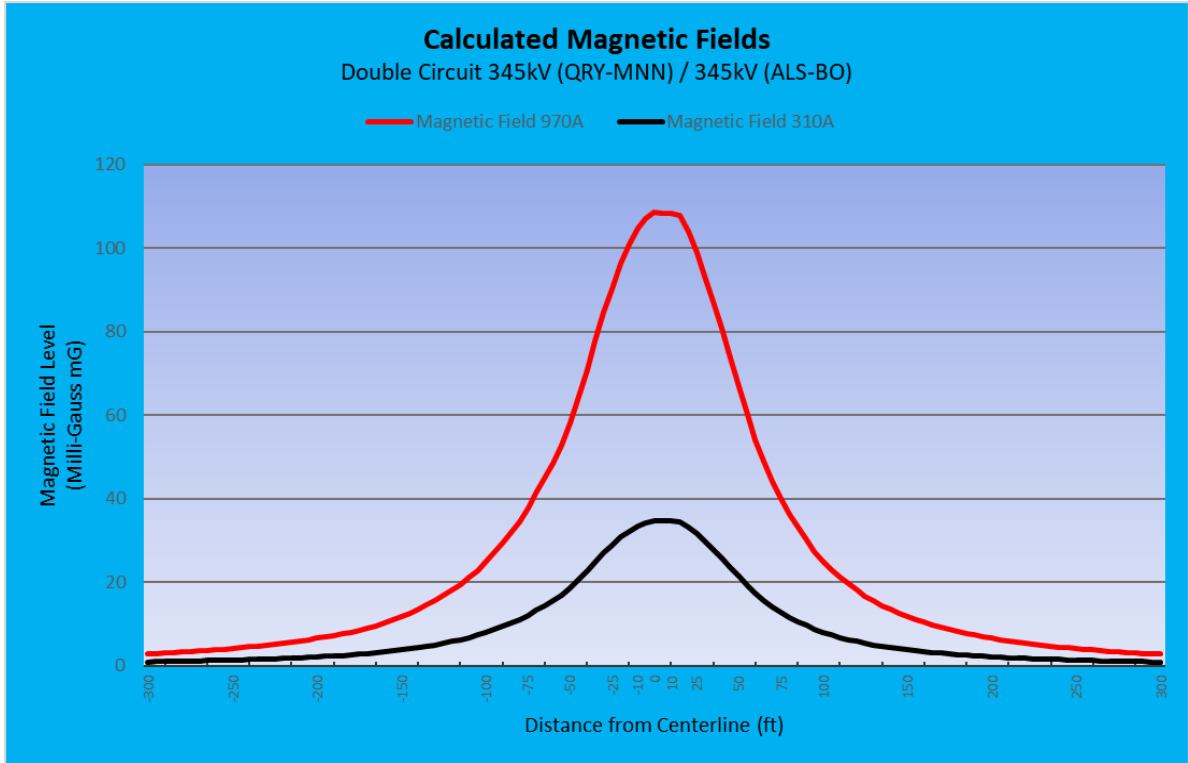
**Table 6.3-3 Magnetic Field Calculation Summary (mG)**

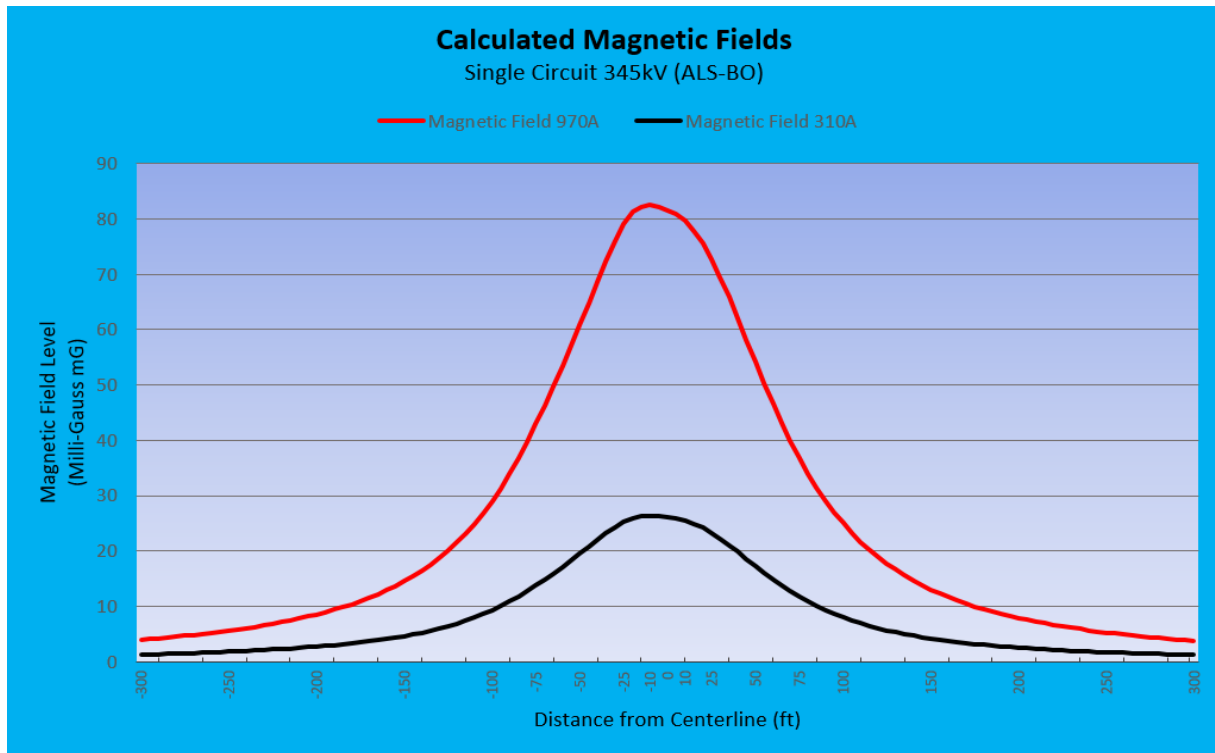
Structure Type	Circuits Present	System Condition	Current (Amps)	Distance to Proposed Alignment (feet)												
				-300	-200	-100	-75	-50	-25	0	25	50	75	100	200	300
345 kV/345 kV Double-Circuit Monopole	Alexandria (ALS) – Riverview (RVV) Alexandria (ALS) – Big Oaks	Peak System Energy Demand (580MVA/580MVA)	970/970	2.7	6.6	23	35	58	95	109	96	65	40	25	6.6	2.6
	Alexandria (ALS) – Riverview (RVV) Alexandria (ALS) – Big Oaks	Average System Energy Demand (185 MVA/185 MVA)	310/310	0.9	2.1	7.3	11	18	30	35	31	21	13	8.1	2.1	0.8
345 kV/345 kV Double-Circuit Monopole	Riverview (RVV) – Quarry (QRY) Alexandria (ALS) – Big Oaks	Peak System Energy Demand (580MVA/580MVA)	970/970	2.6	6.7	25	40	71	115	119	87	52	32	21	6.5	2.6
	Riverview (RVV) – Quarry (QRY) Alexandria (ALS) – Big Oaks	Average System Energy Demand (185 MVA/185 MVA)	310/310	0.8	2.2	8.0	13	23	37	38	28	17	10	6.9	2.1	0.8
345 kV/345 kV Double-Circuit Monopole	Quarry (QRY) – Monticello (MNN) Alexandria (ALS) – Big Oaks	Peak System Energy Demand (580MVA/580MVA)	970/970	2.8	6.5	25	38	58	90	109	99	67	40	25	6.6	2.7
	Quarry (QRY) – Monticello (MNN) Alexandria (ALS) – Big Oaks	Average System Energy Demand (185 MVA/185 MVA)	310/310	0.9	2.1	7.9	12	19	29	35	32	21	13	8.0	2.1	0.9
345 kV Single-Circuit Monopole	Alexandria (ALS) – Big Oaks	Peak System Energy Demand (580MVA)	970	2.4	5.3	17	26	41	64	86	80	51	31	20	5.8	2.6
	Alexandria (ALS) – Big Oaks	Average System Energy Demand (185 MVA)	310	0.8	1.7	5.6	8.4	13	20	27	26	16	10	6.4	1.8	0.8
345 kV Single-Circuit H-Frame River Crossing	Alexandria (ALS) – Big Oaks	Peak System Energy Demand (580MVA)	970	3.9	8.5	29	43	61	79	82	73	54	37	25	7.9	3.8
	Alexandria (ALS) – Big Oaks	Average System Energy Demand (185 MVA)	310	1.3	2.7	9.2	14	19	25	26	23	17	12	8.0	2.5	1.2

**Figure 6.3-2 Calculated Magnetic Flux density (mG) for Proposed 345/345 Kilovolt Transmission Line Design**









There are presently no Minnesota regulations pertaining to magnetic field exposure. The Applicants provide information to the public, interested customers, and employees so they can make informed decisions about magnetic fields. Such information includes the availability for measurements to be conducted for customers and employees upon request.

Considerable research has been conducted since the 1970s to determine whether exposure to power-frequency (60 hertz) magnetic fields causes biological responses and health effects. Public health professionals have also investigated the possible impact of exposure to EMF on human health for the past several decades. While the general consensus is that electric fields pose no risk to humans, the question of whether exposure to magnetic fields can cause biological responses or health effects continues to be debated.

A large body of research has been reviewed by many leading public health agencies such as the U.S. National Cancer Institute, the U.S. National Institute of Environmental Health Sciences, and the World Health Organization (WHO), among others. These reviews do not show that exposure to electric power EMF causes or contributes to adverse health effects.

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Wisconsin, Minnesota, and California have all conducted literature reviews or research to examine this issue. In 2002, Minnesota formed an Interagency Working Group (Working Group) to evaluate the body of research and develop policy recommendations to protect the public health from any potential problems resulting from HVTL EMF effects. The Working Group consisted of staff from various state agencies and published its findings in a White Paper on Electric and Magnetic Field (EMF) Policy and Mitigation Options in September 2002 (reference (4)).

The Commission, based on the Working Group and WHO findings, has repeatedly found that “there is insufficient evidence to demonstrate a causal relationship between EMF exposure and any adverse human health effects” (reference (5)).

#### **6.3.2.4 Stray Voltage and Induced Voltage**

“Stray voltage” is a condition that can potentially occur on a property or on the electric service entrances to structures from distribution lines connected to these structures—not transmission lines as proposed here. The term generally describes a voltage between two objects where no voltage difference should exist. More precisely, stray voltage is a voltage that exists between the neutral wire of either the service entrance or of premise wiring and grounded objects in buildings such as barns and milking parlors. The source of stray voltage is a voltage that is developed on the grounded neutral wiring network of a building and/or the electric power distribution system.

Transmission lines do not, by themselves, create stray voltage because they do not connect directly to businesses or residences. Transmission lines, however, can induce voltage on a distribution circuit that is parallel and immediately under the transmission line. If the proposed transmission lines parallel or cross distribution lines, appropriate mitigation measures can be taken to address any induced voltages. For additional information regarding stray voltage, please see the Minnesota Stray Voltage Guide that is available online at [www.minnesotastrayvoltageguide.com](http://www.minnesotastrayvoltageguide.com) or contact your electric utility provider.

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### **6.3.2.5 Farming Operations, Vehicle Use, and Metal Buildings near Power Lines**

The power lines will be designed to meet or exceed minimum clearance requirements for electric fencing as specified by the NESC. Nonetheless, insulated electric fences used in livestock operations can be instantly charged with an induced voltage from transmission lines. The induced charge may continuously drain to ground when the charger unit is connected to the fence. When the charger is disconnected either for maintenance or when the fence is being built, shocks may result. The local electrical utility can provide site specific information about how to prevent possible shocks when the charger is disconnected.

Farm equipment, passenger vehicles, and trucks may be safely used under and near power lines. The power lines will be designed to meet or exceed minimum clearance requirements with respect to roads, driveways, cultivated fields, and grazing lands as specified by the NESC. Recommended clearances within the NESC are designed to accommodate a relative vehicle height of 14 feet.

Vehicles or any conductive body under HVTLs will be immediately charged with an electric charge. Without a continuous grounding path, this charge can provide a nuisance shock. Such nuisance shocks are a rare event because generally vehicles are effectively grounded through tires. Modern tires provide an electrical path to ground because carbon black, a good conductor of electricity, is added when they are produced. Metal parts of farming equipment are frequently in contact with the ground when plowing or engaging in various other activities. Therefore, the induced charge on vehicles will normally be continually flowing to ground unless they have unusually old tires or are parked on dry rock, plastic, or other surfaces that insulate them from the ground. The Applicants can provide additional vehicle-specific methods for reducing the risk of nuisance shocks in vehicles.

Buildings are permitted near transmission lines but are generally discouraged within the right-of-way itself because a structure under a line may interfere with the safe operation of the transmission facilities. For example, a fire in a building within the right-of-way could damage a transmission line. The NESC establishes minimum electrical clearance zones from power lines for the safety of the general public and utilities often acquire easement rights that require clear areas in excess of these established zones. Utilities may permit encroachment into that easement for buildings

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and other activities when they can be deemed safe and still meet the NESC minimum requirements. Metal buildings may have unique issues due to induction concerns. For example, conductive buildings near power lines of 200 kV or greater must be properly grounded. Any person with questions about a new or existing metal structure can contact the Applicants for further information about proper grounding requirements.

### **6.3.2.6 Impacts and Mitigation**

With the proper safeguards and protective measures described above, impacts related to public health and safety are not anticipated. Therefore, no additional mitigative measures are proposed.

### **6.3.3 Audible Noise**

Noise is defined as unwanted sound. Noise may include a variety of sounds of different intensities across the entire frequency spectrum. Noise is measured in units of decibels (dB) on a logarithmic scale. Because human hearing is not equally sensitive to all frequencies of sound, certain frequencies are given more “weight.” The A-weighted decibel (dBA) scale corresponds to the sensitivity range for human hearing. Noise levels capable of being heard by humans are measured in dBA. A noise level change of three dBA is barely perceptible to average human hearing. A five dBA change in noise level, however, is clearly noticeable. A ten dBA change in noise levels is perceived as a doubling or halving of noise loudness, while a 20 dBA change is considered a dramatic change in loudness (reference (6)).

For cumulative increases resulting from sources of different magnitudes, the rule of thumb is that if there is a difference of greater than ten dBA between noise sources, there will be no additive effect (i.e., only the louder source will be heard and the quieter source will not contribute to noise levels). Therefore, predicted noise levels associated with the transmission line are typically much lower than the ambient noise and will not increase the existing background noise levels. Section 6.3.3.3 addressed noise related to operation of the proposed Big Oaks Substation. Table 6.3-4 provides noise levels associated with common, everyday sources and places the magnitude of noise levels discussed here in context.

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**Table 6.3-4 Noise Levels Associated with Common Sources**

Sound Pressure Level (dBA)	Noise Source
140	Jet engine (at 25 meters)
130	Jet aircraft (at 100 meters)
120	Concert
110	Pneumatic chipper (powered by compressed air or hydraulics)
100	Jointer/planer
90	Chainsaw
80	Heavy truck traffic
70	Business office
60	Conversational speech
50	Library
40	Bedroom
30	Secluded woods
20	Whisper

Source: reference (6)

### **6.3.3.1 Noise Related to Construction**

Construction activities will generate noise that is short-term and intermittent. Construction activities will be limited to daytime hours. As such, the Project will have temporary and localized noise impacts during construction, but overall will not have significant noise effects for the surrounding area. Residents living in close proximity identified in Section 6.3.1 would be temporarily affected by noise generated from construction activities. Construction activities are estimated to last 18 to 20 months however noise would dissipate at a single location as construction crews progress along the Project Route.

### **6.3.3.2 Noise Related to Transmission Line**

Generally, activity-related noise levels during the operation and maintenance of transmission lines are minimal.

Transmission conductors can produce noise under certain conditions. The level of noise depends on conductor conditions, voltage level, and weather conditions. Noise emission from a transmission line occurs during certain weather conditions. In foggy, damp, or rainy weather, power lines can create a crackling sound due to the small

amount of electricity ionizing the moist air near the wires. During heavy rain, the background noise level of the rain is usually greater than the noise from the transmission line. As a result, people do not normally hear noise from a transmission line during heavy rain. During light rain, dense fog, snow, and other times when there is moisture in the air, transmission lines will produce audible noise equal to approximately household background levels. During dry weather, audible noise from transmission lines is barely perceptible by humans.

The MPCA has established standards for the regulation of noise levels. The land use activities associated with residential, commercial and industrial land have been grouped together into Noise Area Classifications (NACs). See Minn. R. 7030.0050. Each NAC is then assigned both daytime (7 a.m. to 10 p.m.) and nighttime (10 p.m. to 7 a.m.) limits for land use activities within the NAC. See Minn. R. 7030.0040. Table 6.3-5 shows the MPCA daytime and nighttime limits in dBA for each NAC. The limits are expressed as a range of permissible dBA within a one-hour period; L50 is the dBA that may be exceeded 50 percent (30 minutes) of the time within an hour, while L10 is the dBA that may be exceeded 10 percent (six minutes) of the time within an hour. Residences, which are typically considered sensitive to noise, are classified as NAC-1.

**Table 6.3-5 Minnesota Pollution Control Agency Noise Limits by Noise Area Classification (dBA)**

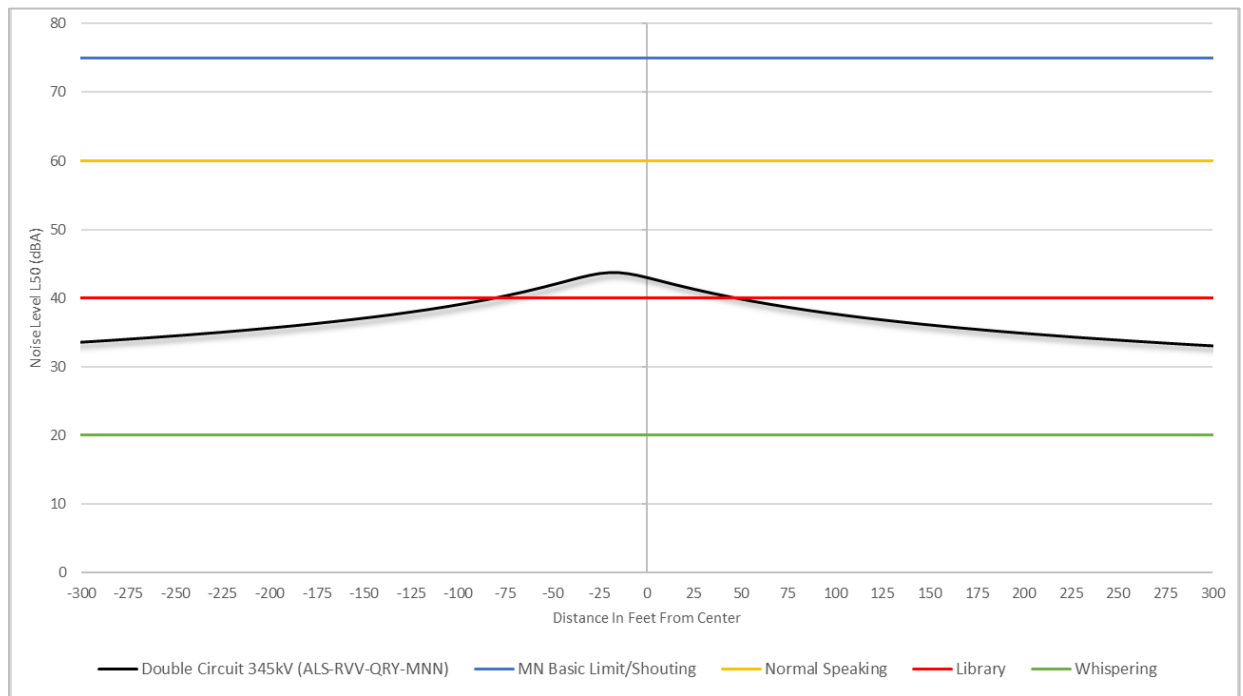
Noise Area Classification (NAC)	Land Use Activities	Daytime		Nighttime	
		L <sub>50</sub>	L <sub>10</sub>	L <sub>50</sub>	L <sub>10</sub>
1	residential housing, religious activities, camping and picnicking areas, health services, hotels, educational services	60	65	50	55
2	retail, business and government services, recreational activities, transit passenger terminals.	65	70	65	70
3	highways, utilities, manufacturing, fairgrounds and amusement parks, agricultural and forestry activities.	75	80	75	80

The Applicants performed a noise analysis by assuming that the noise levels generated by the Project will be the same at night as those generated during the daytime; using this assumption, compliance with the nighttime levels (more restrictive) will also demonstrate compliance with the daytime noise standards due to greater noise sensitivity of humans at night.

The Applicants anticipate that NAC-1 is likely to apply to the large majority of the Project. NAC-1 has a daytime L50 limit of 60 dBA and a nighttime L50 limit of 50 dBA. As shown in Figure 6.3-3 and Figure 6.3-4 the proposed 345 kV lines will be below the MPCA noise limits for NAC-1 which are the most stringent MPCA noise limits.

As discussed in Section 6.3.2.1, there are 154 residences within 500 feet of the anticipated centerline of the proposed transmission line right-of-way. The nearest residence is approximately 75 feet from the existing transmission line centerline along Interstate 94 in Saint Cloud, Minnesota. This segment of the Project would be classified under the NAC 1 category. Noise generated by a double-circuit 345 kV transmission line would not exceed 45 dBA from the center of the transmission line. Therefore, it is not anticipated that the Project would exceed the MPCA noise standards as previously defined.

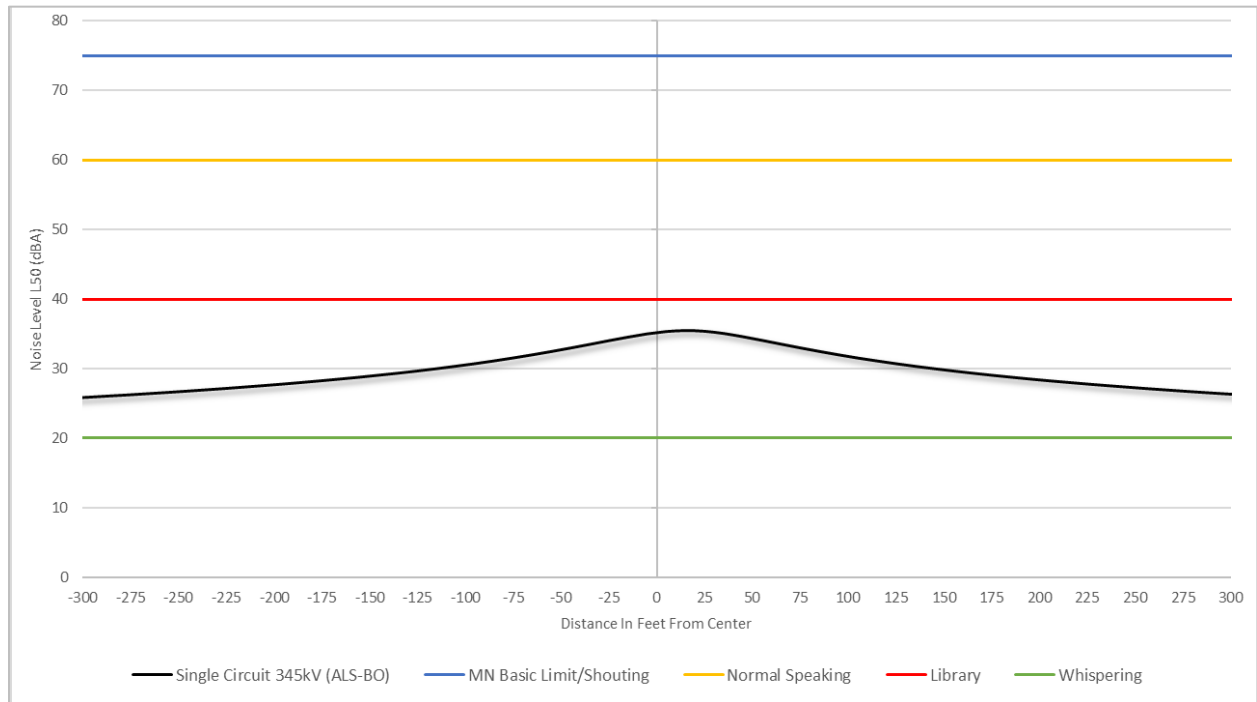
**Figure 6.3-3 Calculated Audible Noise at Nominal System Voltage**



(345 kV Double-Circuit)



**Figure 6.3-4 Calculated Audible Noise at Nominal System Voltage**



(345 kV Single-Circuit)

### 6.3.3.3 Noise Related to Substations

Substations may also contribute noise. Transformer or shunt reactor “hum” is the dominant noise source at substations if such equipment exists. At substations without transformers or shunt reactors, only infrequent noise sources would exist such as the opening and closing of circuit breakers, the operation of an emergency generator, or unexpected maintenance issues. Typical substation design is such that noise produced by these sources does not reach beyond the substation property, in the rare cases that space is limited such that it cannot be accomplished, noise reduction designs are applied such as sound walls placed around transformers, or shelter belts planted around substations to reduce the distance the sound can travel. Like the transmission lines themselves, the Project substations will comply with the MPCA noise standards as set forth in Minn. R. 7030.0040.

### 6.3.3.4 Impacts and Mitigation

Noise associated with the operation of the Project is not predicted to exceed the limits for the NAC area identified in Table 6.3-5. The noise modeling indicates that the noise generated by the Project will not exceed the most stringent MPCA noise standards of NAC-1. Therefore, no mitigative measures are proposed.

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#### 6.3.4 Aesthetics

The aesthetic and visual resources of a landscape are defined as the existing natural and built features visible to the public which affect the visual quality and character of an area. This section discusses the existing aesthetic and visual resources visible from areas where the Project is likely to be within view, referred to as the “viewshed”. A project’s viewshed will vary based on location. Projects located in open and agricultural areas would have a more expansive viewshed, as they are free of visual obstructions. Conversely, projects in urban and residential areas may have a smaller viewshed, due to the presence of visual obstructions from buildings, trees, and existing infrastructure.

To gauge how the aesthetics of the landscape could be affected by the Project, it is valuable to first assess the character of the existing landscape. A landscape’s character is largely influenced by topography, vegetation, and water resources.

The topography of the Project Study Area is generally flat, with areas of rolling plains. As discussed in Section 6.2, the current landscape across the Proposed Route is dominated by agricultural land. In the vicinity of the major rivers crossed by the Project, topography becomes more rolling, with some areas of high hills and broad slopes. In these riparian zones, there is more topography and higher vegetative cover, including forested areas.

The agricultural landscape is dotted with various structures including residences and farm buildings (inhabited and uninhabited farmsteads) scattered along rural county roads. These structures become focal points in the agricultural landscape along the Proposed Route.

The visual character of a landscape is also largely influenced by the presence of the built environment, such as residential, commercial, and municipal buildings, transportation infrastructure, and industrial features. The built environment of the Project Study Area is generally open; however, around cities in the vicinity of the Project the landscape becomes urban, consisting of residential, commercial, and industrial infrastructure in the vicinity of the Proposed Route.

Additionally, the majority of the Proposed Route consists of existing infrastructure, which visually altered the landscape upon its construction.

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#### **6.3.4.1 Existing Transmission Line Second Circuit**

Because this portion of the Project consists largely of stringing a second circuit onto existing infrastructure, aesthetic changes related to this portion of the Proposed Route will be minimal. Visual alterations to the landscape by the construction of a new transmission line occurred when the existing infrastructure was installed. Stringing a new line onto existing infrastructure will result in a very minimal change to the landscape.

#### **6.3.4.2 Alexandria Substation Tap**

The Alexandria Substation Tap represents a deviation from the existing infrastructure for approximately 0.2 miles, where new transmission line would be installed north of existing infrastructure to connect to the Alexandria Substation. The substation's current fenced area would also be expanded to accommodate new substation equipment. The landscape surrounding the Proposed Route in this area is generally industrial and adjacent to Interstate-94. In this setting, the Alexandria Substation Tap and expansion represents a minimal visual disruption that is not anticipated to impact the existing viewshed.

#### **6.3.4.3 Riverview Substation Bypass**

The Riverview Substation Bypass represents a deviation from the existing infrastructure for approximately 0.5 miles, where the new circuit will connect to the Riverview Substation and the existing circuit will be reconfigured to bypass the Riverview Substation; the bypass would be installed west and south of the existing infrastructure around the existing Riverview Substation. The landscape surrounding the Proposed Route in this area is generally rural, with the exception of the existing Riverview Substation. Visual disruptions in this predominantly rural landscape are mitigated by siting the proposed alignment along existing roadway corridors. Additionally, the Proposed Route's proximity to the existing Riverview Substation, which is already a visual disruption to the generally rural nature of this area, minimizes the impact that might be caused by construction of the Riverview Substation Bypass.

#### **6.3.4.4 Quarry Substation Bypass**

The Quarry Substation Bypass represents a deviation from the existing infrastructure for approximately 0.2 miles, where new transmission line would be installed east of the existing infrastructure for the Project to bypass the existing Quarry Substation. The landscape surrounding the Proposed Route in this area is generally rural, except

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for the existing Riverview Substation. The proposed alignment would result in the clearing of an existing tree line, thereby altering the landscape in this area from one that is forested and partially shields views of the Quarry Substation to a landscape that is more open and industrial. However, the presence of the Quarry Substation already represents a visual disruption to the rural setting, and further changes to the landscape in this area will not result in a large change to the viewshed.

#### **6.3.4.5 Big Oaks Substation**

The Big Oaks Substation would consist of a new, 10-acre substation constructed within the Big Oaks Substation Siting Area. The landscape surrounding the Big Oaks Substation Siting Area is generally agricultural but is also located adjacent to a landfill facility to the east and a power plant to the north. Any visual disruption caused by construction of a new substation in a predominantly rural landscape is minimized by the presence of the existing landfill facility and the power plant. However, for any residences within the viewshed of the new Big Oaks Substation, the impact would be more significant.

#### **6.3.4.6 Mississippi River Crossing Options**

A new crossing over the Mississippi River will be constructed to connect the Proposed Route to the new Big Oaks Substation. Each of the two options being considered represents a new crossing over the river. The Western Crossing Option is approximately 0.7 miles long and cross a portion of the river that is sparsely wooded but undeveloped. The Eastern Crossing Option is approximately 2.1 miles long and would cross the river adjacent and parallel to an existing 115 kV transmission line.

The Western Crossing Option would cause the most visual disruption to the existing landscape as this Route would consist of new transmission line construction in an otherwise undisturbed river setting. The Eastern Crossing Option minimizes impacts by constructing the new transmission line adjacent to existing transmission line infrastructure.

#### **6.3.4.7 Impacts and Mitigation**

Because the majority of the Proposed Route consists of stringing a new circuit along an existing transmission corridor, aesthetic impacts are anticipated to be minimal. Potential impacts to aesthetics along the Proposed Route will occur in areas where new structures are proposed, where the Proposed Route will deviate from the existing

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infrastructure, and in the area where a new substation will be constructed. Where new structures are proposed, mitigation would include routing to avoid removal of trees and vegetation and routing to follow existing infrastructure corridors to the extent possible. The Big Oaks Substation will be sited near existing facilities such as the existing landfill facility and the power plant to the extent possible, in order to minimize intrusions to the rural landscape. In addition, existing vegetation and topography provide natural screening such that the Big Oaks Substation will not be visible from the Mississippi River (i.e., recreational users of the Mississippi River water trail would not be able to see the Big Oaks Substation from the river).

### **6.3.5 Socioeconomics**

The area of study for the socioeconomic analysis includes Douglas, Sherburne, Stearns, Todd, and Wright Counties in Minnesota. Socioeconomic factors analyzed include population, income, poverty, and employment. U.S. Census data was obtained from the 2020 census at the community and township level to characterize the area along the Proposed Route. These datasets were compared to county and state data, as demonstrated in Table 6.3-6.

**Table 6.3-6 Demographics U.S. Census Bureau 2020 Data**

Location	Total Population	White (%)	Black or African American (%)	American Indian (%)	Asian (%)	Native Hawaiian (%)	Some Other Race Alone (%)	Two or More Races
Minnesota	5,706,494	4,423,146 (78%)	398,434 (7%)	68,641 (1%)	299,190 (5%)	2,918 (<1%)	168,444 (3%)	345,721 (6%)
Douglas County	39,006	36,887 (95%)	235 (1%)	129 (<1%)	228 (1%)	11 (<1%)	285 (1%)	1,231 (3%)
Sherburne County	97,183	85,504 (88%)	3,666 (4%)	444 (<1%)	1,295 (1%)	22 (<1%)	1,189 (<1%)	5,063 (5%)
Stearns County	158,292	130,858 (83%)	13,315 (8%)	628 (<1%)	3,188 (2%)	69 (<1%)	3,546 (<1%)	495 (<1%)
Todd County	24,109	22,681 (90%)	145 (1%)	162 (1%)	160 (1%)	7 (<1%)	488 (2%)	1,153 (2%)
Wright County	141,337	127,090 (90%)	2,637 (2%)	446 (<1%)	1,898 (1%)	4 (<1%)	77 (<1%)	7,013 (5%)
Route <sup>1</sup>	41,899	36,859 (88%)	2,358 (6%)	172 (<1%)	420 (1%)	9 (<1%)	722 (3%)	1359 (3%)

Source: reference (7)

Notes: Persons may opt to identify with more than one racial minority, therefore, the sum of all racial categories in the table may not equal 100%.

[1] Route population estimates include averages of all townships crossed by the Route. This includes the following townships: Alexandria, Hudson, La Grand, Lake Mary, Orange, Becker, Ashley, Colledgeville, Farming, Grove, Lynden, Melrose, Munson, Oak, Clearwater, Monticello, Sauk Center, West Union, Silver Creek, and Waite Park

Stearns County is the most populated county within the Proposed Route. The population of Stearns County is concentrated in the St. Cloud area, which is in the eastern half of the Proposed Route. Development in St. Cloud is expanding southeast towards the Twin Cities, while the Twin Cities are expanding northwest. Considerable growth is expected in the three counties between these two metropolitan areas, in part because the area is within commuting distance of St. Cloud and the Twin Cities along I-94.

According to the U.S. Census Bureau, the majority of the population in the Proposed Route identify as white, as shown in Table 6.3-6. The Proposed Route has a lower percentage of minority populations than the state average.

Table 6.3-7 shows the 2021 per capita income and the percentage of the population below the poverty level for the state in the counties crossed by the Proposed Route

that are identified in Table 6.3-8. The counties crossed by the Proposed Route had a lower per capita income than the statewide average. The poverty level rate of counties within the Proposed Route ranged from 3.2 percent to 13.7 percent. In 2021 the state poverty rate was 5.5 percent. The per capita income for the counties crossed by the Proposed Route is all lower than the Minnesota average per capita income. The statewide average income is skewed by higher average incomes around the Twin Cities metro area compared to rural areas of the state.

**Table 6.3-7 Economic Characteristics 2021 1-Year Estimates**

Location	Per Capita Income	Percentage of Individuals Below Poverty Level	Top Employment by Industry <sup>1</sup>
Minnesota	\$41,753	5.5	E, P, M
Douglas County	\$36,559	8.1	E, M, R
Sherburne County	\$40,462	4.8	E, M, R
Stearns County	\$33,247	7.4	E, M, R
Todd County	\$26,427	13.7	E, M, R
Wright County	\$39,900	3.2	E, M, C

Notes:

Classification System and abbreviated as follows: Ag = Agriculture, Forestry, Fishing, and Hunting, and Mining; C = Construction; E = Educational, Health and Social Services; M = Manufacturing; P= Professional, Scientific, and Management, and Administrative and Waste Management Services; and R = Retail Trade.

Source: reference (8)

[1] U.S. Census Bureau, 2021. Industries are defined under the 2012 North American Industry

The largest employment industry in the Proposed Route is the educational, health and social services industry. The second largest industry in terms of employment is manufacturing; retail trade is the third largest sector of employment. The professional scientific and management industry category is the second largest industry in the state of Minnesota; however, it is not a significant labor industry along the Proposed Route (Table 6.3-7).

Temporary housing, consisting of apartment rentals, hotels, motels, and campgrounds, is abundant in the St. Cloud area. Proximity to the Twin Cities metro area, which is approximately 70 miles from St. Cloud, provides a relatively large supply of vacant temporary housing.

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### **6.3.5.1 Impacts and Mitigation**

The construction and operation of the Project is expected to have minimal influence on the local (county and municipal) economies. In terms of payroll earnings and construction expenditures, the economic benefit from the Project will be small relative to the regional economy of St. Cloud, which is the major center of economic activity for the Project Study Area.

Construction duration for this Project will be approximately 18 to 20 months and will employ approximately 100 to 150 construction workers. Multiple construction crews are anticipated. During construction, there will be a minor positive impact on the local economy due to the expenditures of the construction crews. Long-term beneficial impacts from the Project will include incremental increases in revenues from utility property taxes.

No adverse socioeconomic impacts are anticipated, and therefore, no mitigative measures are proposed.

### **6.3.6 Environmental Justice**

The U.S. Environmental Protection Agency (EPA) defines environmental justice as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income in developing, implementing, and enforcing environmental laws, regulations, and policies (reference (9)). The MPCA has developed an environmental justice mapping tool to identify environmental justice communities within the state of Minnesota (reference (10)). This analysis identifies environmental justice communities located near the Project to determine if the Project would disproportionately affect environmental justice communities.

The Applicants used the MPCA mapping tool and US Census Bureau data to identify environmental justice communities located near the Project. The MPCA mapping tool considers tribal areas and census tracts with higher concentrations of low-income and minority populations as areas of increased concern for environmental justice. The MPCA defines low-income populations as populations with at least 40 percent of people reporting income less than 185 percent of the federal poverty level. Minority communities are identified as communities with 50 percent or more people of color.

According to the MPCA environmental justice mapping tool, the Proposed Route intersects six census tracts identified as low-income communities (Map 9). Two of



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these census tracts are also identified as containing more than 50 percent people of color (Map 10). The Proposed Route does not cross any federally recognized tribal areas.

The Minnesota State Legislature revised the definition of an “environmental justice area” in Minn. Stat. § 216B.1691, subd. 1(e). Although this statute is not directly applicable to the Project, the definition provides a different method for assessing environmental justice areas along the Proposed Route. The statute defines an environmental justice area as an area in Minnesota that, based on the most recent data published by the U. S. Census Bureau, meets one or more of the following criteria:

- 40 percent or more of the areas total population is non-white;
- 35 percent or more of the households in the area have an income that is at or below 200 percent of the federal poverty level;
- 40 percent or more of the area’s residents over the age of five have limited English proficiency; or
- The area is within Indian country, as defined in United States code, title 18, section 1151.

This revised definition was enacted on February 7, 2023. These changes are not yet reflected in the MPCA environmental justice mapping tool. The Applicants reviewed census data to identify environmental justice communities based on the revised definition. The Proposed Route crosses through 24 census tracts (Table 6.3-8). According to the revised environmental justice definition the Proposed Route intersects six environmental justice areas (Table 6.3-8).

**Table 6.3-8 Environmental Justice Data for Census Tracts Based on Minnesota Laws 2023, Chapter 7, Section 3.**

Location	County	40% or more of total population is non-white <sup>[1]</sup>	At least 35% of people reported income less than 200% of the federal poverty level <sup>[2]</sup>	40% or more people with limited English proficiency <sup>[3]</sup>	Area located within Indian Country <sup>2[4]</sup>	Does the location qualify as an environmental justice community?
Census Tract 304.07	Sherburn	No	No	No	No	No
Census Tract 304.10	Sherburn	No	No	No	No	No
Census Tract 303.02	Sherburn	No	No	No	No	No
Census Tract 1002.02	Wright	No	No	No	No	No
Census Tract 1002.03	Wright	No	No	No	No	No
Census Tract 4507.04	Douglas	No	<b>Yes</b>	No	No	<b>Yes</b>
Census Tract 4507.03	Douglas	No	No	No	No	No
Census Tract 105	Stearns	No	No	No	No	No
Census Tract 115	Stearns	No	<b>Yes</b>	No	No	<b>Yes</b>
Census Tract 106	Stearns	No	No	No	No	No
Census Tract 113.02	Stearns	No	No	No	No	No
Census Tract 114	Stearns	No	No	No	No	No
Census Tract 111.02	Stearns	No	No	No	No	No
Census Tract 5.02	Stearns	<b>Yes</b>	<b>Yes</b>	No	No	<b>Yes</b>
Census Tract 112.02	Stearns	No	No	No	No	No
Census Tract 113.06	Stearns	No	No	No	No	No
Census Tract 113.05	Stearns	No	No	No	No	No
Census Tract 113.08	Stearns	No	<b>Yes</b>	No	No	<b>Yes</b>
Census Tract 4.02	Stearns	No	No	No	No	No
Census Tract 1003	Wright	No	No	No	No	No
Census Tract 7907	Todd	No	<b>Yes</b>	No	No	<b>Yes</b>
Census Tract 4.01	Stearns	<b>Yes</b>	<b>Yes</b>	No	No	<b>Yes</b>
Census Tract 4509	Douglas	No	No	No	No	No
Census Tract 4508	Douglas	No	No	No	No	No

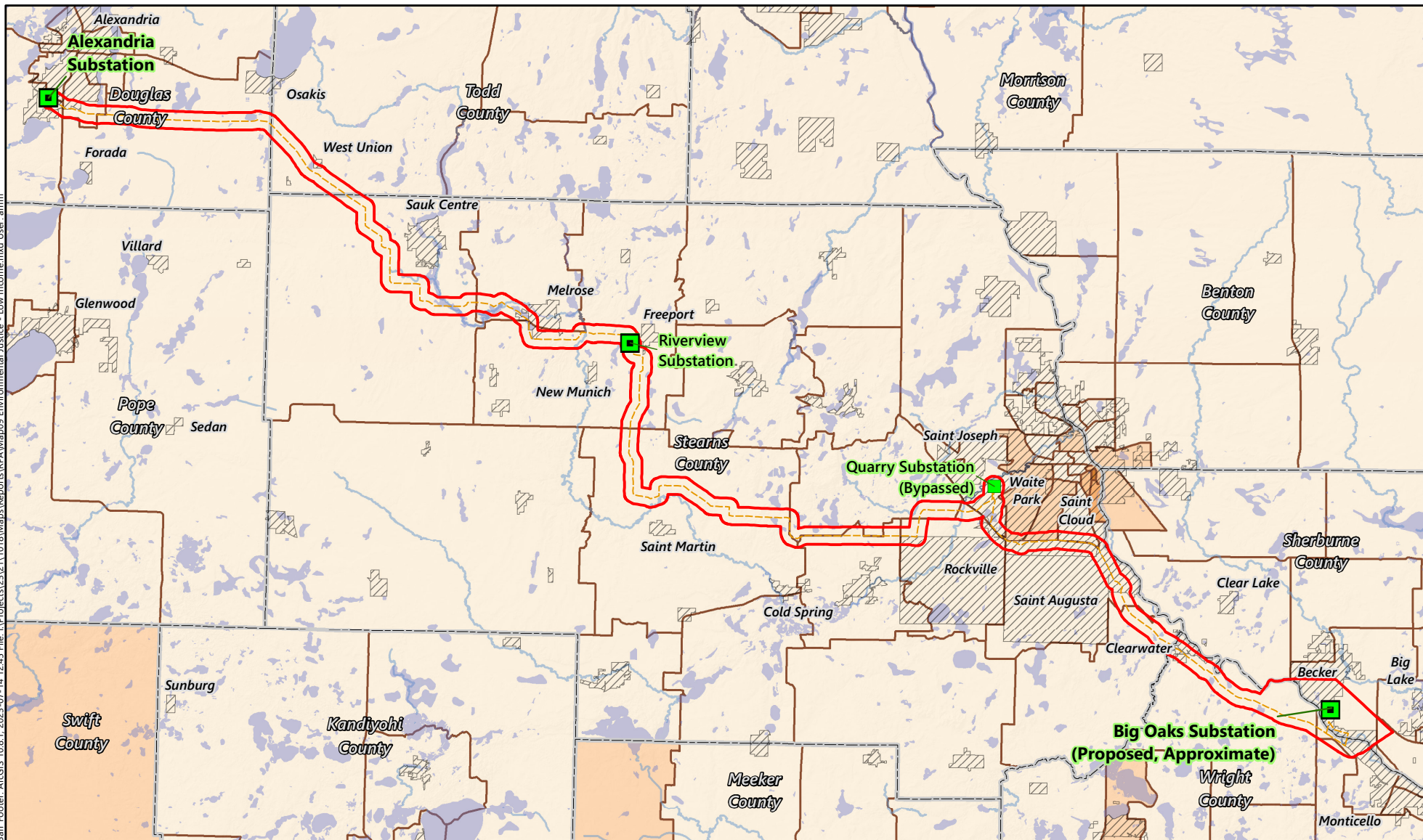
[1] Values adjusted to account for margin of error.

[2] Reference (11)

[3] Reference (12)

[4] Reference (10)

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- Project Study Area
  - Anticipated Alignment
  - Project Substation
  - Bypassed Substation
  - Municipal Boundary
  - County Boundary
- | Percent Below the Poverty Level* |          |
|----------------------------------|----------|
| (by 2020 Census Tract)           |          |
|                                  | < 10%    |
|                                  | 10 - 20% |
|                                  | 20 - 30% |
|                                  | 30 - 40% |
|                                  | 50 - 60% |

\*Percentage of families and people whose income in the past 12 months is below the poverty level (2020).

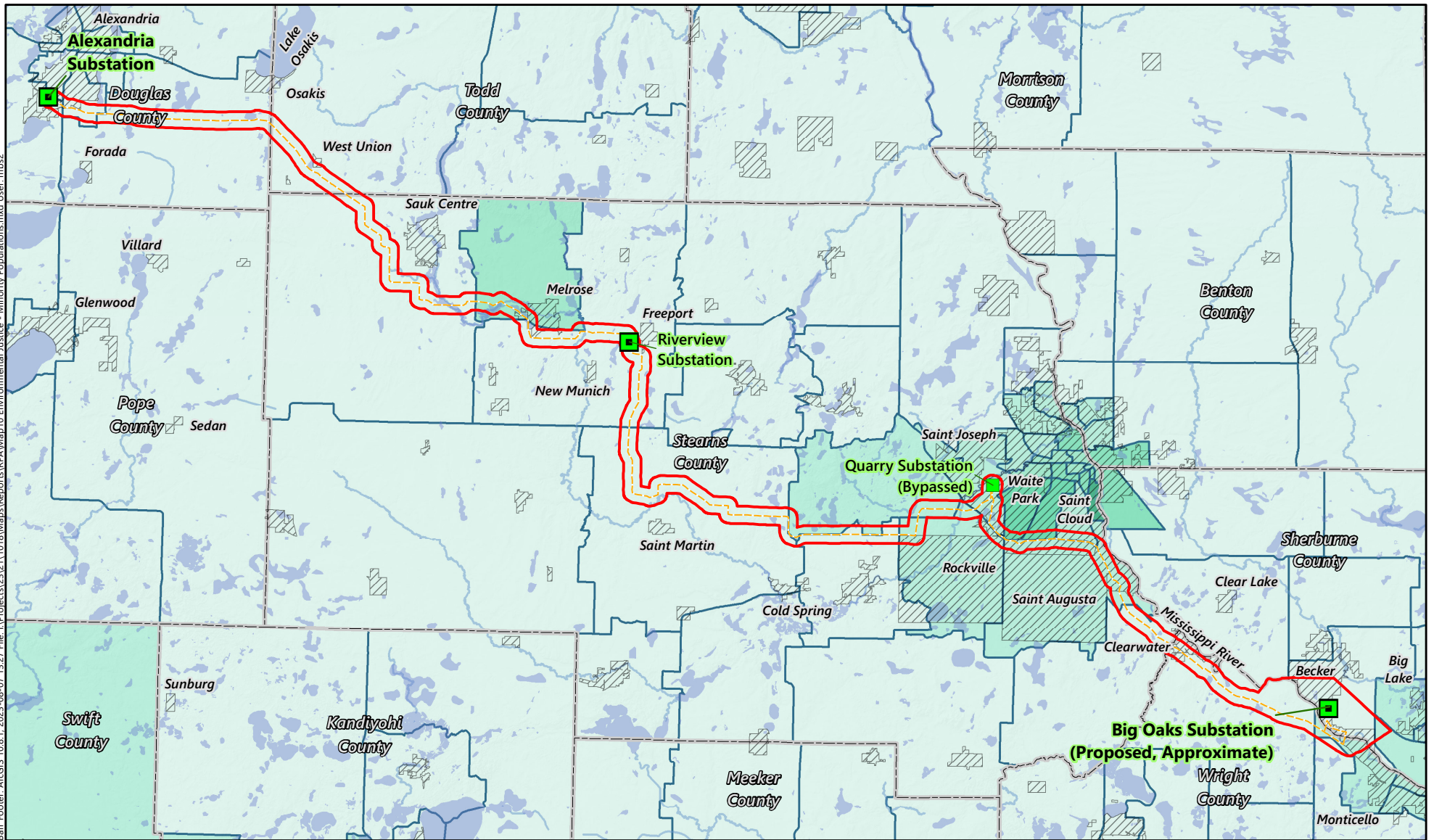


Map 9

**ENVIRONMENTAL JUSTICE**  
**- LOW INCOME -**  
 ALEXANDRIA TO BIG OAKS  
 MISO LRTP-2 Route Permit Application

Data Source: U.S. Census Bureau

Bar Footer: ArcGIS 10.8.1, 2023-08-07 13:27 File: I:\Projects\23\2110\18\Maps\Reports\RPA\_Map10\_Environmental\_Justice - Minority Populations.mxd User: mbs2



- Project Study Area
  - Anticipated Alignment
  - Project Substation
  - Bypassed Substation
  - Municipal Boundary
  - County Boundary
- | Minorities as Percent of Total Population |          |
|-------------------------------------------|----------|
| (by 2020 Census Tract)                    |          |
|                                           | < 10%    |
|                                           | 10 - 20% |
|                                           | 20 - 30% |
|                                           | 30 - 40% |
|                                           | 40 - 50% |
|                                           | 50 - 60% |

\* Percentage of individuals reporting any race other than white (2020).



**Map 10**

**ENVIRONMENTAL JUSTICE  
- MINORITY POPULATIONS -  
ALEXANDRIA TO BIG OAKS  
MISO LRTP-2 Route Permit Application**

Data Source: U.S. Census Bureau

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### **6.3.6.1 Impacts and Mitigation**

Based on the data provided by the U.S. Census Bureau and the MPCA, there are low-income populations and/or minority populations that will be crossed by the Proposed Route. However, the Project is not anticipated to disproportionately affect these communities as discussed throughout Section 6.3.

The Applicants will engage with these potentially affected environmental justice communities to provide equitable access to the planning processes, solicit community input, and work to understand community values. This engagement is likely to occur through Project public outreach, including press releases, Project website, and other efforts. The goals of this engagement include developing initial understanding of potential Project impacts, both beneficial and adverse; gathering preliminary feedback; and establishing an ongoing two-way engagement process. No communities of 40 percent or more people with limited English proficiency were identified in the Proposed Route. Project outreach information was provided by the Applicants in English but can be made available in languages other than English upon request. Applicant contact information is available in Section 1.3.

Tribal governments and Tribal Historic Preservation Offices, identified through the U.S. Department of Housing and Urban Development's Tribal Directory Assessment Tool or the Minnesota Indian Affairs Council as having historic ties to land in proximity to planned project areas have been notified early in the planning process, so that Tribes have the opportunity to advise of any sensitive historical or cultural sites to be avoided. This is discussed further in Section 7.

### **6.3.7 Cultural Values**

Cultural values consist of shared community attitudes expressed within a given area and provide a framework for community unity. The Proposed Route is generally rural in nature but crosses through several urban/industrial areas including Alexandria, St. Cloud, Becker, and Monticello. Rural portions of the Proposed Route have an agriculture-based economy. Corn and soybean crop production, livestock operations, and associated industries drive the local agricultural economy. Manufacturing, industrial, and service industries (restaurants, hotels, repair shops, power plants, landfill, convenience, and retail stores) are concentrated in the urban areas along the Proposed Route. Farming and protecting agriculture, the land, and the ability to

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continue to farm and support livelihoods through agriculture are strong values in the area surrounding the Proposed Route.

Manufacturing, industrial, and service industries (restaurants, hotels, repair shops, power plants, landfill, convenience, and retail stores) are concentrated in the urban areas crossed by the Proposed Route, with St. Cloud representing the largest city along the Proposed Route. St. Cloud has been recognized for its livability, culture and heritage management, and community participation and empowerment (reference (13)). St. Cloud is also home to St. Cloud State University, Minnesota's third-largest public university.

Numerous natural amenities, including lakes, rivers, and WMAs attract local and regional recreational users along the Proposed Route (refer to Section 6.3.8). These areas are also important to the identity of the area and provide opportunities for various recreational activities such as fishing, hunting, and snowmobiling which are also part of the identity of area residents.

#### **6.3.7.1 Impacts and Mitigation**

Construction, operation, and maintenance of the Project is not expected to conflict with the cultural values along the Proposed Route. The area is generally rural in nature with an agriculture-based economy and is anticipated to remain so after construction. No aspects of the culture of the area are anticipated to be significantly impacted or changed as a result of the construction and operation of the Project.

#### **6.3.8 Recreation**

Recreational opportunities in and near the Proposed Route include outdoor recreational trails, use of public lands and parks, snowmobiling, hunting and fishing, boating, camping and participation in local area events associated with these amenities. There are several types of formally managed and regulated lands near the Proposed Route such as WMAs, WPAs, state water trails, and municipal and county parks and trails. Each of these land types offer many recreational opportunities that attract residents and tourists. There are additional recreational opportunities within the municipalities in and adjacent to the Proposed Route such as museums and festivals. See the Tourism section in 6.4.3 for more information on these potential recreational activities that are not on public lands.

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WPAs are lands that were established to conserve migratory bird habitat. The Proposed Route crosses two Douglas County WPA locations and two Stearns County WPA locations. Both WPAs are located in the west end of the Project, west of St. Cloud. WPAs are available for hunting during state-designated hunting seasons.

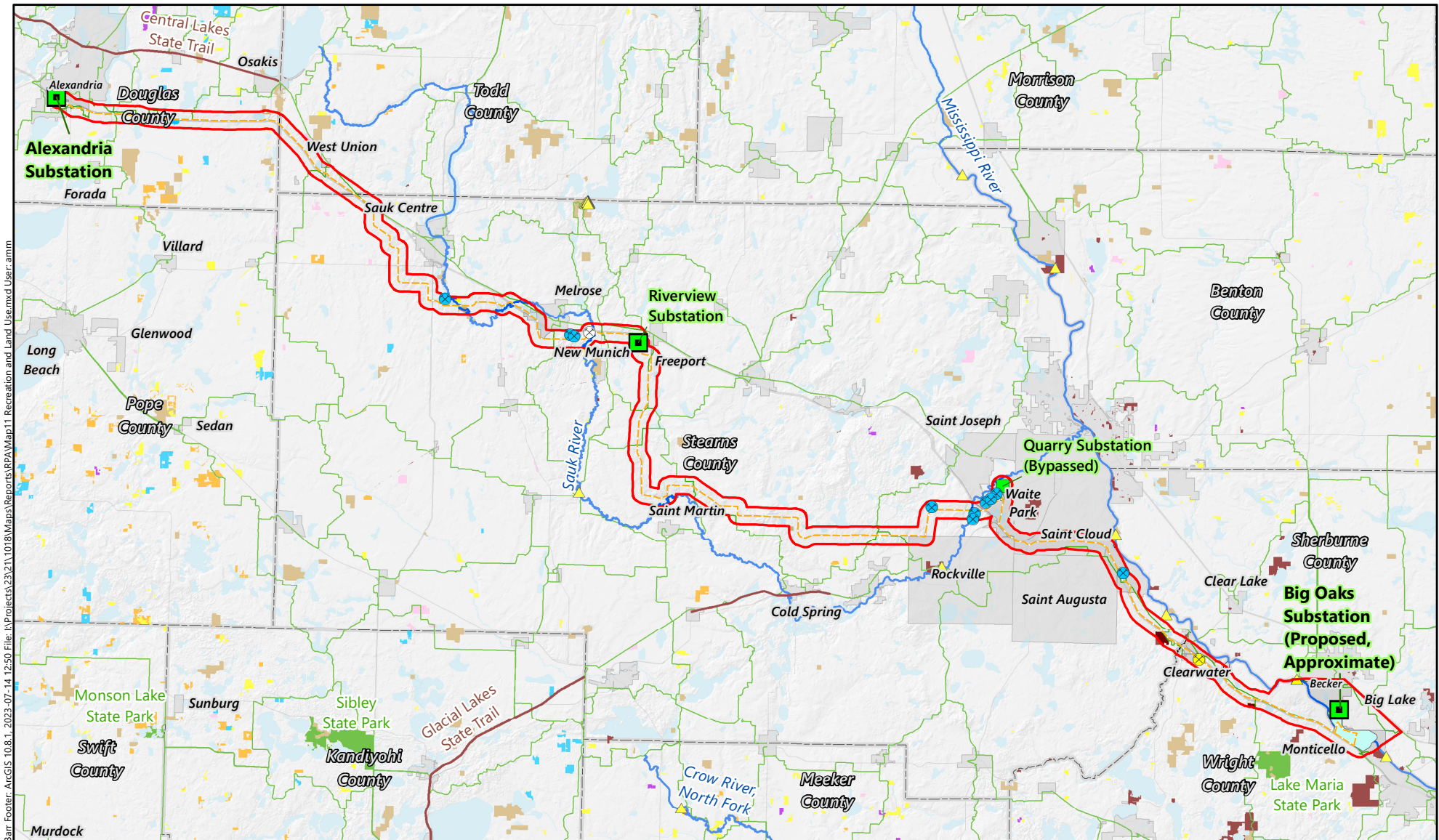
WMAs are part of Minnesota's outdoor recreation system and are established to protect those lands and waters that have a high potential for wildlife production, public hunting, trapping, fishing, and other compatible recreational uses. The Proposed Route crosses one WMA: the Sauk River WMA.

The MDNR manages 35 state water trails covering over 4,500 miles in Minnesota. These trails provide opportunities for canoeing, kayaking, paddleboarding, and camping. The Proposed Route crosses the Sauk River water trail in four locations. Additionally, each of the proposed Mississippi River Crossing Options would cross the Mississippi water trail one time.

Snowmobile trails are mapped by MDNR and managed locally by each county and their respective snowmobile clubs. There are three snowmobile trails in the Proposed Route: one each in Douglas, Stearns, and Wright Counties. At the western end of the Project, the Douglas Area trails parallel and cross portions of the Proposed Route. The Stearns County Snowmobile Trails parallel and cross portions of the Proposed Route between Alexandria and St. Cloud. At the eastern end of the Project, the Wright County Trails parallel and cross the Proposed Route in proximity to the Mississippi River (Map 11).

The Proposed Route crosses two Stearns County parks: a small corner of Warner Lake County Park, just west of Clearwater, Minnesota as well as Lake Wobegon Trail near its inception northwest of Sauk Centre, Minnesota.

There are no MDNR Scientific and Natural Areas, Aquatic Management Areas, state parks, municipal parks, or golf courses in or crossed by the Proposed Route.



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- |                       |                           |                                                 |
|-----------------------|---------------------------|-------------------------------------------------|
| Project Study Area    | Campsite (Non-State Park) | Wetland Banking Easement                        |
| Anticipated Alignment | State Park (MDNR)         | Conservation Easement (MDNR)                    |
| Project Substation    | County or Local Park      | Conservation Reserve Enhancement Program (CREP) |
| Bypassed Substation   | Trails (MDNR)             | Permanent Wetland Preserve (PWP)                |
| Municipal Boundary    | State Trail               | Reinvest in Minnesota (RIM)                     |
| County Boundary       | Snowmobile Trail          | Wetland Reserve Program (WRP)                   |
|                       | Water Trails              |                                                 |

- Active Gravel Pit
- Potentially Active Mine
- Reclaimed Gravel Pit



Data Source:  
Minnesota Dept. of Natural Resources

**Map 11**

**RECREATION AND LAND USE**  
 ALEXANDRIA TO BIG OAKS  
 MISO LRTP-2 Route Permit Application



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### **6.3.8.1 Impacts and Mitigation**

Construction of the Project is not anticipated to affect public access to nearby recreational opportunities. Impacts to recreation areas would mostly be related to Project construction and will be minimal, temporary, and isolated to specific areas. Because the Project consists largely of stringing a second circuit onto existing infrastructure, construction activities related to the majority of the Project will be minimal. Temporary disruptions to use of the snowmobile trails could occur if Project construction occurs during the winter months. However, any disruptions would be minimal, short-term, and would resolve with the completion of construction.

Short-term increases in noise and dust would occur during construction of the Project and could detract from public enjoyment of nearby recreational activities. However, these impacts would be minimal, and use of BMPs to limit noise and fugitive dust during construction would effectively mitigate their effects. No impacts are anticipated during operation and maintenance of the Project.

### **6.3.9 Public Services**

This section provides information about public services within the Project Study Area including police, fire, and ambulance services; hospitals; water and wastewater services; school districts; utilities; and other public services such as public utility infrastructure. It also discusses whether the Project has the potential to affect these public services.

#### **6.3.9.1 Police, Fire, and Ambulance Services**

Public services in the Project Study Area are provided by local law enforcement and emergency response agencies of nearby communities. The sheriff's offices and municipal police departments in nearby cities provide law enforcement in the area. Douglas, Todd, Stearns, Sherburne, and Wright Counties all have sheriff departments that provide services to their respective counties. Additionally, the cities of Alexandria, Melrose, Waite Parke, St. Cloud, and Becker all have local police departments.

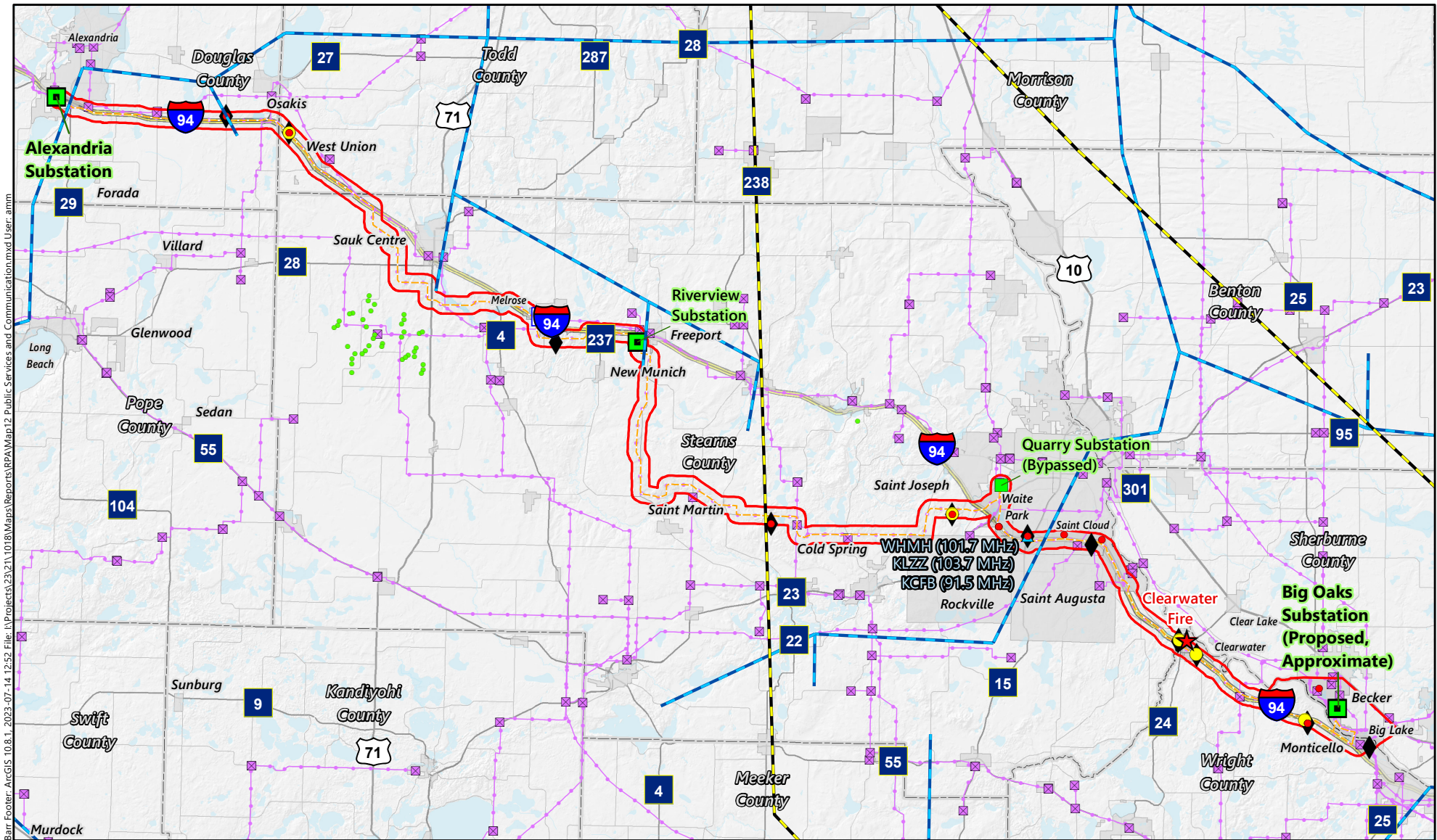
Fire services within the area are provided by city and community fire departments (Map 12). Alexandria, Freeport, Waite Parke, St. Cloud, Clearwater, and Becker all have paid fire departments that service the surrounding cities and townships. Melrose, Rockville, and Monticello have volunteer fire departments.

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Ambulance districts would provide emergency medical response services to the Project. The Central Minnesota EMS Region Ambulance Service and the Gold Cross Ambulance Service of St. Cloud provide response services to cities and townships surrounding St. Cloud including Rockville, Waite Park, Clearwater, Becker, and Monticello. The North Ambulance Service of Douglas County provides response services to Alexandria and other surrounding cities and townships including Melrose and Freeport. Emergency medical response is also available from local hospitals, such as the Douglas County Hospital System in Alexandria and the CentraCare and St. Cloud Hospital Systems, both located in the City of St. Cloud (Map 12).

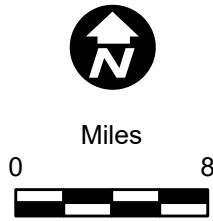
### **6.3.9.2 Hospitals**

Hospitals near the Project include the Douglas County Hospital System in Alexandria and the CentraCare and St. Cloud Hospital Systems, both located in St. Cloud (Map 12). Smaller medical clinics or medical centers in the area include CentraCare in and around the cities of Melrose, Freeport, Clearwater, and Becker, and Stellis Health for the Monticello area (Map 12).



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- |                                         |                              |                          |
|-----------------------------------------|------------------------------|--------------------------|
| Project Study Area                      | Wind Turbine                 | Fire Station             |
| Anticipated Alignment                   | Microwave Service Site       | Hospital                 |
| Project Substation                      | FM Radio Transmitter         | Municipal Boundary       |
| Bypassed Substation                     | Cellular Tower               | County Boundary          |
| Existing Substation                     | Antenna Structure            | Interstate Highway       |
| Existing High-Voltage Transmission Line | Approx. Underground Pipeline | US Highway               |
|                                         | Crude Oil                    | State Highway            |
|                                         | Natural Gas                  | County State-Aid Highway |



**Map 12**  
**PUBLIC SERVICES AND COMMUNICATION**  
**ALEXANDRIA TO BIG OAKS**  
 MISO LRTP-2 Route Permit Application

Data Sources:  
 Minnesota Dept. of Transportation,  
 Minnesota Geospatial Information Office,  
 Federal Aviation Administration (FAA), Federal  
 Communications Commission (FCC)

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### **6.3.9.3 Water and Wastewater Services**

In rural areas near the Project, residents often use private septic systems and wells. Douglas and Stearns Counties provide septic system services to rural areas without access to water treatment facilities if they fall within a town, city, or sewer district. In cities and townships around the Project, municipal water and sewer services are provided, including in Alexandria and St. Cloud. Most residences in the Project Study Area have private septic systems.

### **6.3.9.4 School Districts**

School Districts in the Project Study Area include Alexandria Public School District (Independent School District [ISD] 206), Osakis Public School District (ISD 213), Sauk Centre Public School District (ISD 743), Melrose Public School District (ISD 740), Albany Public School District (ISD 745), Rocori Public School District (ISD 750), St. Cloud Public School District (ISD 742), Becker Public School District (ISD 726), Annandale Public School District (ISD 876), and Monticello Public School District (ISD 882).

### **6.3.9.5 Utilities**

Within the Project Study Area, electric utilities are provided by Otter Tail, Alexandria Light and Power, Runestone Electric Association, Melrose Public Utilities, Xcel Energy, Stearns Cooperative Electric Association, Connexus Energy, and Wright Hennepin Electric Cooperative (Map 12). Four crude oil/petrol product pipelines are located within the Project Study Area. These include a crude oil line west of Rockville, two petrol product lines in Alexandria, and a petrol product pipeline that generally follows the Proposed Route from West Union to Clearwater, Minnesota. Five natural gas pipelines also intersect the Project Study Area. Two are in/near Alexandria, one is in St. Cloud, one near Sauk Centre, and one in Freeport, Minnesota. Each of these cross the Proposed Route.

### **6.3.9.6 Other Public Services**

Many other public services are provided in the Project Study Area, primarily within municipalities. Public works and utility departments design, construct, and maintain sanitary sewers, streets and sidewalks, parks, public landscaping, and water mains. Many public facilities exist within incorporated areas in the Project Study Area, including swimming pools, ice rinks, parks, and libraries.

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### 6.3.9.7 Impacts and Mitigation

Potential impacts to public utilities do not vary between Project Components and would be most likely to occur during ground disturbance activities for Project construction and maintenance. Use of heavy equipment during construction presents the potential for injuries such as falls, equipment-use related injuries, or electrocution. Operation of a transmission line presents a potential risk to public safety if the transmission line or structures are damaged by inclement weather or not operated in compliance with safety standards. Injuries resulting from construction or operation of a transmission line project would require use of local emergency services such as police, fire, ambulance, or hospitals; however, impacts to the availability of emergency services as a result of the Project are not anticipated.

The Applicants will utilize available resources and databases such as the Minnesota Department of Health (MDH) Minnesota Well Index and county ordinances regarding setbacks for septic systems along the Route, to understand where wells and private septic systems have the potential to be impacted by the Project so that they can be avoided.

Although unlikely, damage to existing pipelines could occur during grading activities. The Applicants will utilize the Gopher State One-Call system to locate and mark all existing underground utilities prior to construction to avoid impacts on pipelines. If crossing an underground utility is required, the Applicants will use BMPs to protect existing infrastructure while using heavy equipment during construction (e.g., construction matting).

The Applicants will also work with the appropriate authorities (including emergency services) and utility providers to determine where facilities exist and how to best ensure the proper safety precautions are being met. The Applicants may meet with residents and utility providers to prevent direct or indirect impacts to their services. Overall, public services and facilities are not anticipated to be impacted by the construction and operation of the Project.

Because no impacts to public services are anticipated, no mitigation measures are proposed.

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### **6.3.10 Radio, Television, Cellular Phone, and Global Positioning System**

Operation of transmission lines has the potential to interfere with reception of radio, television, cellular, and Global Positioning System (GPS) signals. Corona, as well as spark discharge, from transmission line conductors can generate electromagnetic “noise” at the same frequencies that some radio, television, cellular, and GPS signals are transmitted. Electromagnetic noise, which typically occurs from about 0.1 to 50 megahertz (MHz), can interfere with the reception of these signals, depending on the frequency and overall strength of the radio and television signal.

#### **6.3.10.1 Radio**

Amplitude modulation (AM) and frequency modulation (FM) radio broadcasting stations that operate or can be heard within the Project Study Area include KVSC (88.1 FM St. Cloud), KCFB (91.5 FM St. Cloud), KXRA-FM (92.3 FM Alexandria), KULO (94.3 FM Alexandria), WROJ-LP (96.1 FM St. Cloud), KVEX-LP (97.5 FM St. Cloud), WWJO (98.1 FM St. Cloud), KLKX-LP (98.5 FM Alexandria), KXRZ (99.3 FM Alexandria), KLZZ (103.7 FM Waite Park), KCLD-FM (104.7 FM St. Cloud), KZYS-LP (105.1 FM St. Cloud), KYES (1180 AM Rockville), WJON (1240 AM St. Cloud), KXSS (1390 AM Waite Park), KNSI (1450 AM St. Cloud), and KXRA (1490 AM Alexandria).

#### **6.3.10.2 Television**

There are more than 45 television channels broadcast in the Project Study Area. These channels would be received from cities including Alexandria, Melrose, Freeport, Waite Park, Rockville, St. Cloud, St. Augusta, Clearwater, Becker, and Monticello, Minnesota. Due to the Project’s proximity to the Twin Cities, television broadcasts from the Twin Cities Metro area are also received within the Project Study Area.

#### **6.3.10.3 Cellular Phone**

There are 10 cellular phone towers located within the Project Study Area (Map 12). Several cellular phone service providers operate in the vicinity of the Proposed Route, including Boost Mobile and Cricket Wireless. Larger carriers such as Verizon Wireless, T-Mobile, and AT&T, offer service in the area and have stores located in Alexandria and St. Cloud, Minnesota.

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#### **6.3.10.4 Global Positioning System**

GPS applications are important components of daily life, used in aviation, vehicle navigation, surveying, and agricultural activities. GPS equipment relies on satellites and typically mobile receiver equipment to provide locational information for navigation between endpoints, as well as geographic orientation for farm and other equipment. GPS equipment is likely used throughout the Project Study Area.

#### **6.3.10.5 Impacts and Mitigation**

No impacts on radio, television, cellular phones, or GPS units are expected from construction or operation of the Proposed Route or the substation options being considered for the Project.

AM radio frequencies are most affected by corona-generated noise; however, interference from a spark discharge source can be found and corrected. AM radio frequency interference typically occurs immediately under a transmission line and dissipates rapidly within the right-of-way to either side. If radio interference from transmission line corona does occur, satisfactory reception from AM radio stations previously providing good reception can be restored by the appropriate modification of (or addition to) the receiving antenna system.

Television broadcast frequencies are typically high enough that they are not affected by corona-generated noise. In particular, digital and satellite television transmissions are not affected by corona-generated noise because they are dependent on packets of binary information or transmitted in the Ku band of radio frequencies (12,000 to 18,000 MHz), respectively. Digital and satellite transmissions are more likely to be affected by multi-path reflections (shadowing) generated by nearby towers. In addition, line-of-sight interference from transmission line structures can affect satellite television transmissions. The use of shielded coaxial cable for cable television transmittals generally makes them insusceptible to interference from electromagnetic noise. Interference to digital and satellite signals as a result of the Project is not anticipated. If interference to these signals were to occur from multi-path reflections or line-of-sight interference, such interference can be mitigated by use of an outdoor antenna to improve digital signals or by moving the affected satellite antenna to a slightly different location.

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Cellular phone signals use an ultra-high frequency, generally around 900 MHz, which is significantly higher than the range of electromagnetic noise generated by transmission line conductors. GPS signals operate at a higher frequency as well, within the range of 1,225 to 1,575 MHz. Because both cellular phone signals and GPS operate at frequencies outside the range of electromagnetic noise generated by transmission line conductors, the risk of interference is negligible.

### **6.3.11 Transportation**

Transmission line projects have the potential to affect local transportation networks such as roadways, railroads, airports, and airstrips. Use of heavy equipment during construction may damage existing road surfaces, and local roadways could experience temporary road and/or lane closures during construction. Co-location of transmission lines with existing public roads could limit future roadway expansion or realignments and could interfere with routine maintenance of roadways. In addition, if a transmission line is sited too close to an operating railroad, it could interfere with safe operation of the railroad.

HVTLLs can present safety concerns to airports and aircraft. An airport, whether public or private, is defined by the state and the Federal Aviation Administration (FAA) as an area of land or water that is used or intended to be used for the landing and takeoff of aircraft, and includes its buildings and facilities, if any (14 C.F.R. Part 1, §1.1 and Minn. R. 8800.0100, subpart 3). The placement of transmission line structures or the stringing of conductors between structures could impact the safe operation of an airport or hinder the maneuverability of aircraft. If close enough, the presence of a steel transmission line structure or wiring could interfere with the operation of air navigation or weather systems. Conductors can also present a risk to pilots.

The physical dimensions of airport runways determine the class size of aircraft capable of landing at an airport. Furthermore, the aircraft design and propulsion system are determinants in an aircraft's ability to land at a given facility. For example, jet aircraft are heavier, typically require a greater runway length for take-off and landing and require more glide slope clearance distance compared to propeller-driven aircraft. Both factors are important in relation to structures such as transmission lines because they determine the take-off and landing glide slopes necessary for safe flight



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operation, which in turn determine the setback distance of structures such as transmission line structures.

The FAA and Minnesota Department of Transportation (MnDOT) have established development guidelines on the proximity of structures, including HVTLs, to public use airports and heliports. Federal Aviation Regulation (FAR) Part 77 establishes standards and notice requirements for reporting airspace obstructions for objects currently impacting or that could impact navigable airspace around aviation facilities. FAR Part 77 defines a series of imaginary surface zones surrounding airports that specify height restrictions for structures based on slope ratios. These imaginary surfaces include the primary surface, horizontal surface, conical surface, approach surface, precision instrument approach surface, and the transitional surface.

According to FAR Part 77, “an object will be considered an obstruction to a public airport (excluding seaplane bases and heliports) if it is of greater height” than any of the aforementioned imaginary surfaces. Each of these imaginary surfaces have corresponding slopes, based in part on the airports’ use designation, flight volumes, and plane size capabilities. All surfaces are measured at the mean sea-level elevation of the airport. If necessary or appropriate, Applicants will file the required notice with FAA pursuant to the requirements set forth by FAR Part 77, Subsection 13.

In addition to FAA regulations, the state of Minnesota establishes air navigation obstruction criteria under Minn. Stat. § 360.018 and Minn. R. 8800. These regulations are intended to control the type of development around airports to prevent incompatible land uses. The state regulations are similar to the FAA regulations as published in FAR Part 77. Runway Safety Zones A through C, which follow the runway approach zones and restrict specific types of development, are included as this part of these regulations. The most restrictive safety zones are A and B; Safety Zone A does not allow any buildings or temporary structures, places of public assembly or transmission lines; Safety Zone B does not allow places of public or semipublic assembly (i.e., churches, hospitals, or schools). Permitted land uses in both zones include agricultural uses, cemeteries, and parking lots. A complete description and copy of the Airport Zoning Standards can be found at <http://www.dot.state.mn.us/aero/avoffice/planning/zoning.html>.

Furthermore, certain objects such as steel pole transmission line structures have the potential to conflict with the operation of airport navigational aids and weather

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observation station facilities. Specifically, these facilities include Very High Frequency Omnidirectional Radio Range (VOR) air navigation systems and Automated Weather Observation Stations. FAA Order 6820.10 “VOR, VOR/DME, and VORTAC Siting Criteria,” specifies the distance setback requirements for trees, buildings, and metallic structures. Within this order, Chapter 4, Section 17(c)(3) identifies obstruction criteria for a VOR facility. Subsections D and E detail setback distances for transmission line structures. These regulations specify that overhead transmission line structures with conductors should be located beyond 1,200 feet of the VOR antenna to avoid communication interference.

Additionally, metallic structures are required to subtend vertical angles of 1.2 degrees or less, measured from the ground elevation of the VOR facility. Therefore, the new transmission line structures proposed for the Project that are 130 feet tall must be 6,206 feet away from a VOR air navigational station to avoid interference with the operation of the facility. Transmission structures 140 feet in height must be 6,683 feet away, and transmission structures 175 feet in height must be 8,354 feet away from a VOR.

Online research was completed to identify roadways, railroads, airports, and airstrips within the Project Study Area. The results of this review and a discussion of potential impacts to these features from construction and operation of the Project is presented below.

### **6.3.11.1 Roadways and Trails**

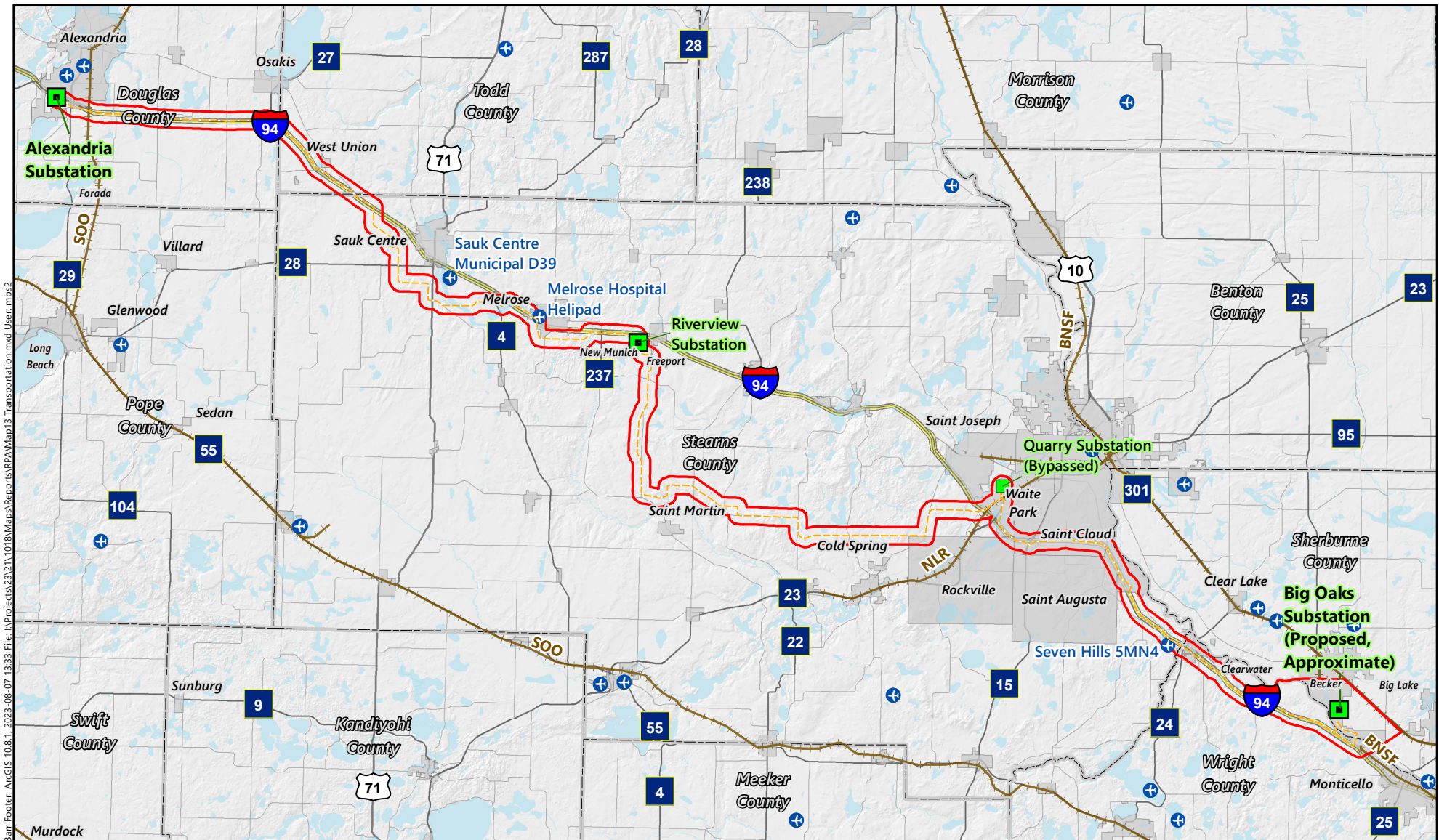
The Project crosses approximately 101 roads (Map 13). Of these, 41 represent interstate, state, or county highways. The remaining 60 roads are owned and operated at the township or municipal level. Near Alexandria, the Proposed Route parallels MN 27 and I-94. The Proposed Route also parallels I-94 outside of Melrose. South of Freeport, the Proposed Route parallels County State-Aid Highway (CSAH) 11. The Proposed Route again parallels I-94 in Waite Park, St. Cloud, and Clearwater. Finally, the Proposed Route parallels CSAH 75 in Clearwater and south of Becker. Major roads crossed by the Proposed Route include Minnesota Trunk Highway (MN) 29, CSAH 23, CSAH 17, CSAH 2, 137<sup>th</sup> Ave in West Union, MN 28, MN 4, Overton Road in Melrose, MN 237, CSAH 30, CSAH 10, CSAH 41, CSAH 50, CSAH 2, CSAH 138, MN 23, CSAH 6, MN 15, CSAH 74, CSAH 136, Roosevelt Road in St. Cloud, CSAH 75, and MN 24.

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With the exception of I-94, MN 23, and MN 29, traffic volumes are relatively low on roads crossed by or running parallel to the Proposed Route where traffic data is available (Table 6.3-9). Annual Average Daily Traffic rates, as available through the MnDOT (reference (14)), are highest on I-94 as measured near Alexandria, Melrose, and St. Cloud. They are lowest on the CSAHs in and around the Project.

**Table 6.3-9 Annual Average Daily Traffic on Roads Crossed by or Co-located with the Proposed Route**

Road	City	County	Annual Average Daily Traffic (AADT)	Traffic Count Year	Co-located Distance (feet)	Notes
CSAH 11	S of Freeport	Stearns	1,000	2017	24,450	N of CSAH 30
CSAH 2	N of Rockville	Stearns	3,850	2017	7,150	S of CR 139 (270 <sup>th</sup> Street)
CSAH 23	Alexandria	Douglas	1,250	2018	160	N of US 52
CSAH 30	S of Freeport	Stearns	355	2017	150	E of CSAH 11
CSAH 50	W of Rockville	Stearns	1,700	2017	170	NW of CR 160
CSAH 75	Becker	Wright	1,600	2016	18,900	NW of 120 <sup>th</sup> St NE
CSAH 75	St. Cloud	Stearns	3260	2021	2,300	SE of MSAS 161
I-94	Alexandria	Douglas	21,093	2021	56,950	AADT impacted by COVID
I-94	Melrose	Stearns	28,500	2017	9,900	SE of MN 4
I-94	St. Cloud	Stearns	38,064	2021	87,400	AADT impacted by COVID
I-94	St. Cloud	Stearns	42,000	2017	87,400	E of MN 15
MN 23	Waite Park	Stearns	17,000	2019	2,300	NE of I-94
MN 29	Alexandria	Douglas	10,624	2021	180	N of CR 87
MN 27	S of Osakis	Douglas	3,500	2018	63,000	N of I-94
MN 4	Melrose	Stearns	830	2017	165	S of I-94

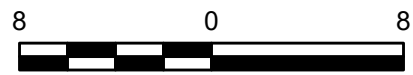


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-  Project Study Area
-  Anticipated Alignment
-  Project Substation
-  Bypassed Substation
-  Municipal Boundary
-  County Boundary
-  Airport/Heliport (MNDOT, FAA)
-  Railroad
-  Interstate Highway
-  US Highway
-  State Highway
-  County State-Aid Highway



Miles



**Map 13**

**TRANSPORTATION**  
**ALEXANDRIA TO BIG OAKS**  
 MISO LRTP-2 Route Permit Application

Data Sources: Minnesota Dept. of Transportation, Federal Aviation Administration

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Review of the Minnesota State Transportation Improvement Program (reference (15)) as well as the St. Cloud Area Planning Organization Transportation Improvement Program (reference (16)) for 2023-2026 indicates there is one funded roadway project within the Proposed Route. This improvement project consists of extending Beaver Island Trail from the St. Cloud city limits to Stearns County Road 143 just west of Clearwater and is funded for construction in 2023. A portion of the trail will be located next to CSAH 75, and the Proposed Route will cross the proposed trail. However, in this area the Project consists of stringing a second 345 kV circuit on existing transmission structures so these existing structures would already be considered in the planning for this improvement project.

### **6.3.11.2 Railroads**

The Proposed Route crosses two active rail lines, the SOO Line Railroad (SOO) that runs through Alexandria from West Glenwood to Thief River Falls, and a Northern Lines Railway (NLR) line that runs from Cold Spring to St. Cloud (Map 13). Big Oaks Substation Siting Area includes a portion of a BNSF Railway line related to the Monticello Nuclear Generating Plant in Becker.

### **6.3.11.3 Airports and Airstrips**

There are no operating public-use airports or heliports in the Project Study Area. There is one private-use airport and one private heliport within the Project Study Area (Map 13). Both airports are located along the existing infrastructure. The Seven Hills Airport (5MN4) occupies eight acres west of Clearwater, Minnesota and has one runway. The Seven Hills Airport is approximately 0.3 miles south of existing infrastructure permanent right-of-way. Seven Hills Airport is considered a personal-use airport under state law. Melrose Hospital, located in Melrose, has a helipad for their use in medical emergencies. The Melrose Hospital heliport is approximately 0.2 miles north of the existing infrastructure permanent right-of-way. The nearest public airport is Chandler Field, located approximately 1.06 miles north of the Proposed Route in Alexandria. There are no known private landing strips in the Project Study Area. There are no airports located within the vicinity of the Alexandria Substation Tap, Riverview Substation Bypass, Quarry Substation Bypass, or the Mississippi River crossing.

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Aerial crop dusting can be an important part of agricultural activities within the Project Study Area and various fields crossed by the Application segments may be subject to these activities.

#### **6.3.11.4 Impacts and Mitigation**

Construction activities are anticipated to be similar across Project Components and are not expected to permanently or significantly impact transportation in the Project Study Area.

##### ***6.3.11.4.1 Roadways and Trails***

Construction could create a minor increase in traffic from construction vehicles and material/equipment delivery along roadways; however, this increase would be temporary and traffic volumes would return to normal conditions after construction activities are completed. Line construction and maintenance at crossing locations could also cause temporary delays if maintenance vehicles are present. To minimize overall impacts, the Applicants will limit vehicle traffic to the Project right-of-way and existing access points to the extent feasible.

Temporary road or lane closures may occur during the construction process to ensure safety of the construction crews and the traveling public. While the line is being constructed, the electrical conductors will be strung on support structures using a pulley system or a tensioner mounted on the back of a digger/derrick truck. At road crossings, roads or lands may be temporarily closed for safety purposes when stringing electrical conductors between support structures. These closures could range in duration from minutes to hours based on the width of the road and the complexity of the crossing. Temporary closings are not expected to have significant impacts on transportation in the area because of the generally rural nature of the area and subsequent low traffic levels on most roads. Once an aerial crossing is completed, the road(s) will be reopened to allow normal traffic flow.

The Proposed Route parallels I-94 in several locations, including near Alexandria, Melrose, and between Waite Park and Becker, Minnesota. Any occupation of state highway right-of-way requires a Utility Permit from MnDOT, per Minn. R. 8810.3100 to 3600. MnDOT's Accommodation Policy provides requirements and guidelines for the installation of utility facilities in and along MnDOT rights-of-way, which the Project was developed to meet. The Applicants have begun coordinating with

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MnDOT and will continue to work with MnDOT throughout the Route Permit process to ensure that the alignment meets MnDOT guidelines.

After the completion of construction, the Applicants will confirm that township, city, and county roads used for purposes of access during construction are returned to either the condition they were in or better before right-of-way clearing began. The Applicants will meet with MnDOT, township road supervisors, city road personnel, and/or county highway departments as necessary to address any issues that arise during construction with roadways, to ensure the roads are adequately restored after construction is complete.

Although there is one roadway improvement project, a new trail, planned within an area that will be crossed by the Proposed Route, this portion of the Project consists of double-circuiting new line on existing transmission structures. Additionally, the new trail is planned to be constructed in 2023 and will be finished prior to construction of the Project.

#### ***6.3.11.4.2 Railroads***

Impacts to railroads are not anticipated as a result of construction and operation of the Project. The Applicants will obtain all necessary railroad crossing permits from SOO, NLR, and BNSF for crossing their rail lines. The Applicants will also coordinate with the appropriate railroad personnel during construction to schedule electrical conductor stringing over the rail line for the safety of construction personnel and rail line operations.

#### ***6.3.11.4.3 Airports and Airstrips***

No impacts to airports or airstrips, including the Seven Hills Airport, are anticipated as a result of the Project. The Applicants will coordinate with the FAA and MnDOT to address any Project-related concerns for aviation activities as the Project progresses, if necessary.

Crop-dusting operations servicing fields crossed by existing transmission lines will have already accommodated the presence of a transmission line. The Applicants will mail notice of the Application filing to aerial applicators registered with the Minnesota Agricultural Aircraft Association in the Project Study Area.



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## 6.4 Land-Based Economies

This section summarizes the potential impacts the Project would have on naturally occurring resources within the Project Study Area. Construction and operation of the Project has the potential to affect land-based economies in Douglas, Todd, Stearns, Sherburne, and Wright Counties through a physical, long-term presence which could prevent or otherwise limit use of the land for other purposes. The following subsections present an overview of agricultural, forestry, tourism, and mining operations in the Project Study Area and discusses how the Proposed Route may affect these industries and what measures the Applicants will implement to mitigate Project effects.

### 6.4.1 Agriculture

As described in Section 6.2, the predominant land cover type in the Proposed Route is cultivated cropland, and 25 percent of the soils in the Proposed Route are defined as prime farmland (Section 6.6.4). In 2017, the average farm size in the counties crossed by the Proposed Route was 217.6 acres, which is smaller than the 371-acre average for all of Minnesota farms (Table 6.4-1). Crop sales account for a larger percentage of total market value of agricultural products compared to livestock sales in Douglas, Sherburne, and Wright Counties. In Todd and Stearns Counties, livestock sales account for the majority of total market value of agricultural products compared to crop sales (reference (17)).

**Table 6.4-1 Agricultural Statistics of Counties Crossed by the Proposed Route**

Location	Number of Farms	Average Farm Size (acres)	Land in Farms (acres)	Crop Sales	Livestock Sales
Minnesota	68,822	371	25.5 million acres (45.8% of state)	\$10 billion (55.4%)	\$8 billion (44.6%)
Douglas	960	274	263,265 (65% of county)	\$74 Million (73.9%)	\$26 million (26.1%)
Todd	1,604	208	333,408 (55% of county)	\$56 million (31.6%)	\$122 million (68.4%)
Stearns	2,951	221	650,821 (73% of county)	\$179 million (23.9%)	\$568 million (76.1%)
Sherburne	501	205	102,544 (37% of county)	\$75 million (83.9%)	\$14 million (16.1%)
Wright	1,338	180	240,651 (57% of county)	\$112 million (57.5%)	\$83 million (42.5%)

Source: reference (17)

Prime Farmland, Prime Farmland if Drained, and Farmland of Statewide Importance are described in Section 6.6.4.

The Conservation Reserve Enhancement Program (CREP) is a voluntary program that pays farmers an annual fee in exchange for taking environmentally sensitive land out of agricultural production to improve environmental health and quality (reference (18)). No agricultural areas along the Proposed Route are part of the CREP.

#### 6.4.1.1 Impacts and Mitigation

Temporary construction impacts on agricultural land are consistent across Project Components and could include soil compaction and rutting, accelerated soil erosion, crop disturbance, disruption to normal farming activities, and introduction of noxious weeds to soil surface. Construction would occur throughout the year, with an effort made to schedule construction during frozen ground conditions. During the winter, impacts are not anticipated to affect agricultural activities as crop fields are unplanted and the ground is frozen. The Applicants would implement measures to reduce compaction, soil erosion, and sedimentation and would compensate producers for crop damage. As stated in Section 5.3, farmers would be compensated for crops damaged during the construction process and future year crop loss due to soil compaction. Construction, restoration, and maintenance activities would follow a U.S.

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Department of Agriculture (USDA) approved AIMP. A draft AIMP and a draft Vegetation Management Plan (VMP) are included in Appendix F and Appendix G. Both crop and livestock activities would be able to continue around Project facilities after construction.

While anticipated alignments were developed with attention to minimizing farmland impacts, permanent impacts to farmland would occur where structures are placed in cultivated fields. It should be noted that a majority of the structures for the Project are already in place and the stringing of the second line will not have additional impacts on agriculture. Structures in fields act as barriers and can hinder efficient operation of large machinery. Both crop and livestock activities would be able to continue around Project facilities after construction, but at an increased difficulty to the farmer. Structures would be placed approximately 1,000 feet apart to minimize the number of structures on farmland.

Structure configuration can influence the degree of permanent impacts. Where a transmission line follows a road, structures are placed approximately 10 feet into the field from the road right-of-way and are therefore counted as impacting farmland. Where routes follow property lines, a monopole would be constructed on the property line and therefore is not counted as an impact.

Table 6.4-2 summarizes the amount of cropland that occurs in the right-of-way. The cropland within the right-of-way has the potential of being impacted by the construction and operation of new structures. The number of new structures that would be placed in fields varies depending on substation locations.

**Table 6.4-2 Summary of Impacts of Proposed Route and Proposed Alignments on Cropland**

Resource	Alexandria Tap	Existing Transmission Line Second Circuit	Riverview Bypass	Quarry Substation Bypass	Mississippi River Western Crossing Option	Mississippi River Eastern Crossing Option	Big Oaks Substation	Route Width
Route Length (miles)	0.21	103.82	0.45	0.16	0.70	3.43	N/A	N/A
Right-of-way (acres)	3.96	1887.72	5.88	2.88	12.70	62.30	249.81	3824.71
Cropland in right-of-way (acres)	4.31	915.93	4.42	0.35	0	0.52	176.85	1348.94
New Structures in Fields	1	33	2	0	0	1	N/A	N/A

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## **6.4.2 Forestry**

The Proposed Route is dominated by cultivated cropland, with wooded lands including deciduous forest, evergreen forest, mixed forest, and woody wetland making up 854.4 acres or approximately 22 percent of the Proposed Route. There are no commercial forest operations identified within the Proposed Route. Specific land cover types are further detailed in Map 7. According to the MDNR forest inventory, there are no forest inventory areas within the Proposed Route (reference (19)). Impacts on forest resources will occur at locations where trees need to be cleared within the right-of-way. For potential impacts to vegetation, see Section 6.6.5.

### **6.4.2.1 Impacts and Mitigation**

Since there are no known commercial forestry operations in the vicinity of the Proposed Route, there are no anticipated impacts to commercial forestry operations with the construction and operation of the Project. Impacts on wooded lands have been reduced by minimizing the tree clearing to the extent feasible. As a result, no mitigative measures are proposed.

## **6.4.3 Tourism**

Tourism in the vicinity of the Proposed Route centers around outdoor recreational activities described in Section 6.3.8. Residents and tourists enjoy recreational areas such as state and county parks, WMAs, WPAs, state water trails, and snowmobile trails. Local economies benefit from tourists who travel from outside the region to enjoy these recreational amenities.

### **6.4.3.1 Impacts and Mitigation**

Construction of the Project is not anticipated to affect available tourism opportunities. Impacts to tourism would be similar to those related to recreation noted in Section 6.3.8 and mostly be related to Project construction, which will be temporary and isolated to specific areas throughout the Proposed Route. To the extent practicable, the Applicants would plan the construction timeline for winter, to avoid the higher volume recreation seasons at these public lands.

## **6.4.4 Mining**

Mining does not comprise a major industry in the Project Study Area and is only identified in one county within the Proposed Route. Stearns County is mapped as

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having crushed stone and granite mines (reference (20)). Sand and gravel are primarily mined for making concrete for highways, roads, bridges, and buildings.

There are no active aggregate pits within the Proposed Route. There is one reclaimed aggregate pit located within the Proposed Route (Map 11). Data indicates one small, potentially active site within 500 feet of the alignment that is outside of Clearwater, Minnesota; however, based on review of recent aerial photography, this site does not appear to be an aggregate source.

As shown on Map 11, there are ten active gravel pits within the Project Study Area that are outside of the Proposed Route.

#### **6.4.4.1 Impacts and Mitigation**

Because no active mines are within the Proposed Route, construction and operation of the Project Components would have no impacts and mitigative measures are not proposed. Prior aggregate mining within the Project Study Area suggests some constructability considerations that the Applicants would need to plan for in Project design.

### **6.5 Archaeological and Historic Resources**

Cultural resources, including archaeological sites and historic architectural resources, provide important information about the history of human occupation and alteration of the landscape over time. Archaeological resources include any location that contains material remains of past human life or activities, or other places and/or items that possess cultural importance to individuals or a group. Historic architectural resources include standing structures, such as buildings and bridges, as well as historic districts and landscapes.

Background research on known cultural resources was conducted in March 2023 by requesting information from the Minnesota State Historic Preservation Office (SHPO) as well as reviewing the Minnesota Office of the State Archaeologist Portal for archaeological sites. Data regarding known cultural resources identified through previous professional cultural resources surveys and reported archaeological sites and historic architectural resources were reviewed. This information was gathered for the Project Study Area, and then refined to determine known archaeological and historic architectural resources within the Proposed Route for the Project.

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The Proposed Route and associated substation options are located within the Central Lakes Deciduous Archaeological Region (Region 4), which covers most of central Minnesota (reference (21)).

Archaeological sites in the Central Lakes Deciduous Region tend to be associated with lakes and major rivers throughout time. Precontact sites, including small campsites, specialized activity sites, and larger village sites are found along major rivers and larger lakes (reference (22)). At contact with Euro-Americans, Santee Dakota groups occupied the eastern part of the Central Lakes Deciduous Region and other Dakota groups such as the Yankton and Yanktonai controlled the western part. The Ojibwe began to move into the northern part of the region in the mid-1700s and controlled this area by the early 1800s (reference (22)). Historic Native American villages were generally located near wild rice beds. By the late 1600s, French traders had entered the region and established posts on some major lakes and rivers, a pattern generally followed by later Euro-American settlers (reference (22)).

### **6.5.1 Previously Recorded Cultural Resources**

Within the Project Study Area, 79 historic architectural resources and 13 archaeological resources have been documented (Appendix H). The historic architectural resources include houses, farmsteads, bridges, and churches. The archaeological sites include precontact artifact scatters and isolated finds as well as one structural ruin and one historic artifact scatter.

Of these, only two archaeological sites and one historic architectural resource are located within the Proposed Route. The previously recorded archaeological sites, 21SH0068 and 21SH0169, both consist of precontact lithic isolate sites. Site 21SH0068 is within the Big Oaks Substation Siting Area while site 21SH0169 is northwest of Clearwater, Minnesota within the existing infrastructure right-of-way. Neither site is eligible for the National Register of Historic Places; therefore, construction activities would not need to be altered to avoid these sites.

The previously recorded historic architectural resource consists of the St. Cloud, Mankato & Austin Railroad (SN-SJT-003), which is within the Proposed Route near the Quarry Substation Bypass. The St. Cloud, Mankato & Austin Railroad is considered eligible for the National Register of Historic Places.

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A Phase Ia cultural resources literature review report is currently being prepared for the Project and will be submitted to the Minnesota SHPO for their review and comment concurrent to this Application.

### **6.5.1.1 Impacts and Mitigation**

Impacts to cultural resources within the Proposed Route may occur where ground disturbance is necessary for Project construction and maintenance.

#### ***6.5.1.1.1 Existing Transmission Line Second Circuit***

Because the Project consists largely of stringing a second circuit onto existing infrastructure, ground disturbance related to this portion of the Proposed Route will be minimal; therefore, the majority of this portion of the Project will not result in impacts to cultural resources.

Impacts to cultural resources would have the potential to occur in areas where the new structures are proposed. Each new structure foundation will result in approximately 115 square feet of disturbance within the existing infrastructure right-of-way. Archaeological resources are most likely be located on or near elevated landforms near permanent water sources. Historic architectural resources would most likely be located near existing municipalities, farmsteads, and infrastructure such as roads and bridges.

In addition, the Proposed Route crosses resource SN-SJT-003, the St. Cloud, Mankato & Austin Railroad, near the Quarry Substation Bypass. This resource is eligible for the National Register of Historic Places. However, as the existing infrastructure already crosses this resource in this area and no new construction is anticipated in its vicinity, the Project is not anticipated to adversely affect this resource.

The Applicants are planning to conduct field surveys in areas of new ground disturbance that could contain previously unrecorded cultural resources. If archaeological or historic architectural resources are identified as a result of field surveys, the Applicants will work with the Minnesota SHPO to identify measures to avoid, minimize or mitigate effects to these resources if any are determined listed or eligible for listing in the National Register of Historic Places.



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If archaeological resources are discovered during construction, ground-disturbing activity will be halted in that location, the Minnesota SHPO will be notified, and appropriate measures will be developed in conjunction with the Minnesota SHPO to assess and protect the resource. Additionally, if unanticipated human remains or burial resources are discovered during construction, they will be reported to the State Archaeologist per Minn. Stat. § 307.08 and construction will cease in that area until adequate mitigation measures have been developed between the Applicants and the State Archaeologist.

#### ***6.5.1.1.2 Alexandria Substation Tap***

As the Alexandria Substation Tap would include the construction of one new structure in what is currently an agricultural field, this portion of the Project has the potential to impact cultural resources, should any be present. The area in which Alexandria Substation is proposed to be expanded appears to consist of previously disturbed land adjacent to the existing substation. As a result, this area has low potential to impact cultural resources. The need for field survey, the Minnesota SHPO coordination, and methodology to be followed in the event of an unanticipated discovery would apply as described in Section 6.5.1.1.1.

#### ***6.5.1.1.3 Riverview Substation Bypass***

The Riverview Substation Bypass would include the construction of five new structures and an expansion of the substation in what are currently agricultural fields. As a result, this portion of the Project has the potential to impact cultural resources, should any be present. The need for field survey, the Minnesota SHPO coordination, and methodology to be followed in the event of an unanticipated discovery would apply as described in Section 6.5.1.1.1.

#### ***6.5.1.1.4 Quarry Substation Bypass***

As the Quarry Substation Bypass would include the construction of one new structure in what is currently a wooded tree line, this portion of the Project has the potential to impact cultural resources, should any be present. The need for field survey, the Minnesota SHPO coordination, and methodology to be followed in the event of an unanticipated discovery would apply as described in Section 6.5.1.1.1.

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#### **6.5.1.1.5 *Big Oaks Substation***

The Big Oaks Substation will result in approximately 10 acres of new ground disturbance within what is currently agricultural field or shrub/scrub vegetation. In addition, one previously recorded archaeological site (21SH0068) is within the Big Oaks Substation Siting Area, suggesting increased potential for additional, undocumented cultural resources in the area. The need for field survey, the Minnesota SHPO coordination, and methodology to be followed in the event of an unanticipated discovery would apply as described in Section 6.5.1.1.1.

#### **6.5.1.1.6 *Mississippi River Crossing Options***

Two options are being considered for a new crossing over the Mississippi River to the new Big Oaks Substation. The Western Crossing Option would be approximately 0.7 miles long and result in the construction of five new structures in what appears to be previously undisturbed land. The Eastern Crossing Option would be approximately 2.1 miles long and require the construction of 15 new structures in what appears to be previously undisturbed land. As a result, each of the options being considered has the potential to result in impacts to cultural resources, should any be present within the option that is ultimately selected.

The need for field survey, the Minnesota SHPO coordination, and methodology to be followed in the event of an unanticipated discovery would apply as described in Section 6.5.1.1.1.

### **6.6 Natural Environment**

Transmission lines have the potential to impact natural resources through temporary, construction-related impacts and long-term impacts to air quality, geology and groundwater, soils, water resources, flora, and fauna.

#### **6.6.1 Air Quality**

Section 109(b) of the Clean Air Act (CAA) requires that the EPA establish National Ambient Air Quality Standards (NAAQS) “requisite to protect” public health and welfare (40 Code of Federal Regulations [CFR] Part 50). The CAA identifies two classes of NAAQS: primary standards, which are limits set to protect the public health of the most sensitive populations, such as asthmatics, children and the elderly; and secondary standards which are limits set to protect public welfare, such as protection against visibility impairment or damage to vegetation, wildlife and structures.

Compliance with the national and state air quality standards in the state of Minnesota is assessed at the county level. The EPA designates all of the counties within the Proposed Route, including Douglas, Todd, Stearns, Wright, and Sherburne counties, to be in attainment for all NAAQS (reference (23)).

The MPCA published a map of outdoor air quality data using data from the 2017 air emissions inventory. The map groups Minnesota counties by evaluation of air pollution score, fine particles ranking, top four air pollutants, and pollutants above health benchmark. Excepting the St. Cloud area of Stearns County and the Monticello area of Wright County, the air quality for all counties impacted by the Project is in the lowest risk category of air pollution score, 0 - 1.05, and have no pollutants reported above health benchmark. The Monticello area of Wright County is in the next lowest category of air pollution score, >1.05 – 2, and has no pollutants reported above health benchmark. St. Cloud, MN is a larger metropolitan area that contains more air quality sites than the other impacted regions of this project (reference (10)). Resultingly, the surrounding areas have higher-risk air quality metrics. Since the St. Cloud area of Stearns County is the primary area of concern regarding air quality, a further evaluation of available air quality data in that region follows.

In Minnesota, air quality is monitored using stations located throughout the state. The MPCA uses data from these monitoring stations to calculate the Air Quality Index (AQI) on an hourly basis for ozone, particulate matter 2.5 microns or less in diameter (PM<sub>2.5</sub>), sulfur dioxide, nitrogen dioxide, and carbon monoxide (reference (24)). Each day is categorized based on the pollutant with the highest AQI value for a particular hour. The monitoring station nearest to the project location is in St. Cloud, MN. This station monitors for ozone and PM<sub>2.5</sub>. The most recent five years of available AQI data for St. Cloud is provided in Table 6.6-1.

**Table 6.6-1 Air Quality Index Category by Day (St. Cloud, Minnesota)**

Year	Good	Moderate	Unhealthy for Sensitive Groups	Unhealthy	Very Unhealthy
2021	290	66	3	2	0
2020	336	30	0	0	0
2019	313	31	0	0	0
2018	310	54	1	0	0
2017	329	36	0	0	0

Source: reference (24)

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Air quality in St. Cloud has been considered good for the majority of the past five years of reported data. Only six days across all five years have been in an unhealthy category, and zero days have been in the very unhealthy category.

### **6.6.1.1 Impacts and Mitigation**

Potential impacts to air quality and associated mitigation measures are discussed collectively here across all Project Components. Construction of the Project will result in intermittent and temporary emissions of criteria pollutants. These emissions generally include dust generated from soil disturbing activities, such as earthmoving and wind erosion associated with right-of-way clearing and construction, combustion emissions from construction machinery engines, and indirect emissions attributable to construction workers commuting to and from work sites during construction. These emissions would be dependent upon weather conditions, the amount of equipment at any specific location, and the period of operation required for construction at that location. Air pollutants from the construction equipment will be limited to the immediate vicinity of the construction area and will be temporary. Therefore, it is not anticipated that construction activities will independently cause or significantly contribute to an emission level that alters the air pollution score or attainment status for any of the NAAQS.

The amount of dust generated would be a function of construction activity, soil type, soil moisture content, wind speed, precipitation, vehicle traffic, vehicle types, and road surface characteristics. Emissions would be greater during dry periods and in areas where fine-textured soils are subject to surface activity. If construction activities generate problematic dust levels, the Applicants may employ construction-related practices to control fugitive dust such as application of water or other commercially available dust control agents on unpaved areas subject to frequent vehicle traffic, reducing the speed of vehicular traffic on unpaved roads, and covering open-bodied haul trucks.

During operation of the line, air emissions would be minimal. A small amount of ozone is created due to corona from the operation of transmission lines (reference (25)). A corona signifies a loss of electricity, so the Applicants have engineered the transmission lines to limit corona. The production rate of ozone due to corona discharges decreases with humidity and less significantly with temperature. Rain causes an increase in ozone production, but also accelerates the decay of ozone.

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Ozone production by HVTLs is not detectable during fair weather above ambient conditions. Ozone production under wet-weather conditions is detectable with special efforts but is still considered insignificant.

Design of the transmission line also influences ozone production rate. The production rate decreases significantly as the conductor diameter increases and is greatly reduced for bundled conductors over single conductors. The production rate of ozone increases with applied voltage. The emission of ozone from the operation of a transmission line of the voltages proposed for the Project is not anticipated to have a significant impact on the environment.

## **6.6.2 Greenhouse Gas Emissions and Climate Change**

### **6.6.2.1 Greenhouse Gas Emissions**

Some of the most abundant gases in the atmosphere are known as greenhouse gases (GHGs). The most common GHGs include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), and fluorinated gases. The concentration of GHGs in the atmosphere has a direct relationship to global warming or climate change. GHGs are known to trap heat in Earth's atmosphere by absorbing light energy and emitting a portion of released energy back towards Earth (reference (26)). Trapped heat in the atmosphere creates a warming effect known as the Greenhouse Gas effect, in which the temperatures of Earth's atmosphere rise as more GHGs are added to the atmosphere. This drives further changes to the climate affecting precipitation, flooding, and storms (reference (27)).

The amount of energy absorbed by 1 ton of a GHG over a given period is known as the Global Warming Potential (GWP). The order of common GHGs by GWP from lowest to highest is CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and fluorinated gases (reference (26)). For ease of comparison, GWPs are calculated relative to the energy absorption of 1 ton of CO<sub>2</sub>. Emission of a given GHG is normalized using the GWP; the resultant value is referred to as carbon dioxide equivalent (CO<sub>2</sub>e).

During construction and operation of the Project, small amounts of GHGs will be generated. GHG emissions from this Project will be largely from the combustion of fossil fuels such as gasoline and diesel. GHGs associated with fuel combustion are CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O. The largest source of GHG emissions from the project will be from the temporary combustion of fossil fuels in construction equipment and heavy

machinery. There will be two construction efforts for the Project: construction of the Big Oaks Substation and Mississippi River Crossing (Greenfield Construction) and installation of the second circuit (Install Second Circuit). Greenfield construction will take place over the course of 8 weeks and Second Circuit Install will take place over 44 weeks. Both construction efforts will involve the use of various mobile combustion sources. Construction emissions will be localized to the construction area and are not anticipated to result in long-term impacts. GHG emissions resulting from Greenfield Construction are estimated to be 398 tons of CO<sub>2</sub>e. GHG emissions from Install Second Circuit are estimated to be 1,998 tons of CO<sub>2</sub>e. Total GHG emissions from the construction of this project are estimated to be approximately 2,396 tons of CO<sub>2</sub>e. Table 6.6-2 provides a preliminary estimate of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O emissions. CO<sub>2</sub> and CH<sub>4</sub> emissions were calculated using factors for diesel combustion from the South Coast Air Quality Management District (SCAQMD) (reference (28)). N<sub>2</sub>O emissions were estimated using the EPA Center for Corporate Climate Leadership (CCCL) factor for construction/mining equipment (reference (29)). Detailed calculations are in Appendix I.

**Table 6.6-2 Greenhouse Gas Emissions from Project Construction**

Emission Source	CO <sub>2</sub> (metric tons)	CH <sub>4</sub> (metric tons)	N <sub>2</sub> O (metric tons)	CO <sub>2</sub> e <sup>[1]</sup> (metric tons)
Greenfield	391.53	0.02	0.02	397.67
Install Second Circuit	1,967.71	0.08	0.09	1,997.84
<b>Total</b>	<b>2,359.24</b>	<b>0.10</b>	<b>0.11</b>	<b>2,395.50</b>

[1] CO<sub>2</sub>e calculated by equation A-1 of 40 CFR, Part 98.2, which states the total CO<sub>2</sub>e is equal to the GWP for each pollutant multiplied by the potential pollutant emissions. The GWP for CO<sub>2</sub> is 1, CH<sub>4</sub> is 25, and N<sub>2</sub>O is 298.

Most of the GHGs generated from this project will cease after construction is complete. Emissions resulting from routine operation and maintenance of the transmission line and substation will largely be from the combustion of gasoline or diesel in maintenance equipment and vehicle use. Routine maintenance is expected to occur on an annual basis and involve the use of diesel fueled, mobile combustion sources. Total annual GHG emissions expected from the routine operation and maintenance of this project are estimated to be 14 tons of CO<sub>2</sub>e per year. Table 6.6-3 provides a preliminary estimate of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O emissions. Emissions were calculated using factors from SCAQMD and the EPA CCCL (reference (29)). Detailed calculations are in Appendix I.

**Table 6.6-3 Greenhouse Gas Emissions from Operation and Maintenance**

Emission Source	CO <sub>2</sub> (metric tons/year)	CH <sub>4</sub> (metric tons/year)	N <sub>2</sub> O (metric tons/year)	CO <sub>2</sub> e <sup>[1]</sup> (metric tons/year)
Operation and Maintenance Activities	13.57	6.20E-04	7.08E-04	13.79

[1] CO<sub>2</sub>e calculated by equation A-1 of 40 CFR, Part 98.2, which states the total CO<sub>2</sub>e is equal to the GWP for each pollutant multiplied by the potential pollutant emissions. The GWP for CO<sub>2</sub> is 1, CH<sub>4</sub> is 25, and N<sub>2</sub>O is 298.

Potential emission of the fluorinated gas, sulfur hexafluoride (SF<sub>6</sub>), is also associated with this project. SF<sub>6</sub> is a powerful GHG that is used in high-voltage circuit breakers in transmission systems. The use of such a substance is extremely common due to its stability and effectiveness at insulating electrical equipment. However, SF<sub>6</sub> emissions from high-voltage circuit breakers are minimal and not expected routinely since they are largely attributed to faulty equipment and leakage.

### 6.6.2.2 Climate Change

The MDNR’s Minnesota Climate Explorer tool provides a summary of projected climate conditions for the state of Minnesota. For the counties where the Project is anticipated to occur (Douglas, Todd, Stearns, Sherburne, and Wright), average and maximum air temperature is anticipated to increase by approximately 4 degrees Fahrenheit (°F) by mid-21<sup>st</sup> century under both a high and low warming scenario, and by 6°F and 10°F by the end of the 21<sup>st</sup> century under low and high warming scenarios, respectively. Minimum air temperatures are projected to increase by approximately 3°F by mid-century under both scenarios and 6°F and 11°F for end of century under low and high warming scenarios, respectively (reference (30)).

Total precipitation is anticipated to increase by 0.7 inches (in) by mid-century under both the low and high warming scenarios. Furthermore, for the end of the 21<sup>st</sup> century, total precipitation is projected to increase by 1.6in and 3.9in for the low and high warming scenarios, respectively (reference (30)). The EPA Climate Resilience Evaluation and Awareness Tool anticipates an increase in 100-year storm intensity of 2.6 to 14 percent in 2035 and 5 to 27 percent in 2060 for the Project area (reference (31)). The EPA Streamflow Projections Map anticipates a change in average streamflow of the Mississippi River in Clearwater, MN by a ratio of 1.15 (90th percentile) under wetter projections and a ratio of 0.79 (10th percentile) under drier

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projections in 2071 to 2100 (RCP 8.5) compared to baseline historical flow (1976 to 2005) (reference (32)).

### **6.6.2.3 Impacts and Mitigation**

The GHG emissions generated during construction and routine operation or maintenance activities will be minimal and have little impact on the atmospheric GHG emissions budget. Emissions from the use of high-voltage circuit breakers cannot be reliably quantified due to the lack of published emission factors. SF<sub>6</sub> is a highly potent GHG due to its warming properties and residence time in the atmosphere. For this reason, equipment containing SF<sub>6</sub> is designed to avoid atmospheric emissions of SF<sub>6</sub>. Performing routine inspections and preventative maintenance as well as following manufacturer specifications for replacing SF<sub>6</sub> containing equipment can mitigate the risk of unexpected emissions associated with aging equipment.

The Applicants also analyzed the carbon reduction benefits of the Projects. MISO's analysis demonstrated the implementation of the LRTP Tranche 1 Portfolio is estimated to reduce carbon emissions by 399 million metric tons over 20 years and 677 million metric tons over 40 years of LRTP Tranche 1 project life. For LRTP2, Xcel Energy estimated that the Project will reduce CO<sub>2</sub> emissions by 17.8 to 22.4 million metric tons over the first 20 years that the Project is in service and by 36.1 to 49.6 million metric tons over the first 40 years that the Project is in service. Therefore, the overall Project is anticipated to help carbon reduction goals both nationally and those set by the state of Minnesota.

As mentioned, effects of climate change include increased precipitation and flooding events. The Project area is within portions of the Federal Emergency Management Administration (FEMA) 100-year and 500-year floodplains, which puts the transmission lines at an increased risk of being impacted by climate change. To reduce the potential impacts of climate change, the Project will be designed to withstand extreme weather events, including flooding to ensure electric service reliability within the Project Area.

### **6.6.3 Water Resources**

The following sections describe water resources located within the Proposed Route.



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### **6.6.3.1 Groundwater**

Groundwater in Minnesota is divided into six aquifer provinces based on glacial geology and bedrock (reference (33)). The Proposed Route is within the East Central and Arrowhead/Shallow Bedrock Provinces (Map 14). Most of the Proposed Route is within the Central Groundwater Province which is characterized by buried sand aquifers relatively extensive surficial sand plains, part of a thick layer of sediment deposited by glaciers overlaying the bedrock. This province has a thick glacial sediment sand and gravel aquifers are common (reference (33)).

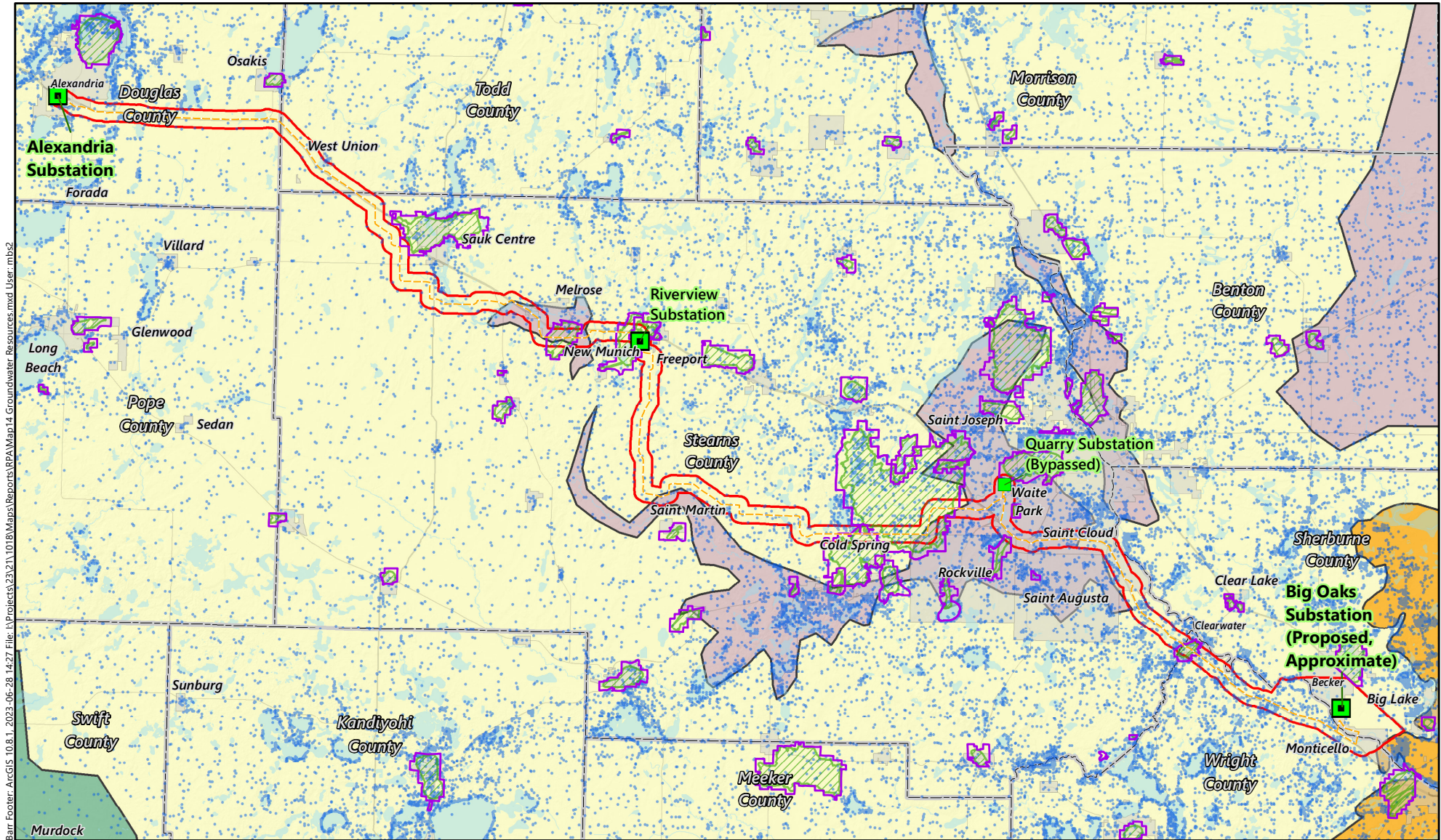
Drinking water supply management area for a surface water intake is the MDH endorsed surface and subsurface area surrounding a public water supply intake that contains the scientifically calculated surface water protection area and is managed by the entity identified in a surface water protection plan.

#### ***6.6.3.1.1 Karst***

A karst feature is characterized as a location underlain by limestone that has been eroded by dissolution, producing caves, fissures, or sinkholes. According to the MDNR Karst Feature Inventory, there are no karst features located within the Proposed Route. The nearest karst feature is approximately 22 miles east of the Proposed Route near Elk River, Minnesota.

#### ***6.6.3.1.2 Impacts and Mitigation***

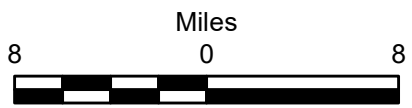
The construction and operation of the Project is not anticipated to adversely impact groundwater resources. The Applicants will conduct geotechnical analyses where appropriate to evaluate whether karst areas are present at structure locations and structure foundation design will account for the presence of karst and the potential for dewatering, as needed. Neither a dewatering permit nor water appropriations permit are anticipated to be required during construction. If geotechnical analyses determine that temporary dewatering or water appropriations would be required, the Applicants will coordinate with the MDNR to obtain the necessary permits.



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-  Project Study Area
-  Anticipated Alignment
-  Project Substation
-  Bypassed Substation
-  Municipal Boundary
-  County Boundary
-  Groundwater Well\*
-  Wellhead Protection Area
-  Drinking Water Supply Management Area
- Groundwater Provinces of Minnesota
  -  East-central
  -  Central
  -  Western
  -  Arrowhead-shallow bedrock

\* Only active wells classified as domestic, multiple dwellings, commercial, or industrial are shown.



Data Sources: Minnesota Geological Survey, Minnesota Department of Health

**Map 14**

**GROUNDWATER RESOURCES**  
 ALEXANDRIA TO BIG OAKS  
 MISO LRTP-2 Route Permit Application

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## 6.6.3.2 Waterbodies and Watercourses

### 6.6.3.2.1 Watersheds

There are eight major watershed basins (HUC-04) and 81 major surface water watersheds (HUC-08) covering Minnesota. The Proposed Route is in the Mississippi Headwaters major watershed (HUC-4; 0701). There are four HUC-8 sub watersheds located within the Proposed Route (Map 15); The Platte-Spunk (07010201), Sauk (07010202), Long Prairie (07010106), and Clearwater Elk (07010203) watersheds.

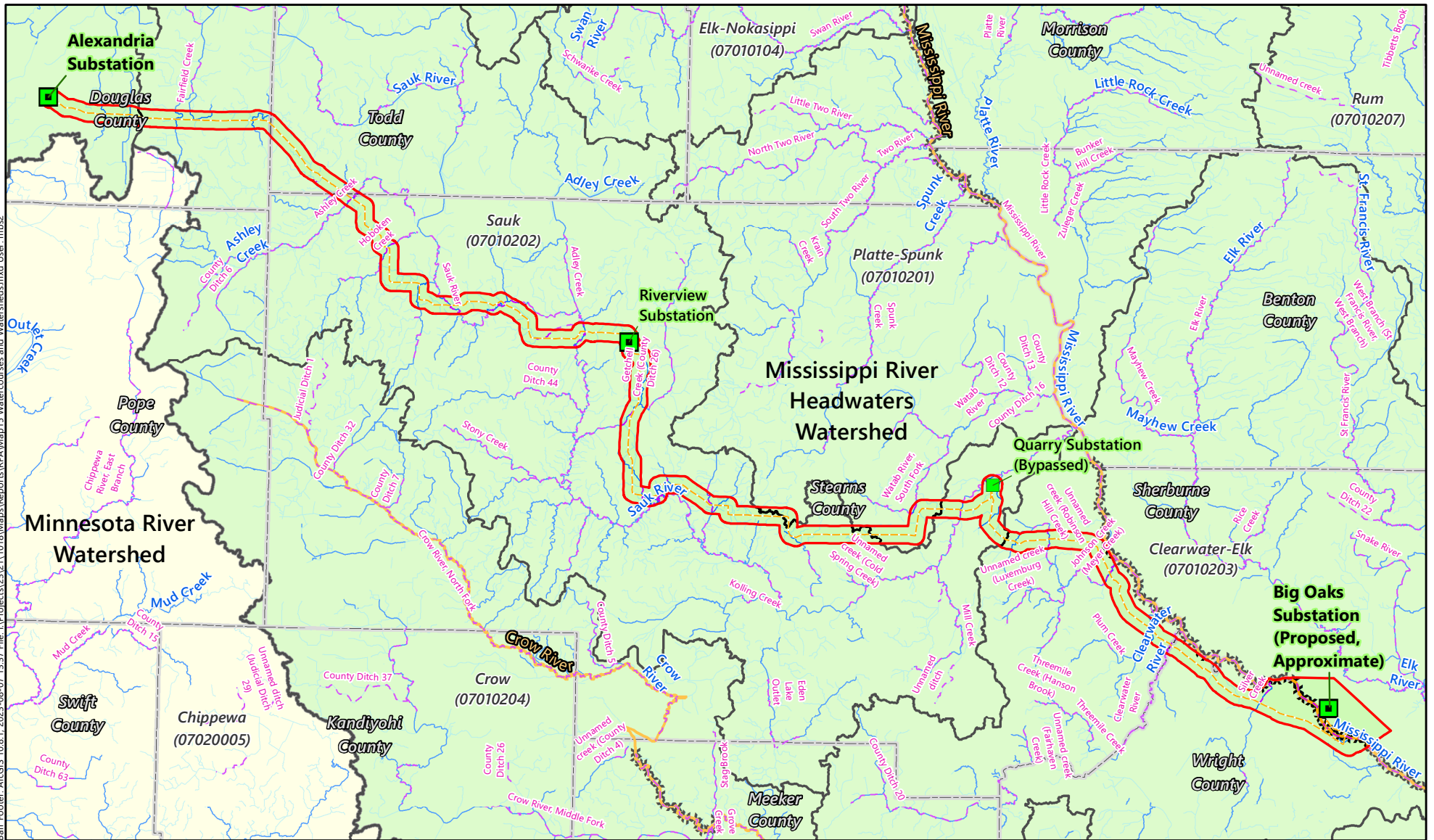
### 6.6.3.2.2 Minnesota Public Waters

The MDNR designates public waterbodies and watercourses that meet the criteria set forth in Minn. Stat. § 103g.005, subdivision 15. According to the MDNR Public Waters Inventory (PWI) dataset, there are 40 PWI watercourses within the Proposed Route including six public ditches and 22 public watercourses (Table 6.6-4). These PWI waterbodies and watercourses are regulated by the MDNR and have a minimum 50-foot perennial vegetative buffer requirement. The public ditches are also regulated by the MDNR and have a 16.5-foot designated buffer requirement. Based on the PWI, there are 15 PWI basins located within the Proposed Route (Table 6.6-4). Locations of the PWI watercourses, and public ditches are displayed in Map 15.

**Table 6.6-4 Public Waters Located within the Proposed Route**

PWI Type	Length or Area in Proposed Route
Public Water Watercourse	6.4 miles
Public Ditch/Altered Natural Watercourse	0.3 miles
Public Water Basin	16.6 acre
Public Water Wetland	28.2 acres

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- Project Study Area
- Anticipated Alignment
- Project Substation
- Bypassed Substation
- Watershed Boundary (USGS, HUC-8)
- Watershed Boundary (USGS, HUC-4)
- Minnesota River
- Mississippi River Headwaters

- Watercourse (USGS)
- Impaired Stream (2022)
- Wild and Scenic River
- Public Waters Inventory Watercourse (MDNR)
- Outstanding Resource Value Waters
- County Boundary



Data Sources: Minnesota Dept. of Natural Resources, U.S. Geological Survey, Minnesota Pollution Control Agency

**Map 15**  
**WATERCOURSES AND WATERSHEDS**  
 ALEXANDRIA TO BIG OAKS  
 MISO LRTP-2 Route Permit Application

### 6.6.3.2.3 Wetlands

The Proposed Route is within the Midwest and Northcentral Northeast regions according to the U.S. Army Corps of Engineers’ (USACE’s) regional wetland designations. These regions are characterized by its generally flat to rolling topography, fertile soils, and moderate to abundant rainfall (reference (34)). Wetlands in these regions are generally characterized as prairie wetlands or riverine wetlands.

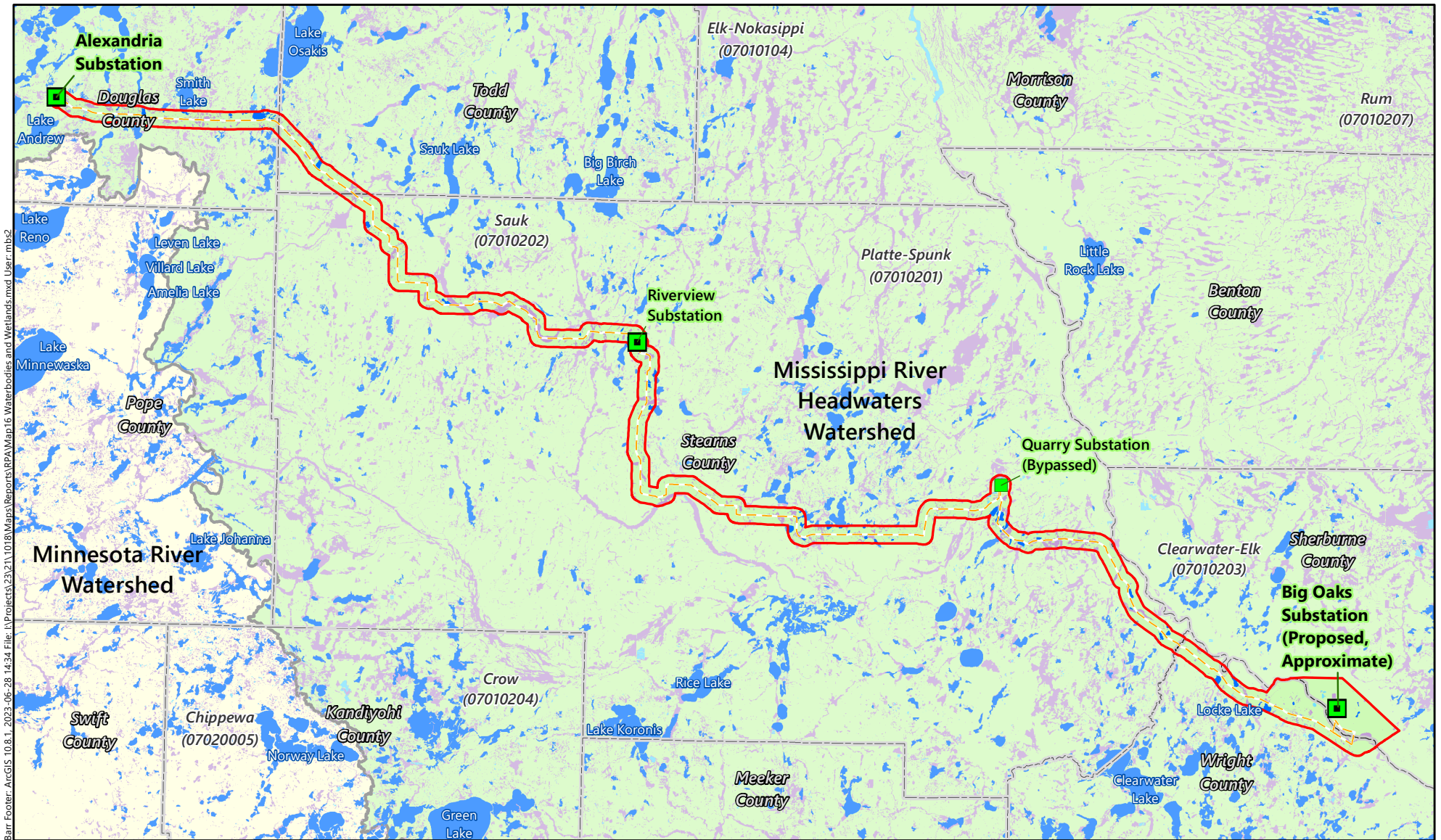
According to the USFWS National Wetlands Inventory (NWI) database, the Proposed Route contains approximately 666 acres of wetlands, comprising approximately 0.1 percent of the Proposed Route (Map 16). The majority of the wetlands are classified as shallow open water wetlands, seasonally flooded wetlands, or shallow marshes (Table 6.6-5).

**Table 6.6-5 National Wetlands Inventory wetlands located within the Proposed Route**

Cowardin Class. <sup>[1]</sup>	Circular 39 Class. <sup>[2]</sup>	Wetland Type	Acres in Proposed Route
PEMA, PUS, PFOA	1	Seasonally Flooded Wetlands	295.7
PEMB, PSSB	2	Wet Meadows (including Calcareous Fens)	10.2
PEMC and F, PSSH, PUBA and C	3	Shallow Marshes	69.1
L2ABF, L2EMF and G, L2US, PABF and G, PEMG and H, PUBB and F	4	Deep Marshes	1.9
L1; L2ABG and H; L2EMA, B, and H; L2RS; L2UB; PABH; PUBG and H	5	Shallow Open Water	17.0
PSSA, C, F, and G; PSS1, 5, and 6B	6	Shrub Swamp	33.7
PFO1, 5, and 6B; PFOC and F	7	Wooded Swamp	3.2
PF02, 4, and 7B; PSS2, 3, 4, and 7B	8	Bogs	<0.5
Riverine	90	Riverine	235.2
TOTAL			666

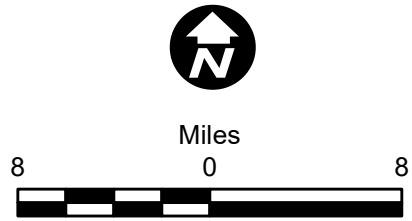
[1] reference (35)

[2] reference (36)



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-  Project Study Area
-  Anticipated Alignment
-  Project Substation
-  Bypassed Substation
-  County Boundary
-  National Wetland Inventory (USFWS)
-  Waterbody (USGS NHD)
-  Public Water Basin or Wetland (MDNR)
-  Watershed Boundary (USGS, HUC-4)
-  Minnesota River
-  Mississippi River Headwaters



**Map 16**  
**WATERBODIES AND WETLANDS**  
 ALEXANDRIA TO BIG OAKS  
 MISO LRTP-2 Route Permit Application

Data Sources: Minnesota Dept. of Natural Resources, U.S. Geological Survey, U.S. Fish and Wildlife Service

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#### **6.6.3.2.4 Calcareous Fens**

Calcareous fens are rare distinctive peat accumulating wetlands that depend on a constant supply of calcium and other mineral rich groundwater. This unique microenvironment can support highly diverse and unique rare plant communities. According to the MDNR's Identification List of Known Calcareous Fens, there are no known calcareous fens located within the Proposed Route (reference (37)). The nearest calcareous fen is 290 feet east of the Proposed Route in Stearns County (Map C34 of Appendix C).

#### **6.6.3.2.5 Special Designated Watercourses**

The Wild and Scenic Rivers Act of 1968 (Public Law 90-542; 16 U.S.C. 1271 et seq) established the National Wild and Scenic Rivers Systems with the purpose to preserve rivers with outstanding natural, cultural, and recreational values. The segment of the Mississippi River that crosses the Proposed Route is designated as a Recreational River under the Wild and Scenic Rivers Act. Rivers designated as recreational rivers are readily accessible by road or railroad, may have some development along their shorelines, and may have undergone some impoundment or diversion in the past. Designation neither prohibits development nor gives the federal government control over private property. Recreation, agricultural practices, residential development, and other uses may continue. Protection of the river is provided through voluntary stewardship by landowners and river users and through regulation and programs of federal, state, local, or tribal governments.

The MDNR designates trout streams within the state of Minnesota to protect and foster the propagation of trout. There is one designated trout stream within the Proposed Route: Robinson Hill Creek (Map C56 of Appendix C). The segment of Robinson Hill Creek that crosses the Proposed Route in Section 6 Township 123 north, Range 28 west is not designated as a trout stream. Taking of fish and minnows is prohibited within Robinson Hill Creek except during the open season or under special permit issued by the MDNR Commissioner.

### **Impaired Waters**

Clean Water Act (CWA) Section 303(d) (Impaired Waters and Total Maximum Daily Loads) requires each state to identify and prioritize waters that are impaired or in danger of becoming impaired (threatened). For these waters, states calculate and allocate pollution reduction levels necessary to meet approved water quality standards

(reference (38)). The MPCA updates this list of impaired waters every two years. There are three impaired watercourses and one impaired wetland within the Proposed Route (Table 6.6-6).

**Table 6.6-6 Impaired Waters located within the Proposed Route**

Type	AUID	Name	Length or Area in Proposed Route
Wetland	21-0003-00	Clifford	0.19 acres
Watercourse	07010203-510	Mississippi River	1320 feet
Watercourse	07010203-557	Silver Creek	150 feet
Watercourse	07010202-501	Sauk River	180 feet

reference (38)

#### **6.6.3.2.6 Infested Waters**

The MDNR adds a lake, river, pond, or wetland to the Infested Waters list if it: 1) contains an aquatic invasive species that could spread to other waters; or, 2) connects to a body of water where an aquatic invasive species is present. The MDNR designates a water as Infested Waters if it contains the following species:

- Eurasian watermilfoil
- Faucet snail
- New Zealand mudsnail
- Zebra mussel
- Ruffe,
- Round goby
- Spiny water flea
- Viral hemorrhagic septicemia fish disease
- White perch.

Activities within Infested Waters are regulated under Minn. R. 6216 to prevent the spread of aquatic invasive species. The current Infested Waters list was updated on



March 21, 2023, by the MDNR. Table 6.6-7 Includes a list of all designated infested waters within the Proposed Route (reference (38)).

**Table 6.6-7 Infested Waters within the Proposed Route**

Water Name	Infested Species	County Location along Proposed Route	Designation Date
Clearwater River from Clearwater Lake to the Mississippi River	zebra mussel	Multiple (Stearns and Wright)	2015
Clearwater River downstream of Clearwater, including 500 feet upstream into its tributaries	Eurasian watermilfoil	Wright	1999
Mississippi River,	zebra mussel	Multiple	2007

reference (38)

### ***6.6.3.2.7 Impacts and Mitigation***

#### **Existing Transmission Line Second Circuit**

Because the Project consists largely of stringing a second circuit onto existing infrastructure, there will be no permanent disturbance to waterbodies or watercourses. Temporary impacts to waterbodies may occur during site access. These impacts will be mitigated as discussed below.

The identified trout stream would not be directly impacted by the Project. The stream would be crossed using the existing transmission line structures. Construction equipment will not be required to cross the stream. Similarly, the identified calcareous fens will not be impacted by the Project. The fens are located outside of the construction right-of-way and would not be crossed by construction equipment. Temporary dewatering will not occur adjacent to the fens. The nearest new structure foundation would be installed 0.7 mile north of the fens and would not alter groundwater at the fen locations.

#### **Substation Bypasses**

The Alexandria Substation will be expanded by 2 to 4 acres to the east of the existing substation as discussed in Section 2.2. According to the NWI database there are two wetlands (0.23 acres) located within the proposed expansion area. These wetlands are classified as a seasonally flooded basin (0.01 acres) and hardwood forest wetland (0.22 acres). The Applicants will complete a field wetland delineation to confirm the

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boundaries of these two wetlands and will consult with the LGU and USACE prior to construction.

According to the NWI and PWI databases there are no wetlands or watercourses that would be directly impacted by the Riverview Substation Bypass or expansion, or Quarry Substation Tap or expansion. The new structure construction and substation expansions would occur in upland locations and would not impact any wetlands or watercourses. The Applicants will use erosion control devices to prevent sedimentation into adjacent wetlands as discussed in Section 5.2.

### **Big Oaks Substation**

The Big Oaks Substation Siting Area includes approximately 250 acres located in cultivated cropland. According to the NWI and PWI databases there are no wetlands or watercourses located within the Big Oaks Substation Siting Area. Therefore, construction of the Big Oaks Substation is not anticipated to impact any wetlands or watercourses. Please refer to the following section for BMPs that will be used to avoid disturbance to the Mississippi.

### **Mississippi River Crossing Options**

Both options would require transmission line spanning of the Mississippi River (Map 5). None of the Mississippi River Crossing Options would require structures to be placed within the riverbed. However, the Eastern Crossing Option would require construction of two structures on an island within the river; the Western Crossing Option would be able to span the Mississippi River without structures placed midway across the waterway.

Indirect impacts to the Mississippi River could include sedimentation to the Mississippi River during construction due to ground disturbance by excavation, grading, construction traffic, and dewatering of holes drilled for transmission structures. This could temporarily degrade water quality by causing turbidity and increased total suspended solids. These impacts will be avoided or minimized using appropriate sediment control practices and construction practices. These practices will be detailed in the NPDES permit and SWPPP that will be completed prior to the start of construction. Since this segment of the river is a recreational river segment, the NPDES permit will comply with items 23.9, 23.10 and 23.1 of the Minnesota Construction Stormwater Permit.

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Once the Project is completed, there will be no significant impact on surface water quality of the Mississippi River because construction impacts will be minimized and mitigated, disturbed soil will be restored to previous conditions or better, and the amount of land area converted to an impervious surface will be limited to the expansion of the existing substations and construction of the Big Oaks Substation which would convert less than 15 acres of land to impervious surface. The Applicants are required to obtain Section 401 certification from the MPCA.

The Applicants will maintain sound water and soil conservation practices during construction and operation of the Project to protect topsoil and adjacent water resources and minimize soil erosion. Construction will be completed according to NPDES permit requirements and an approved AIMP (Appendix F) and VMP (Appendix G).

Watercourses will not be crossed by construction equipment unless necessary, the crossing will be permitted as appropriate, and the appropriate local state, and or federal agencies will be consulted. Where watercourses must be crossed to string new conductors and shield wires, workers may walk across, use boats, or drive equipment across ice in the winter. These construction practices will help to prevent soil erosion and ensure potential fueling and lubricating of equipment will occur at a sufficient distance beyond the construction limits.

Temporary impacts to wetlands may occur if they need to be crossed during construction of the transmission line. No staging or stringing setup areas will be placed within or adjacent to water resources to the extent feasible. If a terminal dead-end structure is in or adjacent to water resources, and there is no other location in that stringing section of line to pull from/to, stringing areas may need to be placed within or adjacent to water resources; this is rare and in most cases the Applicants would be able to pull through such a dead-end and avoid a setup in or adjacent to water resources. If stringing areas need to be located within a water resource, the Applicants will consult with the MDNR, USACE, and LGU to obtain the required approvals prior to the disturbance. The Applicants will avoid major disturbance of individual wetlands and drainage systems during construction to the extent feasible. This will be done by spanning wetlands and drainage systems, which will generally avoid contact with construction equipment, where possible.

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The Applicants will follow standard erosion control measures identified in the MPCA’s Stormwater Best Management Practices Manual, such as using silt fencing to minimize impacts to adjacent water resources. In addition, construction will be completed according to NPDES permit requirements and an approved AIMP (Appendix F) and VMP (Appendix G).

If impacts to wetlands occur, they will be minimized through construction practices. Construction crews will maintain sound water and soil conservation practices during construction and operation of the facilities to protect topsoil and adjacent water resources and minimize soil erosion. Practices may include containing excavated material, protecting exposed soil and stabilizing restored soil.

Crews will avoid major disturbance of individual wetlands and drainage systems during construction. This will be accomplished by strategically locating new access roads and spanning wetlands and drainage systems where possible. When it is not feasible to span the wetland, construction crews will rely on several options during construction to minimize impacts:

- When possible, construction will be scheduled during frozen ground conditions;
- Crews will attempt to access the wetland with the least amount of physical impact to the wetland (i.e., shortest route);
- The structures will be assembled on upland areas before they are brought to the site for installation; and
- When construction during winter is not possible, construction mats will be used where wetlands will be impacted.

### **6.6.3.3 Floodplains**

The Proposed Route crosses FEMA designated 100-year and 500-year floodplain areas. FEMA designated 100-Year floodplain areas are associated with major rivers along the Proposed Route such as the Mississippi River. Table 6.6-8 provides the total acres of Proposed Route located within FEMA designated floodplains.

**Table 6.6-8 Acres of Floodplain within the Proposed Route**

FEMA Floodplain Layer	Acres within the Proposed Route
Floodway	535.59
100 Year floodplain (Zone A and AE)	72.31
500 Year floodplain (Zone X)	50.09

**6.6.3.3.1 Impacts and Mitigation**

The Project may require transmission line structures be placed within FEMA-designated 100-year or 500-year floodplains. The floodplain would be temporarily disturbed from construction site access and the placement of construction access. The contractor will use BMPs to reduce impacts to the floodplain as discussed in Section 5.2. The placement of transmission line structures in floodplains is not anticipated to alter the flood storage capacity of the floodplain based on the minimal size of individual transmission line structures. In addition, the proposed structures will be designed to be capable of accommodating increased flood elevations that could result from climate change.

**6.6.4 Soil Resources**

Soil information for the Proposed Route was obtained from the USDA-Natural Resource Conservation Service (NRCS) Soil Survey Geographic (SSURGO) Database (reference (39)). Soils within the Proposed Route are dominated by loams and sandy loams in the uplands and clay and organic soils in the lowlands, often associated with wetlands.

The USDA-NRCS SSURGO Database identifies farmland soils based on three categories, which are subject to protection under the Farmland Protection Policy Act (FPPA). These categories include prime farmland, prime farmland when drained, and farmland of statewide importance. Prime farmland is defined by the NRCS as land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. Prime farmland when drained includes soils that have the potential to be prime farmland but require drainage or hydrologic alteration to achieve high productivity. Farmland of statewide importance includes soils that are nearly prime, but are not as productive due to permeability, slope, erosion potential, or some other soil property.

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Approximately 25 percent (939 acres) of the Proposed Route is mapped as prime farmland, 10 percent (366 acres) is mapped as prime farmland if drained, and 12 percent (476 acres) is mapped as farmland of statewide importance.

#### **6.6.4.1 Impacts and Mitigation**

Surface soils will be disturbed by site clearing, grading, and excavation activities. With the exception of structure locations, most impacts will be temporary. Impacts on soils are dependent, to some extent, on the conditions of the soil surface at the time of construction. Construction activities that occur on wet soils tend to have longer lasting impacts, regardless of the soil type. BMPs such as matting, and use of low ground pressure equipment will be used to minimize impacts where soil disturbance is necessary in wet soil conditions.

Soil erosion may occur if surface vegetation is removed, especially on fine textured soils. Sediment and erosion control plans will be developed that specify the types of appropriate BMPs to minimize impacts. Depending on the site, BMPs may include installation of silt fence, straw bales, or ditch blocks, and/or covering bare soils with mulch, plastic sheeting, or fiber rolls to protect drainage ways and streams from sediment runoff. Construction will be completed according to NPDES permit requirements and approved AIMP (Appendix F) and VMP (Appendix G).

Some Project Components will traverse prime farmland, prime farmland if drained, and/or farmland of statewide importance, as noted in Table 6.6-9. Permanent impacts include the areas that will be taken out of production at the structure locations or footprint of the Big Oaks Substation. These Project components will contribute to a marginal increase in impervious surface area and a subsequent loss of rainwater infiltration at their locations. Temporary impacts from clearing and grading within the right-of-way or Big Oaks Substation Siting Area, such as crop damages and soil compaction, may occur during construction activities. These areas will be restored and put back into production after completion of construction activities.

**Table 6.6-9 Prime Farmland, Prime Farmland if Drained, and Farmland of Statewide Importance within the Project Components**

Project Feature	Prime Farmland (acres)	Prime Farmland if Drained (acres)	Farmland of Statewide Importance (acres)
Existing Transmission Line Second Circuit	496.1	281.6	390.8
Alexandria Substation Tap	2.2	0.7	1.0
Riverview Substation Bypass	7.0	1.00	0.1
Quarry Substation Bypass	0	1.5	1.3
Big Oaks Substation	0	0	2.1
Western Crossing Option	0.4	0	0
Eastern Crossing Option	3.8	0	0

Additional impacts to prime farmland may occur in order to accommodate expansion of the Alexandria and Riverview Substations.

Removal of the small amount of prime farmland, prime farmland if drained, and farmland of statewide importance is not expected to negatively affect the general farm community within the Proposed Route. Once construction is complete, agricultural production within the right-of-way will resume.

### 6.6.5 Vegetation

As noted in Section 6.1, the Proposed Route straddles four ECS subsections, the Minnesota River Prairie and Hardwood Hills subsections in the western two-thirds and the Anoka Sand Plain and Big Woods subsections in the eastern third (Map 6).

Pre-settlement vegetation in the Minnesota River Prairie subsection consisted primarily of tallgrass prairie and wet prairie islands. Floodplain forests were present within the riparian areas along watercourses and waterbodies (reference (2)).

In the Hardwood Hills subsection, irregular topography and presence of numerous lakes and wetlands provided a partial barrier to fire, resulting in more woodland or forest compared to the Minnesota River Prairie subsection. At pre-settlement, mixed hardwood forests were found in the eastern portion of the subsection, while tallgrass prairie was found on flatter terrain in the west (reference (2)).

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Pre-settlement vegetation in the Anoka Sand Plain subsection primarily consisted of oak barrens and openings. Upland prairie and floodplain forest formed a narrow band along the Mississippi River, while a large portion of the sandplain was primarily brushland (reference (2)).

Pre-settlement vegetation in the Big Woods subsection was dominated by oak woodlands and maple-basswood forests. Aspen forests were common along the western edge of the subsection, along with bur oak forests (reference (2)).

As discussed in Section 6.2, the current landscape across the Proposed Route is dominated by agricultural land (Map 7), with corn and soybeans representing the most common crops. Natural vegetation is present in wetlands and the forested areas near waterbodies and watercourses. In addition, areas of native vegetation are found scattered throughout the Proposed Route in lands mapped or managed by the MDNR; these include Sites of Biodiversity Significance (SBS) and native plant communities (Map 17). No Scientific and Natural Areas are located within one mile of the Proposed Route. Federal and state lands that are managed for wildlife also contain natural vegetation; these are discussed below in Section 6.6.5.

The Proposed Route traverses several SBS, including 11 SBS ranked moderate and 2 ranked high with regards to biodiversity significance (Map 17). Areas with moderate biodiversity ranks contain significant occurrences of rare species and/or moderately disturbed native plant communities and landscapes that have a strong potential for recovery. Areas with high biodiversity ranks contain sites with high quality occurrences of the rarest plant communities and/or important functional landscapes.

The MDNR identifies 11 native plant community types in 19 locations within the Proposed Route, several of which are located within the SBSs (Map 17). Each native plant community is assigned a state conservation status as follows:

- S1 – community is critically imperiled
- S2 – community is imperiled
- S3 – community is vulnerable to extirpation or extinction
- S4 – community is apparently secure



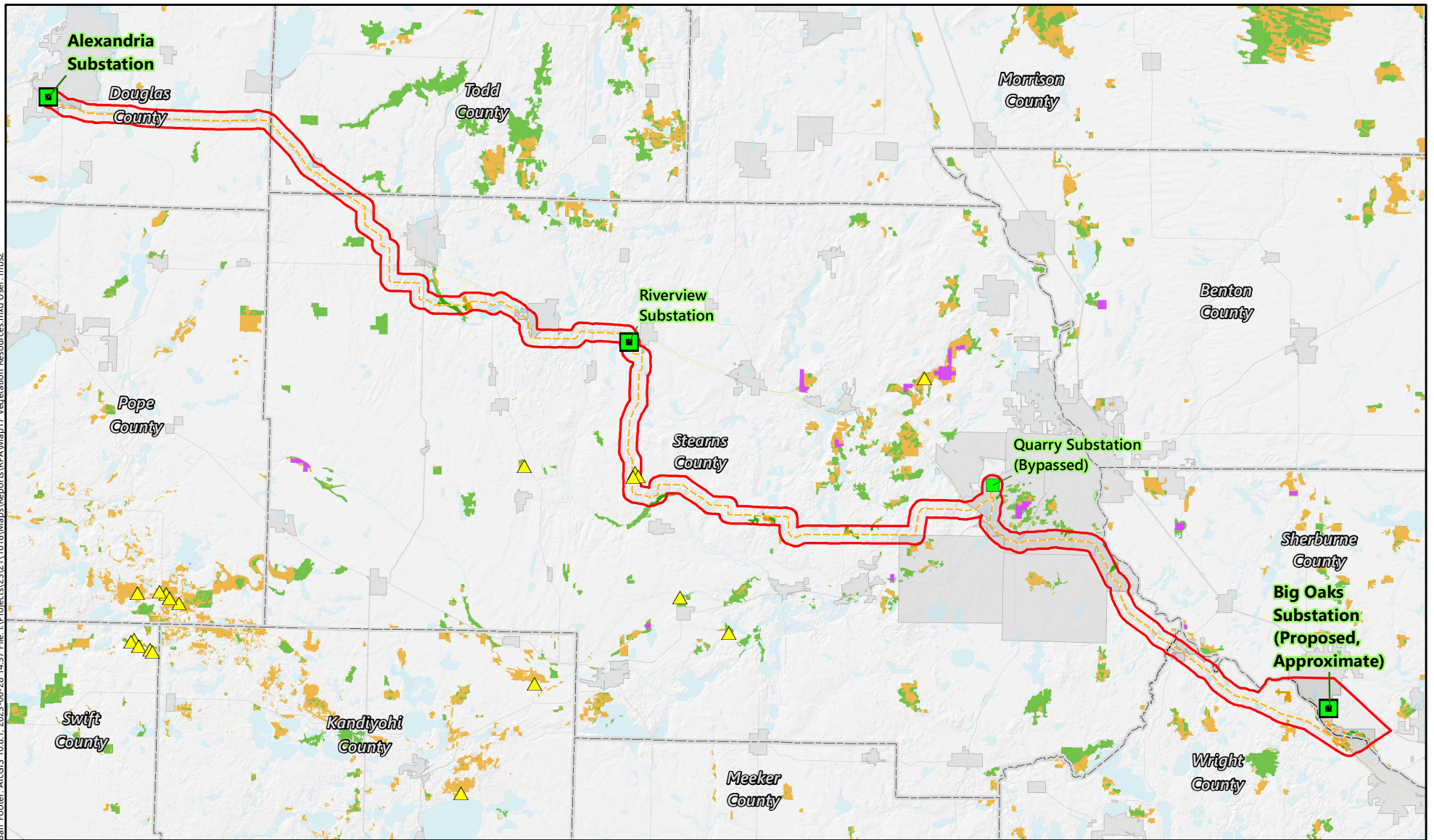
- 
- S5 – community is demonstrably widespread, abundant, and secure











Native plant community types mapped within the Proposed Route include the following:

- Southern Dry-Mesic Oak (Maple) Woodland (FDs37; conservation status S3, S4)
- Pin Oak – Bur Oak Woodland (FDs37b; conservation status S3)
- Southern Terrace Forest (FFs59; conservation status S1, S2, S3)
- Elm – Ash – Basswood Terrace Forest (FFs59c; conservation status S2)
- Silver Maple – (Virginia Creeper) Floodplain Forest (FFS68a; conservation status S3)
- Tamarack Swamp (Southern) (FPs63a; conservation status S2, S3)
- Basswood – Bur Oak – (Green Ash) Forest (MHs38b; conservation status S3)
- Red Oak – Sugar maple – Basswood – (Bitternut Hickory) Forest (MHs38c; conservation status S3)
- Dry Sand – Gravel Prairie (Southern) (UPs13b; conservation status S2)
- Dry Sand – Gravel Oak Savanna (Southern) (UPs14b; conservation status S1, S2)
- Willow – Dogwood Shrub Swamp (WMn82a; conservation status S5)

In addition, the Applicants, in collaboration with several state and local agencies and institutions, has restored and is continuing to manage several acres of oak savanna forest within the Proposed Route, near the Mississippi River Crossing Options and the Monticello nuclear plant (Map 17).

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-  Project Study Area
-  Anticipated Alignment
-  Project Substation
-  Bypassed Substation
-  Municipal Boundary
-  County Boundary
-  Calcareous Fen Location
-  Scientific and Natural Area
-  Native Plant Community
-  Site of Biodiversity Significance\*  
\* Excludes sites with significance ranked 'below'



Miles



**Map 17**

**VEGETATION RESOURCES**  
ALEXANDRIA TO BIG OAKS  
MISO LRTP-2 Route Permit Application

Data Source:  
Minnesota Dept. of Natural Resources

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### 6.6.5.1 Impacts and Mitigation

Potential impacts to vegetation within the Proposed Route will occur where clearing of trees and other vegetation is necessary for Project construction, maintenance, and safe operation of the transmission line. Permanent removal of vegetation will occur in areas where new structures are proposed. Each structure will result in a permanent loss of approximately 115 square feet of vegetation cover.

Construction and maintenance activities also have the potential to result in the introduction or spread of noxious weeds. Noxious weeds, which are regulated under Minn. Stat. § 18, can be introduced to new areas through propagating material like roots or seeds transported by contaminated construction equipment. Disturbed soil surfaces have the potential to allow noxious weeds to establish and out-compete existing vegetation, whether native or cropland.

The Applicants will work with the state and counties crossed by the Proposed Route to identify locations where noxious weeds may be present and will develop appropriate BMPs to minimize impacts across all Project Components.

Areas disturbed due to construction activities will be restored to pre-construction contours and will be reseeded with an approved seed mix that is certified to be free of noxious weeds. Construction, restoration, and maintenance activities will be completed according to an approved AIMP (Appendix F) and VMP (Appendix G).

#### 6.6.5.1.1 *Existing Transmission Line Second Circuit*

Where the second circuit will be strung along existing infrastructure, impacts to vegetation are anticipated to be minimal and/or temporary in nature. While the existing right-of-way primarily crosses through agricultural land, it also crosses six SBS with moderate biodiversity significance ranks and four native plant communities with a conservation status of S2 and S3 (Map 17 and Appendix C). The integrity of these SBS and native plant communities has already been altered from the construction and maintenance of the existing infrastructure. As such, impacts due to construction of the second circuit are not anticipated to substantially further disrupt vegetative community quality or function within the existing right-of-way, as this area is continually impacted by maintenance activities.

Permanent impacts to vegetation will occur in areas where up to 60 new structures are proposed in the existing infrastructure right-of-way to accommodate the second

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circuit. Structures were placed to avoid sensitive areas to the extent feasible; however, two structures will be placed in a SBS of moderate biodiversity significance, one of which is also located in a Basswood – Bur Oak – (Green Ash) Forest native plant community (conservation status S3) (Map C21 of Appendix C). As mentioned above, SBS and native plant communities were previously altered when the existing infrastructure was constructed and as the right-of-way is routinely maintained. The permanent loss of vegetation cover from new structures will occur in this previously disturbed and routinely maintained right-of-way and not undisturbed native plant communities.

With the exception of structure placement, no other permanent changes to vegetation/land cover types will occur within the right-of-way where the second circuit will be strung.

#### ***6.6.5.1.2 Alexandria Substation Tap***

The anticipated alignment into the Alexandria Substation primarily traverses agricultural and open land. However, the anticipated alignment also traverses two small forested areas, one of which is the edge of a hardwood forest where the anticipated alignment deviates from the existing infrastructure right-of-way and the other is a windrow just east of the Alexandria Substation (Map 17 and Map C1 of Appendix C). The anticipated alignment and associated right-of-way avoid SBS and native plant communities.

Permanent impacts to vegetation will occur during construction and maintenance where trees and other vegetation will be cleared within the right-of-way. This alignment will require permanently clearing a few trees where the anticipated alignment deviates from the existing infrastructure and crosses through a windrow just east of the Alexandria Substation (Map 17 and Map C1 of Appendix C). Temporary and permanent impacts to agricultural land are discussed in Section 6.4.1. The anticipated alignment will require one new structure, which will result in a permanent loss of vegetation cover. Additional impacts to vegetation may occur in order to accommodate expansion of the Alexandria Substation.

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### **6.6.5.1.3 Riverview Substation Bypass**

The anticipated alignment bypassing the Riverview Substation traverses all agricultural land and avoids SBS and native plant communities (Map 3 and Map C27 and Map C28 of Appendix C).

Temporary and permanent impacts to agricultural land are discussed in Section 6.4.1. The anticipated alignment will require three to four new structures, which will result in a permanent loss of vegetation cover. Additional impacts to vegetation may occur in order to accommodate expansion of the Riverview Substation.

### **6.6.5.1.4 Quarry Substation Bypass**

The anticipated alignment bypassing the Quarry Substation traverses agricultural and forested land but avoids SBS and native plant communities (Map 4 and Map C52 of Appendix C). Additional impacts to vegetation may occur in order to accommodate expansion of the Quarry Substation.

Permanent impacts to vegetation will occur during construction and maintenance where trees and other vegetation will be cleared within the right-of-way. This alignment will require permanently clearing a few trees. Temporary and permanent impacts to agricultural land are discussed in Section 6.4.1. The anticipated alignment will require four to six new structures, which will result in a permanent loss of vegetation cover.

### **6.6.5.1.5 Big Oaks Substation**

As noted in Section 6.2, the Big Oaks Substation siting area is dominated by agricultural landcover, with open forest vegetation cover in the southern extent of the siting area (Map C70 of Appendix C). The Big Oaks Substation was sited to avoid the South Becker 13 SBS (ranked high) and a Southern Dry-Mesic Oak (Maple) Woodland native plant community (conservation status S3, S4), which border the siting area to the southwest.

Construction of the Big Oaks Substation will result in the permanent removal of 10 acres of vegetation. With the exception of the transmission line alignment that will traverse the substation siting area from one of the options for crossing the Mississippi River, the substation will be sited to avoid natural vegetation to the extent feasible and

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will likely be located on agricultural land. Potential impacts to agricultural areas are discussed in Section 6.4.1.

#### ***6.6.5.1.6 Mississippi River Crossing Options***

Both options for crossing the Mississippi River to connect to the Big Oaks Substation are located in an area dominated by natural vegetation, including several SBS and native plant communities (Map C70 of Appendix C). Permanent impacts to vegetation associated with each option will occur during construction and maintenance where trees and other vegetation will be cleared within the right-of-way. In addition, both options will require new structures, which will result in a permanent loss of vegetation cover. The Applicants will work with the MDNR and other appropriate agencies to avoid or minimize impacts on sensitive vegetation, such as SBS and native plant communities and areas preserved or managed for wildlife (Section 6.6.5). When these areas cannot feasibly be spanned, the Applicants will work to minimize the number of permanent structures within the area.

The anticipated alignment for the Western Crossing Option will require a new corridor through the Monticello Savanna SBS (ranked high) and associated Pin Oak – Bur Oak Woodland native plant community (conservation status S3) and the South Becker 18 SBS (ranked moderate) and associated Southern Dry – Mesic Oak (Maple) Woodland native plant community (conservation status S3) (Map C70 of Appendix C). Although permanent tree clearing will be required within the anticipated right-of-way that traverses these native plant communities, the tree cover is relatively sparse in this area. Clearing of other vegetation would occur where structure placement is necessary.

Before crossing the Mississippi River, the anticipated alignment for the Eastern Crossing Option follows existing infrastructure through the edge of the Monticello Savanna SBS (ranked high) and two native plant community types, Pin Oak – Bur Oak Woodland (conservation status S3) and Dry Sand – Gravel Prairie (Southern) (conservation status S2) (Map 5 and Map C70 of Appendix C). As noted above, the integrity of SBS and native plant communities in the existing infrastructure right-of-way have already been altered. As such, additional impacts where the Eastern Crossing Option follows existing infrastructure are not anticipated to substantially disrupt vegetative community quality or function.

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Where the anticipated alignment for the Eastern Crossing Option deviates from the existing infrastructure, it traverses the edge of a Pin Oak – Bur Oak Woodland native plant community (conservation status S3) along a road corridor and then cuts a new corridor through an island in the Mississippi River, which is a Silver Maple – Virginia Creeper Floodplain Forest native plant community (conservation status S3) and also part of the Monticello Savanna SBS (ranked high) (Map C70 of Appendix C). This native plant community is densely forested and too large to span. As such, all trees will need to be permanently cleared in the anticipated right-of way and two structures will be placed within the native plant community. The Applicants have not identified the exact location of these structures as engineering and design work has not occurred. As noted in Section 6.6.7.2.1 and 7.1.2, the state endangered butternut tree (*Juglans cinerea*) could be present within the anticipated right-of-way for the Eastern Crossing Option.

The Eastern Crossing Option continues north across the Mississippi River into the South Becker 20 SBS (ranked moderate), paralleling an existing transmission line (Map C70 of Appendix C). No native plant communities have been mapped within this SBS; however, the vegetation consists of a sparsely forested community, and will therefore require additional tree clearing in the anticipated right-of-way. The remainder of the Eastern Crossing Option’s anticipated alignment parallels several existing transmission lines through the edge of the South Becker 18 SBS (ranked moderate) and associated Southern Dry – Mesic Oak (Maple) Woodland native plant community (conservation status S3, S4) before entering into the Big Oak Substation siting area (Map C70 of Appendix C). Additional tree clearing may be necessary in this area to expand the transmission line corridor.

### **6.6.6 Wildlife**

The Proposed Route’s agricultural landscape, combined with the natural habitats associated with wetlands, the Mississippi River, preserved or managed wildlife lands, and SBS and native plant communities (discussed above under Section 6.6.4), provide habitat for a diversity of resident and migratory wildlife species. These species include large and small mammals, songbirds, waterfowl, raptors, fish, reptiles, mussels, and insects. These species use the area for forage, shelter, breeding, or as stopover during migration.

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Several lands that are preserved or managed for wildlife and associated habitat are scattered throughout the geographic area. The preserved or managed wildlife lands within the Proposed Route include: the Lake Osakis and Avon Hills National Audubon Society Important Bird Areas (IBA), several USFWS Grassland Bird Conservation Areas (GBCA), the USFWS Douglas and Stearns County WPAs, and the MDNR Sauk River WMA (Map 18).

The National Audubon Society works to identify, monitor, and protect habitat for bird species throughout the U.S., in part by designating sites as IBAs. IBAs are designated when they meet certain criteria, including providing habitat for at least one of the following:

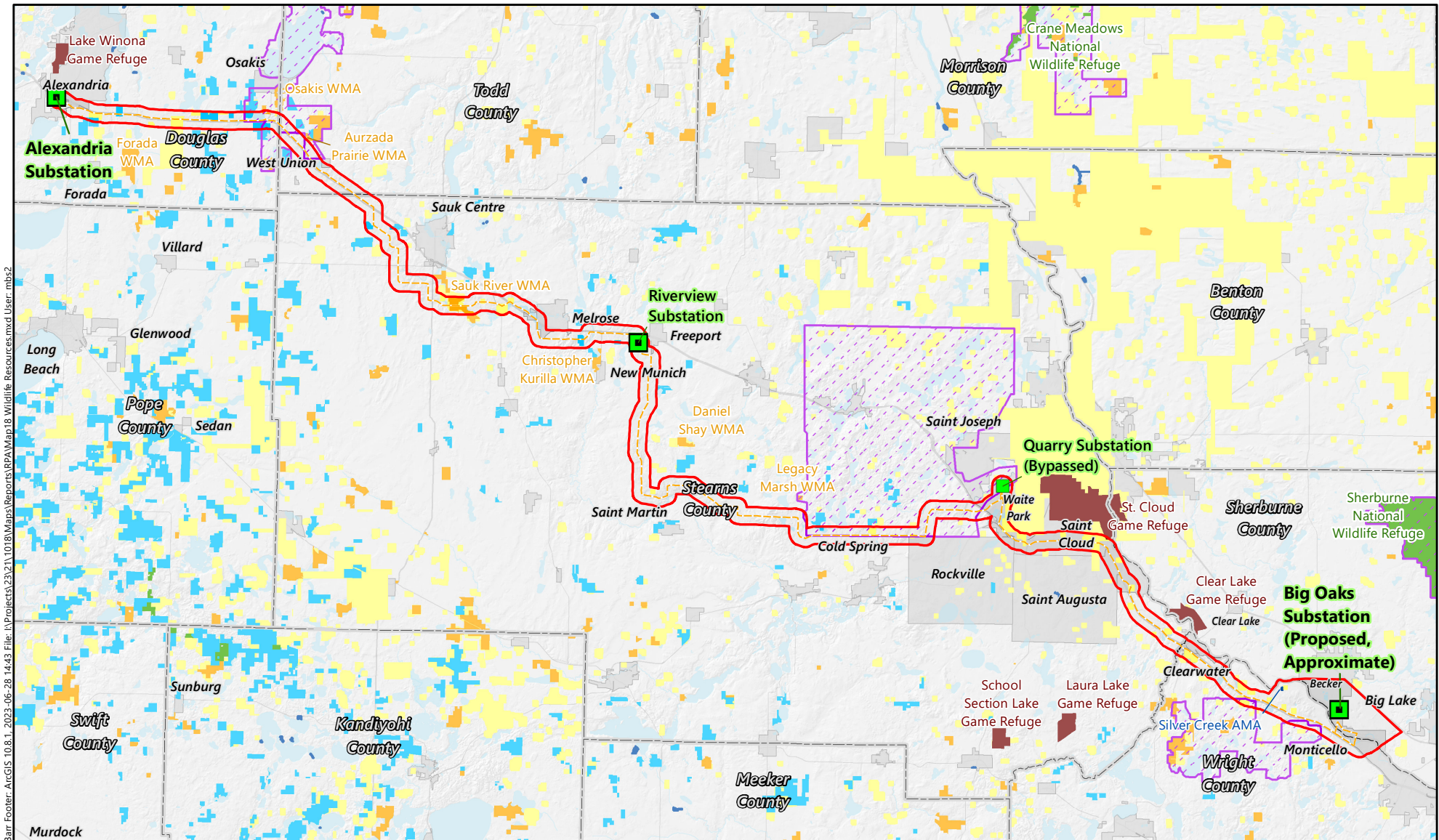
- Species of conservation concern (e.g., threatened and endangered species);
- Range-restricted species (species vulnerable because they are not widely distributed);
- Species that are vulnerable because their populations are concentrated in one general habitat type or biome; and/or
- Species, or groups of similar species (such as waterfowl or shorebirds), that are vulnerable because they occur at high densities due to their congregatory behavior.

The USFWS designates GBCAs as priority areas for grassland protection and enhancement that are thought to provide suitable habitat for many or all priority grassland bird species in tall grass prairie.

The USFWS has conserved more than 3 million acres as WPAs. WPAs are small natural wetlands and grasslands that provide breeding, resting, and nesting habitat for waterfowl, shorebirds, grassland birds and other wildlife.

The MDNR manages over a million acres of land as WMAs intended to protect wildlife habitat, provide hunting opportunities, and recreational activities, including wildlife viewing.





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-  Project Study Area
-  Anticipated Alignment
-  Project Substation
-  Bypassed Substation
-  Municipal Boundary
-  County Boundary
-  Important Bird Area (Audubon Society)
-  State Wildlife Management Area (MDNR)
-  Aquatic Management Area (MDNR)
-  State Game Refuge (MDNR)
-  National Wildlife Refuge (USFWS)
-  Waterfowl Production Area (USFWS)
-  Grassland Bird Conservation Area (Core Areas, USFWS)



**Map 18**

**WILDLIFE RESOURCES**  
 ALEXANDRIA TO BIG OAKS  
 MISO LRTP-2 Route Permit Application

Data Sources: Minnesota Dept. of Natural Resources, Audubon Society, US Fish and Wildlife Service

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### 6.6.6.1 Impacts and Mitigation

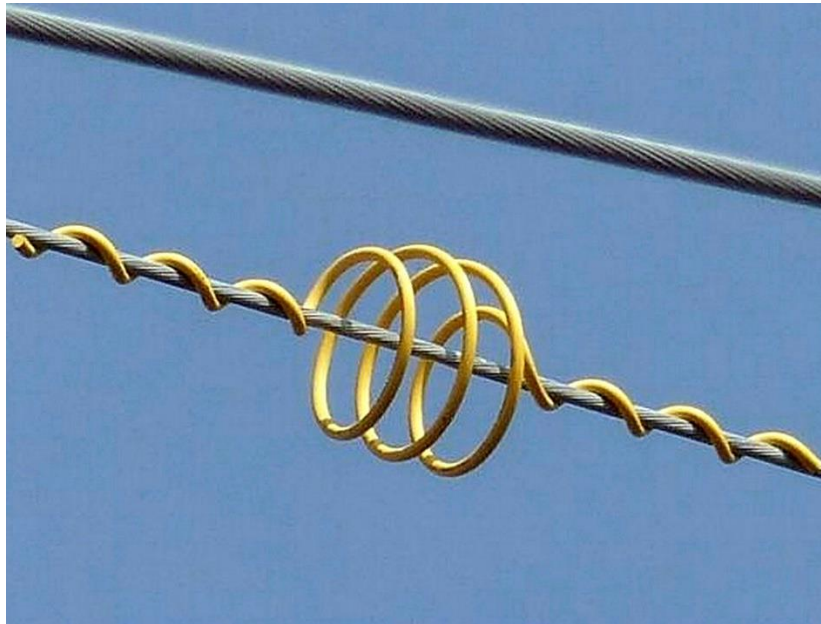
Potential temporary impacts to wildlife within the Proposed Route may occur during Project construction as a result of increased noise, dust, and human activity, which could cause some species to temporarily abandon habitat. The majority of common wildlife species are mobile and can avoid impacts from noise by leaving the affected area for similar habitat adjacent to the Proposed Route. Less mobile wildlife species, such as small mammals, amphibians, reptiles, and nesting birds may be susceptible to mortality from vehicles and other equipment moving within the right-of-way.

The creation of new transmission line corridors can result in permanent habitat loss, conversion, and/or fragmentation as a result of clearing vegetation for construction and maintenance. Permanent removal of potential habitat will occur in areas where new structures are proposed. Each structure will result in a permanent loss of approximately 115 square feet of potential habitat.

Once the Project is operational, there is potential for avian and transmission line interactions in the form of collisions. Waterfowl are more susceptible to transmission line collisions, especially if the transmission line is placed between agricultural fields that serve as feeding areas, and wetlands or open water which serve as resting areas. In these areas, it is likely that waterfowl and other birds will travel between different habitats, potentially increasing the likelihood of avian conflicts with the transmission line. To minimize these potential impacts on birds, the Project will be constructed according to Avian Power Line Interaction Committee (APLIC) recommended safety standards to reduce the potential for avian collisions. These APLIC safety standards will include the use of bird flight diverters (Figure 6.6-1) in certain locations where the risk of collision is high.

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**Figure 6.6-1 Bird Flight Diverter Example**



***6.6.6.1.1 Existing Transmission Line Second Circuit***

Where the second circuit will be strung along existing infrastructure, impacts to wildlife are anticipated to be minimal and/or temporary in nature. Wildlife inhabiting this area are already accustomed to disturbance from routine maintenance activities within the existing right-of-way. In addition, the existing infrastructure already poses a threat to avian collisions; as such, the second circuit is not anticipated to pose a significantly increased threat.

The existing infrastructure right-of-way intersects the Douglas and Stearns County WPAs, the Sauk River WMA, the Lake Osakis and Avon Hills IBAs and 12 GBCAs (Map 18 and Appendix C). The integrity of these preserved or managed wildlife lands has already been altered from the construction and maintenance of the existing infrastructure. As such, impacts due to construction of the second circuit without new infrastructure proposed within these areas are not anticipated to further alter the quality of these habitats.

Permanent loss of potential wildlife habitat will occur in areas where up to 60 new structures are proposed within the existing infrastructure right-of-way to accommodate the second circuit. Preserved or managed wildlife lands were spanned to the extent feasible; however, the Avon Hills IBA is too large to span and will

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require the placement of three new structures within it (Map C47 to Map C49 and Map C51 to Map C52 of Appendix C).

With the exception of structure placement, no other permanent changes to wildlife habitat are anticipated to occur within the right-of-way where the second circuit will be strung.

#### **6.6.6.1.2 Alexandria Substation Tap**

The area around the Alexandria Substation is disturbed from the presence of the substation, transmission lines, and I-94. Available wildlife habitat in the area includes agricultural/open, forested, wetland, and lake habitat; no preserved or managed wildlife lands are present in the vicinity of the substation (Map 18 and Map C1 of Appendix C). As discussed in Section 6.6.4, the anticipated alignment and associated right-of-way into the Alexandria Substation traverses some forested habitat; this habitat will be permanently converted into open right-of-way habitat. One new structure will be required for this alignment, which will result in a permanent loss of potential wildlife habitat. Additional impacts to wildlife habitat may occur in order to accommodate expansion of the Alexandria Substation.

#### **6.6.6.1.3 Riverview Substation Bypass**

The area around the Riverview Substation is disturbed from the presence of the substation, transmission lines, and roads. The only habitat available for wildlife is agricultural land; no preserved or managed wildlife lands are present in the vicinity of the substation (Map 18 and Map C27 and Map C28 of Appendix C). The anticipated alignment bypassing the Riverview Substation traverses agricultural land and would not result in any habitat conversion. Between three and five new structures will be required for this alignment, which will result in a permanent loss of potential habitat. Additional impacts to wildlife habitat may occur in order to accommodate expansion of the Riverview Substation.

#### **6.6.6.1.4 Quarry Substation Bypass**

The area around the Quarry Substation is disturbed from the presence of the substation, transmission lines, and CSAH 138 (Map 4 and Map C52 of Appendix C). Available wildlife habitat in the area includes agricultural/open and forested habitats. In addition, the Avon Hills IBA intersects the Quarry Substation area and several GBCAs are adjacent to the Proposed Route in this area (Map 18 and Map C52 of

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Appendix C). Although the anticipated alignment is within the IBA, new impacts to bird species are expected to be minimal given that the area already contains several existing transmission lines adjacent to the anticipated alignment. However, the anticipated alignment will require up to three new structures within the Avon Hills IBA.

As discussed in Section 6.6.4, the anticipated alignment and associated right-of-way into the Quarry Substation traverses some forested habitat; this habitat will be permanently converted into open right-of-way habitat. Between four and six new structures will be required for this alignment, which will result in a permanent loss of potential habitat. Additional impacts to wildlife habitat may occur in order to accommodate expansion of the Quarry Substation.

#### ***6.6.6.1.5 Big Oaks Substation***

The Big Oaks Substation siting area primarily contains agricultural habitat, with open forest habitat also present in the southern part. No preserved or managed wildlife lands are present in the siting area (Map 18 and Map C70 of Appendix C).

The substation will be sited to avoid natural vegetation to the extent feasible and will likely be located on agricultural land. As such, construction of the Big Oaks Substation will result in the permanent removal of 10 acres of agricultural habitat. Extensive similar agricultural habitat is present adjacent to the siting area. As discussed in Section 6.6.5.1.5, the South Becker 13 SBS (ranked high) and a Southern Dry-Mesic Oak (Maple) Woodland native plant community border the southwest part of the siting area; these areas also provide wildlife habitat.

#### ***6.6.6.1.6 Mississippi River Crossing Options***

Both options for crossing the Mississippi River to connect to the Big Oaks Substation are located in an area of high-quality wildlife habitat due to the presence of natural vegetation, including native plant communities and SBS, and the Mississippi River and islands within the river (Map 17 and Map C70 of Appendix C). As noted in Section 2.4, H-frame structures may be used for either river crossing option to allow for a greater span length across the Mississippi River. Use of H-frames would also allow all of the conductors to be strung in a single horizontal plane, therefore minimizing the vertical barrier that avian species would cross.

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While the Western Crossing Option is the shortest in length, its anticipated alignment crosses the Mississippi River in an area where no existing transmission lines are present (Map C70 of Appendix C); as such, it could potentially create a new impact to birds flying through the area. The anticipated alignment for the Western Crossing Option requires fragmenting sparsely forested wildlife habitat on each side of the Mississippi River. The anticipated alignment for the Western Crossing Option requires permanent conversion of sparsely forested habitat into open right-of-way habitat. New structures will be required for the Western Crossing Option's anticipated alignment, which will result in a permanent loss of potential wildlife habitat.

Although there is an existing transmission line corridor in the vicinity of the Eastern Crossing Option's anticipated alignment, the Eastern Crossing Option is routed to avoid crossing over some of the smaller islands in the Mississippi River (Map C70 of Appendix C). As a result, where the anticipated alignment crosses the Mississippi River, it requires a new corridor, fragmenting densely forested wildlife habitat on a larger island in the Mississippi River causing permanent impacts. The anticipated alignment for the Eastern Crossing Option requires permanent conversion of densely and sparsely forested habitat into open right-of-way habitat. New structures will be required for the Eastern Crossing Option's anticipated alignment, which will result in a permanent loss of potential wildlife habitat.

### **6.6.7 Protected Species**

Data on federal and state-protected species were reviewed for the Project using the USFWS Information for Planning and Consultation (IPaC) online tool, the MDNR Natural Heritage Inventory System (NHIS) database (License Agreement #2022-008), and MDNR Conservation Explorer online tool. Although this review does not represent a comprehensive survey, it provides information on the potential for the presence of protected species within the Proposed Route.

#### **6.6.7.1 Federally Protected Species**

Federally threatened or endangered species are protected under Section 7 of the Endangered Species Act of 1973 (ESA). Migratory birds are protected under the Migratory Bird Treaty Act of 1918 (16 USC 703-712), which prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests. Bald eagles (*Haliaeetus leucocephalus*) and golden eagles (*Aquila chrysaetos*) are protected under the Bald and Golden Eagle Protection Act (16 USC

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668-668d), which specifically prohibits the taking or possession of and commerce in, either alive or dead, or any part, nest, or egg of these eagles.

The USFWS IPaC online tool was queried on April 20, 2023, for a list of federally threatened and endangered species, proposed species, candidate species, and designated critical habitat that may be present within the Proposed Route (Appendix J). The IPaC query identified the following species as potentially occurring in the Proposed Route: northern long-eared bat (*Myotis septentrionalis*; endangered), tricolored bat (*Perimyotis subflavus*; proposed endangered), monarch butterfly (*Danaus plexippus*; candidate), and whooping crane (*Grus americana*; experimental population, non-essential). The IPaC query also identifies bald eagles and golden eagles and several migratory birds as potentially being present in the Proposed Route.

#### **6.6.7.1.1 Northern Long-Eared Bat**

The federally endangered northern long-eared bat roosts in living and dead trees greater than 3 inches in diameter that have loose or peeling bark, cavities, or crevices during the active season (reference (40)). During winter, they hibernate in caves and mines. According to the MDNR and USFWS a northern long-eared bat hibernacula is present approximately 4 miles north of the Proposed Route in Stearns and Sherburne Counties; no maternity roost trees have been identified within the Proposed Route (reference (41)). However, potentially suitable roosting and foraging habitat is present within the Proposed Route.

#### **6.6.7.1.2 Tri-Colored Bat**

Tri-colored bats, a federally proposed endangered species, are found in forested habitats where they roost in trees during the active season; tri-colored bats hibernate in caves and mines over the winter (reference (42)). Potentially suitable roosting and foraging habitat is present within the Proposed Route; however, proposed species are not protected under the ESA.

#### **6.6.7.1.3 Monarch Butterfly**

Monarch butterflies, a federal candidate species, are found in areas with a high number of flowering plants, which provide sources of nectar. Monarch butterflies rely exclusively on the presence of milkweed (*Asclepias* spp.) to complete the caterpillar life stage (reference (43)). Suitable habitat for monarch butterflies is present within the Proposed Route; however, candidate species are not protected under the ESA.

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#### **6.6.7.1.4 Whooping Crane**

Whooping cranes breed, migrate, winter, and forage in a variety of wetland and other habitats, including coastal marshes and estuaries, inland marshes, lakes, ponds, wet meadows and rivers, and agricultural fields (reference (44)). Whooping cranes are extremely rare in Minnesota. Currently there is only one self-sustaining wild population in North America, the Aransas-Wood Buffalo National Park population, which nests in Wood Buffalo National Park and adjacent areas in Canada, and winters in coastal marshes in Texas at Aransas.

The whooping crane is designated as a non-essential experimental population in Minnesota. This designation refers to a population that has been established within its historical range under Section 10(j) of the ESA to aid in recover of the species. Consultation under Section 7(a)(2) of the ESA is only required if project activities will occur within a National Wildlife Refuge or National Park. If project activities are proposed on lands outside of a National Wildlife Refuge or National Park, consultation is not required. The Proposed Route does not cross a National Wildlife Refuge or a National Park. The nearest location of these resources is the Sherburne National Wildlife Refuge, which is approximately 8 miles northeast of the Big Oaks Substation siting area. Although suitable habitat is present within the Proposed Route, given the highly disturbed nature of the Proposed Route and the extreme rarity of whooping cranes in Minnesota, they are not likely to be present.

#### **6.6.7.1.5 Bald and Golden Eagles**

In Minnesota, bald eagles inhabit forested areas near large lakes, reservoirs, and rivers (reference (45)). Golden eagles can be found in open country in the vicinity of hills, cliffs and bluffs associated with grasslands, intermittent forested habitat, and woodland-brushlands (reference (46)). Habitat suitable for bald and golden eagles is present within the Proposed Route.

#### **6.6.7.1.6 Migratory Birds**

The state of Minnesota is in the Central Flyway of North America. The Central Flyway is a bird migration route that encompasses the Great Plains of the U.S. and Canada. Migratory birds use portions of the Central Flyway as resting grounds during spring and fall migration, as well as breeding and nesting grounds throughout the summer. Suitable habitat for migratory birds is present throughout the Proposed Route in the extensive agricultural habitat, as well as areas of high-quality native



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habitat (Section 6.6.4), including those preserved or managed for wildlife (Section 6.6.5). The IPaC query identified 20 USFWS Birds of Conservation Concern (BCC) as potentially being present in the Proposed Route (Appendix J). The USFWS identifies BCCs as species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the ESA. The Fish and Wildlife Conservation Act of 1980 (16 USC 2901-2911) affords protection to BCC.

#### ***6.6.7.1.7 Impacts and Mitigation***

Potential impacts to and mitigation measures for federally protected species are discussed by species for all Project Components.

#### **Northern Long-Eared Bat and Tri-Colored Bat**

Potential impacts to northern-long eared bats may occur in areas of the Project where tree clearing will occur, such as the Alexandria Substation Tap, Quarry Substation Bypass, and the Mississippi River Crossing Options. Direct impacts to individual northern long-eared bats may occur if removal of woody vegetation occurs during the active season, April 15 - October 1. Tree clearing activities conducted when the species is in hibernation are not anticipated to result in direct impacts to individual bats but could result in indirect impacts due to removal of suitable foraging and roosting habitat. The Applicants will consult with the USFWS to develop necessary avoidance and minimization measures for this species and will comply with any applicable USFWS requirements in place at the time of Project construction.

Similar to the northern long-eared bat, tree clearing may impact individual tri-colored bats if tree removal occurs during their active season. Tree clearing activities conducted when the species is in hibernation is not anticipated to result in direct impacts to individual bats but could result in indirect impacts due to removal of suitable foraging and roosting habitat. Avoidance and minimization measures implemented for the northern long-eared bat would also serve to protect tri-colored bats. If the USFWS reaches a decision on the final rule listing the species as endangered prior to Project construction, the Applicants will consult with the USFWS to determine if additional measures are needed to prevent adverse impacts to tri-colored bats.

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### **Monarch Butterfly**

Construction activities involving clearing and grading may impact monarch butterfly individuals. These activities will occur throughout all Project Components. If the USFWS determines the monarch butterfly should be listed and protection for the species coincides with Project planning, permitting, and/or construction, the Applicants will review Project activities for potential impacts on the species, develop appropriate avoidance and minimization measures, and consult with the USFWS as appropriate.

### **Whooping Crane**

Potential impacts to whooping cranes could occur as a result of collision with transmission lines. The new transmission line corridors associated with the Mississippi River Crossing Options could pose a potential threat to whooping cranes should they be present. However, given the rarity of whooping cranes in Minnesota, their presence is not anticipated. Implementation of APLIC safety standards will minimize the potential for whooping crane collisions.

### **Bald and Golden Eagles**

Potential impacts to bald and golden eagles could occur as a result of collision with transmission lines or if construction activities are conducted within 660 feet of an active eagle nest. During the nesting season construction noise and human activity may disturb nesting eagles to such a degree that adults abandon the nest (reference (47)). Suitable nesting habitat is present in the vicinity of the Minnesota River Crossing Options. If construction activities take place in suitable eagle nesting habitat during the species' nesting season, surveys to identify active nests within 660 feet of work areas will be conducted in early spring (i.e., early March/early April) of the year of construction. If active nests are identified within the disturbance buffer, the Applicants will consult with the USFWS to determine next steps and develop appropriate avoidance and minimization measures. Implementation of APLIC safety standards will minimize the potential for bald and golden eagle collisions.

### **Migratory Birds**

Potential indirect impacts to migratory birds, including BCC, could occur as a result of loss of habitat or displacement during construction activities. Vegetation clearing and other ground disturbing activities could directly impact migratory birds should they be nesting within or adjacent to construction areas. Where possible, the Applicants will

conduct these activities outside of the nesting season or conduct pre-construction nest surveys in areas of suitable habitat.

As mentioned in Section 6.6.5, once the Project is operational, there is potential for impacts to migratory birds as a result of collisions with transmission lines and associated equipment. The threat of collision is already present along the existing infrastructure; as such, the second circuit is not anticipated to pose an increased threat. However, areas of new transmission line corridor, particularly the Mississippi River Crossing Options, could pose new potential threats of collision. As discussed in Section 6.6.5, the Project will be constructed according to APLIC recommended safety standards to reduce the potential for avian collisions.

### 6.6.7.2 State Protected Species

State-listed threatened or endangered species are protected under the Minnesota Endangered Species Statute (Minn. Stat. § 84.0895). The MDNR NHIS database was queried on March 13, 2023, to identify known occurrences of state protected threatened and endangered species within the Proposed Route. The NHIS query identified three endangered, five threatened, and thirteen special concern species that have been documented within one mile of the Proposed Route; these species are summarized in Table 6.6-10. Although state special concern species are tracked and monitored by the MDNR, they are not legally protected under state law.

**Table 6.6-10 Natural Heritage Information System Database Records Within One Mile of the Proposed Route**

Common Name	Scientific Name	State Status <sup>1</sup>	Habitat <sup>2</sup>
Vascular Plants			
Butternut	<i>Juglans cinerea</i>	END	Mesic hardwood forests.
Hill's Thistle	<i>Cirsium pumilum var. billii</i>	SPC	Southern dry prairies and southern dry savannas.
Rock Sandwort	<i>Minuartia dawsonensis</i>	THR	Sand and gravel deposits.
Small White Lady's-slipper	<i>Cypripedium candidum</i>	SPC	Mesic prairies with deep soil.
Sterile Sedge	<i>Carex sterilis</i>	THR	Calcareous fens.
Tuberclad Rein Orchid	<i>Platanthera flava var. herbiola</i>	THR	Moist or wet meadows, sunny swales in savannas, and margins of shallow marshy lakes.

Common Name	Scientific Name	State Status <sup>1</sup>	Habitat <sup>2</sup>
Aquatic Species			
Black Sandshell	<i>Ligumia recta</i>	SPC	Riffle and run areas of medium to large rivers in areas dominated by sand or gravel.
Creek Heelsplitter	<i>Lasmigona compressa</i>	SPC	Creeks, small rivers, and the upstream portions of large rivers.
Least Darter	<i>Etheostoma microperca</i>	SPC	Clear freshwater streams and lakes, with cool to warm waters.
Mudpuppy	<i>Necturus maculosus</i>	SPC	Medium to large rivers and larger lakes.
Pugnose Shiner	<i>Notropis anogenus</i>	THR	Clear glacial lakes and low gradient small-to-moderate-sized streams in areas of little current.
Reptiles			
Blanding's Turtle	<i>Emydoidea blandingii</i>	THR	Wetland complexes and adjacent sandy uplands for nesting.
Birds			
Acadian Flycatcher	<i>Empidonax virescens</i>	SPC	Large tracts of mature, intact, closed-canopy deciduous forest.
Cerulean Warbler	<i>Setophaga cerulea</i>	SPC	Large tracts of deciduous forest with mature to old-growth trees and a structurally diverse canopy.
Henslow's Sparrow	<i>Ammodramus henslowii</i>	END	Uncultivated grasslands and old fields with stalks for singing perches and a substantial litter layer.
Lark Sparrow	<i>Chondestes grammacus</i>	SPC	Dry grasslands with a specific set of components and characteristics: short and/or sparse grasses (usually native) in areas of sand or gravel soils, with at least some bare ground and widely scattered or patchy trees.
Loggerhead Shrike	<i>Lanius ludovicianus</i>	END	Native and non-native upland grasslands and sometimes in agricultural areas where short grass vegetation and perching sites such as hedgerows, shrubs, and small trees are found.
Marbled Godwit	<i>Limosa fedoa</i>	SPC	Native grasslands with sparse to moderate cover, adjacent to a complex of wetlands.
Peregrine Falcon	<i>Falco peregrinus</i>	SPC	Nest primarily on buildings and bridges in urban settings and also use historic eyries on cliffs along lakes and rivers.
Red-shouldered Hawk	<i>Buteo lineatus</i>	SPC	Large tracts of mature deciduous forest with scattered wetland openings.
Trumpeter Swan	<i>Cygnus buccinator</i>	SPC	Small ponds and lakes or bays on larger water bodies with extensive beds of emergent vegetation such as cattails, bulrushes, and sedges.

1 END – endangered, THR – threatened, and SPC – special concern. No species identified in the NHIS database are federally listed.

2 Habitat information obtained from the MDNR Rare Species Guide (reference (48)).

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### **6.6.7.2.1 Impacts and Mitigation**

Potential impacts to and mitigation measures for state protected species are discussed by species or species category for all Project Components. A Natural Heritage Review request was submitted through the MDNR Minnesota Conservation Explorer on August 15, 2023 (Project ID 2023-00630). The Applicants will continue to work with the MDNR to avoid or minimize adverse impacts to state protected species and will implement appropriate, species-specific BMPs if Project activities will take place during the species' active season.

#### **Vascular Plants**

None of the vascular plant species identified in Table 6.6-10 have been documented within the Proposed Route. The majority of the Proposed Route consists of agricultural land cover, which is not suitable habitat for these species. However, areas of natural vegetation provide suitable habitat for butternut, Hill's thistle, and tubercled rein orchid. Potential impacts to these species could occur as a result of vegetation clearing and grading activities. Impacts are not anticipated where the second circuit will be strung along existing infrastructure given that the existing right-of-way is routinely disturbed during maintenance activities. Impacts to these species would be minimized by limiting clearing to the right-of-way and spanning areas of natural vegetation and wetlands to the extent feasible.

#### **Aquatic Species**

The black sandshell mussel is the only aquatic species identified in Table 6.6-10 that has been documented within the Proposed Route. Habitat suitable for the mudpuppy salamander is present in the Mississippi River, but no suitable habitat is present for the other aquatic species identified in Table 6.6-10. No in-stream work will be required to construct the Project; however, potential runoff from Project workspaces could temporarily decrease water quality and impact aquatic species. The Applicants will implement appropriate BMPs to prevent erosion and sediment runoff and protect water quality. As such, adverse impacts to aquatic species are not anticipated.

#### **Blanding's Turtle**

Habitat suitable for Blanding's turtles is present within the Proposed Route, and the species was documented on the edge of the Proposed Route. Potential impacts to Blanding's turtles could occur as a result of ground disturbing activities during construction; these potential impacts could be minimized by spanning large wetland

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complexes with adjacent sandy uplands. This impact minimization measure was implemented during construction of the existing infrastructure and will be implemented in areas where new transmission line corridor is proposed. Structure placement in areas where new transmission line corridor is proposed has not been finalized. As noted above, the Applicant submitted a Natural Heritage Review to the MDNR and will continue to work with the MDNR to avoid or minimize adverse impacts to state protected species, such as Blanding’s turtles, and will implement appropriate, species-specific BMPs if Project activities will take place during the species’ active season.

### **Birds**

The cerulean warbler, marbled godwit, and peregrine falcon are the only species identified in Table 6.6-10 that have been documented within the Proposed Route. Suitable habitat for Henslow’s sparrow, lark sparrow, and loggerhead shrike is present within the Proposed Route but not for the other bird species identified in Table 6.6-10. Potential impacts to and mitigation for these species is the same as discussed above in Section 6.6.6.1 for migratory birds.

### **6.7 Unavoidable Impacts**

Minn. R. 7850.1900, subp. 3(G) requires that an application discuss “human and environmental effects that cannot be avoided if the facility is approved at a specific site or route.” The Project has been sited and designed to avoid, minimize, or mitigate potential impacts to the degree possible and practicable, as outlined throughout this Application. However, as is the case with most construction projects, some impacts are unavoidable. Environmental impacts that are not entirely avoidable are described below for the construction and operation phases of the Project.

Unavoidable impacts that will occur during construction of the Project include the following:

- Conversion of land use and land cover (i.e., agricultural land and forest)
- Construction-related noise
- Visual impacts from construction activities
- Construction-related traffic
- Criteria pollutant and GHG emissions from construction equipment
- Wetland impacts (to be confirmed after wetland delineation)

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- Soil compaction and erosion
  - Vegetation clearing
  - Wildlife displacement and habitat loss

Unavoidable impacts that are anticipated to last the life of the Project (operation) include the following:

- Visual impacts
- Interference with AM radio signals
- Criteria pollutant and GHG emissions from operation and maintenance activities
- Maintenance of tall growing vegetation, including trees
- Potential for avian collisions

The Project will require only minimal commitments of resources that are irreversible and irretrievable. Irreversible commitments of resources are those that result from the use or destruction of a specific resource that cannot be replaced within a reasonable timeframe. Irretrievable resource commitments are those that result from the loss in value of a resource that cannot be restored after the action. For the Project, those commitments that do exist are primarily related to construction. Construction resources include aggregate resources, concrete, steel, and hydrocarbon fuel. During construction, vehicles necessary for these activities would be deployed on site and would need to travel to and from the construction area, consuming hydrocarbon fuels. Other resources would be used in pole construction, pole placement, and other construction activities.

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## **7 Federal and State Agency, Local Government, and Public Involvement**

This section describes outreach efforts conducted by the Applicants and discusses pre-application involvement by federal, state, and local agencies as well as the public information outreach campaign. Throughout the process, the Applicants provided opportunities for stakeholders and potentially affected landowners to participate in the Project. This engagement provided the Applicants with valuable insight into landowner and public agency preferences regarding development of the Project.

### **7.1 Agency Involvement in Pre-Application**

As part of pre-application outreach, the Applicants mailed over 100 90-day pre-application notice letters to relevant LGUs and tribal representatives on March 31, 2023 (Appendix K). The notice letter introduced the Project and offered an opportunity to request a consultation meeting regarding the Project.

In April 2023, the Applicants mailed 130 postcards to LGUs, tribal representatives, local senators and representatives, and relevant state and federal agencies, providing notification of the three Project open houses (Appendix E). In addition to providing information on dates and locations of the open houses, notifications also included a general Project description, a Project schedule, a map of the Project Study Area, the Project's website address, and Project contact information. Project open houses are discussed in Section 7.2.2.

A summary of correspondence with federal and state agencies and LGUs is included below. The Applicants will continue to communicate with federal and state agencies and LGUs as the Project moves forward and will seek any necessary permits.

#### **7.1.1 Federal Agencies**

The Applicants corresponded with one federal agency, the USFWS, regarding the Project.

##### **7.1.1.1 U.S. Fish and Wildlife Service**

The Applicant reached out via email to Shauna Marquardt of the USFWS Minnesota-Wisconsin Ecological Services Field Office in August 2023 to provide Project information and answer any questions the USFWS may have. The email also provided information on the Commission's upcoming public review process of the Route



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Permit application. As of the publication of this document, no response has been received from the USFWS, and no further correspondence has occurred.

### **7.1.2 State Agencies**

The Applicants corresponded with the following state agencies regarding the Project: MDNR MnDOT, and the Minnesota SHPO.

#### **7.1.2.1 Minnesota Department of Natural Resources**

The Applicants, along with staff from Barr, met with the MDNR on June 27, 2023, to discuss the overall Project and potential impacts to sensitive resources associated with the Mississippi River Crossing Options. Melissa Collins, MDNR Regional Environmental Assessment Ecologist, followed up with a letter to the Applicant on July 31, 2023; this letter is provided in Appendix L.

The MDNR indicated that a new calcareous fen had been identified near Saint Martin and that it was in the process of undergoing state approval. So that potential impacts to the fen could be assessed, the MDNR provided a shapefile containing the Saint Martin 15 fen location to the Applicants on June 28, 2023.

The MDNR had concerns with Mississippi River Eastern Crossing Option in that it would parallel an existing transmission line but would not share any existing right-of-way, thereby fragmenting an island in the Mississippi River. There was a discussion regarding the extensive tree clearing that would be needed for the Eastern Crossing Option and that the area may contain the state endangered butternut (*Juglans cinerea*) tree. The MDNR recommended a tree survey and a Minnesota Conservation Explorer Natural Heritage Review.

The Applicants discussed whether the existing structures associated with the parallel transmission line could be upgraded to allow the new circuit to be hung on the same pole as the existing line and, therefore, share existing right-of-way. This option is not currently being considered as part of this Application as it would require removing existing structures and constructing new, taller, double-circuit structures at the crossing. This option would be more expensive and would potentially increase the likelihood of avian conflicts with the transmission lines due to the taller structures and additional planes of lines extending vertically.

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### **7.1.2.2 Minnesota Department of Transportation**

The Applicant held a virtual meeting with several staff members from MnDOT on August 3, 2023. The Applicant shared a presentation of the Project with MnDOT during the meeting and answered questions.

On August 24, 2023, Stacy Kotch Egstad, Utility Routing and Siting Coordinator for MnDOT, submitted a letter to the Applicant with a cursory review in response of information exchanged during the August 3, 2023, meeting. The letter from MnDOT, which is provided in Appendix L, indicates the following:

- Existing poles, where applicable, including a second set of conductors on all crossings of I94, were previously permitted by MnDOT.
- For any new construction associated with the Project, including new pole placement and second stringing in areas over/within the state trunk highway system, additional consultation would be required.
- Should the Applicant plan to utilize any portion of MnDOT right-of-way for temporary access and/or staging during construction activities, staff from MnDOT's Office of Environmental Stewardship would request the opportunity to review for unique environmental resources.

### **7.1.2.3 Minnesota State Historic Preservation Office**

The Minnesota SHPO was contacted on March 7, 2023, to request information on known cultural resources with the Project Study Area. The Minnesota SHPO responded on March 10, 2023, with a Microsoft Access database file containing all known records of cultural resources within the Project Study Area. This dataset was incorporated into Section 6.5.

### **7.1.3 Local Government Units**

The Applicants corresponded with the following LGUs regarding the Project: Stearns and Wright counties.

#### **7.1.3.1 Sherburne County and Wright County**

The Applicants met with zoning and planning administrators for Sherburne and Wright counties on August 30, 2023, to discuss Project details and permitting and construction timelines, with a primary focus on the options for crossing the

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Mississippi River. The Applicants informed Sherburne and Wright counties that it was looking for crossing options that create the least amount of impact to the Mississippi Wild & Scenic River District, and that the crossings are being proposed in locations where Xcel Energy owns the land on both sides of the Mississippi River. Wright County stated that they will check to see if, in addition to the Commission’s approval, any local permitting would be required of a new crossing of the Mississippi Wild & Scenic River District. Sherburne County sent an email after the meeting stating that both of the proposed crossing options appear to be entirely within the City of Becker’s zoning authority on the north side of the Mississippi River in Sherburne County.

## **7.2 Public Information Outreach**

Public engagement for the Project consisted of informational mailings and open house meetings, as described below.

### **7.2.1 Mailings and Newsletters**

In April 2023, the Applicants mailed nearly 3,000 postcards to landowners in the Project Study Area (Appendix M) providing notification of the April 2023 open houses to landowners and agencies. As noted above, in addition to providing information on dates and locations of the open houses, notifications also included a general Project description, a Project schedule, a map of the Project Study Area, the Project’s website address, and Project contact information. Open houses were also advertised in the Alexandria Echo Press, the Becker Patriot News, and the St. Cloud Times.

### **7.2.2 Open House Meetings**

Four open house meetings were held for the Project, two in-person and two virtual:

- Alexandria Holiday Inn, Alexandria, MN - April 11, 2023
- Becker Community Center, Becker, MN - April 12, 2023
- Virtual - April 13, 2023 (1:00pm and 6:00pm)

A total of 12 people attended the in-person open house in Alexandria, 17 people attended the in-person open house in Becker, and 25 people logged on to attend the virtual meetings. During and after the open house meetings, formal and informal

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comments were collected. A total of four comments were submitted, one from each in-person open house and two submitted by email.

### **7.2.2.1 Summary of Comments**

Comments submitted about the Project during and after the open house meetings were centered on the following themes:

- Use of existing infrastructure will lessen the disturbance to farmland.
- Request for Project construction to occur after harvest to minimize damage to fields.
- Opposition of a previously reviewed but rejected Mississippi River Crossing Option because it bisects and would disrupt long-standing research at the University of Minnesota Sand Plain Research Farm.

### **7.3 Route Modifications Incorporated Through Public and Agency Involvement**

The Applicants worked with the public and agencies to inform the routing process. The majority of the Project involves stringing a second circuit along existing infrastructure and taps or bypasses associated with substations along that line. As such, Route modifications were not made; however potential alignment modifications within the Route were considered for crossing the Mississippi River into the proposed Big Oaks Substation.

- A third Mississippi River Crossing Option east of the Monticello Nuclear Generating Plant was originally considered (Map 5). As noted in Section 7.2.2.1, the Project received a comment from the University of Minnesota Sand Plain Research Farm with concerns that this alignment would bisect and disrupt long-standing research at the University of Minnesota Sand Plain Research Farm. In addition, as noted in Section 3.1.2, this alignment was rejected based on evaluation against the guiding factors outlined in Section 3.1 including effect on human settlement, recreation, tourism and costs of constructing, operating, and maintaining the facility. The rejected alignment is longer than the other two options, has greater linear impacts on the Mississippi Wild & Scenic River District and is more expensive. Additionally, challenges and costs related to the construction, operation and maintenance of the

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alignment associated with crossing up to seven different existing transmission lines near the Monticello Substation and Monticello Nuclear Generating Plant led to the alignment's rejection.

## 8 Permits, Approvals, Consultations, and Reviews

### 8.1 Anticipated Permits, Approvals, Consultations, and Reviews

The Project will require several regulatory permits, approvals, consultations, and reviews; these are summarized in Table 8.1-1. All permits, approvals, consultations, and reviews required for the Project will be obtained prior to the onset of construction in applicable areas.

**Table 8.1-1 Anticipated Permits, Approvals, Consultations, and Reviews**

Permit/Compliance	Administering Agency
<b>Federal</b>	
Section 7 Consultation	USFWS
Section 10 Permit	USACE
Section 404 Permit	USACE
Notice of Proposed Construction and Actual Construction (7460)	FAA
Spill Prevention, Control, and Countermeasure (SPCC) Plan	EPA
Farmland Protection Policy Act/Farmland Conversion Impact Rating	USDA/NRCS
<b>State</b>	
Threatened & Endangered Species Natural Heritage Review	MDNR
License to Cross Public Waters or State Lands	MDNR
Construction Dewatering Permit	MDNR
Utility Permit	MnDOT
Driveway/Access Permits	MnDOT
Oversize/Overweight Permits	MnDOT
Wetland Conservation Act Exemption Concurrence	Board of Water and Soil Resources
Section 401 Water Quality Certification	MPCA
National Pollutant Discharge Elimination System (NPDES) Permit (Construction Stormwater)	MPCA
Cultural Resources Consultation	Minnesota State Historic Preservation Office/State Archaeologist
Agricultural Impact Mitigation Plan	Minnesota Department of Agriculture

Permit/Compliance	Administering Agency
<b>Local</b>	
Road Crossing/Right-of-Way Permits	County, Township, City
Public Lands Permits - Local	County, Township, City
Utility Permits	County, Township, City
Oversize/Overweight Permits	County, Township, City
Driveway/Access Permits	County, Township, City
Municipal Stormwater Permits	County, Township, City

## 8.2 Federal

### 8.2.1 U.S. Fish and Wildlife Service, Federal Threatened and Endangered Species Review

The ESA, as amended, directs the USFWS to identify and protect endangered and threatened species and their critical habitat. Section 9 of the ESA prohibits take of federally-listed species; take is defined as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct” The term “harm” includes significant habitat alteration which kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. There is one federally listed and legally protected species that could potentially be present within the Proposed Route, the northern long-eared bat.

Projects involving federal lands, funding or authorizations require consultation between the lead federal agency (i.e., the USACE) and the USFWS, pursuant to Section 7 of the ESA. If it is determined that a project will have adverse impacts on a listed species, a Biological Opinion and Incidental Take Statement will be issued by the USFWS.

Project-specific consultations were initiated via email to Shauna Marquardt of the USFWS Minnesota-Wisconsin Ecological Services Field Office in August 2023. The Applicants will coordinate further discussion with the USFWS; however, the Applicants do not anticipate adverse impacts on federally listed species; therefore, an Incidental Take Permit will not likely be necessary.

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### **8.2.2 U.S. Army Corps of Engineers, Section 10 River and Harbors Act Permit**

The USACE regulates impacts to navigable waters of the U.S. under Section 10 of the River and Harbors Act. The Applicants will apply for a permit to cross the Mississippi River once a Route Permit is issued for the Project.

### **8.2.3 U.S. Army Corps of Engineers, Section 404 Clean Water Act Permit**

A Section 404 permit is required from the USACE under the CWA for discharges of dredged or fill material into waters of the U.S. The Applicants will apply for these permits once a Route Permit is issued for the Project.

The Project would not require replacement wetlands under Minnesota law because it would be covered under the Federal Approvals exemption for utilities. In accordance with Minn. Stat. § 103G.2241, subd. 3 and 6 and Minn. R. 8420.0420, subp. 4, a replacement plan is not required for wetland impacts resulting from the construction, maintenance, or repair of utility lines, when such a project is authorized by the USACE under Section 404 of the CWA.

### **8.2.4 Federal Aviation Administration, Notice of Proposed Construction and Actual Construction or Alteration, Part 7460 Review**

FAA notice and approval are required for structures 200 feet above ground level or those that may exceed an imaginary surface extending outward and upward at certain slopes defined in the 14 CFR Part 77.9. Form 7460-1 shall be submitted to the FAA for notice of construction. Each individual structure meeting these requirements will be registered for notice, which would include information such as the latitude and longitude, structure height, and the elevation at the structure location. The FAA then conducts an aeronautical study for potential airspace impacts and issues a determination of hazard or no hazard. If a structure location is changed prior to construction, it is necessary to resubmit Form 7460-1 for that structure. When the construction is complete, as-built information will be submitted using Form 7460-2.

### **8.2.5 U.S. Environmental Protection Agency, Spill Prevention, Control, and Countermeasure Plan**

A Spill Prevention, Control, and Countermeasure (SPCC) plan is required to contain and prevent discharge of oil or other petroleum products into waters of the U.S. The Applicants will prepare an SPCC plan for the construction phase of the project if



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contractors bring in stationary or mobile fueling tanks that exceed the 40 CFR, Part 112 threshold requirements (1,320 gallons of oil capacity). The SPCC plan will cover all laydown, staging, parking, and refueling activities along the right-of-way. A separate facility SPCC plan will be created for Big Oaks Substation if regulatory oil thresholds are exceeded.

### **8.2.6 U.S. Department of Agriculture/Natural Resources Conservation Service, Farmland Protection Policy Act/Farmland Conversion Impact Rating**

The FPPA is intended to minimize the impact Federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. A FPPA form will be filled out and filed with the USDA/NRCS if applicable.

### **8.2.7 U.S. Fish and Wildlife Service, Special Use Permit**

A Special Use Permit is required from the USFWS if the Proposed Route intersects with USFWS-owned land or easements. The Applicants have existing Special Use permits that allow for a second circuit to be strung on existing right of way that crosses the Douglas and Stearns County WPAs. Still, the Applicants will re-visit these Special Use Permits with USFWS to verify no amendments are necessary to accommodate the Project. The Project is not anticipated to adversely impact other federally owned parcels.

## **8.3 State**

### **8.3.1 Minnesota Department of Natural Resources, State Threatened and Endangered Species Review**

Pursuant to Minnesota's Endangered Species Statute (Minn. Stat. § 84.0895), the MDNR is required to adopt rules designating species meeting the statutory definitions of endangered, threatened, or species of special concern and regulate treatment of these species. A Natural Heritage Review request was submitted through the MDNR Minnesota Conservation Explorer on August 15, 2023 (Project ID 2023-00630). The Applicants will consult with the MDNR regarding any Project-specific construction considerations related to Minnesota's Endangered Species Statute.

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### **8.3.2 Minnesota Department of Natural Resources, License to Cross Public Waters or State Lands**

A MDNR Utility License is required for the passage of any utility over, under, or across any public waters or state land. The MDNR Division of Lands and Minerals is responsible for granting approval in the form of a crossing license. In addition to a long-term license fee, there is a one-time crossing fee for each waterbody crossed. Agency review time of the application varies depending on the crossing technique and involves review and approval from several state departments and associated divisions. The Applicants will consult with the MDNR and will obtain a license, as applicable.

### **8.3.3 Minnesota Department of Natural Resources, Construction Dewatering Permit**

The MDNR also regulates water appropriation activities that exceed 10,000 gallons per day or a total of one million gallons per year under Minn. R. 6115.0620. The Applicants will obtain authorization for the Project under MDNR's General Permit 1997-2005 for Temporary Projects, only as necessary, for activities such as construction site dewatering.

### **8.3.4 Minnesota Department of Transportation, Utility Permit**

The Applicants will apply for a Utility Accommodation on Trunk Highway Right-of-Ways (Form 2525) as necessary. This permit is required for the construction of utility facilities crossing or paralleling existing trunk highway rights-of-way.

### **8.3.5 Minnesota Department of Transportation, Driveway Access Permit**

The Applicants will apply for an Access/Driveway Permit (Form 1721) for using driveways and access points to trunk highways crossed or paralleled by the Project during construction.

### **8.3.6 Minnesota Department of Transportation, Oversize/Overweight Permits**

The Applicants will apply for oversize and/or overweight permits for all vehicles using state trunk highways during construction and operation of the Project. These permits are required for vehicle loads of excess height, length, and/or weight, although overlength utility poles may be exempt. Certain overwidth and/or overlength loads require escorts, which the Applicants will arrange as necessary.

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### **8.3.7 Minnesota Board of Water and Soil Resources, Wetland Conservation Act Exemption Concurrence**

The Minnesota Wetland Conservation Act is administered at the local level with oversight from BWSR in accordance with Minn. R. 8420. The Project may require a permit under these rules if permanent impacts to wetlands cannot be avoided.

### **8.3.8 Minnesota Pollution Control Agency, Section 401 Water Quality Certification**

The MPCA requires Section 401 water quality certification to obtain a federal permit for any activity potentially resulting in discharge to waters of the U.S. This certification ensures the Project will comply with state water quality standards according to the CWA. The Applicants will obtain Section 401 water quality certification as necessary for the Project.

### **8.3.9 Minnesota Pollution Control Agency, National Pollutant Discharge Elimination System Permit**

The MPCA requires an NPDES Permit for stormwater discharges associated with construction activities disturbing one acre of land or greater. Prior to construction, the Applicants will obtain a construction stormwater permit and develop and implement a SWPPP that identifies BMPs and construction measures to contain soils and to minimize discharge of sediment during stormwater events.

### **8.3.10 State Historic Preservation Office, Cultural Resources Consultation**

The Applicants have contacted the Minnesota SHPO to determine if features eligible for listing in the National Record of Historic Places are present within the area encompassed by the Project. The Applicants will continue to coordinate with the Minnesota SHPO.

### **8.3.11 Agriculture Impact Mitigation Plan**

The Applicants will follow an updated AIMP for the CapX2020 transmission projects (reference (49)) A draft of the updated AIMP is in Appendix F. This plan describes measures and BMPs used in agricultural land to minimize any negative impacts on cultivated fields and drain tile systems. Landowners would be compensated for any loss of or damage to crops, or for lands that cannot be planted because of Project construction activities.

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## **8.4 Local**

### **8.4.1 Road Crossings/Right-of-Way Permits**

These permits may be required to occupy/cross county, township, and city rights-of-way and roads.

### **8.4.2 Public Lands Permits**

These permits may be required to occupy county, township, and city lands such as park lands, watershed districts, or other properties owned by these entities.

### **8.4.3 Utility Permits**

These permits may be required to place utilities within county, township, and city rights-of-way and roads.

### **8.4.4 Over-size/Overweight Permits**

These permits may be required to move over-width or heavy loads on county, township, or city roads and will be obtained once a Route Permit has been issued by the Commission.

### **8.4.5 Driveway/Access Permits**

These permits may be required to construct access roads or driveways that access county, township or city roadways and will be obtained once a Route Permit has been issued by the Commission.

### **8.4.6 Municipal Stormwater Permits**

A stormwater permit may be required from municipalities in the Proposed Route for stormwater discharges associated with construction activities disturbing one or more acres. A requirement of the permit is to develop and implement a SWPPP, which includes BMPs to minimize discharge of pollutants from the site.

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## 9 References

1. **Minnesota Public Utilities Commission.** Alternative Process. [Online] <https://mn.gov/puc/activities/energy-facilities/power-plants-transmission-lines/alternative-process/>.
2. **Minnesota Department of Natural Resources.** Ecological Classification System: Ecological Land Classification Hierarchy. [Online] [Cited: March 13, 2023.] <https://www.dnr.state.mn.us/ecs/index.html>.
3. **Minnesota Public Utilities Commission.** Order Granting Route Permit In the Matter of the Route Permit Application for a 345 kV Transmission Line from Brookings County, South Dakota to Hampton, Minnesota. September 14, 2010. Docket No. E-2/TL-08-1474.
4. **The Minnesota State Interagency Working Group on EMF Issues.** A White Paper on Electric and Magnetic Field (EMF) Policy and Mitigation Options. September 2002.
5. **State of Minnesota Public Utilities Commission.** Findings of Fact, Conclusions of Law and Order Issuing a Route Permit to Xcel Energy for Lake Yankton to Marshall Transmission Project. August 29, 2008. In the Matter of the Application of Xcel Energy for a Route Permit for the Lake Yankton to Marshall Transmission Line Project in Lyon County. Docket No. E-002/TL-07-1407.
6. **Minnesota Pollution Control Agency.** A Guide to Noise Control in Minnesota: Acoustical Properties, Measurement, Analysis, and Regulation. November 2015. p-gen6-01.
7. **U.S. Census Bureau.** P1 | Race. *Decennial Census*. [Online] 2020. DEC Redistricting Data (PL 94-171 - Table: DECENNIALPL2020.P1. Todd, Grant, Douglas, Stevens, Pope, Big Stone, Sherburne, Swift, Kandiyohi, Wright, Lac qui Parle Counties, Minnesota. [https://data.census.gov/table?q=population&g=0400000US27\\_0500000US27011,27041,27051,27067,27073,27121,27141,27149,27151,27153,27171&tid=DECENNIALPL2020.P1](https://data.census.gov/table?q=population&g=0400000US27_0500000US27011,27041,27051,27067,27073,27121,27141,27149,27151,27153,27171&tid=DECENNIALPL2020.P1).
8. —. DP03: Selected Economic Characteristics. *American Community Survey 5-Year Estimates Data Profiles*. [Online] 2020. Table: ACS5Y2020.DP03. Todd, Grant, Douglas, Stevens, Pope, Big Stone, Sherburne, Swift, Kandiyohi, Wright, Lac qui Parle Counties, Minnesota. [https://data.census.gov/table?q=DP03&g=0400000US27\\_0500000US27011,27041,27051,27067,27073,27121,27141,27149,27151,27153,27171&tid=ACS5Y2020.DP03](https://data.census.gov/table?q=DP03&g=0400000US27_0500000US27011,27041,27051,27067,27073,27121,27141,27149,27151,27153,27171&tid=ACS5Y2020.DP03).

- 
9. **U.S. Environmental Protection Agency.** Environmental Justice. [Online] [Cited: May 10, 2023.] <https://www.epa.gov/environmentaljustice>.
  10. **Minnesota Pollution Control Agency.** Understanding environmental justice in Minnesota. [Online] [Cited: August 21, 2023.] <https://mpca.maps.arcgis.com/apps/MapSeries/index.html?appid=f5bf57c8dac24404b7f8ef1717f57d00>.
  11. **U.S. Census Bureau.** S1601: Language Spoken at Home. *American Community Survey 5-Year Estimates*. [Online] Table: ACSST5Y2021.S1601, 2021. Census Tract 4507.04; 4507.03; 4509; 4508; Douglas Cnty; MN; 105; 106; 115; 113.02; 114; 111.02; 5.02; 112.02; 113.06; 113.05; 113.08; 4.02; 4.01; Stearns Cnty; MN; 1003; 1002.02; 1002.03; Wright Cnty; MN; 303.02; 304.07; 304.10; Sherburne Cnty; MN. <https://data.census.gov/table?q=language&g=1400000US27041450703,27041450704,27041450800,27041450900,27141030302,27141030407,27141030410,27145000401,27145000402,27145000502,27145010500,27145010600,27145011102,27145011202,27145011302,27145011305,27145011306>.
  12. —. S1701: Poverty Status in the Past 12 Months. *American Community Survey 5-Year Estimates*. [Online] Table: ACSST5Y2020.S1701, 2020. Census Tract 4507.04; 4507.03; 4509; 4508; Douglas Cnty; MN; 105; 106; 115; 113.02; 114; 111.02; 113.06; 113.05; 113.08; 4.02; 4.01; Stearns Cnty; MN; 1003; 1002.02; 1002.03 Wright Cnty; MN; 303.02; 304.07; 304.10 Sherburne County; MN. <https://data.census.gov/table?q=Income+and+Poverty&g=1400000US27041450703,27041450704,27041450800,27041450900,27141030302,27141030407,27141030410,27145000401,27145000402,27145000502,27145010500,27145010600,27145011102,27145011202,27145011302,27145011305,2>.
  13. **Berg, Jenny.** St. Cloud snags 4 awards at international competition for most livable cities. *St. Cloud Times*. December 13, 2019.
  14. **Minnesota Department of Transportation.** Traffic Forecasting & Analysis. [Online] [Cited: August 16, 2019.] <http://www.dot.state.mn.us/traffic/data/tma.html>.
  15. —. State of Minnesota State Transportation Improvement Program (STIP): 2023-2026. September 30, 2023.
  16. **Saint Cloud Area Planning Organization.** Transportation Improvement Program: FY 2023-2026. September 8, 2022.
  17. **U.S. Department of Agriculture.** Chapter 2, Table 1 - County Summary Highlights. *2017 Census of Agriculture*. [Online] Douglas County, Minnesota. [https://www.nass.usda.gov/Quick\\_Stats/CDQT/chapter/2/table/1/state/MN/county/041/year/2017](https://www.nass.usda.gov/Quick_Stats/CDQT/chapter/2/table/1/state/MN/county/041/year/2017).

- 
18. —. About the Conservation Reserve Program (CRP). *Conservation Reserve Program*. [Online] <https://www.fsa.usda.gov/programs-and-services/conservation-programs/conservation-reserve-program/>.
19. **Minnesota Department of Natural Resources - Division of Forestry.** MNDNR Forest Inventory. [Online] January 6, 2023. <https://gisdata.mn.gov/dataset/biota-dnr-forest-inventory>.
20. **Minnesota Department of Natural Resources.** Mineral Industries of Minnesota: including regions of known but undeveloped resources. 1988.
21. **Minnesota Archaeological Predictive Model.** Anfinson's Archaeological Resource Regions. n.d.
22. **Gibbon, Guy E., Johnson, Craig M. and Hobbs, Elizabeth.** Chapter 3 Minnesota's Environment and Native American Culture History. *Mn/Model Minnesota Statewide Archaeological Predictive Model*. [Online] 2002. <https://www.dot.state.mn.us/mnmodel/P3FinalReport/chapter3.html>.
23. **U.S. Environmental Protection Agency.** Minnesota Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants. *Green Book*. [Online] [Cited: April 11, 2023.] [http://www.epa.gov/oar/oaqps/greenbk/anayo\\_mn.html](http://www.epa.gov/oar/oaqps/greenbk/anayo_mn.html).
24. **Minnesota Pollution Control Agency.** Minnesota Air Quality Index. [Online] Tableau Software, LLC, August 10, 2023. [Cited: August 19, 2023.] [https://public.tableau.com/app/profile/mpca.data.services/viz/MinnesotaAirQualityIndex\\_0/AQIEExternal](https://public.tableau.com/app/profile/mpca.data.services/viz/MinnesotaAirQualityIndex_0/AQIEExternal).
25. **Comber, M. G. and Zaffanella, L. E.** Corona Loss. *Transmission Line Reference Book: 345 kV and Above*. Second. s.l. : Electric Power Research Institute, 1982.
26. **U.S. Environmental Protection Agency.** Understanding Global Warming Potential. [Online] [Cited: August 18, 2023.] <https://www.epa.gov/ghgemissions/understanding-global-warming-potentials>.
27. —. Climate Change Indicators: Weather and Climate. [Online] [Cited: August 18, 2023.] <https://www.epa.gov/climate-indicators/weather-climate>.
28. **South Coast Air Quality Management District.** Off-Road - Model Mobile Source Emission Factors. *Air Quality Analysis Handbook*. [Online] Off-road Mobile Source Emission Factors (Scenario 2007-2025.xls [2023 SCAB Fleet Average Emission Factors (Diesel) - 2023. <http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/off-road-mobile-source-emission-factors>.

- 
29. **U.S. Environmental Protection Agency Center for Corporate Climate Leadership.** Emission Factors for Greenhouse Gas Inventories. April 1, 2022.
30. **University of Minnesota.** Climate Explorer Tool. *University of Minnesota Climate Adaptation Partnership.* [Online] [Cited: August 17, 2023.]  
<https://climate.umn.edu/climate-explorer-tool>.
31. **U.S. Environmental Protection Agency.** CREAT Climate Change Scenarios Projection Map. [Online] [Cited: August 21, 2023.]  
<https://epa.maps.arcgis.com/apps/MapSeries/index.html?appid=3805293158d54846a29f750d63c6890e&platform#map>.
32. —. Streamflow Projections Map. *Creating Resilient Water Utilities.* [Online] [Cited: August 21, 2023.]  
<https://epa.maps.arcgis.com/apps/MapSeries/index.html?appid=48dcf8ca136a49a298a60e31422d58f0>.
33. **Minnesota Department of Natural Resources.** Minnesota groundwater provinces 2021. [Online] [Cited: May 10, 2023.]  
<https://www.dnr.state.mn.us/groundwater/provinces/index.html>.
34. **U.S. Army Corps of Engineers.** Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0). [ed.] Dr. James S. Wakeley, Robert W. Lichvar and Chris V. Noble. Vicksburg, MS : U.S. Army Engineer Research and Development Center, August 2010. ERDC/EL TR-10-16.
35. **Cowardin, L.M., V. Carter, F.C. Golet, R.T. LaRoe.** Classification of Wetlands and Deepwater Habitats of the United States. Washington, D.C. : U.S. Fish and Wildlife Service, 1979. FWS/OBS079/31.
36. **Shaw, S.P. and C.G. Fredine.** Wetlands of the United States - Their Extent and Their Value to Waterfowl and Other Wildlife. Washington, D.C. : U.S. Department of the Interior, 1956 (reprinted 1971). p. 67. Circular 39.
37. **Minnesota Department of Natural Resources.** Identification List of Known Calcareous Fens. [Online] October 2021. [Cited: December 23, 2022.]  
[https://files.dnr.state.mn.us/eco/wetlands/calcareous\\_fen\\_list.pdf](https://files.dnr.state.mn.us/eco/wetlands/calcareous_fen_list.pdf).
38. **Minnesota Pollution Control Agency.** 2022 Minnesota's Impaired Waters. [Online] April 29, 2022. 2022 Impaired Waters List (wq-iw1-73.xlsx).  
<https://www.pca.state.mn.us/water/minnesotas-impaired-waters-list>.
39. **U.S. Department of Agriculture Natural Resources Conservation Service.** Web Soil Survey. [Online] <https://websoilsurvey.sc.egov.usda.gov/app>.
40. **Minnesota Department of Natural Resources.** *Myotis septentrionalis*-Northern Long-eared Bat. *Rare Species Guide.* [Online] [Cited: March 14, 2023.]



---

<https://www.dnr.state.mn.us/rsg/profile.html?action=elementDetail&selectedElement=AMACC01150>.

41. **Minnesota Department of Natural Resources; U.S. Fish and Wildlife Service.** Townships Containing Documented Northern Long-Eared Bat (NLEB) Maternity Roost Trees and/or Hibernacula Entrances in Minnesota. June 7, 2021.
42. **U.S. Fish & Wildlife Service.** Tricolored Bat. [Online] [Cited: March 14, 2023.] <https://www.fws.gov/species/tricolored-bat-perimyotis-subflavus>.
43. **Minnesota Department of Natural Resources.** Monarch Butterfly - *Danaus plexippus*. *Insects / Arthropods*. [Online] [Cited: March 16, 2023.] <https://www.dnr.state.mn.us/insects/monarchbutterfly.html>.
44. **U.S. Fish and Wildlife Service.** Whooping crane (*Grus americana*). *Environmental Conservation Online System*. [Online] [Cited: April 19, 2023.] <https://ecos.fws.gov/ecp/species/758>.
45. **Minnesota Department of Natural Resources.** *Haliaeetus leucocephalus* - Bald Eagle. *Rare Species Guide*. [Online] [Cited: April 20, 2023.] <http://www.dnr.state.mn.us/rsg/profile.html?action=elementDetail&selectedElement=ABNKC10010>.
46. **U.S. Fish and Wildlife Service.** Golden Eagle. *Species*. [Online] [Cited: April 20, 2023.] <https://www.fws.gov/species/golden-eagle-aquila-chrysaetos>.
47. —. Bald and Golden Eagle Protection Act. [Online] June 8, 1940. 16 U.S.C. 668-668d. <https://www.fws.gov/law/bald-and-golden-eagle-protection-act>.
48. **Minnesota Department of Natural Resources.** Rare Species Guide. *Endangered, threatened and special concern species*. [Online] [Cited: April 20, 2023.] Minnesota's endangered, threatened, and special concern species. <https://www.dnr.state.mn.us/rsg/index.html>.
49. **Northern States Power Company.** Agricultural Impact Mitigation Plan: CapX2020 345 kV Electric Transmission Projects in Minnesota. September 2009. Docket No. ET2/TL-09-246.

## Appendices

## **Appendix A**

### **Route Permit Completeness Checklist**

Authority	Required Information	Location in Application
<b>Minn. Stat. § 216E.04 – Notice of Application</b>		
Subd. 4	<p>Upon submission of an application under this section, the applicant shall provide the same notice as required by section 216E.03, subdivision 4.</p> <p>216E.03, Subd. 4: Within 15 days after submission of an application to the commission, the applicant shall publish notice of the application in a legal newspaper of general circulation in each county in which the site or route is proposed and send a copy of the application by certified mail to any regional development commission, county, incorporated municipality, and town in which any part of the site or route is proposed. Within the same 15 days, the applicant shall also send a notice of the submission of the application and description of the proposed project to each owner whose property is on or adjacent to any of the proposed sites for the power plant or along any of the proposed routes for the transmission line. The notice must identify a location where a copy of the application can be reviewed. For the purpose of giving mailed notice under this subdivision, owners are those shown on the records of the county auditor or, in any county where tax statements are mailed by the county treasurer, on the records of the county treasurer; but other appropriate records may be used for this purpose. The failure to give mailed notice to a property owner, or defects in the notice, does not invalidate the proceedings, provided a bona fide attempt to comply with this subdivision has been made. Within the same 15 days, the applicant shall also send the same notice of the submission of the application and description of the proposed project to those persons who have requested to be placed on a list maintained by the commission for receiving notice of proposed large electric generating power plants and high voltage transmission lines.</p>	To be provided
<b>Minn. R. 7850.2800, Subp. 2 – Notice to PUC</b>		
Subp. 2	An applicant for a permit for one of the qualifying projects in subpart 1, who intends to follow the procedures of parts 7850.2800 to 7850.3700, shall notify the PUC of such intent, in writing, at least ten days before submitting an application for the project.	Appendix B

Authority	Required Information	Location in Application
<b>Minn. R. 7850.3100 – Contents of Application</b>		
	If the applicant has rejected alternative sites or routes, the applicant shall include in the application the identity of the rejected sites or routes and an explanation of the reasons for rejecting them.	Section 3.1.2
<b>Minn. R. 7850.1900, Subp. 2 – Route Permit for a High Voltage Transmission Line (“HVTL”)</b>		
A.	A statement of proposed ownership of the facility at the time of filing the application and after commercial operation.	Section 1.2
B.	The precise name of any person or organization to be initially named as permittee or permittees and the name of any other person to whom the permit may be transferred if transfer of the permit is contemplated.	Section 1.3
C.	Identification of the applicant's preferred route and the reasons for the preference.	Not required by Minn. R. 7850.3100
D.	A description of the proposed high voltage transmission line and all associated facilities including the size and type of the high voltage transmission line.	Chapter 2
E.	The environmental information required under subpart 3.	Chapter 6
F.	Identification of land uses and environmental conditions along the proposed routes.	Section 6.1 and 6.2
G.	The names of each owner whose property is within any of the proposed routes for the high voltage transmission line.	Appendix M
H.	United States Geological Survey topographical maps or other maps acceptable to the commission showing the entire length of the high voltage transmission line on all proposed routes.	Appendix C
I.	Identification of existing utility and public rights-of-way along or parallel to the proposed routes that have the potential to share the right-of-way with the proposed line.	Section 3.1.2
J.	The engineering and operational design concepts for the proposed high voltage transmission line, including information on the electric and magnetic fields of the transmission line.	Chapter 5 Section 6.3.2
K.	Cost analysis of each route, including the costs of constructing, operating, and maintaining the high voltage transmission line that are dependent on design and route.	Section 2.8

Authority	Required Information	Location in Application
L.	A description of possible design options to accommodate expansion of the high voltage transmission line in the future.	Not Applicable. No future expansion planned
M.	The procedures and practices proposed for the acquisition and restoration of the right-of-way, construction, and maintenance of the high voltage transmission line.	Chapter 5
N.	A listing and brief description of federal, state, and local permits that may be required for the proposed high voltage transmission line.	Chapter 8
O.	A copy of the Certificate of Need or the certified HVTL list containing the proposed high voltage transmission line or documentation that an application for a Certificate of Need has been submitted or is not required.	Section 1.4
<b>Minn. R. 7850.1900, Subp. 3 – Environmental Information</b>		
A.	A description of the environmental setting for each site or route.	Section 6.1
B.	A description of the effects of construction and operation of the facility on human settlement, including, but not limited to, public health and safety, displacement, noise, aesthetics, socioeconomic impacts, cultural values, recreation, and public services.	Section 6.3
C.	A description of the effects of the facility on land-based economies, including, but not limited to, agriculture, forestry, tourism, and mining.	Section 6.4
D.	A description of the effects of the facility on archaeological and historic resources.	Section 6.5
E.	A description of the effects of the facility on the natural environment, including effects on air and water quality resources and flora and fauna.	Sections 6.6.1 – 6.6.7
F.	A description of the effects of the facility on rare and unique natural resources.	Section 6.6.6
G.	Identification of human and natural environmental effects that cannot be avoided if the facility is approved at a specific site or route.	Chapter 6
H.	A description of measures that might be implemented to mitigate the potential human and environmental impacts identified in items A to G and the estimated costs of such mitigative measures.	Chapters 5 and 6

## **Appendix B**

### **Alternative Permitting Process Notice Letter to Commission**



September 1, 2023

—Via Electronic Filing—

Will Seuffert  
Executive Secretary  
Minnesota Public Utilities Commission  
121 7th Place East, Suite 350  
St. Paul, MN 55101

Re: NOTICE OF INTENT TO FILE A ROUTE PERMIT APPLICATION FOR THE  
ALEXANDRIA – BIG OAKS TRANSMISSION LINE PURSUANT TO THE  
ALTERNATIVE PERMITTING PROCESS  
Docket No. E002, E017, ET2, E015, ET10/TL-23-159

Dear Mr. Seuffert:

In accordance with Minn. R. 7850.2800, subp. 2, Northern States Power Company, doing business as Xcel Energy, along with Great River Energy, Minnesota Power, Otter Tail Power Company, and Western Minnesota Municipal Power Agency (collectively, the Applicants) hereby notify the Minnesota Public Utilities Commission (Commission) of their intent to submit an application for a Route Permit for the Alexandria to Big Oaks 345 kilovolt (kV) Transmission Line Project (Project) following the alternative permitting process set forth in Minn. Stat. § 216E.04 and Minn. R. 7850.2800 to 7850.3900.

In the Route Permit application for the Project, the Applicants will propose a route that is located along existing high-voltage transmission line right-of-way for more than 95 percent of its length. Based on this use of existing high-voltage transmission line right-of-way, the Project is eligible for the alternative permitting process for the Route Permit pursuant to Minn. Stat. § 216E.04, subd. 2(5).

The majority of the Applicants' proposed route for the Project follows existing transmission line right-of-way because the Project involves placing a new 345 kV transmission line circuit on existing transmission line structures that were previously permitted and constructed as double-circuit capable as part of the Monticello to Saint Cloud 345 kV Transmission Line Project (E002, ET2/TL-09-246) and the Fargo to Saint Cloud 345 kV Transmission Line Project (E002, ET2/TL-09-1056).



Mr. Will Seuffert  
September 1, 2023  
Page 2

The Project is one portion of the larger Big Stone South – Alexandria – Big Oaks 345 kV Transmission Line Project for which the Applicants will file a single Certificate of Need application with the Commission. This overall project includes the Alexandria to Big Oaks segment (Eastern Segment), which is the subject of this notice, and the Big Stone South to Alexandria segment (Western Segment). The Certificate of Need application for the overall project will be filed at approximately the same time as the Route Permit application for the Eastern Segment. Otter Tail Power Company and Western Minnesota Municipal Power Agency are currently assessing route alternatives by identifying opportunities and constraints, conducting stakeholder outreach, engaging applicable governmental and regulatory agencies, and developing engineering, design and construction information and anticipate submitting a separate Route Permit application for the portion of the Western Segment that is located in Minnesota in the fourth quarter of 2024.

The overall project was studied, reviewed, and approved as part of the Long-Range Transmission Plan (LRTP) Tranche 1 Portfolio by the Midcontinent Independent System Operator, Inc.'s (MISO) Board of Directors in July 2022 as part of its annual MISO Transmission Expansion Plan 2021 (MTEP21) report<sup>1</sup>. The project will improve electric reliability, reduce transmission congestion, and increase access to renewable energy in the region.

Xcel Energy has electronically filed this document and served copies on all parties on the attached service list. Please let me know if you have any questions regarding this filing.

Sincerely,

*/s/ Matt Langan*

MATT LANGAN  
PRINCIPAL AGENT, SITING AND LAND RIGHTS  
NORTHERN STATES POWER COMPANY

cc: Service List

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<sup>1</sup> A copy of the MTEP21 report is available online at: <https://cdn.misoenergy.org/MTEP21%20Addendum-LRTP%20Tranche%201%20Report%20with%20Executive%20Summary625790.pdf>

IN THE MATTER OF THE APPLICATION FOR  
A ROUTE PERMIT FOR THE ALEXANDRIA TO  
BIG OAKS 345-KV TRANSMISSION PROJECT  
IN CENTRAL MINNESOTA

MPUC DOCKET No. E002, E017, ET2,  
E015, ET10/TL-23-159

### **CERTIFICATE OF SERVICE**

Theresa Senart certifies that on the 1st day of September, 2023, on behalf of Northern States Power Company, doing business as Xcel Energy, along with Great River Energy, Minnesota Power, Otter Tail Power Company and Western Minnesota Municipal Power Agency, she efiled a true and correct copy of the **Notice of Intent to File a Route Permit** by posting the same on [eDockets](#). Said document is also served as designated on the attached Service List on file with the Minnesota Public Utilities Commission in the above-referenced docket number.

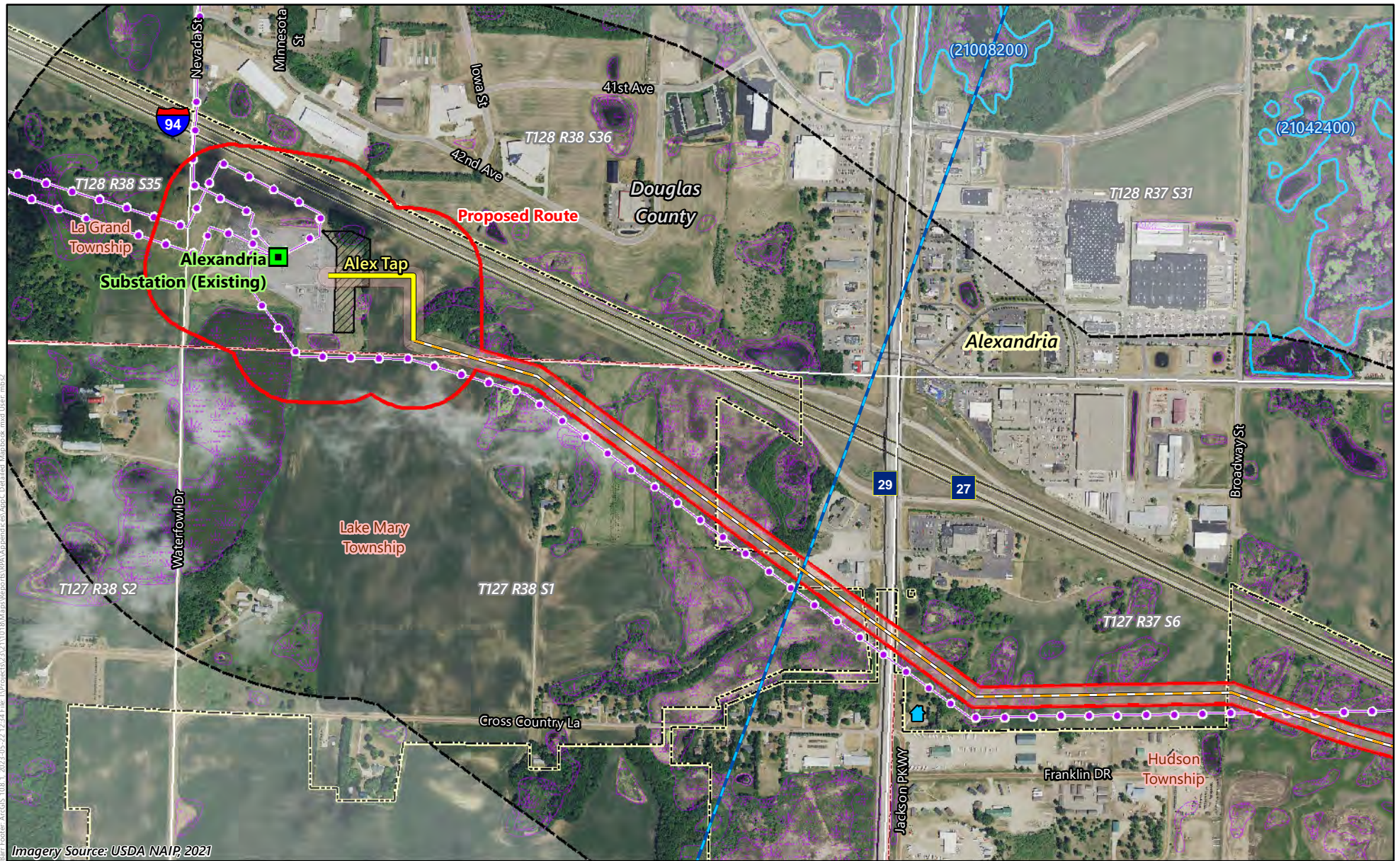
*/s/ Theresa Senart*

\_\_\_\_\_  
Theresa Senart

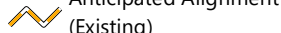
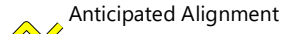
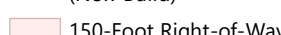
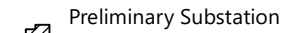
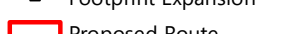
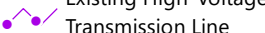
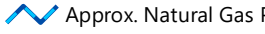
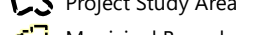


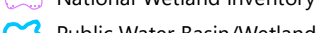
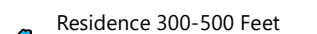
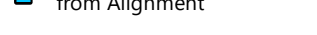
First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Jon	Brekke	jbrekke@grenergy.com	Great River Energy	12300 Elm Creek Boulevard  Maple Grove, MN 553694718	Electronic Service	No	OFF_SL_23-159_TL-23-159
Generic Notice	Commerce Attorneys	commerce.attorneys@ag.state.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1400  St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_23-159_TL-23-159
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 280  Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_23-159_TL-23-159
Benjamin	Levine	Blevine@mnpower.com	Minnesota Power	30 West Superior Street  Duluth, MN 55802	Electronic Service	No	OFF_SL_23-159_TL-23-159
Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012131	Electronic Service	Yes	OFF_SL_23-159_TL-23-159
J.P.	Schumacher	jps@mrenergy.com	Missouri River Energy Services	N/A	Electronic Service	No	OFF_SL_23-159_TL-23-159
Christine	Schwartz	Regulatory.records@xcelenergy.com	Xcel Energy	414 Nicollet Mall FL 7  Minneapolis, MN 554011993	Electronic Service	No	OFF_SL_23-159_TL-23-159
Will	Seuffert	Will.Seuffert@state.mn.us	Public Utilities Commission	121 7th Pl E Ste 350  Saint Paul, MN 55101	Electronic Service	Yes	OFF_SL_23-159_TL-23-159
Stuart	Tommerdahl	stommerdahl@otpc.com	Otter Tail Power Company	215 S Cascade St PO Box 496 Fergus Falls, MN 56537	Electronic Service	No	OFF_SL_23-159_TL-23-159

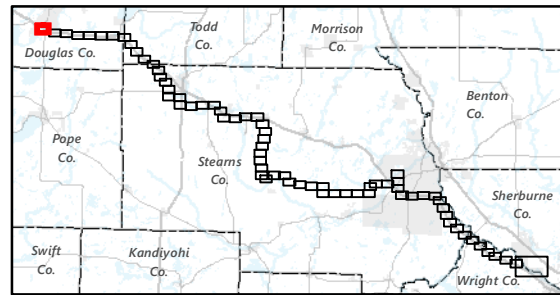
## **Appendix C**

### **Detailed Route Maps**




Imagery Source: USDA NAIP, 2021

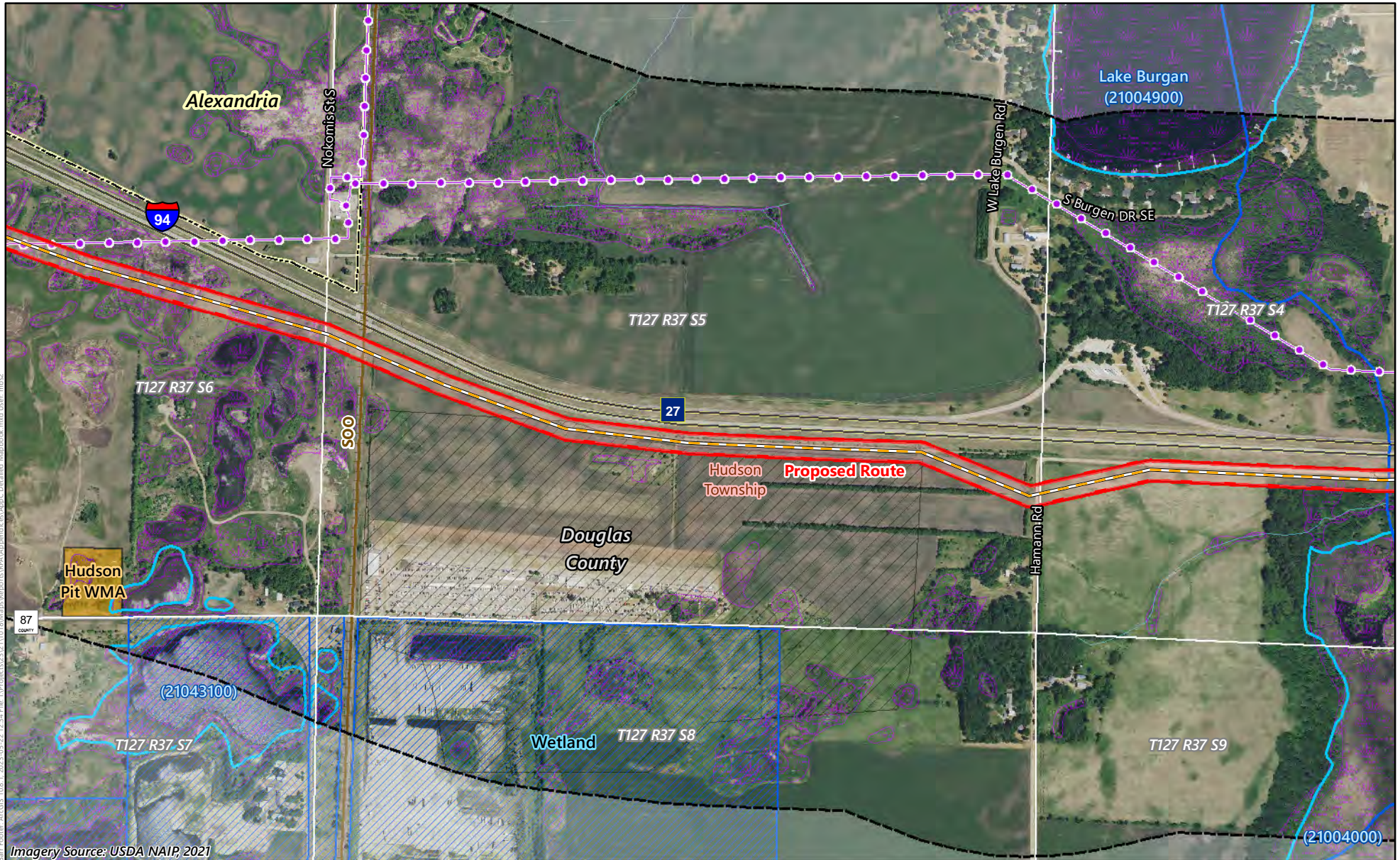
-  Anticipated Alignment (Existing)
-  Anticipated Alignment (New Build)
-  150-Foot Right-of-Way
-  Preliminary Substation Footprint Expansion
-  Proposed Route
-  Existing High-Voltage Transmission Line
-  Approx. Natural Gas Pipeline
-  Project Study Area
-  Municipal Boundary
-  Civil Township
-  National Wetland Inventory
-  Public Water Basin/Wetland
-  Residence 300-500 Feet from Alignment



**Appendix C, Map C1**  
**ALEXANDRIA TO BIG OAKS**  
 MISO LRTP-2  
 Route Permit Application

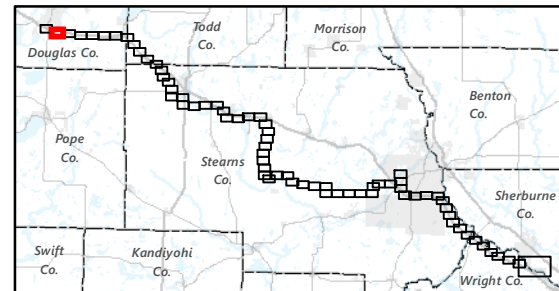
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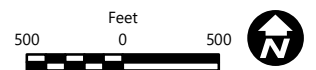



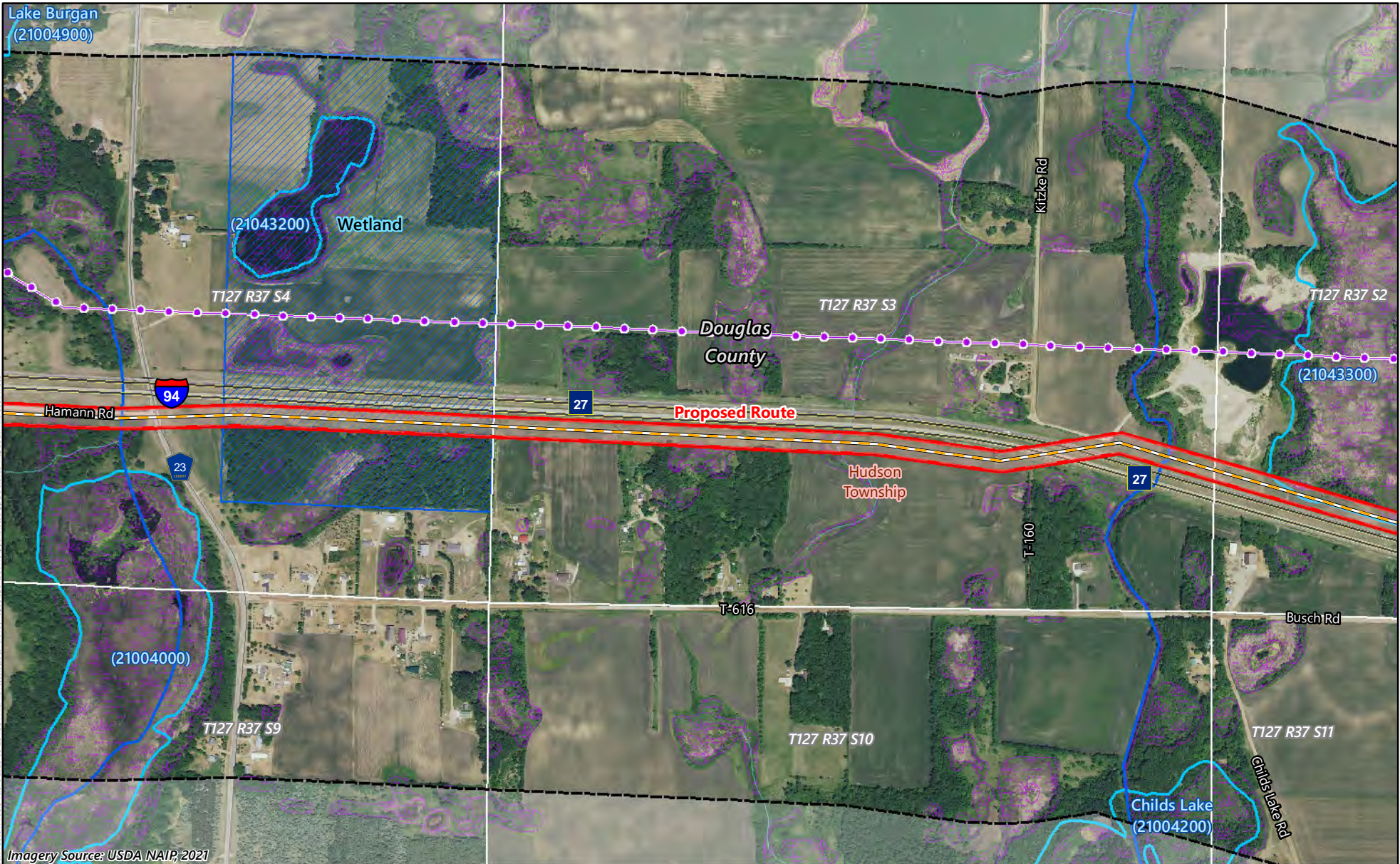
Imagery Source: USDA NAIP, 2021











- |                                  |                                         |                            |
|----------------------------------|-----------------------------------------|----------------------------|
| Anticipated Alignment (Existing) | Existing High-Voltage Transmission Line | National Wetland Inventory |
| 150-Foot Right-of-Way            | Railroad                                | Public Water Basin/Wetland |
| Proposed Route                   | Project Study Area                      | Public Water Watercourse   |
| Grassland Bird Conservation Area | Municipal Boundary                      | Waterfowl Production Area  |
| Wildlife Management Area         | Civil Township                          |                            |

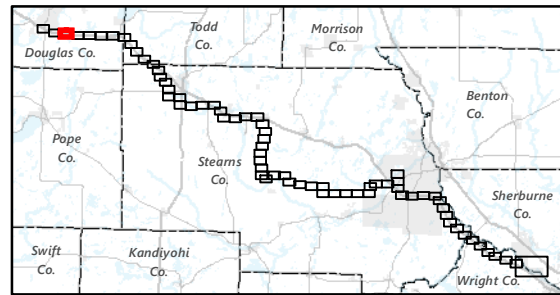


**Appendix C, Map C2**  
**ALEXANDRIA TO BIG OAKS**  
 MISO LRTP-2  
 Route Permit Application






-  Anticipated Alignment (Existing)
-  Existing High-Voltage Transmission Line
-  National Wetland Inventory
-  Public Water Basin/Wetland
-  150-Foot Right-of-Way
-  Project Study Area
-  Public Water Watercourse
-  Waterfowl Production Area
-  Proposed Route
-  Civil Township



**Appendix C, Map C3**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**












Feet  
 500 0 500

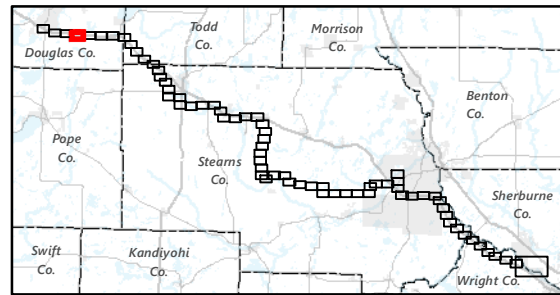



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 Imagery Source: USDA NAIP, 2021




Imagery Source: USDA NAIP, 2021

-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Grassland Bird Conservation Area
-  Existing High-Voltage Transmission Line
-  Project Study Area
-  Civil Township
-  Conservation Easement
-  Wetland Reserve Program
-  National Wetland Inventory
-  Public Water Basin/Wetland

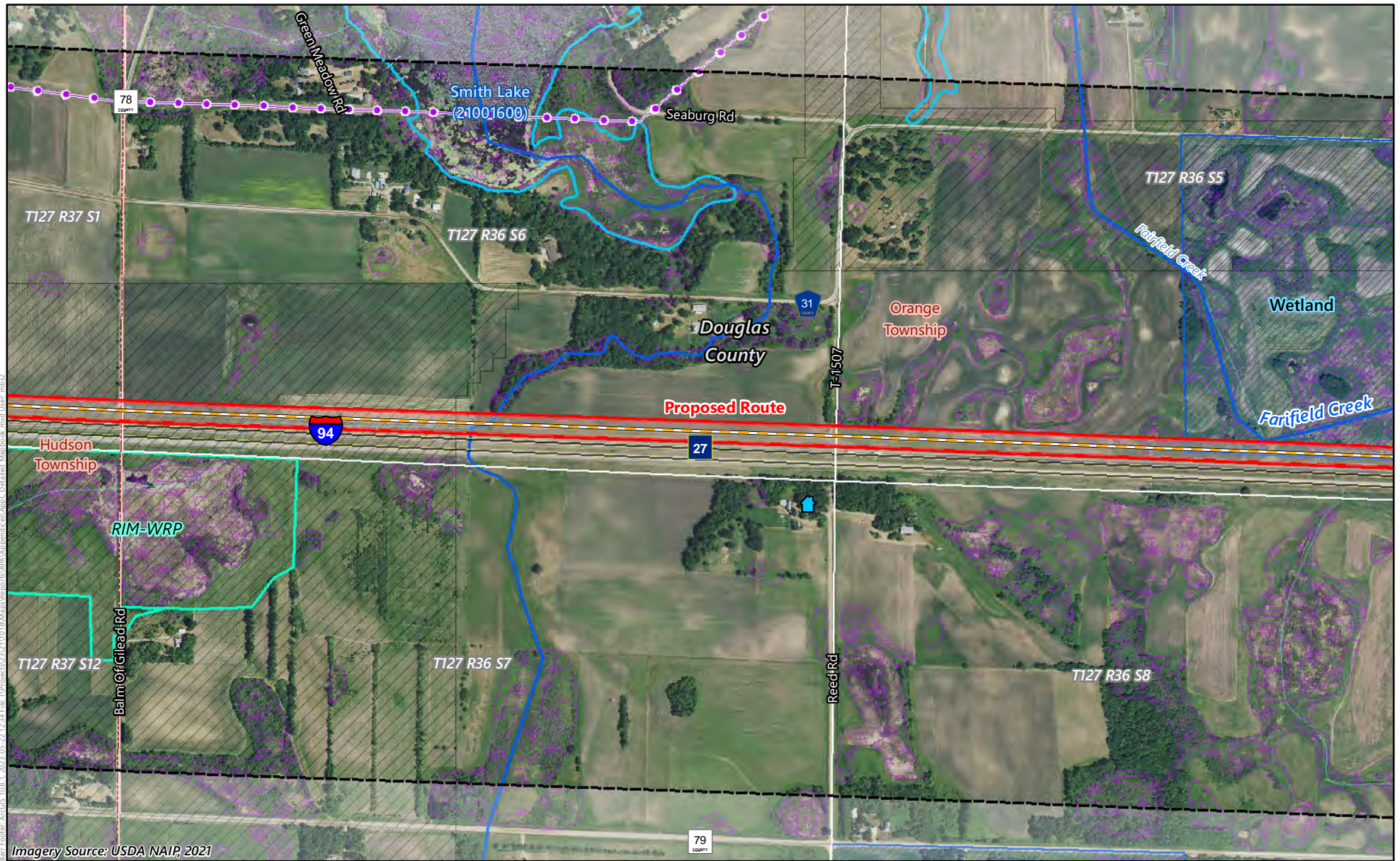


**Appendix C, Map C4**  
**ALEXANDRIA TO BIG OAKS**  
 MISO LRTP-2  
 Route Permit Application

500 0 500 Feet

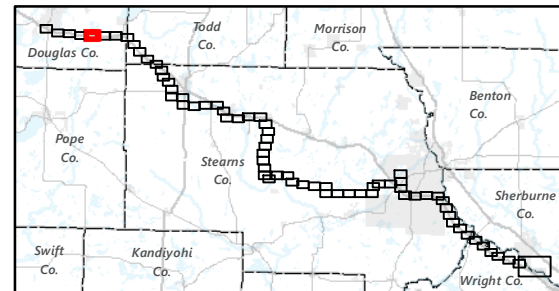




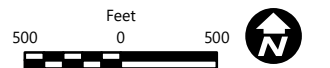



Imagery Source: USDA NAIP, 2021

- |                                  |                                         |                            |
|----------------------------------|-----------------------------------------|----------------------------|
| Anticipated Alignment (Existing) | Existing High-Voltage Transmission Line | National Wetland Inventory |
| 150-Foot Right-of-Way            | Project Study Area                      | Public Water Basin/Wetland |
| Proposed Route                   | Civil Township                          | Public Water Watercourse   |
| Grassland Bird Conservation Area | Conservation Easement                   | Waterfowl Production Area  |
| Wetland Reserve Program          | Residence 300-500 Feet from Alignment   |                            |





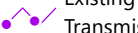

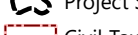

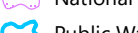





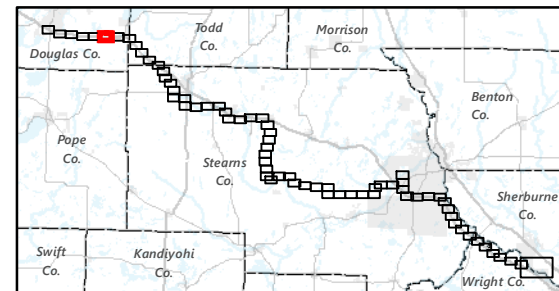
**Appendix C, Map C5**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**



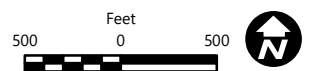


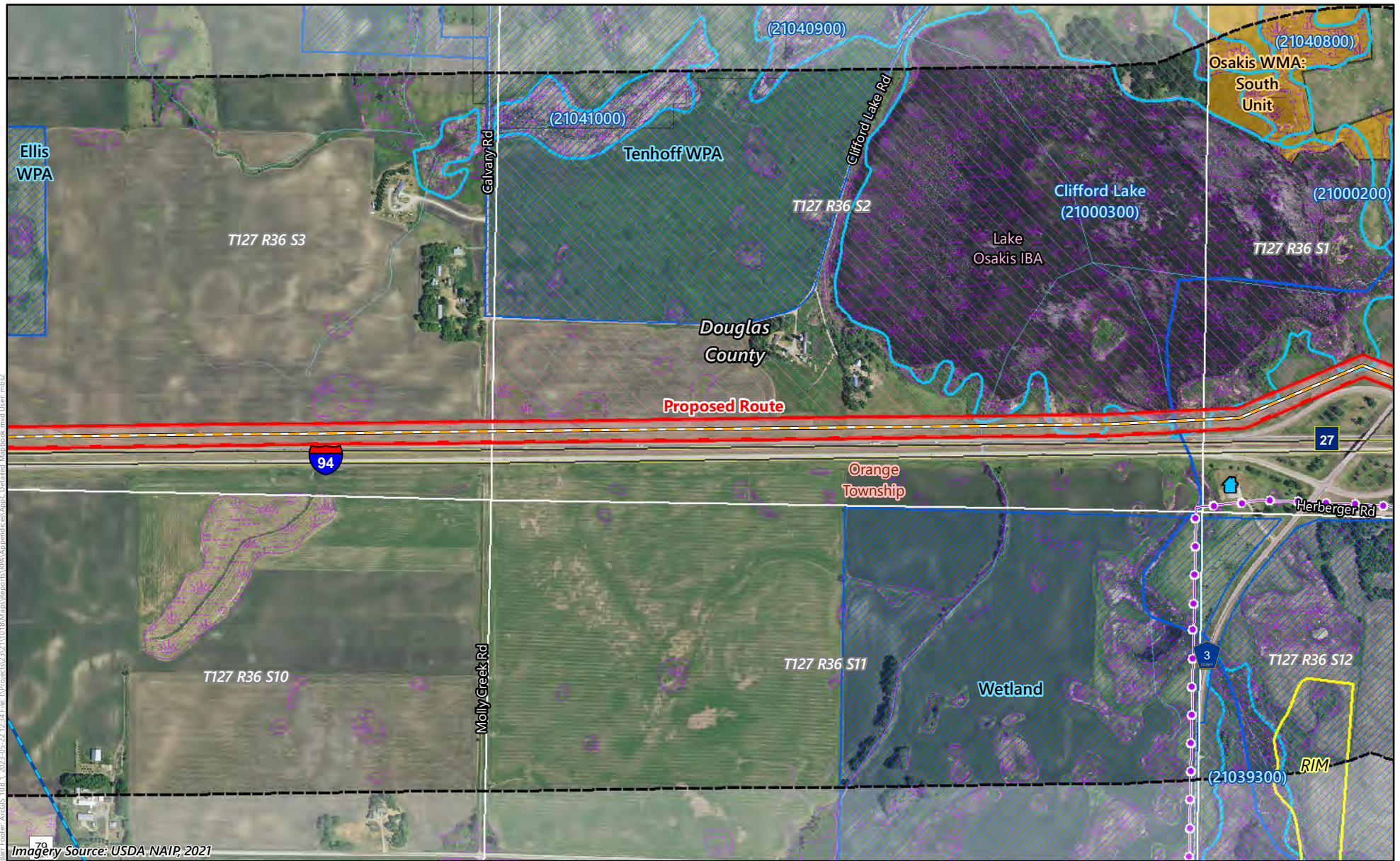
Imagery Source: USDA NAIP, 2021

-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Grassland Bird Conservation Area
-  Existing High-Voltage Transmission Line
-  Approx. Natural Gas Pipeline
-  Project Study Area
-  Civil Township
-  National Wetland Inventory
-  Public Water Basin/Wetland
-  Public Water Watercourse
-  Waterfowl Production Area



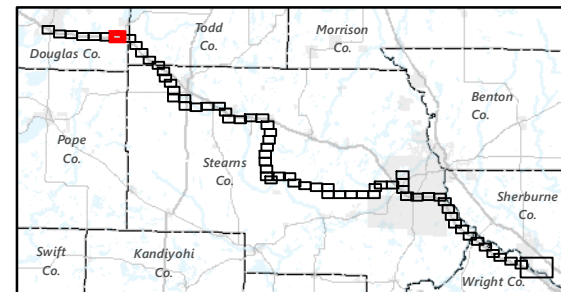
**Appendix C, Map C6**  
**ALEXANDRIA TO BIG OAKS**  
 MISO LRTP-2  
 Route Permit Application





Imagery Source: USDA NAIP, 2021

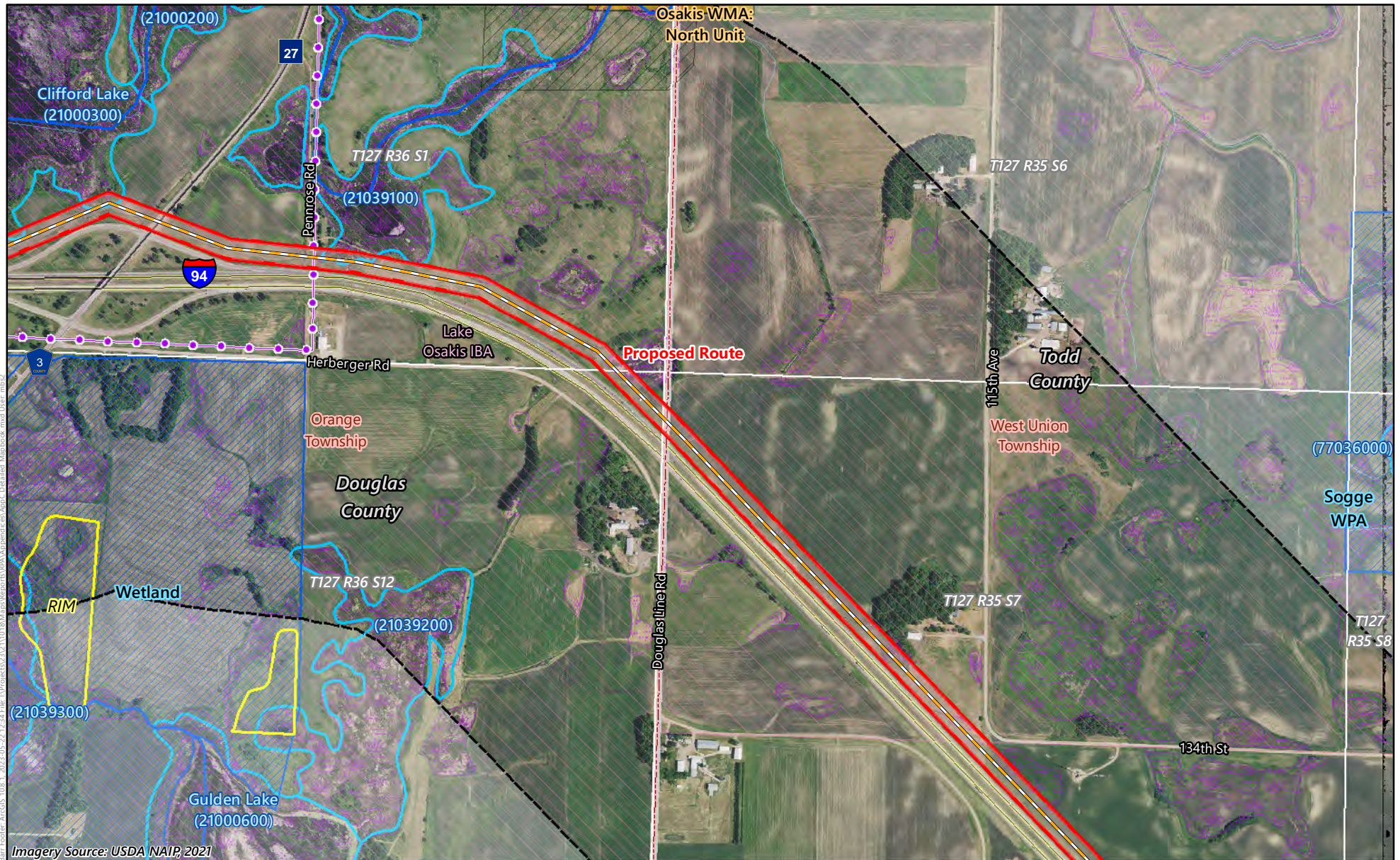
- Anticipated Alignment (Existing)
- 150-Foot Right-of-Way
- Proposed Route
- Grassland Bird Conservation Area
- Important Bird Area
- Existing High-Voltage Transmission Line
- Approx. Natural Gas Pipeline
- Project Study Area
- Civil Township
- Wildlife Management Area
- Conservation Easement
- Reinvest in Minnesota
- National Wetland Inventory
- Public Water Basin/Wetland
- Public Water Watercourse
- Waterfowl Production Area
- Residence 300-500 Feet from Alignment



**Appendix C, Map C7**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**

500 0 500 Feet

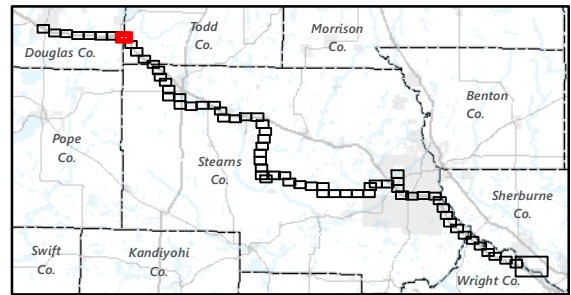




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Imagery Source: USDA NAIP, 2021

- |                                  |                                         |                            |
|----------------------------------|-----------------------------------------|----------------------------|
| Anticipated Alignment (Existing) | Existing High-Voltage Transmission Line | National Wetland Inventory |
| 150-Foot Right-of-Way            | Project Study Area                      | Public Water Basin/Wetland |
| Proposed Route                   | Civil Township                          | Public Water Watercourse   |
| Grassland Bird Conservation Area | Wildlife Management Area                | Waterfowl Production Area  |
| Important Bird Area              | Conservation Easement                   |                            |
|                                  | Reinvest in Minnesota                   |                            |




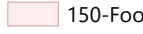


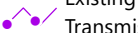




**Appendix C, Map C8**  
**ALEXANDRIA TO BIG OAKS**  
 MISO LRTP-2  
 Route Permit Application




500 0 500 Feet

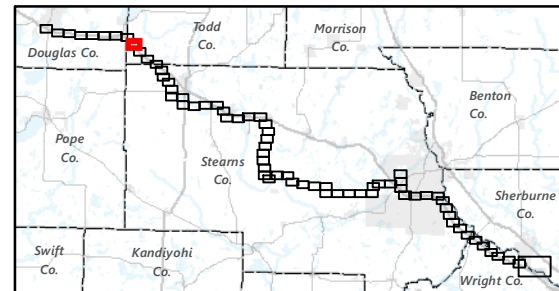




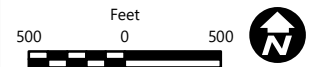
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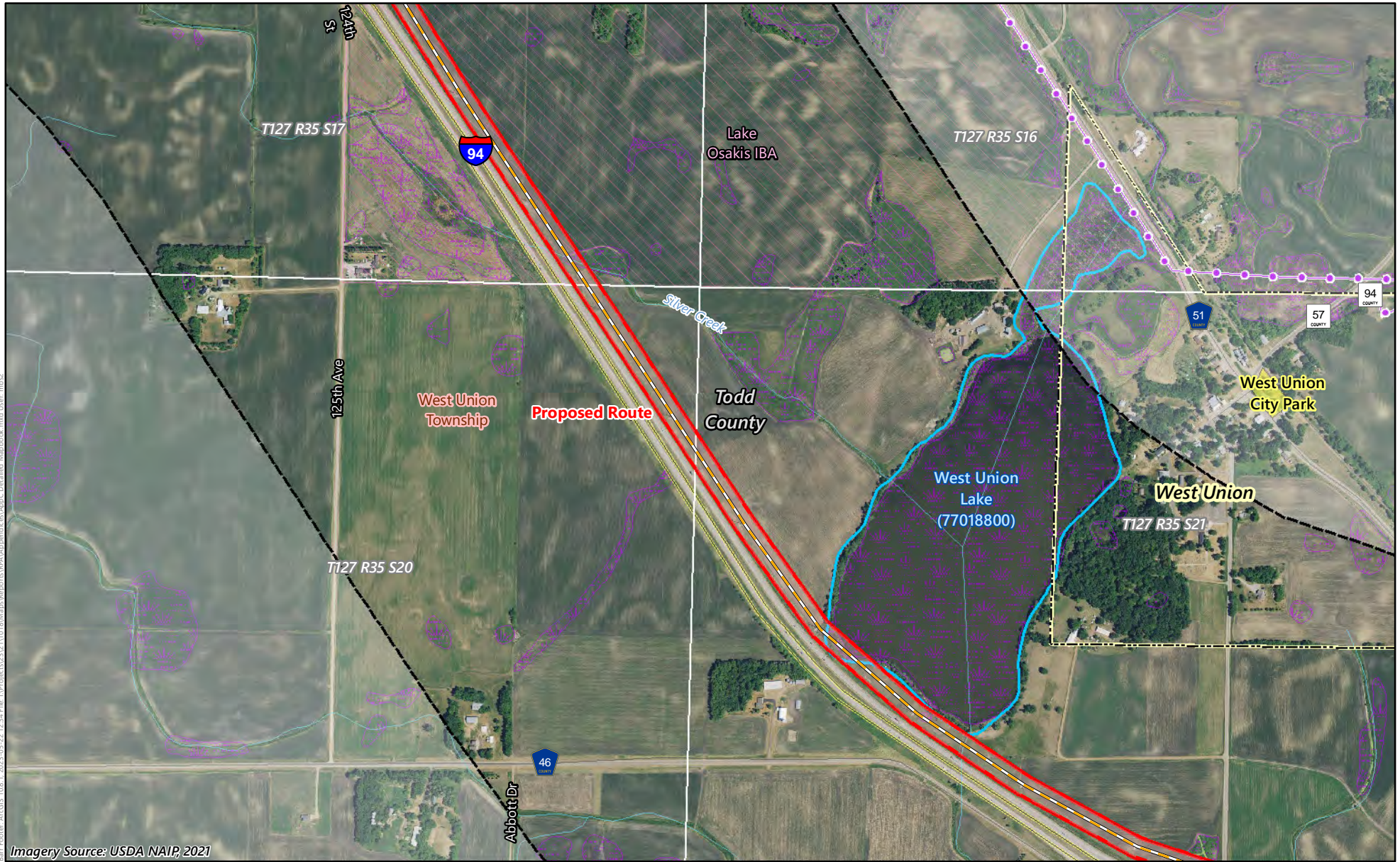
-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Important Bird Area
-  Existing High-Voltage Transmission Line
-  Project Study Area
-  Civil Township
-  Wildlife Management Area
-  Wetland Banking Easement

-  National Wetland Inventory
-  Public Water Basin/Wetland
-  Waterfowl Production Area














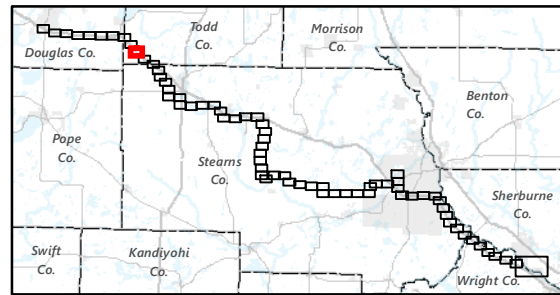
**Appendix C, Map C9**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**






Imagery Source: USDA NAIP, 2021

-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Important Bird Area
-  Existing High-Voltage Transmission Line
-  Project Study Area
-  Municipal Boundary
-  Civil Township
-  County/Municipal Park
-  National Wetland Inventory
-  Public Water Basin/Wetland










**Appendix C, Map C10**  
**ALEXANDRIA TO BIG OAKS**  
 MISO LRTP-2  
 Route Permit Application

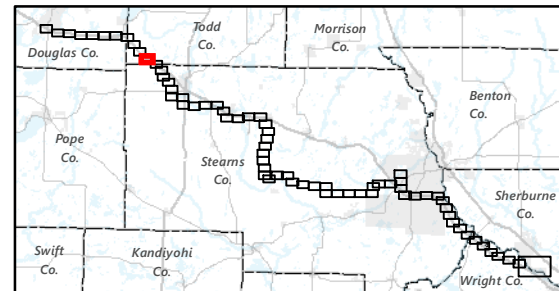
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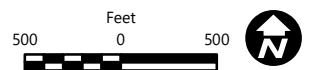



Imagery Source: USDA NAIP, 2021

-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Existing High-Voltage Transmission Line
-  National Wetland Inventory
-  Project Study Area
-  Civil Township













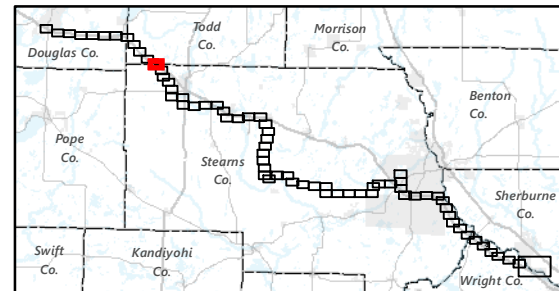
**Appendix C, Map C11**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**



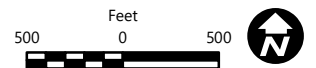


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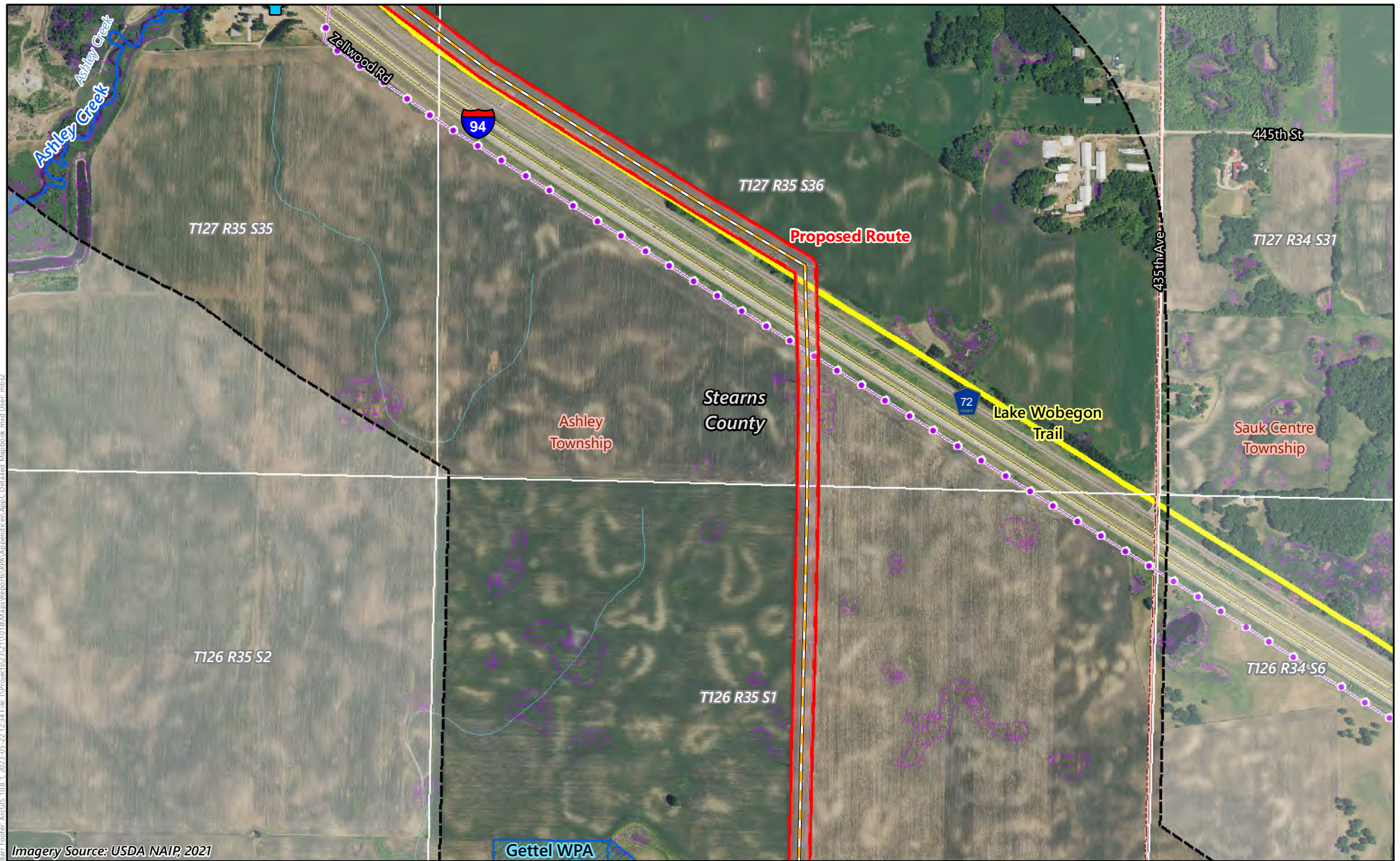
-  Anticipated Alignment (Existing)
-  Existing High-Voltage Transmission Line
-  150-Foot Right-of-Way
-  Proposed Route
-  National Wetland Inventory
-  Public Water Watercourse
-  Project Study Area
-  Civil Township
-  County/Municipal Park
-  Residence 300-500 Feet from Alignment



**Appendix C, Map C12**  
**ALEXANDRIA TO BIG OAKS**  
 MISO LRTP-2  
 Route Permit Application















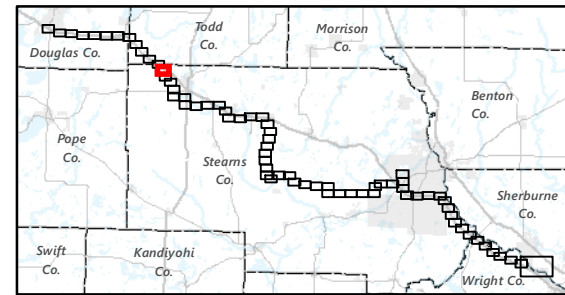




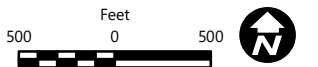
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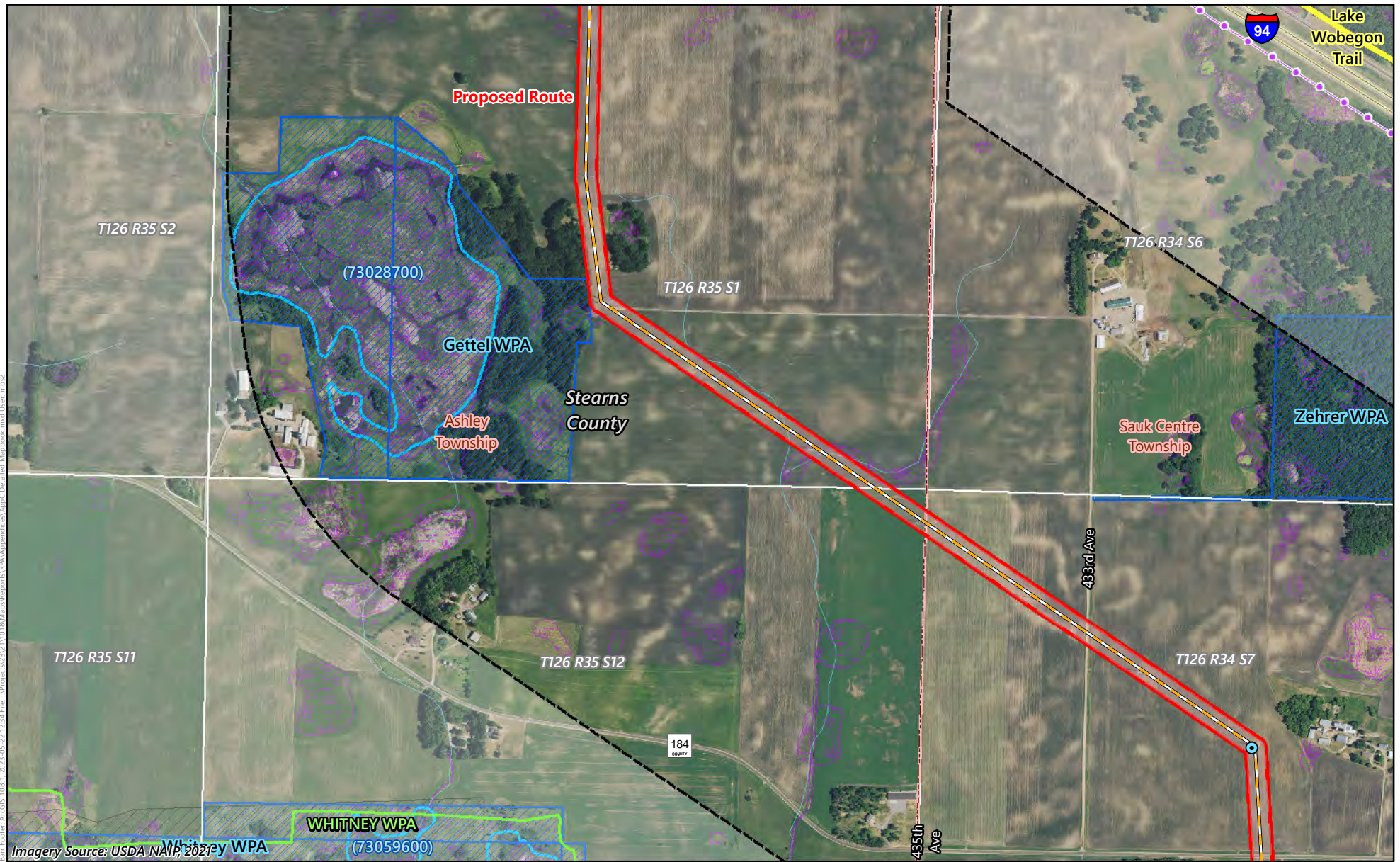
Imagery Source: USDA NAIP, 2021

-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Existing High-Voltage Transmission Line
-  Project Study Area
-  Civil Township
-  County/Municipal Park
-  National Wetland Inventory
-  Public Water Basin/Wetland
-  Public Water Watercourse
-  Waterfowl Production Area
-  Residence 300-500 Feet from Alignment
















**Appendix C, Map C13**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**

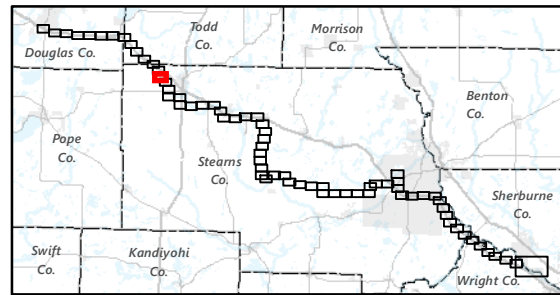




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Imagery Source: USDA NAIP, 2021

-  New Foundation and Pole
-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Grassland Bird Conservation Area
-  Existing High-Voltage Transmission Line
-  Project Study Area
-  Civil Township
-  County/Municipal Park
-  National Wetland Inventory
-  Public Water Basin/Wetland
-  Site of Biodiversity Significance
-  Waterfowl Production Area



**Appendix C, Map C14**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**















Feet  
 500 0 500

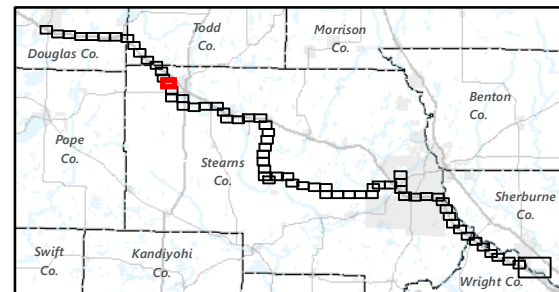




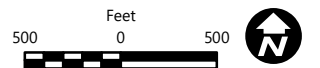

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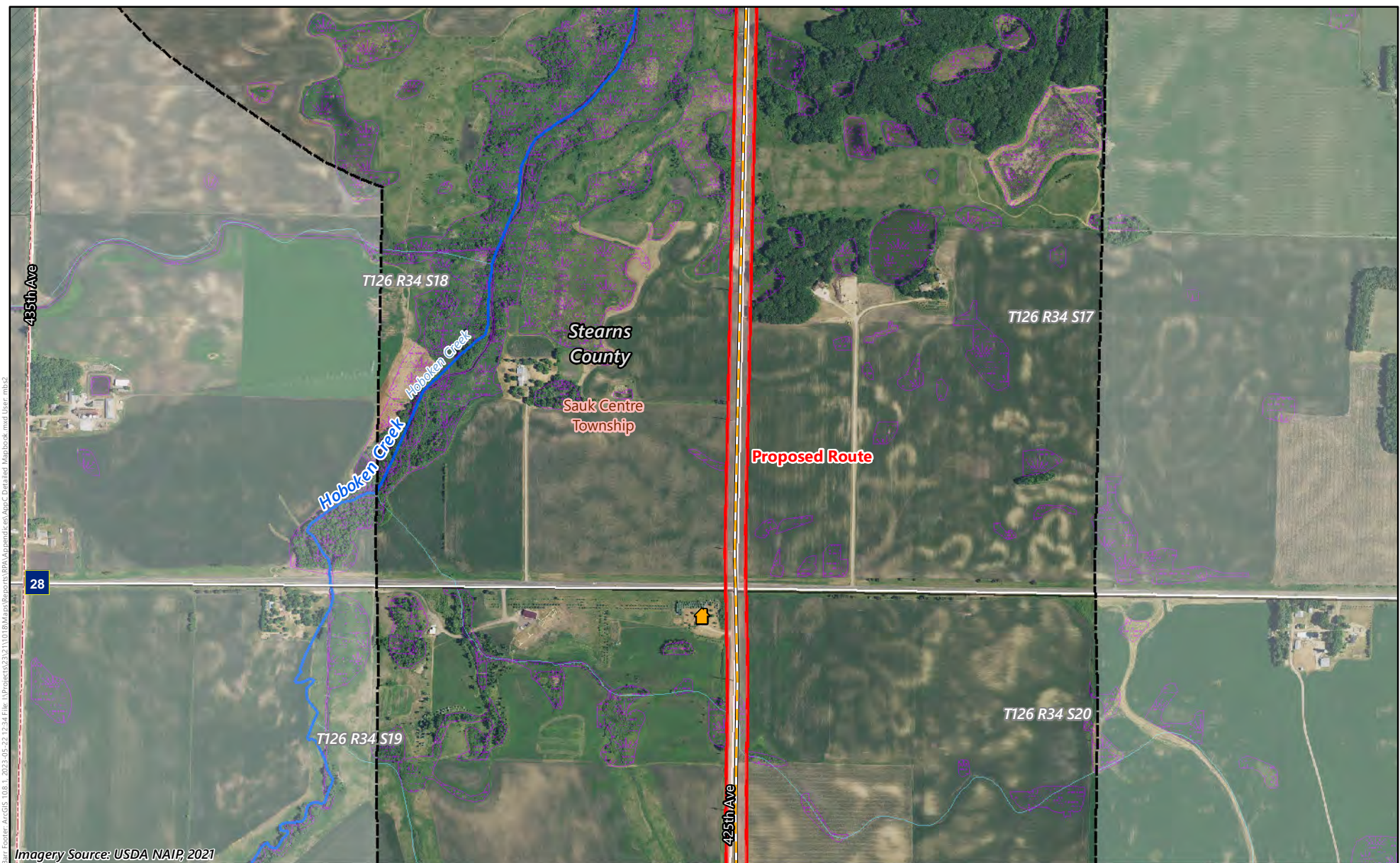
Imagery Source: USDA NAIP, 2021

-  New Foundation and Pole
-  New Pole Only
-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Grassland Bird Conservation Area
-  Existing High-Voltage Transmission Line
-  Project Study Area
-  Civil Township
-  National Wetland Inventory
-  Public Water Basin/Wetland
-  Public Water Watercourse
-  Site of Biodiversity Significance
-  Waterfowl Production Area




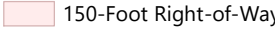

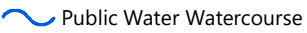
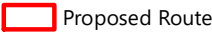





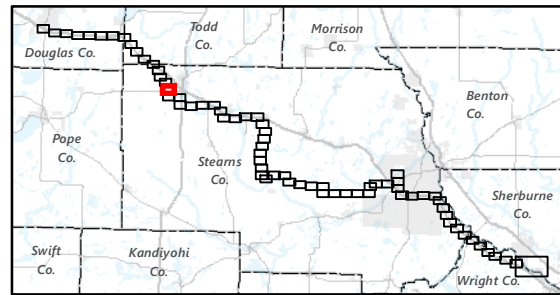
**Appendix C, Map C15**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**



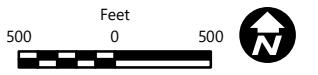


Imagery Source: USDA NAIP, 2021











-  Anticipated Alignment (Existing)
-  Existing High-Voltage Transmission Line
-  National Wetland Inventory
-  150-Foot Right-of-Way
-  Project Study Area
-  Public Water Watercourse
-  Proposed Route
-  Civil Township
-  Residence 75-300 Feet from Alignment
-  Grassland Bird Conservation Area

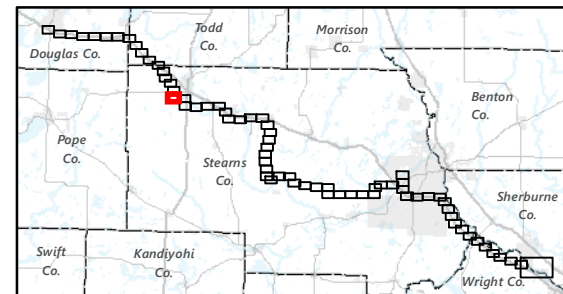


**Appendix C, Map C16**  
**ALEXANDRIA TO BIG OAKS**  
 MISO LRTP-2  
 Route Permit Application

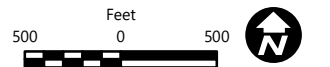


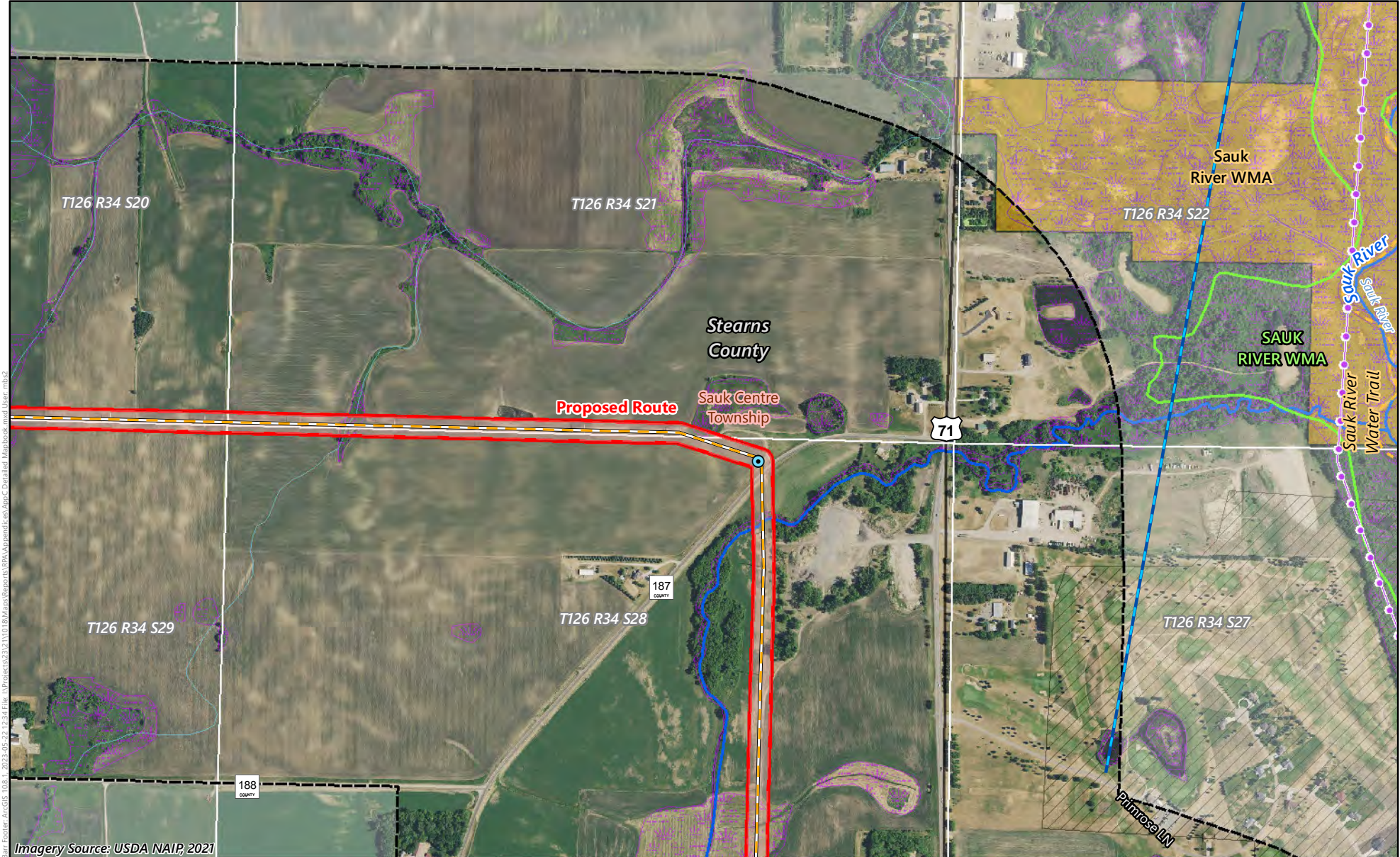


-  New Foundation and Pole
-  New Pole Only
-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Existing High-Voltage Transmission Line
-  Project Study Area
-  Civil Township
-  National Wetland Inventory
-  Public Water Watercourse

















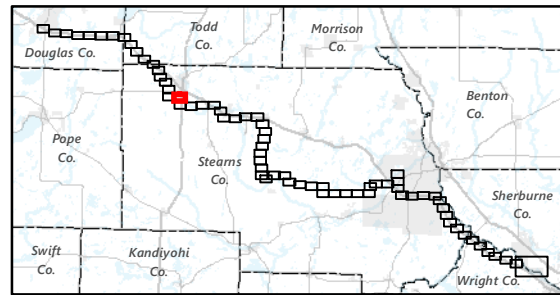
**Appendix C, Map C17**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**






Imagery Source: USDA NAIP, 2021

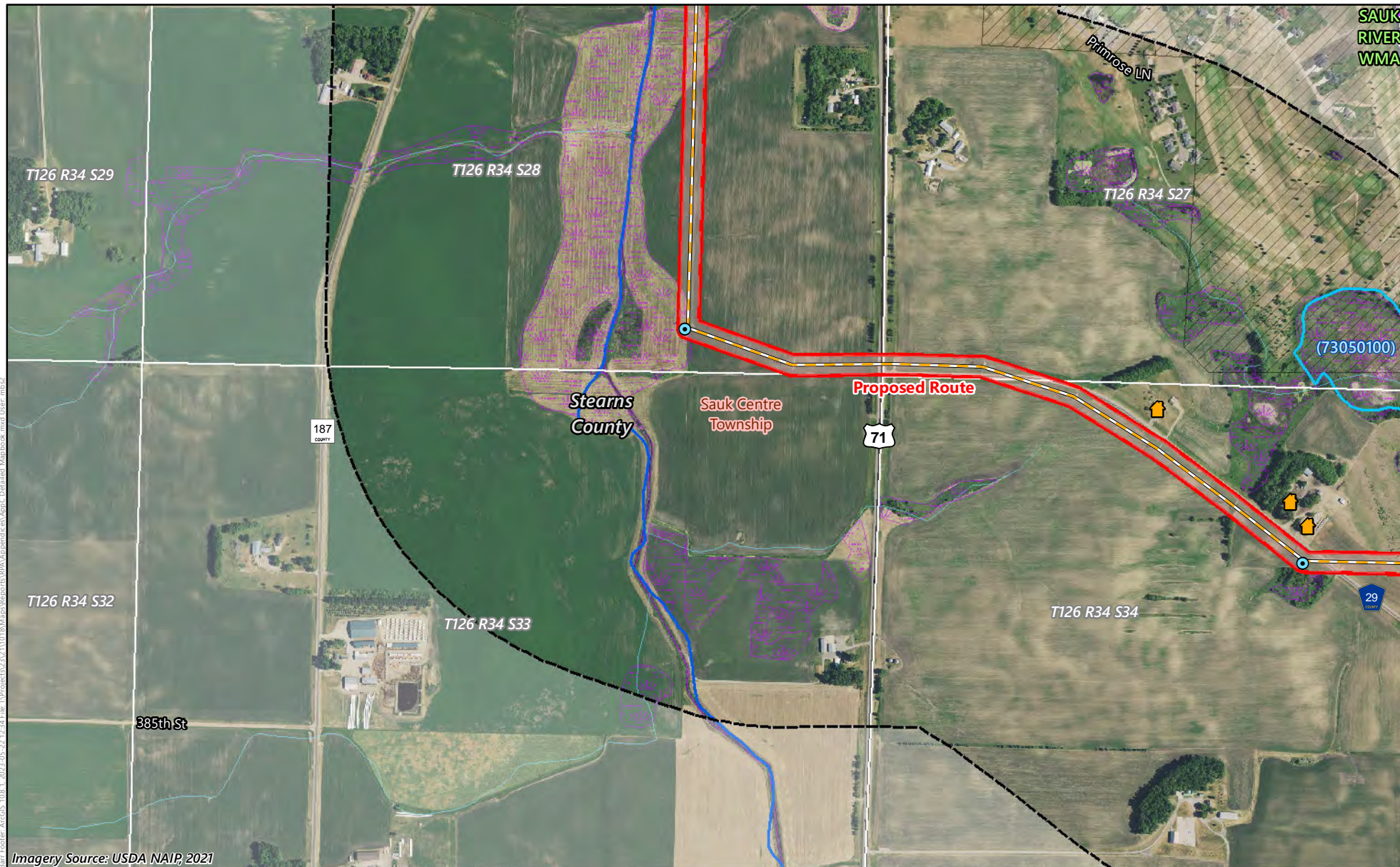
-  New Foundation and Pole
-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Grassland Bird Conservation Area
-  Existing High-Voltage Transmission Line
-  Approx. Natural Gas Pipeline
-  Project Study Area
-  Civil Township
-  Wildlife Management Area
-  National Wetland Inventory
-  State Water Trail
-  Public Water Watercourse
-  Site of Biodiversity Significance



**Appendix C, Map C18**  
**ALEXANDRIA TO BIG OAKS**  
 MISO LRTP-2  
 Route Permit Application

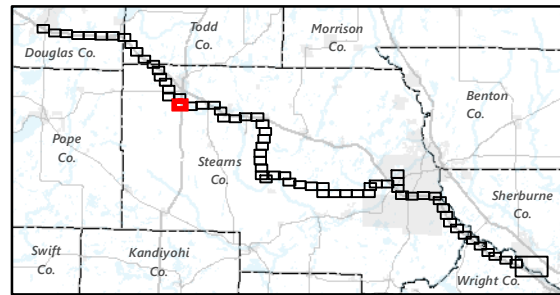
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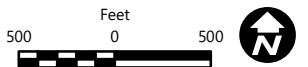



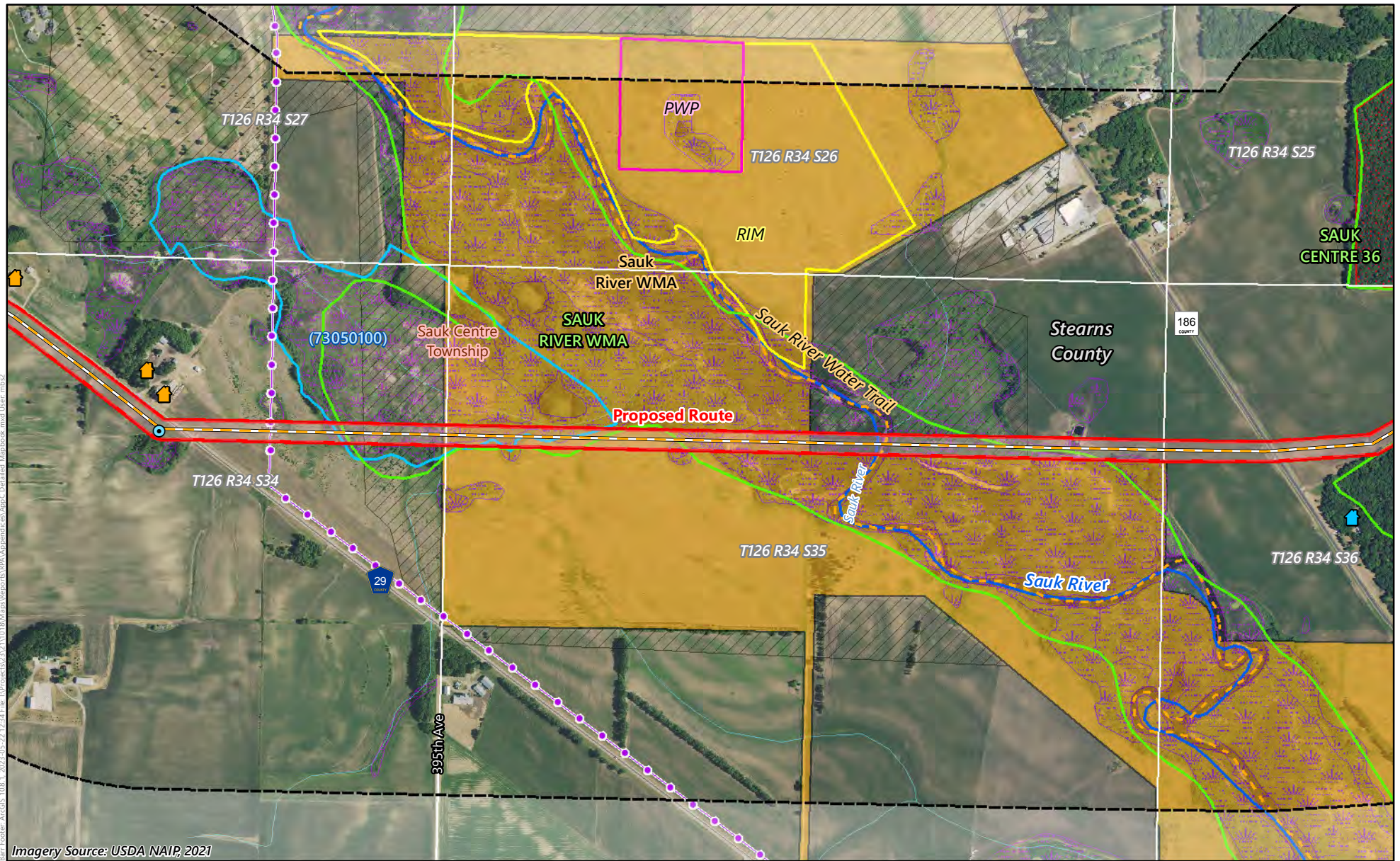
Imagery Source: USDA NAIP, 2021

- New Foundation and Pole
- Anticipated Alignment (Existing)
- 150-Foot Right-of-Way
- Proposed Route
- Grassland Bird Conservation Area
- Existing High-Voltage Transmission Line
- Project Study Area
- Civil Township
- National Wetland Inventory
- Public Water Basin/Wetland
- Public Water Watercourse
- Site of Biodiversity Significance
- Residence 75-300 Feet from Alignment



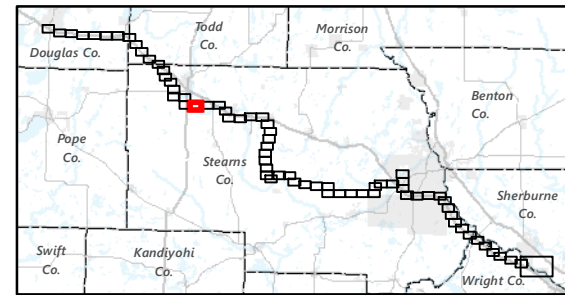
**Appendix C, Map C19**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**



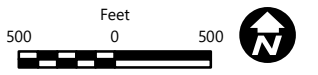


Imagery Source: USDA NAIP, 2021

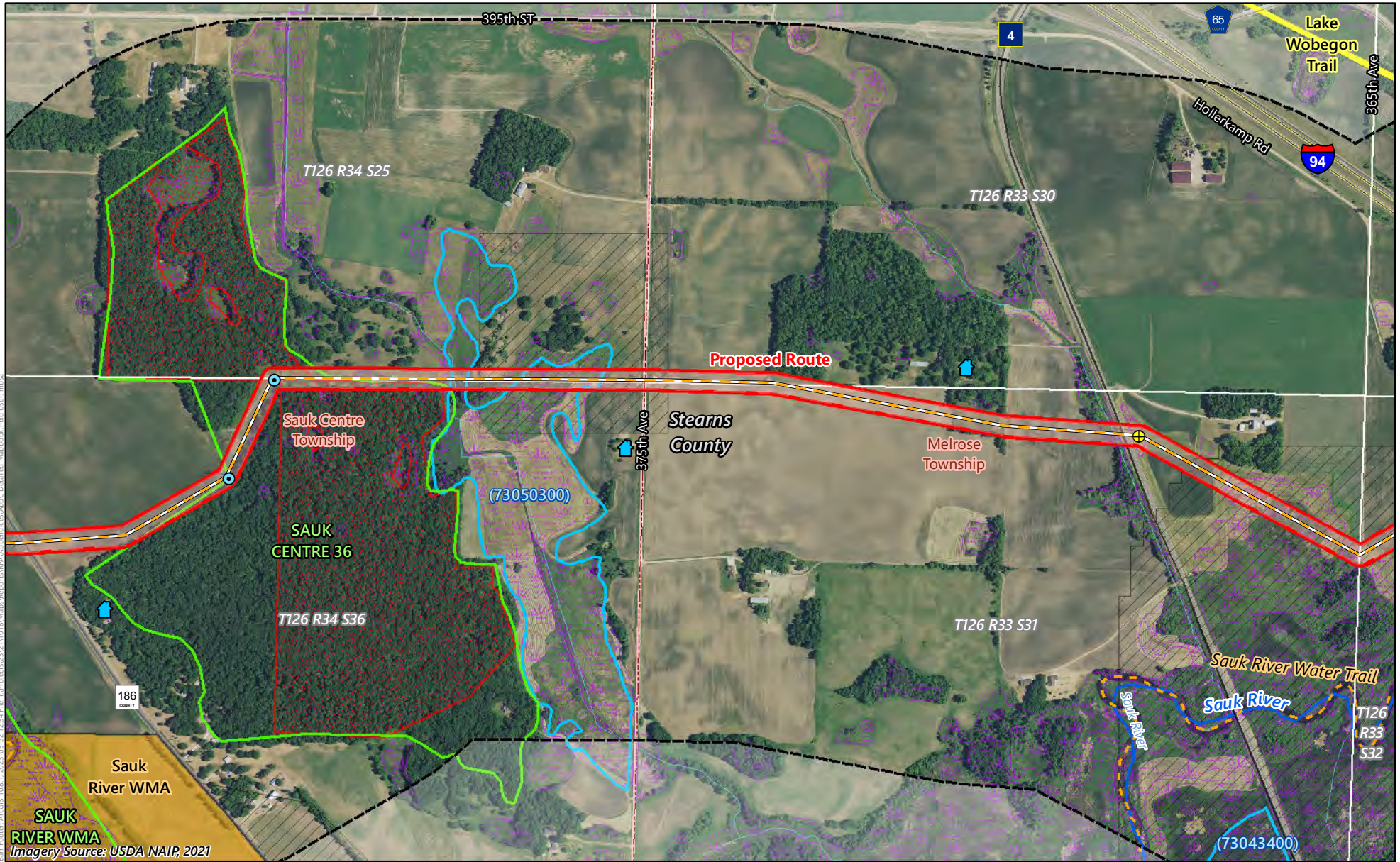
- |                                  |                                         |                                       |
|----------------------------------|-----------------------------------------|---------------------------------------|
| New Foundation and Pole          | Existing High-Voltage Transmission Line | National Wetland Inventory            |
| Anticipated Alignment (Existing) | Project Study Area                      | Public Water Basin/Wetland            |
| 150-Foot Right-of-Way            | Civil Township                          | State Water Trail                     |
| Proposed Route                   | Wildlife Management Area                | Public Water Watercourse              |
| Grassland Bird Conservation Area | Conservation Easement                   | Site of Biodiversity Significance     |
|                                  | Permanent Wetland Preserve              | Residence 75-300 Feet from Alignment  |
|                                  | Reinvest in Minnesota                   | Residence 300-500 Feet from Alignment |
|                                  | Native Plant Community                  |                                       |



**Appendix C, Map C20**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**

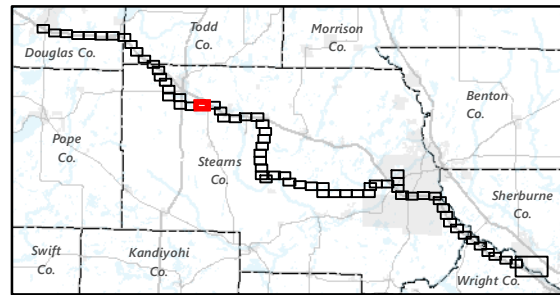






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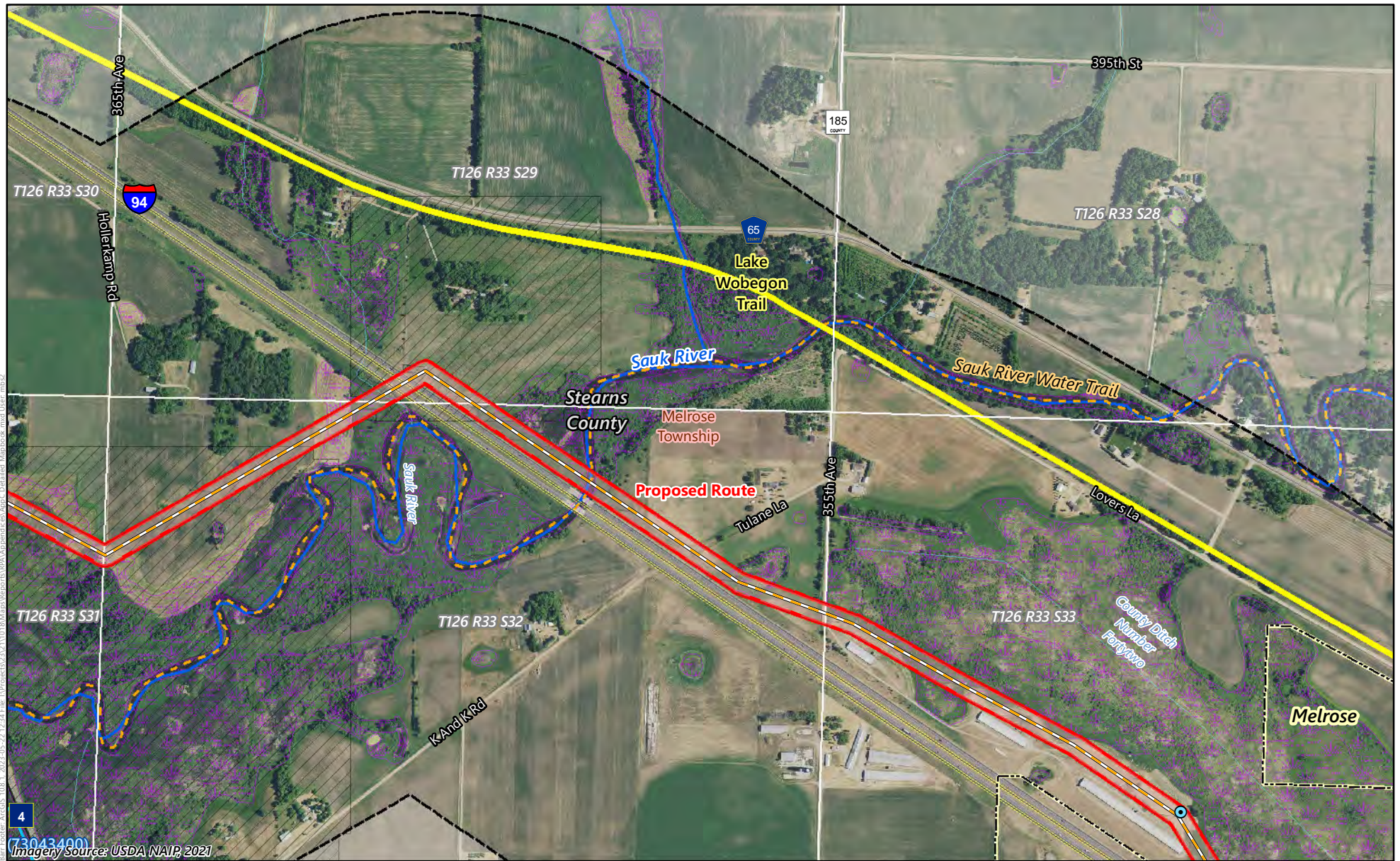
- New Foundation and Pole
- New Pole Only
- Anticipated Alignment (Existing)
- 150-Foot Right-of-Way
- Proposed Route
- Grassland Bird Conservation Area
- Existing High-Voltage Transmission Line
- Project Study Area
- Civil Township
- County/Municipal Park
- Wildlife Management Area
- Native Plant Community
- National Wetland Inventory
- Public Water Basin/Wetland
- State Water Trail
- Public Water Watercourse
- Site of Biodiversity Significance
- Residence 300-500 Feet from Alignment



**Appendix C, Map C21**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**

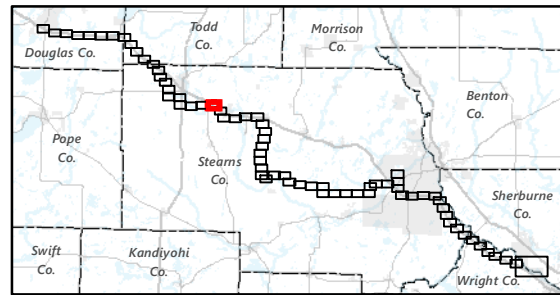
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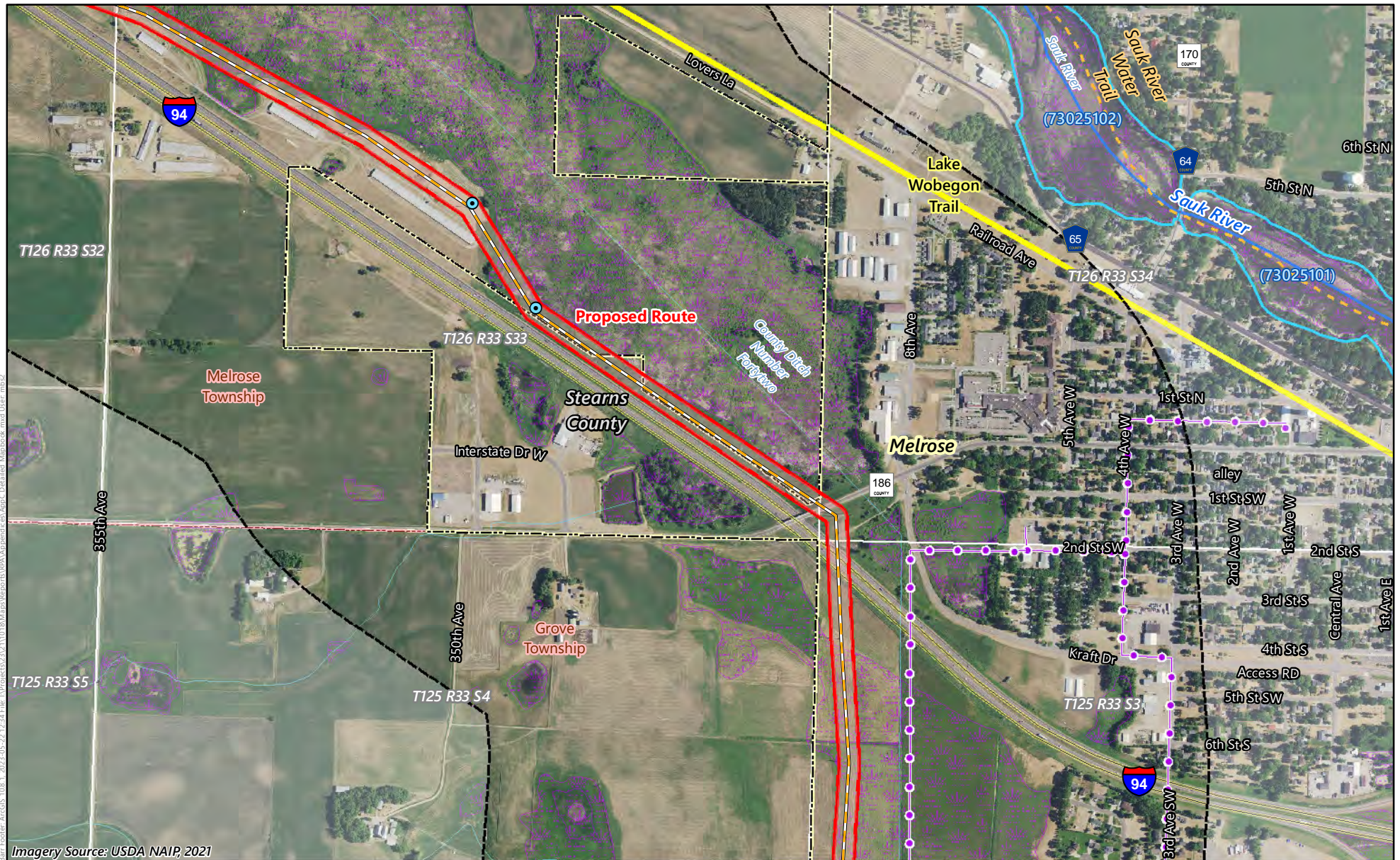
- New Foundation and Pole
- Anticipated Alignment (Existing)
- 150-Foot Right-of-Way
- Proposed Route
- Grassland Bird Conservation Area
- Existing High-Voltage Transmission Line
- Project Study Area
- Municipal Boundary
- Civil Township
- County/Municipal Park
- National Wetland Inventory
- Public Water Basin/Wetland
- State Water Trail
- Public Water Watercourse
















**Appendix C, Map C22**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**

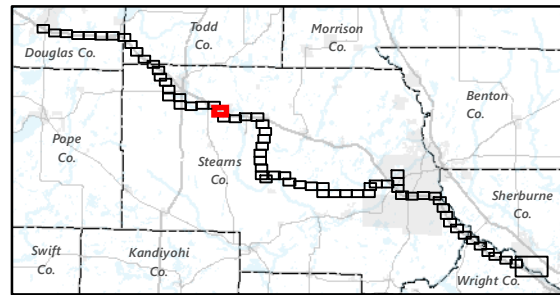
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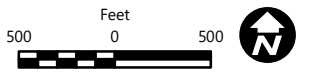


Imagery Source: USDA NAIP, 2021

-  New Foundation and Pole
-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Existing High-Voltage Transmission Line
-  Project Study Area
-  Municipal Boundary
-  Civil Township
-  County/Municipal Park
-  National Wetland Inventory
-  Public Water Basin/Wetland
-  State Water Trail
-  Public Water Watercourse












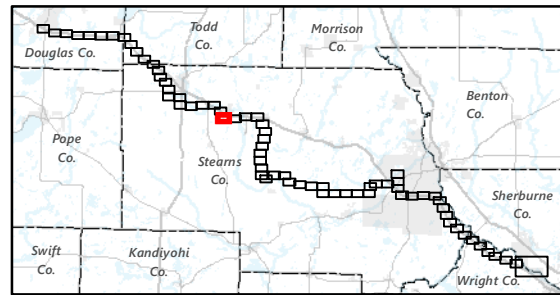
**Appendix C, Map C23**  
**ALEXANDRIA TO BIG OAKS**  
 MISO LRTP-2  
 Route Permit Application






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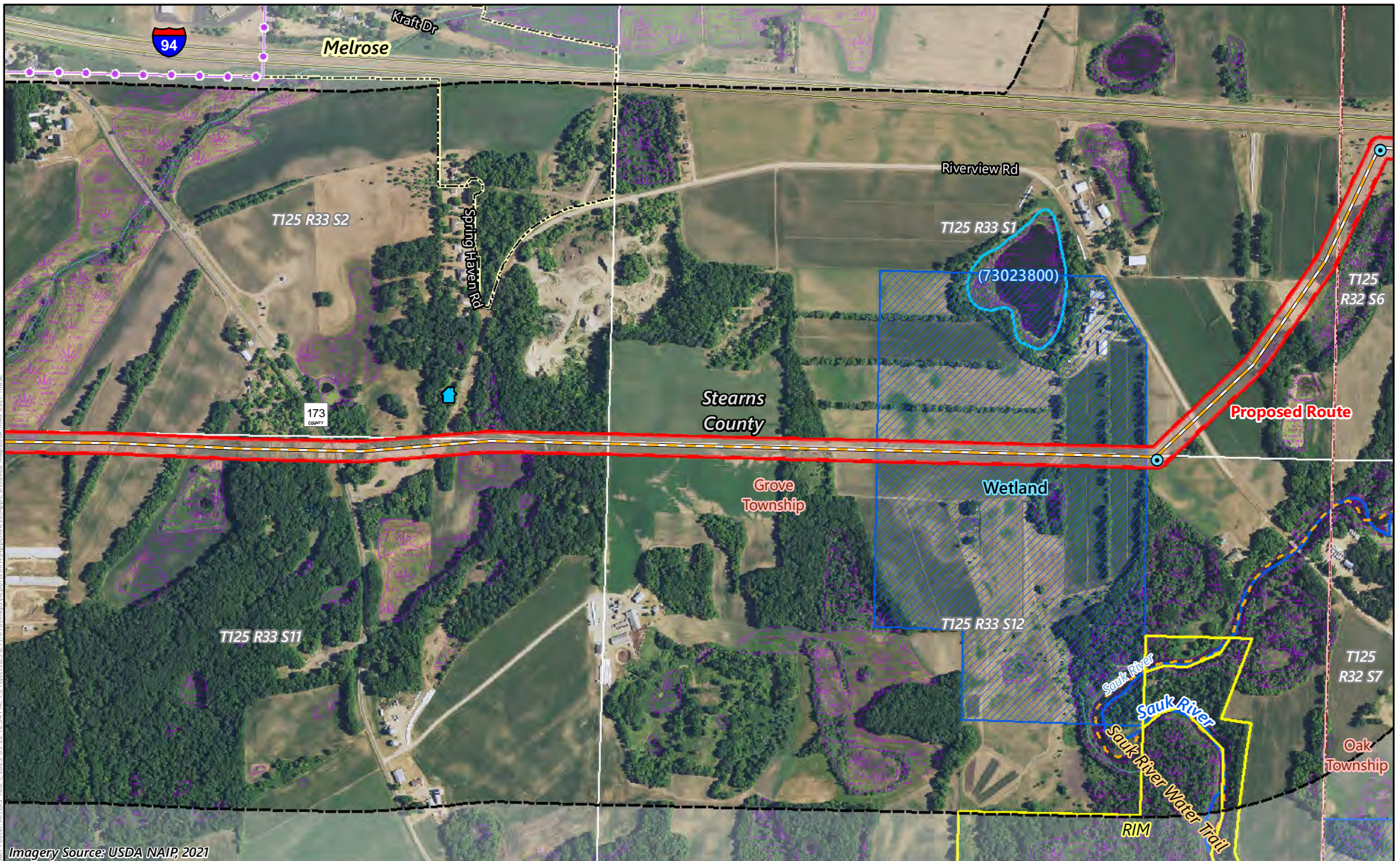
-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Existing High-Voltage Transmission Line
-  Project Study Area
-  Municipal Boundary
-  Civil Township
-  National Wetland Inventory
-  Residence 75-300 Feet from Alignment



**Appendix C, Map C24**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**

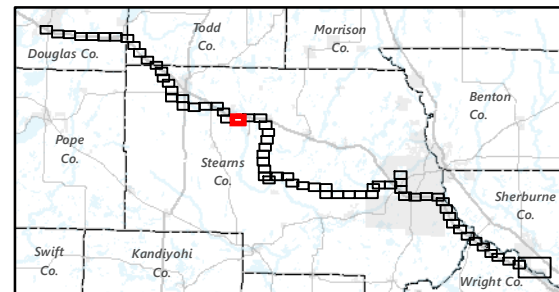
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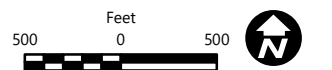



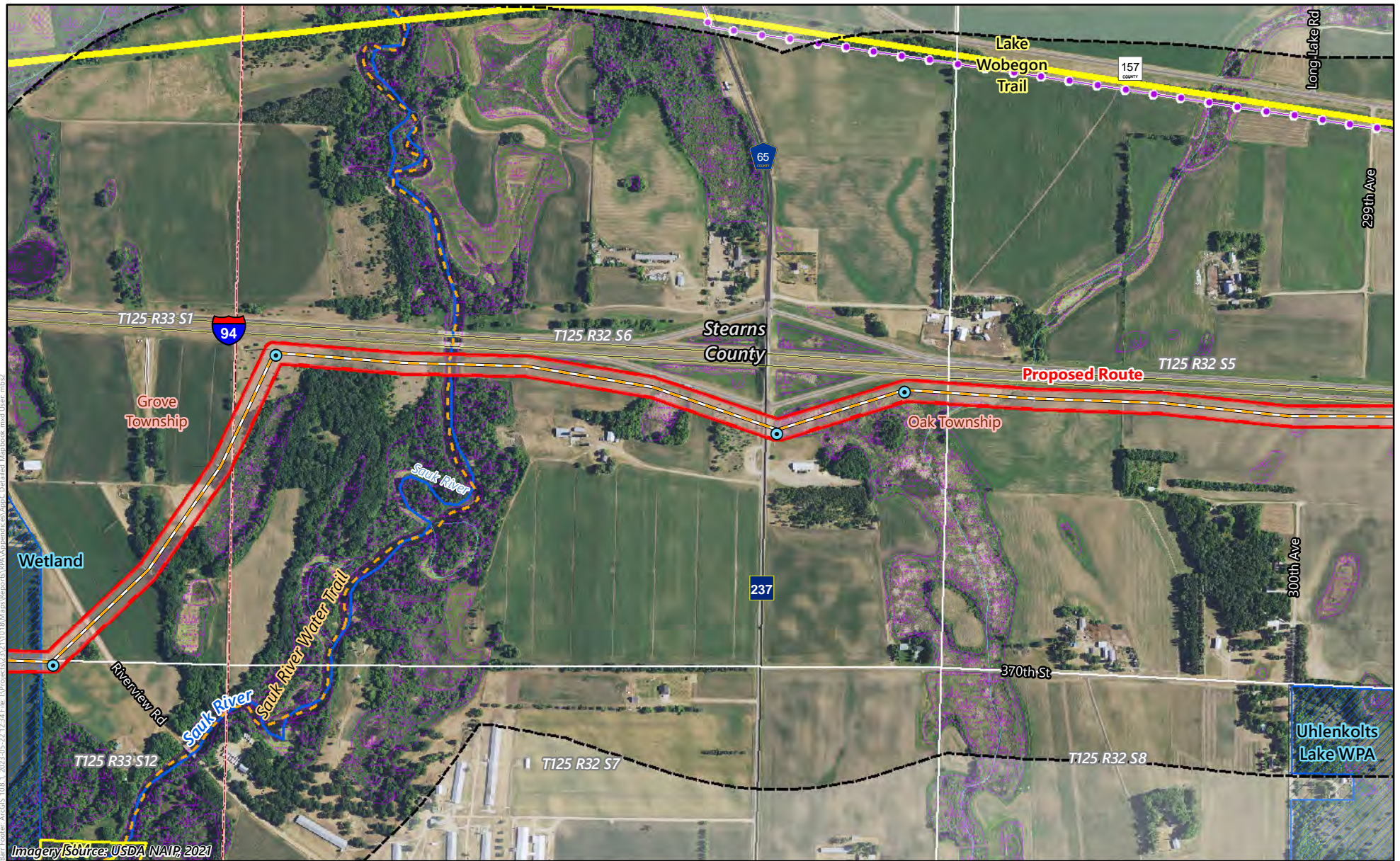
Imagery Source: USDA NAIP, 2021

- |                                  |                                         |                                       |
|----------------------------------|-----------------------------------------|---------------------------------------|
| New Foundation and Pole          | Existing High-Voltage Transmission Line | National Wetland Inventory            |
| Anticipated Alignment (Existing) | Project Study Area                      | Public Water Basin/Wetland            |
| 150-Foot Right-of-Way            | Municipal Boundary                      | State Water Trail                     |
| Proposed Route                   | Civil Township                          | Public Water Watercourse              |
|                                  | Conservation Easement                   | Waterfowl Production Area             |
|                                  | Reinvest in Minnesota                   | Residence 300-500 Feet from Alignment |



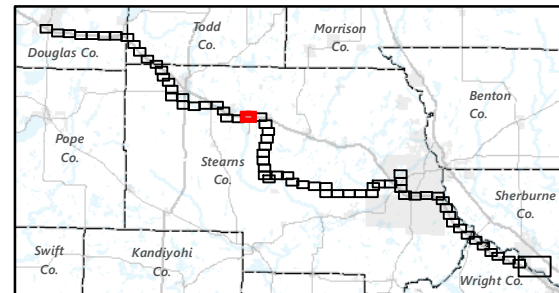
**Appendix C, Map C25**  
**ALEXANDRIA TO BIG OAKS**  
 MISO LRTP-2  
 Route Permit Application



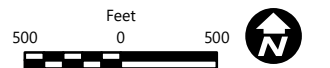


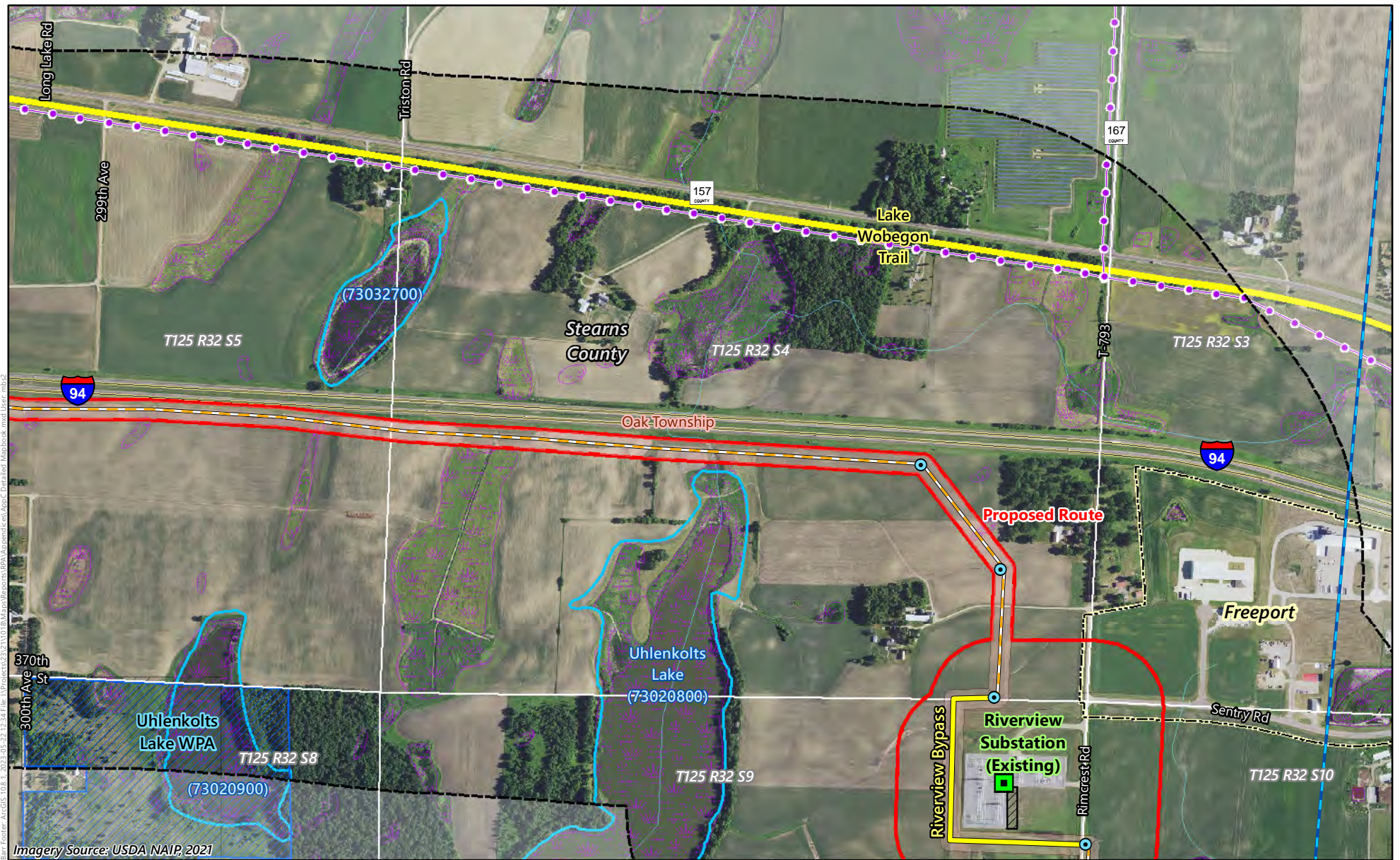
Imagery Source: USDA NAIP, 2021

- New Foundation and Pole
- Anticipated Alignment (Existing)
- 150-Foot Right-of-Way
- Proposed Route
- Grassland Bird Conservation Area
- Existing High-Voltage Transmission Line
- Project Study Area
- Civil Township
- County/Municipal Park Conservation Easement
- Reinvest in Minnesota
- National Wetland Inventory
- State Water Trail
- Public Water Watercourse
- Waterfowl Production Area



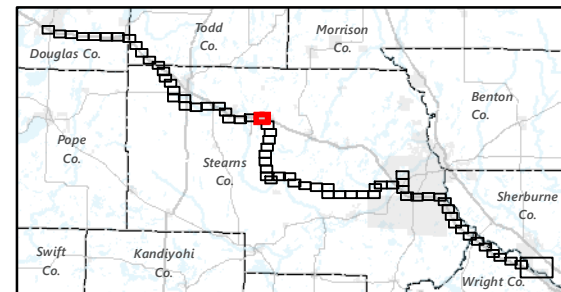
**Appendix C, Map C26**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**



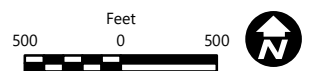


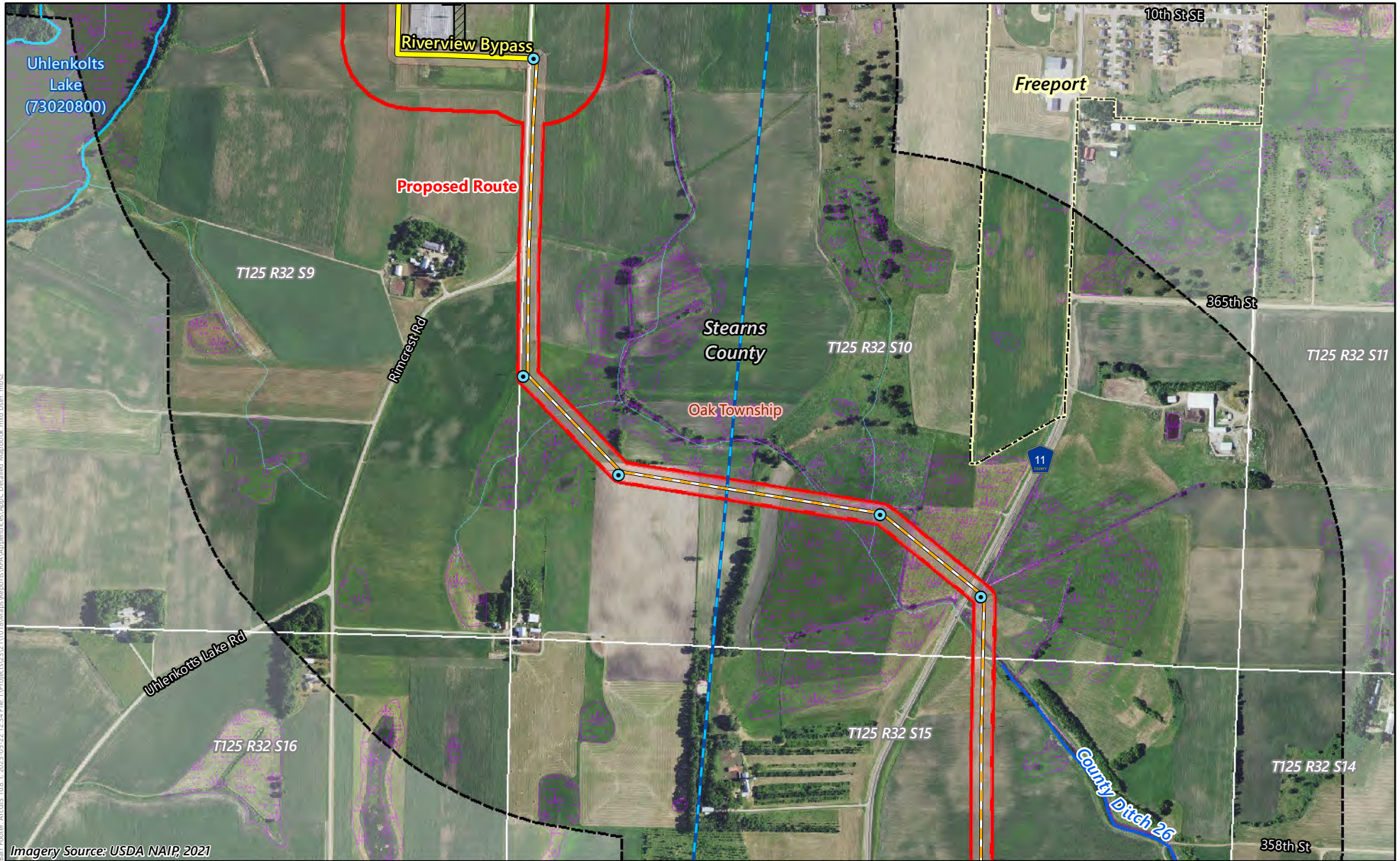
Imagery Source: USDA NAIP, 2021

- New Foundation and Pole
- Anticipated Alignment (Existing)
- Anticipated Alignment (New Build)
- 150-Foot Right-of-Way
- Preliminary Substation Footprint Expansion
- Proposed Route
- Grassland Bird Conservation Area
- Existing High-Voltage Transmission Line
- Approx. Natural Gas Pipeline
- Project Study Area
- Municipal Boundary
- Civil Township
- County/Municipal Park
- National Wetland Inventory
- Public Water Basin/Wetland
- Waterfowl Production Area

















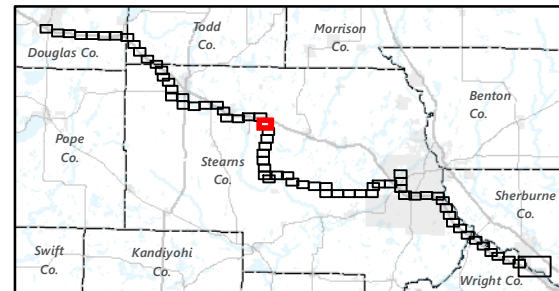
**Appendix C, Map C27**  
**ALEXANDRIA TO BIG OAKS**  
 MISO LRTP-2  
 Route Permit Application



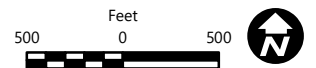


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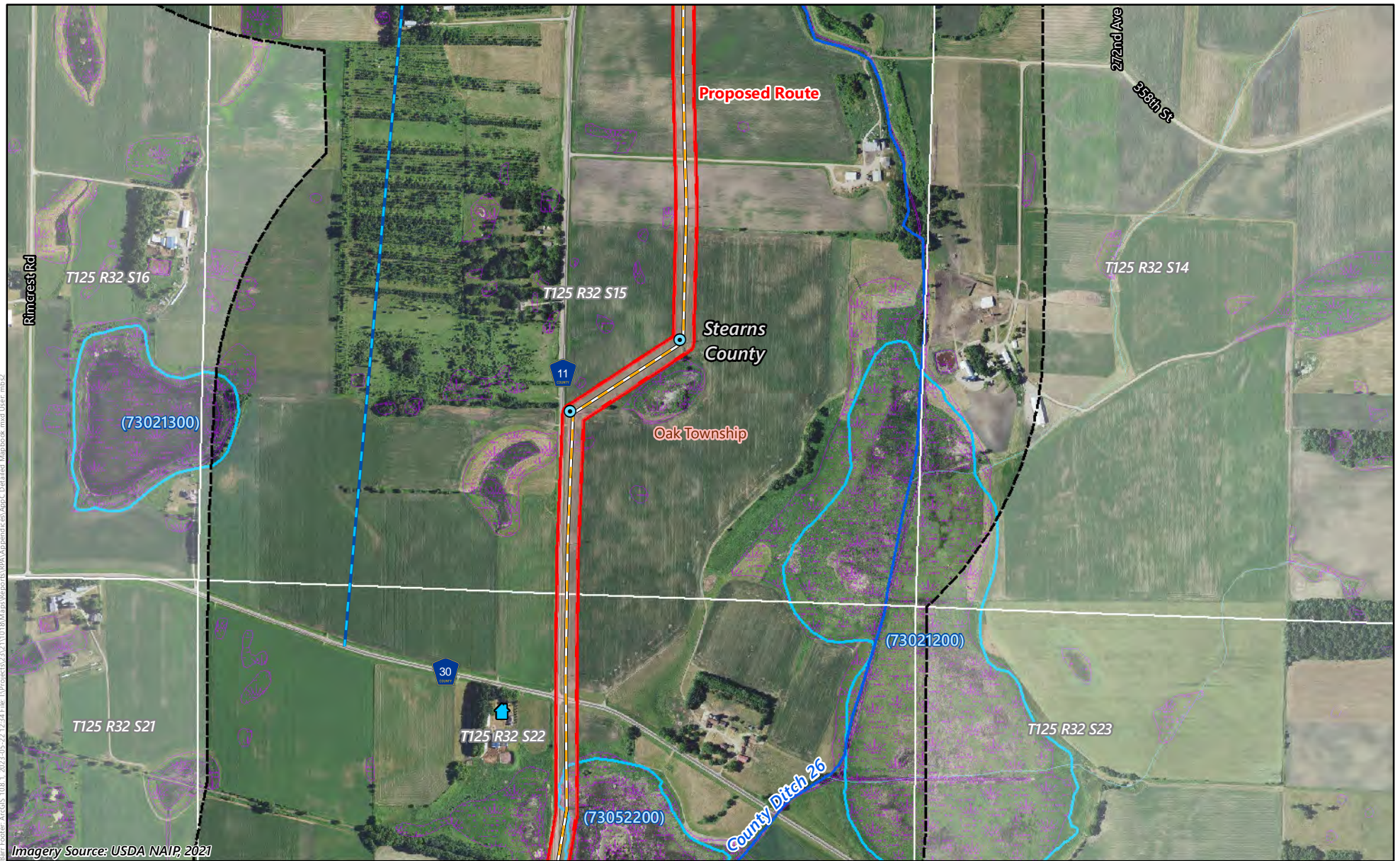
-  New Foundation and Pole
-  Anticipated Alignment (Existing)
-  Anticipated Alignment (New Build)
-  150-Foot Right-of-Way
-  Preliminary Substation Footprint Expansion
-  Proposed Route
-  Existing High-Voltage Transmission Line
-  Approx. Natural Gas Pipeline
-  Project Study Area
-  Municipal Boundary
-  Civil Township
-  National Wetland Inventory
-  Public Water Basin/Wetland
-  Public Water Watercourse















**Appendix C, Map C28**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**

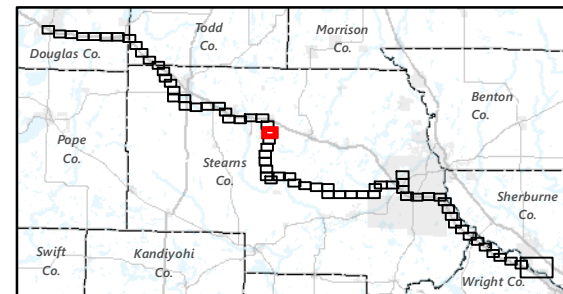




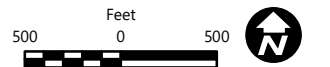


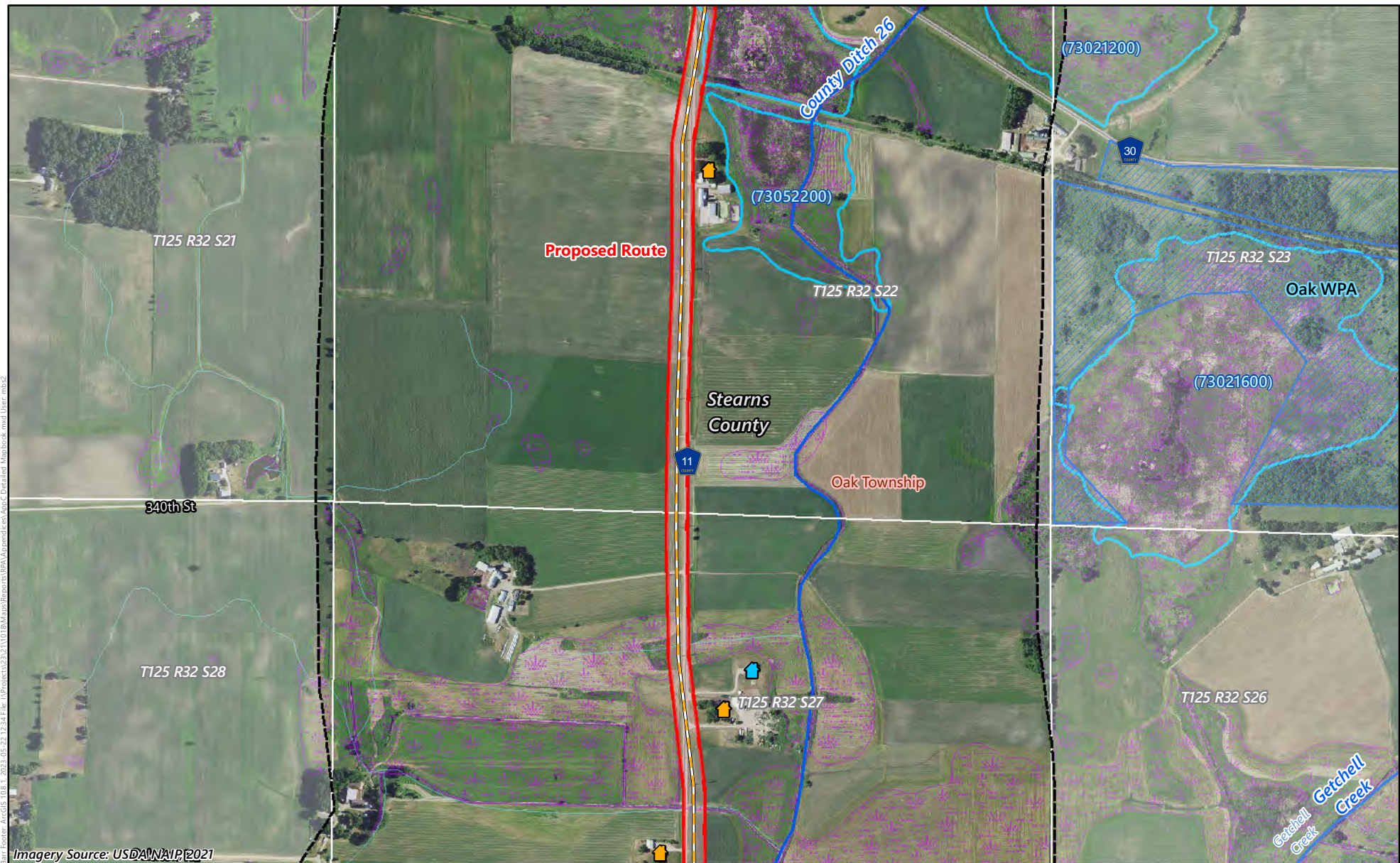
Imagery Source: USDA NAIP, 2021

-  New Foundation and Pole
-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Existing High-Voltage Transmission Line
-  Approx. Natural Gas Pipeline
-  Project Study Area
-  Civil Township
-  National Wetland Inventory
-  Public Water Basin/Wetland
-  Public Water Watercourse
-  Residence 300-500 Feet from Alignment















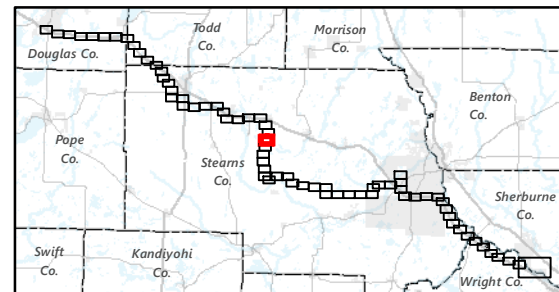
**Appendix C, Map C29**  
**ALEXANDRIA TO BIG OAKS**  
 MISO LRTP-2  
 Route Permit Application



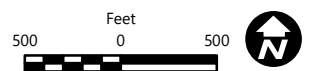


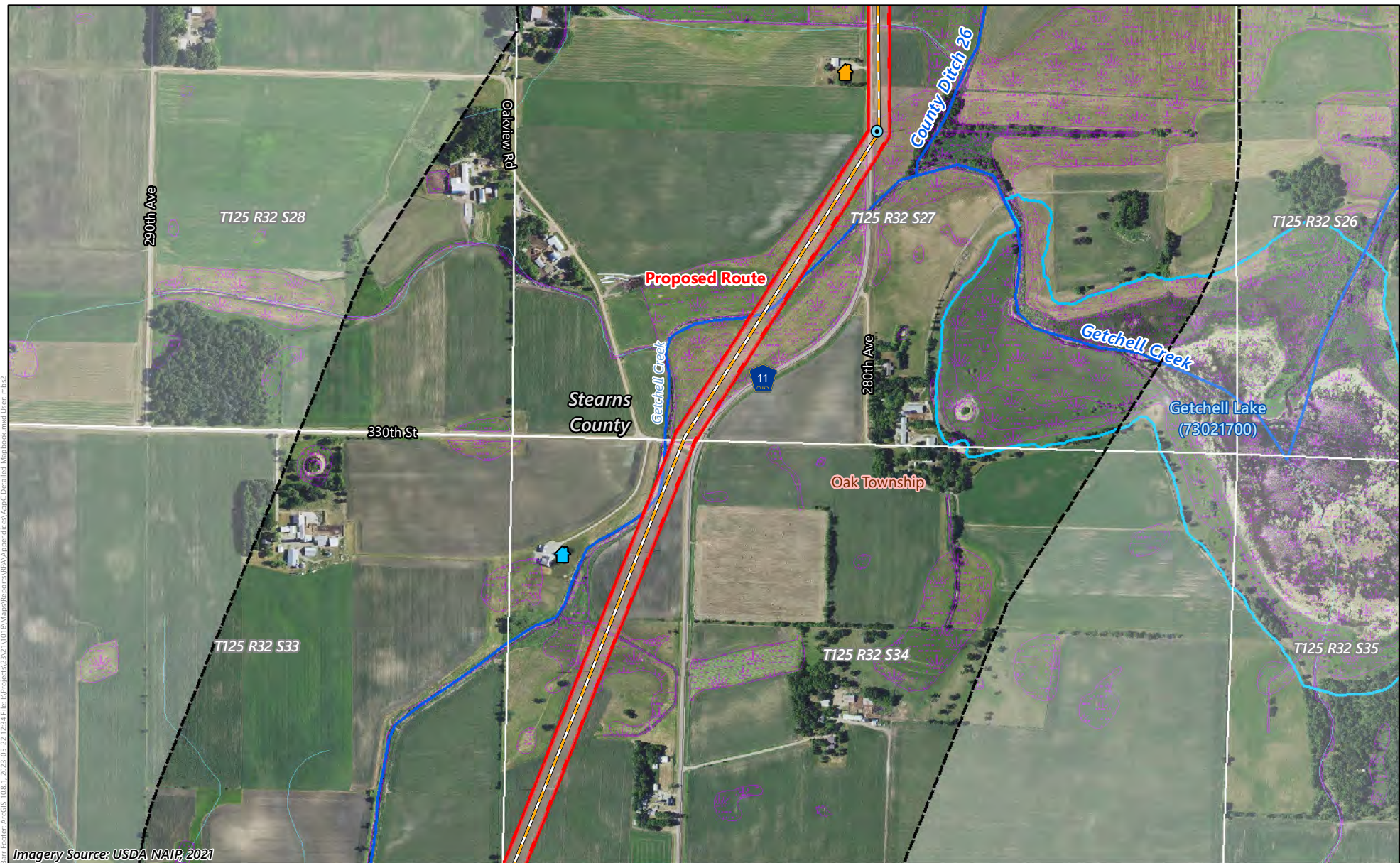
Imagery Source: USDA NAIP, 2021

-  Anticipated Alignment (Existing)
-  Existing High-Voltage Transmission Line
-  150-Foot Right-of-Way
-  Proposed Route
-  Project Study Area
-  Civil Township
-  National Wetland Inventory
-  Public Water Basin/Wetland
-  Public Water Watercourse
-  Waterfowl Production Area
-  Residence 75-300 Feet from Alignment
-  Residence 300-500 Feet from Alignment















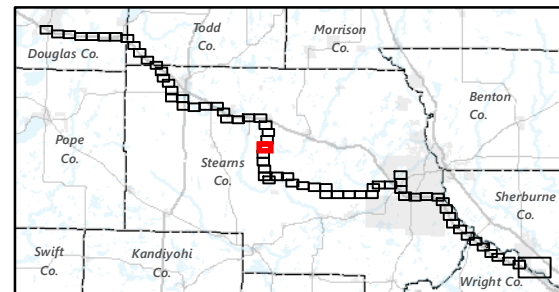
**Appendix C, Map C30**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**



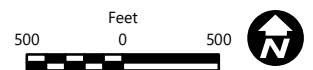


Imagery Source: USDA NAIP, 2021

-  New Foundation and Pole
-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Existing High-Voltage Transmission Line
-  Project Study Area
-  Civil Township
-  National Wetland Inventory
-  Public Water Basin/Wetland
-  Public Water Watercourse
-  Residence 75-300 Feet from Alignment
-  Residence 300-500 Feet from Alignment













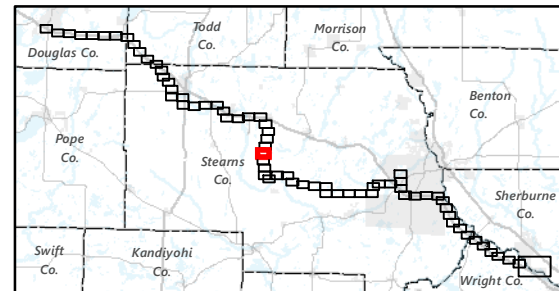
**Appendix C, Map C31**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**



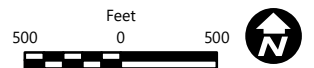


Imagery Source: USDA NAIP, 2021

-  New Foundation and Pole
-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Grassland Bird Conservation Area
-  Existing High-Voltage Transmission Line
-  Project Study Area
-  Civil Township
-  National Wetland Inventory
-  Public Water Watercourse














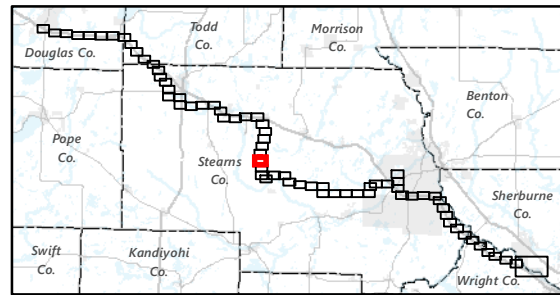
**Appendix C, Map C32**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**



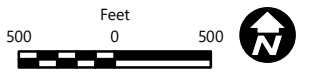


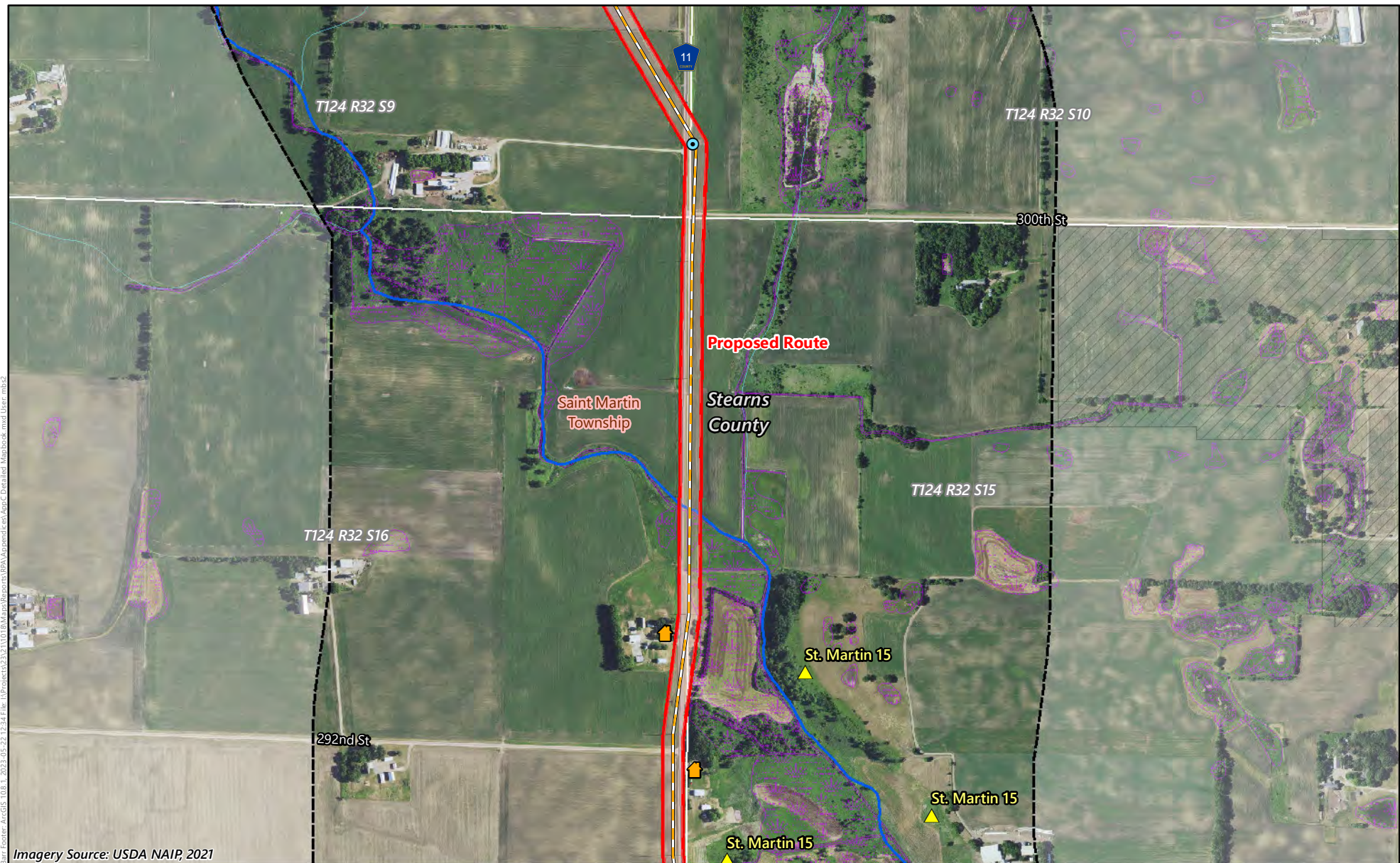
Imagery Source: USDA NAIP, 2021

-  New Foundation and Pole
-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Grassland Bird Conservation Area
-  Existing High-Voltage Transmission Line
-  Project Study Area
-  Civil Township
-  National Wetland Inventory
-  Public Water Basin/Wetland
-  Public Water Watercourse















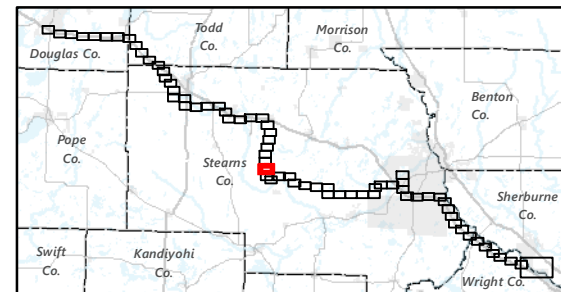
**Appendix C, Map C33**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**



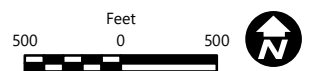


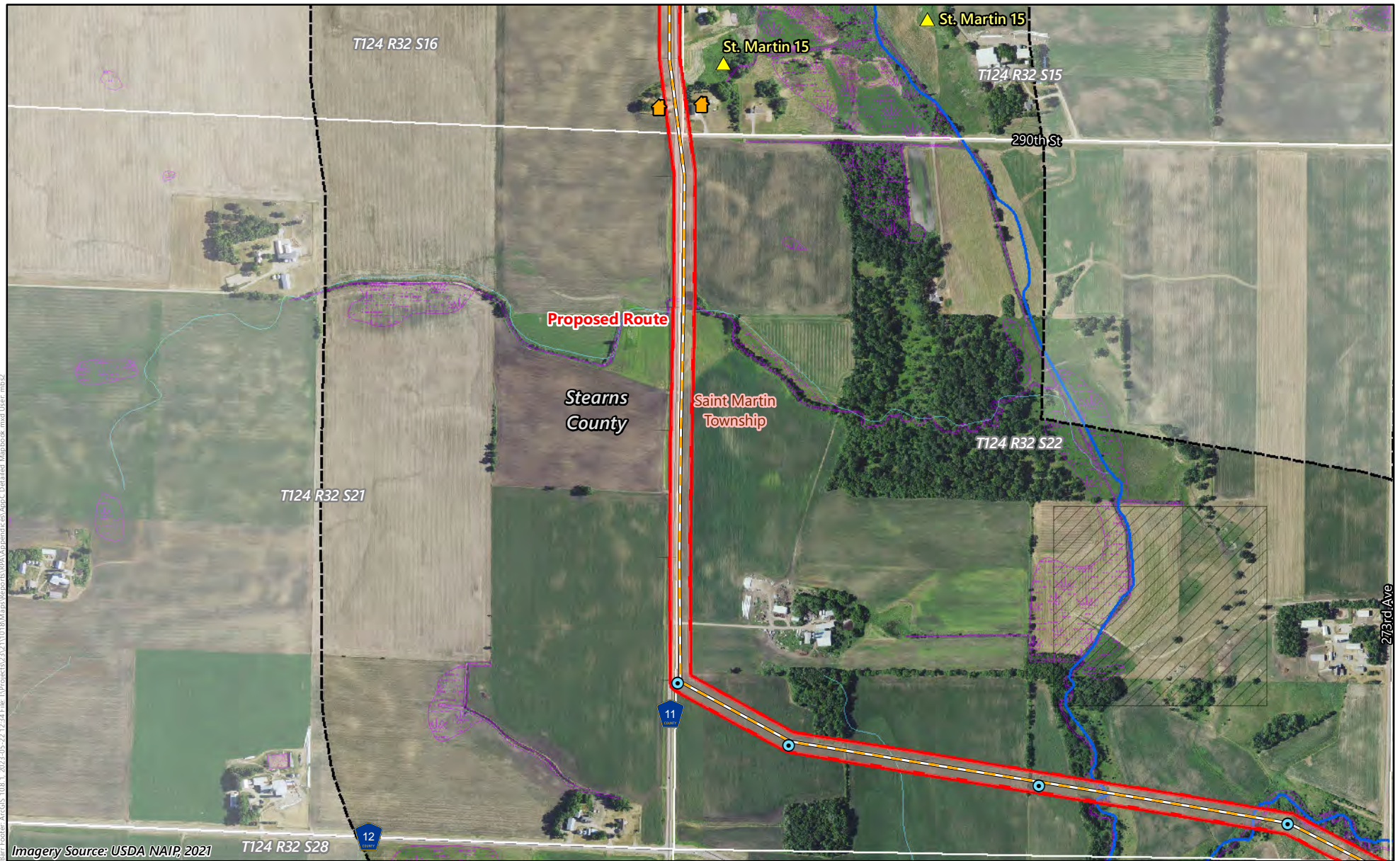
Imagery Source: USDA NAIP, 2021

-  New Foundation and Pole
-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Grassland Bird Conservation Area
-  Existing High-Voltage Transmission Line
-  Project Study Area
-  Civil Township
-  National Wetland Inventory
-  Public Water Watercourse
-  Residence 75-300 Feet from Alignment
-  Calcareous Fen Location















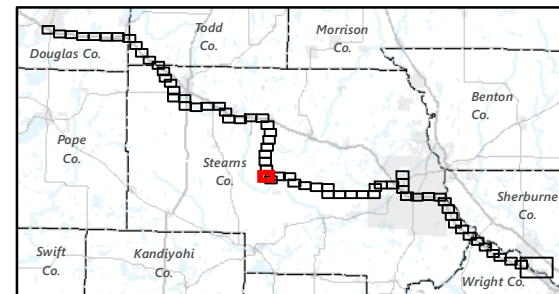
**Appendix C, Map C34**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**



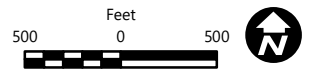


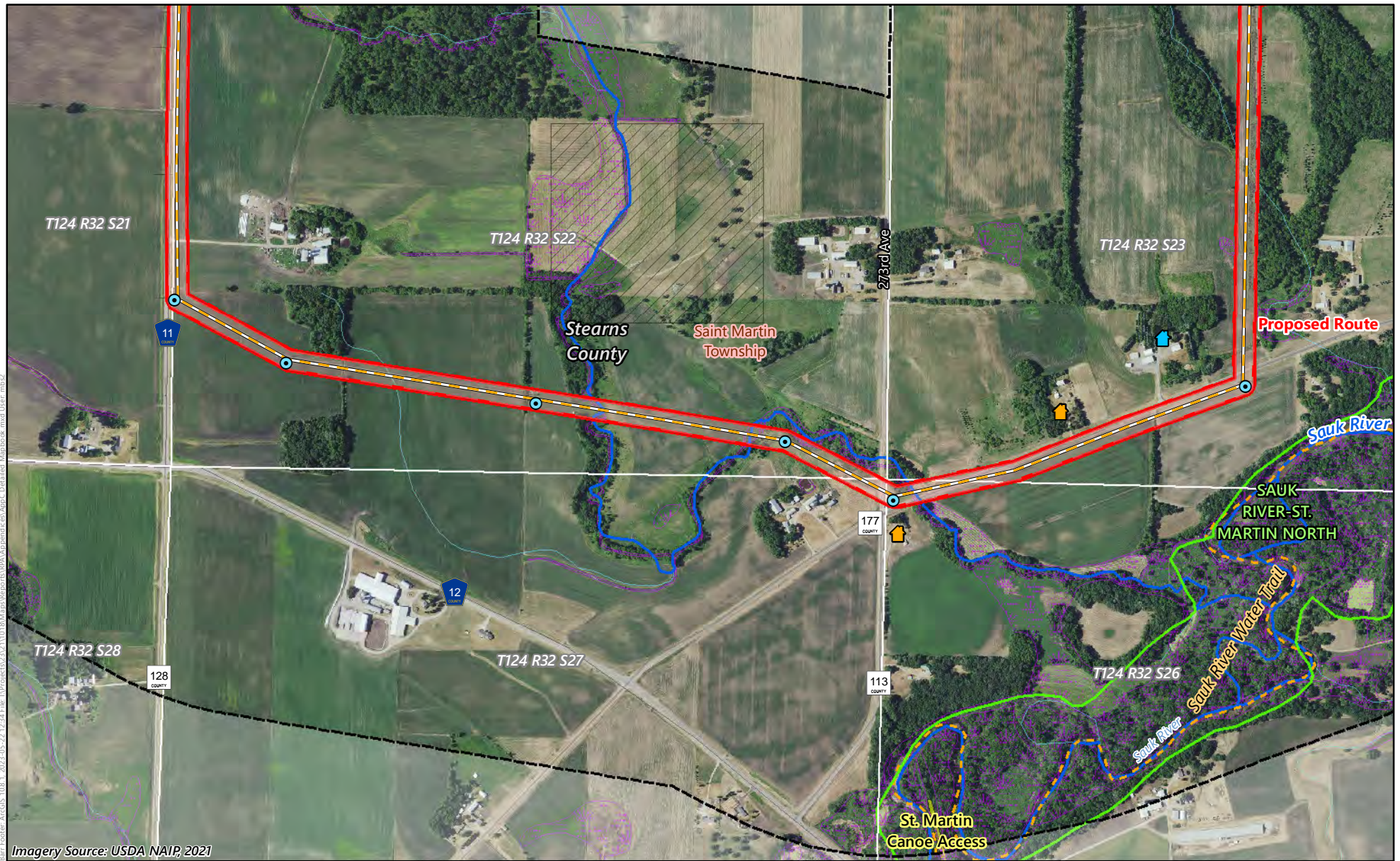
Imagery Source: USDA NAIP, 2021

-  New Foundation and Pole
-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Grassland Bird Conservation Area
-  Existing High-Voltage Transmission Line
-  Project Study Area
-  Civil Township
-  National Wetland Inventory
-  Public Water Watercourse
-  Residence 75-300 Feet from Alignment
-  Calcareous Fen Location



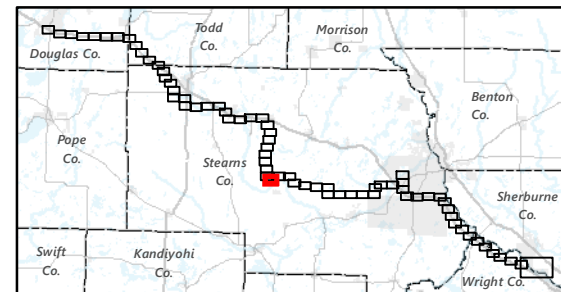
**Appendix C, Map C35**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**



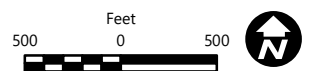


Imagery Source: USDA NAIP, 2021

- New Foundation and Pole
- Anticipated Alignment (Existing)
- 150-Foot Right-of-Way
- Proposed Route
- Grassland Bird Conservation Area
- Existing High-Voltage Transmission Line
- Project Study Area
- Civil Township
- County/Municipal Park
- National Wetland Inventory
- State Water Trail
- Public Water Watercourse
- Site of Biodiversity Significance
- Residence 75-300 Feet from Alignment
- Residence 300-500 Feet from Alignment
















**Appendix C, Map C36**  
**ALEXANDRIA TO BIG OAKS**  
 MISO LRTP-2  
 Route Permit Application

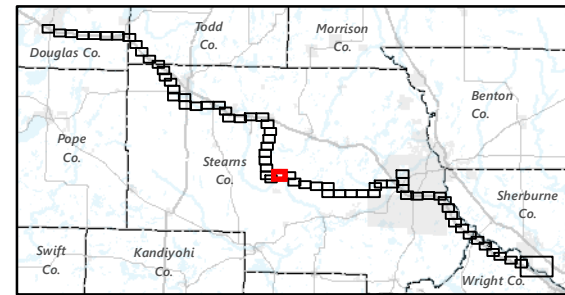







Imagery Source: USDA NAIP, 2021

-  New Foundation and Pole
-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Existing High-Voltage Transmission Line
-  Project Study Area
-  Civil Township
-  National Wetland Inventory
-  State Water Trail
-  Public Water Watercourse
-  Site of Biodiversity Significance
-  Residence 75-300 Feet from Alignment
-  Residence 300-500 Feet from Alignment



**Appendix C, Map C37**  
**ALEXANDRIA TO BIG OAKS**  
 MISO LRTP-2  
 Route Permit Application











500 0 500 Feet

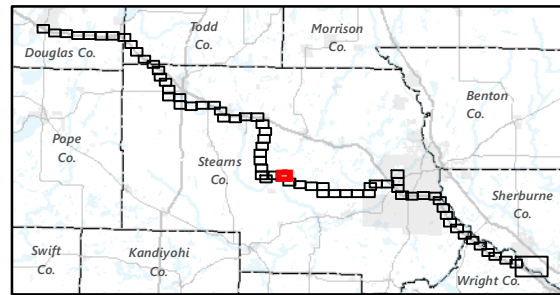





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Imagery Source: USDA NAIP, 2021.32 S25

-  New Foundation and Pole
-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Existing High-Voltage Transmission Line
-  Project Study Area
-  Civil Township
-  National Wetland Inventory
-  State Water Trail
-  Public Water Watercourse



**Appendix C, Map C38**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**













500 0 500 Feet

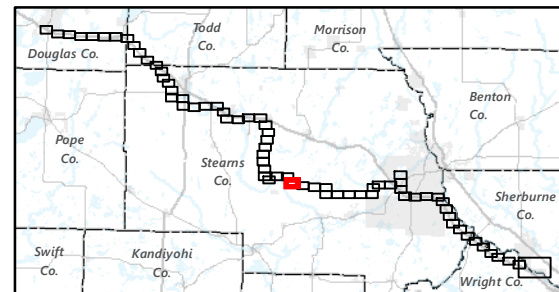




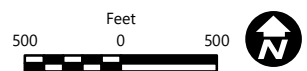

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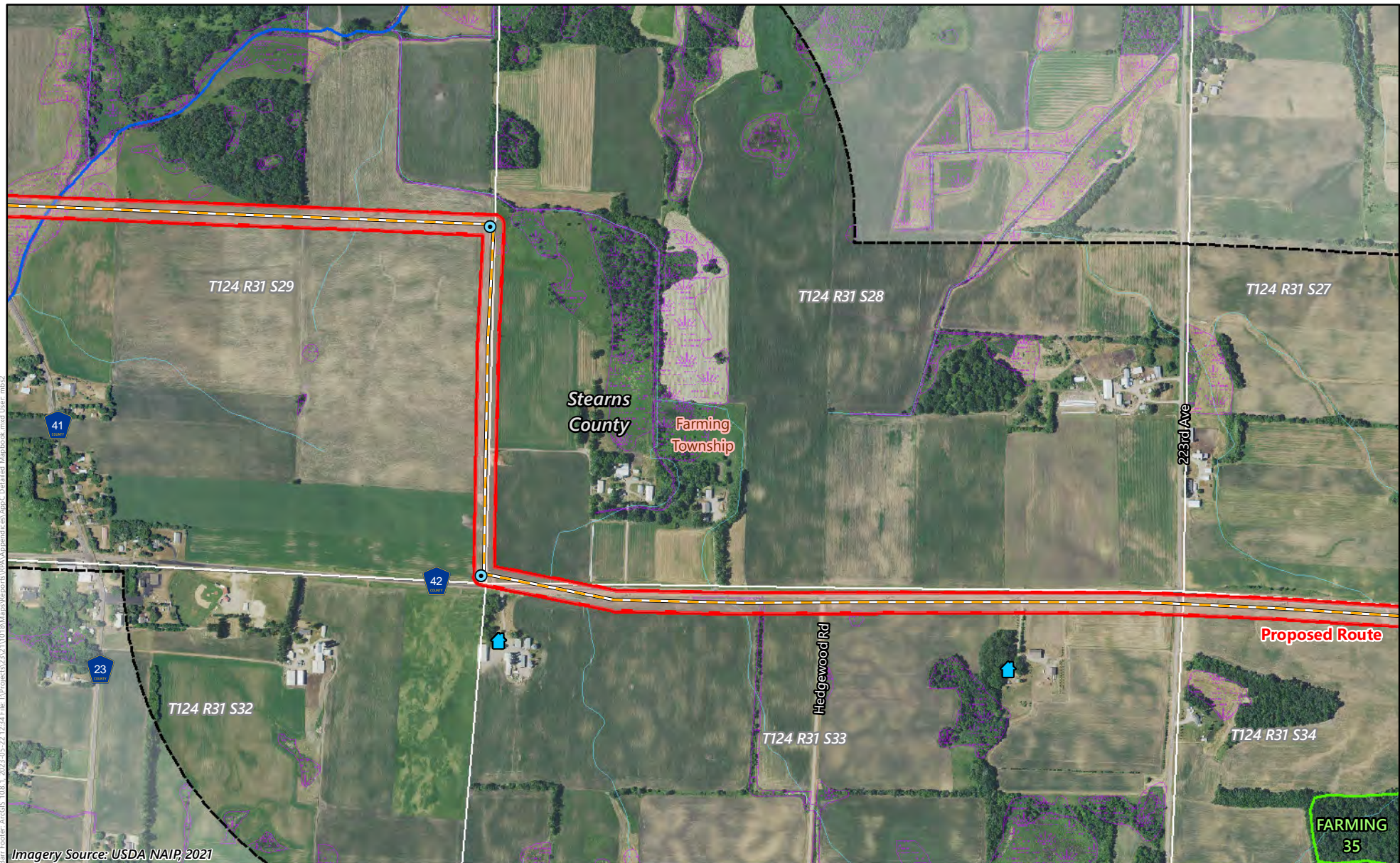
Imagery Source: USDA NAIP, 2021

-  New Foundation and Pole
-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Existing High-Voltage Transmission Line
-  Project Study Area
-  Civil Township
-  National Wetland Inventory
-  State Water Trail
-  Public Water Watercourse
-  Residence 75-300 Feet from Alignment
-  Residence 300-500 Feet from Alignment














**Appendix C, Map C39**  
**ALEXANDRIA TO BIG OAKS**  
 MISO LRTP-2  
 Route Permit Application

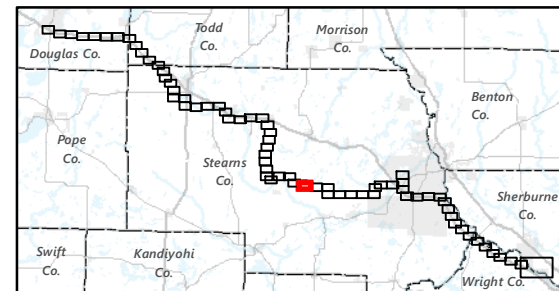




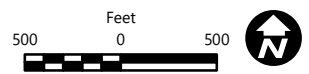
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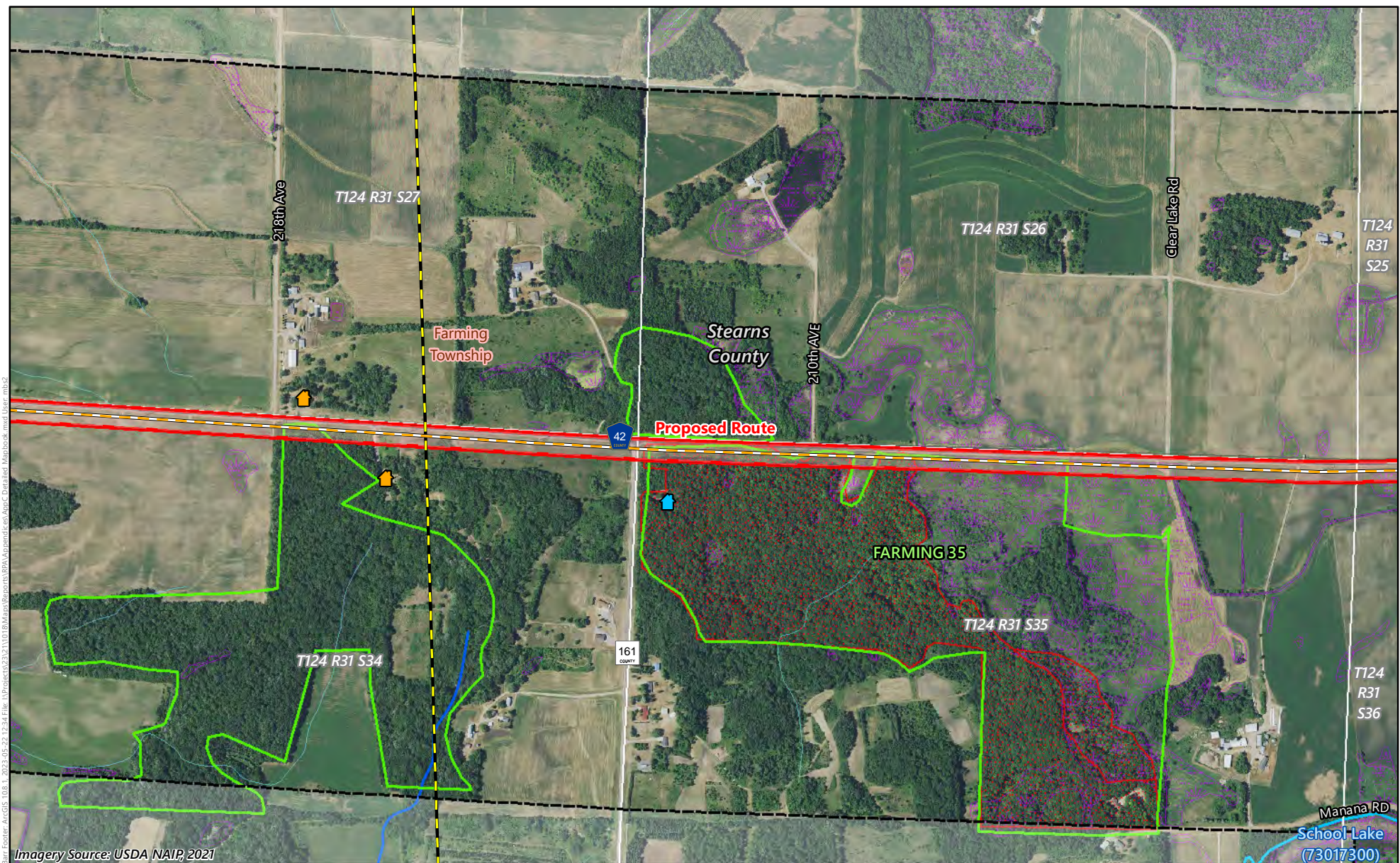
Imagery Source: USDA NAIP, 2021

-  New Foundation and Pole
-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Existing High-Voltage Transmission Line
-  Project Study Area
-  Civil Township
-  National Wetland Inventory
-  Public Water Watercourse
-  Site of Biodiversity Significance
-  Residence 300-500 Feet from Alignment

















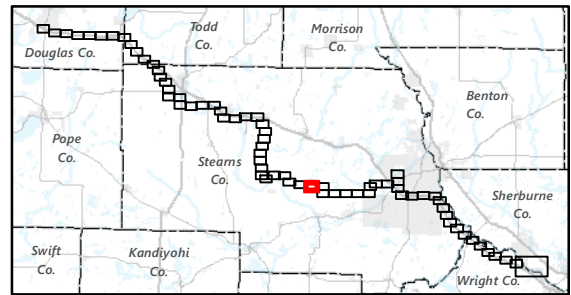
**Appendix C, Map C40**  
**ALEXANDRIA TO BIG OAKS**  
 MISO LRTP-2  
 Route Permit Application






Imagery Source: USDA NAIP, 2021

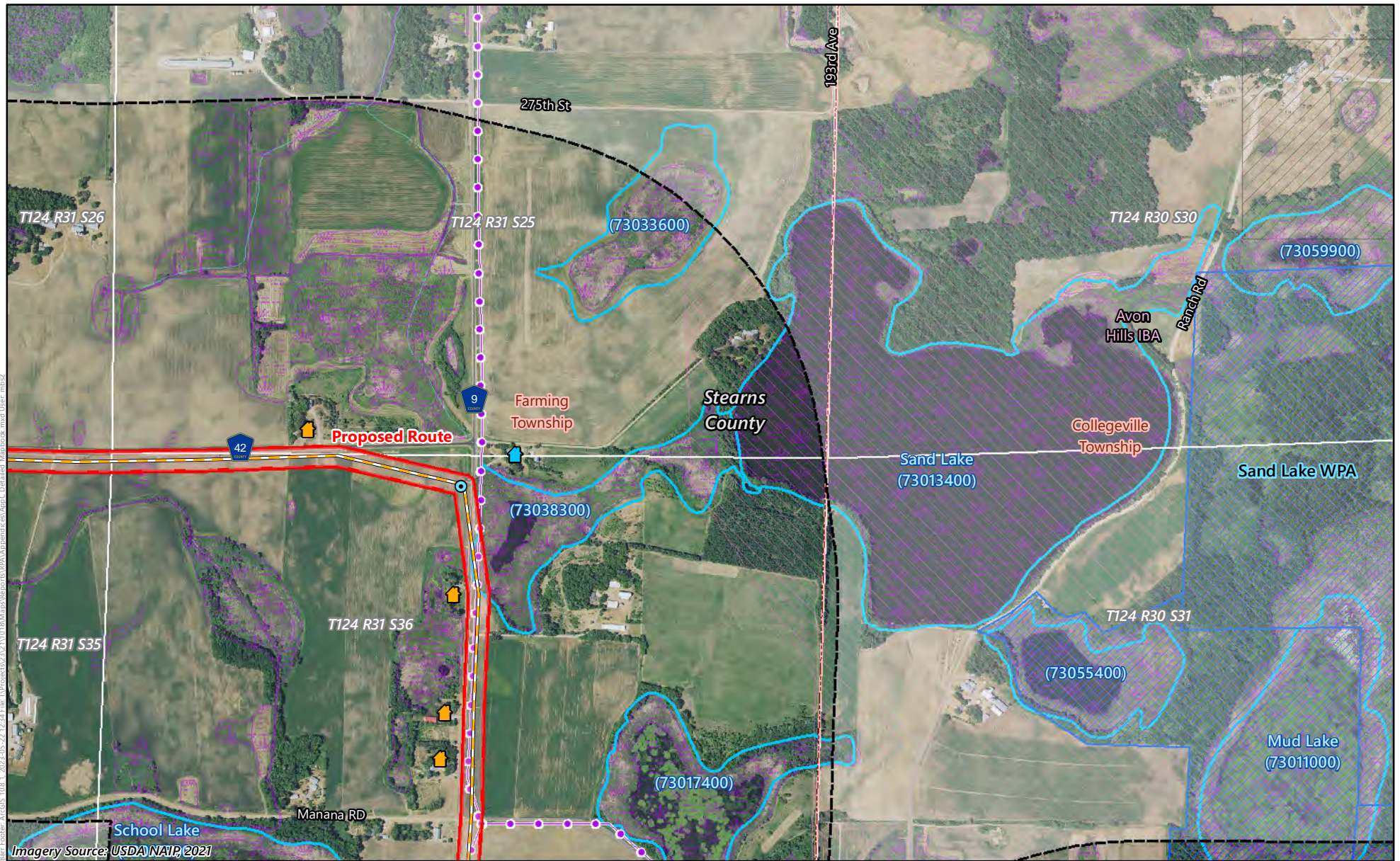
-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Existing High-Voltage Transmission Line
-  Approx. Crude Oil Pipeline
-  Project Study Area
-  Civil Township
-  Native Plant Community
-  National Wetland Inventory
-  Public Water Basin/Wetland
-  Public Water Watercourse
-  Site of Biodiversity Significance
-  Residence 75-300 Feet from Alignment
-  Residence 300-500 Feet from Alignment



**Appendix C, Map C41**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**















500 0 500 Feet

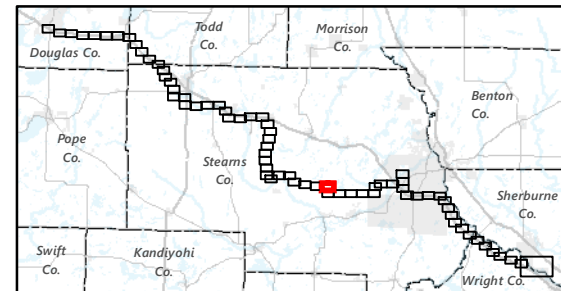


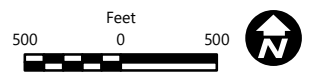
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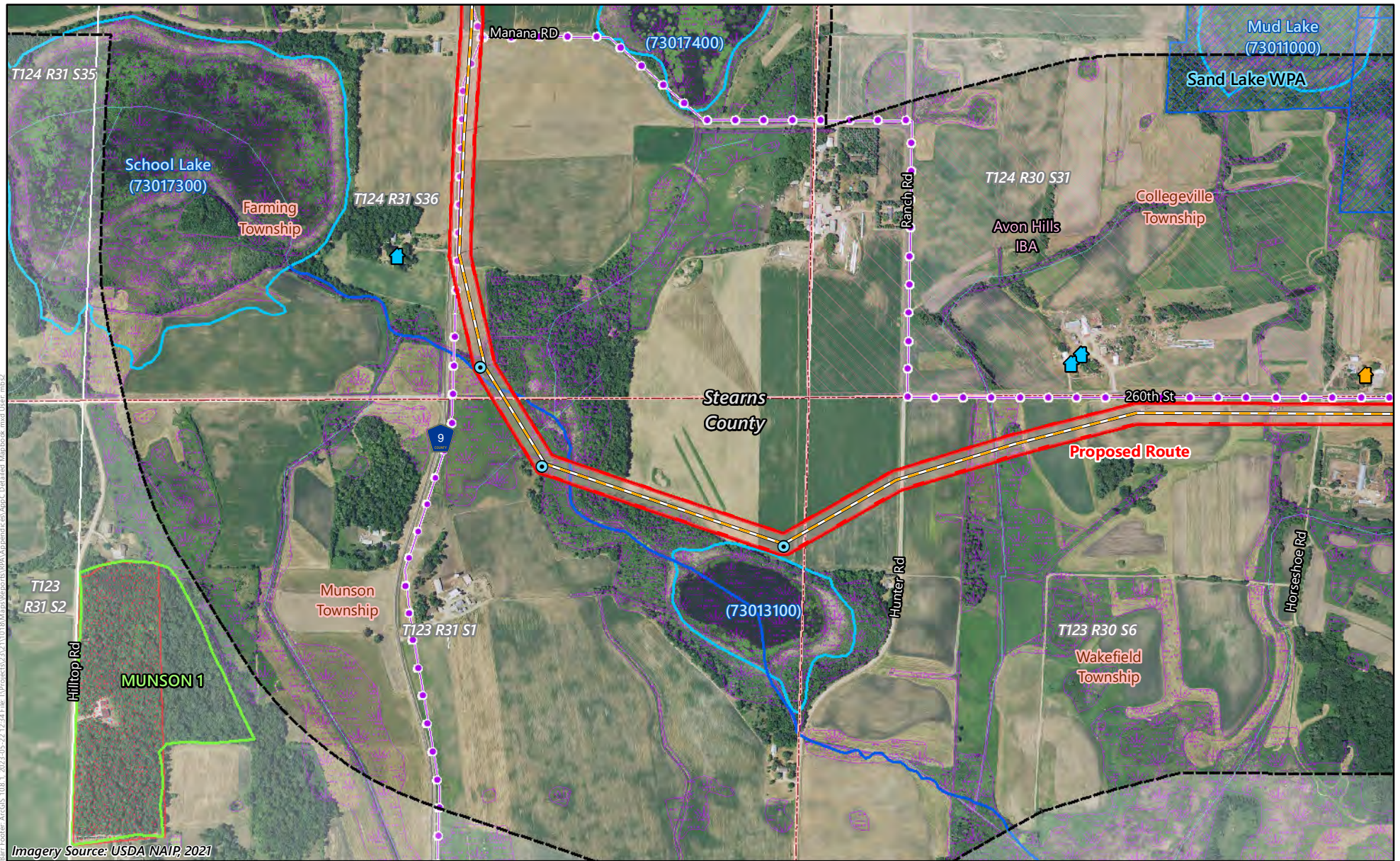
Imagery Source: USDA NAIP, 2021

-  New Foundation and Pole
-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Grassland Bird Conservation Area
-  Important Bird Area
-  Existing High-Voltage Transmission Line
-  Project Study Area
-  Civil Township
-  National Wetland Inventory
-  Public Water Basin/Wetland
-  Waterfowl Production Area
-  Residence 75-300 Feet from Alignment
-  Residence 300-500 Feet from Alignment



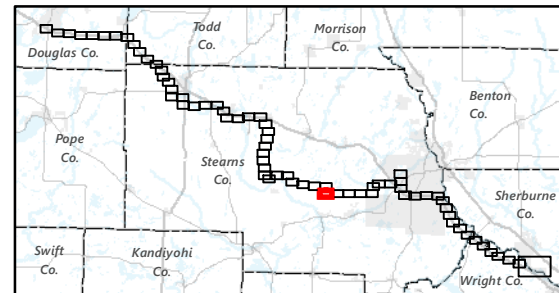
**Appendix C, Map C42**  
**ALEXANDRIA TO BIG OAKS**  
 MISO LRTP-2  
 Route Permit Application



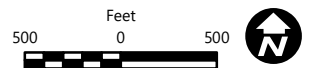


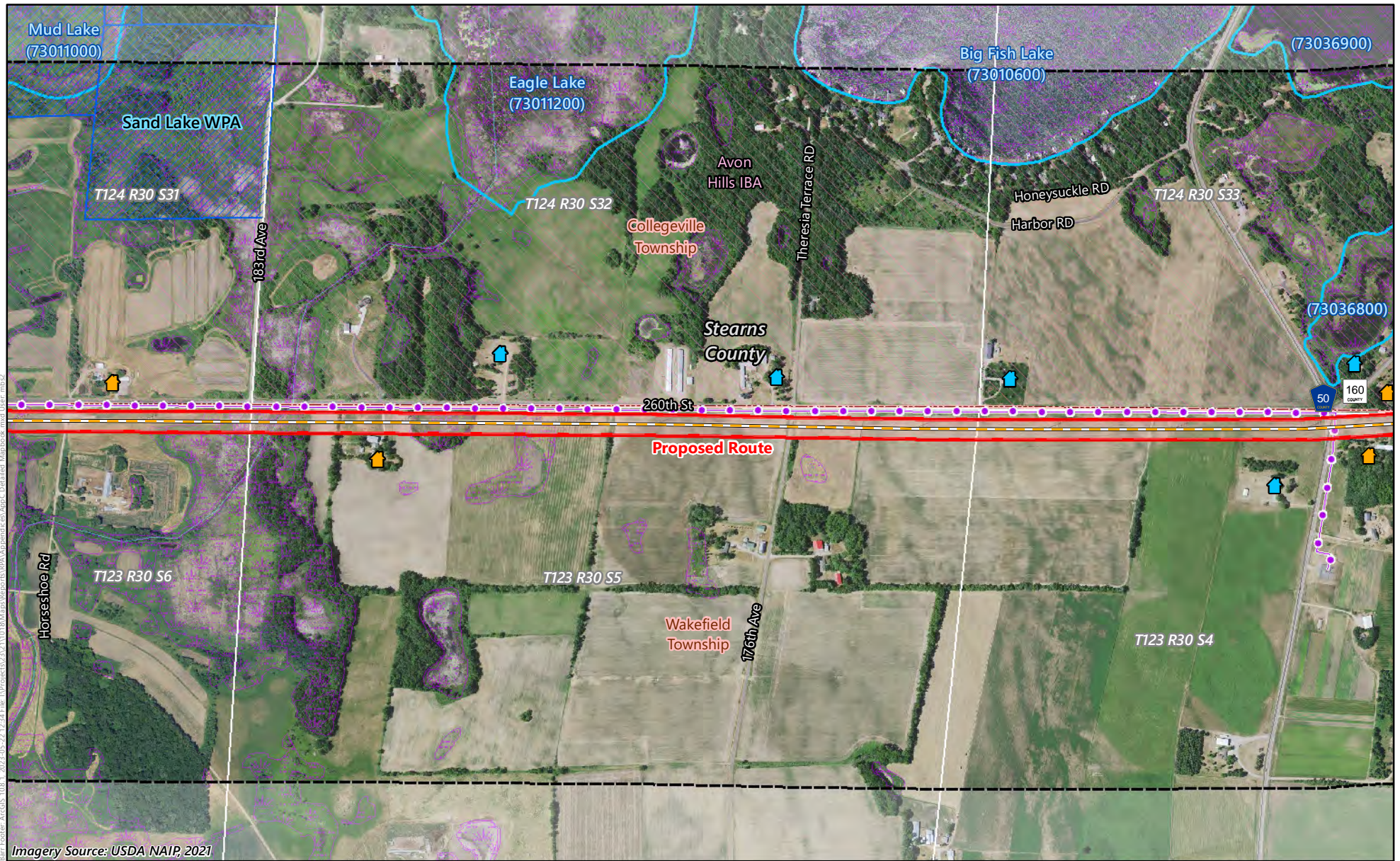
Imagery Source: USDA NAIP, 2021

- New Foundation and Pole
- Anticipated Alignment (Existing)
- 150-Foot Right-of-Way
- Proposed Route
- Important Bird Area
- Existing High-Voltage Transmission Line
- Project Study Area
- Civil Township
- Native Plant Community
- National Wetland Inventory
- Public Water Basin/Wetland
- Public Water Watercourse
- Site of Biodiversity Significance
- Waterfowl Production Area
- Residence 75-300 Feet from Alignment
- Residence 300-500 Feet from Alignment

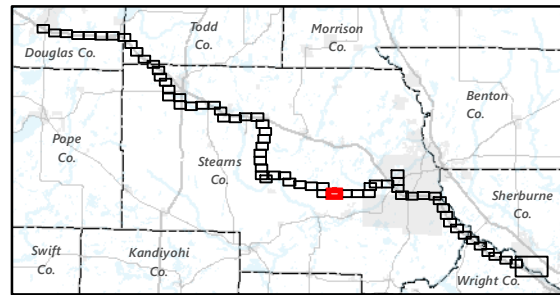


**Appendix C, Map C43**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**





- Anticipated Alignment (Existing)
- 150-Foot Right-of-Way
- Proposed Route
- Important Bird Area
- Existing High-Voltage Transmission Line
- Project Study Area
- Civil Township
- National Wetland Inventory
- Public Water Basin/Wetland
- Waterfowl Production Area
- Residence 75-300 Feet from Alignment
- Residence 300-500 Feet from Alignment



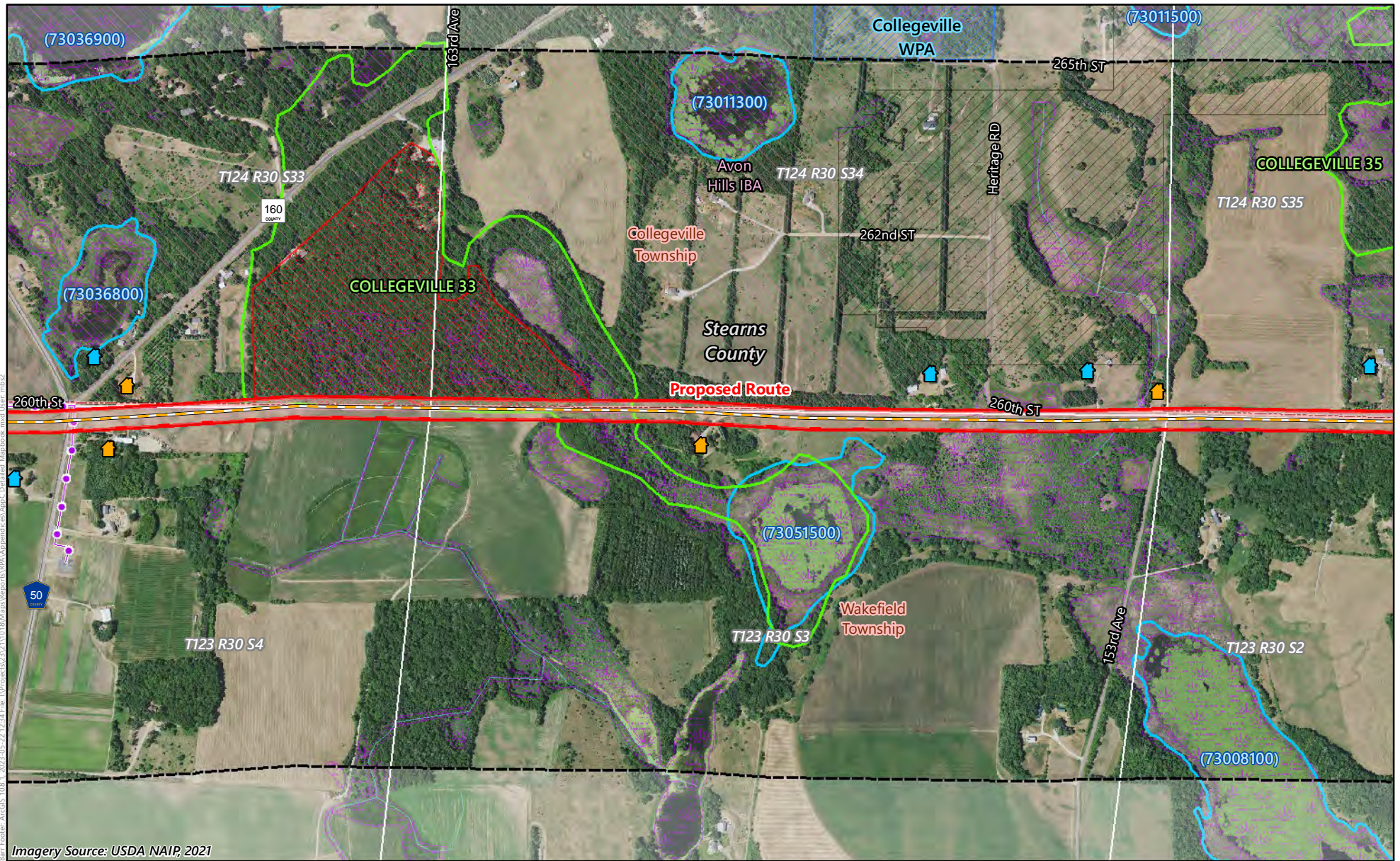
**Appendix C, Map C44**  
**ALEXANDRIA TO BIG OAKS**  
 MISO LRTP-2  
 Route Permit Application

500 0 500 Feet


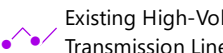
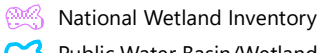
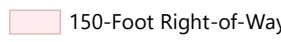

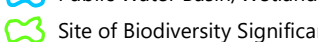
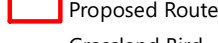
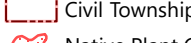
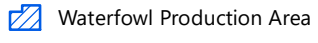
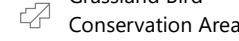
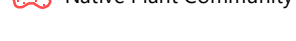
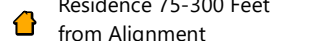
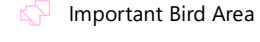

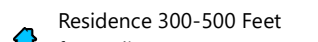


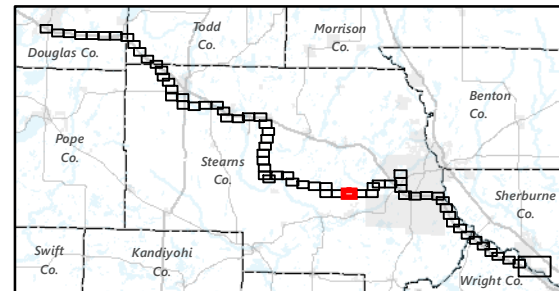
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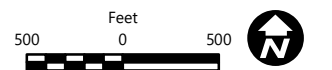


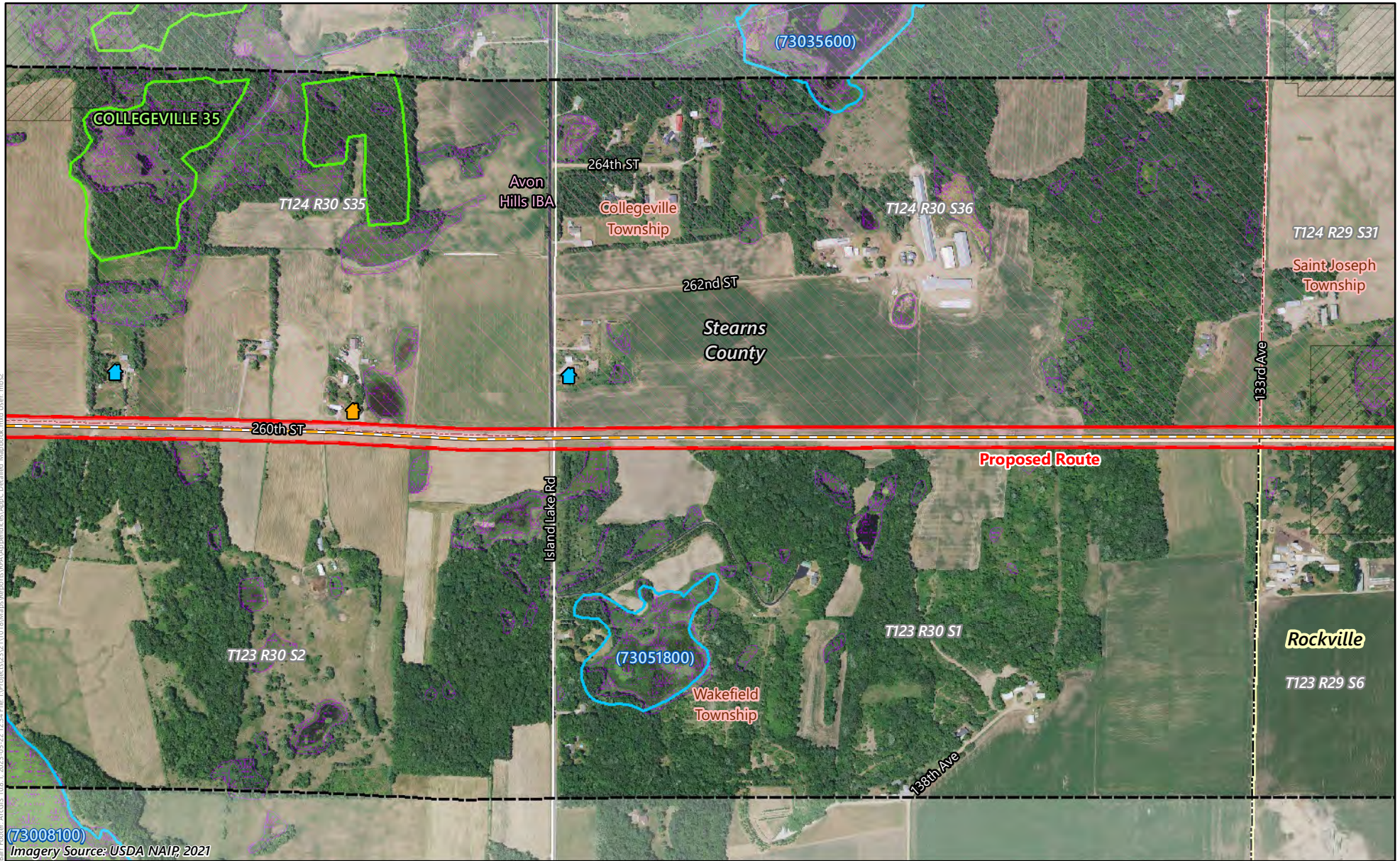
Imagery Source: USDA NAIP, 2021

-  Anticipated Alignment (Existing)
-  Existing High-Voltage Transmission Line
-  National Wetland Inventory
-  150-Foot Right-of-Way
-  Project Study Area
-  Public Water Basin/Wetland
-  Proposed Route
-  Civil Township
-  Site of Biodiversity Significance
-  Grassland Bird Conservation Area
-  Native Plant Community
-  Waterfowl Production Area
-  Residence 75-300 Feet from Alignment
-  Residence 300-500 Feet from Alignment
-  Important Bird Area

















**Appendix C, Map C45**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**

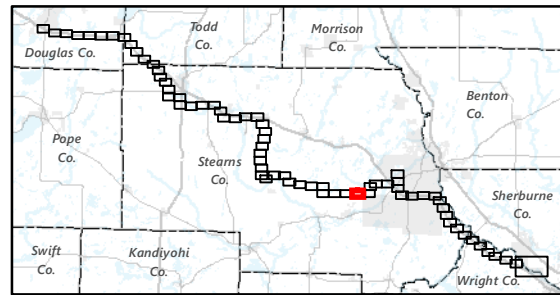




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Imagery Source: USDA NAIP, 2021

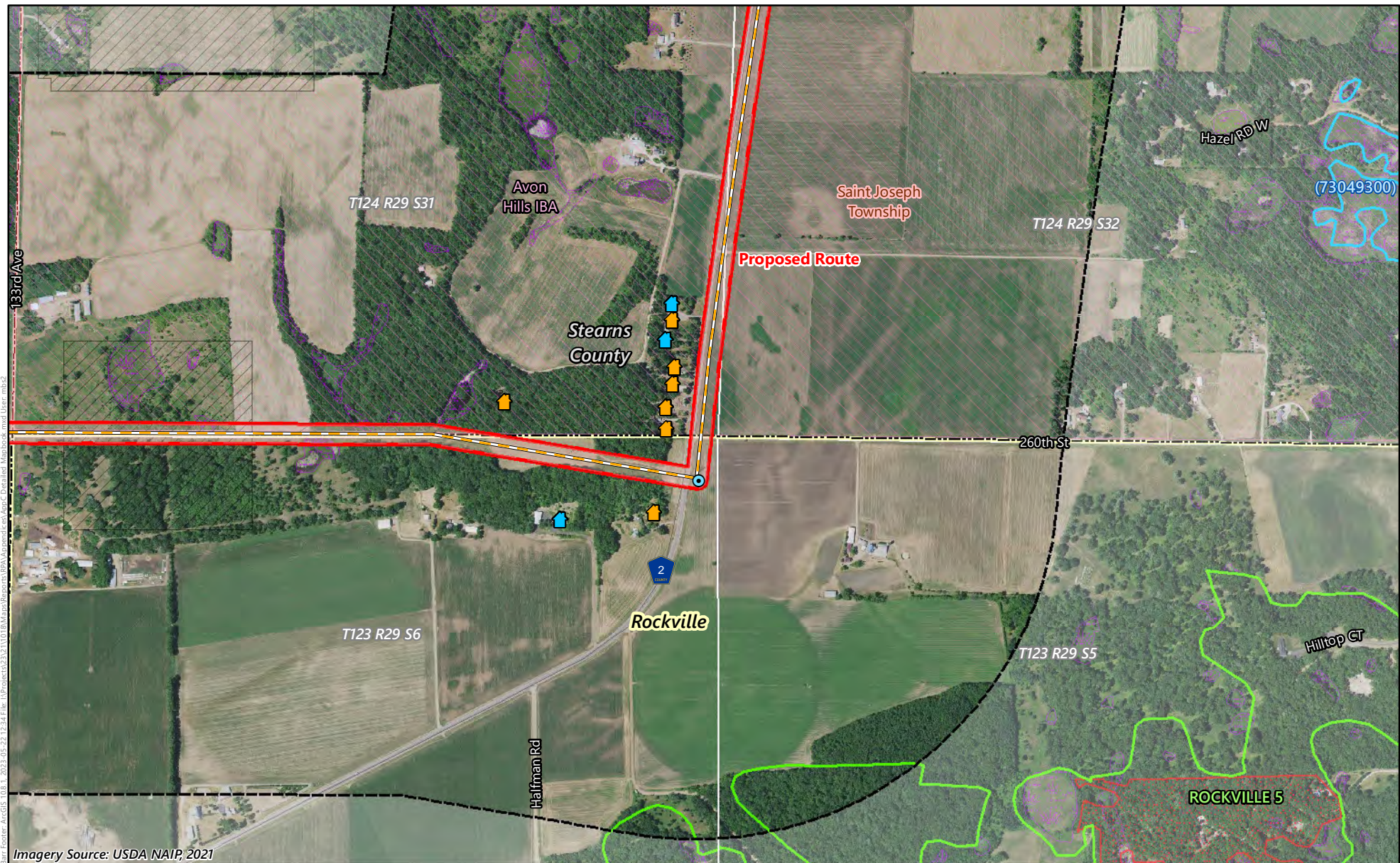
-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Grassland Bird Conservation Area
-  Important Bird Area
-  Existing High-Voltage Transmission Line
-  Project Study Area
-  Municipal Boundary
-  Civil Township
-  National Wetland Inventory
-  Public Water Basin/Wetland
-  Site of Biodiversity Significance
-  Residence 75-300 Feet from Alignment
-  Residence 300-500 Feet from Alignment



















**Appendix C, Map C46**  
**ALEXANDRIA TO BIG OAKS**  
 MISO LRTP-2  
 Route Permit Application

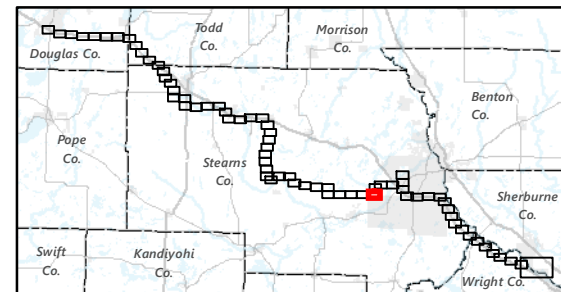
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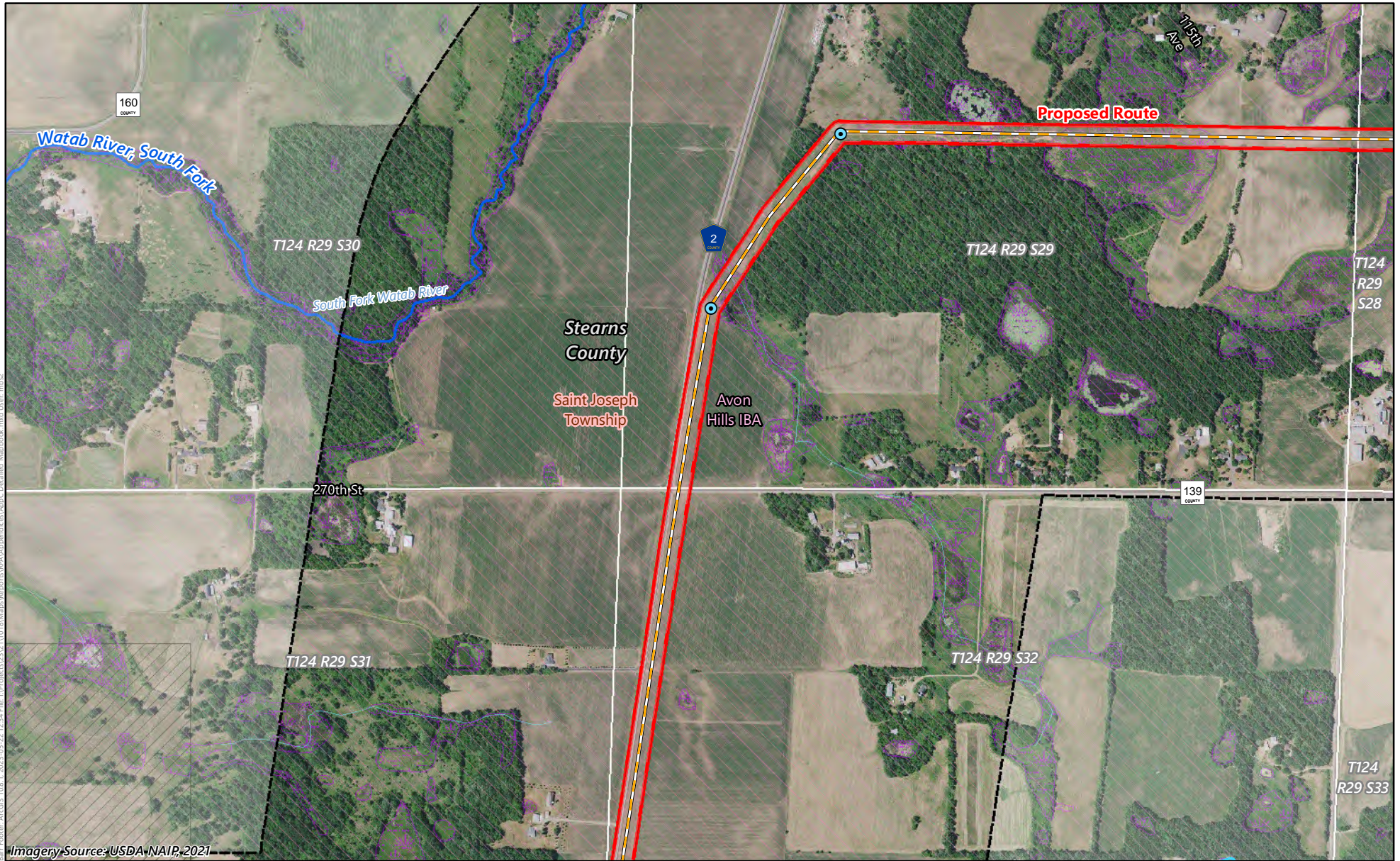
Imagery Source: USDA NAIP, 2021

-  New Foundation and Pole
-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Grassland Bird Conservation Area
-  Important Bird Area
-  Existing High-Voltage Transmission Line
-  Project Study Area
-  Municipal Boundary
-  Civil Township
-  Native Plant Community
-  National Wetland Inventory
-  Public Water Basin/Wetland
-  Site of Biodiversity Significance
-  Residence 75-300 Feet from Alignment
-  Residence 300-500 Feet from Alignment















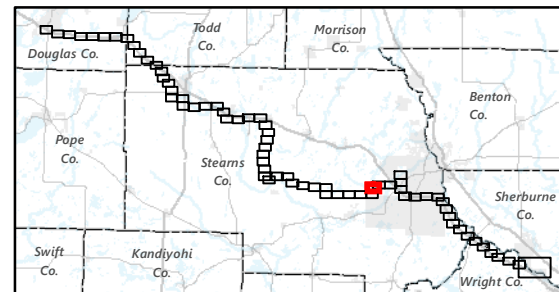
**Appendix C, Map C47**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**



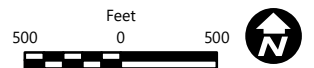


Imagery Source: USDA NAIP, 2021

-  New Foundation and Pole
-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Grassland Bird Conservation Area
-  Important Bird Area
-  Existing High-Voltage Transmission Line
-  Project Study Area
-  Civil Township
-  National Wetland Inventory
-  Public Water Basin/Wetland
-  Public Water Watercourse














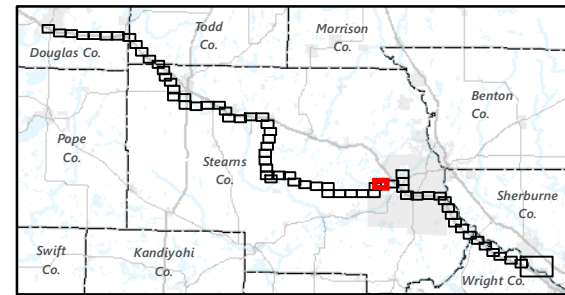
**Appendix C, Map C48**  
**ALEXANDRIA TO BIG OAKS**  
 MISO LRTP-2  
 Route Permit Application



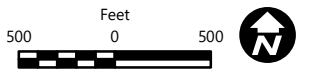


Imagery Source: USDA NAIP, 2021

-  New Foundation and Pole
-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Grassland Bird Conservation Area
-  Important Bird Area
-  Existing High-Voltage Transmission Line
-  Project Study Area
-  Civil Township
-  National Wetland Inventory
-  Public Water Watercourse

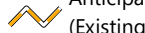
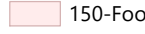


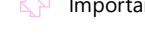
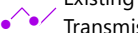

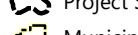

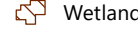

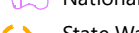

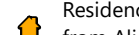




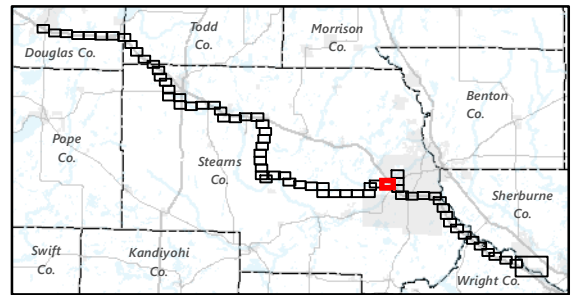
**Appendix C, Map C49**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**






Imagery Source: USDA NAIP, 2021

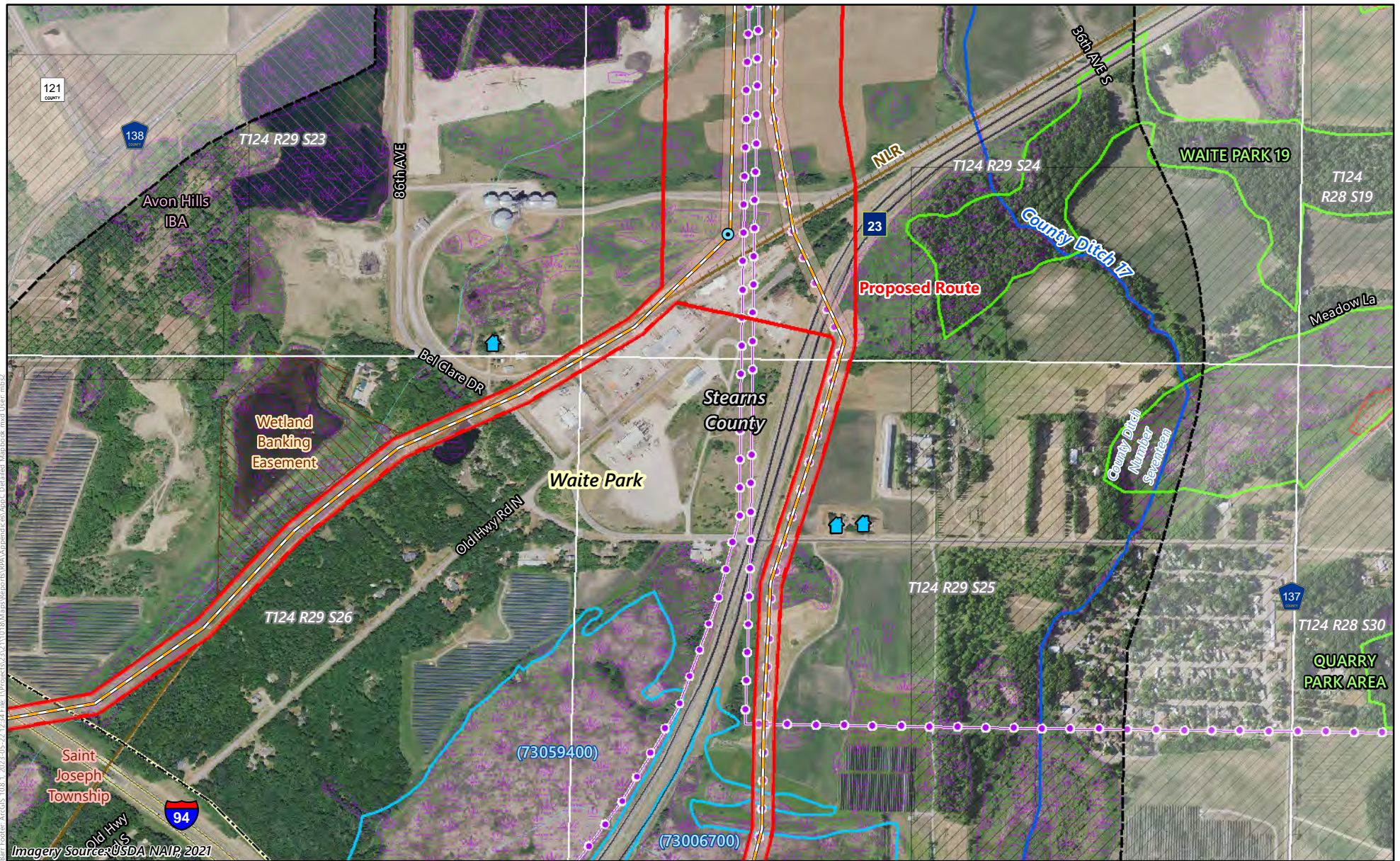
-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Grassland Bird Conservation Area
-  Important Bird Area
-  Existing High-Voltage Transmission Line
-  Railroad
-  Project Study Area
-  Municipal Boundary
-  Civil Township
-  Wetland Banking Easement
-  National Wetland Inventory
-  State Water Trail
-  Public Water Watercourse
-  Residence 75-300 Feet from Alignment
-  Residence 300-500 Feet from Alignment



**Appendix C, Map C50**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**

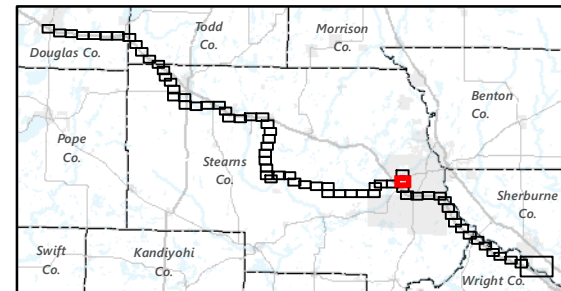
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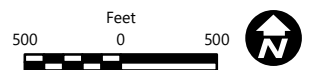



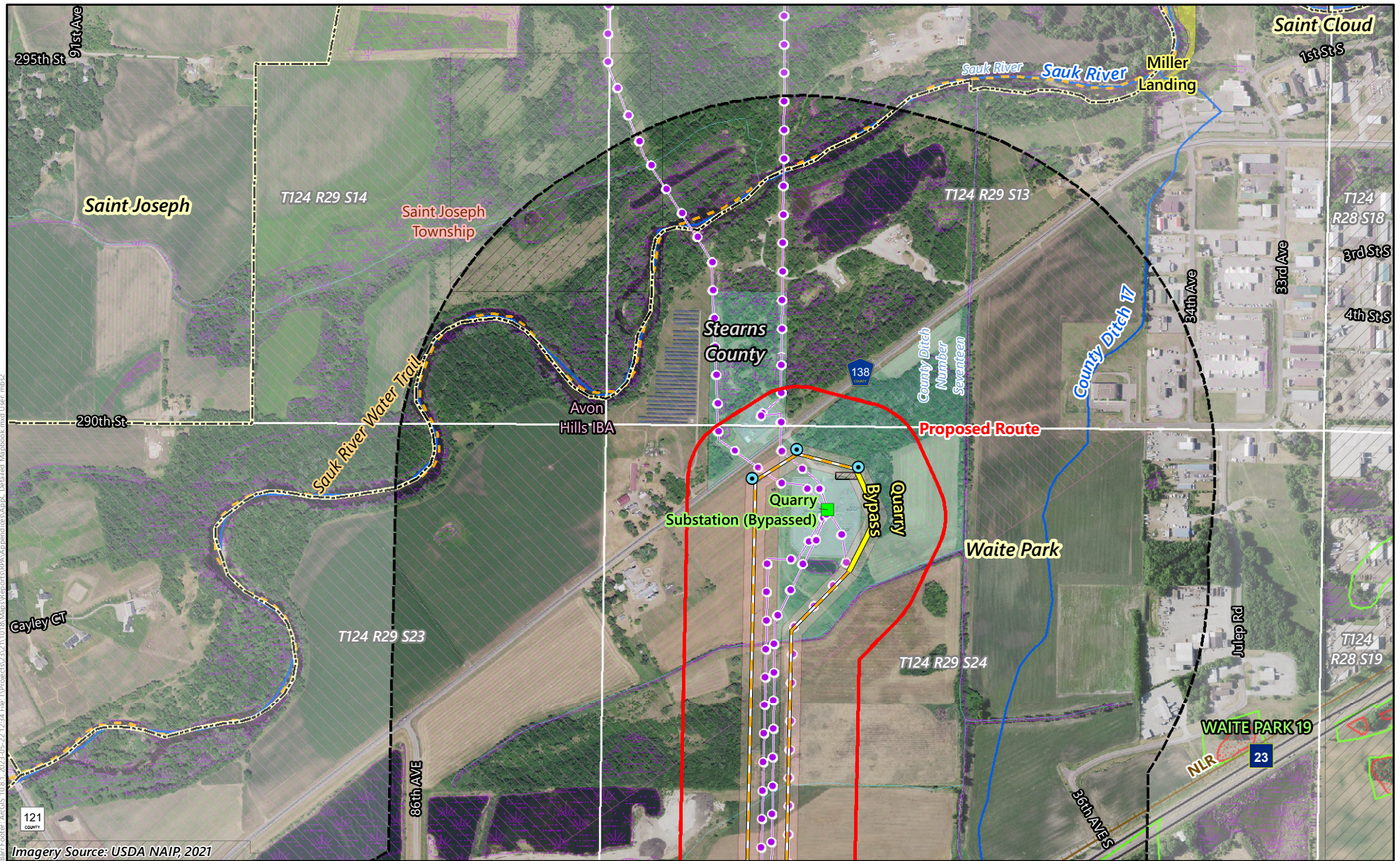
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 Imagery Source: USDA NAIP, 2021

- |  |                                  |  |                                         |
|--|----------------------------------|--|-----------------------------------------|
|  | New Foundation and Pole          |  | National Wetland Inventory              |
|  | Anticipated Alignment (Existing) |  | Public Water Basin/Wetland              |
|  | 150-Foot Right-of-Way            |  | Public Water Watercourse                |
|  | Proposed Route                   |  | Site of Biodiversity Significance       |
|  | Grassland Bird Conservation Area |  | Residence 300-500 Feet from Alignment   |
|  | Important Bird Area              |  | Existing High-Voltage Transmission Line |
|  | Municipal Boundary               |  | Railroad                                |
|  | Civil Township                   |  | Project Study Area                      |
|  | Wetland Banking Easement         |  | Wetland Banking Easement                |
|  | Native Plant Community           |  | Native Plant Community                  |

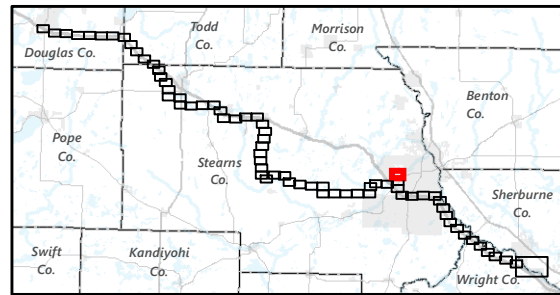


**Appendix C, Map C51**  
**ALEXANDRIA TO BIG OAKS**  
 MISO LRTP-2  
 Route Permit Application





- New Foundation and Pole
- Anticipated Alignment (Existing)
- Anticipated Alignment (New Build)
- 150-Foot Right-of-Way
- Preliminary Substation Footprint Expansion
- Proposed Route
- Existing High-Voltage Transmission Line
- Railroad
- Project Study Area
- Xcel-Owned Parcel
- Municipal Boundary
- Civil Township
- County/Municipal Park
- Native Plant Community
- National Wetland Inventory
- State Water Trail
- Public Water Watercourse
- Site of Biodiversity Significance
- Grassland Bird Conservation Area
- Important Bird Area

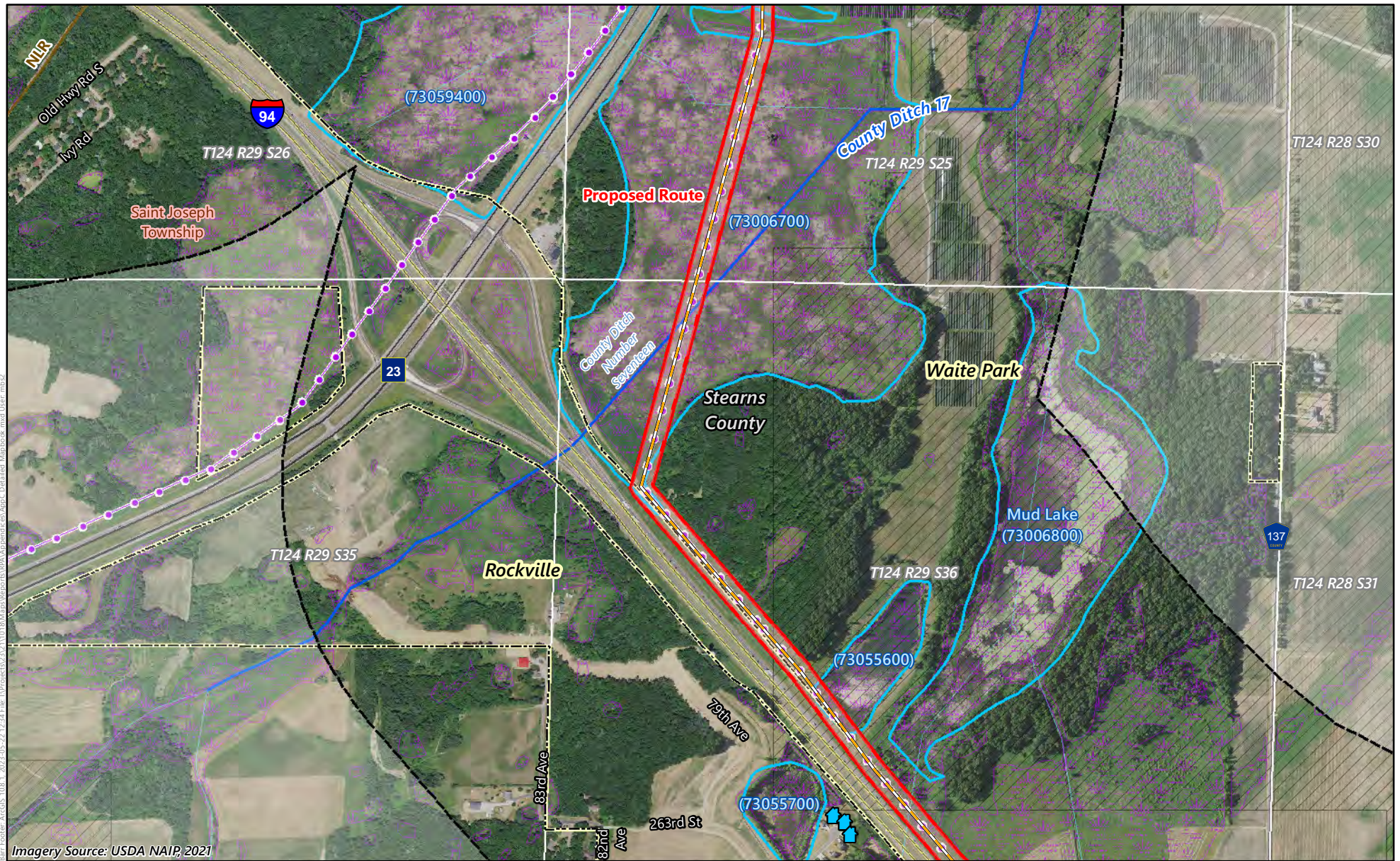


**Appendix C, Map C52**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**













500 0 500 Feet

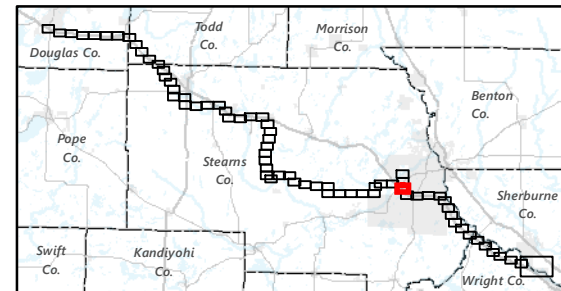




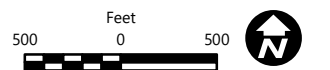


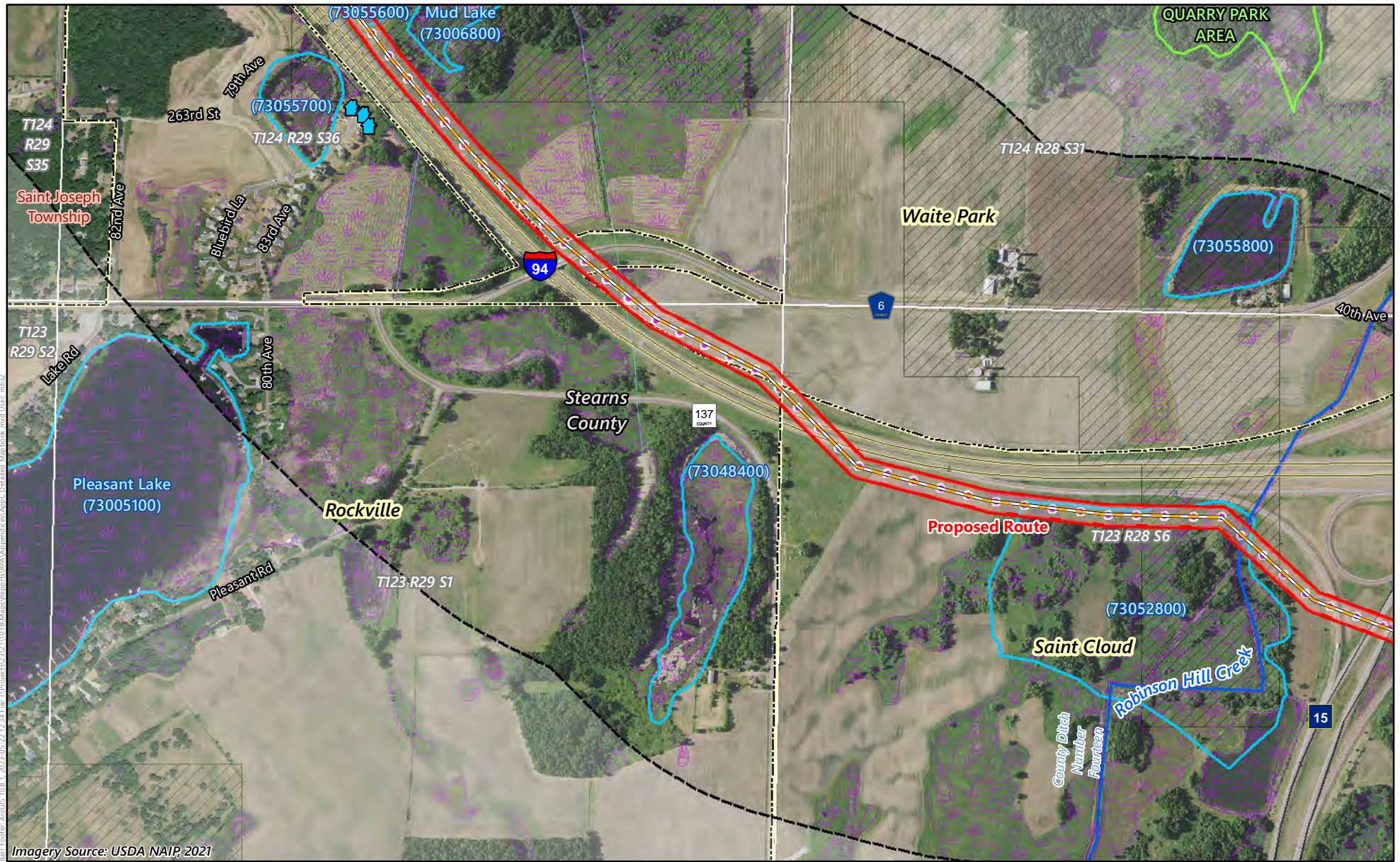
Imagery Source: USDA NAIP, 2021

- |                                                                                                                     |                                                                                                                             |                                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
|  Anticipated Alignment (Existing) |  Existing High-Voltage Transmission Line |  National Wetland Inventory            |
|  150-Foot Right-of-Way            |  Railroad                                |  Public Water Basin/Wetland            |
|  Proposed Route                   |  Project Study Area                      |  Residence 300-500 Feet from Alignment |
|  Grassland Bird Conservation Area |  Municipal Boundary                      |                                                                                                                           |
|  Civil Township                   |                                                                                                                             |                                                                                                                           |
















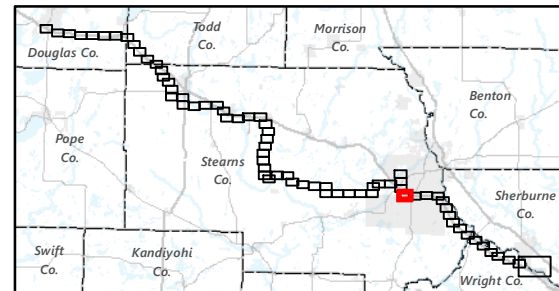
**Appendix C, Map C53**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**



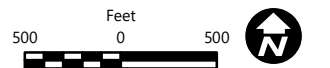


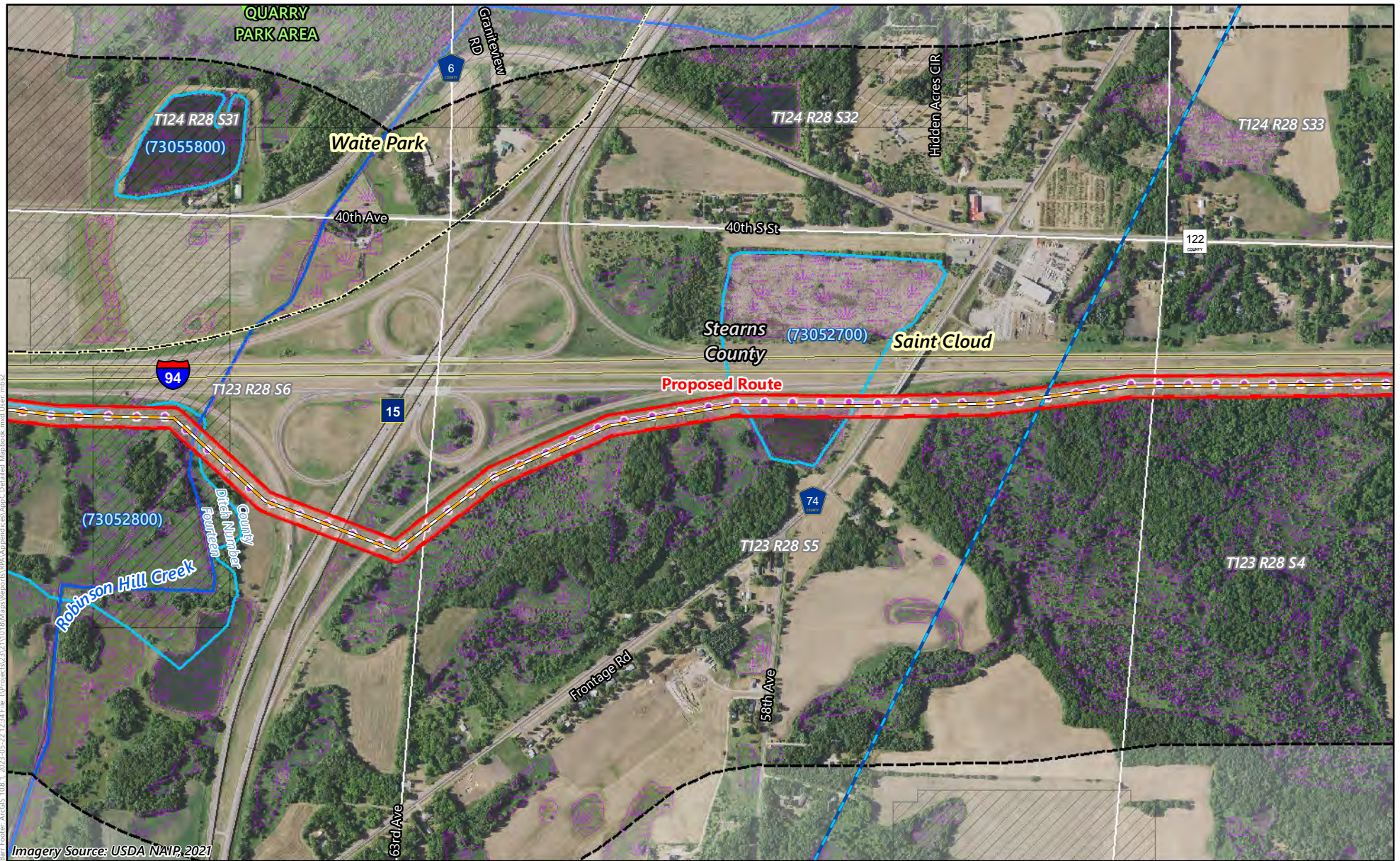
Imagery Source: USDA NAIP, 2021

-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Grassland Bird Conservation Area
-  Existing High-Voltage Transmission Line
-  Project Study Area
-  Municipal Boundary
-  Civil Township
-  National Wetland Inventory
-  Public Water Basin/Wetland
-  Public Water Watercourse
-  Site of Biodiversity Significance
-  Residence 300-500 Feet from Alignment















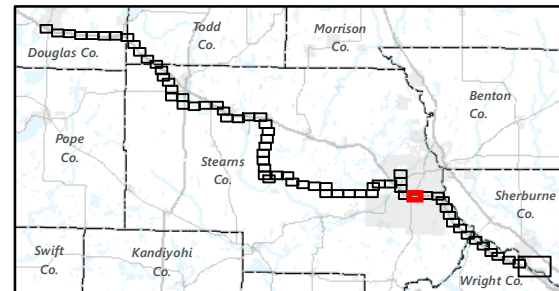
**Appendix C, Map C54**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**



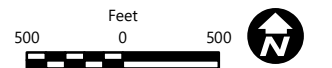


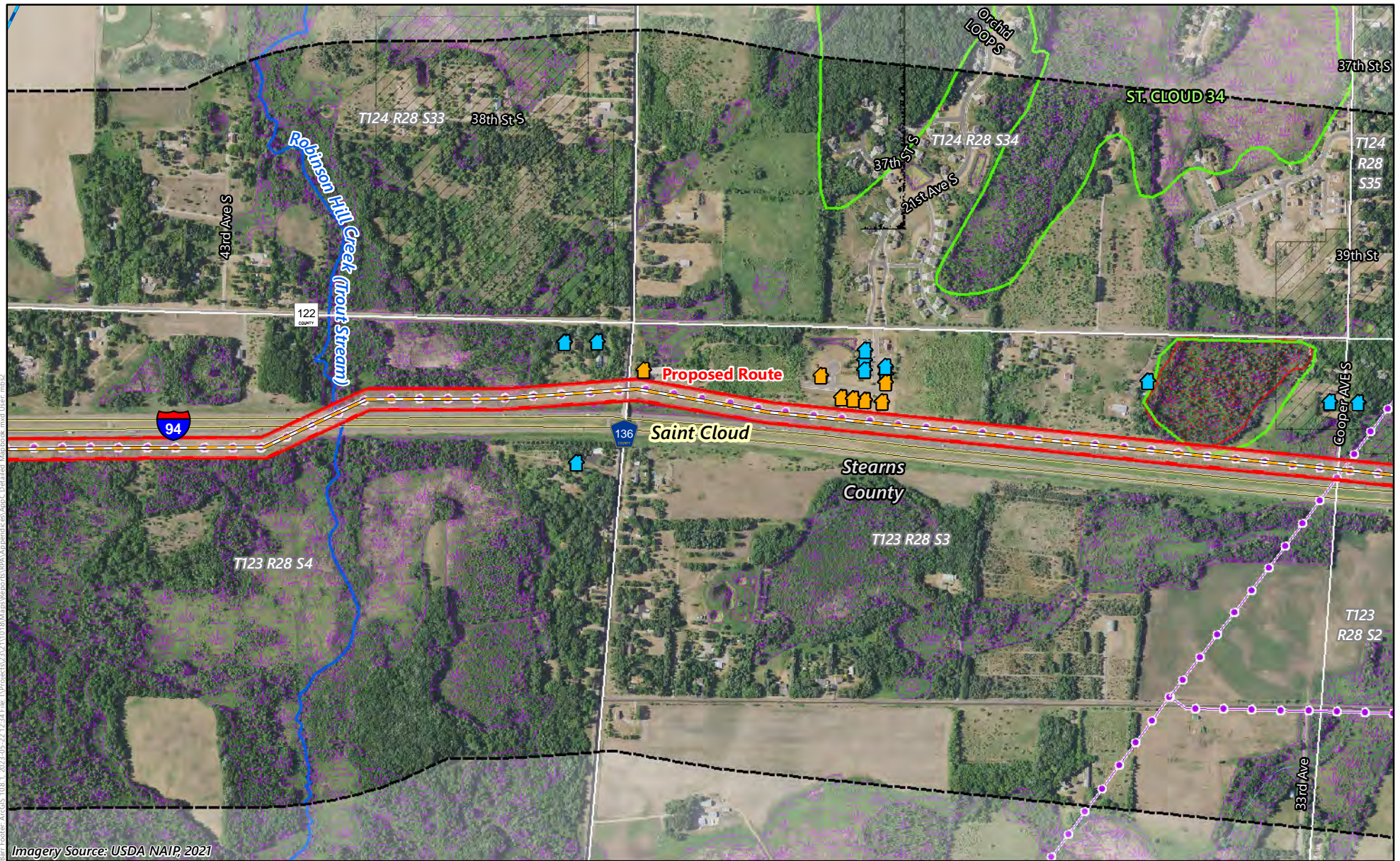
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 Imagery Source: USDA NAIP, 2021

-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Grassland Bird Conservation Area
-  Existing High-Voltage Transmission Line
-  Approx. Natural Gas Pipeline
-  Project Study Area
-  Municipal Boundary
-  National Wetland Inventory
-  Public Water Basin/Wetland
-  Public Water Watercourse
-  Site of Biodiversity Significance

















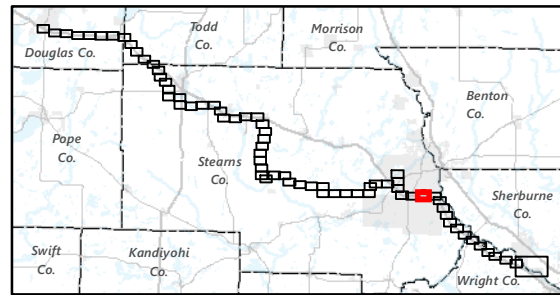
**Appendix C, Map C55**  
**ALEXANDRIA TO BIG OAKS**  
 MISO LRTP-2  
 Route Permit Application






Imagery Source: USDA NAIP, 2021

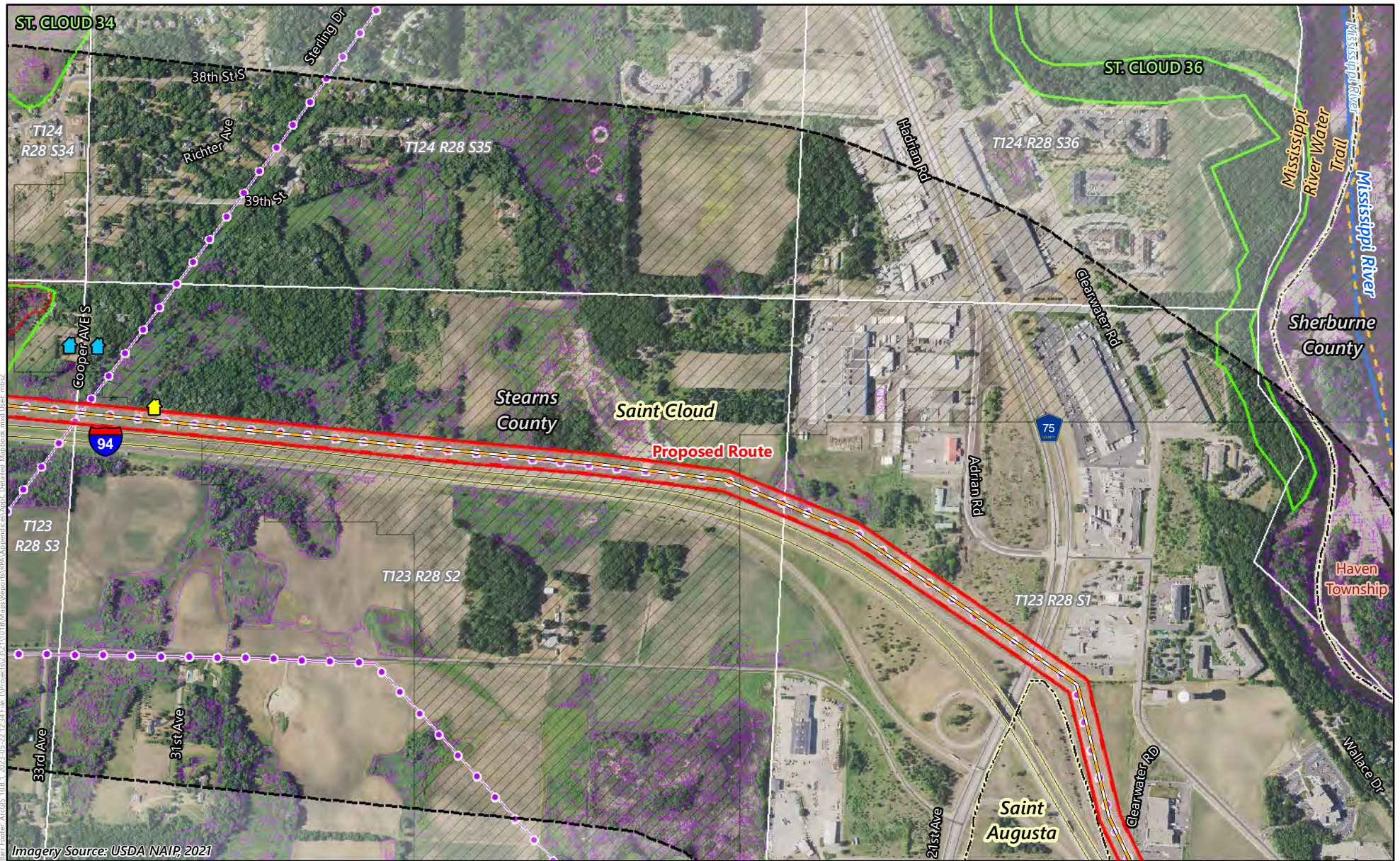
-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Grassland Bird Conservation Area
-  Existing High-Voltage Transmission Line
-  Public Water Watercourse
-  Approx. Natural Gas Pipeline
-  Project Study Area
-  Municipal Boundary
-  Native Plant Community
-  National Wetland Inventory
-  Site of Biodiversity Significance
-  Residence 75-300 Feet from Alignment
-  Residence 300-500 Feet from Alignment


















**Appendix C, Map C56**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**

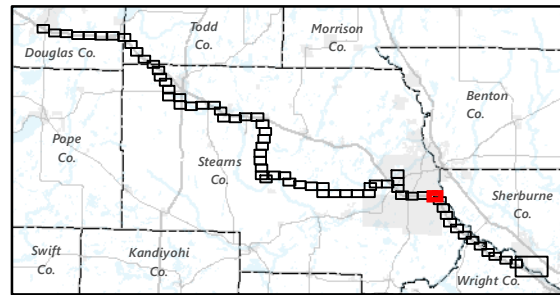
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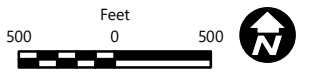



Imagery Source: USDA NAIP, 2021

-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Grassland Bird Conservation Area
-  Existing High-Voltage Transmission Line
-  Project Study Area
-  Municipal Boundary
-  Civil Township
-  Native Plant Community
-  National Wetland Inventory
-  State Water Trail
-  Public Water Watercourse
-  Site of Biodiversity Significance
-  Residence 0-75 Feet from Alignment
-  Residence 300-500 Feet from Alignment















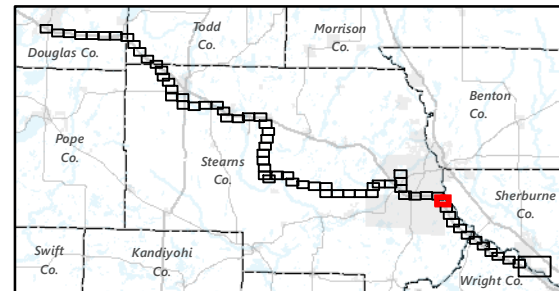
**Appendix C, Map C57**  
**ALEXANDRIA TO BIG OAKS**  
 MISO LRTP-2  
 Route Permit Application



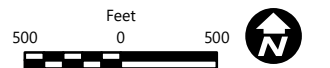


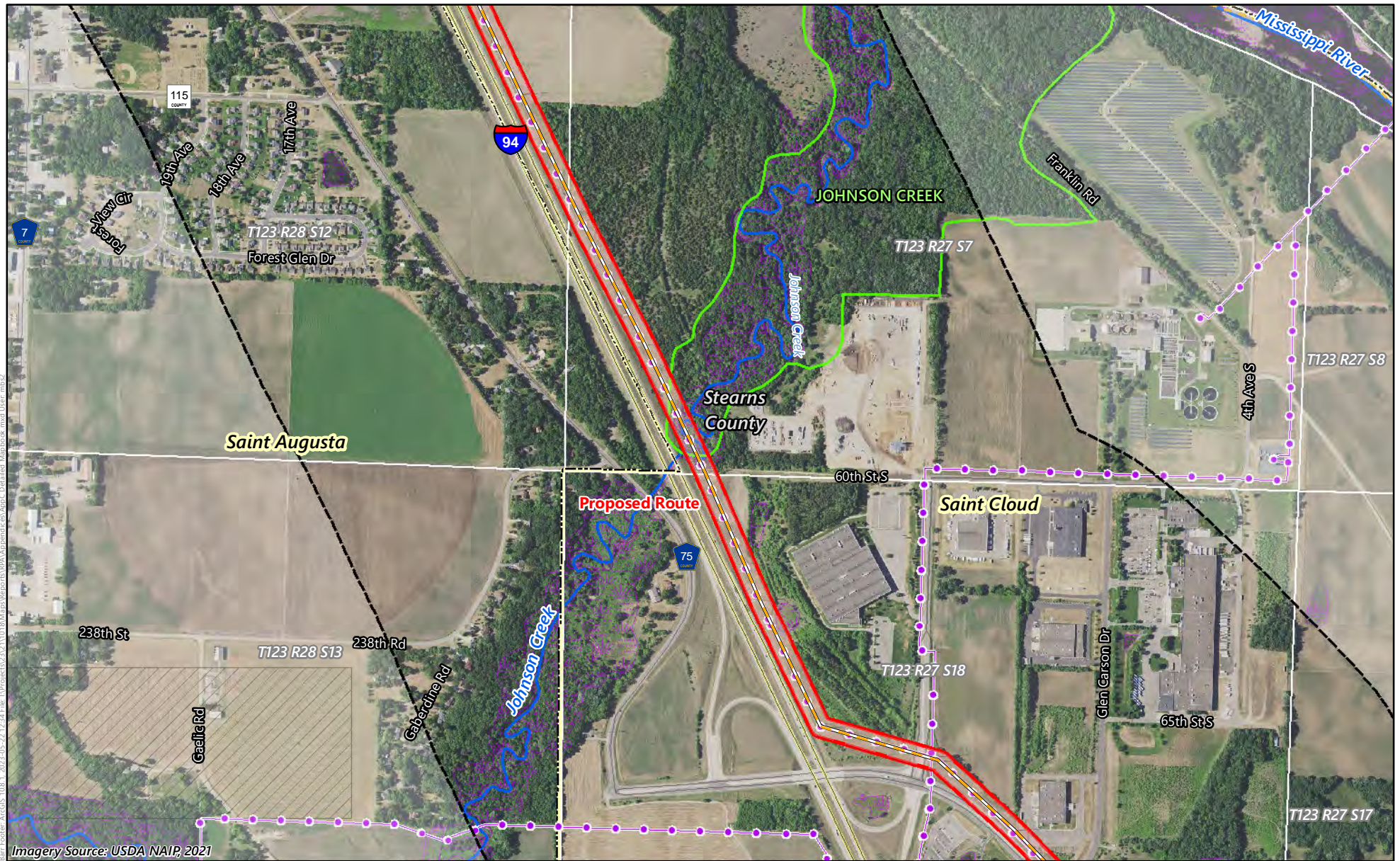
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-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Grassland Bird Conservation Area
-  Existing High-Voltage Transmission Line
-  Project Study Area
-  Municipal Boundary
-  Civil Township
-  National Wetland Inventory
-  State Water Trail
-  Public Water Watercourse
-  Site of Biodiversity Significance

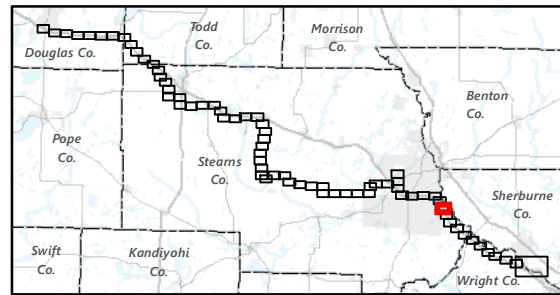


**Appendix C, Map C58**  
 ALEXANDRIA TO BIG OAKS  
 MISO LRTP-2  
 Route Permit Application





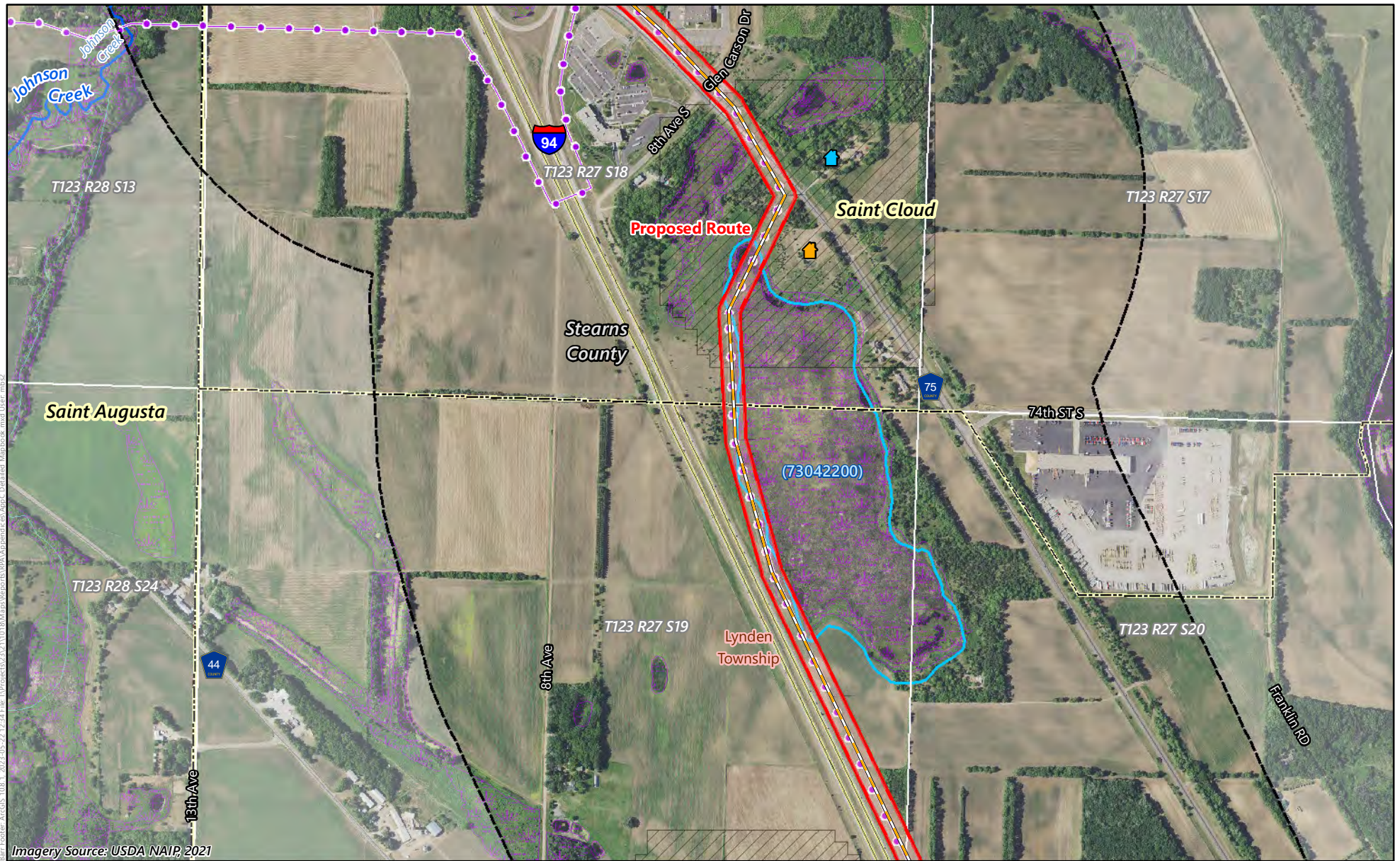
- Anticipated Alignment (Existing)
- 150-Foot Right-of-Way
- Proposed Route
- Grassland Bird Conservation Area
- Existing High-Voltage Transmission Line
- Project Study Area
- Municipal Boundary
- Civil Township
- National Wetland Inventory
- State Water Trail
- Public Water Watercourse
- Site of Biodiversity Significance
















**Appendix C, Map C59**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**

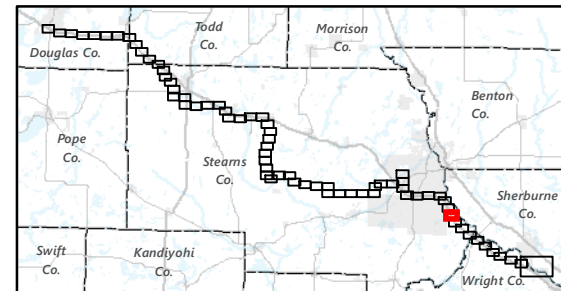
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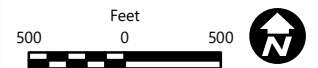


Imagery Source: USDA NAIP, 2021

-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Grassland Bird Conservation Area
-  Existing High-Voltage Transmission Line
-  Project Study Area
-  Municipal Boundary
-  Civil Township
-  National Wetland Inventory
-  Public Water Basin/Wetland
-  Public Water Watercourse
-  Residence 75-300 Feet from Alignment
-  Residence 300-500 Feet from Alignment














**Appendix C, Map C60**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**

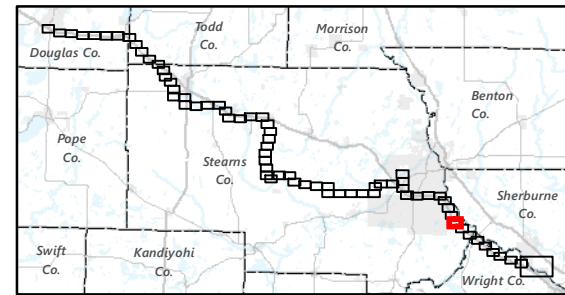




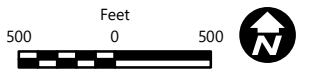


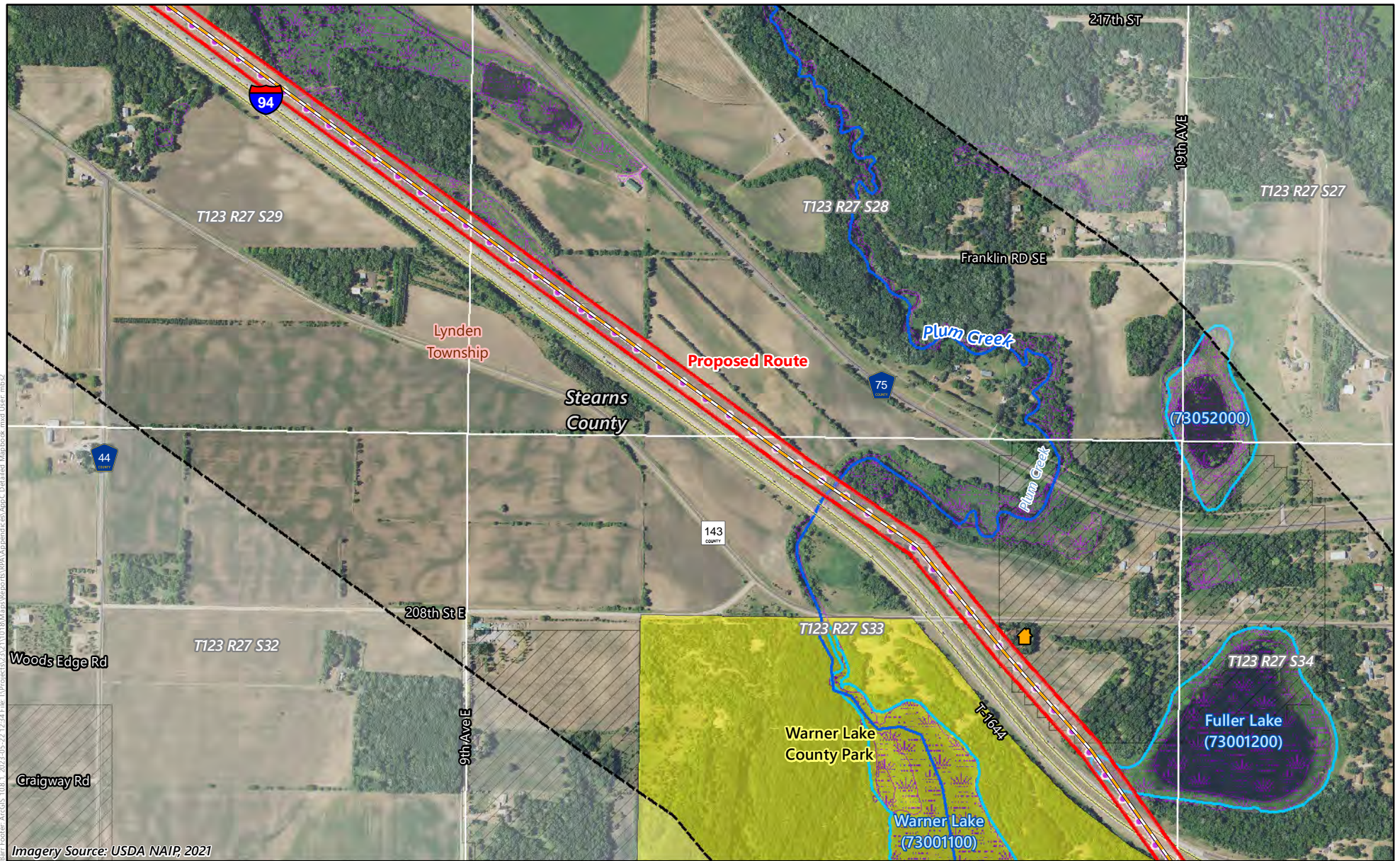
Imagery Source: USDA NAIP, 2021

-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Grassland Bird Conservation Area
-  Existing High-Voltage Transmission Line
-  Project Study Area
-  Civil Township
-  National Wetland Inventory
-  Public Water Basin/Wetland
-  Residence 75-300 Feet from Alignment
-  Residence 300-500 Feet from Alignment



**Appendix C, Map C61**  
**ALEXANDRIA TO BIG OAKS**  
 MISO LRTP-2  
 Route Permit Application

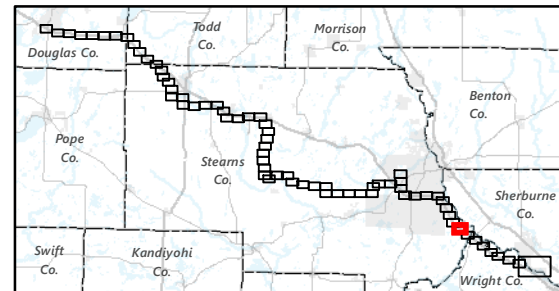




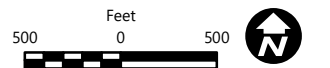
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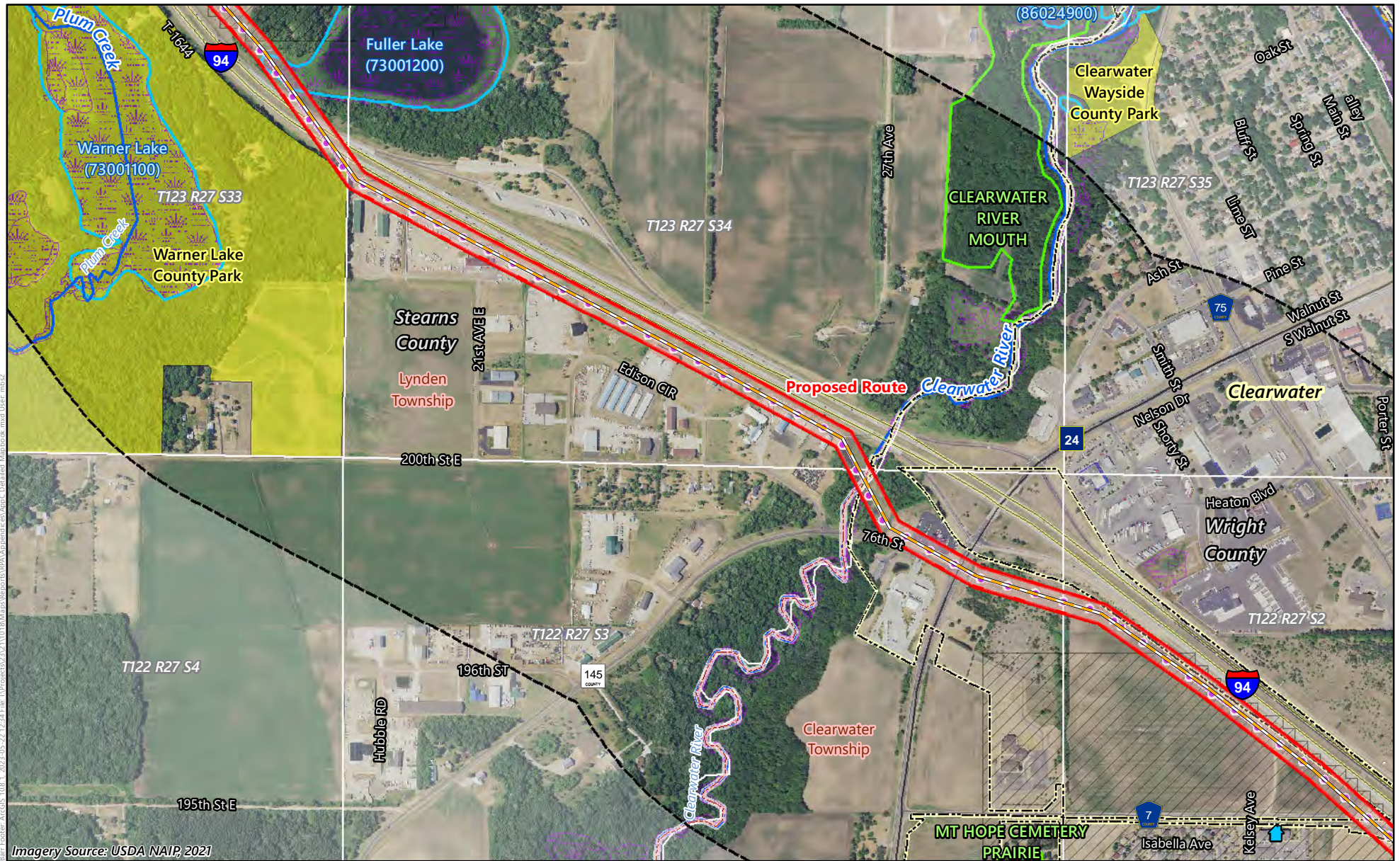
Imagery Source: USDA NAIP, 2021

- |                                  |                                         |                                      |
|----------------------------------|-----------------------------------------|--------------------------------------|
| Anticipated Alignment (Existing) | Existing High-Voltage Transmission Line | National Wetland Inventory           |
| 150-Foot Right-of-Way            | Project Study Area                      | Public Water Basin/Wetland           |
| Proposed Route                   | Civil Township                          | Public Water Watercourse             |
| Grassland Bird Conservation Area | County/Municipal Park                   | Residence 75-300 Feet from Alignment |



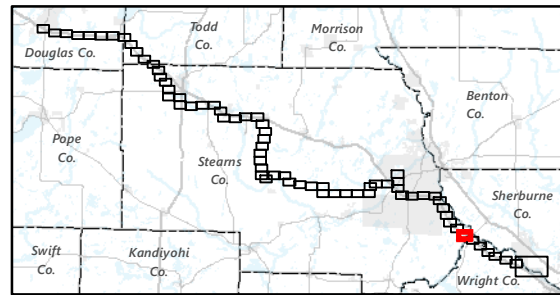
**Appendix C, Map C62**  
 ALEXANDRIA TO BIG OAKS  
 MISO LRTP-2  
 Route Permit Application





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 Imagery Source: USDA NAIP, 2021

- |                                  |                                         |                                       |
|----------------------------------|-----------------------------------------|---------------------------------------|
| Anticipated Alignment (Existing) | Existing High-Voltage Transmission Line | National Wetland Inventory            |
| 150-Foot Right-of-Way            | Project Study Area                      | Public Water Basin/Wetland            |
| Proposed Route                   | Municipal Boundary                      | State Water Trail                     |
| Grassland Bird Conservation Area | Civil Township                          | Public Water Watercourse              |
|                                  | County/Municipal Park                   | Site of Biodiversity Significance     |
|                                  | Native Plant Community                  | Residence 300-500 Feet from Alignment |







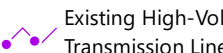



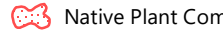
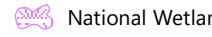


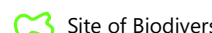
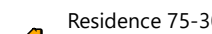

**Appendix C, Map C63**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**

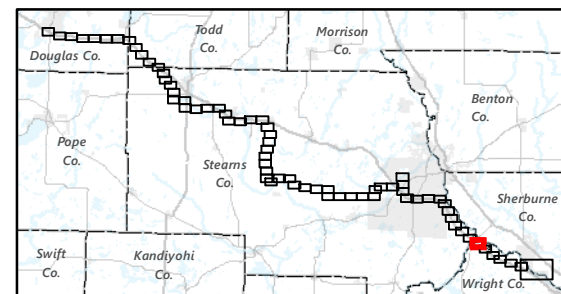
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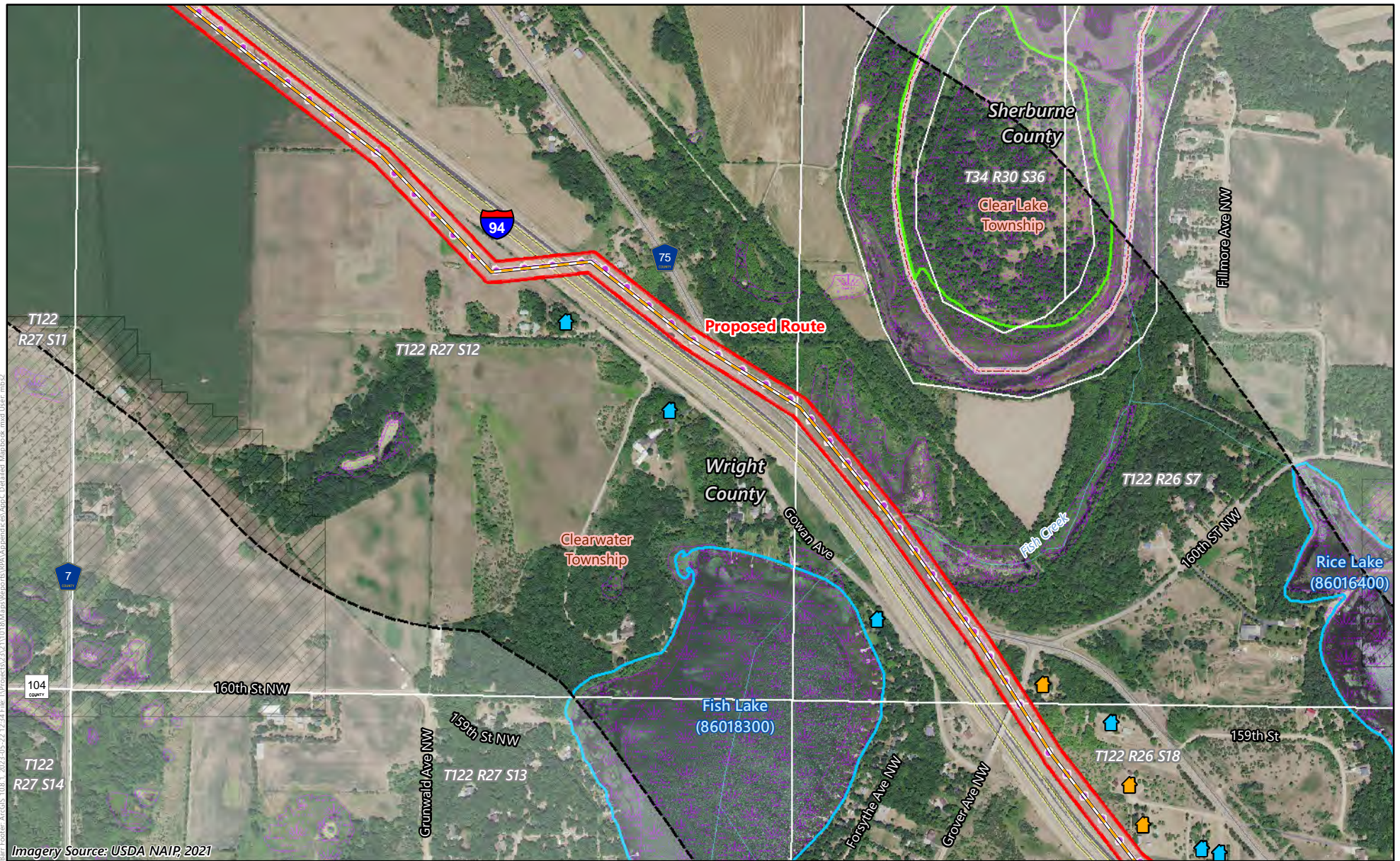
Imagery Source: USDA NAIP, 2021

-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Grassland Bird Conservation Area
-  Existing High-Voltage Transmission Line
-  Project Study Area
-  Municipal Boundary
-  Civil Township
-  Native Plant Community
-  National Wetland Inventory
-  State Water Trail
-  Public Water Watercourse
-  Site of Biodiversity Significance
-  Residence 75-300 Feet from Alignment
-  Residence 300-500 Feet from Alignment















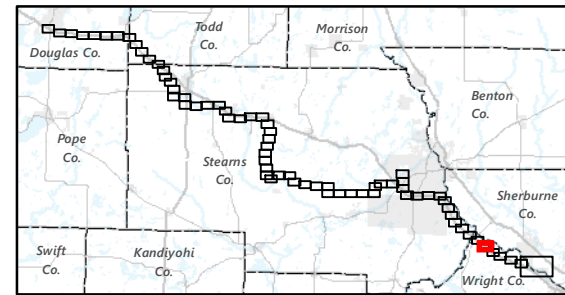
**Appendix C, Map C64**  
**ALEXANDRIA TO BIG OAKS**  
 MISO LRTP-2  
 Route Permit Application



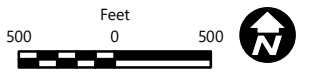


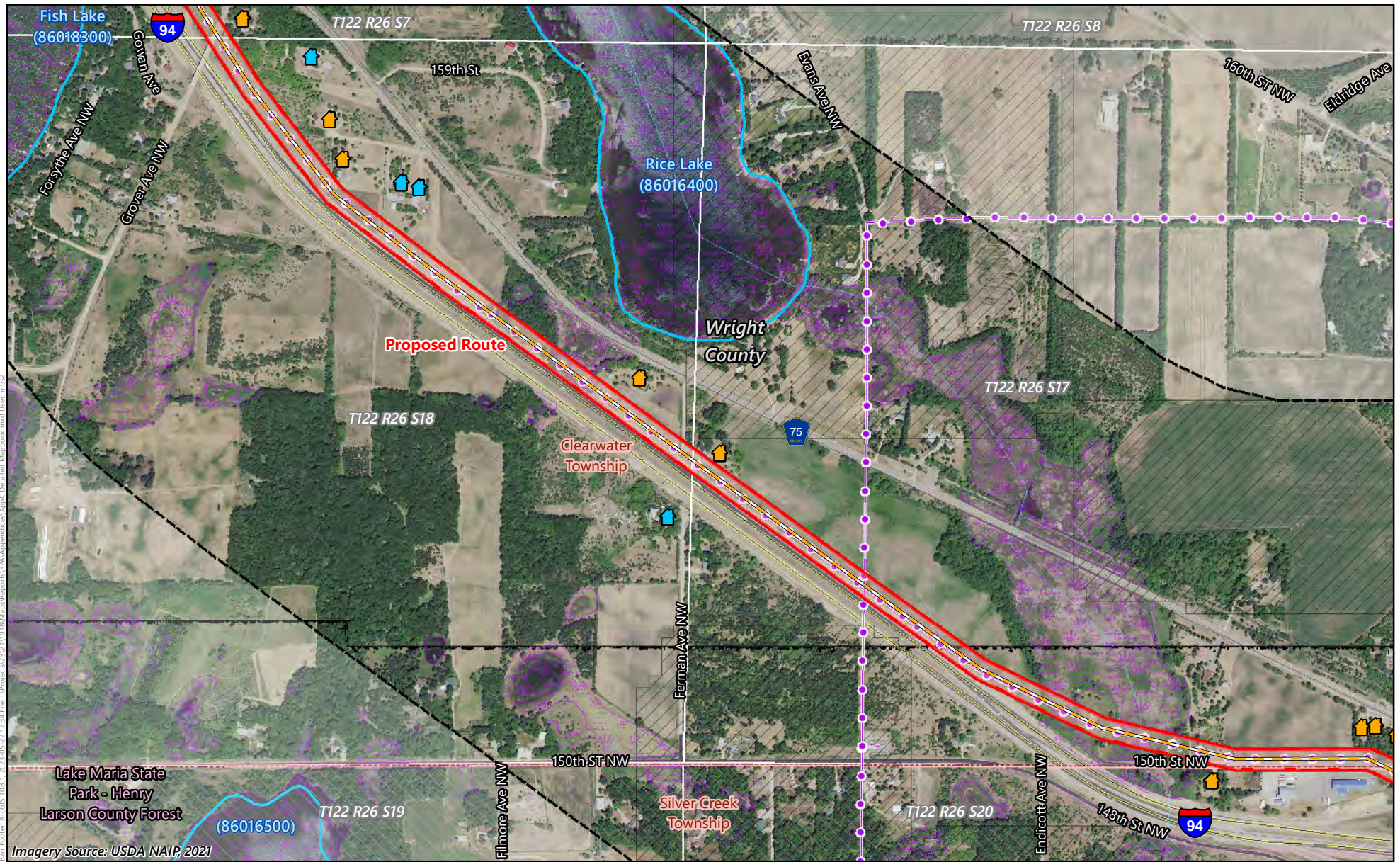
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-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Grassland Bird Conservation Area
-  Existing High-Voltage Transmission Line
-  Project Study Area
-  Civil Township
-  National Wetland Inventory
-  Public Water Basin/Wetland
-  Site of Biodiversity Significance
-  Residence 75-300 Feet from Alignment
-  Residence 300-500 Feet from Alignment



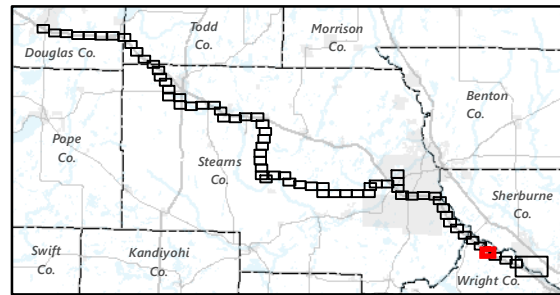
**Appendix C, Map C65**  
**ALEXANDRIA TO BIG OAKS**  
 MISO LRTP-2  
 Route Permit Application





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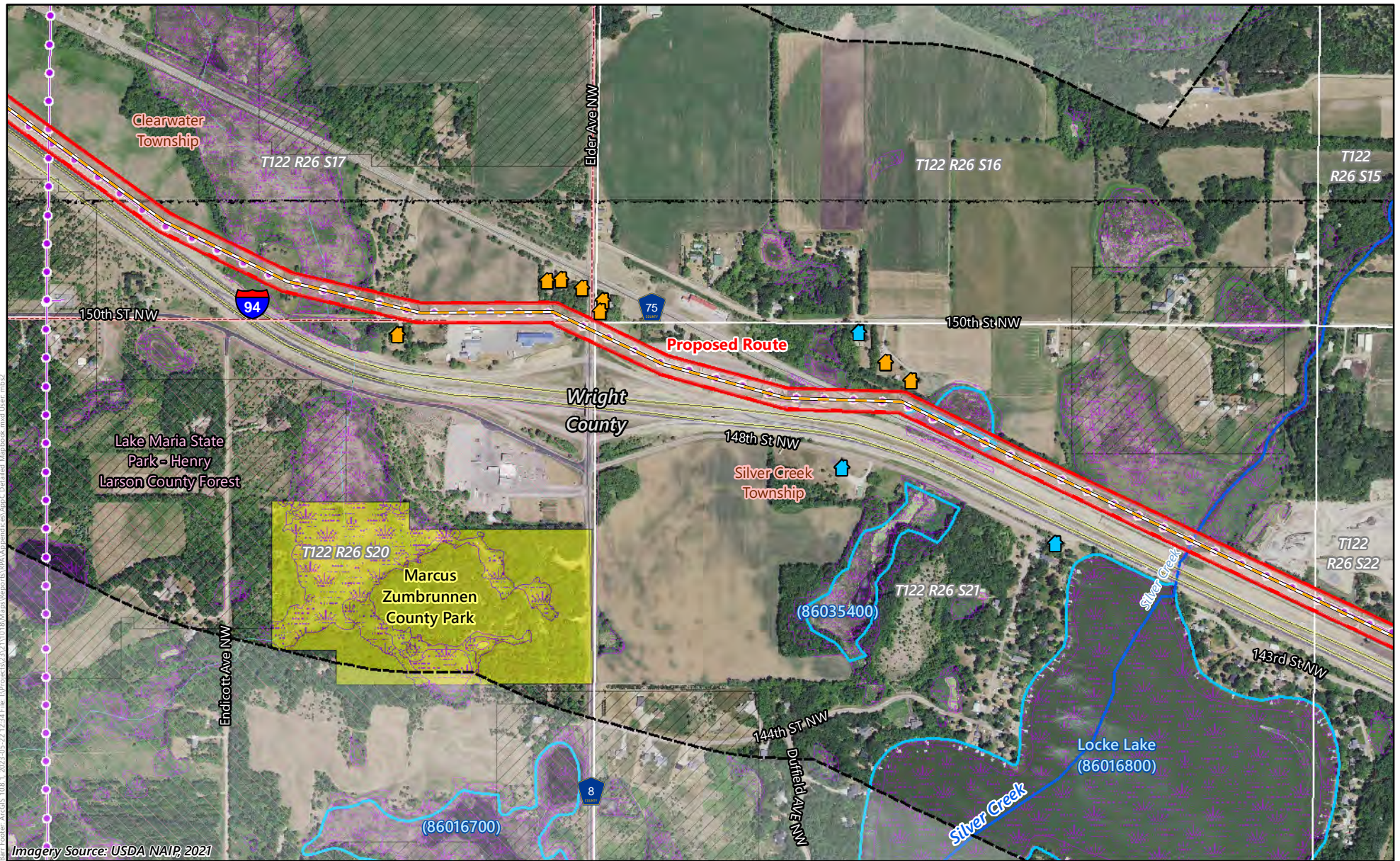
- Anticipated Alignment (Existing)
- 150-Foot Right-of-Way
- Proposed Route
- Grassland Bird Conservation Area
- Important Bird Area
- Existing High-Voltage Transmission Line
- Project Study Area
- Civil Township
- National Wetland Inventory
- Public Water Basin/Wetland
- Residence 75-300 Feet from Alignment
- Residence 300-500 Feet from Alignment






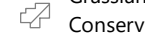
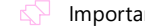
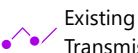


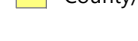
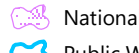

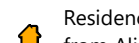
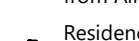

**Appendix C, Map C66**  
 ALEXANDRIA TO BIG OAKS  
 MISO LRTP-2  
 Route Permit Application

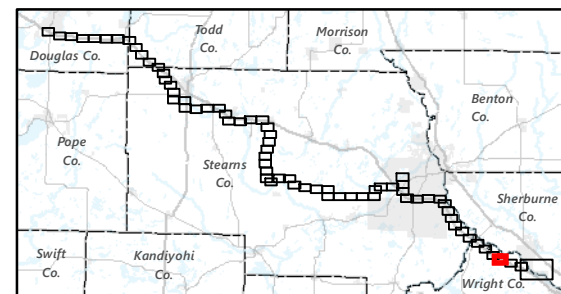
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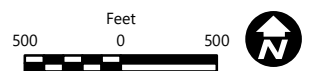


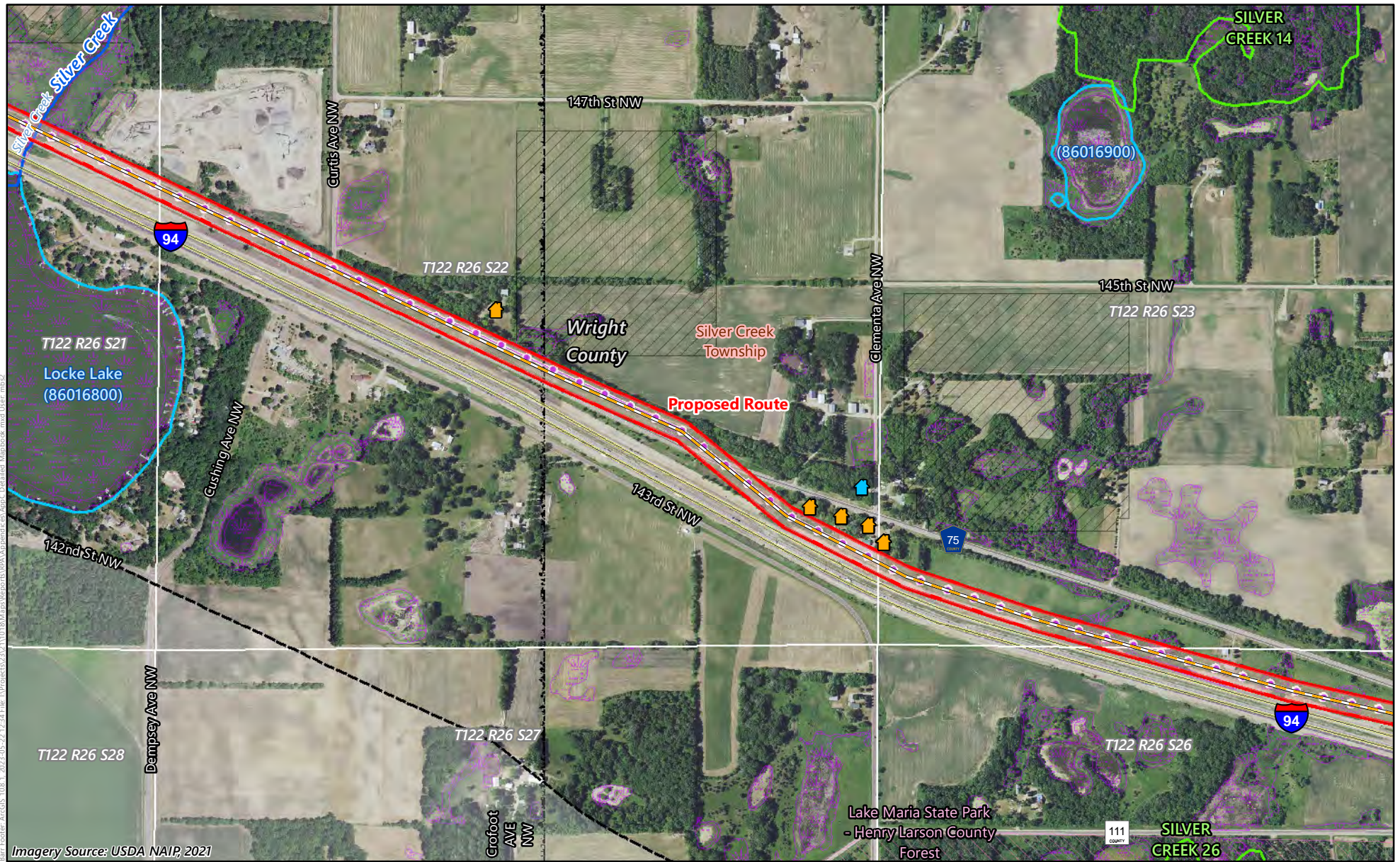
Imagery Source: USDA NAIP, 2021











-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Grassland Bird Conservation Area
-  Important Bird Area
-  Existing High-Voltage Transmission Line
-  Project Study Area
-  Civil Township
-  County/Municipal Park
-  National Wetland Inventory
-  Public Water Basin/Wetland
-  Public Water Watercourse
-  Residence 75-300 Feet from Alignment
-  Residence 300-500 Feet from Alignment

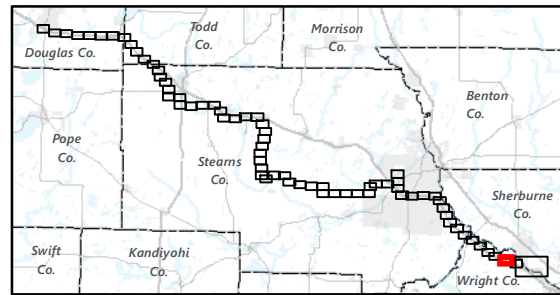


**Appendix C, Map C67**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**






-  Anticipated Alignment (Existing)
-  150-Foot Right-of-Way
-  Proposed Route
-  Grassland Bird Conservation Area
-  Important Bird Area
-  Existing High-Voltage Transmission Line
-  Project Study Area
-  Civil Township
-  National Wetland Inventory
-  Public Water Basin/Wetland
-  Public Water Watercourse
-  Site of Biodiversity Significance
-  Residence 75-300 Feet from Alignment
-  Residence 300-500 Feet from Alignment

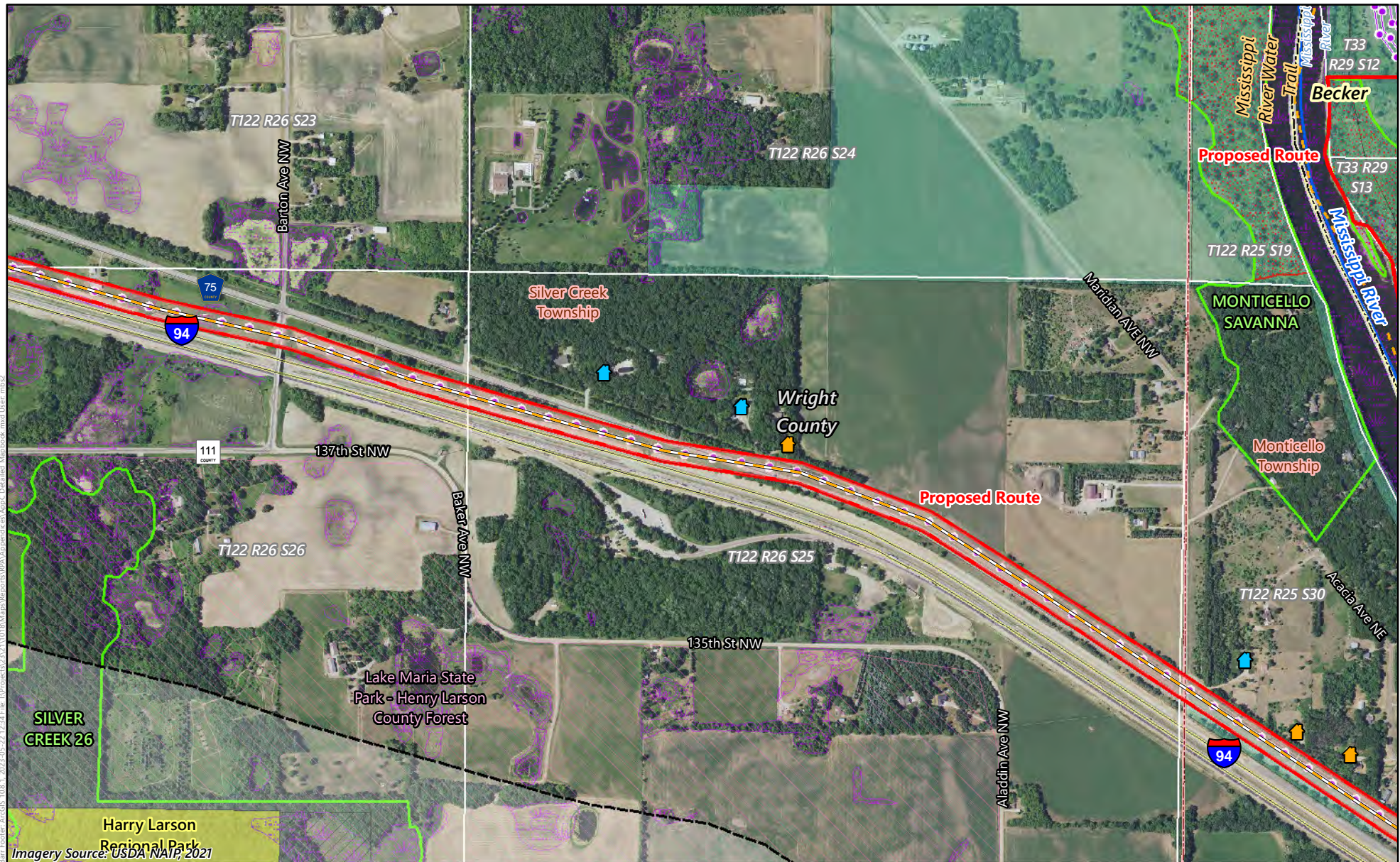


**Appendix C, Map C68**  
**ALEXANDRIA TO BIG OAKS**  
 MISO LRTP-2  
 Route Permit Application

500 0 500 Feet

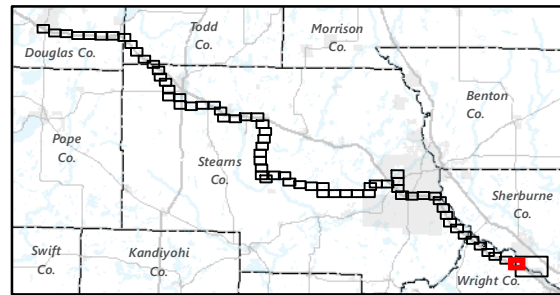




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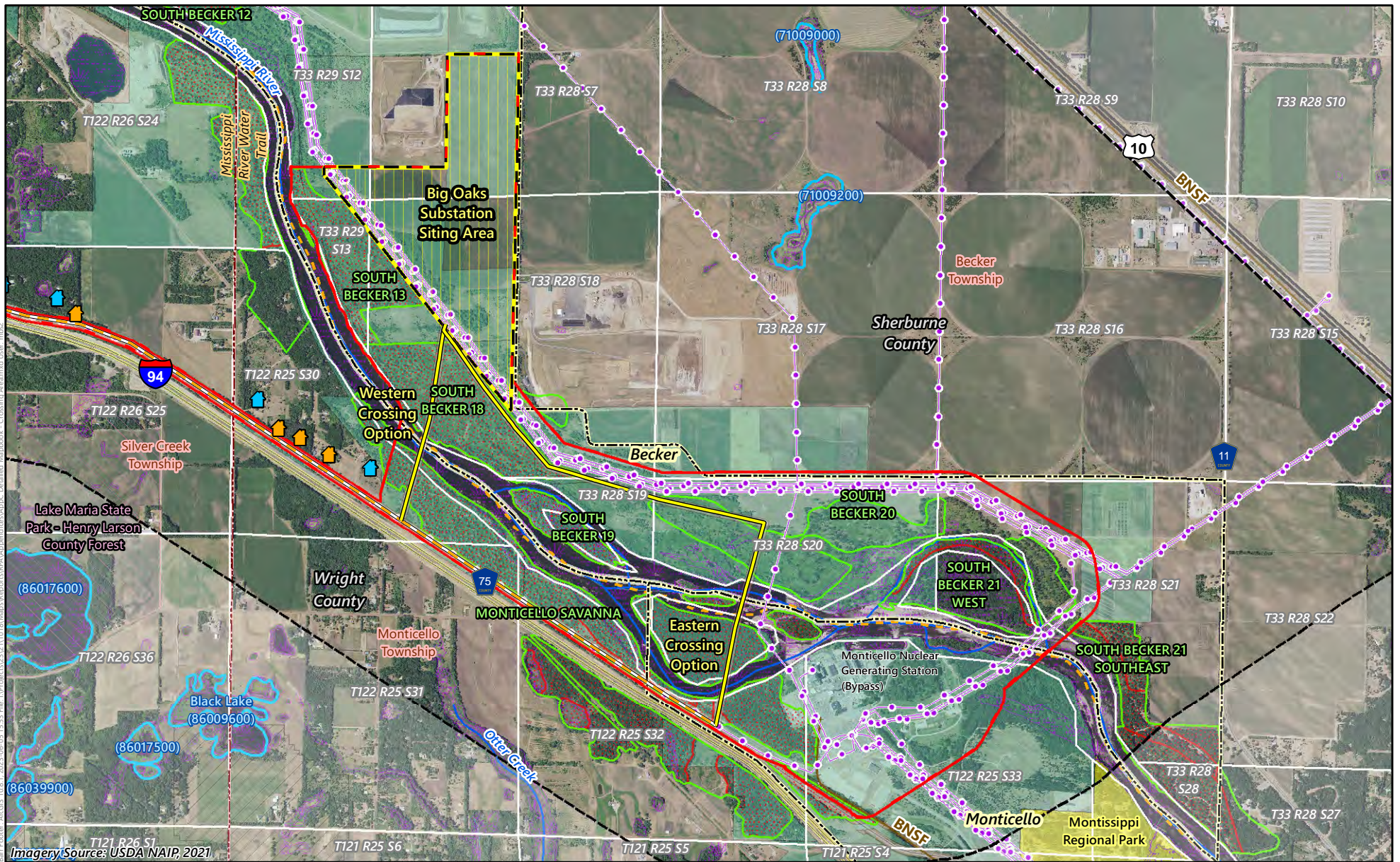
- Anticipated Alignment (Existing)
- 150-Foot Right-of-Way
- Proposed Route
- Grassland Bird Conservation Area
- Important Bird Area
- Existing High-Voltage Transmission Line
- Project Study Area
- Xcel-Owned Parcel
- Municipal Boundary
- Civil Township
- County/Municipal Park
- Native Plant Community
- State Water Trail
- Public Water Watercourse
- Site of Biodiversity Significance
- Residence 75-300 Feet from Alignment
- Residence 300-500 Feet from Alignment



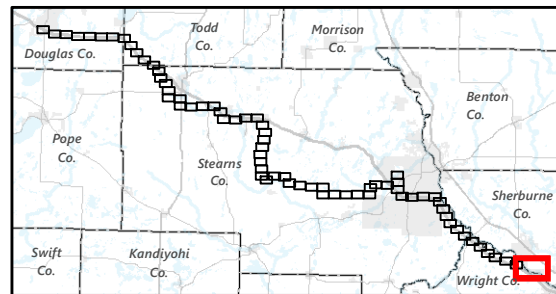
**Appendix C, Map C69**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**

Feet  
 500 0 500

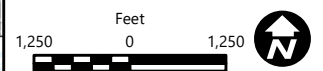




- Anticipated Alignment (Existing)
- Anticipated Alignment (New Build)
- Big Oaks Substation Siting Area
- 150-Foot Right-of-Way
- Proposed Route
- Grassland Bird Conservation Area
- Important Bird Area
- Existing High-Voltage Transmission Line
- Railroad
- Project Study Area
- Xcel-Owned Parcel
- Municipal Boundary
- Civil Township
- County/Municipal Park
- Native Plant Community
- National Wetland Inventory
- Public Water Basin/Wetland
- State Water Trail
- Public Water Watercourse
- Site of Biodiversity Significance
- Residence 75-300 Feet from Alignment
- Residence 300-500 Feet from Alignment

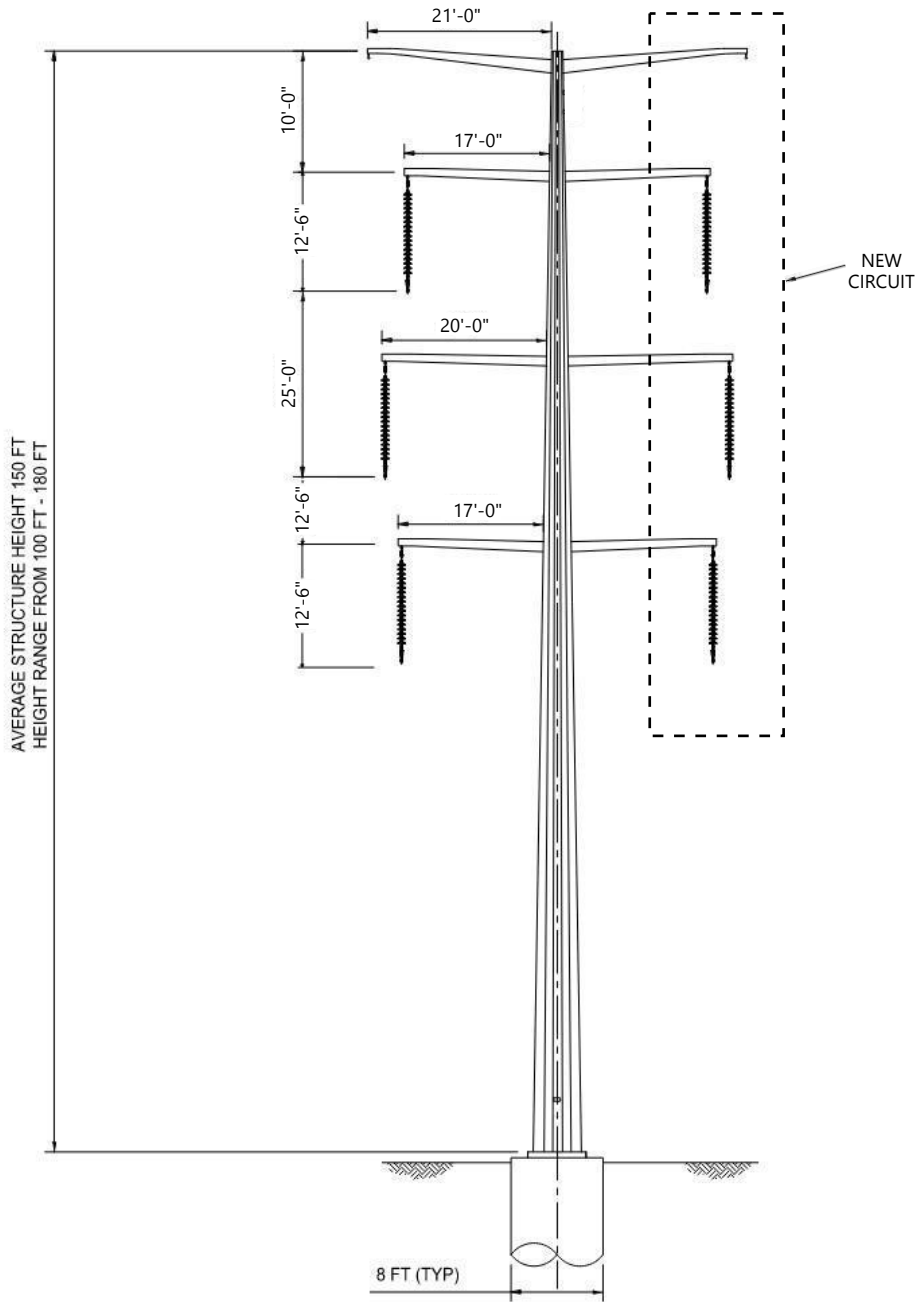


**Appendix C, Map C70**  
**ALEXANDRIA TO BIG OAKS**  
**MISO LRTP-2**  
**Route Permit Application**

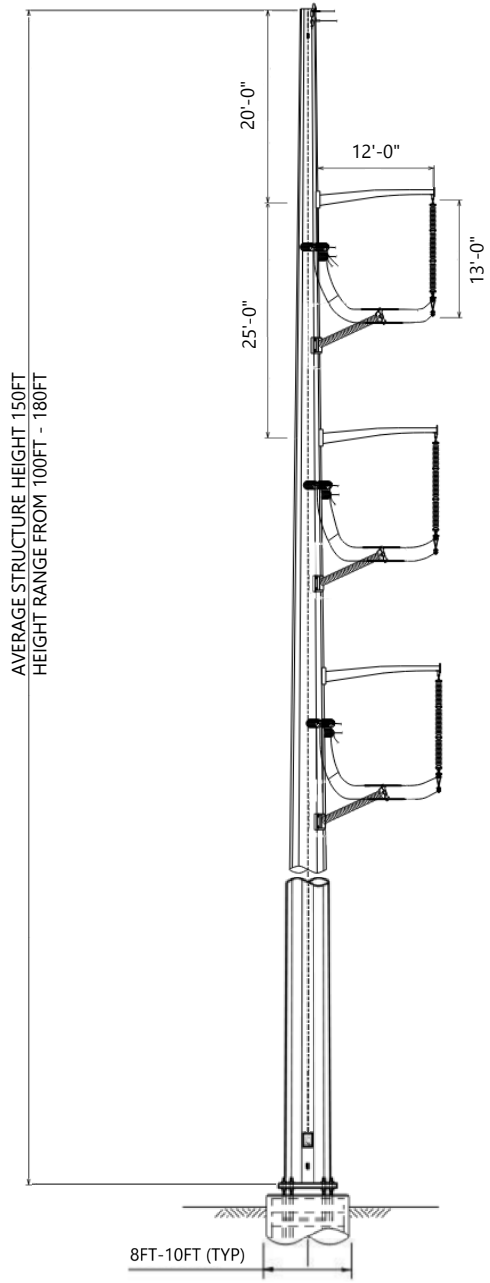


## **Appendix D**

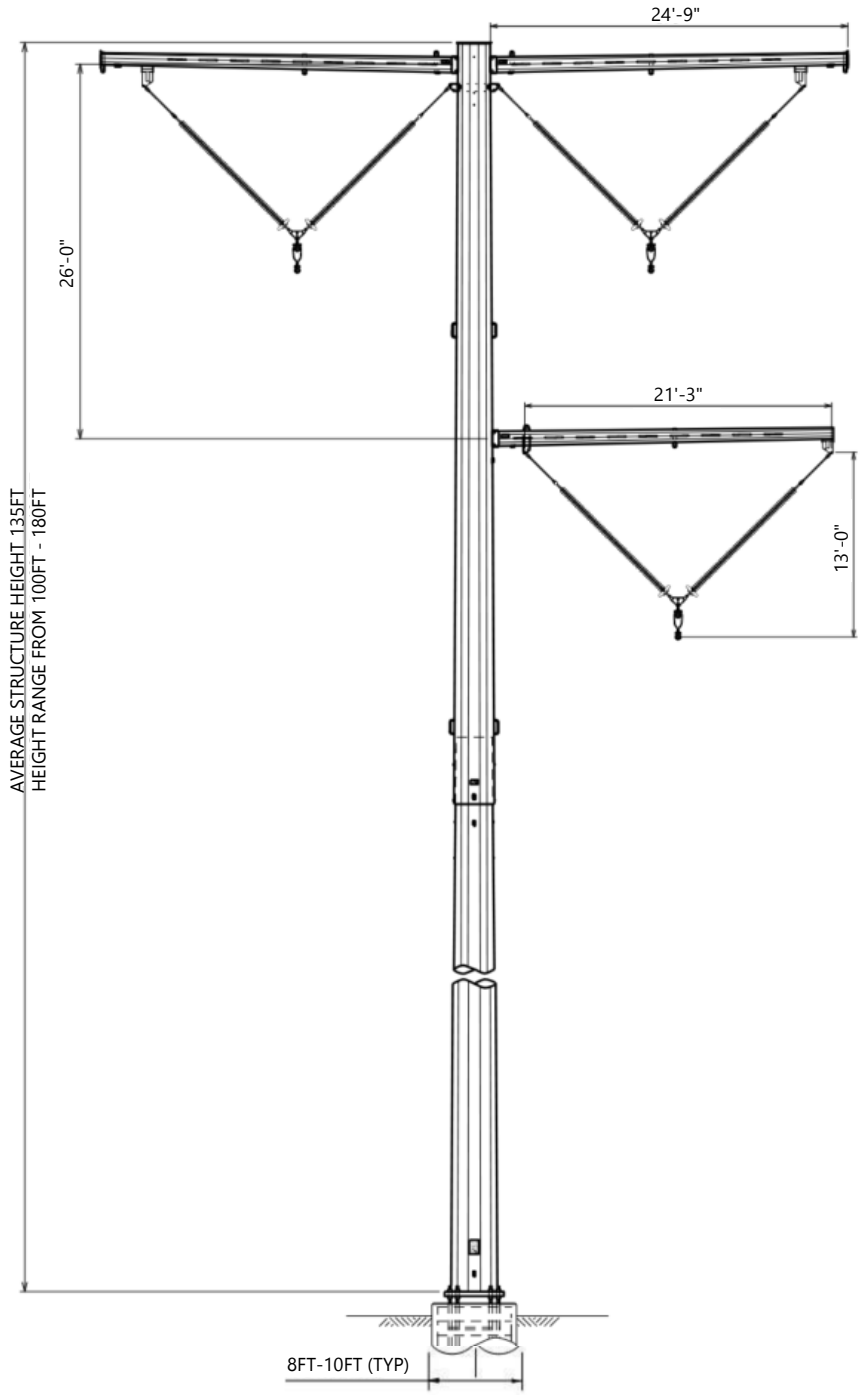
### **Typical Structure Types**



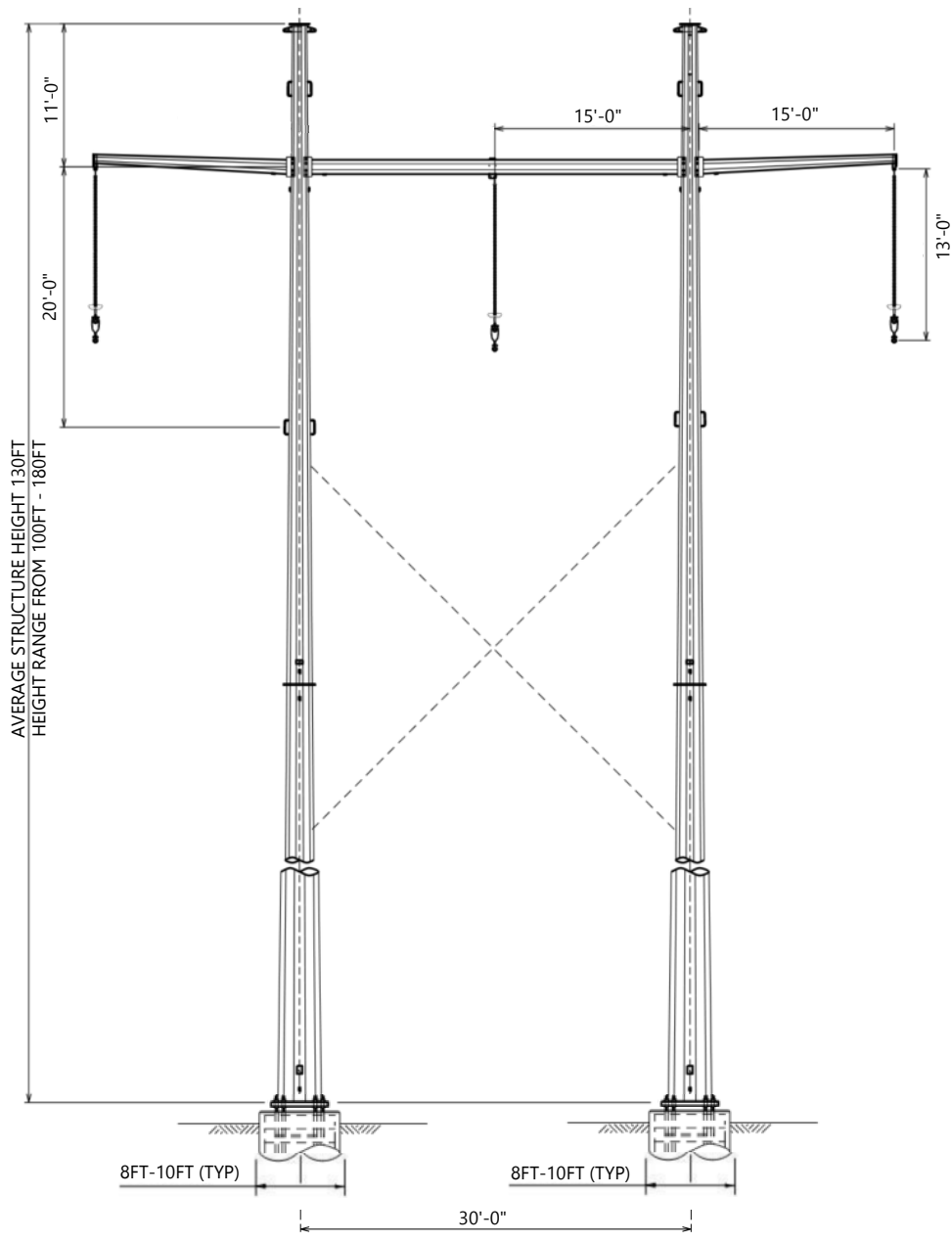
LOOKING AHEAD  
 EXISTING DOUBLE-CIRCUIT  
 MONOPOLE TANGENT STRUCTURE  
 STANDARD SPAN



LOOKING AHEAD  
MONOPOLE  
DEAD END STRUCTURE  
STANDARD SPAN



LOOKING AHEAD  
 SINGLE-CIRCUIT MONOPOLE  
 TANGENT STRUCTURE  
 STANDARD SPAN



LOOKING AHEAD  
SINGLE-CIRCUIT H-FRAME  
TANGENT STRUCTURE  
STANDARD SPAN

## **Appendix E**

### **Open House Meeting Invitations**



414 Nicollet Mall  
Minneapolis, MN 55401

PRESORTED  
FIRST-CLASS MAIL  
U.S. POSTAGE  
**PAID**  
TWIN CITIES, MN  
PERMIT NO. 3580

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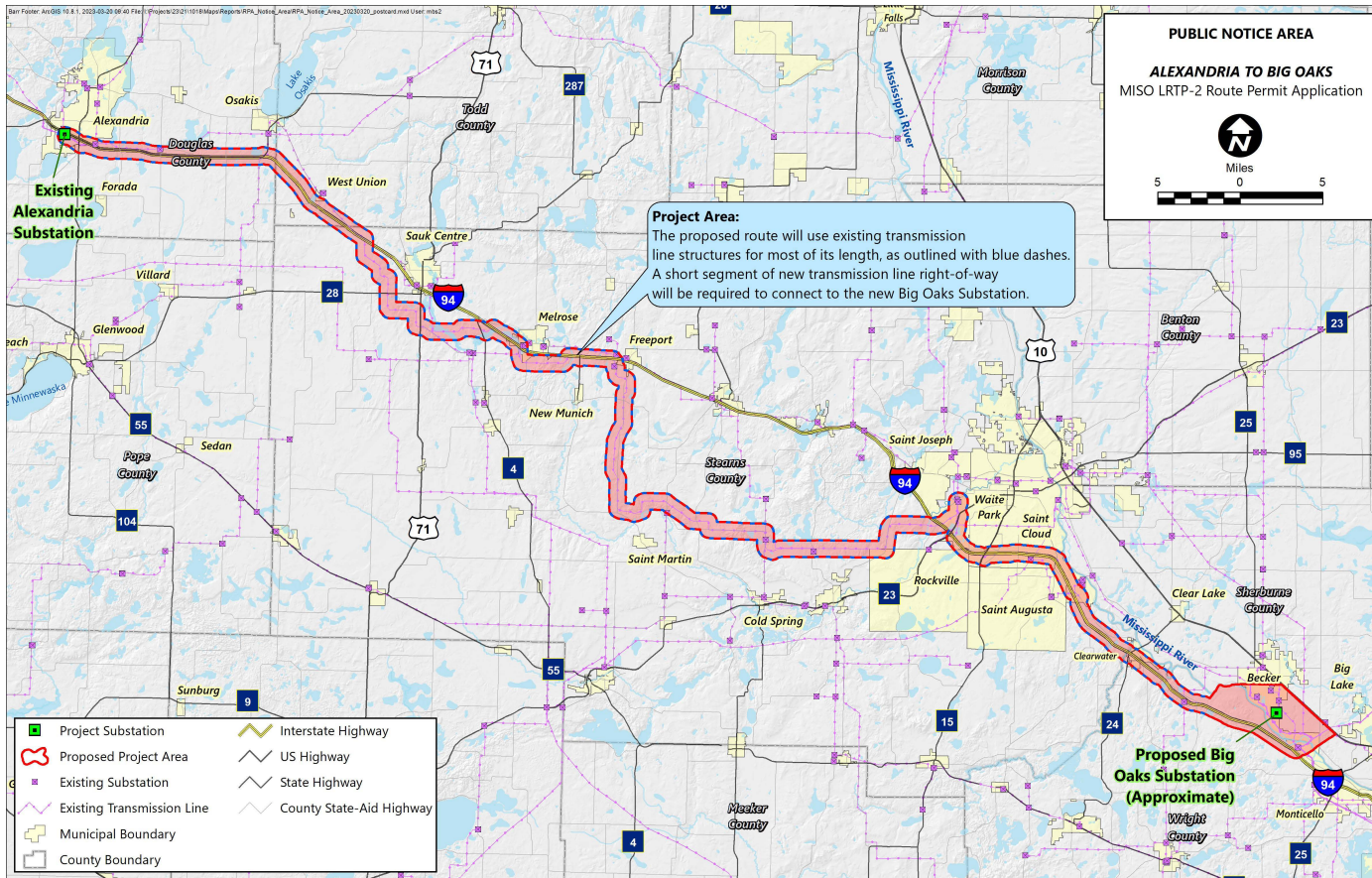
Name  
Title  
Address

T-12 P-1 003126

# PLEASE JOIN US TO LEARN ABOUT THE ALEXANDRIA-BIG OAKS TRANSMISSION LINE PROPOSAL

Open houses scheduled to provide information and answer questions about transmission line expansion





# PLEASE JOIN US TO LEARN ABOUT THE ALEXANDRIA-BIG OAKS TRANSMISSION LINE PROPOSAL

Open houses scheduled to provide information and answer questions about transmission line expansion

Xcel Energy, along with other utility partners, is proposing new transmission line infrastructure that will improve electric reliability in the region, reduce congestion on the transmission system, and increase access to new low-cost renewable energy in the coming years.

The Alexandria-Big Oaks transmission line proposal would add a second transmission circuit on the open side of the existing CapX2020 transmission line structures between Alexandria and Monticello, Minnesota, along with new structures to connect to the new Big Oaks substation, which will be built near Xcel Energy's Sherco power plant.

## CAPX2020 HISTORY

When originally approved, regulators and utilities believed the transmission grid would eventually need expansion. Rather than build an entirely new transmission line, the MN Public Utilities Commission directed CapX2020 to build the Fargo-St. Cloud/Monticello line capable of adding a 'second circuit,' which would reduce the amount of future infrastructure. The utilities involved in this project include Great River Energy, Minnesota Power, Missouri River Energy Services, Otter Tail Power Company, and Xcel Energy.

## BIG STONE SOUTH-ALEXANDRIA

The Big Stone South-Alexandria segment will connect a new 345-kV transmission line between the existing Big Stone South substation in northeast South Dakota and the Alexandria substation near Alexandria, Minnesota. Otter Tail Power Company and Missouri River Energy Services, the companies leading this portion of the project, will work closely with landowners, communities, and local officials to identify potential routes and develop a Route Permit application that will be overseen by the Minnesota Public Utilities Commission.

## OPEN HOUSE SCHEDULE

Tuesday, April 11 4:00-7:00 p.m.	Alexandria Holiday Inn	5637 Highway 29 South Alexandria, MN 56308
Wednesday, April 12 4:00-7:00 p.m.	Becker Community Center	11500 Sherburne Ave. Becker, MN 55308
Thursday, April 13 1:00 p.m. and 6:00 p.m.	Virtual open house	Link posted at AlexandriatoBigOaks.com

## PROJECT SCHEDULE

**Second Quarter 2023:** Open houses to discuss project and new route options to connect to the Big Oaks substation near the existing Sherco power plant

**Third Quarter 2023:** Certificate of Need and Route Permit filed with the Minnesota Public Utilities Commission (MN PUC)

**Third Quarter 2023-First Quarter 2024:** MN PUC reviews Certificate of Need and Route Permit; decision expected in Summer/Fall 2024

**2024-2025:** Engineering and design; easement negotiations with landowners

**2025-2030:** Add second circuit to transmission line; build new infrastructure, including Big Oaks substation and expand existing Alexandria substation

## FOR MORE INFORMATION:

**AlexandriatoBigOaks.com** or **BigStoneSouthtoAlexandria.com**

Phone: **888-231-7068**

Email: **AlexandriatoBigOaks@xcelenergy.com**

## **Appendix F**

### **Draft - Agricultural Impact Mitigation Plan**

**DRAFT AGRICULTURAL IMPACT MITIGATION PLAN**  
**ALEXANDRIA TO BIG OAKS 345KV TRANSMISSION LINE PROJECT**

MPUC Docket No. E002/TL-23-159

**DRAFT AGRICULTURAL IMPACT MITIGATION PLAN**  
**ALEXANDRIA TO BIG OAKS 345KV TRANSMISSION LINE PROJECT**

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**DRAFT AGRICULTURAL IMPACT MITIGATION PLAN**  
**ALEXANDRIA TO BIG OAKS 345KV TRANSMISSION LINE PROJECT**

**Purpose**

This Agricultural Impact Mitigation Plan ("AIMP" or 'the plan') was developed by Northern States Power Company, doing business as Xcel Energy (Xcel Energy), along with Great River Energy, Minnesota Power, Otter Tail Power Company (Otter Tail), and Missouri River Energy Services, on behalf of Western Minnesota Municipal Power Agency (Western Minnesota), together, referred to as "the Utilities". The overall objective of this AIMP is to identify measures the Utilities will take to avoid, mitigate, repair and/or provide compensation for impacts that may result from the construction of a 345 kV electric transmission line on Agricultural Land in Minnesota.

The Project will be jointly owned by Xcel Energy, Great River Energy, Minnesota Power, Otter Tail and Western Minnesota. The Alexandria to Big Oaks 345 kV Transmission Line Project is needed to provide additional transmission capacity, to mitigate current capacity issues, and to improve electric system reliability throughout the region as more renewable energy resources are added to the electric system in and around the region.

The construction standards and policies in this plan apply only to construction activities occurring partially or wholly on privately owned Agricultural Land. The measures do not apply to construction activities occurring entirely on public rights-of-way, railroad rights-of-way, publicly owned land, or private land that is not Agricultural Land. The Utilities will, however, adhere to the same construction standards relating to the repair of agricultural tile (Item No. 3 in the AIMP) when tiles are encountered on public highway rights-of-way, railroad rights-of-way, or publicly or privately owned land.

Appendix B of this AIMP applies only to Organic Agricultural Land as described in the National Organic Program Rules, 7 CFR Parts 205.100, 205.202, and 205.101.

Unless the Easement or other agreement, regardless of nature, between the Utilities and the Landowner or Tenant specifically provides to the contrary, the mitigative actions specified in the construction standards and policies set forth in this AIMP will be implemented in accordance with the General Provisions.

**General Provisions**

The mitigative actions are subject to change by Landowners or Tenants, provided such changes are negotiated with and acceptable to the Utilities.

Certain provisions of this AIMP require the Utilities to consult with the Landowner and Tenant of a property. The Utilities will engage in a good faith effort to secure the agreement of both Landowner and Tenant in such cases.

Unless otherwise specified, the Utilities will retain qualified contractors to execute mitigative actions. However, the Utilities may negotiate with Landowners or Tenants to carry out the mitigative actions that Landowners or Tenants wish to perform themselves.

Mitigative actions employed by the Utilities pursuant to this AIMP, unless otherwise specified in this AIMP or in an Easement or other agreement negotiated with an individual Landowner or Tenant, will be implemented within 45 days following completion of Final Clean-up on an affected property, weather permitting, or unless otherwise delayed by mutual agreement between Landowner or Tenant and Utility. Temporary repairs will be made by the Utilities during construction as needed to minimize the risk of additional property damage or interference with the Landowner's or Tenant's access to or use of the property that may result from an extended time period to implement mitigative actions.

The Utilities will implement the mitigative actions contained in this AIMP to the extent that they do not conflict with the requirements of any applicable federal and/or state rules and regulations and other permits and approvals that are obtained by the Utilities for the project or they are not determined to be unenforceable by reason of other requirements of federal and state permits issued for the project. To the extent a mitigative action required by this agreement is determined to be unenforceable in the future due to requirements of other federal or state permits issued for the project, the Utilities will so inform the Landowner or Tenant and will work with them to develop a reasonable alternative mitigative action.

Prior to the construction of the transmission line, the Utilities will provide each Landowner and Tenant with a telephone number and address which can be used to contact the Utilities, both during and following the completion of construction, regarding the agricultural impact mitigation work which is performed on their property or other construction-related matter. If the contact information changes at any time before completion of Final Clean-up and/or after the completion of construction, the Utilities will provide the Landowner and Tenant with updated contact information. The Utilities will respond to Landowner and Tenant telephone calls and correspondence within a reasonable time.

The Utilities will use good faith efforts to obtain a written acknowledgement of completion from each Landowner and Tenant upon the completion of Final Clean-up on their respective property.

If any provision of this AIMP is held to be unenforceable, no other provision will be affected by that holding, and the remainder of the AIMP will be interpreted as if it did not contain the unenforceable provision.

### **Mitigative Actions**

The Utilities will reasonably restore or compensate Landowners and/or Tenants, as appropriate, for damages caused by the Utilities as a result of transmission line construction, and as outlined in this plan. The decision to restore land or compensate Landowners will be made by the Utilities after discussion with the Landowner or Tenant.

**1. Pole Placement**

During the design of the project, the Utilities' engineering, land rights and permitting staff will work together to address pole placement issues. Utilities' staff will work with Landowners on pole placement. When the preliminary design is complete, the land rights agents will review the staked pole locations with the Landowners.

**2. Soil and Rock Removal for Bored Holes**

Any excess soil and rock will be removed from the site unless otherwise requested by the Landowner.

**3. Damaged and Adversely Affected Tile**

The Utilities will contact affected Landowners or Tenants for their knowledge of Tile locations prior to the transmission line's installation. Utilities will make every attempt to probe for Tile if the Landowner does not know if Tile is located in the proposed pole location. Tile that is damaged, cut, or removed as a result of this probe will be immediately repaired. The repair will be reported to the Inspector.

If Tile is damaged by the transmission line installation, the Tile will be repaired in a manner that restores the Tile's operating condition at the point of repair. If Tiles on or adjacent to the transmission line's construction area are adversely affected by the construction of the transmission line, the Utilities will take such actions as are necessary to restore the functioning of the Tile, including the relocation, reconfiguration, and replacement of the existing Tile. The affected Landowner or Tenant may elect to negotiate a fair settlement with the Utilities for the Landowner or Tenant to undertake the responsibility for repair, relocation, reconfiguration, or replacement of the damaged Tile. In the event the Landowner or Tenant chooses to undertake the responsibility for repair, relocation, reconfiguration, or replacement of the damaged Tile, the Utilities will not be responsible for correcting Tile repairs after completion of the transmission line (the Utilities are responsible for correcting Tile repairs after completion of the transmission line, provided the repairs were made by the Utilities or their agents or designees).

Where the damaged Tile is repaired by the Utilities, the following standards and policies will apply to the Tile repair:

- A. Tiles will be repaired with materials of the same or better quality as that which was damaged. If water is flowing through a damaged Tile, temporary repairs will be promptly installed and maintained until such time that permanent repairs can be made.
- B. Before completing permanent Tile repairs, Tiles will be examined within the work area to check for Tile that might have been damaged by construction equipment. If Tiles are found to be damaged, they will be repaired so they operate as well after construction as before construction began.



- C. The Utilities will make efforts to complete permanent Tile repairs within a reasonable timeframe after Final Clean-up, taking into account weather and soil conditions.
- D. Following completion of the Final Clean-up and damage settlement, the Utilities will be responsible for correcting and repairing Tile breaks, or other damages to Tile systems that are discovered on the Right-of-Way to the extent that such breaks are the result of transmission line construction. These damages are usually discovered after the first significant rain event. The Utilities will not be responsible for Tile repairs the Utilities have paid the Landowner or Tenant to perform.

**4. Installation of Additional Tiles**

The Utilities will be responsible for installing such additional Tile and other drainage measures as are necessary to properly drain wet areas on the Right-of-Way caused by the construction of the transmission line.

**5. Construction Debris**

Construction-related debris and material which are not an integral part of the transmission line, and which have been placed there by the Utilities, will be removed from the Landowner's property at the Utilities' cost. Such material to be removed would include excess construction materials or litter generated by the construction crews.

**6. Compaction, Rutting, Fertilization, Liming, and Soil Restoration**

- A. Compaction will be alleviated as needed on Cropland traversed by construction equipment. Cropland that has been compacted will be plowed using appropriate deep-tillage and draft equipment. Alleviation of compaction of the topsoil will be performed during suitable weather conditions, and must not be performed when weather conditions have caused the soil to become so wet that activity to alleviate compaction would damage the future production capacity of the land as determined by the Agricultural Monitor.
- B. The Utilities will restore rutted land to as near as practical to its pre-construction condition.
- C. If there is a dispute between the Landowner or Tenant and the Utilities as to what areas need to be ripped or chiseled, the depth at which compacted areas should be ripped or chiseled, or the necessity or rates of lime, fertilizer, and organic material application, the Agricultural Monitor's opinion will be considered by the Utilities.

**7. Damaged Soil Conservation Practices**

Soil conservation practices such as terraces and grassed waterways which are damaged by the transmission line's construction, will be restored to their pre-construction condition.

**8. Weed Control**

On land which is owned by Utilities for substation facilities, the Utilities will work with Landowners if requested on weed control activities outside of the substations with the intent to not allow the spread of weeds onto adjacent Agricultural Land. Any weed control spraying will be in accordance with State of Minnesota regulations.

**9. Irrigation Systems**

- A. If the transmission line and/or temporary work areas intersect an operational (or soon to be operational) spray irrigation system, the Utilities will establish with the Landowner or Tenant, an acceptable amount of time the irrigation system may be out of service.
- B. If, as a result of the transmission line construction activities, an irrigation system interruption results in crop damages, either on the Right-of-Way or off the Right-of-Way, compensation of Landowners and/or Tenants, as appropriate, will be determined as described in section 11 of this AIMP.
- C. If it is feasible and mutually acceptable to the Utilities and the Landowner or Tenant, temporary measures will be implemented to allow an irrigation system to continue to operate across land on which the transmission line is also being constructed. Utilities will work with the Landowner or Tenant to identify a preferable construction time.

**10. Temporary Roads**

The location of temporary roads to be used for construction purposes will be discussed with the Landowner or Tenant.

- A. The temporary roads will be designed so as to not impede proper drainage and will be built to mitigate soil erosion on or near the temporary roads.
- B. Upon abandonment, temporary roads may be left intact through mutual agreement of the Landowner or Tenant and the Utilities unless otherwise restricted by federal, state or local regulations.
- C. If a temporary road is to be removed, the Agricultural Land upon which the temporary road is constructed will be returned to its previous use and restored to equivalent condition as existed prior to their construction.

**11. Construction in Wet Conditions**

If it is necessary to construct during wet conditions, and if the Agricultural Monitor believes conditions are too wet for continued construction, damages which may result from such construction will be paid for by the Utilities and/or appropriate restoration will be conducted. Compensation for Landowners and/or Tenants, as appropriate, will be determined as described in section 12 of this AIMP.

**12. Procedures for Determining Construction-Related Damages and Providing Compensation**

- A. The Utilities will develop and put into place a procedure for the processing of anticipated Landowners' or Tenants' claims for construction-related damages. The procedure will be intended to standardize and minimize Landowner and Tenant concerns in the recovery of damages, to provide a degree of certainty and predictability for Landowners, Tenants and the Utilities, and to foster good relationships among the Utilities, Landowners and their Tenants over the long term.
- B. Negotiations between the Utilities and any affected Landowner or Tenant will be voluntary in nature and no party is obligated to follow any particular method for computing the amount of loss for which compensation is sought or paid. The compensation offered is only an offer to settle, and the offer shall not be introduced in any proceeding brought by the Landowner or Tenant to establish the amount of damages the Utilities must pay. In the event the Utilities and a Landowner or Tenant are unable to reach an agreement on the amount of damages, the Landowner or Tenant may seek recourse through mediation.

**13. Advance Notice of Access to Private Property**

The Utilities will endeavor to provide the Landowner and/or Tenant advanced notice before beginning construction on the property. Prior notice will consist of a personal contact, email, letter or a telephone contact, whereby the Landowner and the Tenant are informed of the Utilities' intent to access the land.

**14. Role and Responsibilities of Agricultural Monitor**

The Agricultural Monitor will be retained and funded by the Utilities, but will report directly to the MDA. The primary function of the Agricultural Monitor will be to audit the Utilities' compliance with this AIMP. The Agricultural Monitor will not have the authority to direct construction activities and will not have authority to stop construction. The Agricultural Monitor will notify the Utilities' Inspector if he/she believes a compliance issue has been identified. The Agricultural Monitor will have full access to Agricultural Land crossed by the Project and will have the option of attending meetings where construction on Agricultural Land is discussed. Specific duties of the Agricultural Monitor will include, but are not limited to the following:

1. Participate in preconstruction training activities sponsored by the Utilities.
2. Monitor construction and restoration activities on Agricultural Land for compliance with provisions of this AIMP.
3. Report instances of noncompliance to the Utilities Inspector.
4. Prepare regular compliance reports and submit to MDA, as requested by the MDA.

5. Act as liaison between Landowners and Tenants and MDA, if necessary.
6. Maintain a written log of communications from Landowners and/or Tenants regarding compliance with this AIMP. Report Landowner complaints to the Utilities Inspector and/or Right-of-Way representative.
7. In disputes between Utilities and a Landowner and/or Tenant over restoration, determine if agricultural restoration is reasonably adequate in consultation with the Utilities Inspector.

**15. Qualifications and Selection of Agricultural Monitor**

The Agricultural Monitor will have a bachelor's degree in agronomy, soil science or equivalent work experience. The Agricultural Monitor will have demonstrated practical experience with pipeline or electric transmission line construction and restoration on Agricultural Land. Final selection of the Agricultural Monitor will be a joint decision between the MDA and the Utilities.

**16. Role of the Utilities Inspector**

The Utilities Inspector will:

1. Be full-time member of the Utilities inspection team.
2. Be responsible for verifying the Utilities compliance with provisions of this AIMP during construction.
3. Work collaboratively with other Utilities Inspectors, Right-of-Way agents, and the Agricultural Monitor in achieving compliance with this AIMP.
4. Observe construction activities on Agricultural Land on a regular basis.
5. Have the authority to stop construction activities that are determined to be out of compliance with provisions of this AIMP.
6. Document instances of noncompliance and work with construction personnel to identify and implement appropriate corrective actions as needed.
7. Provide construction personnel with training on provisions of this AIMP before construction begins.
8. Provide construction personnel with field training on specific topics as needed.

## Appendix A Definitions

Agricultural Land	Land that is actively managed for cropland, hayland, or pasture, and land in government set-aside programs.
Agricultural Monitor	Monitor retained and funded by the Utilities, reporting directly to the Minnesota Department of Agriculture ("MDA") and responsible for auditing the Utilities' compliance with provisions of this AIMP.
Cropland	Land actively managed for growing row crops, small grains, or hay.
Easement	The agreement(s) and/or interest in privately owned Agricultural Land held by the Utilities by virtue of which it has the right to construct, operate and maintain the transmission line together with such other rights and obligations as may be set forth in such agreement.
Final Clean-up	Transmission line activity that occurs after the power line has been constructed. Final Clean-up activities include but are not limited to: removal of construction debris, de-compaction of soil as required, installation of permanent erosion control structures, final grading, and restoration of fences and required reseeding. Once Final Clean-up is finished, Landowners will be contacted to settle all damage issues and will be provided a form to sign confirming final settlement.
Landowner	Person(s) holding legal title to Agricultural Land on the transmission line route from whom the Utilities is seeking, or has obtained, a temporary or permanent Easement, or their representatives.
Non-Agricultural Land	Any land that is not "Agricultural Land" as defined above.
Right-of-Way	The Agricultural Land included in permanent and temporary Easements which the Utilities acquires for the purpose of constructing, operating and maintaining the transmission line.
Tenant	Any Person lawfully renting or sharing land for agricultural production which makes up the "Right-of-Way" as defined in this AIMP.
Tile	Artificial subsurface drainage system.
Topsoil	The uppermost horizon (layer) of the soil, typically with the darkest color and highest content of organic matter.
Utilities Inspector	Full-time on-site inspector retained by the Utilities to verify compliance with requirements of this AIMP during construction of the transmission line. The Inspector will have demonstrated experience with transmission line construction on Agricultural Land.

## **Appendix B: Mitigative Actions for Organic Agricultural Land**

### **Introduction**

The Utilities recognize that Organic Agricultural Land is a unique feature of the landscape and will treat this land with the same level of care as other sensitive environmental features. This Appendix identifies mitigation measures that apply specifically to farms that are Organic Certified or farms that are in active transition to become Organic Certified, and is intended to address the unique management and certification requirements of these operations. All protections provided in the Agricultural Impact Mitigation Plan will also be provided to Organic Agricultural Land in addition to the provisions of this Appendix.

The provisions of this Appendix will apply to Organic Agricultural Land for which the Landowner or Tenant has provided to the Utilities a true, correct and current version of the Organic System Plan within 60 days after the signing of the Easement for such land or 60 days after the issuance of a Route Permit to the Utilities by the PUC, whichever is sooner, or, in the event the Easement is signed later than 60 days after the issuance of the Route Permit. The provisions of this Appendix are applicable when the Organic System Plan is provided to the Utilities at the time of the signing of the Easement.

### **Organic System Plan**

The Utilities recognize the importance of the individualized Organic System Plan (OSP) to the Organic Certification process. The Utilities will work with the Landowner or Tenant, the Landowner or Tenant's Certifying Agent, and/or a mutually acceptable third-party Organic consultant to identify site-specific construction practices that will minimize the potential for Decertification as a result of construction activities. Possible practices may include, but are not limited to: equipment cleaning, planting a deep-rooted cover crop in lieu of mechanical decompaction, applications of composted manure or rock phosphate, preventing the introduction of disease vectors from tobacco use, restoration and replacement of beneficial bird and insect habitat, maintenance of organic buffer zones, use of organic seeds for any cover crop, or similar measures. The Utilities recognizes that Organic System Plans are proprietary in nature and will respect the need for confidentiality.

### **Prohibited Substances**

The Utilities will avoid the application of Prohibited Substances onto Organic Agricultural Land. No herbicides, pesticides, fertilizers or seed will be applied unless requested and approved by the Landowner. Likewise, no refueling, fuel or lubricant storage or routine equipment maintenance will be allowed on Organic Agricultural Land. Equipment will be checked prior to entry to make sure that fuel, hydraulic and lubrication systems are in good working order before working on Organic Agricultural Land. If Prohibited Substances are used on land adjacent to Organic Agricultural Land, these substances will be used in such a way as to prevent them from entering Organic Agricultural Land.

### **Temporary Road Impacts**

Topsoil and subsoil layers that are removed during construction on Organic Agricultural Land for temporary road impacts will be stored separately and replaced in the proper sequence after the transmission line is installed. Unless otherwise specified in the site-specific plan described above, the Utilities will not use this soil for other purposes, including creating access ramps at road crossings. No topsoil or subsoil (other than incidental amounts) may be removed from Organic Agricultural Land. Likewise, Organic Agricultural Land will not be used for storage of soil from non-Organic Agricultural Land.

### **Erosion Control**

On Organic Agricultural Land, the Utilities will, to the extent feasible, implement erosion control methods consistent with the Landowner or Tenant's Organic System Plan. On land adjacent to Organic Agricultural Land, the Utilities' erosion control procedures will be designed so that sediment from adjacent non-Organic Agricultural Land will not flow along the Right-of-Way and be deposited on Organic Agricultural Land. Treated lumber, non-organic hay bales, non-approved metal fence posts, etc. will not be used in erosion control on Organic Agricultural Land.

### **Weed Control**

On Organic Agricultural Land, the Utilities will, to the extent feasible, implement weed control methods consistent with the Landowner's or Tenant's Organic System Plan. Prohibited Substances will not be used in weed control on Organic Agricultural Land. In addition, the Utilities will not use Prohibited Substances in weed control on land adjacent to Organic Agricultural Land in such a way as to allow these materials to drift onto Organic Agricultural Land.

### **Monitoring**

In addition to the responsibilities of the Agricultural Monitor described in the AIMP, the following will apply:

- A. The Agricultural Monitor will monitor construction and restoration activities on Organic Agricultural Land for compliance with the provisions of this appendix and will document any activities that may result in Decertification.
- B. Instances of non-compliance will be documented according to Independent Organic Inspectors Association protocol consistent with the Landowner's Organic System Plan, and will be made available to the MDA, the Landowner, the Tenant, the Landowner's or Tenant's Certifying Agent, the Utilities Inspector and to the Utilities.

If the Agricultural Monitor is responsible for monitoring activities on Organic Agricultural Land, he/she will be trained, at the Utilities' expense, in organic inspection, by the Independent Organic Inspectors Association, unless the Agricultural Monitor received such training during the previous three years.

### **Compensation for Construction Damages**

The settlement of damages will be based on crop yield and/or crop quality determination and the need for additional restoration measures. Unless the Landowner or Tenant of Organic Agricultural Land and Company agree otherwise, at the Utilities expense, a mutually agreed upon professional agronomist will make crop yield determinations, and the Minnesota Department of Agriculture Fruit and Vegetable Inspection Unit will make crop quality determinations. If the crop yield and/or crop quality determinations indicate the need for soil testing, the testing will be conducted by a commercial laboratory that is properly certified to conduct the necessary tests and is mutually agreeable to the Utilities and the Landowner or Tenant. Field work for soil testing will be conducted by a Professional Soil Scientist or Professional Engineer licensed by the State of Minnesota. The Utilities will be responsible for the cost of sampling, testing and additional restoration activities, if needed. Landowners or Tenants may elect to settle damages with the Utilities in advance of construction on a mutually acceptable basis or to settle after construction based on a mutually agreeable determination of actual damages.

### **Compensation for Damages Due to Decertification**

Should any portion of Organic Agricultural Land be Decertified as a result of construction activities, the settlement of damages will be based on the difference between revenue generated from the land affected' before Decertification. and after Decertification so long as a good faith effort is made by the Landowner or Tenant to regain Certification.



## Definitions

Unless otherwise provided to the contrary in this Appendix, capitalized terms used in this Appendix shall have the meanings provided below and in the AIMP. In the event of a conflict between this Appendix and the AIMP with respect to definitions, the definition provided in this Appendix will prevail but only to the extent such conflicting terms are used in this Appendix. The definition provided for the defined words used herein shall apply to all forms of the words.

Apply	To intentionally or inadvertently spread or distribute any substance onto the exposed surface of the soil.
Certifying Agent	As defined by the National Organic Program Standards, Federal Regulations 7 CFR Part 205.2.
Decertified or Decertification	Loss of Organic Certification.
Organic Agricultural Land	Farms or portions thereof described in 7 CFR Parts 205.100, 205.202, and 205.101.
Organic Buffer Zone	As defined by the National Organic Program Standards, Federal Regulations 7 CFR Part 205.2.
Organic Certification or Organic Certified	As defined by the National Organic Program Standards, Federal Regulations 7 CFR Part 205.100 and 7 CFR Part 205.101.
Organic System Plan	As defined by the National Organic Program Standards, Federal Regulations 7 CFR Part 205.2.
Prohibited Substance	As defined by the National Organic Program Standards, Federal Regulations 7 CFR Part 205.600 through 7 CFR 205.605 using the criteria provided in 7 USC 6517 and 7 USC 6518

## **Appendix G**

### **Draft - Vegetation Management Plan**

# **Draft Vegetation Management Plan**

## **Alexandria to Big Oaks 345 kV Transmission Line Project**

Douglas, Stearns, and Todd Counties, Minnesota

August 2023

## 1 INTRODUCTION

The Alexandria to Big Oaks 345 kilovolt (kV) Transmission Line Project (Project) is needed to provide additional transmission capacity, to mitigate current capacity issues, and to improve electric system reliability throughout the region as more renewable energy resources are added to the electric system in and around the region.

The Project involves construction of an approximately 105 to 108-mile long, 345 kV transmission line from the existing Alexandria Substation located in Alexandria, Douglas County to the new Big Oaks Substation that will be constructed on the north side of the Mississippi River in Becker, Sherburne County. The majority of the new 345 kV transmission line from the Alexandria Substation to the Big Oaks Substation follows existing transmission line right-of-way as the Project involves placing this new 345 kV transmission line on existing CapX2020 transmission line structures that were previously permitted and constructed as double-circuit capable as part of the Monticello to St. Cloud 345 kV Transmission Line Project (E002, ET2/TL-09-246) and the Fargo to St. Cloud 345 kV Transmission Line Project (E002, ET2/TL-09-1056).

The Project will be jointly owned by Xcel Energy, Great River Energy, Minnesota Power, Otter Tail Power Company (Otter Tail) and Missouri River Energy Services, on behalf of Western Minnesota Municipal Power Agency (Western Minnesota) (collectively referred to as the Permittees).

In accordance with previously approved Route Permits, the Permittees shall develop a Vegetation Management Plan and submit it to the Commission prior to submitting the Plan and Profile. The purpose of the Vegetation Management Plan is to minimize tree clearing, prevent the introduction of noxious weeds and invasive species, and revegetate disturbed non-cropland areas with appropriate native species in cooperation with landowners and appropriate state, federal and local resource agencies.

This Vegetation Management Plan (Plan) shall:

- Identify measures that will be taken to minimize tree removal and minimize ground disturbance.
- Identify a comprehensive re-vegetation plan for non-cropland areas.
- Identify areas, such as trail crossings, where vegetative screening would minimize aesthetic impacts to the extent that such actions do not violate sound engineering principles or system reliability criteria.
- Identify vegetation control methods to be used during the operation and maintenance of the high voltage transmission line (HVTL).
- Identify areas where landowners or resource agencies have specified no herbicide application.

- Identify measures to prevent the introduction of noxious weeds and invasive species on lands disturbed by construction activities.

## **2 GENERAL RIGHT-OF-WAY VEGETATION MANAGEMENT**

The standard practice of Permittees is to clear all woody vegetation within the proposed right-of-way for the new high voltage transmission line that may interfere with or restrict safe and reliable operation of the line. Cleared rights-of-way also provide for ready access or observation for inspection and maintenance purposes. There are limited circumstances when this practice is modified and selective vegetation can remain within the right-of-way provided National Electric Safety Code (NESC) clearance requirements are met. However, there may be select locations within the right-of-way where the retention of some vegetation may be feasible.

In these areas, Permittees may vary their standard procedure and retain some vegetation within the right-of-way to the extent practicable. While some trees may still be removed when necessary for the construction and safe and reliable operation of the facility, unnecessary tree or vegetation removal or destruction in these specific areas within the right-of-way may otherwise be avoided.

### **2.1 General**

The following provides a list of general practices the Permittees will follow to minimize vegetation impacts related to Project construction.

- Use erosion control best management practices (BMPs) to intercept stormwater runoff from areas disturbed as part of clearing operations. Stormwater BMPs are addressed in the Stormwater Pollution Prevention Plan (SWPPP).
- Minimize rutting by using matting materials in wetland areas for all construction activities, including right-of-way clearing activities; or perform work on firm or frozen ground that can support the equipment used.
- Minimize soil disturbance in steeply sloped areas, to the extent possible and/or practicable.
- Limit construction activities, including vegetation removal, to the right-of-way and off right-of-way access.
- Selectively retain some vegetation within the right-of-way where feasible.
- Limit traffic in the right-of-way between transmission structure locations to a single access path to the extent practicable.
  - Use BMPs to minimize the potential for spills or leaks from equipment during construction, including frequent inspections of equipment, requiring portable spill containment kits for construction equipment, ensuring that equipment

operators are present at the nozzle at all times when fueling is in progress, and prohibiting the refueling of equipment in wetlands.

- Avoid placement of staging or laydown areas in wetlands, and immediately adjacent to wetlands to the extent practicable.
- Limit staging and lay-down areas to previously disturbed areas where practicable.
- Locate, design, construct, and maintain access paths to minimize rutting, maintain surface and subsurface water flows in the wetland, and reduce erosion and sedimentation.
- Where wetlands are to be crossed, create access through the shortest route within the wetland resulting in the least amount of physical impact to the wetland during construction.
- Assemble structures on upland areas before transporting into wetlands where practicable.
- Use construction mats to minimize impacts within wetlands when construction during winter (frozen) months is not possible.
- Slash or woody vegetation that originates from outside wetlands is not to be left in wetlands. Slash or woody vegetation that originates from outside the wetland is considered unauthorized fill and must be removed.
- To the extent practicable, complete construction in wet organic soils when the ground is frozen.

## **2.2 Site Clean-Up and Restoration**

As construction wastes are generated, respective materials will be properly disposed of in a manner which is suitable and appropriate for those wastes. Restoration of the natural landscape will begin as soon as construction or clearing activities cease. Restoration activities may include:

- Regrading areas disturbed by construction or clearing to reflect pre-construction topography.
- Return floodplain contours to their pre-construction profile if disturbed during construction.
- Plant or seed non-agricultural areas disturbed by transmission line structures to prevent erosion. Use native seed mixes from indigenous plants; ensure seeding and/or plantings are done at a time congruent with seeding and growth of the area, not during a time that would preclude germination or rooting.

- Restore the right-of-way, temporary work spaces, access paths, and other areas of ground disturbance affected by Project construction upon completion of work.

### **3 VEGETATION REMOVAL**

The Project will require the clearing of woody vegetation within the right-of-way, and clearing of brush along temporary construction access paths. Tall woody vegetation that may interfere with safe construction and safe and reliable operation of the transmission line will not be allowed to persist and will be controlled. In upland areas, woody vegetation will be removed within the right-of-way and managed through the operational life of the Project.

Clearing of vegetation within the right-of-way will occur prior to other construction activities as allowed by landowner agreements and permit conditions. Clearing of brush, trees, and herbaceous vegetation to facilitate access and to meet safety standards will occur. Clearing may be accomplished with the use of chainsaws, mowers, and hydraulic tree-cutting equipment. Vegetation will be cut at, or slightly above, the ground surface. Rootstock or stumps will be left in place unless transmission structure installation or construction access requires otherwise or at the request of the landowner.

Landowners will be notified to allow them to harvest trees within easement boundaries prior to the initiation of clearing. At the time of clearing, any merchantable trees will be cut to standard logging lengths and stacked in upland areas within the right-of-way. The landowner will retain the title to all timber material, if desired. Non-merchantable material, including trees, brush, and slash, will be either cut and scattered, placed in windrow piles, chipped, or burned within the right-of-way. Non-merchantable felled material may also be removed from the right-of-way in a fashion that does not cause erosion unless BMPs are installed.

The cut and scatter method may be used in areas where limited clearing will occur in either wetlands or uplands; however, no slash material may be deposited in wetlands. The purpose of this method is to limit the need for unnecessarily hauling and potentially disturbing existing ground or vegetation. Likely situations where this method will be used are in shrub and brush areas with a limited numbers of trees. No upland tree material is to be deposited within wetlands as this would constitute wetland fill, which is prohibited.

Woody vegetation may be chipped and scattered over the right-of-way to a maximum depth of one inch in non-agricultural upland areas. Chipping or scattering of chips will not occur in wetlands.

#### **3.1 Wetlands**

The use of heavy equipment in wetlands will be kept to the minimum extent practicable. Permanent wetland fill has not been approved beyond the extent of structure installation. Temporary fill will not be permitted without prior written consent from the U.S. Army Corps of Engineers (USACE). Wetland impact minimization will be accomplished by: constructing in wetlands during frozen conditions to the extent feasible; the use of ice roads; working in dry conditions; using low ground-pressure tires or specialized tracked vehicles; and using of matting materials during non-frozen ground conditions. These BMPs are intended to minimize damage to wetland vegetation and soils.

Forested wetlands may require the removal of woody vegetation within the right-of-way sufficient to provide access for stringing conductors and shield wires, for transmission structure installation, and for safe Project operation. The removal of woody vegetation within forested wetlands will be conducted in accordance with USACE permit conditions. Within these areas, all trees and large shrub species will be cleared to ground level. All woody material will be removed from temporary access paths. On either side of the access path within the right-of-way, small diameter trees and shrubs (<6" diameter) will be cut and debris scattered in place. Large diameter trees and shrubs (>6" diameter) will be hauled out of wetland areas to suitable upland locations and treated according to applicable procedures.

Stump removal may occur within wetlands only where stumps interfere with the placement of construction mats or pole locations, or pose a risk to construction tires and equipment. Where removal is required for access, stumps will be ground to a point at or slightly below the ground surface using low ground-pressure track-mounted equipment. Woody materials generated by stump grinding may be thin-spread in the wetland; but said material may not be mounded.

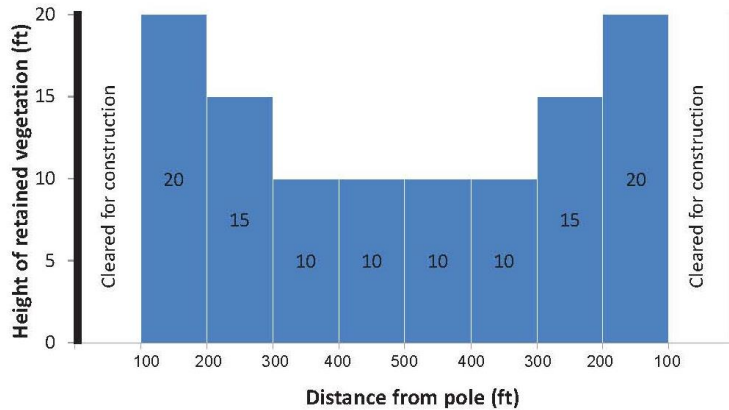
### **3.2 State Lands**

On state-owned lands, Permittees shall vary their standard practice of clearing all woody vegetation within the proposed right-of-way for a new high voltage transmission line. Where state-owned lands are crossed, Permittees will work with the Minnesota Department of Natural Resources (DNR) in planning for the right-of way preparation prior to any clearing activities commencing on those lands. Selective right-of way vegetation removal typically includes the following practices:

- Woody vegetation within 100 feet of a transmission line pole will be cleared for safe construction of the transmission line facilities.
- Woody vegetation whose mature height will not exceed the heights specified in Figure 1 below will be retained to the extent feasible.
- Within 75 feet of a DNR Public Water Inventory stream crossing, woody vegetation whose mature height will not exceed 10 feet will be retained to the extent feasible, so long as the woody vegetation is not within 100 feet of a transmission pole.
- DNR Operational Order #113, Invasive Species Prevention and Management, will be followed.



**Figure 1 Woody Vegetation Removal for DNR Lands**



This diagram assumes a typical span between poles of approximately 1,000 feet.

#### **4 HERBICIDE USE**

Herbicides will not be used at organic farms or other properties where landowners prohibit their use. Herbicides will be used in accordance with manufacturer’s specifications and all applicable federal and state regulations. Herbicides may be used to control the re-sprout of the stumps of tall-growing tree species or to control listed invasive or noxious weed species. Herbicides may not be used for right-of-way clearing within 75 feet of the vegetative buffer zone of waterbody crossings. Herbicides used in or near wetlands and waterbodies must be designed for use in wet areas as designated by manufacture’s specifications and federal and state regulations. Herbicides may not be used on public lands without permit.

#### **5 NOXIOUS WEEDS AND INVASIVE SPECIES CONTROL**

Permittees have identified the following mitigation measures to be implemented that should prevent the introduction of noxious weeds and invasive species (NWIS) on lands disturbed by construction activities.

- To prevent the introduction and spread of NWIS into the Project area from offsite locations, equipment will be cleaned prior to arrival onsite. Visible dirt must be removed from all equipment using high pressure compressed air blowers or brushing.
- The contractor(s) must maintain record of cleaning for each piece of equipment used onsite. This information will be available to the Environmental Inspector (EI) upon request.
- Non-compliance with equipment cleaning requirements may warrant a stop work order to be issued. Construction activity could then recommence only after Project equipment has been removed from the site, and adequately cleaned.

Winter clearing within the right-of-way and for the purposes of access outside the right-of-way and will allow for spring regeneration of existing vegetation within the corridor. The EI will be

required to survey the project area for NWIS throughout the construction oversight period. Additionally, the construction contractor will report any observed or recognized NWIS infestations to the EI who will then provide further instructions for control. The EI will report any infestations of NWIS species to the Permittees and the appropriate agencies.

Major infestation areas identified during the first growing season will be treated with the use of herbicides or by mechanical methods. The contractor applying herbicide is required to obtain any necessary permits and/or certifications prior to herbicide placement. The contractor applying herbicide must keep proper documentation of location and timing of herbicide use and be prepared to provide such documentation to the Permittees or the EI upon request. Treatment shall conform to manufactures' specifications.

To prevent the spread of NWIS during clearing and construction, mulch used on the Project sites will consist of state-certified weed-free material or mulch derived from onsite locations. The contractor will be responsible for locating and documenting the source of certified weed-free mulch. Copies of the applicable certification documentation must be given to the EI and made available upon request to the appropriate agencies. Mulch derived from onsite locations may be spread up to six inches deep in upland areas to provide ground protection along access paths. Upon abandonment of access routes, woodchip mulch is to be spread evenly to a depth no greater than one inch. No mulch is to be spread in wetland locations.

## **6 SEEDING, EROSION CONTROL, REVEGETATION, AND RESTORATION**

Revegetation and restoration of disturbed areas associated with construction activities are intended to protect wetland and water resources from issues associated with erosion and sedimentation, to protect wildlife habitat, and reduce the movement of NWIS species within the right-of-way. Oversight for the implementation of revegetation and restoration procedures will be provided by the EI.

Seed used will be purchased on a Pure Live Seed (PLS) basis for seeding revegetation areas. Seed tags will identify:

- Purity;
- Germination;
- Date tested;
- Total weight and PLS weight;
- Weed seed content; and
- Seed supplier's name and business information.

Seed will be used within 12 months of testing as required by applicable state rules and regulations. The seed tags on the seed sacks will also certify that the seed is "noxious weed free." Seed rates used on the project will be based on PLS rate, not actual weight. The species components of individual mixes are subject to availability at the time of purchase. Grass species

may be substituted with alternative native or non-invasive species that are included in Natural Resource Conservation Service guidelines and subject to approval by the Permittees.

Seed tags must be collected by the contractor and provided to the EI during seeding activities. The tags will be reviewed by the EI prior to use to ensure that the seed mix complies with specifications described herein. Legume seed (where specified) will be treated with inoculants specific to the species and in accordance with the manufacturer's recommended rate, appropriate for the seeding method (broadcast, drill, or hydroseeding).

Seedbed preparation and seeding are to occur immediately following completion of construction activities and site cleanup in any given location. Where applicable, soil will be tilled to a minimum depth of four inches with a disc, field cultivator, or chisel plow to prepare the seedbed, breaking up large clumps and firming the soil surface. Prior to seeding, prepared beds should be sufficiently soft to allow for seed penetration and mulch anchoring, while sufficiently firm to provide surface soil stability. Seeding and mulching should occur parallel to ground contours as practicable.

In order to minimize ground disturbance along the entire right-of-way, forested areas are being cleared, but roots and stumps are being left in place where appropriate, but may be removed at the request of the landowner or in cases where access is needed for snowmobile, hiking, or maintenance crews. Within areas of cleared forest, it may not be practical to access large areas of ground with seeding and seedbed preparation equipment. In these areas, smaller vehicles may be required to perform tasks such as smoothing ruts, preparing seedbeds with small rakes, and surface packing after seeding. The contractor will work with the EI to develop strategies to work around stumps. Fertilizers and other soil amendments are not recommended and will only be applied as requested by and agreed to with landowners.

## **6.1 Seeding Methods, Erosion Control and Timing**

### **6.1.1 Seeding Methods**

Drilled seed will be sown at a depth of 0.25 inches. Seeding equipment will be able to accommodate and uniformly distribute different sizes of seed at the required depth. Seeding mechanisms will be able to evenly distribute different seed types at the rates specified. Seedbed soil is to be suitably firmed immediately following seed drilling. Within cleared areas, it is assumed that seed drilling will be limited by the presence of stumps and roots left in place to retain the soil surface.

Broadcast seeding will occur as specified in the seed mixes. Seed is to be uniformly distributed by a mechanical, hand-operated seeder; or in small seeding areas, by hand. Following seeding, the surface is to be raked with a cultipacker, harrow, or hand rake. The bed is to be firmed as appropriate to site conditions.

Hydroseeding will occur as specified in the seed mixes. Seed will be applied in a broadcast, hydromulch slurry. The hydromulch seed mix will allow the contractor to see where application has taken place, ensuring uniform coverage of the seeding area. The hydroseeder must provide for continuous agitation of slurry and provide for a uniform flow of slurry. Hydroseed slurry is not to be held in the tank for more than one hour prior to application.

### **6.1.2 Erosion Control**

Straw mulch will be applied to disturbed, non-cultivated upland areas if requested by landowners or land managers. If state certified weed-free straw mulch is not used, the project will manage any noxious weeds in the right-of-way. The contractor will be responsible for acquiring certified weed-free straw mulch from approved sources and copies of applicable documentation must be provided to the EI. Mulch will be required on disturbed, exposed soils on all slopes greater than five percent, and on dry, sandy soils prone to erosion by wind or rain.

Straw mulch will be applied at a rate of two tons per acre in upland areas unless otherwise specified in permit conditions. Mulch rate may also be changed based on landowner discussion. Mulch will be uniformly distributed by mechanical blower or by hand in areas where vehicular access is limited. Mulch will be crimped to a depth of two to three inches using a mulch anchoring device where accessible. In areas where stumps and slash limit access by vehicles, mulch may be applied by hand at a reduced rate or at the specified rate and anchored in place by a liquid trackifier approved by the EI. Should conditions prevent straw mulch to be anchored, it shall be applied at a rate to not cause the straw material to move in the wind.

Seeding periods for application of the native area vegetation seed mix and the wet meadow seed mix are limited to April 1 to June 30, during spring, or when soil temperatures have fallen below 55 degrees Fahrenheit in the fall. Outside of these time windows, temporary seed mixes, applied according to temporary cover-crop seed mix specifications are to be used. Prior to installation of native seed mixes, the seedbed should be mowed and prepared for final seeding.

Seeding of the right-of-way is to occur as indicated in the project SWPPP. Where seeding is not possible, temporary stabilization using erosion control matting or mulch is required. Dormant seeding may be used after soil temperatures have fallen below 55 degrees Fahrenheit. Lower temperatures prevent seed from germinating. If dormant seeding is performed, temporary erosion control measures will be installed as indicated in the project SWPPP. Erosion control measures may consist of anchored straw mulch, hydromulch, wood chip mulch, or erosion control blankets.

### **6.2 Temporary Revegetation and Restoration**

Temporary revegetation will be implemented to quickly establish vegetative cover with the primary purposes of minimizing soil erosion and reducing the potential for the establishment of noxious weeds. The temporary seed mix is considered a cover crop, has rapid germination, and provides a quick ground cover. This seed mix is not intended to provide multi-year cover.

Temporary seeding of cover crop will occur in locations where unfrozen, bare soil surface conditions and ruts will not be permanently restored within 30 days of completion of active work. Temporary restoration activities will include the repair of rutted surfaces and an even broadcast-seeding of the temporary cover-crop seed mix at a rate appropriate to the cover crop to provide erosion control of the soils. No mulch is to be applied in wetland areas.

Temporary vegetation will be placed in accordance to the SWPPP or as directed by the EI. Temporary vegetation establishment may be expected to be successful between April 1 and September 30. Temporary use of mulch to stabilize soils should be applied outside of the

September 30 through April 1 window unless soil temperatures will support vegetation establishment.

Straw or wood chip mulch may be used to help stabilize areas or bare soils during the establishment of temporary vegetation or during the period between October 1 and April 1 (winter). The contractor will apply mulch during the establishment of temporary vegetation as requested by the landowner, specified in licenses or permits, or as requested by the Permittees.

Wood chip mulch may be used to protect areas where bare soils have been exposed due to tree clearing and construction activities. In winter situations, wood chips or other appropriate BMPs such as erosion control blankets may be used as indicated in the project SWPPP to provide protection for bare soils exposed due to construction activities where out of season seeding is not applicable.

Woodchip mulch derived from onsite locations may be spread up to 6 inches deep in upland areas to provide ground protection along access paths. Upon abandonment of access routes, woodchip mulch is to be spread evenly to a depth no greater than 2 inches. Wood chip mulch is not to be used within wetlands. Straw mulch may be used outside of the seeding window as a temporary erosion control measure, followed by temporary or permanent seeding after the April 1 seeding date. The contractor will be responsible for locating and documenting the source of certified weed-free mulch if used. Copies of the applicable documentation must be given to the EI and made available upon request to the applicable agencies. Straw mulch will be applied as previously described.

### **6.3 Permanent Revegetation and Restoration**

Appropriate vegetative cover of the right-of-way will be required along the entire length of the right-of-way. Because this project does not require major grading activities, in many cases natural revegetation by early successional native species following tree clearing is expected to occur. In areas where native species voluntarily revegetate the right-of-way, active restoration may not be required. Monthly monitoring during the first year, and adaptive management will be required to ensure that NWIS are controlled, that desirable native plant species become the dominant vegetation communities in natural areas, and that bare soils are quickly stabilized to reduce erosion. In areas of minimal disturbance, vegetation will be allowed to regenerate naturally.

Where standing water is not present, and where surrounding vegetation is dominated by abundant native species, the seeding of bare soils created by rutting, using the temporary cover-crop seed mix may be sufficient for cover while native species revegetate the area. The EI will consult with the appropriate agencies during the construction period to assess application of techniques in specific locations. Permanent seed mixes will include native seed varieties commonly found and/or available from local seed distributors. The permanent seed mixes are designed to augment the natural colonization of the right-of-way by local, native seed sources.

On private agricultural lands, the Permittees' land agents will work with landowners to develop appropriate measures for reseeding of disturbed lands. Unless requested by the landowner, a native area vegetation seed mix will be used in non-farmed land. Pastures will be seeded with landowner-specified seed mix.

In accordance with the Route Permit, Permittees will advise the Commission, in writing, within 60 days after the completion of all restoration activities.

#### **6.4 Wetland Areas**

In wetland areas, clean-up and temporary or final restoration will occur immediately following construction activities, in accordance with the SWPPP. Wetland clean-up and site restoration activities include the following:

- Fertilizers, pesticides, or herbicides are not to be used in or near water bodies, including wetlands unless approved by the wetland permit(s).
- All waste, construction materials, and debris from construction activities will be collected and hauled from wetlands immediately upon work being completed in each wetland basin to the extent practical.
- Permanent restoration within wetland areas will include the removal of all construction mats and restoration of all ruts and depressions left by mats that are greater than six inches deep. No fill from outside of a wetland area is allowed to be used for repair of ruts.
- In areas of minimal disturbance, vegetation will be allowed to regenerate naturally.
- Where bare soils are created due to construction activities, but are limited to areas where natural revegetation from native seed bank and rhizomes is likely, a temporary cover-crop seed mix will be broadcast-seeded for temporary cover to reduce opportunities for noxious weed invasion as allowed by the wetland permit(s).
- Where standing water is not present and surrounding vegetation is dominated by abundant native species, the broadcast-seeding of bare soil using the temporary cover-crop seed mix may be sufficient as allowed by the wetland permit(s).

The preferred method for revegetation of disturbed areas within wetland is reliance on revegetation by resident plant communities. The EI, in consultation with the appropriate agencies, will determine whether disturbed areas will require the use of the temporary cover crop only, seeding with a wetland-specific mix, or if no action is appropriate.

In areas where wetland plant species are dominated by native species with rhizomatous root systems that will likely recolonize areas of limited disturbance rapidly, bare soils are to be broadcast-seeded with the seasonally appropriate temporary cover-crop seed mix. In areas where disturbed and bare soils are sufficient to preclude revegetation from the local, native seed source, a native wetland seed mix will be applied as indicated in the wetland permit(s) or in consultation with wetland authority agencies.

## **7 MONITORING**

The Permittees will be required to monitor and control NWIS within the right-of-way through the construction. The EI will inspect and provide information regarding infestations of NWIS along the right-of-way to the appropriate agencies. The Permittees will be required to meet easement and lease conditions and obligations and will continue to work with landowners and the appropriate agencies to achieve standards set forth in easement or lease agreements.

The Permittees will monitor areas where seeding and erosion control measures have been implemented and will follow-up with reseeding measures where vegetative cover by the specified seed mix, or revegetation by the local, native seed source is inadequate to provide long term stability and sustainable native plant communities.

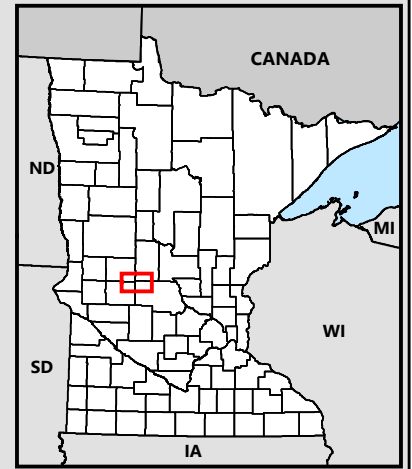
## Appendix H

### Protected and Confidential – Cultural Resources Maps













Unredacted versions of the Appendix H maps have been provided under separate cover to the Department of Commerce, Energy Environmental Review and Analysis for their review. These maps show the specific locations of sensitive archaeological and historic sites. The Applicants obtained data from the Minnesota State Historic Preservation Office. Access to archaeological data is limited to qualified archaeologists. Reports that are widely distributed to the public should avoid identifying site locations. The Applicants did not include this data on public maps and respectfully request that this data remains non-public.



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Redacted

-  Project Study Area
-  Anticipated Alignment
-  Project Substation
-  Interstate Highway
-  US Highway
-  State Highway
-  County State-Aid Highway
-  Historic Architectural Resource
-  Municipal Boundary
-  Civil Township
-  County Boundary
-  State Boundary



Miles



### Appendix H, Map H1

**CULTURAL RESOURCES**  
**ALEXANDRIA TO MELROSE PORTION**  
 ALEXANDRIA TO BIG OAKS  
 MISO LRTP-2 Route Permit Application









**Contains Protected and Confidential Cultural Resource Information**



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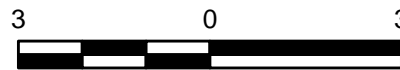
Redacted

-  Project Study Area
-  Anticipated Alignment
-  Project Substation
-  Bypassed Substation
-  Interstate Highway
-  US Highway
-  State Highway
-  County State-Aid Highway

-  Archaeological Site
-  Historic Architectural Resource
-  Municipal Boundary
-  Civil Township
-  County Boundary
-  State Boundary



Miles



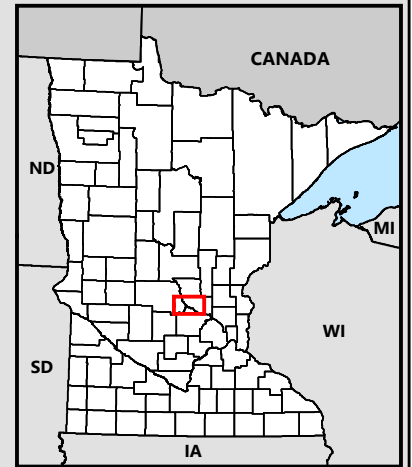
**Appendix H, Map H2**

**CULTURAL RESOURCES**  
**MELROSE TO SAINT CLOUD PORTION**  
 ALEXANDRIA TO BIG OAKS  
 MISO LRTP-2 Route Permit Application









**Contains Protected and Confidential Cultural Resource Information**



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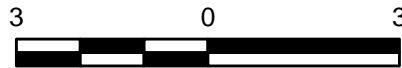
Redacted

-  Project Study Area
-  Anticipated Alignment
-  Project Substation
-  Bypassed Substation
-  Interstate Highway
-  US Highway
-  State Highway
-  County State-Aid Highway

-  Archaeological Site
-  Historic Architectural Resource
-  Municipal Boundary
-  Civil Township
-  County Boundary
-  State Boundary



Miles



**Appendix H, Map H3**

**CULTURAL RESOURCES**  
**SAINT CLOUD TO BIG OAKS PORTION**  
 ALEXANDRIA TO BIG OAKS  
 MISO LRTP-2 Route Permit Application

**Contains Protected and Confidential Cultural Resource Information**



## **Appendix I**

### **Greenhouse Gas Calculations**



**Table 1-1. Summary of Construction GHG Emissions**

<b>Emission Source</b>	<b>CO<sub>2</sub></b> <b>(metric tons)</b>	<b>CH<sub>4</sub></b> <b>(metric tons)</b>	<b>N<sub>2</sub>O</b> <b>(metric tons)</b>	<b>CO<sub>2</sub>e<sup>[1]</sup></b> <b>(metric tons)</b>
Greenfield Construction	391.53	0.02	0.02	397.67
Install Second Circuit	1,967.71	0.08	0.09	1,997.84
<b>Total</b>	<b>2,359.24</b>	<b>0.10</b>	<b>0.11</b>	<b>2,395.50</b>

[1] CO<sub>2</sub>e calculated by equation A-1 of 40 CFR 98.2, which states the total CO<sub>2</sub>e is equal to the GWP for each pollutant multiplied by the potential pollutant emissions. The GWP for CO<sub>2</sub> is 1, CH<sub>4</sub> is 25, and N<sub>2</sub>O is 298.



**Table 1-2. Summary of Operations GHG Emissions**

<b>Emission Source</b>	<b>CO<sub>2</sub> (metric tons/year)</b>	<b>CH<sub>4</sub> (metric tons/year)</b>	<b>N<sub>2</sub>O (metric tons/year)</b>	<b>CO<sub>2</sub>e<sup>[1]</sup> (metric tons/year)</b>
Operation and Maintenance Activities	13.57	6.20E-04	7.08E-04	13.79

[1] CO<sub>2</sub>e calculated by equation A-1 of 40 CFR 98.2, which states the total CO<sub>2</sub>e is equal to the GWP for each pollutant multiplied by the potential pollutant emissions. The GWP for CO<sub>2</sub> is 1, CH<sub>4</sub> is 25, and N<sub>2</sub>O is 298.



**Table 2-1. Conversions**

Unit	Amount	Unit
ton	2000	lbs
ton	0.907185	metric tons
ton	907.185	kg
ton	907185	grams
lb	453.592	grams
MWh	1000	kWh
hectare	2.47105	acres
1 MJ	0.372506136	hp-h
US gallon (diesel) <sup>[1]</sup>	144.945	MJ
US gallon (diesel)	53.9929019	hp-h

[1] US Energy Information Administration, 2023.

<https://www.eia.gov/energyexplained/units-and-calculators/energy-conversion-calculators.php>

**Table 2-2. Global Warming Potentials**

<b>Greenhouse Gas Name</b>	<b>CAS Number</b>	<b>Chemical Formula</b>	<b>Global Warming Potential (100-yr. )</b>
Carbon dioxide	124-38-9	CO <sub>2</sub>	1
Methane	74-82-8	CH <sub>4</sub>	25
Nitrous oxide	10024-97-2	N <sub>2</sub> O	298
Sulfur Hexafluoride	2551-62-4	SF <sub>6</sub>	22,800
Table A-1 to Subpart A of Part 98, Title 40, <a href="https://www.ecfr.gov/current/title-40/part-98/appendix-Table A-1 to Subpart A of Part 98">https://www.ecfr.gov/current/title-40/part-98/appendix-Table A-1 to Subpart A of Part 98</a>			



**Xcel Energy**  
**Alexandria to Big Oaks 345 KV Transmission Line Project**  
**GHG Calculations**

**Table 3-1. Construction Emissions from Mobile Combustion Sources - Greenfield**

Equipment Type <sup>[1]</sup>	Number of Units <sup>[1]</sup>	Horsepower <sup>[1]</sup>	Total Operation Time (hr) <sup>[1]</sup>	SCAQMD Classification <sup>[2]</sup>	Horsepower from SCAQMD <sup>[2]</sup>	CO <sub>2</sub> Emission Factor <sup>[2]</sup> (lb/hr)	CH <sub>4</sub> Emission Factor <sup>[2]</sup> (lb/hr)	N <sub>2</sub> O Emission Factor <sup>[3]</sup> (lb/hr)	CO <sub>2</sub> (metric tons)	CH <sub>4</sub> (metric tons)	N <sub>2</sub> O (metric tons)	CO <sub>2</sub> e <sup>[4]</sup> (metric tons)
ATV 4 TO 6 WHEEL, W/ DUMP	1	13.5	48	Dumpers/Tenders	25	7.62	8.30E-04	5.18E-04	0.20	2.20E-05	1.37E-05	0.21
BACKHOE W/ LOADER 4X4	2	94	48	Tractors/Loaders/Backhoes	120	51.73	2.75E-03	3.61E-03	1.37	7.26E-05	9.54E-05	1.40
BUCKET 105' WORK HEIGHT	2	300	320	Aerial Lifts	500	212.86	5.75E-03	1.15E-02	37.54	1.01E-03	2.03E-03	38.17
BUCKET 125' WORK HEIGHT 8X6	1	350	320	Aerial Lifts	500	212.86	5.75E-03	1.34E-02	37.54	1.01E-03	2.37E-03	38.27
CRANE TRUCK 45 T HYDRAULIC 6 AXLE	4	450	320	Cranes	500	180.10	8.48E-03	1.73E-02	31.76	1.50E-03	3.05E-03	32.71
DIGGER DERRICK 15 T CAP	3	330	320	Off-Highway Trucks	500	272.33	1.16E-02	7.55E-03	48.03	2.05E-03	1.33E-03	48.48
DOZER 10 THRU 12 T, W/ WINCH	1	80	96	Rubber Tired Dozers	175	129.48	1.16E-02	3.07E-03	6.85	6.16E-04	1.62E-04	6.91
DOZER 18 T W/ WINCH	3	190	96	Rubber Tired Dozers	250	183.49	1.32E-02	7.29E-03	9.71	6.98E-04	3.86E-04	9.84
FORKLIFT 11,000 THRU 12,000# TELESCOPIC BOOM	2	142	160	Forklifts	175	56.05	2.35E-03	5.45E-03	4.94	2.07E-04	4.81E-04	5.09
FRONT END LOADER 68,000# 4X4	2	386	160	Tractors/Loaders/Backhoes	500	344.85	1.24E-02	1.48E-02	30.41	1.10E-03	1.31E-03	30.83
HYDRAULIC BULLWHEEL BUNDLE TENSIONER	1	80	30	Other Construction Equipment	120	80.86	3.76E-03	3.07E-03	1.34	6.21E-05	5.08E-05	1.35
PULLER ROPE TRAILER 4,000# CAP W/ SPLIT REEL TOW TYPE TANDEM AXLE	1	74	30	Other Construction Equipment	120	80.86	3.76E-03	2.84E-03	1.34	6.21E-05	4.70E-05	1.35
PULLER CABLE TRAILER 30,000# CAP TOW TYPE TANDEM AXLE	1	400	30	Off-Highway Trucks	500	272.33	1.16E-02	9.15E-03	4.50	1.92E-04	1.51E-04	4.55
PULLER ROPE TRAILER 4 DRUM 3,500# CAP TOW TYPE TANDEM AXLE	1	115	30	Other Construction Equipment	120	80.86	3.76E-03	4.41E-03	1.34	6.21E-05	7.30E-05	1.36
300T AT Setting Crane	1	577	150	Cranes	750	303.04	1.43E-02	2.21E-02	25.05	1.18E-03	1.83E-03	25.63
60T RT Crane	2	320	160	Cranes	500	180.10	8.48E-03	1.23E-02	15.88	7.48E-04	1.08E-03	16.22
SKID STEER LOADER TRACK MTD 80 > 75 HP	3	95	160	Skid Steer Loaders	120	42.76	1.70E-03	3.65E-03	3.77	1.50E-04	3.22E-04	3.87
DUMP BOX TRUCK 2-1/2 T 6X6	2	505	80	Off-Highway Trucks	750	441.74	1.89E-02	1.15E-02	19.48	8.32E-04	5.09E-04	19.65
DUMP BOX TRUCK 1-1/4 & 1-1/2 T	2	420	160	Off-Highway Trucks	500	272.33	1.16E-02	9.60E-03	24.02	1.02E-03	8.47E-04	24.29
FLATBED (FRAMING) TRUCK 1-1/4 & 1-1/2 T	4	420	160	Off-Highway Trucks	500	272.33	1.16E-02	9.60E-03	24.02	1.02E-03	8.47E-04	24.29
PICKUP TRUCK 3/4 T	14	420	320	Off-Highway Trucks	500	272.33	1.16E-02	9.60E-03	48.03	2.05E-03	1.69E-03	48.59
TRUCK TRACTOR 2-1/2 T 6X4 & 5 T 6X6	7	450	96	Off-Highway Trucks	500	272.33	1.16E-02	1.03E-02	14.41	6.15E-04	5.44E-04	14.59
<b>TOTAL</b>	--	--	--	--	--	--	--	--	<b>391.53</b>	<b>0.02</b>	<b>0.02</b>	<b>397.67</b>

[1] Information provided by Xcel on 8/16/2023

[2] Emission factors are based on the South Coast Air Quality Management District. SCAB Fleet Average Emission Factors (Diesel), 2023. <http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/off-road-mobile-source-emission-factors>

[3] N<sub>2</sub>O emissions calculated using the EPA CCCL emission factors for construction/mining equipment, Table 5: Mobile Combustion CH<sub>4</sub> and N<sub>2</sub>O for Non-Road Vehicles, 2023. [https://www.epa.gov/system/files/documents/2023-03/ghg\\_emission\\_factors\\_hub.pdf](https://www.epa.gov/system/files/documents/2023-03/ghg_emission_factors_hub.pdf)

The emission factor for N<sub>2</sub>O is 0.56 g/gallon for diesel off-road trucks and 0.94 for diesel equipment.

[4] CO<sub>2</sub>e calculated by equation A-1 of 40 CFR 98.2, which states the total CO<sub>2</sub>e is equal to the GWP for each pollutant multiplied by the potential pollutant emissions. The GWP for CO<sub>2</sub> is 1, CH<sub>4</sub> is 25, and N<sub>2</sub>O is 298.

**Xcel Energy**  
**Alexandria to Big Oaks 345 KV Transmission Line Project**  
**GHG Calculations**

**Table 3-2. Construction Emissions from Mobile Combustion Sources - Second Circuit Install**

Equipment Type <sup>[1]</sup>	Number of Units <sup>[1]</sup>	Horsepower <sup>[1]</sup>	Total Operation Time (hr) <sup>[1]</sup>	SCAQMD Classification <sup>[2]</sup>	Horsepower from SCAQMD <sup>[2]</sup>	CO <sub>2</sub> Emission Factor <sup>[2]</sup> (lb/hr)	CH <sub>4</sub> Emission Factor <sup>[2]</sup> (lb/hr)	N <sub>2</sub> O Emission Factor <sup>[3]</sup>	CO <sub>2</sub> (metric tons)	CH <sub>4</sub> (metric tons)	N <sub>2</sub> O (metric tons)	CO <sub>2</sub> e <sup>[4]</sup> (metric tons)
ATV 4 TO 6 WHEEL, W/ DUMP	1	13.5	264	Dumpers/Tenders	25	7.62	8.30E-04	5.18E-04	1.11	1.21E-04	7.54E-05	1.13
BACKHOE W/ LOADER 4X4	2	94	264	Tractors/Loaders/Backhoes	120	51.73	2.75E-03	3.61E-03	7.53	4.00E-04	5.25E-04	7.69
BUCKET 105' WORK HEIGHT	1	300	1760	Aerial Lifts	500	212.86	5.75E-03	1.15E-02	206.48	5.58E-03	1.12E-02	209.95
BUCKET 125' WORK HEIGHT 8X6	1	350	1760	Aerial Lifts	500	212.86	5.75E-03	1.34E-02	206.48	5.58E-03	1.30E-02	210.50
CRANE TRUCK 45 T HYDRAULIC 6 AXLE	4	450	1760	Cranes	500	180.10	8.48E-03	1.73E-02	174.70	8.22E-03	1.68E-02	179.90
DIGGER DERRICK 15 T CAP	3	330	1760	Off-Highway Trucks	500	272.33	1.16E-02	7.55E-03	264.17	1.13E-02	7.32E-03	266.64
DOZER 10 THRU 12 T, W/ WINCH	1	80	528	Rubber Tired Dozers	175	129.48	1.16E-02	3.07E-03	37.68	3.39E-03	8.94E-04	38.03
DOZER 18 T W/ WINCH	2	190	528	Rubber Tired Dozers	250	183.49	1.32E-02	7.29E-03	53.40	3.84E-03	2.12E-03	54.12
FORKLIFT 11,000 THRU 12,000# TELESCOPIC BOOM	1	142	880	Forklifts	175	56.05	2.35E-03	5.45E-03	27.19	1.14E-03	2.64E-03	28.00
FRONT END LOADER 68,000# 4X4	1	386	880	Tractors/Loaders/Backhoes	500	344.85	1.24E-02	1.48E-02	167.26	6.03E-03	7.19E-03	169.55
HYDRAULIC BULLWHEEL BUNDLE TENSIONER	1	80	264	Other Construction Equipment	120	80.86	3.76E-03	3.07E-03	11.77	5.47E-04	4.47E-04	11.91
PULLER ROPE TRAILER 4,000# CAP W/ SPLIT REEL TOW TYPE TANDEM AXLE	1	74	264	Other Construction Equipment	120	80.86	3.76E-03	2.84E-03	11.77	5.47E-04	4.13E-04	11.90
PULLER CABLE TRAILER 30,000# CAP TOW TYPE TANDEM AXLE	1	400	264	Off-Highway Trucks	500	272.33	1.16E-02	9.15E-03	39.63	1.69E-03	1.33E-03	40.06
PULLER ROPE TRAILER 4 DRUM 3,500# CAP TOW TYPE TANDEM AXLE	1	115	264	Other Construction Equipment	120	80.86	3.76E-03	4.41E-03	11.77	5.47E-04	6.42E-04	11.97
60T RT Crane	1	320	528	Cranes	500	180.10	8.48E-03	1.23E-02	52.41	2.47E-03	3.57E-03	53.54
SKID STEER LOADER TRACK MTD 80 > 75 HP	2	95	880	Skid Steer Loaders	120	42.76	1.70E-03	3.65E-03	20.74	8.23E-04	1.77E-03	21.29
DUMP BOX TRUCK 2-1/2 T 6X6	1	505	440	Off-Highway Trucks	500	272.33	1.16E-02	1.15E-02	66.04	2.82E-03	2.80E-03	66.95
DUMP BOX TRUCK 1-1/4 & 1-1/2 T	2	420	880	Off-Highway Trucks	500	272.33	1.16E-02	9.60E-03	132.09	5.63E-03	4.66E-03	133.62
FLATBED (FRAMING) TRUCK 1-1/4 & 1-1/2 T	3	420	880	Off-Highway Trucks	500	272.33	1.16E-02	9.60E-03	132.09	5.63E-03	4.66E-03	133.62
PICKUP TRUCK 3/4 T	9	420	1760	Off-Highway Trucks	500	272.33	1.16E-02	9.60E-03	264.17	1.13E-02	9.32E-03	267.23
TRUCK TRACTOR 2-1/2 T 6X4 & 5 T 6X6	3	450	528	Off-Highway Trucks	500	272.33	1.16E-02	1.03E-02	79.25	3.38E-03	2.99E-03	80.23
<b>TOTAL</b>	--	--	--	--	--	--	--	--	<b>1,967.71</b>	<b>0.08</b>	<b>0.09</b>	<b>1,997.84</b>

[1] Information provided by Xcel on 8/16/2023

[2] Emission factors are based on the South Coast Air Quality Management District. SCAB Fleet Average Emission Factors (Diesel), 2023. <http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/off-road-mobile-source-emission-factors>

[3] N2O emissions calculated using the EPA CCCL emission factors for construction/mining equipment, Table 5: Mobile Combustion CH4 and N2O for Non-Road Vehicles, 2023. [https://www.epa.gov/system/files/documents/2023-03/ghg\\_emission\\_factors\\_hub.pdf](https://www.epa.gov/system/files/documents/2023-03/ghg_emission_factors_hub.pdf)

The emission factor for N2O is 0.56 g/gallon for diesel off-road trucks and 0.94 for diesel equipment.

[4] CO<sub>2</sub>e calculated by equation A-1 of 40 CFR 98.2, which states the total CO<sub>2</sub>e is equal to the GWP for each pollutant multiplied by the potential pollutant emissions. The GWP for CO<sub>2</sub> is 1, CH<sub>4</sub> is 25, and N<sub>2</sub>O is 298.

Table 4-1. Operations Emissions from Mobile Combustion Sources

Equipment Type <sup>[1]</sup>	Number of Units <sup>[1]</sup>	Total Operation Time (hr) <sup>[1]</sup>	SCAQMD Classification <sup>[2]</sup>	Horsepower from SCAQMD <sup>[2]</sup>	CO <sub>2</sub> Emission Factor <sup>[2]</sup> (lb/hr)	CH <sub>4</sub> Emission Factor <sup>[2]</sup> (lb/hr)	N <sub>2</sub> O Emission Factor <sup>[3]</sup> (lb/hr)	CO <sub>2</sub> (metric tons)	CH <sub>4</sub> (metric tons)	N <sub>2</sub> O (metric tons)	CO <sub>2</sub> e <sup>[4]</sup> (metric tons)
E4_OTL EQP_PICKUP TRUCK-F350_CREW CAB_8001-11K_4X4	1	10	Off-Highway Trucks	500	272.33	1.16E-02	1.14E-02	1.50	6.40E-05	6.30E-05	1.52
K8_OTL EQP_HEAVY BUCKET TRUCK 100 FT_RUBBER TIRE_6X6	1	10	Off-Highway Trucks	500	272.33	1.16E-02	1.14E-02	1.50	6.40E-05	6.30E-05	1.52
N4_OTL EQP_TRUCK MOUNTED CRANE_45T/50T_RUBBER TIRE	1	10	Cranes	500	180.10	8.48E-03	1.92E-02	0.99	4.67E-05	1.06E-04	1.03
S2_OTL EQP_BACKHOE-LOADER_RUBBER TIRE_4X4	1	10	Tractors/Loaders/Backhoes	120	51.73	2.75E-03	4.61E-03	0.29	1.51E-05	2.54E-05	0.29
U1_OTL EQP_SKID STEER LOADER_TRACKED	1	10	Skid Steer Loaders	120	42.76	1.70E-03	4.61E-03	0.24	9.35E-06	2.54E-05	0.24
W2_OTL EQP_ATV/UTV POLARIS/CANAM/ARGO_RUBBER	1	40	Rubber Tired Loaders	25	16.93	1.84E-03	9.60E-04	0.37	4.06E-05	2.12E-05	0.38
R1_OTL EQP_TRAILER UTV/FRAMING/ENCLOSED_<=12K_RUBBER TIRE_TANDEM	1	40	Other Construction Equipment	120	80.86	3.76E-03	4.61E-03	1.78	8.28E-05	1.02E-04	1.81
D2_OTL EQP_PICKUP TRUCK-F150_6001-8K_4X4	1	40	Off-Highway Trucks	500	272.33	1.16E-02	1.14E-02	6.00	2.56E-04	2.52E-04	6.09
R2_OTL EQP_TRAILER MEDIUM EQUIP_12001-20K_RUBBER TIRE_TANDEM	1	10	Other Construction Equipment	120	80.86	3.76E-03	4.61E-03	0.45	2.07E-05	2.54E-05	0.45
R3_OTL EQP_TRAILER LARGE EQUIP_>20K_RUBBER TIRE_TANDEM	1	10	Other Construction Equipment	120	80.86	3.76E-03	4.61E-03	0.45	2.07E-05	2.54E-05	0.45
<b>TOTAL</b>	--	--	--	--	--	--	--	<b>13.57</b>	<b>0.00</b>	<b>0.00</b>	<b>13.79</b>

[1] Information provided by Xcel 8/17/2023  
 [2] Emission factors are based on the South Coast Air Quality Management District. SCAB Fleet Average Emission Factors (Diesel), 2023. <http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/off-road-mobile-source-emission-factors>  
 [3] N2O emissions calculated using the EPA CCCL emission factors for construction/mining equipment, Table 5: Mobile Combustion CH4 and N2O for Non-Road Vehicles, 2023. [https://www.epa.gov/system/files/documents/2023-03/ghg\\_emission\\_factors\\_hub.pdf](https://www.epa.gov/system/files/documents/2023-03/ghg_emission_factors_hub.pdf)  
 The emission factor for N2O is 0.56 g/gallon for diesel off-road trucks and 0.94 for diesel equipment.  
 [4] CO<sub>2</sub>e calculated by equation A-1 of 40 CFR 98.2, which states the total CO<sub>2</sub>e is equal to the GWP for each pollutant multiplied by the potential pollutant emissions. The GWP for CO<sub>2</sub> is 1, CH<sub>4</sub> is 25, and N<sub>2</sub>O is 298.

## **Appendix J**

### **Information for Planning and Consultation (IPaC) Species List**



# United States Department of the Interior



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In Reply Refer To:

May 04, 2023

Project Code: 2023-0078145

Project Name: ALEXANDRIA TO BIG OAKS 345 KV TRANSMISSION LINE PROJECT

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

This response has been generated by the Information, Planning, and Conservation (IPaC) system to provide information on natural resources that could be affected by your project. The U.S. Fish and Wildlife Service (Service) provides this response under the authority of the Endangered Species Act of 1973 (16 U.S.C. 1531-1543), the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d), the Migratory Bird Treaty Act (16 U.S.C. 703-712), and the Fish and Wildlife Coordination Act (16 U.S.C. 661 *et seq.*).

### **Threatened and Endangered Species**

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and may be affected by your proposed project. The species list fulfills the requirement for obtaining a Technical Assistance Letter from the U.S. Fish and Wildlife Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the ECOS IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS IPaC system by completing the same process used to receive the enclosed list.

### **Consultation Technical Assistance**

Please refer to our [Section 7 website](#) for guidance and technical assistance, including [step-by-step instructions](#) for making effects determinations for each species that might be present and for specific guidance on the following types of projects: projects in developed areas, HUD, CDBG, EDA, USDA Rural Development projects, pipelines, buried utilities, telecommunications, and requests for a Conditional Letter of Map Revision (CLOMR) from FEMA.

We recommend running the project (if it qualifies) through our **Minnesota-Wisconsin Federal Endangered Species Determination Key (Minnesota-Wisconsin ("D-key"))**. A [demonstration video](#) showing how-to access and use the determination key is available. Please note that the Minnesota-Wisconsin D-key is the third option of 3 available d-keys. D-keys are tools to help Federal agencies and other project proponents determine if their proposed action has the potential to adversely affect federally listed species and designated critical habitat. The Minnesota-Wisconsin D-key includes a structured set of questions that assists a project proponent in determining whether a proposed project qualifies for a certain predetermined consultation outcome for all federally listed species found in Minnesota and Wisconsin (except for the northern long-eared bat- see below), which includes determinations of "no effect" or "may affect, not likely to adversely affect." In each case, the Service has compiled and analyzed the best available information on the species' biology and the impacts of certain activities to support these determinations.

If your completed d-key output letter shows a "No Effect" (NE) determination for all listed species, print your IPaC output letter for your files to document your compliance with the Endangered Species Act.

For Federal projects with a "Not Likely to Adversely Affect" (NLAA) determination, our concurrence becomes valid if you do not hear otherwise from us after a 30-day review period, as indicated in your letter.

If your d-key output letter indicates additional coordination with the Minnesota-Wisconsin Ecological Services Field Office is necessary (i.e., you get a "May Affect" determination), you will be provided additional guidance on contacting the Service to continue ESA coordination outside of the key; ESA compliance cannot be concluded using the key for "May Affect" determinations unless otherwise indicated in your output letter.

**Note: Once you obtain your official species list, you are not required to continue in IPaC with d-keys, although in most cases these tools should expedite your review.** If you choose to make an effects determination on your own, you may do so. If the project is a Federal Action, you may want to review our section 7 step-by-step instructions before making your determinations.

### **Using the IPaC Official Species List to Make No Effect and May Affect Determinations for Listed Species**

1. If IPaC returns a result of "There are no listed species found within the vicinity of the project," then project proponents can conclude the proposed activities will have **no effect** on any federally listed species under Service jurisdiction. Concurrence from the Service is not required for **no effect** determinations. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records.
2. If IPaC returns one or more federally listed, proposed, or candidate species as potentially present in the action area of the proposed project – other than bats (see below) – then project proponents must determine if proposed activities will have **no effect** on or **may affect** those species. For assistance in determining if suitable habitat for listed, candidate, or proposed species occurs within your project area or if species may be affected by project activities, you can obtain [Life History Information for Listed and Candidate Species](#) on our office website. If no impacts will occur to a species on the IPaC species list (e.g., there is no habitat present in the project area), the appropriate determination is **no effect**. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records.

3. Should you determine that project activities **may affect** any federally listed, please contact our office for further coordination. Letters with requests for consultation or correspondence about your project should include the Consultation Tracking Number in the header. Electronic submission is preferred.

### **Northern Long-Eared Bats**

Northern long-eared bats occur throughout Minnesota and Wisconsin and the information below may help in determining if your project may affect these species.

This species hibernates in caves or mines only during the winter. In Minnesota and Wisconsin, the hibernation season is considered to be November 1 to March 31. During the active season (April 1 to October 31) they roost in forest and woodland habitats. Suitable summer habitat for northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags  $\geq 3$  inches dbh for northern long-eared bat that have exfoliating bark, cracks, crevices, and/or hollows), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) of forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat and evaluated for use by bats. If your project will impact caves or mines or will involve clearing forest or woodland habitat containing suitable roosting habitat, northern long-eared bats could be affected.

Examples of unsuitable habitat include:

- Individual trees that are greater than 1,000 feet from forested or wooded areas,
- Trees found in highly developed urban areas (e.g., street trees, downtown areas),
- A pure stand of less than 3-inch dbh trees that are not mixed with larger trees, and
- A monoculture stand of shrubby vegetation with no potential roost trees.

If IPaC returns a result that northern long-eared bats are potentially present in the action area of the proposed project, project proponents can conclude the proposed activities **may affect** this species **IF** one or more of the following activities are proposed:

- Clearing or disturbing suitable roosting habitat, as defined above, at any time of year,
- Any activity in or near the entrance to a cave or mine,
- Mining, deep excavation, or underground work within 0.25 miles of a cave or mine,
- Construction of one or more wind turbines, or
- Demolition or reconstruction of human-made structures that are known to be used by bats based on observations of roosting bats, bats emerging at dusk, or guano deposits or stains.

*If none of the above activities are proposed*, project proponents can conclude the proposed activities will have **no effect** on the northern long-eared bat. Concurrence from the Service is not required for **No**

**Effect** determinations. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records.

*If any of the above activities are proposed*, and the northern long-eared bat appears on the user's species list, the federal project user will be directed to either the range-wide northern long-eared bat D-key or the Federal Highways Administration, Federal Railways Administration, and Federal Transit Administration Indiana bat/ Northern long-eared bat D-key, depending on the type of project and federal agency involvement. Similar to the Minnesota-Wisconsin D-key, these d-keys helps to determine if prohibited take might occur and, if not, will generate an automated verification letter.

*Please note:* On November 30, 2022, the Service published a proposal final rule to reclassify the northern long-eared bat as endangered under the Endangered Species Act. On January 26, 2023, the Service published a 60-day extension for the final reclassification rule in the Federal Register, moving the effective listing date from January 30, 2023, to March 31, 2023. This extension will provide stakeholders and the public time to preview interim guidance and consultation tools before the rule becomes effective. When available, the tools will be available on the Service's northern long-eared bat website (<https://www.fws.gov/species/northern-long-eared-bat-myotis-septentrionalis>). Once the final rule goes into effect on March 31, 2023, the 4(d) D-key will no longer be available (4(d) rules are not available for federally endangered species) and will be replaced with a new Range-wide NLEB D-key (range-wide d-key). For projects not completed by March 31, 2023, that were previously reviewed under the 4(d) d-key, there may be a need for reinitiation of consultation. For these ongoing projects previously reviewed under the 4(d) d-key that may result in incidental take of the northern long-eared bat, we recommend you review your project using the new range-wide d-key once available. If your project does not comply with the range-wide d-key, it may be eligible for use of the Interim (formal) Consultation framework (framework). The framework is intended to facilitate the transition from the 4(d) rule to typical Section 7 consultation procedures for federally endangered species and will be available only until spring 2024. Again, when available, these tools (new range-wide d-key and framework) will be available on the Service's [northern long-eared bat website](#).

### **Whooping Crane**

Whooping crane is designated as a non-essential experimental population in Wisconsin and consultation under Section 7(a)(2) of the Endangered Species Act is only required if project activities will occur within a National Wildlife Refuge or National Park. If project activities are proposed on lands outside of a National Wildlife Refuge or National Park, then you are not required to consult. For additional information on this designation and consultation requirements, please review "[Establishment of a Nonessential Experimental Population of Whooping Cranes in the Eastern United States](#)."

### **Other Trust Resources and Activities**

*Bald and Golden Eagles* - Although the bald eagle has been removed from the endangered species list, this species and the golden eagle are protected by the Bald and Golden Eagle Act and the Migratory Bird Treaty Act. Should bald or golden eagles occur within or near the project area please contact our office for further coordination. For communication and wind energy projects, please refer to additional guidelines below.

*Migratory Birds* - The Migratory Bird Treaty Act (MBTA) prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Service. The Service has the responsibility under the MBTA to proactively prevent the



mortality of migratory birds whenever possible and we encourage implementation of [recommendations that minimize potential impacts to migratory birds](#). Such measures include clearing forested habitat outside the nesting season (generally March 1 to August 31) or conducting nest surveys prior to clearing to avoid injury to eggs or nestlings.

*Communication Towers* - Construction of new communications towers (including radio, television, cellular, and microwave) creates a potentially significant impact on migratory birds, especially some 350 species of night-migrating birds. However, the Service has developed [voluntary guidelines for minimizing impacts](#).

*Transmission Lines* - Migratory birds, especially large species with long wingspans, heavy bodies, and poor maneuverability can also collide with power lines. In addition, mortality can occur when birds, particularly hawks, eagles, kites, falcons, and owls, attempt to perch on uninsulated or unguarded power poles. To minimize these risks, please refer to [guidelines](#) developed by the Avian Power Line Interaction Committee and the Service. Implementation of these measures is especially important along sections of lines adjacent to wetlands or other areas that support large numbers of raptors and migratory birds.

*Wind Energy* - To minimize impacts to migratory birds and bats, wind energy projects should follow the Service's [Wind Energy Guidelines](#). In addition, please refer to the Service's [Eagle Conservation Plan Guidance](#), which provides guidance for conserving bald and golden eagles in the course of siting, constructing, and operating wind energy facilities.

#### **State Department of Natural Resources Coordination**

While it is not required for your Federal section 7 consultation, please note that additional state endangered or threatened species may also have the potential to be impacted. Please contact the Minnesota or Wisconsin Department of Natural Resources for information on state listed species that may be present in your proposed project area.

##### *Minnesota*

[Minnesota Department of Natural Resources - Endangered Resources Review Homepage](#)

Email: [Review.NHIS@state.mn.us](mailto:Review.NHIS@state.mn.us)

##### *Wisconsin*

[Wisconsin Department of Natural Resources - Endangered Resources Review Homepage](#)

Email: [DNRERReview@wi.gov](mailto:DNRERReview@wi.gov)

We appreciate your concern for threatened and endangered species. Please feel free to contact our office with questions or for additional information.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Migratory Birds
- Wetlands

# **OFFICIAL SPECIES LIST**

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Minnesota-Wisconsin Ecological Services Field Office**

3815 American Blvd East

Bloomington, MN 55425-1659

(952) 858-0793

## PROJECT SUMMARY

Project Code: 2023-0078145

Project Name: ALEXANDRIA TO BIG OAKS 345 KV TRANSMISSION LINE PROJECT

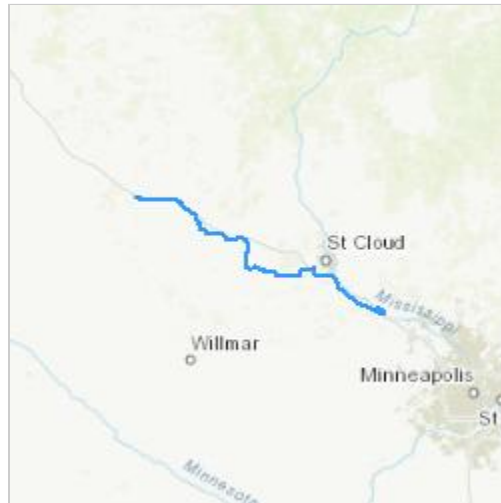
Project Type: Transmission Line - New Constr - Above Ground

Project Description: Xcel Energy, along with other utility partners, is proposing new transmission line infrastructure that will improve electric reliability in the region, reduce congestion on the transmission system, and increase access to new low-cost renewable energy in the coming years. The Alexandria-Big Oaks 345 kV transmission line would add a second transmission circuit on the open side of the existing CapX2020 transmission line structures between Alexandria and Monticello, Minnesota, along with new structures to connect to the new Big Oaks substation, which will be built near Xcel Energy's Sherco power plant. The Project would include four areas that deviate from the existing CAPX2020 line, including crossing the Mississippi River near Monticello.

It is anticipated that Project construction will occur 2025-2030.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@45.58921575,-94.70608615711583,14z>



Counties: Minnesota

## ENDANGERED SPECIES ACT SPECIES

There is a total of 4 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. [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.

### MAMMALS

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Endangered
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/10515">https://ecos.fws.gov/ecp/species/10515</a>	Proposed Endangered

### BIRDS

NAME	STATUS
Whooping Crane <i>Grus americana</i> Population: U.S.A. (AL, AR, CO, FL, GA, ID, IL, IN, IA, KY, LA, MI, MN, MS, MO, NC, NM, OH, SC, TN, UT, VA, WI, WV, western half of WY) No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/758">https://ecos.fws.gov/ecp/species/758</a>	Experimental Population, Non- Essential

### INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate

## **CRITICAL HABITATS**

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

# USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

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.

The following FWS National Wildlife Refuge Lands and Fish Hatcheries lie fully or partially within your project area:

FACILITY NAME	ACRES
DOUGLAS COUNTY WATERFOWL PRODUCTION AREA OF MN <a href="https://www.fws.gov/refuges/profiles/index.cfm?id=32585">https://www.fws.gov/refuges/profiles/index.cfm?id=32585</a>	29,119.721
STEARNS COUNTY WATERFOWL PRODUCTION AREA <a href="https://www.fws.gov/refuges/profiles/index.cfm?id=32588">https://www.fws.gov/refuges/profiles/index.cfm?id=32588</a>	5,061.853

# MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

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](#).

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1. The [Migratory Birds Treaty Act](#) of 1918.
  2. The [Bald and Golden Eagle Protection Act](#) of 1940.
  3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

**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
American Golden-plover <i>Pluvialis dominica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Bald Eagle <i>Haliaeetus leucocephalus</i> 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.	Breeds Dec 1 to Aug 31

NAME	BREEDING SEASON
<p>Black Tern <i>Chlidonias niger</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/3093">https://ecos.fws.gov/ecp/species/3093</a></p>	Breeds May 15 to Aug 20
<p>Black-billed Cuckoo <i>Coccyzus erythrophthalmus</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/9399">https://ecos.fws.gov/ecp/species/9399</a></p>	Breeds May 15 to Oct 10
<p>Bobolink <i>Dolichonyx oryzivorus</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 20 to Jul 31
<p>Canada Warbler <i>Cardellina canadensis</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 20 to Aug 10
<p>Cerulean Warbler <i>Dendroica cerulea</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/2974">https://ecos.fws.gov/ecp/species/2974</a></p>	Breeds Apr 22 to Jul 20
<p>Chimney Swift <i>Chaetura pelagica</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Mar 15 to Aug 25
<p>Eastern Whip-poor-will <i>Antrostomus vociferus</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 1 to Aug 20
<p>Golden Eagle <i>Aquila chrysaetos</i>  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.  <a href="https://ecos.fws.gov/ecp/species/1680">https://ecos.fws.gov/ecp/species/1680</a></p>	Breeds elsewhere
<p>Golden-winged Warbler <i>Vermivora chrysoptera</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/8745">https://ecos.fws.gov/ecp/species/8745</a></p>	Breeds May 1 to Jul 20
<p>Henslow's Sparrow <i>Ammodramus henslowii</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/3941">https://ecos.fws.gov/ecp/species/3941</a></p>	Breeds May 1 to Aug 31
<p>Lesser Yellowlegs <i>Tringa flavipes</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/9679">https://ecos.fws.gov/ecp/species/9679</a></p>	Breeds elsewhere



NAME	BREEDING SEASON
<p>Long-eared Owl <i>asio otus</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p><a href="https://ecos.fws.gov/ecp/species/3631">https://ecos.fws.gov/ecp/species/3631</a></p>	Breeds Mar 1 to Jul 15
<p>Marbled Godwit <i>Limosa fedoa</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p><a href="https://ecos.fws.gov/ecp/species/9481">https://ecos.fws.gov/ecp/species/9481</a></p>	Breeds May 1 to Jul 31
<p>Red-headed Woodpecker <i>Melanerpes erythrocephalus</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 10 to Sep 10
<p>Ruddy Turnstone <i>Arenaria interpres morinella</i></p> <p>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p>	Breeds elsewhere
<p>Rusty Blackbird <i>Euphagus carolinus</i></p> <p>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p>	Breeds elsewhere
<p>Short-billed Dowitcher <i>Limnodromus griseus</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p><a href="https://ecos.fws.gov/ecp/species/9480">https://ecos.fws.gov/ecp/species/9480</a></p>	Breeds elsewhere
<p>Upland Sandpiper <i>Bartramia longicauda</i></p> <p>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p> <p><a href="https://ecos.fws.gov/ecp/species/9294">https://ecos.fws.gov/ecp/species/9294</a></p>	Breeds May 1 to Aug 31
<p>Western Grebe <i>aechmophorus occidentalis</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p><a href="https://ecos.fws.gov/ecp/species/6743">https://ecos.fws.gov/ecp/species/6743</a></p>	Breeds Jun 1 to Aug 31
<p>Wood Thrush <i>Hylocichla mustelina</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 10 to Aug 31

## 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.

### **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.

### **No Data (—)**

A week is marked as having no data if there were no survey events for that week.

### **Survey Timeframe**

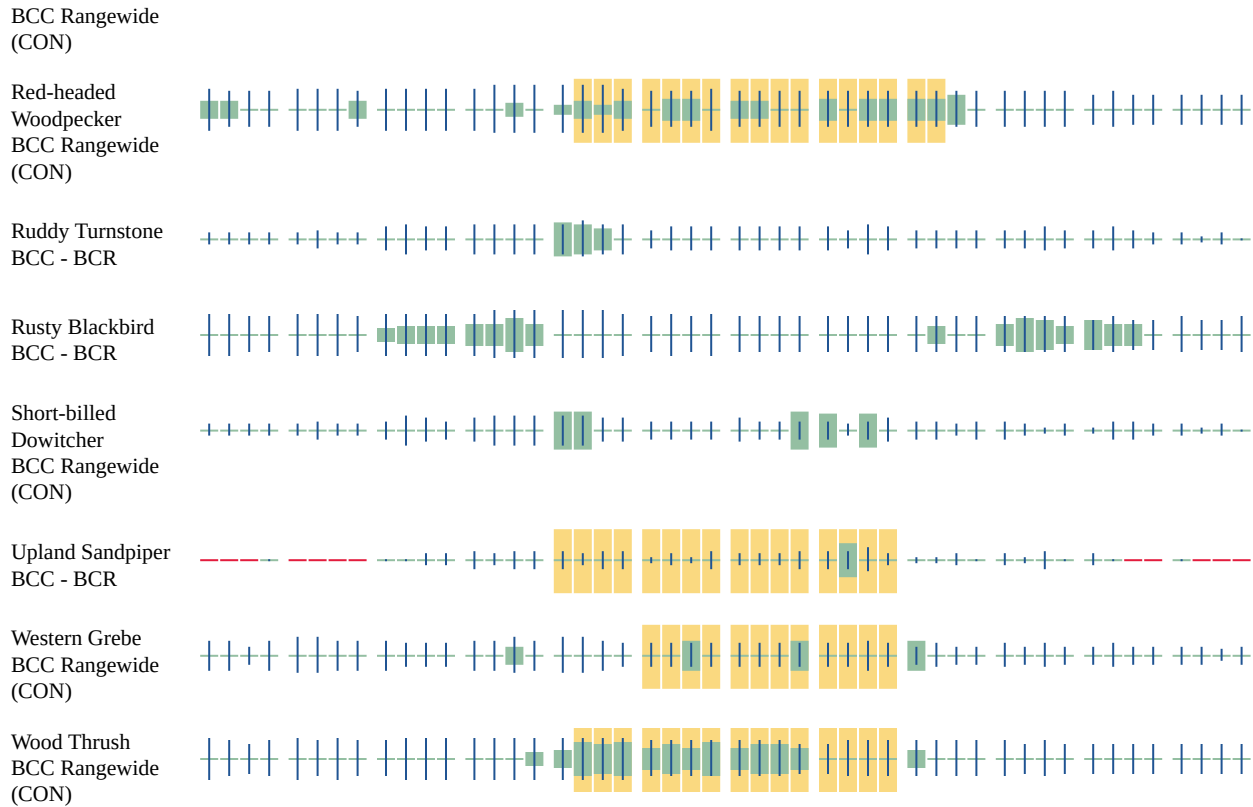
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

---

■ probability of presence   ■ breeding season   | survey effort   — no data

SPECIES      JAN    FEB    MAR    APR    MAY    JUN    JUL    AUG    SEP    OCT    NOV    DEC





Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

## MIGRATORY BIRDS FAQ

**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](#) 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 list of migratory birds that potentially occur 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 [Rapid Avian Information Locator \(RAIL\) 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 or migrating in my 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 query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. 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.

# WETLANDS

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.

WETLAND INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED.  
PLEASE VISIT [HTTPS://WWW.FWS.GOV/WETLANDS/DATA/MAPPER.HTML](https://www.fws.gov/wetlands/data/mapper.html) OR CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

## **IPAC USER CONTACT INFORMATION**

Agency: Barr Engineering  
Name: Jess Butler  
Address: 4300 MarketPointe Drive  
Address Line 2: Suite 200  
City: Minneapolis  
State: MN  
Zip: 55435  
Email: [jbutler@barr.com](mailto:jbutler@barr.com)  
Phone: 9528322694



## **Appendix K**

### **90-Day Pre-application Letter to Local Units of Government and Affidavits of Mailing**

**AFFIDAVIT OF MAILING**

IN THE MATTER OF THE APPLICATION FOR A  
ROUTE PERMIT FOR THE ALEXANDRIA – BIG  
OAKS 345-KV TRANSMISSION PROJECT

MPUC DOCKET No. E002, E017, ET2, E015,  
ET10/TL-23-159

STATE OF MINNESOTA    )  
                                          ) SS.  
COUNTY OF HENNEPIN    )

I, Theresa Senart, hereby certify that on the 31st day of March, 2023, I sent via U.S. Mail a true and a correct copy of the 90-Day Pre-Application Notice Letter attached hereto as **Exhibit 1** to all Local Government Units, Tribal Nations, and Tribal Offices on the list attached hereto as **Exhibit 2**.

*Theresa Senart*  
\_\_\_\_\_  
Theresa Senart

Subscribed and sworn to before me  
this 28th day of April, 2023

*Roshelle Herstein*  
\_\_\_\_\_  
Notary Public





414 Nicollet Mall  
Minneapolis, MN 55401

March 31, 2023

**Via U.S. Mail**

RE: NOTICE OF AVAILABILITY FOR MEETING; MINN. STAT. § 216E.03, SUBD. 3A

IN THE MATTER OF THE APPLICATION FOR A ROUTE PERMIT FOR THE  
ALEXANDRIA – BIG OAKS TRANSMISSION PROJECT

Dear Local Government Official,

I am writing to offer you the opportunity to request a consultation meeting regarding a proposed transmission line project between Alexandria and Becker. The majority of this portion of the project will include adding a second set of wires that will be strung on existing transmission line structures except for a short one-to four-mile segment of new construction near Monticello and Becker.

Northern States Power Company, doing business as Xcel Energy, along with Great River Energy, Minnesota Power, Otter Tail Power Company (Otter Tail), and Western Minnesota Municipal Power Agency (Western Minnesota) (collectively, the Applicants) are proposing to construct a new transmission line project known as the Big Stone South – Alexandria – Big Oaks 345 kilovolt (kV) Transmission Line Project (Project). The Project consists of a new 345 kV transmission line between Big Stone City, South Dakota, and Sherburne County, Minnesota which will be comprised of two segments.

- The western segment will run from the existing Big Stone South Substation near Big Stone City, South Dakota to the existing Alexandria Substation near Alexandria, Minnesota (Western Segment); and
- The eastern segment will continue on from the existing Alexandria Substation to a new Big Oaks Substation in Sherburne County, Minnesota (Eastern Segment).<sup>1</sup>

A map of the proposed Project is attached to this letter as Figure 1. The majority of the Eastern Segment of the Project will include adding a second set of wires that will be strung on existing transmission line structures except for a short one-to four-mile

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<sup>1</sup> The Western Segment and the Eastern Segment are herein referred to collectively as the Project.

segment of new construction to connect the new 345 kV transmission line to the new Big Oaks Substation. Proposed routes for the Western Segment of the Project are currently under evaluation by Otter Tail and Missouri River Energy Services, on behalf of Western Minnesota.

The Project was studied, reviewed, and approved as part of the Long-Range Transmission Planning (LRTP) Tranche 1 Portfolio by the Midcontinent Independent System Operator, Inc.'s (MISO) Board of Directors in July 2022 as part of its 2021 Transmission Expansion Plan (MTEP21) report.<sup>2</sup>

The LRTP Tranche 1 Portfolio will provide significant benefits to the Midwest subregion of the MISO footprint by facilitating more reliable, safe, and affordable energy delivery. The Project, designated as LRTP#2 in MTEP21, is a key part of the LRTP Tranche 1 Portfolio. More specifically, the existing 230 kV transmission system in eastern North Dakota and South Dakota plays a key role in transporting and delivering energy to customers in Minnesota. The 230 kV system is at its capacity leading to a number of reliability concerns that could affect customers' service. The Project is needed to provide additional transmission capacity, to mitigate current capacity issues, and to improve electric system reliability throughout the region as more renewable energy resources are added to the electric system in and around the region.

Two approvals must be obtained from the Minnesota Public Utilities Commission (Commission) before high voltage transmission lines like the proposed Project can be built: a Certificate of Need and a Route Permit. In the Certificate of Need proceeding, the Commission determines whether a proposed transmission line project is needed and the appropriate size, configuration, and timing. If the Commission determines that the Project is needed, the Commission will then determine the route for the proposed transmission lines. There are multiple opportunities for public and stakeholder input in these proceedings.

The Applicants intend to include both segments of the Project in a single Certificate of Need application and each segment in separate Route Permit applications. The Applicants plan to submit a Certificate of Need application for the entire Project and a Route Permit application for the Eastern Segment in the third quarter of 2023. Otter Tail and Western Minnesota are currently planning to submit a Route Permit application for the Western Segment of the Project in the fourth quarter of 2024. Likewise, Otter Tail and Western Minnesota will be filing a Route Permit application

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<sup>2</sup> A copy of MTEP21 report is available online at: <https://cdn.misoenergy.org/MTEP21%20Addendum-LRTP%20Tranche%201%20Report%20with%20Executive%20Summary625790.pdf>.

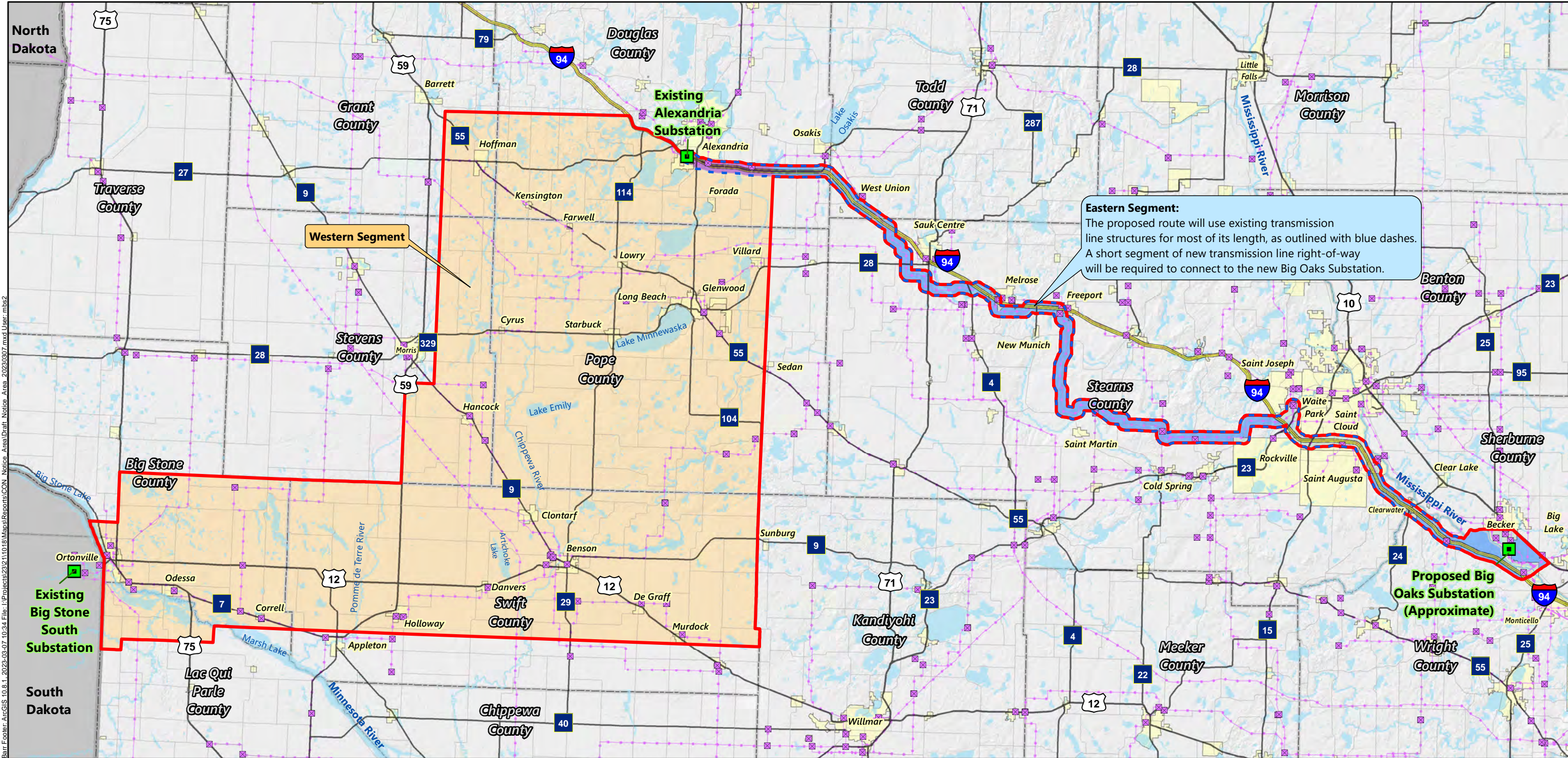
in the future for the Western Segment with the South Dakota Public Utilities Commission.

Minnesota Statute § 216E.03, subd. 3b provides local units of government the opportunity to request a consultation meeting regarding the proposed Project prior to the submission of a Route Permit application to the Commission. This letter is being provided because the Applicants are anticipating to file a Route Permit application for the Eastern Segment within the next ninety days. A separate letter will be provided to the appropriate local government officials prior to filing a Route Permit application for the Western Segment. If you would like to request a meeting, please call 1-888-231-7068 or send an email to [AlexandriatoBigOaks@XcelEnergy.com](mailto:AlexandriatoBigOaks@XcelEnergy.com). I am happy to discuss any questions that you may have about the Project. Additional information about the Project can also be found on the Project's websites: [www.AlexandriatoBigOaks.com](http://www.AlexandriatoBigOaks.com) (Eastern Segment) and [www.BigStoneSouthtoAlexandria.com](http://www.BigStoneSouthtoAlexandria.com) (Western Segment).

Sincerely,

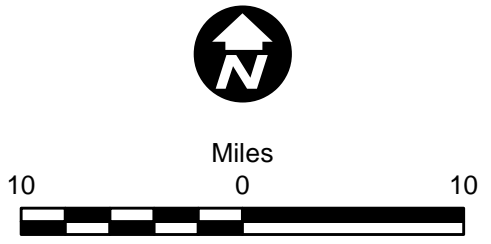
*/s/ Matt Langan*

MATT LANGAN  
PRINCIPAL AGENT, SITING AND LAND RIGHTS  
NORTHERN STATES POWER COMPANY



Barr Footer: ArcGIS 10.8.1, 2023-03-07 10:34 File: I:\Projects\23211018\MapReports\CON Notice Area\Draft Notice Area 20230307.mxd User: mbs2

- |  |                                   |  |                            |  |                          |
|--|-----------------------------------|--|----------------------------|--|--------------------------|
|  | Certificate of Need               |  | Project Substation         |  | Interstate Highway       |
|  | Public Notice Area                |  | Existing Substation        |  | US Highway               |
|  | Western Segment                   |  | Existing Transmission Line |  | State Highway            |
|  | Eastern Segment                   |  | Municipal Boundary         |  | County State-Aid Highway |
|  | Shared Portion of the Notice Area |  | County Boundary            |  |                          |
|  |                                   |  | State Boundary             |  |                          |



**PUBLIC NOTICE AREA**  
**BIG STONE SOUTH TO ALEXANDRIA**  
**AND ALEXANDRIA TO BIG OAKS**  
 MISO LRTP-2

Line1	Line2	Line3	Line4
Bobbie Osterberg	Alexandria Mayor	704 Broadway	Alexandria, MN 56308
Martin Schultz	Alexandria City Administrator	704 Broadway	Alexandria, MN 56308
Tracy Bertram	Becker Mayor	12060 Sherburne Avenue	Becker, MN 55308
Greg Lerud	Becker City Administrator	12060 Sherburne Avenue	Becker, MN 55308
Andrea Lawrence-Wheeler	Clearwater Mayor	PO Box 9	Clearwater, MN 55320
Anita Smythe	Clearwater City Administrator	PO Box 9	Clearwater, MN 55320
Mike Eveslage	Freeport Mayor	PO Box 301	Freeport, MN 56331
Jon Nelson	Freeport City Clerk	PO Box 301	Freeport, MN 56331
Joe Finken	Melrose Mayor	225 1st NE	Melrose, MN 56352
Colleen Winter	Melrose City Administrator	225 1st NE	Melrose, MN 56352
Lloyd Hilgart	Monticello Mayor	505 Walnut Street	Monticello, MN 55362
Rachel Leonard	Monticello City Administrator	505 Walnut Street	Monticello, MN 55362
Duane Willenbring	Rockville Mayor	PO Box 93	Rockville, MN 56369
Mike Zenzen	Saint Augusta Mayor	2162 County Road 115	St Augusta, MN 56301
Bill McCabe	Saint Augusta City Administrator	1914 250th Street	St Augusta, MN 56301
Dave Kleis	Saint Cloud Mayor	1201 7th St. S.	St. Cloud, MN 56301
Matthew Staehling	Saint Cloud City Administrator	1201 7th St. S.	St. Cloud, MN 56301
Seth Kauffman	Saint Cloud City Clerk	1201 7th St. S.	St. Cloud, MN 56301
Richard Miller	Waite Park Mayor	PO Box 339	Waite Park, MN 56387
Shauna Johnson	Waite Park City Administrator	PO Box 339	Waite Park, MN 56387
Adri Brenny	Waite Park City Clerk	PO Box 339	Waite Park, MN 56387
Roger Engle	West Union Mayor	PO Box 106	West Union, MN 56389
Janet Macey	West Union City Clerk	PO Box 106	West Union, MN 56389
Heather Schlangen	Douglas County Coordinator	821 Cedar Street	Alexandria, MN 56308
Bruce Messelt	Sherburne County Administrator	13880 Business Center Drive NW, Suite 100	Elk River, MN 55330-4668
Michael Williams	Stearns County Administrator	705 Courthouse Square, Room 121	St. Cloud, MN 56303-4701
Lee Kelly	Wright County Administrator	3650 Braddock Avenue NE Room 3200	Buffalo, MN 55313
Chris Pelzer	Todd County Coordinator	215 1st Ave S, Suite 300	Long Prairie, MN 56347
Jessica Minette	Ashley Township Clerk	43250 433rd Avenue	Sauk Centre, MN 56378
Bob Ritter	Ashley Township Chairperson	45925 430th Street	Sauk Centre, MN 56378
Lucinda Messman	Becker Township Clerk	PO Box 248	Becker, MN 55308
Brian Kolbinger	Becker Township Chairman	12165 Hancock St	Becker, MN 55308
Jean Just	Clearwater Township Clerk	15015 State Highway24	Clearwater, MN 55320
John Notsch	Clearwater Township Chairperson	15015 State Highway24	Clearwater, MN 55320
Joe Pohl	Collegeville Township Clerk	27724 Co Rd 50	Cold Spring, MN 56320
Terry Stein	Collegeville Township Chairperson	27724 Co Rd 50	Cold Spring, MN 56320
Judy Bruemmer	Farming Township Clerk	27555 County Road 41	Albany, MN 56307

Jason Willenbring	Farming Township Chairman	20104 275th Street	Richmond, MN 56368
Kris Leukam	Grove Township Clerk	34308 Overton Road	Melrose, MN 56352
Ron Schaefer	Grove Township Chairperson	33323 Oakshire Road	Melrose, MN 56352
Carol Hedlund	Hudson Township Clerk	3499 Caribou Lane, SE	Alexandria, MN 56308
Cindy VanLuik	Hudson Township Treasurer	11393 State Highway29 S	Alexandria, MN 56308
Kelly Beilke	La Grand Township Clerk	3999 County Road 82 NW	Alexandria, MN 56308
Ben Johnson	La Grand Township Chairperson	501 Town Hall Road	Alexandria, MN 56308
Susan Hanson	Lake Mary Township Clerk	2640 Lodge Hall Road SW	Alexandria, MN 56308
James Schmidt	Lake Mary Township Chairman	4791 County Road 4 SW	Alexandria, MN 56308
Jenny Schmidt	Lynden Township Clerk	21367 County Road 44	Clearwater, MN 55320
David Johnson	Lynden Township Chairman	18378 County Road 145	Clearwater, MN 55320
Cecilia Tylutki	Melrose Township Clerk	32721 Birch Field Court	Melrose, MN 56352
Jane Salzi	Melrose Township Chairperson	42557 County Road 13	Melrose, MN 56352
Cathy Shuman	Monticello Township Clerk	8550 Edmonson Avenue NE	Monticello, MN 55362
Brett Holker	Monticello Township Chairperson	8550 Edmonson Avenue NE	Monticello, MN 55362
Boni Behnen	Munson Township Clerk	24285 193rd Avenue	Richmond, MN 56368
Butch Gertkin	Munson Township Chairperson	20704 243rd Street	Richmond, MN 56368
Thomas Roelike	Oak Township Clerk	34993 County Road 172	Freeport, MN 56331
Pete Welle	Oak Township Chairman	28093 7th Street SW	Freeport, MN 56331
Jennifer Dietrich	Orange Township Clerk	8186 Molly Creek Road, SE	Osakis, MN 56360
Barb Boogaard	Orange Township Treasurer	11455 County Road 2 SE	Osakis, MN 56360
Anna Reischl	Saint Joseph Township Clerk	200 Hill St. W	St. Joseph, MN 56374
Doug Fredrickson	Saint Joseph Township Chairperson	26545 Jade Road	St. Cloud, MN 56301
Donald Rausch	Saint Martin Township Clerk	28422 County Road 177	Paynesville, MN 56362
Kenneth Utsch	Saint Martin Township Chairman	31161 Sauk Valley Road	Paynesville, MN 56362
Missy Schirmers	Sauk Centre Township Clerk	43216 400th Street	Sauk Centre, MN 56378
John Bosl	Sauk Centre Township Chairperson	38171 County Road 29	Sauk Centre, MN 56378
Heidi Eckerman	Silver Creek Township Clerk/Treasurer	3827 134th ST NW	Monticello, MN 55362
Chris Newman	Silver Creek Township Chairperson	3827 134th ST NW	Monticello, MN 55362
Heidi Stalboerger	Wakefield Township Clerk	22295 Frostview Road	Cold Spring, MN 56320
Jerry Frieler	Wakefield Township Treasurer	22295 Frostview Road	Cold Spring, MN 56320
Shawn Garding	Wakefield Township Chairperson	16275 County Road 49	Cold Spring, MN 56320
John Chalmers	West Union Township Clerk	14622 County 57	Osakis, MN 56360
Earyl Didier	West Union Township Chairperson	15489 150th St	Osakis, MN 56360
Lawrence Plucinski	Bad River Band of the Lake Superior Tribe of Chippewa Indians Deputy Tribal Historic Preservation Office	PO Box 39	Odanah, WI 54861
Max Bear	Cheyenne and Arapaho Tribes Tribal Historic Preservation Officer	700 Black Kettle Blvd	Concho OK 73022



Garrie Kills A Hundred	Flandreau Santee Sioux Tribe of South Dakota Tribal Historic Preservation Officer	PO Box 283	Flandreau, SD 57028
Evan Schroeder	Fond du Lac Band of the Minnesota Chippewa Tribe Tribal Historic Preservation Officer	1720 Big Lake Rd	Cloquet, MN 55720
Michael Blackwolf	Fort Belknap Indian Community of Montana Tribal Historic Preservation Officer	656 Agency Main Street	Harlem, MT 59526-9455
Rob Hull	Grand Portage Band of the Minnesota Chippewa Tribe Tribal Historic Preservation Officer	PO Box 428	Grand Portage, MN 55605
Lance Foster	Iowa Tribe of Kansas and Nebraska Tribal Historic Preservation Officer	3345 B Thrasher Rd.	White Cloud KS 66094
Alden Connor	Keweenaw Bay Indian Community, Michigan Tribal Historic Preservation Officer	16429 Beartown Rd.	Baraga, MI 49908
Alina Shively	Lac Vieux Desert Band of Lake Superior Chippewa Indians of Michigan Tribal Historic Preservation Officer	E23709 US Highway2 West	Watersmeet, MI 49969
Cheyenne St. John	Lower Sioux Indian Community in the State of Minnesota Tribal Historic Preservation Officer	PO Box 308	Morton, MN 56270
Terry Kemper	Mille Lacs Band of Ojibwe Tribal Historic Preservation Officer	43408 Oodena Drive	Onamia, MN 56359
Rob Hull	Minnesota Chippewa Tribe Tribal Historic Preservation Officer	P.O. Box 428	Grand Portage, MN 55605
Noah White	Prairie Island Indian Community Tribal Historic Preservation Officer	5636 Sturgeon Lake Road	Welch, MN 55089
Marvin DeFoe	Red Cliff Band of Lake Superior Chippewa Indians Tribal Historic Preservation Officer	88455 Pike Road	Bayfield, WI 54814
Misty Frazier	Santee Sioux Nation, Nebraska Tribal Historic Preservation Officer	425 Frazier Ave. N. Suite 2	Niobrara, NE 68760
Dianne Desrosiers	Sisseton-Wahpeton Oyate of the Lake Traverse Reservation Tribal Historic Preservation Officer	12554 BIA Highway711, PO Box 907	Agency Village, SD 57262
Kenneth Graywater	Spirit Lake Tribe Tribal Historic Preservation Officer	P.O. Box 359	Fort Totten, ND 58335-0359
Samantha Odegard	Upper Sioux Community Tribal Historic Preservation Officer	PO Box 147	Granite Falls, MN 56241-0147
Jaime Arsenaault	White Earth Band of the Minnesota Chippewa Tribe Tribal Historic Preservation Officer	PO Box 418	White Earth, MN 56591
Durrell Cooper	Apache Tribe of Oklahoma Chairman	PO Box 1330	Anadarko, OK 73005
Sarah Thompson	Lac du Flambeau Band of Lake Superior Chippewa Indians Tribal Historic Preservation Officer	PO Box 67	Lac du Flambeau, WI 54538

Amy Burnette	Leech Lake Band of the Minnesota Chippewa Tribe Tribal Historic Preservation Officer	190 Sailstar Drive NE	Cass Lake, MN 56633
David Grignon	Menominee Indian Tribe Tribal Historic Preservation Officer	PO Box 910	Keshena, WI 54135-0910
Michael Laronge	Sokaogon Chippewa Community Tribal Historic Preservation Officer	3051 Sand Lake Road	Crandon, WI 54520
Jaylen Strong	Bois Forte Band of Chippewa Tribal Historic Preservation Officer	1500 Bois Forte Road	Tower, MN 55790
Kade Ferris	Red Lake Band of Chippewa Indians Tribal Historic Preservation Officer	PO Box 274	Red Lake, MN 56671
Leonard Wabasha	Shakopee Mdewakanton Sioux Community Tribal Historic Preservation Officer	2330 Sioux Trail NW	Prior Lake, MN 55372
Shannon Geshick	Minnesota Indian Affairs Council Executive Director	161 St. Anthony Ave, Suite 919	St. Paul, MN 55103
Charlie Lippert	Mille Lacs Band of Ojibwe Air Quality Specialist	43408 Oodena Drive	Onamia, MN 56359

## Appendix L

### Agency Correspondence

Division of Ecological and Water Resources  
Region 3 Headquarters  
1200 Warner Road  
Saint Paul, MN 55106

Transmitted by Email

July 31, 2023

Matt Langan  
Xcel Energy  
414 Nicollet Mall, 414-6A  
Minneapolis, MN 55401

Dear Matt Langan,

Thank you for engaging with the Department of Natural Resources (DNR) in early coordination during the development of Xcel Energy's Cap X 2<sup>nd</sup> Circuit 345 kV High Voltage Transmission Line (HVTL) from Alexandria to the Big Oaks Station in Becker, MN. We appreciate the long-term planning that has gone into this project to enable an efficient use of existing route right-of-way and HVTL structures in order to minimize impacts to natural resources. DNR respectfully submits the following comments for your consideration as you prepare to submit an alternate route permit application to the Public Utilities Commission (PUC):

1. The DNR strongly prefers a route that utilizes existing crossings over the Mississippi River, especially within a wild and scenic river (WSR) district. There is not currently a route option that utilizes an existing crossing, and the two proposed crossings are located in sensitive areas along the WSR in Minnesota Biological Survey (MBS) Sites of Biodiversity Significance and DNR Native Plant Communities (NPC). The DNR recommends that impacts to MBS Sites of Biodiversity Significance and DNR NPC's with a Conservation Status Rank of S1-S3 be avoided to the greatest extent feasible.

Xcel Energy is currently involved in the development of multiple HVTL projects that may need to cross the Mississippi River to connect to the Big Oaks Substation. We suggest greater coordination across projects to co-locate as many crossings as possible, especially if a new crossing within the WSR is deemed necessary. Please coordinate further with DNR as these projects move forward to identify the least impactful solution for all projects currently in development.

Please be aware that in Sherburne County, most of the Mississippi River bank within the WSR district is also in a Bluff Impact Zone and may be subject to additional restrictions.

2. The newly listed St. Martin 15 Calcareous Fen is located along the project route. A [calcareous fen](#) is a rare and distinctive peat-accumulating wetland is legally protected in Minnesota. *Minnesota Statutes*, section 103G.223, states that calcareous fens may not be filled, drained, or otherwise degraded, wholly or partially, by any activity, except as provided for in a

management plan approved by the commissioner of the Department of Natural Resources. Many of the unique characteristics of calcareous fens result from the upwelling of groundwater through calcareous substrates. Because of this dependence on groundwater hydrology, calcareous fens can be affected by nearby activities or even those several miles away.

Shapefiles that show the location of the fen have already been sent to Xcel. It appears that new pole structures are being proposed within a mile of the fen. DNR will require further hydrogeotechnical analysis in order to determine if the location and depth of these structure foundations are likely to impact fen hydrology and require a Calcareous Fen Management Plan.

3. The DNR recommends that Xcel should use the NHIS Rare Features Data received under License Agreement 1058 to avoid impacts to known occurrences of state-listed endangered and threatened species and nearby habitat. To ensure compliance with state law regarding rare features, please request a Natural Heritage Review via the [Minnesota Conservation Explorer](#). To ensure compliance with federal law, please conduct a federal regulatory review using the U.S. Fish & Wildlife Service's online [Information for Planning and Consultation \(IPaC\) tool](#).
4. A DNR Water Appropriation Permit is required if the water pumped exceeds 10,000 gallons in a day, or one million gallons in one year. The DNR General Permit for Temporary Appropriation, with its lower permit application fee and reduced time for review, may be used for the dewatering if the dewatering volume is less than 50 million gallons and the time of the appropriation is less than one year.
5. Where the route crosses Public Water Wetlands, a utility license to cross is not required, but a public water work permit is and can be applied for through the [Minnesota DNR Permitting and Reporting System](#).

Thank you again for your ongoing coordination. Please let me know if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Melissa Collins". The signature is written in black ink on a light blue rectangular background.

Melissa Collins

Regional Environmental Assessment Ecologist | Ecological and Water Resources

Minnesota Department of Natural Resources

CC: Cynthia Warzecha, DNR Energy Planner

Office of Land Management  
395 John Ireland Blvd MS 678  
St. Paul, MN 55155

August 24, 2023

Matt Langan  
Principal Agent, Siting and Land Rights  
Xcel Energy  
414 Nicollet Mall, 414-6A  
Minneapolis, MN 55401

Mr. Langan,

The Minnesota Department of Transportation (MnDOT) has performed a cursory review of the information available, including information exchanged during an August 3<sup>rd</sup>, 2023 meeting, for the Alexandria to Big Oaks Transmission Line Project (Project) and offers the following comments and recommendations for consideration.

The proposed Project primarily involves the stringing of a second set of conductors on the existing transmission structures between Alexandria and Monticello. The existing poles, where applicable, including a second set of conductors on all crossings of I94, were previously permitted by MnDOT. We have been informed that this Project requires no additional work over that road surface area of I94. For any new construction associated with this project, including new pole placement and second stringing in areas over/within the state trunk highway system, additional consultation would be required. Additionally, MnDOT requires adherence to the following Statute, Rule, Policy and other permitting requirements:

- [MnDOT Utility Accommodation Policy](#)
- [MnDOT Utility Accommodation and Coordination Manual](#)
- [MnDOT Environmental Requirements](#) (updated version available soon)

Office of Environmental Stewardship (OES):

Should Xcel plan to utilize any portion of MnDOT right-of-way for temporary access and/or staging during construction activities, OES staff would request the opportunity to review for unique environmental resources, including but not limited to, contaminated sites, wetlands and waterbodies, and biological and cultural resources. Preconstruction field surveys may be required to identify sensitive resources, and post-construction inspections may be required to document compliance with MnDOT permits.

MnDOT appreciates Xcel's early outreach and recommends continued, close coordination regarding areas of this Project that may affect the state trunk highway system.

Sincerely,

*Stacy Kotch Egstad*  
Utility Routing & Siting Coordinator | Office of Land Management  
**Minnesota Department of Transportation**

*Equal Opportunity Employer*

## **Appendix M**

### **List of Landowners in the Project Study Area**

**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
2175 LLC	2275 37th St S	Saint Cloud, MN 56301
337 34th Ave S Partners LLC	337 34th Ave S	Waite Park, MN 56387
5 Star Family Properties LLC	13341 Acacia Ave NE	Monticello, MN 55362
AAK Properties LLC	15292 40th Ave N	Plymouth, MN 55446
Aaron Bring & Michelle Moen	700 Lauren Ave	Clearwater, MN 55320
Aaron D Grefsrud	820 10th St	Clearwater, MN 55320
Abbe Family Trust	18047 Kindred Ct	Lakeville, MN 55044
Abdulkadir Muhsin and Rjae Properties LLC; Iman Farhiya Hassan	3845 Bear Ridge Ave S	Saint Cloud, MN 56301
Abel Suzanne M and Abel Wallace J	3711 21st Ave S	Saint Cloud, MN 56301
Abfalter Tyler M and Arnold Amanda J	24415 17th Ave	Saint Augusta, MN 56301
Abonce-Carrillo Carlos A and Abonce-Aguilar Maria D	705 Eagle Dr SW	Melrose, MN 56352
Abraham Blanca P Matamoros	316 2nd St SW	Melrose, MN 56352
Ace & R LLC	9484 95th St NE	Otsego, MN 55362
Adam L Eggersgluess & Kadin Eggersgluess	904 Isabella Ave	Clearwater, MN 55320
Adam L Wilkinson	16026 Grover Ave NW	Clearwater, MN 55320
Adam R Murphy & Jennifer Murphy	1024 Nicole Ave	Clearwater, MN 55320
Adam S Hinnenkamp & Michelle M Kustermann	1205 Main St	Clearwater, MN 55320
Adjei Eunice	1500 E Saint Germain St	Saint Cloud, MN 56304
Adm-Benson Quinn	PO Box 1470	Decatur, IL 62525
Adrian D & Renae Berning	9484 95th St NE	Otsego, MN 55362
Affordable Rental Properties	12744 Jarvis Ave NW	Annandale, MN 55302
Ag-Gro Inc	PO Box 135	Greenwald, MN 56335
Agnew David and Agnew Robert; Agnew Harold R	2105 193rd St E	Clearwater, MN 55320
Ahlert Janelle R	24438 17th Ave	Saint Augusta, MN 56301
Ahmann Brent and Ahmann Tammy M	23872 Gaberdine Rd	Saint Augusta, MN 56301
Ahrens Jeffrey J & Wanda L	PO Box 84	Greenwald, MN 56335
Airlake Development Inc	800 Lasalle Ave	Minneapolis, MN 55402
Akervik Roger	44705 Zellwood Rd	Sauk Centre, MN 56378
Alan & Adella Espelien Trust	1000 24th Ave N	Saint Cloud, MN 56303
Alan A & Shelly R Schmitz	13353 Acacia Ave NE	Monticello, MN 55362
Albers Dale	4552 230th St	Saint Augusta, MN 56301
Albers Kristine L	5657 40th St S	Saint Cloud, MN 56301
Albros Leasing LLC	23083 60th Ave	Saint Augusta, MN 56301
Alex D Evavold & Stephanie K Evavold	8381 148th St NW	Clearwater, MN 55320
Alexander Peter C & Julie A	17476 Harbor Rd	Cold Spring, MN 56320
Alice A Coudron Revocalbe Tr	2417 143rd St NW	Monticello, MN 55362



**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Alicia M Amundson	15254 Curtis Ave NW	Monticello, MN 55362
Alisa D Schryver	772 Isabella Ave	Clearwater, MN 55320
Allan W Brevik	2494 137th St NW	Monticello, MN 55362
Allen A Schaefer Trust	26846 County Road 177	Albany, MN 56307
Allen Beverly and Allen Thomas	PO Box 234	Clearwater, MN 55320
Allen J & Judith B Schefers	2540 Casco Point Rd	Wayzata, MN 55391
Allen M Stewart Rev Liv Trust	12926 1st St	Becker, MN 55308
Allex James R & Laurie A	3035 255th St	Saint Cloud, MN 56301
Allstate Bk Real Estate Hold	4415 Highway 6	Sugar Land Tx 77478
Alpha Foods LLP	PO Box 922	Annandale, MN 55302
Althaus Diane L and Diane Althaus Rev Trust Agreement	181 Par Dr SW	Melrose, MN 56352
Althaus Jeffrey R and Althaus Karen J	2519 40th St S	Saint Cloud, MN 56301
Alvero Real Estate Holdings LLLP	15422 Leona Ln	Wayzata, MN 55391
Alvin J Leinen Rev Trust and Phyllis A Leinen Rev Trust; Welberg Todd & Marcy R	416 Country Oak Dr	Sauk Centre, MN 56378
Ambriz Tanya A	403 3rd St SW	Melrose, MN 56352
Ambriz-Morelos Betty and Ambriz-Morelos Trinidad	47 Donna St NE	Melrose, MN 56352
Ameribuilt Investment Grp LLC	904 Division St	Waite Park, MN 56387
American Heritage Natl Bank	24 2nd St S	Long Prairie, MN 56347
American Legion Post #621	1894 247th St	Saint Augusta, MN 56301
Andersen Donald T & Kathryn	222 5th St SW	Melrose, MN 56352
Anderson Brian E & Winifred and Smith Linda S	3700 Deerwood Ct	Saint Cloud, MN 56301
Anderson Dale R & Virginia M S	25502 County Road 50	Cold Spring, MN 56320
Anderson Family Trust	1624 2nd St S	Sauk Centre, MN 56378
Anderson Gaylin M	24482 18th Ave	Saint Augusta, MN 56301
Anderson Grandchildren LP	PO Box 1377	Saint Cloud, MN 56302
Anderson Ian	22035 County Road 75	Clearwater, MN 55320
Anderson Julie K	1933 38th St S	Saint Cloud, MN 56301
Anderson Kern C and Anderson Gwen T R	24121 County Road 75	Saint Augusta, MN 56301
Anderson Mary Ann A and Anderson Richard W	25765 County Road 136	Saint Cloud, MN 56301
Anderson Matthew K & Cindy A	189 Meadowlark Ln SW	Melrose, MN 56352
Anderson Mitchell and Anderson Jessica M	22241 Fairmount Rd	Saint Cloud, MN 56301
Anderson Nancy A and Anderson Robert A	9163 Ivy Rd	Saint Cloud, MN 56301
Anderson Prop of St Cloud LLP	PO Box 1377	Saint Cloud, MN 56302
Anderson Robert A & Nancy A	9163 Ivy Rd	Saint Cloud, MN 56301
Anderson Trucking Service Inc	725 Opportunity Dr	Saint Cloud, MN 56301
Anderson Trucking Service Inc	PO Box 1377	Saint Cloud, MN 56302

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Andre Perez & Rebecca Perez	4409 Mason Ct NE	Saint, Michael, MN 55376
Andrew G Williams & Christina Williams	3097 145th St NW	Monticello, MN 55362
Andrew R & Melissa D Henkemeyer	940 Kelsey Ave	Clearwater, MN 55320
Andrew Rentz	510 9th St	Clearwater, MN 55320
Andrew S Jacobs Rev Trust and Angela M Jacobs Rev Trust	2251 37th St S	Saint Cloud, MN 56301
Angela L Steffens	655 8th St	Clearwater, MN 55320
Angeline Landwehr Rev Trust	2636 255th St	Saint Cloud, MN 56301
Ann Gosch	600 9th St	Clearwater, MN 55320
Ann M Hayes Rev Trust	3183 County Road 137	Waite Park, MN 56387
Ann Millerbernd	5893 157th St NW	Clearwater, MN 55320
Annandale Lumber LLC	PO Box 369	Clearwater, MN 55320
Ansiel Deborah C	PO Box 255	Melrose, MN 56352
Anthony & Christine Kenning	604 Juliet Ave	Clearwater, MN 55320
Anthony B Johnson	1010 Nicole Ave	Clearwater, MN 55320
Anthony J & Kristin Larson	4969 150th St NW	Clearwater, MN 55320
Anthony P Rasmuson	1950 159th St NW	Monticello, MN 55362
Antique Depot LLC	8318 State Highway 23	Saint Cloud, MN 56301
Arceneau Amber M and Arceneau Jaylyn B	28252 290th St	Freeport, MN 56331
Arceneau Brian L	30542 263rd Ave	Albany, MN 56307
Arceneau, John M & Starla	720 2nd St S	Sauk Centre, MN 56378
Archie & Regina Meemken Trust	868 Country Club Dr SW	Melrose, MN 56352
Arctic Cat Inc	6801 Glenn Carlson Dr	Saint Cloud, MN 56301
Aretz Barbara J	4370 Clearwater Rd	Saint Cloud, MN 56301
Aric D Strohschein	703 Lauren Ave	Clearwater, MN 55320
Arlan & Marilyn Schroeder Rev Trust	38146 County Road 186	Sauk Centre, MN 56378
Arlyce L Abrahamson	8425 39th Ave N	Minneapolis, MN 55427
Arnold & Jane M Ergen Revocable Living Trust	5274 160th St NW	Clearwater, MN 55320
Aronson Harold & Alice	9696 County Road 138	Saint Cloud, MN 56301
Asfeld Brandi	1823 Forest Glen Dr	Saint Augusta, MN 56301
Asfeld Bruce N & Rose E	10804 137th Ave	Osakis, MN 56360
At & T Communications of Midwest	1010 Pine St	Saint Louis Mo 63101
Athmann James L & Rosalyn M	37181 Springhaven Rd	Melrose, MN 56352
Augusta Auto Body Inc	24695 County Road 7	Saint Augusta, MN 56301
Austin F Schorn	687 8th St	Clearwater, MN 55320
Austin Haugen & Brittany Childs	825 Isabella Ave	Clearwater, MN 55320
Austing Donald E & Marcene	30096 370th St	Melrose, MN 56352

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Austing Michael D	30292 370th St	Melrose, MN 56352
Austing-Jacobson Stacey and Jacobson Nathanael N	306 Country Club Rd SW	Melrose, MN 56352
Avilez Leonardo D Cervantes	1684 Forest Glen Cir	Saint Augusta, MN 56301
Bacher Eric R & Krista L	3715 38th St	Saint Cloud, MN 56301
Backes Anita and Backes Roger S	27732 223rd Ave	Richmond, MN 56368
Backes Michelle L	1636 Forest Glen Cir	Saint Augusta, MN 56301
Bader Kathleen and Jonas Thomas; Jonas John	15405 County Road 160	Cold Spring, MN 56320
Badial Steven E & Bonnie J	2435 200th St E	Clearwater, MN 55320
Baier Donna and Baier Bradley E	24142 County Road 75	Saint Augusta, MN 56301
Bailey Jane	43965 450th St	Sauk Centre, MN 56378
Bajari Pat	PO Box 179	New London, MN 56273
Baker Eric and Baker Naomi	1506 38th St S	Saint Cloud, MN 56301
Baker Jason T & Renee J	24381 19th Ave	Saint Augusta, MN 56301
Bakerschmidt Homes LLC	3466 Deercreek Trl	Saint Cloud, MN 56301
Balfanz Chad & Sara	1761 Forest Glen Dr	Saint Augusta, MN 56301
Bangsund Nathan and Bangsund Hunter	209 4th Ave NW	Melrose, MN 56352
Banxarath Voradeth	24401 17th Ave	Saint Augusta, MN 56301
Barbara A Anderson Rev Trust	3630 Plum Creek Dr	Saint Cloud, MN 56301
Barbara A Fisher	13820 Meridian Ave N	Monticello, MN 55362
Bard Luann and Stang Ann M	25406 County Road 74	Saint Cloud, MN 56301
Bares Steven A and Bares Heidi M	23752 Gaberdine Rd	Saint Augusta, MN 56301
Barragan Blanca and Barragan Moises	226 6th St SW	Melrose, MN 56352
Barragan Cruz	411 2nd St SW	Melrose, MN 56352
Barragan Moises & Blanca	508 E Main St	Melrose, MN 56352
Barrett Gregory J	211 Kevin Longley Dr	Monticello, MN 55362
Barry A Hart	1810 159th St NW	Monticello, MN 55362
Barry M & Sally J Heikkinen	14329 Barton Ave NW	Monticello, MN 55362
Barth Patricia A	3719 21st Ave S	Saint Cloud, MN 56301
Barthel Family Revocable Living Trust	15186 County Road 75 NW	Clearwater, MN 55320
Barthel Lyle M & Sharon R	914 Railroad Ave NW	Melrose, MN 56352
Barton Contracting Co	10633 89th Ave N	Maple Grove, MN 55369
Bauer Christopher G and Hoag Jennifer	36540 335th Ave	Melrose, MN 56352
Bauer Gary E & Jacqueline M	426 Main St W	Melrose, MN 56352
Bauer Jason and Bauer Kim M	36556 County Road 173	Melrose, MN 56352
Bauer Joey	308 2nd St SW	Melrose, MN 56352
Bauer Kathleen E	326 1st St NW	Melrose, MN 56352

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Bauer Kim M and Bauer Jason	36556 County Road 173	Melrose, MN 56352
Bauer Sylvester K & Kathryn and Bauer Christopher	37217 335th Ave	Melrose, MN 56352
Bautch Phillip D & Robin A	24721 State Highway 15	Saint Augusta, MN 56301
Bautch Robert P & Neomi K	25366 County Road 74	Saint Cloud, MN 56301
Baxter, James L & Barbara M	5980 Whitetail Ln SE	Osakis, MN 56360
Bear Ridge Development LLC	606 25th Ave S	Saint Cloud, MN 56301
Bearson, Dustin	6240 Calvary Rd SE	Osakis, MN 56360
Bearson, Gene E	6100 Calvary Rd SE	Osakis, MN 56360
Beau R Smiley & Alice S Smiley	810 10th St	Clearwater, MN 55320
Beauty Properties LLC	PO Box 7031	Saint Cloud, MN 56302
Bechtel Family Joint Revocable Trust	1864 159th St NW	Monticello, MN 55362
Bechtold Ag Land LLC	24353 125th Ave	Saint Cloud, MN 56301
Bechtold Delbert	10932 W Minnesota St	Saint Joseph, MN 56374
Bechtold Family LP	12976 County Road 51	Saint Joseph, MN 56374
Bechtold Joseph	PO Box 13	Milltown Mt 59851
Bechtold Zachary C	4209 40th St S	Saint Cloud, MN 56301
Beck Sarah B	1581 200th St E	Clearwater, MN 55320
Becker Bldg LLC	20697 Fenway Ave N	Forest Lake, MN 55025
Becker Connie and Becker David	24370 18th Ave	Saint Augusta, MN 56301
Becker Mary S and Becker Mark B	16683 County Road 160	Cold Spring, MN 56320
Becker Noah	240 1st St	West Union, MN 56389
Becker Shawn E & Victoria L P	24349 18th Ave	Saint Augusta, MN 56301
Beckermann Matthew L	38042 County Road 186	Sauk Centre, MN 56378
Bel Clare (Estates) Inc	3210 Bel Clare Dr	Saint Cloud, MN 56301
Bel Clare LLC	51 W Center St	Orem Ut 84057
Belgrade Cooperative Assoc Inc	PO Box 369	Belgrade, MN 56312
Benjamin A Whiteaker	20 Porter Cir	Clearwater, MN 55320
Benjamin D Jackson	664 9th St	Clearwater, MN 55320
Benjamin S & Ana K Zieglmeier	1350 Sunrise Ct	Clearwater, MN 55320
Bennett Corbin S	419 E 1st St N	Melrose, MN 56352
Benson Patrick and Benson Bethany L	2275 37th St S	Saint Cloud, MN 56301
Berdan David C & Joann P	10651 Mitchell Ln	Saint Cloud, MN 56301
Berg Justin M	7937 Bluebird Ct	Saint Cloud, MN 56301
Berg Michele A	40094 Us Highway 71	Sauk Centre, MN 56378
Berg, Guy R	8631 Burr Oak Rd SE	Osakis, MN 56360
Berling Properties LLC	6305 Glenn Carlson Dr	Saint Cloud, MN 56301

**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Bernice G Schmidt Trust and Gerald E Schmidt Rev Living Trust	22444 8th Ave	Clearwater, MN 55320
Berscheid Builders LLC	25 86th St NW	Rice, MN 56367
Berscheid Michael	39315 Wild Rose Ct	Sauk Centre, MN 56378
Berscheid Ronald J	197 Meadowlark Ln SW	Melrose, MN 56352
Bertram Adam and Hennen Maria	27950 County Road 113	Albany, MN 56307
Bertram Family Trust	9503 Wedgewood Dr	Woodbury, MN 55125
Bertram Roman & Carol	216 3rd St SW	Melrose, MN 56352
Beste Catherine	44545 Brick Yard Rd	Sauk Centre, MN 56378
Beste Chad & Beth	40985 425th Ave	Sauk Centre, MN 56378
Beste Enterprise Inc	44545 Brick Yard Rd	Sauk Centre, MN 56378
Beste John Henry & Yvonne M	PO Box 322	Freeport, MN 56331
Beste Kenneth H & Debra E	39986 County Road 187	Sauk Centre, MN 56378
Beste Michael and Beste Andria	32797 Riverview Rd	Melrose, MN 56352
Beth M Hansgen Rev Trust and Daniel E Hansgen Rev Trust	26392 Theresia Ter	Richmond, MN 56368
Bethany L Harmsen	16923 County Road 75 NW	Clearwater, MN 55320
Bettin Lucas A and Tenvoorde Kaylee N	1676 Forest Glen Cir	Saint Augusta, MN 56301
Beumer Luanne E	3854 County Road 74	Saint Cloud, MN 56301
Beuning Barbara M	PO Box 344	Freeport, MN 56331
Beuning Kyle M & Tammy E	35151 Lovers Ln	Melrose, MN 56352
Beuning LLC	PO Box 277	Clearwater, MN 55320
Beyer Adam M	1822 Forest Glen Dr	Saint Augusta, MN 56301
Bibeau Terese Ann and Stransky Gary	17564 Janssen Dr	Cold Spring, MN 56320
Bierschbach Aaron M	1911 County Road 115	Saint Augusta, MN 56301
Bierschbach Allen J	409 Main St W	Melrose, MN 56352
Bierschbach Eugene J and Bierschbach Mary L	24883 County Road 7	Saint Augusta, MN 56301
Bierschbach Judy M	410 Main St W	Melrose, MN 56352
Big Fish Lake Investments LLC	17488 Harbor Rd	Cold Spring, MN 56320
Big Ten Incorporated	28322 County Road 11	Freeport, MN 56331
Bill B & Jean M Sonsteby	15528 Elder Ave NW	Clearwater, MN 55320
Bilyeu Christopher G	1846 38th St S	Saint Cloud, MN 56301
Bischof Bradley E and Bischof Leah M	25554 County Road 136	Saint Cloud, MN 56301
Bischoff Douglas N and Klein Sally A	PO Box 813	Saint Cloud, MN 56302
Black Adley Inc	PO Box 201	Melrose, MN 56352
Blaser Daniel and Walz Danielle	3773 County Road 74	Saint Cloud, MN 56301
Blauer Steven D & Diane L	22246 3rd Ave E	Saint Cloud, MN 56301
Blenker Gary D	28772 292nd St	Freeport, MN 56331

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Blenker Joshua D	3825 Blueberry Ave S	Saint Cloud, MN 56301
Blesi Butt, Pamela A	6849 Valley View Pl	Cheyenne Wy 82009
Blonigen Jeff & Stacy M	300 11Th St N	Sartell, MN 56377
Blonigen Marcus	25341 Island Lake Rd	Cold Spring, MN 56320
Blonigen Roman L & Mary C	5749 Town Hall Rd NE	Sauk Rapids, MN 56379
Blue Can Properties LLC	118 3rd St NE	Freeport, MN 56331
Blum Clarence N & Janet P	15312 260th St	Cold Spring, MN 56320
Blum Mary Jane	PO Box 871261	Wasilla Ak 99687
Blum Ronald & Linda	15382 265th St	Cold Spring, MN 56320
Blumke Aaron M & Mariza S	24424 17th Ave	Saint Augusta, MN 56301
Blums Heritage LLC	15382 265th St	Cold Spring, MN 56320
BMR Properties LLC	23610 67th Ave	Saint Cloud, MN 56301
BMW Properties LLC	39204 County Road 186	Sauk Centre, MN 56378
BN Holdings LLC	16492 149th St SE	Big Lake, MN 55309
BNSF Railway Company	PO Box 961089	Fort Worth Tx 76161
Bob Merrill Jr	943 Isabella Ave	Clearwater, MN 55320
Bodell Robert W & Susan A	10611 County 51	Sauk Centre, MN 56378
Boecker Ronald R & Heather M	403 16th St NE	Dilworth, MN 56529
Boecker Steve H & Geraldine M	510 1st St SW	Melrose, MN 56352
Boie Sarah	1611 Forest Glen Cir	Saint Augusta, MN 56301
Boldt Kristen L and Boldt Timothy P	14124 264th St	Cold Spring, MN 56320
Bolstad Melody L	1876 38th St S	Saint Cloud, MN 56301
Bonita K Born Trust	3071 145th St NW	Monticello, MN 55362
Borash Rebecca	218 6th St SW	Melrose, MN 56352
Borgerding Brandon L	39186 County Road 183	Sauk Centre, MN 56378
Borgerding Clarence H & M	28256 County Road 157	Freeport, MN 56331
Borgerding James J & Lynell	29541 County Road 157	Freeport, MN 56331
Borgerding Jarrett	44512 County Road 184	Sauk Centre, MN 56378
Borgerding Jason and Borgerding Melanie	43528 County Road 184	Sauk Centre, MN 56378
Borgerding Living Trust	3636 Belle Rose Dr	Leesburg Fl 34748
Borgerding Meghan and Klaphake Charles H; Borgerding Jarrett	44512 County Road 184	Sauk Centre, MN 56378
Borgmann Jeanna and Borgmann Ryan	36543 335th Ave	Melrose, MN 56352
Boser Lawrence J and Boser Doris I	3951 21st Ave S	Saint Cloud, MN 56301
Bosl John H and Bosl Debora M	38171 County Road 29	Sauk Centre, MN 56378
Bosl Wilfred & Cindy R	37786 County Road 29	Sauk Centre, MN 56378
Botello Eduardo and Botello Evelia	170 Par Dr SW	Melrose, MN 56352

**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Botello Jose Martinez and Botello Alfredo Martinez	34698 County Road 65	Melrose, MN 56352
Botello Miguel A	425 1st St SW	Melrose, MN 56352
Bottelberghe James R & Julie	PO Box 103	West Union, MN 56389
Bottko Real Estate Holdings LLC	PO Box 7	Clearwater, MN 55320
Botzet Sylvester J & Helen (Trustees)	12579 County 46	Osakis, MN 56360
Boucher James D & Karolyn	19814 County Road 145	Clearwater, MN 55320
Boulton Darrell F & Cecilia	10344 270th St	Saint Cloud, MN 56301
Braatz Donn S & Diane	14229 115th Ave	Osakis, MN 56360
Brad & Karen Johnson Family Tr	11747 Emery Village Dr N	Champlin, MN 55316
Bradley & Jessica Busby	685 10th St	Clearwater, MN 55320
Bradley A & Janet Peterson	1325 Sunrise Ct	Clearwater, MN 55320
Bradley J & Tracy D Zadow	13334 County Road 75 NE	Monticello, MN 55362
Bradley M Munsterteiger & Theresa Munsterteiger	12591 Aetna Ave NE	Monticello, MN 55362
Bradley S Gates & Sheri L Maki Gates	16956 County Road 75 NW	Clearwater, MN 55320
Bradley Steckelberg	655 9th St	Clearwater, MN 55320
Brady Wilson & Heather Wilson	2094 159th St NW	Monticello, MN 55362
Braegelmann Cyril P	104 Emerald Ave SW	Melrose, MN 56352
Braegelmann Gary	1203 Lakeview Pkwy	Buffalo, MN 55313
Braegelmann Henry & Barbara	25163 County Road 9	Richmond, MN 56368
Braegelmann Joseph H	19901 Manana Rd	Richmond, MN 56368
Braegelmann Rochelle A and Braegelmann Owen A	26142 Theresia Ter	Richmond, MN 56368
Brandon C Veches & Nichole L Veches	15910 Fillmore Ave NW	Clearwater, MN 55320
Brandon E & Jordan M Reinking	530 Isabella Ct	Clearwater, MN 55320
Brandon L Fisher & Emily I Fisher	715 Lauren Ave	Clearwater, MN 55320
Brandon Lee Taatjes & Anna E Goodwalt	9563 172nd Ave SE	Becker, MN 55308
Brandon Michael Cottrell & Abby Elizabeth Cottrell	671 Juliet Ave	Clearwater, MN 55320
Brandon R Brastad & Gina Brastad	795 Isabella Ave	Clearwater, MN 55320
Brandon R Hanebuth	16256 County Road 7 NW	Clearwater, MN 55320
Brandon Shank Maguire	745 Lauren Ave	Clearwater, MN 55320
Bratsch Rebekah and Bratsch Jason L	3828 Cooper Ave S	Saint Cloud, MN 56301
Braun Darlene H	1624 Forest Glen Cir	Saint Augusta, MN 56301
Brecht Jo and Brecht Larry D	146 Par Dr SW	Melrose, MN 56352
Brekken Jenelle F and Brekken Jeffrey L	1500 39th St S	Saint Cloud, MN 56301
Brelje, Arnold L & Marian F (Trustees of The) Trust Agrmt of Arnold & Marian Bre	6744 County Road 2 SE	Osakis, MN 56360
Brent J Elstad	647 145th St NW	Monticello, MN 55362
Brent R Kruchten	2959 145th St NW	Monticello, MN 55362

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Brent W & Sharon M Lesniak	1130 Porter St	Clearwater, MN 55320
Bret G Anderson & Deanna M Becker	1355 Sunrise Ct	Clearwater, MN 55320
Breth Andrew and Breth Dominique	26553 133rd Ave	Cold Spring, MN 56320
Brian & Lois Shilson	929 Isabella Ave	Clearwater, MN 55320
Brian A & Laurie J Larson	14847 Endicott Ave NW	Clearwater, MN 55320
Brian D & Amaya B Kunkel	650 8th St	Clearwater, MN 55320
Brian J Flaherty	5101 Lyndale Ave S	Minneapolis, MN 55419
Brian J Marx	2180 159th St NW	Monticello, MN 55362
Brian J Ohland	4691 148th St NW	Clearwater, MN 55320
Brian M & Jami L Sloan	17031 County Road 7 NW	Clearwater, MN 55320
Brian M Miller Rev Trust	428 Oak St N	Sauk Centre, MN 56378
Brian R Hawkinson	975 Kelsey Ave	Clearwater, MN 55320
Brian Severson	13536 Acacia Ave NE	Monticello, MN 55362
Brian Wurm	14197 County Road 75 NW	Monticello, MN 55362
Brickweg Dillon	24471 17th Ave	Saint Augusta, MN 56301
Brinker John H & Gloria	25780 153rd Ave	Cold Spring, MN 56320
Brix Sandra L and Brix Brady D	22444 288th St	Albany, MN 56307
Broadstone Nf Minnesota LLC	6200 Glenn Carlson Dr	Saint Cloud, MN 56301
Bromenshenkel Chad & Jennifer	8298 263rd St	Saint Cloud, MN 56301
Bromenshenkel Bryan J & Tricia	8 Oak St	West Union, MN 56389
Bromenshenkel David	40197 County Road 183	Sauk Centre, MN 56378
Bromenshenkel Marilyn	42798 State Highway 28	Sauk Centre, MN 56378
Bromenshenkel Ronald & Donna	415 East St	Sauk Centre, MN 56378
Brothers and One Inc	PO Box 106	Clearwater, MN 55320
Brower Living Trust	19698 County Road 145	Clearwater, MN 55320
Brown Bryan and Gross Paula R	24943 County Road 7	Saint Augusta, MN 56301
Brown Daniel W and Brown Meghan	708 Eagle Dr SW	Melrose, MN 56352
Brown Ryan and Jacobson Sara	1654 Forest Glen Cir	Saint Augusta, MN 56301
Brown Steven & Lanette M	9199 Old Highway Rd S	Saint Cloud, MN 56301
Brown-Wilbert Inc	2280 Hamline Ave N	Roseville, MN 55113
Bruce & Bonnie Fladebo	815 Isabella Ave	Clearwater, MN 55320
Bruce A & Loretta C Nemitz	5115 150th St NW	Clearwater, MN 55320
Bruce E Abrahamson	8425 39th Ave N	Minneapolis, MN 55427
Bruce R Dewitt & Robin L Dewitt	4113 140th St NW	Clearwater, MN 55320
Bruemmer Daniel G & Judith A	11718 County Road 139	Saint Cloud, MN 56301
Bruemmer Gilbert T & Judith	27555 County Road 41	Albany, MN 56307



**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Bryan Teri L and Bryan Brendon R	3702 Bear Ridge Ct S	Saint Cloud, MN 56301
Buchheit Troy	11534 County Road 139	Saint Cloud, MN 56301
Buckhorn Sands LLC	31715 Riverview Rd	Melrose, MN 56352
Buckley, Katherine Frances	20173 County Road 50 NW	Big Lake, MN 55309
Budget Inn Clearwater LLC	945 State Highway 24	Clearwater, MN 55320
Bueckers Chad	30741 County Road 65	Melrose, MN 56352
Bueckers Daniel R & Geraldine	38084 Thunder Rd	Melrose, MN 56352
Bueckers Properties LLC	30838 County Road 157	Melrose, MN 56352
Buettner Ralph J and Pekarek Lori K	25958 County Road 50	Cold Spring, MN 56320
Bugarin Angela C	4372 Clearwater Rd	Saint Cloud, MN 56301
Bui Properties of Minnesota LLC	PO Box 8487	Madison, WI 53708
Burg Gerald E	28026 County Road 12	Freeport, MN 56331
Burg Keith C & Gina	27748 County Road 23	Albany, MN 56307
Burlington Northern Inc and Burlington Northern Santa Fe	PO Box 961089	Fort Worth Tx 76161
Burns P & Debra A Doran	15315 Curtis Ave NW	Monticello, MN 55362
Burroughs Ramon & Jill K	3804 Cooper Ave S	Saint Cloud, MN 56301
Burt Bryan D and Burt Chelsey D	1613 Forest Glen Cir	Saint Augusta, MN 56301
Burton Daren	12620 Trotwood Ct	Beltsville Md 20705
Bushbaum Riley J	2122 42nd St S	Saint Cloud, MN 56301
Bussmann Scott E	216 Country Club Rd SW	Melrose, MN 56352
Bussmann Scott E & Andrea M	343 Country Club Rd SW	Melrose, MN 56352
Byker Bennett G & Maryteresa	24187 County Road 75	Saint Augusta, MN 56301
Byram Timothy J & Deborah A	25807 80th Ave	Saint Cloud, MN 56301
Bzdok Mark J & Patricia A	9026 Ivy Rd	Saint Cloud, MN 56301
Caleb J & Jessica L Mol	615 Juliet Ave	Clearwater, MN 55320
Calvin Artimus	3548 Irving Ave S	Minneapolis, MN 55408
Calvin B Dye	630 9th St	Clearwater, MN 55320
Campos Jose M	24426 18th Ave	Saint Augusta, MN 56301
Cap Enterprises of Melrose Inc	511 3rd Ave SW	Melrose, MN 56352
Capgrow Holdings JV Sub VI LLC	320 W Ohio St	Chicago, IL 60654
Cardona Juana J and Cervantes Armando V; Hernandez Andrea C	217 2nd St SW	Melrose, MN 56352
Cargill Ryan	24461 18th Ave	Saint Augusta, MN 56301
Cargill Salvador Jr	24396 19th Ave	Saint Augusta, MN 56301
Carl T Gause	6600 S 69th St	Grand Forks, ND 58201
Carlos M Lopez Rev Trust	15931 Forsythe Ave NW	Clearwater, MN 55320
Carlos Martinez Sanchez & Miriam Martinez	720 10th St	Clearwater, MN 55320

**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Carlson Blake and Carlson Michelle	4523 E Redfield Rd	Phoenix Az 85032
Carlson Matthew J	26101 Bluebird Ln	Saint Cloud, MN 56301
Carlson Steven M	500 S Washington St	New Ulm, MN 56073
Carlstedt David C & Heidi R	5011 Hidden Acres Cir	Saint Cloud, MN 56301
Carlyn R Ellering Rev Trust	120 Emerald Ave SW	Melrose, MN 56352
Carol A Lieder	1607 River Links Dr	Cold Spring, MN 56320
Carol A Reuter Rev Living Trust and Wayne Reuter Rev Living Trust	41812 County Road 188	Sauk Centre, MN 56378
Carol A Schneider Trust	145 Par Dr SW	Melrose, MN 56352
Carol J Makowsky	1000 Porter St	Clearwater, MN 55320
Caron Neria S and Caron Bruce A	29035 County Road 11	Freeport, MN 56331
Carrs Tree Service Inc	PO Box 250	Ottertail, MN 56571
Carstens Inc	733 Main St W	Melrose, MN 56352
Caseys Retail Company	PO Box 54288	Lexington Ky 40555
Cathedral High School	312 7th Ave N	Saint Cloud, MN 56303
Caughlan Melissa L and Caughlan John R	457 E 221st St	Clearwater, MN 55320
Cecko Matthew J and Jahr Rachael M	24326 19th Ave	Saint Augusta, MN 56301
Cedar Pointe Apartment Homes LLC	21425 19th Ave E	Clearwater, MN 55320
Cedar Ridge Apartments LLLP	4654 Amber Valley Pkwy S	Fargo, ND 58104
Cedar South Townhomes Assoc	13736 Johnson St NE	Anoka, MN 55304
Celia L Prigge Rev Trust	8301 Quarry Rd	Saint Cloud, MN 56301
Centracare Health System - Melrose	1406 6th Ave N	Saint Cloud, MN 56303
Centracare Health System-Melrose	525 Main St W	Melrose, MN 56352
Central Minnesota Housing Properties LLC	37 28th Ave N	Saint Cloud, MN 56303
Chad & Kathleen Gagnon	15254 76th St NW	South Haven, MN 55382
Chad K Jung & Jodi C Jung	20079 Polk St NW	Elk River, MN 55330
Chad M Larson	650 Juliet Ave	Clearwater, MN 55320
Chansivong Sanda and Wathanaphone Saveng	1697 Forest Glen Cir	Saint Augusta, MN 56301
Chapin Joshua T	4746 40th St S	Saint Cloud, MN 56301
Charles F & Lois M Leckelt	15917 Evans Ave NW	Clearwater, MN 55320
Charles R Zander Jr	635 8th St	Clearwater, MN 55320
Charles W & Jeanette D Bray	13939 Appleton Ave NW	Monticello, MN 55362
Chavez Gustavo Martinez and Martinez Karla B	36678 County Road 173	Melrose, MN 56352
Chavez Sergio H and Mireles Maria G M	312 1st St SW	Melrose, MN 56352
Cheryl A Lardy	40 Porter Cir	Clearwater, MN 55320
Cheryl Traver	704 Lauren Ave	Clearwater, MN 55320
Chip Snoopy Dog LLC	8365 Brandon Rd	Baxter, MN 56425

**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Christel A Jerde	671 9th St	Clearwater, MN 55320
Christen Bryan P & Joan T	25503 138th Ave	Cold Spring, MN 56320
Christensen Shirley E	5539 40th St S	Saint Cloud, MN 56301
Christensen Tyler R and Christensen Elizabeth A	7901 Bluebird Ct	Saint Cloud, MN 56301
Christenson Tanya and Christenson Jason	625 Riverside Ave NW	Melrose, MN 56352
Christianson Systems Inc	24562 County Road 75	Saint Augusta, MN 56301
Christina L Bock	690 8th St	Clearwater, MN 55320
Christine L Shaffer	23586 Decker Ave	Faribault, MN 55021
Christopher E Farber	685 9th St	Clearwater, MN 55320
Christopher E Wourms	920 Isabella Ave	Clearwater, MN 55320
Christopher J & Cindy Ritzer	1140 Porter St	Clearwater, MN 55320
Christopher Koenig & Jenna Koenig	1041 Nicole Ave	Clearwater, MN 55320
Christopher M & Cheryl K Reeve	16509 County Road 7 NW	Clearwater, MN 55320
Christopher W Newman	15343 Curtis Ave NW	Monticello, MN 55362
Church of St Catherine Farming	36966 County Road 23	Richmond, MN 56368
Church of St Luke	17545 Huber Ave NW	Clearwater, MN 55320
Church of St Martin	119 Maine St	Saint Martin, MN 56376
Cinco Marie LLC	390 Industrial Blvd	Sauk Rapids, MN 56379
Claude T Banyai	2136 147th St NW	Monticello, MN 55362
Clausen Deborah L	24331 17th Ave	Saint Augusta, MN 56301
Clay Hills Holsteins LLC	31602 County Road 11	Freeport, MN 56331
Clay Leasing LLC	23725 Saddle Ridge Dr	Rogers, MN 55374
Clayton Carrier & Maggie Mae Smith	825 Lauren Ct	Clearwater, MN 55320
Clayton M Hughes Jr & Percy C Hughes Sr	4045 5th Ave S	Minneapolis, MN 55409
CLC Partners LLC	PO Box 99	Saint Joseph, MN 56374
Clearwater Commons LLC	20092 Edison Cir	Clearwater, MN 55320
Clearwater Development Inc	PO Box 370	Clearwater, MN 55320
Clearwater Estates Inc	PO Box 35	Clearwater, MN 55320
Clearwater Holdings LLC	5810 Archer Ln N	Plymouth, MN 55446
Clearwater Hotels LLC	4385 Clearwater Rd	Saint Cloud, MN 56301
Clearwater Park View LP	1600 University Ave W	Saint Paul, MN 55104
Clearwater Ranch LLC	24121 County Road 75	Saint Augusta, MN 56301
Clearwater River Apts LLC	2020 14th St	Cloquet, MN 55720
Clearwater Storage LLC	1307 2nd Ave N	Minneapolis, MN 55405
Clemens Cynthia B	22682 53rd Ave	Saint Augusta, MN 56301
Clement Allan P	4963 County Road 6	Saint Cloud, MN 56301

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Clifford S & Shirley Johnson	3431 144th St NW	Monticello, MN 55362
Clifton B Butler	965 Kelsey Ave	Clearwater, MN 55320
Clight LLC	PO Box 189	Clearwater, MN 55320
CMC Properties LLC	14345 Conley Ave	Rosemount, MN 55068
CMCC Properties LLC	PO Box 428	Clearwater, MN 55320
CMTN LLC	PO Box 1086	Saint Cloud, MN 56302
Coborn Realty Company LP	PO Box 6146	Saint Cloud, MN 56302
Coborns Incorporated	1921 Coborn Blvd	Saint Cloud, MN 56301
Cody J Baker	920 Kelsey Ave	Clearwater, MN 55320
Cody Maus & Arianna Nielsen	2023 159th St NW	Monticello, MN 55362
Cold Spring Granite Co	17482 Granite West Rd	Cold Spring, MN 56320
Condon Family Holdings LLC	3551 Wildflower Rd S	Saint Cloud, MN 56301
Conover Lance E & Anita	24314 18th Ave	Saint Augusta, MN 56301
Conrad Duane R & Karen K	26225 133rd Ave	Cold Spring, MN 56320
Conway Joshua and Conway Jaime	26175 80th Ave	Saint Cloud, MN 56301
Conway Michael R and Conway Lisa A	25573 58th Ave	Saint Cloud, MN 56301
Cook Edward A & Diana B	23902 Gaberdine Rd	Saint Augusta, MN 56301
Cook Jason E & Keri R	1917 38th St S	Saint Cloud, MN 56301
Cook Melissa and Cook Michael G	15790 262nd St	Cold Spring, MN 56320
Cooke Cynthia Ann and Ramler Timothy J; Ward Kerry Ramler; Cook Ronald	136 Par Ln	Cold Spring, MN 56320
Cordie Joseph A & Joy L	7913 Bluebird Ct	Saint Cloud, MN 56301
Cory Fuhrman	735 Isabella Ave	Clearwater, MN 55320
Cory R & Amy M Wipper	614 Juliet Ave	Clearwater, MN 55320
Cory S Broich & Samantha J Broich	663 9th St	Clearwater, MN 55320
Cosman Anthony J	24342 18th Ave	Saint Augusta, MN 56301
Coucke Timothy and Coucke Peggy	1645 Forest Glen Cir	Saint Augusta, MN 56301
Courrier Janet	2122 37th St S	Saint Cloud, MN 56301
Court Jerome & Irene C	26171 82nd Ave	Saint Cloud, MN 56301
Craig & Elizabeth Green	567 135th St NW	Monticello, MN 55362
Craig & Shalynn M Reid	1020 Nicole Ave	Clearwater, MN 55320
Craig J & Karen L Vanderwaal	688 124th St NE	Monticello, MN 55362
Craig Jelen & Darla Graves	13730 County Road 75 NW	Monticello, MN 55362
Craig L Davidson	3264 142nd St NW	Monticello, MN 55362
Croat Land Company	20863 20th Ave	Saint Augusta, MN 55320
Cross Lori	1601 Forest Glen Cir	Saint Augusta, MN 56301
Cruz Rossy Alvarez De De La and Gonzalez Ronald De La Cruz	325 2nd St SW	Melrose, MN 56352

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Crystal Windfeldt	16428 County Road 7 NW	Clearwater, MN 55320
CTP Holdings LLC	4747 109th Ave	Clear Lake, MN 55319
Cumming Thomas J and Cumming Margie E	1717 39th St S	Saint Cloud, MN 56301
Cunningham Mark A & Karon C	24917 County Road 7	Saint Augusta, MN 56301
Curtis J & Cheryl M Paulzine	3922 144th St NW	Monticello, MN 55362
Curtis Ross J and Pearson-Curtis Whitney B	24419 18th Ave	Saint Augusta, MN 56301
Cynthia A Walls Rev Trust and Scott G Walls Rev Trust	2648 255th St	Saint Cloud, MN 56301
Czeck Gregory M and Zirbes Shannon M	3901 Cooper Ave S	Saint Cloud, MN 56301
D & E Transport LLC	PO Box 429	Clearwater, MN 55320
D & M Enterprises LLP	38585 County Road 186	Sauk Centre, MN 56378
D7 4 LLC	6442 City West Pkwy	Eden Prairie, MN 55344
Dale & Deona Munsterteiger Trust	36877 300th Ave	Melrose, MN 56352
Dale A Hinkemeyer Trust	21954 County Road 44	Saint Augusta, MN 55320
Dale E & Rhoda Erickson	431 135th St NW	Monticello, MN 55362
Dalton Billie J	8614 Old Highway Rd N	Saint Cloud, MN 56301
Damon & Jessica Hessig	13919 Clementa Ave NW	Monticello, MN 55362
Dan Roering LLC	602 1st Ave N	Freeport, MN 56331
Danco Properties LLC	6958 River Rd SE	Clear Lake, MN 55319
Daniel Currier	614 9th St	Clearwater, MN 55320
Daniel E Hansgen Rev Trust and Beth M Hansgen Rev Trust	26392 Theresia Ter	Richmond, MN 56368
Daniel E Witschen	1121 145th St NW	Monticello, MN 55362
Daniel J & Laura R Dolan	679 Juliet Ave	Clearwater, MN 55320
Daniel J & Linda Elstad	674 127th St NE	Monticello, MN 55362
Daniel J Langanki & Kathleen D Langanki	14318 Clementa Ave NW	Monticello, MN 55362
Daniel J Nygaard	6474 Moonlight Ln	Sartell, MN 56377
Daniel L Mckeen & Nancy J Mckeen	400 Prairie St	Clearwater, MN 55320
Daniel M Niehoff	425 Walnut St N	Clearwater, MN 55320
Daniel Ryan	PO Box 2041	Saint Cloud, MN 56302
Danielle E Patten	775 Isabella Ave	Clearwater, MN 55320
Danielle Phaneuf	913 Isabella Ave	Clearwater, MN 55320
Darin R Hayes & Sarah Gustafson	530 9th St	Clearwater, MN 55320
Darrin W Larson	1006 Nicole Ave	Clearwater, MN 55320
Darryle C Anderson Rev Trust	13551 Baker Ave NW	Monticello, MN 55362
Dasa Properties, LLC	14195 Bank St	Becker, MN 55308
David A & Brenda L Bittman	805 Isabella Ave	Clearwater, MN 55320
David A & Diane L Dilley	13322 Clementa Ave NW	Monticello, MN 55362

**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
David A & Kristy N Potter	17187 County Road 7 NW	Clearwater, MN 55320
David A Fogal & Tera D Fogal	641 8th St	Clearwater, MN 55320
David C Pratt	13264 Acacia Ave NE	Monticello, MN 55362
David Dewitt	764 Isabella Ave	Clearwater, MN 55320
David E & Audra L Pederson	1015 Main St	Clearwater, MN 55320
David E & Betty L Miller	440 127th St NE	Monticello, MN 55362
David F & Cynthia A Walker	409 127th St NE	Monticello, MN 55362
David G Hodnefield Trust	970 Willow Grove Cir	Waite Park, MN 56387
David H Michael Trust	37177 Rimcrest Rd	Freeport, MN 56331
David J Berezni Rev Living Trust	2337 200th St E	Clearwater, MN 55320
David K & Julie Olson	17109 County Road 7 NW	Clearwater, MN 55320
David M & Luann Bock	3163 150th St NW	Monticello, MN 55362
David M Miller	16779 County Road 7 NW	Clearwater, MN 55320
David Mendel & Rachel K Pelkey	785 Isabella Ave	Clearwater, MN 55320
David O Hansen	6440 Flying Cloud Dr	Eden Prairie, MN 55344
David Olson & Lisa Hurt	5592 Lander Ave NE	Albertville, MN 55301
David Omann	15758 Evans Ave NW	Clearwater, MN 55320
David P Koch	14424 Cushing Ave NW	Monticello, MN 55362
David P Laudenbach	2122 County Road 143	Clearwater, MN 55320
David R & Lee A Kunkel	15777 Grover Ave NW	Clearwater, MN 55320
David S Mangan	1170 Porter St	Clearwater, MN 55320
David T & Lisa C Phaneuf	6456 159th St NW	Clearwater, MN 55320
David T & Roberta J Hibbison	635 9th St	Clearwater, MN 55320
David Winters	211 NEwspaper Run NE	Kimball, MN 55353
Davin E Kangas	900 Isabella Ave	Clearwater, MN 55320
Dawn M Biske Kiefer & Colin J Kiefer	7127 84th St NE	Monticello, MN 55362
Dawn Zimmerman	14526 Devitt Ave NW	Monticello, MN 55362
Dayle Veches Construction Inc	2219 116th St NE	Monticello, MN 55362
DDD Partnership LLC	PO Box 1222	Saint Cloud, MN 56302
Dean Croat Construction Inc	19054 Emerson Rd	Clearwater, MN 55320
Dean Klaverkamp Rev Trust and Mary Jo Klaverkamp Rev Trust	1707 Gaelic Rd	Saint Augusta, MN 56301
Dean M & Becky Schmitz	14454 Devitt Ave NW	Monticello, MN 55362
Dean M Fessenden & Nancy M Schreifels	3776 144th St NW	Monticello, MN 55362
Dean Tintes	15363 Barton Ave NW	Monticello, MN 55362
Deborah A Petty	420 Manor Dr	Clearwater, MN 55320
Deborah Belcher	315 Kothman Cir	Clearwater, MN 55320

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Decker Michael A	26825 County Road 9	Richmond, MN 56368
Decker Michael J and Decker Sara J	168 Meadowlark Ln SW	Melrose, MN 56352
Deem Robert	39324 Wild Rose Ct	Sauk Centre, MN 56378
Delphine E Waltzing	17004 County Road 75 NW	Clearwater, MN 55320
Delrose R Willard Trust	9422 County Road 138	Saint Cloud, MN 56301
Delroy & Rhonda Scheeler	15879 Evans Ave NW	Clearwater, MN 55320
Demarais John H	2217 200th St E	Clearwater, MN 55320
Denise M Pearson Trust	665 8th St	Clearwater, MN 55320
Denne Thomas R	24931 21st Ave	Saint Augusta, MN 56301
Dennis & Ruth Mohs Trust	5012 Hidden Acres Cir	Saint Cloud, MN 56301
Dennis & Sarah Biljan	12534 Aetna Ave NE	Monticello, MN 55362
Dennis J Thull Rev Trust and Sheila K Thull Rev Trust	28767 330th St	Freeport, MN 56331
Dennis J Warner Rev Trust and Tamera J Anhalt-Warner Rev Trust	20841 County Road 75	Clearwater, MN 55320
Dennis M Forsman	14084 County Road 75 NW	Monticello, MN 55362
Derek & Kayla Brutger	987 Kelsey Ave	Clearwater, MN 55320
Derek J & Jenna M Potter	5029 160th St NW	Clearwater, MN 55320
Desautels Daniel A & Karen	25153 County Road 74	Saint Cloud, MN 56301
Deters Eugene P	PO Box 208	West Union, MN 56389
Deters Roger and Deters Joann M	3867 21st Ave S	Saint Cloud, MN 56301
Devin Craig Popp	920 Spring St	Clearwater, MN 55320
Devine Willaim and Devine Kimberly	1618 38th St S	Saint Cloud, MN 56301
Dewald April	316 1st St NW	Melrose, MN 56352
Dezurik Christine M	1797 Forest Glen Dr	Saint Augusta, MN 56301
Diane Johnson	735 Lauren Ave	Clearwater, MN 55320
Diane M Salliotte	14247 Barton Ave NW	Monticello, MN 55362
Diaz Carmen Mercedes Ramos and Alvarez Federico Santiago	1795 Forest Glen Dr	Saint Augusta, MN 56301
Dickenson Betty Lou and Pflipsen Gary; Pflipsen Donald	412 1st St SW	Melrose, MN 56352
Dickhaus Robert D & Kristine E	322 Co Club Rd SW	Melrose, MN 56352
Didier, Michael	6561 Clifford Lake Rd SE	Osakis, MN 56360
Diehl James P & Carol M	24693 County Road 75	Saint Augusta, MN 56301
Dierkhising Mark & Deanne	37247 Springhaven Rd	Melrose, MN 56352
Dietrich, James R	14463 County Road 79 SE	Osakis, MN 56360
Dillman Richard H and Dillman Diane B	3727 21st Ave S	Saint Cloud, MN 56301
Dingman Family Farm Trust	11900 37th St NE	Saint, Michael, MN 55376
Dingmann Brandon and Dingmann Jennifer	13954 262nd St	Cold Spring, MN 56320
Dingmann David M	26414 Theresia Ter	Richmond, MN 56368

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Dingmann Robert J	27587 County Road 9	Richmond, MN 56368
Dinndorf Donald J & Viola L	23826 Gaberdine Rd	Saint Augusta, MN 56301
Dirksen LLC	8656 95th Ave	Clear Lake, MN 55319
Dirksen Thomas and Dirksen Cynthia	3816 Cooper Ave S	Saint Cloud, MN 56301
Dlp Investments LLC	3955 Roosevelt Rd	Saint Cloud, MN 56301
Dm Dingmann Farms LLC	13942 262nd St	Cold Spring, MN 56320
Dm Property LLC	PO Box 388	Clearwater, MN 55320
Doane Peter M	1315 240th St	Saint Cloud, MN 56301
Dobmeier Keith W and Dobmeier Tanya M	726 Country Club Dr SW	Melrose, MN 56352
Dockendorf Joseph D & Julie	20445 Manana Rd	Richmond, MN 56368
Dockendorf Paul M & Jane L	25726 Island Lake Rd	Cold Spring, MN 56320
Dockendorf Terrance L & Patti	24466 17th Ave	Saint Augusta, MN 56301
Doebber Walter L & Patricia	21426 Franklin Rd	Clearwater, MN 55320
Doering Travis J and Doering Melissa K	25796 County Road 136	Saint Cloud, MN 56301
Doll Gary & Leenay	26721 County Road 177	Albany, MN 56307
Doll Joshua	424 1st St NW	Melrose, MN 56352
Doll Richard M and Doll Joshua T	27736 290th St	Albany, MN 56307
Don E & Roxanne M Markwood	635 Juliet Ave	Clearwater, MN 55320
Donabauer Keith A & Joyce L	24075 County Road 75	Saint Augusta, MN 56301
Donald & Kathleen Jerabek Trust	3831 County Road 74	Saint Cloud, MN 56301
Donald & Toni Grove	670 8th St	Clearwater, MN 55320
Donald A & Mary A Kemkes	15767 Forsythe Ave NW	Clearwater, MN 55320
Donald C & Marilyn R Zutz Family Trust	1848 39th St S	Saint Cloud, MN 56301
Donald C & Susan Gedatus Rev T	13555 182nd Ln NW	Elk River, MN 55330
Donald Christianson	950 Isabella Ave	Clearwater, MN 55320
Donald E & Heidi A Cox	15420 County Road 75 NW	Clearwater, MN 55320
Donald E Anderson	14677 Appleton Ave NW	Monticello, MN 55362
Donald M Rausch Rev Trust and Magdalen Rausch Rev Trust	28422 County Road 177	Paynesville, MN 56362
Donald N Erickson	207 E 4th St	Monticello, MN 55362
Donald O Roisum	11899 Cameron Ave NE	Monticello, MN 55362
Donna M Arnold	14587 Appleton Ave NW	Monticello, MN 55362
Donna M Born Revocable Trust and Donna M Born (Trustee)	2983 145th St NW	Monticello, MN 55362
Donna M Heairet Trust	3900 Lawndale Ln N	Plymouth, MN 55446
Donna M Pasternak	13787 Meridian Ave N	Monticello, MN 55362
Donna M Stai	425 Prairie St	Clearwater, MN 55320
Donovan Donna M	PO Box 7368	Saint Cloud, MN 56302



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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Doreen A Wenker Rev Trust	116 Emerald Ave SW	Melrose, MN 56352
Dorein E Johnson	16777 County Road 75 NW	Clearwater, MN 55320
Doris C Pilarski Trust and Allan L Pilarski Trust	1849 247th St	Saint Augusta, MN 56301
Dorweiler Matthew K and Dorweiler Cindi L	8662 Old Highway Rd N	Saint Cloud, MN 56301
Dosch Zane R	900 Country Club Dr SW	Melrose, MN 56352
Dottie Ambrose & Lynn A Ambrose	14558 Devitt Ave NW	Monticello, MN 55362
Doubek Joseph F	18109 260th St	Richmond, MN 56368
Doubek Kenneth and Doubek Marina	29495 County Road 10	Albany, MN 56307
Doubrava Michael J	15509 Flight Way	Saint Paul, MN 55124
Douglas & Debra Friedhoff Tr	3437 144th St NW	Monticello, MN 55362
Douglas C Moen Trust	1387 Orono Ln	Wayzata, MN 55391
Douglas G Vorderbruggen	564 127th St NE	Monticello, MN 55362
Douglas J & Annette L Kasper	14309 Custer Ave NW	Monticello, MN 55362
Douglas J & Karen M Schneider	3152 150th St NW	Monticello, MN 55362
Douglas N Bischoff Rev Trust	22480 County Road 75	Saint Cloud, MN 56301
Douglas N Bischoff Rev Trust	PO Box 813	Saint Cloud, MN 56302
Douglas Nicole C	403 2nd St SW	Melrose, MN 56352
Douglas W & Kathy A Stevens	14684 Curtis Ave NW	Monticello, MN 55362
Douvier Jeffrey J	105 3rd Ave NW	Melrose, MN 56352
Dowell Wayne and Dowell Wilma	214 5th St SW	Melrose, MN 56352
Downare Taggart	1249 2 1/2 St N	Sartell, MN 56377
Downtown LLC	2218 200th St E	Clearwater, MN 55320
Drontle Christina M and Drontle Jerome D	11442 County Road 139	Saint Cloud, MN 56301
Drontle Dennis G	26701 Island Lake Rd	Cold Spring, MN 56320
Drontle Robert D & Leah D	25465 Hunter Rd	Richmond, MN 56368
Duane G Schmidt Rev Trust	14473 Appleton Ave NW	Monticello, MN 55362
Duane L & Darlene M Johnson	124 Bluebird Ln	Clearwater, MN 55320
Duane S & Jojean L Wold	15316 Baker Ave NW	Monticello, MN 55362
Duane S Szczech & Marcia Benson	1560 6th Ave N	Saint Cloud, MN 56303
Dueker Kathleen	11939 125th Ave	Osakis, MN 56360
Duerr Robert A & Joyce A	129 Meadowlark Ln SW	Melrose, MN 56352
Duininck Concrete LLC	PO Box 1867	Willmar, MN 56201
Dukowitz Brandon	25396 County Road 74	Saint Cloud, MN 56301
Dusha Ryan & Mollie	30744 County Road 65	Melrose, MN 56352
Dustin D Taylor	765 Isabella Ave	Clearwater, MN 55320
Dustin T Parker	15167 Elder Ave NW	Clearwater, MN 55320

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Dylan D Jude	837 10th St	Clearwater, MN 55320
Dylan J Gunnerson & Brittany M Stroud	787 Isabella Ave	Clearwater, MN 55320
E H Staples	705 Courthouse Sq	Saint Cloud, MN 56303
Early Rise Wash LLC	PO Box 184	Melrose, MN 56352
Economic Dev Authority of City of St Cloud Mn	400 2nd St S	Saint Cloud, MN 56301
Economic Development Authority	125 Main St E	Freeport, MN 56331
Ecotek LLC	24228 County Road 75	Saint Augusta, MN 56301
Eddie S Acres LLC	49212 440th St	Sauk Centre, MN 56378
Edgewater Development LLC	6640 Lyndale Ave S	Richfield, MN 55423
Edgewater Townhomes Condo Asso	4378 Clearwater Rd	Saint Cloud, MN 56301
Edison Circle Properties LLC	20088 Ferret St NW	Nowthen, MN 55330
Edward H Weaver Jr	2318 Imperial Dr	Saint Cloud, MN 56301
Edward J Nunke	PO Box 68	Clearwater, MN 55320
Edwards Paul J and Edwards Paola P	24436 19th Ave	Saint Augusta, MN 56301
Edwards Rita M	22069 Fairmount Rd	Saint Cloud, MN 56301
Edwards Rita M	483 E 221st St	Clearwater, MN 55320
Eekhoff Brian K & Rosanne E	35355 County Road 65	Melrose, MN 56352
Eggert Emily A and Eggert Jason A	25574 Island Lake Rd	Cold Spring, MN 56320
Ehresmann Danna L and Ehresmann Victor J	26003 Heritage Rd	Cold Spring, MN 56320
Ehrlichmann Brenda M and Busche Mark R	1502 38th St S	Saint Cloud, MN 56301
Eich Daniel A	25157 County Road 136	Saint Cloud, MN 56301
Eich Susan and Zuaro Deborah A; Linda Eich Desjardins Trust	2729 Drew Ave S	Minneapolis, MN 55416
Eichers Scott A	692 Eagle Dr SW	Melrose, MN 56352
Eichten Ashley M	25149 County Road 74	Saint Cloud, MN 56301
Eickhoff Justin M and Eickhoff Tina	27353 210th Ave	Richmond, MN 56368
Eickhoff Rev Living Trust	22978 County Road 42	Richmond, MN 56368
Eikmeier Kenneth A & Linda K	8825 Old Highway Rd N	Saint Cloud, MN 56301
Eileen M Krieger	5421 71st Cir N	Brooklyn Center, MN 55429
Eilers Mary and Eilers Eugene	2640 15th St N	Saint Cloud, MN 56303
Eisele, Lucy	15778 County Road 50 SE	Big Lake, MN 55309
Eisenreich Charles H and Eisenreich Peggy S	4005 21st Ave S	Saint Cloud, MN 56301
Eisenschenk Brian & Ashley	25842 County Road 50	Cold Spring, MN 56320
Eisenschenk Douglas C and Eisenschenk Lora L	25794 176th Ave	Richmond, MN 56368
Eisenschenk Jaymie G and Eisenschenk Kristen R	5015 Hidden Acres Cir	Saint Cloud, MN 56301
Eisenschenk Jeffrey J and Eisenschenk Emily M	PO Box 629	Cold Spring, MN 56320
Eisenschenk Kevin & Christine	16019 County Road 160	Cold Spring, MN 56320

**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Eisenschenk Lora L and Eisenschenk Douglas C	25794 176th Ave	Richmond, MN 56368
Elaine J Kiffmeyer Rev Trust	21502 County Road 44	Clearwater, MN 55320
Elfering Greg D and Hreha Jodi M Elfering; Elfering John R; Elfering Joel D	35385 County Road 11	Freeport, MN 56331
Elfering Jeanne R and Frieler Alvin B & Rita; Douvier Darlene M	209 3rd Ave SW	Melrose, MN 56352
Elfering Joel D	35477 County Road 11	Freeport, MN 56331
Elfering John R and Elfering Alecia A	35781 County Road 11	Freeport, MN 56331
Elfering Thomas R & Dorothy	35385 County Road 11	Freeport, MN 56331
Elizabeth L Lardy	210 Kothman Cir	Clearwater, MN 55320
Elizabeth R Bigelow	14354 Cushing Ave NW	Monticello, MN 55362
Ellen J Kush	917 Hidden Meadow Ln	Lake City, MN 55041
Ellering Perry J and Zwiig Danielle M	417 1st St SW	Melrose, MN 56352
Ellering-Gross LLC	1548 Prairie Hill Rd	Saint Cloud, MN 56301
Ellis Martin B and Ellis Suzanne Coborn	2460 Keller Rd	Long Lake, MN 55356
Ellis, Gary A & Barbara J	5841 Whitetail Ln SE	Osakis, MN 56360
Emerson Edwin E	421 E 221st St	Clearwater, MN 55320
Emmerich Jacob M	22075 3rd Ave E	Saint Cloud, MN 56301
Emslander Leo H & Laure M	245 222nd St E	Saint Cloud, MN 56301
Engberg David W & Joyce M	23732 Gaberdine Rd	Saint Augusta, MN 56301
Engel Gregory A & Susan A	1983 40th St S	Saint Cloud, MN 56301
Enger Gloria C	9105 County Road 138	Saint Cloud, MN 56301
Engie Energy	225 W Hubbard St	Chicago, IL 60654
Engle Brothers Construction Inc	1841 Sinclair Lewis Ave	Sauk Centre, MN 56378
Enneking Marvin	26365 Huckleberry Ct	Cold Spring, MN 56320
Enninga Josiah D	26086 80th Ave	Saint Cloud, MN 56301
Enos Matthew	22133 Fairmount Rd	Saint Cloud, MN 56301
Erdman Eric and Erdman Emily	24429 17th Ave	Saint Augusta, MN 56301
Eric Farber	638 Juliet Ave	Clearwater, MN 55320
Eric J Frieler & Jocelyn D Frieler	1315 Sunrise Ct	Clearwater, MN 55320
Eric L Leander	1025 Mitchell Ave	Clearwater, MN 55320
Eric M Mcquire	865 Isabella Ave	Clearwater, MN 55320
Eric M Metso & Lacie L Metso	3635 144th St NW	Monticello, MN 55362
Eric T & Esther M Aspling	210 Kitty Dr	Clearwater, MN 55320
Erickson Bernard R	5073 County Road 6	Saint Cloud, MN 56301
Erickson Kaylee C	1673 Forest Glen Cir	Saint Augusta, MN 56301
Erickson Scott D and Erickson Lynette K	1215 Royal Oaks Rd	Saint Cloud, MN 56304
Erik T Nichols	1160 Porter St	Clearwater, MN 55320

**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Erin D Swenson Rev Trust	25818 Island Lake Rd	Cold Spring, MN 56320
Ernst Terence M and Ernst Jane L	3959 21st Ave S	Saint Cloud, MN 56301
Estby Scott A and Estby Rebecca A	1560 39th St S	Saint Cloud, MN 56301
Ethen John A	4516 40th St S	Saint Cloud, MN 56301
Ethen Wayne M & Christine E	21823 Fairfax Rd	Clearwater, MN 55320
ETJ Properties LLC	PO Box 234	Melrose, MN 56352
Eugene & Stephanie Bassamore	956 Isabella Ave	Clearwater, MN 55320
Eugene A Blommel Rev Trust and Marlene E Blommel Rev Trust	38467 Tristan Rd	Freeport, MN 56331
Eugene H Middendorf & Mary Ann A Middendorf Rev Trust	124 4th Ave NW	Melrose, MN 56352
Euteneuer Cyrilla and Euteneuer Norman	28567 263rd Ave	Albany, MN 56307
Euteneuer Duane	26642 County Road 177	Albany, MN 56307
Euteneuer Jeffrey S	25482 County Road 74	Saint Cloud, MN 56301
Evans Lindsay L	3815 Barberry Dr S	Saint Cloud, MN 56301
Evens Duane L & Carol A	38954 County Road 29	Sauk Centre, MN 56378
Everett G Scherping Trust Agreement	37267 Rimcrest Rd	Freeport, MN 56331
Eversman Ginger K	9010 Terra Verde Trl	Eden Prairie, MN 55347
Ewers Henry H & Kathryn M	3825 Richter Ave	Saint Cloud, MN 56301
Ewing Farms, Inc	18565 County Road 14 NW	Big Lake, MN 55309
Ewing Properties, LLC	18438 County Road 14 NW	Big Lake, MN 55309
Ewing, Peter A	13066 165th Ave	Becker, MN 55308
Eyvindsson Erik J	1668 Forest Glen Cir	Saint Augusta, MN 56301
Fahey Debra L and Morgel Irene	24764 21st Ave	Saint Augusta, MN 56301
Fahrner Monica and Westermeyer Kathryn; Fahrner Matthew; Koste Anne	235 Meadowlark Ln SW	Melrose, MN 56352
Family Tr of Agnew Loving Tr and Ione C Agnew (Trustee)	19197 County Road 145	Clearwater, MN 55320
Family Trust and Elizabeth M Hemmesch Trust	25666 County Road 9	Richmond, MN 56368
Famo Feeds Inc	446 Industrial Dr	Freeport, MN 56331
Famo Feeds Inc	PO Box 7	Freeport, MN 56331
Fandel Susan Marie	67 Harper St	San Francisco Ca 94131
Fanfulik Brian	4388 Clearwater Rd	Saint Cloud, MN 56301
Farmers Union Industries LLC	PO Box 319	Redwood Falls, MN 56283
Farming Baseball Club Inc	PO Box 65	Richmond, MN 56368
Farming Community Center	23801 County Road 42	Richmond, MN 56368
Fedyszyn Carl J and Fedyszyn Mary G	1905 38th St S	Saint Cloud, MN 56301
Feld Ralph F	16498 County Road 160	Cold Spring, MN 56320
Feldewerd Karrie	247 Meadowlark Ln SW	Melrose, MN 56352
Feldewerd Susan M and Feldewerd Jacob	32318 Riverview Rd	Melrose, MN 56352

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Felix Lenore A	26715 Island Lake Rd	Cold Spring, MN 56320
Felix Robert J & Rosemarie	1536 39th St S	Saint Cloud, MN 56301
Felling Jason and Felling Marie	38572 County Road 187	Sauk Centre, MN 56378
Felsch Eric L	1507 37th St S	Saint Cloud, MN 56301
Finken Alto J	16682 County Road 160	Cold Spring, MN 56320
Finken Daniel L	9288 County Road 138	Saint Cloud, MN 56301
Finken Gary Jr	180 Meadowlark Ln SW	Melrose, MN 56352
Fischer Marian	1308 240th St	Saint Cloud, MN 56301
Fischer Nicholas	24321 18th Ave	Saint Augusta, MN 56301
Fischer Nicole R and Fischer Ryan	26093 Bluebird Ln	Saint Cloud, MN 56301
Fisher Deedee D	1925 38th St S	Saint Cloud, MN 56301
Fitzgerald Michael	4530 40th St S	Saint Cloud, MN 56301
Florence A Schurman Trust	205 Fairy Lake Rd	Sauk Centre, MN 56378
Foley Michael M & Joann L	39065 State Highway 4	Sauk Centre, MN 56378
Folkerts Michael and Folkerts Nicole	8915 290th St	Saint Cloud, MN 56301
Forstrom Carla M Forstrom Thomas W	208 222nd St E	Saint Cloud, MN 56301
Foster Nathan A and Foster Melissa S	5575 40th St S	Saint Cloud, MN 56301
Fouquette Chad R and Fouquette Audrey S	1710 39th St S	Saint Cloud, MN 56301
Francis E & Melissa A Stafki	12450 Afton Ave NE	Monticello, MN 55362
Frank B & Margaret A Imholte Trust	8158 County Road 138	Saint Cloud, MN 56301
Frank Nicholas W and Frank Marcia	1956 38th St S	Saint Cloud, MN 56301
Frantesl Mark J & Kathryn M	4214 255th St	Saint Cloud, MN 56301
Franzwa Jordan and Franzwa Morgan	26154 Bluebird Ln	Saint Cloud, MN 56301
Frederick & Carole Wurst Trust	5300 250th St	Saint Cloud, MN 56301
Fredrickson R Doug & Sue	26545 Jade Rd	Saint Cloud, MN 56301
Freed Bryan J	26053 Bluebird Ln	Saint Cloud, MN 56301
Freed Marie S and Freed John A	26096 Bluebird Ln	Saint Cloud, MN 56301
Freeman James D & Heidi A	2614 Atwood Dr	Saint Cloud, MN 56301
Freeport State Bank	PO Box 187	Freeport, MN 56331
French Rachel J and French Brian R	26876 223rd Ave	Richmond, MN 56368
Frericks Loren N and Zarbok Myranda N	PO Box 102	Melrose, MN 56352
Frie Peter and Mattos Patricia; Hughes Margaret; Frie Paul; Frie Rosalie C	109 Emerald Ave SW	Melrose, MN 56352
Frieler Jacob M	504 1st St SW	Melrose, MN 56352
Frieler Kurt T	36635 County Road 13	Melrose, MN 56352
Frieler Michael D and Frieler Mara L	38746 375th Ave	Sauk Centre, MN 56378
Frieler Nicholas T	718 Country Club Dr SW	Melrose, MN 56352

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Frieler Thomas & Barbara	36003 County Road 13	Melrose, MN 56352
Frieler Timothy L & Debra A	39316 Wild Rose Ct	Sauk Centre, MN 56378
Fries Jerry F	10501 270th St	Saint Cloud, MN 56301
Froelich James C & Dawn M	21151 Franklin Rd	Clearwater, MN 55320
Fruth Enterprises LLC	17307 County Road 7 NW	Clearwater, MN 55320
Fruth Michael R	22335 County Road 75	Saint Cloud, MN 56301
Fruth Revocable Intervivos Tr	10960 Hart Ave NW	Maple Lake, MN 55358
Fuchs Jamie R	706 Country Club Dr SW	Melrose, MN 56352
Funk Darin R and Funk Stacy	37167 300th Ave	Melrose, MN 56352
Funk Mark J	36022 Rimcrest Rd	Freeport, MN 56331
Funk Michael L	29002 Uhlenkolts Lake Rd	Freeport, MN 56331
Funk Roger & Susan	36475 Rimcrest Rd	Freeport, MN 56331
G & M Outdoor Holdings LLC	1190 Highland Bay	Big Lake, MN 55309
G & R Dairy Partnership	25522 County Road 177	Albany, MN 56307
Gadacz Sharri L	1680 Forest Glen Cir	Saint Augusta, MN 56301
Gaebel Donald & Judith	28514 Oakview Rd	Freeport, MN 56331
Gail A Stanger Rev Trust	27209 Jade Rd	Saint Cloud, MN 56301
Gamradt Allen E and Gamradt Judy	41752 373rd Ave	Sauk Centre, MN 56378
Gamradt Pearl A	173 Meadowlark Ln SW	Melrose, MN 56352
Gamradt Zachary D	404 2nd St NW	Melrose, MN 56352
Gangl David	110 Park Dr SW	Melrose, MN 56352
Gannon Jeffrey J	24457 17th Ave	Saint Augusta, MN 56301
Gardner Kevin M	4108 255th St	Saint Cloud, MN 56301
Garies Jeffrey and Garies Nicole R	24379 19th Ave	Saint Augusta, MN 56301
Gary A Shonyo	1197 145th St NW	Monticello, MN 55362
Gary Benson	14110 Barton Ave NW	Monticello, MN 55362
Gary D & Barbara J Kjellberg	2070 159th St NW	Monticello, MN 55362
Gary G & Christa Zahler	16019 Evans Ave NW	Clearwater, MN 55320
Gary J & Jessica M Rieder	16001 Forsythe Ave NW	Clearwater, MN 55320
Gary J & Karen K Smith	5268 150th St NW	Clearwater, MN 55320
Gary J Grant	15809 Grover Ave NW	Clearwater, MN 55320
Gary L & Wanda L Phelps	1150 Porter St	Clearwater, MN 55320
Gary M & Jodi A Schneider Trust	12800 202nd St	Cold Spring, MN 56320
Gary M Quarnstrom & Ardyth E Quarnstrom	2536 155th St NW	Monticello, MN 55362
Gary R Salmela	745 Isabella Ave	Clearwater, MN 55320
Gasperlin Brian	22092 3rd Ave E	Saint Cloud, MN 56301

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Gaulrapp Melissa J	19054 Emerson Rd	Clearwater, MN 55320
Gayken Richard L & Julie A	3916 Cooper Ave S	Saint Cloud, MN 56301
Gc Iron Inc	13628 Joseph Ave	Becker, MN 55308
GD Properties of Waite Park LLC	PO Box 682	Waite Park, MN 56387
Geise Gerald & Mary Ann	23267 County Road 42	Richmond, MN 56368
Geise Sylvester M & Mary	23728 County Road 17	Freeport, MN 56331
Geislinger Dwight R & Karen	11544 County Road 139	Saint Cloud, MN 56301
Gene E Jr & Anna G Spurlock	3005 145th St NW	Monticello, MN 55362
Genereux Brent T & Cathy J	1617 Forest Glen Cir	Saint Augusta, MN 56301
Genex Cooperative Inc	PO Box 469	Shawano, WI 54166
Genuine Properties LLC	PO Box 339	Clearwater, MN 55320
Gerads Adam	324 2nd St SW	Melrose, MN 56352
Gerads Clarence & Alvina	948 Country Club Dr SW	Melrose, MN 56352
Gerads David and Gerads Darlene	226 Kraft Dr SW	Melrose, MN 56352
Gerads Nicholas L and Gerads Amyia K	304 1st St SW	Melrose, MN 56352
Gerads Troy and Hinnenkamp Jodi	213 Meadowlark Ln SW	Melrose, MN 56352
Gerald C & Mary L Foley	15139 Elder Ave NW	Clearwater, MN 55320
Gerald D Zimmermann Rev Liv Tr	11347 Hillcrest Dr N	Champlin, MN 55316
Gerald E Schmidt Rev Living Trust and Bernice G Schmidt Trust	22444 8th Ave	Clearwater, MN 55320
Gerald Sonnen Legacy Family LLLP	33556 State Highway 4	Melrose, MN 56352
Gerald W & Mary S Kingren	1421 155th St NW	Monticello, MN 55362
Geraldine A Moscho Trust and Leroy F Moscho Trust	30087 County Road 11	Freeport, MN 56331
Gertken Alicia	7925 Bluebird Ct	Saint Cloud, MN 56301
Gertken Daniel W	PO Box 672	Richmond, MN 56368
Gertken David L & Georgia A	25646 County Road 177	Albany, MN 56307
Gertken Ervin	233 Maple Ave SE	Richmond, MN 56368
Gertken Jamie R and Gertken Cassian M	25992 County Road 177	Albany, MN 56307
Gertken Leo E and Demarais Jolene	20374 Edgehill Cir	Richmond, MN 56368
Gertken Robert L & Suellen	22096 Fairmount Rd	Saint Cloud, MN 56301
Gettel Jason R	175 Par Dr SW	Melrose, MN 56352
Gfall Donald J & Julie A	23514 Gaberdine Rd	Saint Augusta, MN 56301
Gieske Thomas J	PO Box 142	Melrose, MN 56352
Gill Michael V & Arleen R	10977 270th St	Saint Cloud, MN 56301
Gill Richard J & Gloria J	5211 40th St S	Saint Cloud, MN 56301
Gillitzer Randy & Sue	8945 Ivy Rd	Saint Cloud, MN 56301
Gj Enterprises LLC	21425 19th Ave E	Clearwater, MN 55320

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Glen Lewerenz & Jennifer A Mack	950 Kelsey Ave	Clearwater, MN 55320
Glen Schultz & Nancy Schultz	890 10th St	Clearwater, MN 55320
Glenn David H & Vicki L	23534 Gaberdine Rd	Saint Augusta, MN 56301
Goebel Alice and Goebel Leroy B	1621 Forest Glen Cir	Saint Augusta, MN 56301
Goebel Jordan L and Goebel Melinda E	26101 80th Ave	Saint Cloud, MN 56301
Goebel Kevin A & Sharon	34464 County Road 11	Freeport, MN 56331
Goebel Roger A & Michelle M	700 Eagle Dr SW	Melrose, MN 56352
Goehring Emily A and Loxtercamp Eric R	26119 80th Ave	Saint Cloud, MN 56301
Goerdts Steven & Lisa	224 Meadowlark Ln SW	Melrose, MN 56352
Goerger Jason and Goerger Cindy	25595 County Road 2	Saint Cloud, MN 56301
Gohman Lloyd J & Leroy E	24150 Franklin Rd	Saint Cloud, MN 56301
Gohman Ronald F & Rosemary B	1702 200th St E	Clearwater, MN 55320
Good Duane L & Barbara B	24888 21st Ave	Saint Augusta, MN 56301
Good Monica L	27076 County Road 41	Albany, MN 56307
Goodell Cory R	PO Box 126	Clearwater, MN 55320
Gopher State Properties LLC	1208 Trappers Path	Buffalo, MN 55313
Goulet Christopher A and Goulet Christina J	25801 County Road 136	Saint Cloud, MN 56301
Graham J & Janice M Hendrickson	709 Lauren Ave	Clearwater, MN 55320
Grand River (Estates) LLC	3735 8th Ave S	Saint Cloud, MN 56301
Grand Valley Properties LLC	29007 477th Ave	Canton, SD 57013
Granite City Ready Mix, Inc	4787 Shadowwood Dr NE	Sauk Rapids, MN 56379
Grant M & Ranae K Williams	3433 144th St NW	Monticello, MN 55362
Great River Energy	12300 Elm Creek Blvd N	Maple Grove, MN 55369
Green Gables Turkey Farm Inc	38942 355th Ave	Melrose, MN 56352
Greener Ronald L & Jeanette	5930 250th St	Saint Cloud, MN 56301
Greg & Jean Steinhofer Family Trust	24085 County Road 75	Saint Augusta, MN 56301
Gregg Nolt	16565 Fillmore Ave NW	Clearwater, MN 55320
Gregg Snabb	235 Kothman Cir	Clearwater, MN 55320
Gregory & Angela McCormick	668 Juliet Ave	Clearwater, MN 55320
Gregory M & Susan A Lanners	358 127th St NE	Monticello, MN 55362
Gregory O & Patricia A Roisen	8117 65th Ave N	Brooklyn Park, MN 55428
Grewe Carl W Jr & Sharon	905 NW Oakridge Dr	Blue Springs Mo 64015
Griffith James and Kirkham-Griffith Justine	1620 Forest Glen Cir	Saint Augusta, MN 56301
Groetsch Brothers Farms LLC	38262 County Road 187	Sauk Centre, MN 56378
Gronseth Rhonda and Gronseth Scott	1724 39th St S	Saint Cloud, MN 56301
Gross Brian P & Sheela J	4206 40th St S	Saint Cloud, MN 56301



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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Grossinger Craig and Pettis Laura	2335 200th St E	Clearwater, MN 55320
Grove Land Co LLC	33672 343rd Ave	Melrose, MN 56352
Grow Holding Company Inc	533 Julep Rd	Waite Park, MN 56387
Gruber Christine	24447 18th Ave	Saint Augusta, MN 56301
Gruenke Anthony	1607 Forest Glen Cir	Saint Augusta, MN 56301
Grundman, Marilyn L	12643 Mound Rd SE	Osakis, MN 56360
Gruska Linda	26062 80th Ave	Saint Cloud, MN 56301
Grussing Paul D	37319 Springhaven Rd	Melrose, MN 56352
Guggenberger Craig R & Denise	26174 Island Lake Rd	Cold Spring, MN 56320
Gysberg Roger R	36872 300th Ave	Melrose, MN 56352
Gysberg Tammy and Gysberg Rocky	36704 300th Ave	Melrose, MN 56352
H & H Holdings LLC	2105 Troop Dr	Sartell, MN 56377
H Richard West Family Trust	118 Inger Pl	Buffalo, MN 55313
Haakonson Valerie M	24332 19th Ave	Saint Augusta, MN 56301
Haelan House LLC	60 S 6th St	Minneapolis, MN 55402
Haffley Robert R & Juanita	PO Box 71	Richmond, MN 56368
Hagemeier Erin and Hagemeier Peter J	27582 246th Ave	Albany, MN 56307
Hagemeier Jesse & Lucy	27043 County Road 23	Albany, MN 56307
Hagemeier Peter J and Hagemeier Erin	27582 246th Ave	Albany, MN 56307
Hagemeier Terrance & Sandra	27150 246th Ave	Albany, MN 56307
Hagen Byram Raeann C and Byram Nicholas J	25807 80th Ave	Saint Cloud, MN 56301
Hagstrom Eugene & Deanne and Hagstrom Erick; Hagstrom Victoria; Hagstrom David	33893 Downy Dr	Dent, MN 56528
Hahn Steven F & Michelle T	23922 Gaberdine Rd	Saint Augusta, MN 56301
Hall Leonard and Marshall-Hall Geraldine	3812 Blueberry Ave S	Saint Cloud, MN 56301
Hamann Darla and Hamann Gregory	1614 38th St S	Saint Cloud, MN 56301
Hanisch Jonathan K & Tina R	5643 40th St S	Saint Cloud, MN 56301
Hanisch Leroy & Raymond	23270 8th Ave	Saint Cloud, MN 56301
Hanley Ramsey J and Hanley Kelsey M	24335 18th Ave	Saint Augusta, MN 56301
Hansen Christopher and Hansen Crystal	311 1st St SW	Melrose, MN 56352
Hansen Daniel J	815 5 1/2 St N	Cold Spring, MN 56320
Hansen Geraldine M and Brennan William L; Hansen-Brennan Jessica; Hansen Steven	23051 County Road 75	Saint Cloud, MN 56301
Hansen James	21734 County Road 42	Richmond, MN 56368
Hansen Thomas G & Donna M	13667 Glacier Rd	Cold Spring, MN 56320
Hansen Zachary J & Kimberly K	26109 Bluebird Ln	Saint Cloud, MN 56301
Happa Properties LLP	22442 43rd Ave	Saint Augusta, MN 56301
Happe John E	1701 Prairie Hill Rd	Saint Cloud, MN 56301

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Hardrives Inc	14475 Quiram Dr	Rogers, MN 55374
Harnanan Heeralall	14842 Endicott Ave NW	Clearwater, MN 55320
Harold A Schneider Rev Trust and Joan M Schneider Rev Trust	9137 County Road 138	Saint Cloud, MN 56301
Harold Mayes Jr	620 Juliet Ave	Clearwater, MN 55320
Harold W Jr & Mary Lu Keske	17130 County Road 75 NW	Clearwater, MN 55320
Harren Daniel R and Harren Susanne R	426 1st St SW	Melrose, MN 56352
Harren Robert A & Kristie M B	28691 County Road 30	Freeport, MN 56331
Harrum Christopher M	27133 County Road 41	Albany, MN 56307
Hartung Chris D	204 4th Ave NW	Melrose, MN 56352
Harvest Bank	PO Box 70	Kimball, MN 55353
Harvey Lindstrom	14929 Appleton Ave NW	Monticello, MN 55362
Haskamp Mark	39318 Us Highway 71	Sauk Centre, MN 56378
Haskamp Ronald W & Janice M	PO Box 174	Melrose, MN 56352
Hasselbring Enterprises	307 Waite Ave S	Saint Cloud, MN 56301
Hasty House LLC	PO Box 11	Milaca, MN 56353
Hasty Truck Stop Inc	4101 148th St NW	Clearwater, MN 55320
Haus Lisa	1301 5th Ave N	Cold Spring, MN 56320
Hausmann Terry D and Hausmann Lynn M	1936 38th St S	Saint Cloud, MN 56301
Hawkinson Douglas E & Vicki J	26021 County Road 2	Saint Cloud, MN 56301
Hayden Susan M	3659 N Spaulding Ave	Chicago, IL 60618
Hayenga Gregory A and Hayenga Meagan M	24897 21st Ave	Saint Augusta, MN 56301
Hayward James & Laurie	23782 Gaberdine Rd	Saint Augusta, MN 56301
Heald Shane R & Angela R	8988 Ivy Rd	Saint Cloud, MN 56301
Heartland Properties of Blaine LLC	6885 139th Ln NW	Ramsey, MN 55303
Heaton Derek and Dhein Jessica	24440 18th Ave	Saint Augusta, MN 56301
Hector Harland J	16286 County 2	Osakis, MN 56360
Hedin Amber G and Hedin Paul A	2105 37th St S	Saint Cloud, MN 56301
Hegg Wayne M and Hegg Aimee R	37325 Springhaven Rd	Melrose, MN 56352
Hegge, James M & Eileen	310 Ormsbee St	Big Lake, MN 55309
Heidi Boon	644 9th St	Clearwater, MN 55320
Heineman Karen J and Heineman Gary D	4135 21st Ave S	Saint Cloud, MN 56301
Heinen Craig J and Heinen Talyn M	1688 Forest Glen Cir	Saint Augusta, MN 56301
Heinen Dennis L and Hoffman Christiann K	PO Box 442	Cold Spring, MN 56320
Heinen Douglas M & Alyssa H	26152 Island Lake Rd	Cold Spring, MN 56320
Heinen Family Trust	17604 260th St	Richmond, MN 56368
Heinen Robert & Deb	26582 183rd Ave	Richmond, MN 56368

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Heinen Stephen J	16105 County Road 160	Cold Spring, MN 56320
Heinen Thomas & Carol	27913 Jade Rd	Saint Cloud, MN 56301
Heinks Jerald D & Elaine A	4009 Cooper Ave S	Saint Cloud, MN 56301
Heins David & Lila	25883 Holly Rd	Saint Cloud, MN 56301
Heinze Craig R & Kristie S	179 Meadowlark Ln SW	Melrose, MN 56352
Held Limited Partnership	8504 Old Highway Rd N	Saint Cloud, MN 56301
Held Randy J and Held Amanda J	3817 Richter Ave	Saint Cloud, MN 56301
Held Richard E & Karen M	8504 Old Highway Rd N	Saint Cloud, MN 56301
Held Todd L & Mary A	8506 Old Highway Rd N	Saint Cloud, MN 56301
Helget Joseph D & Corinne S	2219 County Road 143	Clearwater, MN 55320
Helget Keith	2277 197th St E	Clearwater, MN 55320
Helget Keith P	PO Box 426	Clearwater, MN 55320
Hellermann Matthew	5 5th Ave SW	Melrose, MN 56352
Hemmesch Mary Lou	23477 County Road 23	Richmond, MN 56368
Hendricks Andrew	24412 18th Ave	Saint Augusta, MN 56301
Henkel Trent M	8942 Ivy Rd	Saint Cloud, MN 56301
Hennen Jeanette L	25138 63rd Ave	Saint Cloud, MN 56301
Hennen Joseph J	PO Box 114	Freeport, MN 56331
Hennen Timothy	5667 40th St S	Saint Cloud, MN 56301
Hennes Maria D	1633 Forest Glen Cir	Saint Augusta, MN 56301
Henry A Weidema	13990 Berkshire Ln	Dayton, MN 55327
Henry A Weidema Revocable Tr	17600 113Th Ave N	Maple Grove, MN 55369
Henry J Ahrens & Janice M Ahrens Trust and Ahrens Henry & Janice	507 Riverside Ave NW	Melrose, MN 56352
Henry Judith A and Henry Greg S	1567 39th St S	Saint Cloud, MN 56301
Herdering Steven A & Pamela K	29846 County Road 157	Freeport, MN 56331
Herickhoff Bradley and Herickhoff Amy	42340 State Highway 28	Sauk Centre, MN 56378
Herman & Dianne Aschnewitz	885 145th St NW	Monticello, MN 55362
Hernandez Jaime M and Cisneros Veronica M	425 Main St W	Melrose, MN 56352
Hernandez Jesus Valencia and Chavez Zaida Orozco	326 1st St SW	Melrose, MN 56352
Hervig Dana	PO Box 612	Philipsburg Mt 59858
Hesse Gordon A	14112 264th St	Cold Spring, MN 56320
Hesselroth Diane R	411 1st St SW	Melrose, MN 56352
Hickman Melissa E	26132 Bluebird Ln	Saint Cloud, MN 56301
Hicks Stephanie A	939 Cypress Rd	Saint Cloud, MN 56303
Hiemenz Daniel J and Winter Kristin L	24364 19th Ave	Saint Augusta, MN 56301
Highway Materials Properties LLC	14990 Industry Ave SE	Becker, MN 55308

**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Hiltner Donald R & Rebecca R	34764 County Road 65	Melrose, MN 56352
Hiltner Keith A & Susan S	7985 Bluebird Ct	Saint Cloud, MN 56301
Hinkemeyer Harold & Luanne	22382 County Road 44	Saint Augusta, MN 55320
Hinkemeyer Mitchell G and Hinkemeyer Anna M	22082 Fairfax Rd	Clearwater, MN 55320
Hinnenkamp Bros Dairy LLC	35537 County Road 185	Sauk Centre, MN 56378
Hinnenkamp Isaak and Hinnenkamp Kathryn J	39746 County Road 13	Melrose, MN 56352
Hinnenkamp Jeron N & Lavonne F	38942 355th Ave	Melrose, MN 56352
Hinnenkamp Luverne B	3 2nd St SE	Melrose, MN 56352
Hinnenkamp Richard & Claudette and Frieler Michael D	820 Country Club Dr SW	Melrose, MN 56352
Hipsag Sasha	4222 Clearwater Rd	Saint Cloud, MN 56301
Hirschfeld Homes LLC	1203 4th Ave N	Cold Spring, MN 56320
Hobbs Rosemary C and Hobbs Jordan S	26415 Hermitage Rd	Cold Spring, MN 56320
Hochstedler Kandy L and Hochstedler Chad D	3837 County Road 74	Saint Cloud, MN 56301
Hock Robert and Hock Doris	104 Garnet Ave SW	Melrose, MN 56352
Hodgin Family Farm Ptshp LLP	PO Box 157	Loretto, MN 55357
Hodnefield Todd A & Holly J	21979 Franklin Rd	Clearwater, MN 55320
Hoelscher Sharon M and Hoelscher Lloyd D	26083 80th Ave	Saint Cloud, MN 56301
Hoeschen Amanda and Theiler Aaron L	956 Country Club Dr SW	Melrose, MN 56352
Hoffarth Brad & Gina	12899 124th St	Osakis, MN 56360
Hoffman Anthony S and Kaye Jennifer J	26117 Bluebird Ln	Saint Cloud, MN 56301
Hoffman Bryan J and Hoffman Crescent A	1512 39th St S	Saint Cloud, MN 56301
Hoffman Ryan J & Tiffany R	22103 County Road 75	Saint Cloud, MN 56301
Hoffmann Michelle A and Hoffmann Jason J	660 5th St NW	Richmond, MN 56368
Hoffmann Robert N & Karen A	29833 273rd Ave	Albany, MN 56307
Hoffner Nathan & Sara	180 Par Dr SW	Melrose, MN 56352
Hogie Wanda Lynn	422 E 221st St	Clearwater, MN 55320
Hoheisel Justin A	24433 18th Ave	Saint Augusta, MN 56301
Holiday Stationstores Inc	PO Box 1224	Minneapolis, MN 55440
Hollenhorst Cory C and Hollenhorst Michelle M	3669 21st Ave S	Saint Cloud, MN 56301
Hollenkamp David J	37011 Xenon St NW	Princeton, MN 55371
Hollermann Vernon & Barbara	525 1st St SW	Melrose, MN 56352
Holtzs Three LLC	14420 83rd St SE	Becker, MN 55308
Hommerding Arthur C Jr & Betty	16767 County Road 160	Cold Spring, MN 56320
Hommerding Randy H & Denise and Randy H & Denise A Hommerding Trust	24183 County Road 75	Saint Augusta, MN 56301
Hondl Properties LLC	32155 Noble Oak Cir	Avon, MN 56310
Honkomp Jason L and Thelen Darla A	37221 Springhaven Rd	Melrose, MN 56352

**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Hood Brooks W	24987 County Road 7	Saint Augusta, MN 56301
Hopfer Eugenia C	28732 County Road 176	Freeport, MN 56331
Hoplock Farm LLC	33122 280th Ave	Freeport, MN 56331
Hoppe Timothy J	29486 330th St	Freeport, MN 56331
Hornibrook William J & Susan	23962 Gaberdine Rd	Saint Augusta, MN 56301
Housman James B	314 Main St W	Melrose, MN 56352
Housman Samantha	117 3rd Ave SW	Melrose, MN 56352
Houston Homes Inc	9020 Willowby Xing	Maple Grove, MN 55311
HRA of St Cloud	1225 W Saint Germain St	Saint Cloud, MN 56301
Hubbard, Ryan & Michelle	12272 82nd St SE	Becker, MN 55308
Hugget Charlotte X and Hugget Brandon D	24791 County Road 7	Saint Augusta, MN 56301
Hughs Braden D & Lynette M	25033 County Road 7	Saint Augusta, MN 56301
Hugo O Cantoran Nava & Jayme S Johnson	660 Juliet Ave	Clearwater, MN 55320
Huhne Ross G & Karen M	1857 39th St S	Saint Cloud, MN 56301
Huls Drew J	26302 County Road 50	Cold Spring, MN 56320
Huls Nicholas J	9937 320th St	Saint Joseph, MN 56374
Huls Ross Herbert	219 35th Ave N	Saint Cloud, MN 56303
Huntington Dillon	39413 Us Highway 71	Sauk Centre, MN 56378
Husom Constance L	PO Box 283	Clearwater, MN 55320
Hutt Danielle M and Hutt Jacob M	24475 18th Ave	Saint Augusta, MN 56301
Hutt Darla and Hutt Timothy	24365 19th Ave	Saint Augusta, MN 56301
Hutt Gretchen and Hutt Jeremy	24412 19th Ave	Saint Augusta, MN 56301
Hutt Tanner C	24405 18th Ave	Saint Augusta, MN 56301
Ian A Greniger & Emily Webb	505 Prairie St	Clearwater, MN 55320
ICPRE, LLC	14123 42nd St NE	Saint, Michael, MN 55376
Iman Bishoro and Hassan Abdirisag	3842 Bear Ridge Ave S	Saint Cloud, MN 56301
Iman Muna and Ali Abdi	3834 Bear Ridge Ave S	Saint Cloud, MN 56301
Iman Yasmin Hassan and Ali Isse Nur	3829 Bear Ridge Ave S	Saint Cloud, MN 56301
Imdieke Jacob	15678 Parkwood Cir	Avon, MN 56310
Imdiekes Imperial Farms LLC Rev Trust Agreement and Landwehr Landholding LLC	16118 163rd Ave	Watkins, MN 55389
Imholte Robert L & Patricia	16768 County Road 160	Cold Spring, MN 56320
Independent School District #742	1201 2nd St S	Waite Park, MN 56387
Independent School District #745	PO Box 40	Albany, MN 56307
Inderrieden Ralph & Roseann	PO Box 53	Melrose, MN 56352
Institute For Rural America	PO Box 566	Ames Ia 50010
Interchange Plaza LLC	11276 210th St W	Lakeville, MN 55044

**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Isham Michele M	1603 Forest Glen Cir	Saint Augusta, MN 56301
Island Investment Inc	728 Garfield Ave	Duluth, MN 55802
IWWP LLC	PO Box 1228	Saint Cloud, MN 56302
J & J Building LLC	22480 County Road 75	Saint Cloud, MN 56301
J & J Building LLC	4807 Heatherwood Rd	Saint Cloud, MN 56301
J & J Building LLC	PO Box 813	Saint Cloud, MN 56302
J & M Acres LLC	20104 275th St	Richmond, MN 56368
J K Real Estate Services LLC	PO Box 428	Sartell, MN 56377
J2 Properties LLC	8365 Brandon Rd	Baxter, MN 56425
Jackula Sally B	3112 Southway Dr	Saint Cloud, MN 56301
Jacob Bidwell	515 9th St	Clearwater, MN 55320
Jacob C & Sara M Hernandez	725 Isabella Ave	Clearwater, MN 55320
Jacob Danial Scherer & Elisa Joan Scherer	16184 21st St	Clear Lake, MN 55319
Jacob J Schaunaman & Shelby G Lieser	830 10th St	Clearwater, MN 55320
Jacob R Rigenhagen & Allison F Oschwald	273 127th St NE	Monticello, MN 55362
Jacob Vickroy	1025 Main St	Clearwater, MN 55320
Jacobs Bryan L	755 County Road 143	Clearwater, MN 55320
Jacobs Mark L & Sheila A	2174 County Road 143	Clearwater, MN 55320
Jacobson Katherine E and Jacobson Andrew T	1669 Forest Glen Cir	Saint Augusta, MN 56301
Jacqueline A Osiecki Kalway	15187 County Road 75 NW	Clearwater, MN 55320
Jacqueline Mikel Adamek 2004 Rev Trust	17386 Harbor Rd	Cold Spring, MN 56320
Jake Lindenfelser & Emily Lindenfelser	15268 Ferman Ave NW	Clearwater, MN 55320
Jake M Deadrick	777 Isabella Ave	Clearwater, MN 55320
Jamboree Properties LLC	1008 Main St S	Sauk Centre, MN 56378
James & Barbara Boeck	14181 Dempsey Ave NW	Monticello, MN 55362
James & Mary Hallila Trust	3074 142nd St NW	Monticello, MN 55362
James & Patricia Voigt Trust	21362 County Road 44	Clearwater, MN 55320
James A Hill	1195 Porter St	Clearwater, MN 55320
James A Studniski & Debra K Studniski Rev Trust	21955 County Road 75	Clearwater, MN 55320
James C & Julie A Lebahn	313 Meadowood Ln	Vadnais Heights, MN 55127
James D Properties, LP	12940 Prosperity Ave	Becker, MN 55308
James G Matchinsky & Roselyn Matchinsky Rev Trust	116 Garnet Ave SW	Melrose, MN 56352
James G Nieland	695 10th St	Clearwater, MN 55320
James Geyen Helget	15440 Ferman Ave NW	Clearwater, MN 55320
James H Fynboh Rev Trust	39202 Wild Rose Ct	Sauk Centre, MN 56378
James H Herding Rev Trust and Lisa M Herding Rev Trust	25772 County Road 17	Freeport, MN 56331

**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
James J Deters Trust	117 Hoowaiwai Loop	Wailuku HI 96793
James K & Nila Anderson	1461 155th St NW	Monticello, MN 55362
James L & Lynea R Theisen	3162 142nd St NW	Monticello, MN 55362
James L Hennen & Joan V Hennen Rev Trust	116 River Oaks Dr	Cold Spring, MN 56320
James L Robeck	13280 Acacia Ave NE	Monticello, MN 55362
James Linda & Krista Linda	1380 Sunrise Ct	Clearwater, MN 55320
James M & Kaye A Eisele	704 W 4th St	Monticello, MN 55362
James P & Mary H Nunke	PO Box 68	Clearwater, MN 55320
James R & Lisa A Evans	14485 Custer Ave NW	Monticello, MN 55362
James R Schreifels Family Trust	8621 County Road 8	Kimball, MN 55353
James S Lowe	1898 159th St NW	Monticello, MN 55362
James T & Valarie Schwinghammer	669 9th St	Clearwater, MN 55320
James Willard Partnership	9562 County Road 138	Saint Cloud, MN 56301
Jamie E & Donna M Erickson	647 127th St NE	Monticello, MN 55362
Jamkee Properties Inc	1413 1st St S	Cold Spring, MN 56320
Jammy A & Amanda J Walker	855 Isabella Ave	Clearwater, MN 55320
Janet J Wittman	750 Lauren Ave	Clearwater, MN 55320
Janet K Lahr 2008 Rev Trust	37402 County Road 187	Sauk Centre, MN 56378
Janice F Pearson Rev Trust	152 Cardinal Ln	Clearwater, MN 55320
Janice M Pallow Rev Trust	13390 Stearns Line Rd	Sauk Centre, MN 56378
Janku Michael H & Katherine	26061 82nd Ave	Saint Cloud, MN 56301
Janski Daniel and Janski Thomas	3761 200th St	Saint Augusta, MN 55382
Jansky James G & Sharon L	39314 Wild Rose Ct	Sauk Centre, MN 56378
Jansky Madelyn T	1609 Forest Glen Cir	Saint Augusta, MN 56301
Janson Gary D & Nancy L	11680 Hazel Rd	Saint Cloud, MN 56301
Janssen Carl & Pamela	27275 223rd Ave	Richmond, MN 56368
Janssen Duane A	27176 218th Ave	Richmond, MN 56368
Janssen Family Rev Trust	26855 County Road 23	Richmond, MN 56368
Janssen Jeffrey J & Sandra E	10803 270th St	Saint Cloud, MN 56301
Jared C Stedham	739 Lauren Ave	Clearwater, MN 55320
Jared S & Ashley M Sypnieski	15370 County Road 75 NW	Clearwater, MN 55320
Jarnot William J & Patricia S	2214 Stephens Way	Saint Cloud, MN 56301
Jasen Hوجلund	14143 Clementa Ave NW	Monticello, MN 55362
Jason & Paige Ovick	520 9th St	Clearwater, MN 55320
Jason A & Tanya J Horst	406 Ramsey St	Monticello, MN 55362
Jason A Middagh	1005 Main St	Clearwater, MN 55320

**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Jason G & Wendy K Mapes	12715 Aetna Ave NE	Monticello, MN 55362
Jason Kreuz	701 Lauren Ave	Clearwater, MN 55320
Jason L Ebert	220 Kothman Cir	Clearwater, MN 55320
Jason L Lejeune	4606 Lords St NE	Prior Lake, MN 55372
Jayson C Boon	935 Isabella Ave	Clearwater, MN 55320
Jeanne L Bushard Trust and Michael L Bushard Trust	40302 425th Ave	Sauk Centre, MN 56378
Jeanne Rosdahl	685 8th St	Clearwater, MN 55320
Jeffrey A Seefeldt	1004 Nicole Ave	Clearwater, MN 55320
Jeffrey C Klemz	15905 Forsythe Ave NW	Clearwater, MN 55320
Jeffrey D Trout	1479 127th St NE	Monticello, MN 55362
Jeffrey E Heinen	13610 Acacia Ave NE	Monticello, MN 55362
Jeffrey N Faust	405 Prairie St	Clearwater, MN 55320
Jeffrey P & Nicole Schmeltzer	2846 156th St NW	Monticello, MN 55362
Jeffrey Ramerth & Britni Christenson	933 Isabella Ave	Clearwater, MN 55320
Jeffrey W & Mary P Hoppe Trust	33122 280th Ave	Freeport, MN 56331
Jeffry Warren	14536 Devitt Ave NW	Monticello, MN 55362
Jelen Joyce	1744 38th St S	Saint Cloud, MN 56301
Jendro John R	2408 40th St S	Saint Cloud, MN 56301
Jennifer B Dart	14160 County Road 75 NW	Monticello, MN 55362
Jennifer L & Kelly J Weber	980 Kelsey Ave	Clearwater, MN 55320
Jennifer L Dickinson Rev Trust and Jennifer L Dickinson (Trustee)	827 145th St NW	Monticello, MN 55362
Jennifer L Jacobson	1335 Sunrise Ct	Clearwater, MN 55320
Jennings Scott J & Beverly K	3824 43rd Ave S	Saint Cloud, MN 56301
Jensen Diane R	210 Kraft Dr SW	Melrose, MN 56352
Jeremiah D & Holly K Konz	909 Isabella Ave	Clearwater, MN 55320
Jeremy L & Nancy L Romness	780 Isabella Ave	Clearwater, MN 55320
Jerome R Zabinski Rev Trust and Kathleen M Zabinski Rev Trust	2734 County Road 6	Waite Park, MN 56387
Jerry D Simpson	14220 Clementa Ave NW	Monticello, MN 55362
Jesse A Schabel	5498 158th St NW	Clearwater, MN 55320
Jesse H & Kayla J Pesola	3710 144th St NW	Monticello, MN 55362
Jesse L Dickinson	1796 137th St NW	Monticello, MN 55362
Jesse Puncochar	680 Juliet Ave	Clearwater, MN 55320
Jesse R & Amanda J Shank	1655 155th St NW	Monticello, MN 55362
Jessica Ann Hoehn	840 10th St	Clearwater, MN 55320
Jessie D & Nicole E Heberling	15545 Grover Ave NW	Clearwater, MN 55320
Jill T Stang Rev Trust	21425 19th Ave E	Clearwater, MN 55320



**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Jim Fuchs Trucking Inc	17 Industry Pkwy SW	Melrose, MN 56352
JJ Ergen and Son'S, LLC	17342 County Road 75 NW	Clearwater, MN 55320
JJJB Properties LLC	PO Box 223	Owatonna, MN 55060
JK Secure Storage LLC	PO Box 428	Sartell, MN 56377
JMKS Properties LLC	PO Box 346	Merrifield, MN 56465
Joan Linder Living Trust	22184 Fairmount Rd	Saint Cloud, MN 56301
Joan M Bettin	660 9th St	Clearwater, MN 55320
Joanne M Holme Rev Trust	14548 Devitt Ave NW	Monticello, MN 55362
Job David J & Alice Mastey	27479 County Road 30	Freeport, MN 56331
Job Elmer and Job Kristal K	26974 County Road 30	Freeport, MN 56331
Jodi Bentley & Carl Bentley	41 Biltmore Pl	West Barnstable Ma 02668
Joel Boster	1583 155th St NW	Monticello, MN 55362
Joel C Dirnberger	14403 Custer Ave NW	Monticello, MN 55362
Joel J Ott & Molly J Hohlen	905 Isabella Ave	Clearwater, MN 55320
Joel R Middendorf Rev Trust and Julie K Middendorf Rev Trust	36262 400th St	Sauk Centre, MN 56378
Johanek Daniel S & Anne M	6452 250th St	Saint Cloud, MN 56301
Johann A Massmann	14518 Devitt Ave NW	Monticello, MN 55362
Johannes Daniel J & Judith	14904 260th St	Cold Spring, MN 56320
Johannes Dennis R & Delores	1906 10th Ave S	Saint Cloud, MN 56301
Johannes Jedd R and Johannes Mary C	24965 County Road 7	Saint Augusta, MN 56301
John & Kate Dietel	13720 County Road 75 NW	Monticello, MN 55362
John A Pazik	16415 Gowan Ave NW	Clearwater, MN 55320
John C & Sarah Spencer	925 Spring St	Clearwater, MN 55320
John C Notsch	16025 Forsythe Ave NW	Clearwater, MN 55320
John C Stafney	16901 County Road 75 NW	Clearwater, MN 55320
John D & Eleanor E Koester	151 Bluebird Ln	Clearwater, MN 55320
John E & Chris A Koshiol	4861 150th St NW	Clearwater, MN 55320
John E & Roberta K Zaske	16061 Evans Ave NW	Clearwater, MN 55320
John E Kleist & Rebecca J Kleist	15232 Curtis Ave NW	Monticello, MN 55362
John Elmer McCooley Rev Tr & Rita Ruth McCooley Rev Tr	4956 150th St NW	Clearwater, MN 55320
John L & Rosalie J Bell	13633 Acacia Ave NE	Monticello, MN 55362
John M & Ginna M Leeb	45 Porter Cir	Clearwater, MN 55320
John M & Roberta L Lauzon	15583 Curtis Ave NW	Monticello, MN 55362
John M & Sueann M Perreault	1390 Sunrise Ct	Clearwater, MN 55320
John M Rice Rev Trust	1004 Marcella Ct	Sauk Rapids, MN 56379
John S Haack	118 1st St E	Maple Lake, MN 55358

**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
John S Pippert	14570 Devitt Ave NW	Monticello, MN 55362
John W & Linda K Humphrey	14187 Dempsey Ave NW	Monticello, MN 55362
John W Cameron Trust	31597 Riverview Rd	Melrose, MN 56352
John W Maile Rev Trust	603 Red River Ave S	Cold Spring, MN 56320
John W Willenbring Trust and Jane E Willenbring Trust	16819 Glenwood Rd	Cold Spring, MN 56320
John Wyant	791 Isabella Ave	Clearwater, MN 55320
Johnson Charles E & Edith I	743 208th St E	Clearwater, MN 55320
Johnson Danielle	3535 Century Ave N	White Bear Lake, MN 55110
Johnson Family Rev Living Trust	24853 21st Ave	Saint Augusta, MN 56301
Johnson Haakon	26080 Bluebird Ln	Saint Cloud, MN 56301
Johnson Jesse and Johnson Lexi L	706 Main St W	Melrose, MN 56352
Johnson Kenneth	24373 17th Ave	Saint Augusta, MN 56301
Johnson Mark A & Karen L	13164 125th Ave	Osakis, MN 56360
Johnson Todd E	24721 County Road 7	Saint Augusta, MN 56301
Johnson Walter M & Elda M and Johnson Grant O	1883 15th Ave NW	New Brighton, MN 55112
Johnson Wendy	24842 21st Ave	Saint Augusta, MN 56301
Johnson, Elmer W & Luella	5180 State Highway 27 SE	Osakis, MN 56360
Jon Dolence & Sandra Dolence	6118 39th Ave N	Crystal, MN 55422
Jon L Wheeler & Andrea Lawrence Wheeler	955 Kelsey Ave	Clearwater, MN 55320
Jon R Pendzimas Rev Trust	1365 137th St NW	Monticello, MN 55362
Jonathan Theisen	741 Isabella Ave	Clearwater, MN 55320
Jordan L Rux & Jamie L Curtis	850 10th St	Clearwater, MN 55320
Jose De Leon	692 124th St NE	Monticello, MN 55362
Joseph & Delores Schmitt Trust	27842 County Road 177	Paynesville, MN 56362
Joseph & Diana Brenny Trust	8925 County Road 101	Corcoran, MN 55340
Joseph & Margurite Roelike Family Trust	34999 County Road 186	Melrose, MN 56352
Joseph A & Amanda M Grothaus	14174 Barton Ave NW	Monticello, MN 55362
Joseph D Vierzba	860 10th St	Clearwater, MN 55320
Joseph J Ergen	17019 County Road 75 NW	Clearwater, MN 55320
Joseph Koshiol & Amber Koshiol	13822 County Road 75 NW	Monticello, MN 55362
Joseph R Chadwick Jr	5230 150th St NW	Clearwater, MN 55320
Joseph R Treska	14167 Clementa Ave NW	Monticello, MN 55362
Joseph S Poirier	16251 Gowan Ave NW	Clearwater, MN 55320
Joseph Watson & Sydney Rudy	1085 Mitchell Ave	Clearwater, MN 55320
Joshua & Tiffany L Loeffler	711 135th St NW	Monticello, MN 55362
Joshua A & Kendra M Botzek	675 Juliet Ave	Clearwater, MN 55320

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Joshua Bayerl & Breanna Fitzpatrick	740 Lauren Ave	Clearwater, MN 55320
Joshua G & Michelle A Holthaus	2459 155th St NW	Monticello, MN 55362
Joshua J & Kimberly J Neubert	960 Kelsey Ave	Clearwater, MN 55320
Joshua L & Rhonda Battis	1435 145th St NW	Monticello, MN 55362
Joshua Paul Madden & Gina Lynn Miller	845 Isabella Ave	Clearwater, MN 55320
Joyce A Loehrer	25 Porter Cir	Clearwater, MN 55320
Joyce Elizabeth Middendorf & Toni Jesinoski	14453 Custer Ave NW	Monticello, MN 55362
JSD Properties, LLC	1617 11Th Ave SE	Saint Cloud, MN 56304
JT Commercial Properties LLC	16138 149th St SE	Big Lake, MN 55309
J-T of Melrose Inc	222 County Road 173 SE	Melrose, MN 56352
Jtek Properties LLC	431 Riverside Ave NW	Melrose, MN 56352
JTSLCJ LLC	2167 196th St E	Clearwater, MN 55320
Judith A Jarmuzek	15484 County Road 75 NW	Clearwater, MN 55320
Judith M Ziemann Rev Trust	2211 26th Ave S	Saint Cloud, MN 56301
Julie Ann Ostenson	3760 150th St NW	Clearwater, MN 55320
Julie K Henderson	13514 Acacia Ave NE	Monticello, MN 55362
Julie K Middendorf Rev Trust and Joel R Middendorf Rev Trust	36262 400th St	Sauk Centre, MN 56378
June R Lanners Trust	506 W 3rd St	Monticello, MN 55362
Jungels Brian	14619 260th St	Cold Spring, MN 56320
Justin D & Anna M Hall	15195 Barton Ave NW	Monticello, MN 55362
Justin R Miller & Melissa Miller	520 Isabella Ct	Clearwater, MN 55320
Justin W Scherr & Aleshia M Johnson	944 Isabella Ave	Clearwater, MN 55320
Justin Wilmes	1215 Main St	Clearwater, MN 55320
Kaf Property LLC	PO Box 188	Clearwater, MN 55320
Kain Thomas A and Schmidt Leon J	1140 3rd St N	Sartell, MN 56377
Kaitlyn Helen Bible Ericksen & Trevor Charles Ericksen	770 Isabella Ave	Clearwater, MN 55320
Kaitlyn M Suckert	1185 Porter St	Clearwater, MN 55320
Kaitlynn Bollig	610 9th St	Clearwater, MN 55320
Kalthoff Amber	313 Main St W	Melrose, MN 56352
Kalthoff Richard J	28302 County Road 10	Albany, MN 56307
Kammers Gary D & Lisa J	1505 2nd St S	Cold Spring, MN 56320
Kampsen Living Trust	28644 340th St	Freeport, MN 56331
Karen E Abrahamson	2900 45th Ave S	Minneapolis, MN 55406
Karen L Sawyer Trust	828 5th Ave NW	Melrose, MN 56352
Karen M Durant Revocable Trust	15777 Forsythe Ave NW	Clearwater, MN 55320
Karen S Schaefer Trust	26844 County Road 177	Albany, MN 56307

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Karl Perl Trust	1420 Ensell Rd	Lake Zurich, IL 60047
Karleen E Sime	2036 159th St NW	Monticello, MN 55362
Karls Jerome P & Donna Mae	12113 260th St	Saint Cloud, MN 56301
Kasella Ryan J	21992 Fairfax Rd	Clearwater, MN 55320
Kasper Patrick D and Swanson Amanda F	403 1st St SW	Melrose, MN 56352
Kathryn L Henkemeyer Rev Trust	3714 21st Ave S	Saint Cloud, MN 56301
Katie Fridgen	1075 Mitchell Ave	Clearwater, MN 55320
Katzner Elizabeth S and Stich Glenn P	28814 County Road 157	Freeport, MN 56331
Keenan A Erickson & Taylor A Dettwiler	705 Lauren Ave	Clearwater, MN 55320
Keenan J Schuldt	928 Isabella Ave	Clearwater, MN 55320
Keerstyn Phelps	985 Kelsey Ave	Clearwater, MN 55320
Keith & Robert Klaverkamp Ptsp	22848 County Road 44	Saint Augusta, MN 55320
Keith A Yeager Rev Trust	PO Box 785	Monticello, MN 55362
Keith Burnham	PO Box 1677	Monticello, MN 55362
Keller Tyler M	1608 Forest Glen Cir	Saint Augusta, MN 56301
Kelly & Sharon Johnson	PO Box 325	Clearwater, MN 55320
Kelly J Kurtz	715 Maple St	Clearwater, MN 55320
Kelly J Vouk	927 Isabella Ave	Clearwater, MN 55320
Kelmaren LLC	15454 Elder Ave NW	Clearwater, MN 55320
Kelzenberg Galen	3774 County Road 74	Saint Cloud, MN 56301
Kemp Stephen	3841 40th St S	Saint Cloud, MN 56301
Kemper John S & Debra M	26161 County Road 2	Saint Cloud, MN 56301
Kemper Theodore & Renee M	35058 County Road 65	Melrose, MN 56352
Kemper William B & Mary A	315 1st St NW	Melrose, MN 56352
Kennedy Kevin P & Kathleen H	9195 Old Highway Rd S	Saint Cloud, MN 56301
Kenneth A Picha Rev Trust	3746 21st Ave S	Saint Cloud, MN 56301
Kenneth D & Kathleen Gohman	17066 County Road 75 NW	Clearwater, MN 55320
Kenneth Francis & Rita M Meyer	1396 145th St NW	Monticello, MN 55362
Kenneth J & Julie A Schwartz	15454 Elder Ave NW	Clearwater, MN 55320
Kenneth J Reuter Trust and Mary E Reuter Trust	42136 County Road 188	Sauk Centre, MN 56378
Kenneth L Abraham & Mary Burt	205 Kitty Dr	Clearwater, MN 55320
Kenneth S Funk Rev Trust	26726 State Highway 237	Melrose, MN 56352
Kent R & Kelly A Holme	14554 Devitt Ave NW	Monticello, MN 55362
Kent Travis J	627 5th Ave S	Saint Cloud, MN 56301
Kerfeld Scott J and Kerfeld Malinda J	24180 County Road 75	Saint Augusta, MN 56301
Kerry M & Sharon Johnson Rev Tr	13916 Appleton Ave NW	Monticello, MN 55362

**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Kettler Kathleen R	38735 State Highway 4	Sauk Centre, MN 56378
Kevin & Deborah Karpen Trust	25316 58th Ave	Saint Cloud, MN 56301
Kevin John Jennissen & Kayla Marie Jennissen	200 Kitty Dr	Clearwater, MN 55320
Kevin L Kneip & Marie Eisenschenk Kneip	695 Juliet Ave	Clearwater, MN 55320
Kevin M & Jonay E Krone	1754 120th St NE	Monticello, MN 55362
Kevin M & Rita M Gaslin	1135 Porter St	Clearwater, MN 55320
Kevin O Kelly & Jennifer A Kelly	750 123rd St NE	Monticello, MN 55362
KGK Partners, LLC	13384 179th Cir NW	Elk River, MN 55330
Kieler Construction & Holdings Company LLC	PO Box 292	Howard Lake, MN 55349
Kiffmeyer Richard H & Joan A	24948 County Road 75	Saint Augusta, MN 56301
Kiffmeyer Timothy C	107 River Oaks Dr	Cold Spring, MN 56320
Kilpatrick Karen G	110 S 1st Ave	Melrose, MN 56352
Kimberly H Watson	660 10th St	Clearwater, MN 55320
Kims Global Holding LLC	12940 Prosperity Ave	Becker, MN 55308
Kings Family Cabin LLC	11555 39th Ave NW	Rice, MN 56367
Kirchner David & Linda	3814 Richter Ave	Saint Cloud, MN 56301
Kirmeier Joy M	4144 21st Ave S	Saint Cloud, MN 56301
Kjellbergs Inc	4300 School Blvd	Monticello, MN 55362
KL Properties LLC and Meyer Roy J & Ruth K	PO Box 187	Melrose, MN 56352
Klaphake Anthony A & Alice	226 3rd St SW	Melrose, MN 56352
Klaphake Charles H	44512 County Road 184	Sauk Centre, MN 56378
Klaphake Feed Mill Inc	36177 County Road 186	Melrose, MN 56352
Klaphake Feed Mill Inc	36207 County Road 186	Melrose, MN 56352
Klaphake Gerald B & Ann	27935 310th St	Freeport, MN 56331
Klaphake Glen E & Debra J	279 Meadowlark Ln SW	Melrose, MN 56352
Klaphake Jeffrey J	31295 Riverview Rd	Melrose, MN 56352
Klaphake Jeffrey J & Tammy S	830 Main St	Melrose, MN 56352
Klaphake Kevin F	303 2nd St SW	Melrose, MN 56352
Klaphake Mark & Jennifer	41835 County Road 184	Sauk Centre, MN 56378
Klaphake Neal & Karen	34723 370th St	Melrose, MN 56352
Klaphake Ronald P	43157 County Road 184	Sauk Centre, MN 56378
Klaphake Steven R & Pamela J	31602 County Road 11	Freeport, MN 56331
Klaphake William E	38447 County Road 29	Sauk Centre, MN 56378
Klasen Melvin & Kathleen	876 Country Club Dr SW	Melrose, MN 56352
Klassen Jordan W	1657 Forest Glen Cir	Saint Augusta, MN 56301
Klaverkamp David L	5341 40th St S	Saint Cloud, MN 56301

**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Klaverkamp Dean L	1707 Gaelic Rd	Saint Augusta, MN 56301
Klaverkamp Keith E and Klaverkamp Robert J	22848 County Road 44	Saint Augusta, MN 55320
Klaverkamp Mark A	21584 Franklin Rd	Clearwater, MN 55320
Klaverkamp Ronald F	407 222nd St E	Saint Cloud, MN 56301
Klc Farms Business Trust	37089 395th Ave	Sauk Centre, MN 56378
Klehr Michael K & Lori	14732 260th St	Cold Spring, MN 56320
Klein James E & Sharon A	PO Box 579	Richmond, MN 56368
Klein Jane M	210 8th Ave NW	Melrose, MN 56352
Klein John A & Linda L	524 1st St SW	Melrose, MN 56352
Klein Larry A & Linda V	3670 Plum Creek Dr	Saint Cloud, MN 56301
Kleinco Property LLC	6428 64th St NE	Albertville, MN 55301
Klersy Living Trust	229 127th St NE	Monticello, MN 55362
Knall Arianna E	4334 Cooper Ave S	Saint Cloud, MN 56301
Knoblach Kevin R & Kathleen M	44214 County Road 184	Sauk Centre, MN 56378
Knochenmus Scott B & Wendy M	24800 21st Ave	Saint Augusta, MN 56301
Knutson Ryan D and Knutson Bethany A	2106 42nd St S	Saint Cloud, MN 56301
Kockler Christopher and Stephanie Janna	4029 21st Ave S	Saint Cloud, MN 56301
Koenig Charles L	24359 19th Ave	Saint Augusta, MN 56301
Koenig Hailey and Koenig David	24340 19th Ave	Saint Augusta, MN 56301
Koenig Nicole	26274 Island Lake Rd	Cold Spring, MN 56320
Koeniguer Michael & Dawn	11681 Hazel Rd	Saint Cloud, MN 56301
Koetter Mark	PO Box 41	Freeport, MN 56331
Koetter Ralph	37561 299th Ave	Freeport, MN 56331
Kohorst Daniel J & Barbara	28076 County Road 41	Albany, MN 56307
Kolb Farms Partnership	26151 County Road 32	Paynesville, MN 56362
Kolb Thomas G and Kolb Alain K	404 1st St SW	Melrose, MN 56352
Kolby M Desomma	1020 Mitchell Ave	Clearwater, MN 55320
Koltes Farms LLC and Koltes Kenneth J & Teresa M	11312 County Road 139	Saint Cloud, MN 56301
Koltes Jerome P & Linda V	25615 County Road 136	Saint Cloud, MN 56301
Koltes Kenneth J & Teresa M	11312 County Road 139	Saint Cloud, MN 56301
Kopp David L and Popp Vickie L	2118 37th St S	Saint Cloud, MN 56301
Koppelman Thomas T & Pamela A	321 2nd St SW	Melrose, MN 56352
Korn Christopher T and Korn Sheila A	39204 Wild Rose Ct	Sauk Centre, MN 56378
Kortlever Randy P & Kathryn	25338 County Road 74	Saint Cloud, MN 56301
Koshiol Jeffrey P	25097 58th Ave	Saint Cloud, MN 56301
Koshiol Kenneth L	19564 83rd Ave	Kimball, MN 55353

**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Koshiol Ronald R	331 2nd Ave NE	Saint Cloud, MN 56304
Koth Troy	1551 39th St S	Saint Cloud, MN 56301
Kowalczyk Christopher	3826 Bear Ridge Ave S	Saint Cloud, MN 56301
Kraemer Jason J & Trisha K	753 Country Club Dr SW	Melrose, MN 56352
Kraemer Kenneth and Kraemer Stephanie A	11714 County 46	Osakis, MN 56360
Kraemer Lumber Co	PO Box 187	Melrose, MN 56352
Kraemer Michael A & Linda L	39012 State Highway 4	Sauk Centre, MN 56378
Kraemer Nina and Kaufman Deborah	128 Par Dr SW	Melrose, MN 56352
Kraemer Stephanie A	11714 County 46	Osakis, MN 56360
Kraft Brandon L and Kraft Kimberly L	1677 Forest Glen Cir	Saint Augusta, MN 56301
Kraker Charles P & Monica M	305 Country Club Rd SW	Melrose, MN 56352
Kramer Travis M	7916 Bluebird Ct	Saint Cloud, MN 56301
Kratzke Kurt M and Kratzke Susan R	2102 37th St S	Saint Cloud, MN 56301
Krause John A & Patricia	4271 112Th St NW	Maple Lake, MN 55358
Krause Thomas G Jr	25493 County Road 74	Saint Cloud, MN 56301
Krebsbach Mark & Sharon	12564 County Road 160	Saint Joseph, MN 56374
Kremers Joshua	22052 Fenway Rd	Cold Spring, MN 56320
Krippner E Jeanette	1624 245th St	Saint Augusta, MN 56301
Krippner Edward L and Krippner Melanie M	25156 63rd Ave	Saint Cloud, MN 56301
Kris Engineering Inc	1988 247th St	Saint Augusta, MN 56301
Kristina M Lair	683 9th St	Clearwater, MN 55320
Kristina M Mjolhus	625 9th St	Clearwater, MN 55320
Kristina Ohman	680 9th St	Clearwater, MN 55320
Kristy L Fuller & John Fuller	409 135th St NW	Monticello, MN 55362
Kristy R & Kenneth J Maehren	200 Kothman Cir	Clearwater, MN 55320
Kritzeck John L & Carol	22211 Frankfurt Rd	Clearwater, MN 55320
Krogen Properties	2244 197th St E	Clearwater, MN 55320
Kron Daniel M and Kron Melissa J	26183 133rd Ave	Cold Spring, MN 56320
Krousey Matthew J and Krousey Jill E	42854 County Road 184	Sauk Centre, MN 56378
Krueger John S & Gloria L and Krueger Rya L	1855 38th St S	Saint Cloud, MN 56301
Krueger Richard	3818 Richter Ave	Saint Cloud, MN 56301
Kuechle Jesse D and Kuechle Jennifer M	404 Main St W	Melrose, MN 56352
Kuehl Wayne M and Kuehl Diane K	4380 Clearwater Rd	Saint Cloud, MN 56301
Kulzer Arlene and Myers Shelly W Jr	PO Box 108	Sauk Centre, MN 56378
Kulzer Jacob J and Kulzer Miranda S	26731 County Road 161	Richmond, MN 56368
Kulzer Joseph R & Debbie M	29976 County Road 10	Albany, MN 56307

**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Kunkel Patricia A and Kunkel Roger H	2552 40th St S	Saint Cloud, MN 56301
Kunkel Scott C and Kunkel Tara L	26100 80th Ave	Saint Cloud, MN 56301
Kuntz Gregory and Kuntz Wendolyn	26415 Huckleberry Ct	Cold Spring, MN 56320
Kurt & Karen Harstad	3394 142nd St NW	Monticello, MN 55362
Kurt A & Shari L Oravetz	15781 Clementa Ave NW	Monticello, MN 55362
Kurth Shane	24891 21st Ave	Saint Augusta, MN 56301
Kurtz Teresa L and Koester Shawn W; Bottema Vicky L	21214 Franklin Rd	Clearwater, MN 55320
Kuschel Ronald R & Julie A	3869 County Road 74	Saint Cloud, MN 56301
Kuss Duane A and Kuss Bette L	26440 Hermitage Rd	Cold Spring, MN 56320
Kustritz Joseph M & Gladys J	3840 County Road 136	Saint Cloud, MN 56301
Kutter Frederick M	26245 County Road 9	Richmond, MN 56368
Kuzma Robert & Reilene	325 1st St NW	Melrose, MN 56352
Kvaas David R & Elaine L	1919 247th St	Saint Augusta, MN 56301
Kvamme Amanda J Trubes	24410 17th Ave	Saint Augusta, MN 56301
Kwik Trip Inc	PO Box C2107	La Crosse, WI 54602
Kyle Erickson	PO Box 1206	Monticello, MN 55362
Kyle J Kampa	751 Isabella Ave	Clearwater, MN 55320
Kyle L Gramsey & Kimberlie A Gramsey	5438 160th St NW	Clearwater, MN 55320
Kyle M & Kara A Potter	15828 County Road 75 NW	Clearwater, MN 55320
Kyle R Zirbes & Hannah M Zirbes	695 9th St	Clearwater, MN 55320
Lahr Aaron	38354 Us Highway 71	Sauk Centre, MN 56378
Lahr Dean V and Lahr Nicole D	2220 37th St S	Saint Cloud, MN 56301
Lahr Donald J	40154 Us Highway 71	Sauk Centre, MN 56378
Lahr Family Living Trust	3875 21st Ave S	Saint Cloud, MN 56301
Lahr Jeffrey N & Sherrie C	3803 County Road 136	Saint Cloud, MN 56301
Lahr Randy & Maria	9113 Ivy Rd	Saint Cloud, MN 56301
Lake Central Bank	40 Chestnut St W	Annandale, MN 55302
Lamn LLC	900 Mendelssohn Ave N	Golden Valley, MN 55427
Lance & Sheila Moe Trust	15159 Curtis Ave NW	Monticello, MN 55362
Lance A Lindstrom	14772 Barton Ave NW	Monticello, MN 55362
Lanctot Adam M & Nicole M	24359 17th Ave	Saint Augusta, MN 56301
Landwehr Aaron & Heidi M	1904 40th St S	Saint Cloud, MN 56301
Landwehr Colleen A	1811 40th St S	Saint Cloud, MN 56301
Landwehr Joe R	4003 Cooper Ave S	Saint Cloud, MN 56301
Landwehr Landholding LLC and Imdiekes Imperial Farms LLC Rev Trust Agreement	16118 163rd Ave	Watkins, MN 55389
Landwehr Mark & Debbie	72 170th Ave NW	Andover, MN 55304



**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Lane Frazier & Ronald Frazier	16443 130th St	Foreston, MN 56330
Lanny L & Dianne E Wentler	1557 155th St NW	Monticello, MN 55362
Lantz Linda	2065 County Road 143	Clearwater, MN 55320
Larry Anhalt & Jacqueline R Bloom Anhalt	17032 County Road 7 NW	Clearwater, MN 55320
Larry L & Mary J Sonsteby	13121 Huber Ave NW	Annandale, MN 55302
Larry L & Teresa Sakkinen	1175 Porter St	Clearwater, MN 55320
Larry O & Diane A Klatt	1360 Sunrise Ct	Clearwater, MN 55320
Larry S & Cynthia C Zerfoss	2235 147th St NW	Monticello, MN 55362
Larsen Donna	404 1st St NW	Melrose, MN 56352
Larson Bryce J	24904 County Road 75	Saint Augusta, MN 56301
Lashinski Vernon V and Lashinski Mary Ann	7896 Bel Clare Dr	Saint Cloud, MN 56301
Lass Bernard and Lass Helen E	4720 40th St S	Saint Cloud, MN 56301
Laudenbach Anthony M & Lori A	23596 Gaberdine Rd	Saint Augusta, MN 56301
Laudenbach David P & Jodi R	2122 County Road 143	Clearwater, MN 55320
Laudenbach Dean E & Sheila J	24591 County Road 75	Saint Augusta, MN 56301
Laudenbach James G	25551 County Road 136	Saint Cloud, MN 56301
Laudenbach Loren T	20781 County Road 142	Saint Augusta, MN 55382
Laura E Bihl Trust	14316 Endicott Ave NW	Clearwater, MN 55320
Laverne M Franklin Rev Trust	226 Goldfinch Ln	Clearwater, MN 55320
Lawinger Alan G & Cheryl L	39775 County Road 187	Sauk Centre, MN 56378
Lc Real Estate, LLC	14080 Commerce Dr	Becker, MN 55308
Leah A Egan	745 Maple St	Clearwater, MN 55320
Leander J Winkels Rev Trust and Karen B Winkels Rev Trust	29321 County Road 117	Albany, MN 56307
Lee E & Rosemary C Monk	415 Prairie St	Clearwater, MN 55320
Lee Robert	1782 245th St	Saint Augusta, MN 56301
Lehnen Christopher M	26507 133rd Ave	Cold Spring, MN 56320
Lehnen Floyd & Beverly	25032 63rd Ave	Saint Cloud, MN 56301
Leider Neal & Sandra	27088 County Road 41	Albany, MN 56307
Leither Chad R	26258 County Road 2	Saint Cloud, MN 56301
Lelan & Terri Moe Trust	14427 Custer Ave NW	Monticello, MN 55362
Lemm Steven J	30536 370th St	Melrose, MN 56352
Lenny Kalway	4297 160th St NW	Clearwater, MN 55320
Lenore J Johnson	2223 127th St NW	Monticello, MN 55362
Lensing Marcella B	974 Country Club Dr SW	Melrose, MN 56352
Lenzmeier Leon C & Alice R	1900 13Th St S	Saint Cloud, MN 56301
Leon M & Helen A Lieder	3248 Welcome Ave N	Crystal, MN 55422

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Leonard H Helget Rev Trust and Joan S Helget Rev Trust	2155 County Road 143	Clearwater, MN 55320
Leonard Michael & Geraldine	1914 Pine Cir	Fergus Falls, MN 56537
Leonard R Carlson	13710 Meridian Ave N	Monticello, MN 55362
Lepinski Michael D & Rhonda	23672 Gaberdine Rd	Saint Augusta, MN 56301
Leroy & Kathryn Kemper Trust	35864 K K Rd	Sauk Centre, MN 56378
Leroy A Osowski & Judy Osowski	5860 Kirkwood Ln N	Plymouth, MN 55442
Leroy F Moscho Trust and Geraldine A Moscho Trust	30087 County Road 11	Freeport, MN 56331
Leroy Osowski	5860 Kirkwood Ln N	Plymouth, MN 55442
Lester John D and Lester Erin M	36955 State Highway 237	Melrose, MN 56352
Letourneau Brett A & Brenda E	3841 Richter Ave	Saint Cloud, MN 56301
Letourneau Jacob R	3840 Richter Ave	Saint Cloud, MN 56301
Letourneau Joshua A and Thell Joseph J	25734 County Road 136	Saint Cloud, MN 56301
Leukam Viola M	197 Meadowlark Ln SW	Melrose, MN 56352
Levi Pocklington & Katelyn Rudeen	325 Kothman Cir	Clearwater, MN 55320
Lewandowski Megan K and Petro Michael B G	1672 Forest Glen Cir	Saint Augusta, MN 56301
Ley Rebecca M and Ley Brandon J	22234 Fairmount Rd	Saint Cloud, MN 56301
Leyendecker Homebuilders LLC	2421 Crimson Ridge Cir NW	Rochester, MN 55901
Leyendecker Jessica L	322 1st St SW	Melrose, MN 56352
Lfk Enterprises LLC	723 Cascade Rd	South Haven, MN 55382
Liberty Paper, Inc	5600 Highway 169 N	New Hope, MN 55428
Lichy Christopher D and Husom Angela L	26174 County Road 50	Cold Spring, MN 56320
Liebl Farms	PO Box 29	Willmar, MN 56201
Lieser Adam	858 Country Club Dr SW	Melrose, MN 56352
Lieser Carl J & Ruth I	27133 County Road 12	Paynesville, MN 56362
Lieser James D & Laura A	21242 Franklin Rd	Clearwater, MN 55320
Lieser Jeron & Lois	25828 Hilltop Rd	Richmond, MN 56368
Lieser Joshua & Linda	15410 110th St	Sauk Centre, MN 56378
Lieser Mary M	346 Country Club Rd SW	Melrose, MN 56352
Lieser Ryan and Lieser Kaitlin	38643 Us Highway 71	Sauk Centre, MN 56378
Lifestyle Lumber Inc	PO Box 305	Saint Martin, MN 56376
Lighthouse Holdings Clearwater LLC	10011 Xylite St NE	Minneapolis, MN 55449
Lilke Gary P and Klein Pamela H	2126 37th St S	Saint Cloud, MN 56301
Linda L Doerr Trust	14590 Devitt Ave NW	Monticello, MN 55362
Lindahl Tyler and Lindahl Jason	3859 21st Ave S	Saint Cloud, MN 56301
Lindgren Melissa A and Lindgren Peder S	26197 80th Ave	Saint Cloud, MN 56301
Lindy M Donat Rev Trust	150 Bluebird Ln	Clearwater, MN 55320

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Linn Beth A and Linn Joshua R	26655 County Road 9	Richmond, MN 56368
Linn Brian G and Linn Jennifer J	27666 115th Ave	Saint Joseph, MN 56374
Linn Dairy Farm	19257 Manana Rd	Richmond, MN 56368
Linn James E and Gerber Tamara L	3984 255th St	Saint Cloud, MN 56301
Linn Kelly	425 1st St NW	Melrose, MN 56352
Linn Michael E & Katherine M	21354 County Road 42	Richmond, MN 56368
Linton K Levin Family Trust	180 Hiawatha Ave W	Big Lake, MN 55309
Linz Curtis A & Mary J	641 Villawood Ln	Coppell Tx 75019
Linz David D	20012 County Road 42	Richmond, MN 56368
Littfin Properties LLC	PO Box 666	Winsted, MN 55395
Little Falls Courtyard LLC	1414 Paul Larson Memorial Dr	Little Falls, MN 56345
Lobdell Gordon and Lobdell Rita	1944 38th St S	Saint Cloud, MN 56301
Loch John & Carol	25388 County Road 74	Saint Cloud, MN 56301
Lochen David J and Tighe Abriana R	1625 Forest Glen Cir	Saint Augusta, MN 56301
Loecken Farms LLC	16831 Radium St NW	Ramsey, MN 55303
Loecken Randy & Judy	30389 County Road 11	Freeport, MN 56331
Loehlein Eugene and Loch Heidi K	25155 63rd Ave	Saint Cloud, MN 56301
Loehrer David & Susan	2626 40th St S	Saint Cloud, MN 56301
Loesch Garrett J	2573 County Road 143	Clearwater, MN 55320
Loesch Kimberly T	1637 Forest Glen Cir	Saint Augusta, MN 56301
Loesch Stephen J	1681 Forest Glen Cir	Saint Augusta, MN 56301
Logan J & Johannah Strandjord	1035 Mitchell Ave	Clearwater, MN 55320
Logan Utterberg & Dana Sellner	9080 Country Ave	Monticello, MN 55362
Lois A Frericks Rev Trust	39322 Wild Rose Ct	Sauk Centre, MN 56378
Lommel Elizabeth A and Gohmann Heather M; Hodnefield Holly J; Faber Jill A	24405 19th Ave	Saint Augusta, MN 56301
Lommel Jay A	3201 Bent Tree Dr	Saint Cloud, MN 56301
Lommel Roger J	24348 County Road 7	Saint Augusta, MN 56301
Lommen Caileen M	2068 42nd St S	Saint Cloud, MN 56301
Longtin Michael A	25867 80th Ave	Saint Cloud, MN 56301
Longwell Stacie M	1696 Forest Glen Cir	Saint Augusta, MN 56301
Lonnie F Waldvogel & Judy E Waldvogel Rev Trust	32702 Riverview Rd	Melrose, MN 56352
Lonny L & Joanne M Lieder	23710 141st Ave N	Rogers, MN 55374
Lord Richard V & Mary	1887 247th St	Saint Augusta, MN 56301
Loren G & Dianne L Hafterson	3469 144th St NW	Monticello, MN 55362
Loren J Weese & Vernetta I Weese Joint Rev Tr	3690 20th St NE	Buffalo, MN 55313
Loren Maurer & Sarah Maurer	640 10th St	Clearwater, MN 55320

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Lorenz M Ertl Trust	32540 Quinlan Ave	Center City, MN 55012
Lorenz Ronald E and Lorenz Larry D; Lorenz Donald R	25553 County Road 138	Saint Cloud, MN 56301
Lori A Arceneau Trust and Glen A Arceneau Trust	26265 290th St	Albany, MN 56307
Losinski Paul F & Diane S	26623 163rd Ave	Cold Spring, MN 56320
Loso Loren D & Susan L	26514 133rd Ave	Cold Spring, MN 56320
Lothert Kevin J	24270 County Road 75	Saint Augusta, MN 56301
Lotus Holdings LLC	10249 Yellow Circle Dr	Minnetonka, MN 55343
Lovelace Santana and Lovelace Jesse	223 4th St SW	Melrose, MN 56352
Lowe Ronna L and Lowe Darren M	1510 38th St S	Saint Cloud, MN 56301
Lowell O & Maxine S Beck	184 Cardinal Ln	Clearwater, MN 55320
Lowest Cost Inc	1700 Douglas Dr N	Golden Valley, MN 55422
Loxtercamp Dale & Joan	163 Par Dr SW	Melrose, MN 56352
Loxtercamp Ronald H and Loxtercamp Alice M	103 Emerald Ave SW	Melrose, MN 56352
Loyal & Sandra Skuza Rev Trust	29529 Kraemer Lake Rd	Saint Joseph, MN 56374
Ludwig Tirz and Ludwig Aaron	219 Meadowlark Ln SW	Melrose, MN 56352
Luebesmier Luella M	25541 County Road 74	Saint Cloud, MN 56301
Luebesmier Robert E & Carrie A	225 2nd St SW	Melrose, MN 56352
Lueck Joshua A	25953 80th Ave	Rockville, MN 56301
Luetmer Anthony H & Sheri L	36599 State Highway 4	Melrose, MN 56352
Lumber One Development Co LLC	PO Box 7	Avon, MN 56310
Lund Travis L J and Lund Laura C	24647 18th Ave	Saint Augusta, MN 56301
Lunser Family Rev Trust	1600 238th St	Saint Augusta, MN 56301
Luskey Robert J	217 3rd St SW	Melrose, MN 56352
Lutgen John	25743 Hilltop Ct	Saint Cloud, MN 56301
Lyle J Beumer	870 10th St	Clearwater, MN 55320
Lynda D Moe	14417 Custer Ave NW	Monticello, MN 55362
Lynn D Lund	7644 Rockaway Ave	Yucca Valley Ca 92284
Lynne F Crandall	2162 159th St NW	Monticello, MN 55362
M 80 LLC	160 Park St E	Annandale, MN 55302
M C & K Properties LLC	503 Industrial Dr SW	Willmar, MN 56201
Macey Kenneth J & Mark M	171 Main St	West Union, MN 56389
Mackove Leroy & Sharon	10738 County 51	Sauk Centre, MN 56378
Magedanz Joseph R and Magedanz Jolene M	26633 County Road 177	Albany, MN 56307
Magic Properties LLC	11786 Quail Rd	Avon, MN 56310
Magney Jo Ellen and George David D	474 E 221st St	Clearwater, MN 55320
Maier Norma T	1920 38th St S	Saint Cloud, MN 56301

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Maleska Thomas J & Joann T	36801 335th Ave	Melrose, MN 56352
Mandy	26158 350th St	Freeport, MN 56331
Mapes-Arney Cheryl A and Arney Gregory D	2935 Summertree Ave	Bettendorf Ia 52722
Marberg Rosanne	4366 Clearwater Rd	Saint Cloud, MN 56301
Marco Inc	4510 Heatherwood Rd	Saint Cloud, MN 56301
Marcus Todd & Kristen Todd	15433 Curtis Ave NW	Monticello, MN 55362
Margaret A Kreger	15240 Baker Ave NW	Monticello, MN 55362
Margaret M Gohman Rev Trust and Michael J Gohman Rev Trust	23300 County Road 75	Saint Cloud, MN 56301
Marilyn A Mergen Rev Trust	23734 County Road 42	Richmond, MN 56368
Marilyn Bahn	650 9th St	Clearwater, MN 55320
Marilyn D Koontz	149 Bluebird Ln	Clearwater, MN 55320
Marilyn E Pierskalla Trust	2203 37th St S	Saint Cloud, MN 56301
Marilyn J Schwartz Rev Trust	1745 38th St S	Saint Cloud, MN 56301
Mario A Gonzalez & Raquel Chavez	783 Isabella Ave	Clearwater, MN 55320
Marion T Kloepfner Rev Trust	21044 County Road 75	Clearwater, MN 55320
Mark & Barbara Bredenberg	3049 Utah Ave N	Crystal, MN 55427
Mark & Teresa Steinhaus	5405 158th St NW	Clearwater, MN 55320
Mark A & Mary E O'Brien Liv Tr	949 100th St NE	Monticello, MN 55362
Mark A Campbell	35 Porter Cir	Clearwater, MN 55320
Mark B & Bonita L Felten	674 Juliet Ave	Clearwater, MN 55320
Mark C Leinonen	755 Isabella Ave	Clearwater, MN 55320
Mark Coborn & Chris Coborn Property Family Partnership	1921 Coborn Blvd	Saint Cloud, MN 56301
Mark D & Brandii H Thomas	1045 Mitchell Ave	Clearwater, MN 55320
Mark Donnelly	644 101st St NW	Monticello, MN 55362
Mark F Johnson	671 124th St NE	Monticello, MN 55362
Mark Harries & Jennifer Harries	925 Isabella Ave	Clearwater, MN 55320
Mark J & Gloria A Johnson	305 Kothman Cir	Clearwater, MN 55320
Mark N & Lynn M Wienhold	3049 145th St NW	Monticello, MN 55362
Mark S & Carol J Olsen	15789 Evans Ave NW	Clearwater, MN 55320
Marlene E Blommel Rev Trust and Eugene A Blommel Rev Trust	38467 Tristan Rd	Freeport, MN 56331
Marlin F & Bernice Kubitz	2160 155th St NW	Monticello, MN 55362
Marshall T Cooper	125 Bluebird Ln	Clearwater, MN 55320
Marthaler Arnold J & Beverly	11100 124th St	Osakis, MN 56360
Marthaler Chad M & Darla	14872 110th St	Sauk Centre, MN 56378
Marthaler Cyril & Marjorie	25705 County Road 2	Saint Cloud, MN 56301
Marthaler David A & Sharon	11137 134th St	Osakis, MN 56360

**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Marthaler Kelly H & Marlys K	310 William St	West Union, MN 56389
Marthaler Kenneth R	17544 Herberger Rd SE	Osakis, MN 56360
Marthaler Linda & Thomas	48978 430th St	Sauk Centre, MN 56378
Marthaler Properties Family LLLP	11780 Stearns Line Rd	Osakis, MN 56360
Marthaler Raymond E & Lucille H Marthaler	11959 124th St	Osakis, MN 56360
Marthaler Scott M	12787 125th Ave	Osakis, MN 56360
Marthaler, Alcuin J & Cathy A	13417 County Road 79 SE	Osakis, MN 56360
Marthaler, Carol A, Trust	39024 County Road 186	Sauk Centre, MN 56378
Marthaler, Kenneth R	17544 Herberger Rd SE	Osakis, MN 56360
Marthaler, Patrick & Patricia	5211 State Highway 27 SE	Osakis, MN 56360
Marthaler, Thomas N	6737 County Road 2 SE	Osakis, MN 56360
Martin Andrew P & Julie A	3433 21st Ave S	Saint Cloud, MN 56301
Martin R & Nancy M Smolensky	3865 144th St NW	Monticello, MN 55362
Martin Scott	4431 Starling Ln SE	Rochester, MN 55904
Martinez Guadalupe & Maria C	241 Meadowlark Ln SW	Melrose, MN 56352
Martinez Josue	20 4th Ave SW	Melrose, MN 56352
Marvin Enterprises LLC	31600 Mahogany Rd	Albany, MN 56307
Mary A Gillham Trust	13354 Brenda Blvd	Becker, MN 55308
Mary A Keske	16593 County Road 7 NW	Clearwater, MN 55320
Mary Cichon	605 8th St	Clearwater, MN 55320
Mary E Egan	9744 Hall Ave NE	Monticello, MN 55362
Mary Hansen	1203 Main St	Clearwater, MN 55320
Mary Jo Klaverkamp Rev Trust and Dean Klaverkamp Rev Trust	1707 Gaelic Rd	Saint Augusta, MN 56301
Mary K Bondhus Ir Property Tr and Candace Seidl & Diane Fales Tr	508 W 3rd St	Monticello, MN 55362
Mary K Bondhus Revocable Trust	9505 W Fern Dr	Sun City Az 85351
Mary S Howard	4622 Wentworth Ave	Minneapolis, MN 55419
Massmann Joseph W	38266 Thunder Rd	Melrose, MN 56352
Massmann Scott D & Susan B	24934 21st Ave	Saint Augusta, MN 56301
Mast, Craig D	6706 County Road 2 SE	Osakis, MN 56360
Mastey Patrick R and Mastey April A	2759 Clearwater Rd	Saint Cloud, MN 56301
Mat Properties LLC	3112 Southway Dr	Saint Cloud, MN 56301
Matthew & Jessica Jara	670 9th St	Clearwater, MN 55320
Matthew B & Nancy C Novak	7785 Iverson Ave S	Cottage Grove, MN 55016
Matthew Bombach	3746 Conroy Trl	Inver Grove Heights, MN 55076
Matthew Cox	2122 159th St NW	Monticello, MN 55362
Matthew D & Amelia N Mooney	1030 Mitchell Ave	Clearwater, MN 55320

**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Matthew D & Terra L Dziengel	15743 Forsythe Ave NW	Clearwater, MN 55320
Matthew E & Neisha R Emerson	690 Juliet Ave	Clearwater, MN 55320
Matthew G & Renee Maier	14320 Franklin Ave NW	Clearwater, MN 55320
Matthew M Busch & Stacy M Bower Busch	3459 144th St NW	Monticello, MN 55362
Mattson Christopher M	20606 Manana Rd	Richmond, MN 56368
Maurer Robert F	23887 Birchmont Beach Rd NE	Bemidji, MN 56601
Maurice Mayers Trust	28483 Oakview Rd	Freeport, MN 56331
Maus Darrel & Lisa	28886 310th St	Freeport, MN 56331
Maus Duane L	29784 315th St	Freeport, MN 56331
Maus Jason M and Maus Brittany	226 1st St SW	Melrose, MN 56352
Maus Paul N & Anne M	234 Meadowlark Ln SW	Melrose, MN 56352
Maus, Dale R & Dorothy (Trstee) and Dale R & Dorothy M Maus Rltr	11757 Eagle View Dr	Osakis, MN 56360
Maxwell Joseph R	405 2nd St NW	Melrose, MN 56352
May Timothy C & Louise M	4268 255th St	Saint Cloud, MN 56301
Mayer Riley J	3883 County Road 74	Saint Cloud, MN 56301
Mayers Gerald M and Mayers Mary H	413 1st Ave N	Freeport, MN 56331
Mayers Inc	37264 County Road 13	Melrose, MN 56352
Mayers Mark H & Mary B	105 Bogey Run SW	Melrose, MN 56352
Mayers Mark H and Mayers Robert E	37264 County Road 13	Melrose, MN 56352
Mayers Maurice and Mayers Charlotte	28483 Oakview Rd	Freeport, MN 56331
Mayers Repair Inc	26969 County Road 23	Richmond, MN 56368
Mayers Robert E & Julie Ann	151 Meadowlark Ln SW	Melrose, MN 56352
Mayers Thomas	11821 County Road 139	Saint Cloud, MN 56301
MBE Properties LLC	25772 County Road 17	Freeport, MN 56331
McAlister Debra L	6933 22nd St N	Saint Cloud, MN 56303
McCallum Jeffrey T and Beilke Gretchen M	23643 Gaberdine Rd	Saint Augusta, MN 56301
McCarty Richard C and Tubbiola Maureen L	3703 Bear Ridge Ct S	Saint Cloud, MN 56301
McDonald Matthew and Mcdonald Brittany	964 Country Club Dr SW	Melrose, MN 56352
McDonalds Corp 22-187 Amf Ohar	PO Box 182571	Columbus, OH 43218
McGuire Jeanne M	25927 80th Ave	Saint Cloud, MN 56301
McLellan Robert and Mclellan Pamela	39335 Wild Rose Ct	Sauk Centre, MN 56378
McMullen Darin and McMullen Karen	3833 Richter Ave	Saint Cloud, MN 56301
McMullen Joann D	11283 Kimball Ave NW	Annandale, MN 55302
McNutt David W	24666 County Road 7	Saint Augusta, MN 56301
Meadowlark Country Club	PO Box 68	Melrose, MN 56352
Meadowlark Melrose LLC	4 Park Ln	Minneapolis, MN 55416

**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Meadowlark Patio Hmowner Assoc	104 Garnet Ave SW	Melrose, MN 56352
Meemken James S & Debbie L	3809 Richter Ave	Saint Cloud, MN 56301
Megan A Yeager & Paul W Yeager	15593 Clementa Ave NW	Monticello, MN 55362
Mehr Gregory T	30325 273rd Ave	Albany, MN 56307
Mehr Steven C and Mehr Jeri A M	24233 County Road 75	Saint Augusta, MN 56301
Meier Rodney B & Ruth A	42067 County Road 184	Sauk Centre, MN 56378
Meier Thomas R & Doreeen E	5243 County Road 6	Saint Cloud, MN 56301
Meijer Eduard & Denise A	23802 Gaberdine Rd	Saint Augusta, MN 56301
Meinders, Jeff & Diane	30646 230th St	Worthington, MN 56187
Melena-Zamora Jose E and Melena-Cervantes Maria E	229 Meadowlark Ln SW	Melrose, MN 56352
Melissa A Meemken	655 10th St	Clearwater, MN 55320
Melissa J & Edward R Arens	1865 155th St NW	Monticello, MN 55362
Melissa L & Christine M Johnson	977 Kelsey Ave	Clearwater, MN 55320
Melrose Area Food Shelf	255 Country Club Rd SW	Melrose, MN 56352
Melrose Community LLC	5200 Willson Rd	Minneapolis, MN 55424
Melrose Feed Mill Inc	224 Turkey Ln	Melrose, MN 56352
Melrose Telephone Co	150 2nd St SW	Perham, MN 56573
Melrose Townhomes LLC	1414 Paul Larson Memorial Dr	Little Falls, MN 56345
Melvin & K Walberg	730 127th St NE	Monticello, MN 55362
Melvin N & Mary Ann Kammers Trust	18926 260th St	Richmond, MN 56368
Memo Gas Services Inc	4325 Clearwater Rd	Saint Cloud, MN 56301
Mendoza Avelino Barragan	416 1st St NW	Melrose, MN 56352
Mergen Kerry E & Barbara J	28955 County Road 117	Albany, MN 56307
Mergen Russell C	20605 Manana Rd	Richmond, MN 56368
Meridith L Kjellberg 04 Rev Tr	5360 150th St NW	Clearwater, MN 55320
Merrill Rev Trust	8161 County Road 6	Saint Cloud, MN 56301
Merten Michael & Dorene	38678 County Road 186	Sauk Centre, MN 56378
Merten Steven	301 William St	West Union, MN 56389
Messer John & June	12632 County 46	Osakis, MN 56360
Messer Nathan and Messer Jana M	42739 County Road 184	Sauk Centre, MN 56378
Messer Philip C & Sharon	12990 County 46	Osakis, MN 56360
Messer Timothy M	4413 40th St S	Saint Cloud, MN 56301
Metcalf Darryl L & Tina M	27042 290th St	Albany, MN 56307
Meyer Diane M	39203 Wild Rose Ct	Sauk Centre, MN 56378
Meyer Elmer L & Virginia A	714 Eagle Dr SW	Melrose, MN 56352
Meyer Jeffrey R	405 Chinook Ave SW	Avon, MN 56310



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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Meyer Joann M	22085 Fairfax Rd	Clearwater, MN 55320
Meyer Jone	PO Box 13	Melrose, MN 56352
Meyer Kenneth J	32252 Oakland Rd	Freeport, MN 56331
Meyer Michael C & Laura M and Meyer Joshua M; Meyer Kayla M	167 Meadowlark Ln SW	Melrose, MN 56352
Meyer Nathan A and Meyer Alexis L B	331 Country Club Rd SW	Melrose, MN 56352
Meyer Roger F & Sharon Lee	36408 County Road 13	Melrose, MN 56352
Meyer Shawn S and Klein Amy J	4542 40th St S	Saint Cloud, MN 56301
Meyer Thomas M and Meyer Kenneth J	116 6th St S	Sauk Centre, MN 56378
Michael & Katherine Williams	15843 Grover Ave NW	Clearwater, MN 55320
Michael & Louise Kemmetmueller	13858 County Road 75 NW	Monticello, MN 55362
Michael & Patricia Chouinard	14964 Appleton Ave NW	Monticello, MN 55362
Michael A & Corinne Mitchell	PO Box 1538	Monticello, MN 55362
Michael A & Jill C Tabatt	16315 Gowan Ave NW	Clearwater, MN 55320
Michael A & Sandra J Welle	13424 Acacia Ave NE	Monticello, MN 55362
Michael A Ross & Briana Scheiber	934 Isabella Ave	Clearwater, MN 55320
Michael Berndt & Mariah Jackson	755 Lauren Ave	Clearwater, MN 55320
Michael C Shughart & Sarah R Shughart	1070 Mitchell Ave	Clearwater, MN 55320
Michael D & Kimberly A Mossey	12777 Aetna Ave NE	Monticello, MN 55362
Michael F Cavanaugh & Ashley Meline	1165 Porter St	Clearwater, MN 55320
Michael I & Sharon R O Connor	2826 156th St NW	Monticello, MN 55362
Michael J & Rose M Hess	649 Juliet Ave	Clearwater, MN 55320
Michael J & Tammi L Day	3260 142nd St NW	Monticello, MN 55362
Michael J Shefveland & Deborah Viteri	796 120th St NE	Monticello, MN 55362
Michael K & Julie A Blomberg	3760 150th St NW	Clearwater, MN 55320
Michael K & Linnea L Wheeler	5220 159th St NW	Clearwater, MN 55320
Michael L & Debra M Goeman	12824 Aetna Ave NE	Monticello, MN 55362
Michael L & Jenice Schroetke	15951 Forsythe Ave NW	Clearwater, MN 55320
Michael Mitchell & Jamie Mitchell	PO Box 1586	Monticello, MN 55362
Michael P & Jennifer Ackerman	683 124th St NE	Monticello, MN 55362
Michael P Korman & Mary Kay Schutz	725 Ash St	Clearwater, MN 55320
Michael R & Sarah J Tasa	915 Isabella Ave	Clearwater, MN 55320
Michael T Keller	957 Kelsey Ave	Clearwater, MN 55320
Michael V Triplett	12480 Afton Ave NE	Monticello, MN 55362
Michael V Weidenbach	5592 Lander Ave NE	Albertville, MN 55301
Michael W Fulda & Leticia A Dechene Fulda	615 127th St NE	Monticello, MN 55362
Michael Welker & Ashley Payne	15766 Grover Ave NW	Clearwater, MN 55320

**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Michael Wrona & Courtney Wrona	15689 Clementa Ave NW	Monticello, MN 55362
Michal A Brendsel Rev Trust	14860 Fillmore Ave NW	Clearwater, MN 55320
Michelle A Lortz	645 8th St	Clearwater, MN 55320
Michelle J Gapinski	604 9th St	Clearwater, MN 55320
Michelle Mullen	815 10th St	Clearwater, MN 55320
Michels Rosemary	39338 Wild Rose Ct	Sauk Centre, MN 56378
Mick Family Properties LLC	701 Julep Rd	Waite Park, MN 56387
Mickelson Investments LLP	3331 Evergreen Ln	Eau Claire, WI 54701
Midas Carol	4368 Clearwater Rd	Saint Cloud, MN 56301
Middendorf Eric R & Marcie T	37884 395th St	Sauk Centre, MN 56378
Middendorf Family Farm LLC	40169 County Road 166	Freeport, MN 56331
Middendorf Glen & Dennis	30494 County Road 157	Melrose, MN 56352
Middendorf Jody J	806 Country Club Dr SW	Melrose, MN 56352
Middendorf John E	1005 2nd St SE	Melrose, MN 56352
Middendorf Kevin H and Middendorf Laurie K	38278 County Road 186	Sauk Centre, MN 56378
Middendorf Mary Jane	1005 2nd St SE	Melrose, MN 56352
Middendorf Neil A	216 7th St SW	Freeport, MN 56331
Middendorf Victor T and Middendorf Florence A	119 Emerald Ave SW	Melrose, MN 56352
Middlestaedt Paul D	1908 38th St S	Saint Cloud, MN 56301
Midway Farm LLC	PO Box 201	Melrose, MN 56352
Midwest Screen Print Inc	PO Box 31	Melrose, MN 56352
Mike & Sharon R O Connor	2826 156th St NW	Monticello, MN 55362
Miller (Trustee) Sonja M and Brian M Miller	44705 Zellwood Rd	Sauk Centre, MN 56378
Miller Eugene & Patricia M and Miller Chad G; Miller Kevin J; Miller Travis G	20831 County Road 75	Clearwater, MN 55320
Miller Eugene E	14826 Stearns Line Rd	Sauk Centre, MN 56378
Miller Family Trust	549 84th Ave NE	Spring Lake Park, MN 55432
Miller Gabriel R and Miller Arica C	40358 Us Highway 71	Sauk Centre, MN 56378
Miller James A & Rosalyn D	10023 137th Ave	Sauk Centre, MN 56378
Miller James W	PO Box 1228	Saint Cloud, MN 56302
Miller Jason	26153 80th Ave	Saint Cloud, MN 56301
Miller Machine Properties LLC	14105 Commerce Dr	Becker, MN 55308
Miller Nicholas T	11968 125th Ave	Osakis, MN 56360
Miller Thomas H & Carol	PO Box 212	West Union, MN 56389
Mills Brian & Julie	26402 183rd Ave	Richmond, MN 56368
Minette Acres Partnership	43250 433rd Ave	Sauk Centre, MN 56378
Minette Gerald B & Maria	45276 County Road 184	Sauk Centre, MN 56378

**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Minnerath Properties LLC	25241 163rd Ave	Cold Spring, MN 56320
Mireles Maria G M and Chavez Sergio H	312 1st St SW	Melrose, MN 56352
Mitchell Bentley	760 Isabella Ave	Clearwater, MN 55320
Mitchell D Hayes	800 10th St	Clearwater, MN 55320
Mitchell E Rose	12981 Aetna Ave NE	Monticello, MN 55362
Mitchell H Senkler & Nicole M Hicks	735 Maple St	Clearwater, MN 55320
Mitchell J Hanson	930 Isabella Ave	Clearwater, MN 55320
Mitchell Oster & Marie Adamczyk	2428 155th St NW	Monticello, MN 55362
Mitchell, Kevin L & Susan E	5840 Whitetail Ln SE	Osakis, MN 56360
Mjolhus Mark & Roseann	3824 Richter Ave	Saint Cloud, MN 56301
MK Pieper Properties LLC	PO Box 240	Clear Lake, MN 55319
MK Pieper Properties LLC	PO Box 34	Clearwater, MN 55320
MM Properties of Lynden Township	14045 Northdale Blvd	Rogers, MN 55374
MN Asset Holding Company LLC	1730 Meadowoods Trl	Long Lake, MN 55356
Moeller Cole and Schuh Kelli J	21259 County Road 44	Clearwater, MN 55320
Moeller Daniel R	20979 County Road 44	Clearwater, MN 55320
Moen, Jeremy D & Shelly L	6575 Clifford Lake Rd SE	Osakis, MN 56360
Moening Leon J & Kathleen A	26093 82nd Ave	Saint Cloud, MN 56301
Mohs David A & Joyce M	22124 Fairmount Rd	Saint Cloud, MN 56301
Moises A Bustillos & Maria Rosario Bustillos	645 Juliet Ave	Clearwater, MN 55320
Molden Virgene D & Linda M	3922 County Road 136	Saint Cloud, MN 56301
Molitor Clifford J & Alice M	5435 40th St S	Saint Cloud, MN 56301
Molitor Justin J	22121 Franklin Rd	Clearwater, MN 55320
Mondloch Daniel and Mondloch Mallory P	15902 262nd St	Cold Spring, MN 56320
Monroe Maynard & Susan	218 5th Ave NW	Melrose, MN 56352
Monson Debra K	205 Meadowlark Ln SW	Melrose, MN 56352
Montagne, Winifred M	911 7th St N	Albany, MN 56307
Montanez Carlos A Hernandez	325 Main St W	Melrose, MN 56352
Montanez Jr Fermin M and Martinez Nancy L	158 Par Dr SW	Melrose, MN 56352
Montanez Luis Migue Hernandez	203 4th St SW	Melrose, MN 56352
Monticello Mushroom Inc	2177 155th St NW	Monticello, MN 55362
Moonlight Acres Inc	29495 County Road 10	Albany, MN 56307
Mora Creamery Dev Inc	27477 County Road 30	Freeport, MN 56331
Moran William J	1953 245th St	Saint Augusta, MN 56301
Mordechai Kobany	13826 Drake St NW	Andover, MN 55304
Moreno Andres and Moreno Laura	24335 17th Ave	Saint Augusta, MN 56301

**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Morgan Michael L	24468 18th Ave	Saint Augusta, MN 56301
Morgel Irene and Trnka Sharon L	24764 21st Ave	Saint Augusta, MN 56301
Morris Barbara A & Deborah K Waldvogel	12787 125th Ave	Osakis, MN 56360
Morris Linda S	815 29th Ave N	Saint Cloud, MN 56303
Morton Mark A	34926 County Road 65	Melrose, MN 56352
Morton Mary K and Morton Ronald A	3690 21st Ave S	Saint Cloud, MN 56301
Morton Wolke Partners	25123 22nd Ave	Saint Cloud, MN 56301
Moscho Dale D	152 Par Dr SW	Melrose, MN 56352
Moscho Glen U & Mary R	29418 293rd Ave	Freeport, MN 56331
Moscho Michael and Moscho Lisa	30087 County Road 11	Freeport, MN 56331
Moscho Russell L and Moscho Sarah V	28729 292nd St	Freeport, MN 56331
Mount Hope Cemetary Assoc	14451 Huber Ave NW	Annandale, MN 55302
Mr I LLC	PO Box 189	Clearwater, MN 55320
Mr Iii LLC	2218 200th St E	Clearwater, MN 55320
Ms-Cloud LLC	16130 Ventura Blvd	Encino Ca 91436
Muehlbauer Edward & Kathleen	9207 County Road 138	Saint Cloud, MN 56301
Mueller Corey B and Mueller Chelsea L	25624 Island Lake Rd	Cold Spring, MN 56320
Mueller Edward & Katherine Trt	19 3rd Ave SW	Melrose, MN 56352
Mueller Gregory G & Terry R	25770 133rd Ave	Cold Spring, MN 56320
Mueller Michael A & Bonita C	16623 County Road 160	Cold Spring, MN 56320
Mueller Scott R	17392 Horseshoe Rd	Richmond, MN 56368
Muellner Linda Lou Mary	419 2nd St SW	Melrose, MN 56352
Mugg Robert R & Jeannette M	34722 County Road 65	Melrose, MN 56352
Muller Dustin C	21707 County Road 75	Clearwater, MN 55320
Muller Susan A	24121 County Road 75	Saint Augusta, MN 56301
Munson Feed Co Inc	PO Box 184	Melrose, MN 56352
Murphy Stephen G & Charlotte D	1901 38th St S	Saint Cloud, MN 56301
Musatov Adam	1514 38th St S	Saint Cloud, MN 56301
Musburger Jonathan D and Mccann Jennifer A; Musburger Jerry P & Carol A	40048 Primrose Ln	Sauk Centre, MN 56378
Nack, Keith L & Linda S	9941 County Road 79 SE	Osakis, MN 56360
Naegele William O	600 Market St	Chanhassen, MN 55317
Naomi A Kowalik	15851 Evans Ave NW	Clearwater, MN 55320
Nathan J Marvin	948 Isabella Ave	Clearwater, MN 55320
Nathan L Sypnieski	5381 158th St NW	Clearwater, MN 55320
Nathe Charles R	4111 21st Ave S	Saint Cloud, MN 56301
Nathe Georgine Ann	32548 County Road 11	Freeport, MN 56331

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Nathe Rueben & Darlene	40055 Us Highway 71	Sauk Centre, MN 56378
Nathe William A and Reuter Tony; Reuter Nicole; Nathe Amanda N	32546 County Road 11	Freeport, MN 56331
Nathean J Andersen Otto	1080 Mitchell Ave	Clearwater, MN 55320
Natures Edge Investments LLC	6640 Lyndale Ave S	Richfield, MN 55423
Nava Evelyn S and Calzada Jose A Hernandez	940 Country Club Dr SW	Melrose, MN 56352
Neal G & Debra U Suwyn	1067 145th St NW	Monticello, MN 55362
Nellans Frank P and Nellans Tracy J	3621 21st Ave S	Saint Cloud, MN 56301
Nelly M Fladstol & Debra M Zahler	15258 Curtis Ave NW	Monticello, MN 55362
Nelson Acres LLC	13073 Aladdin Ave NW	Monticello, MN 55362
Nelson Alan H & Judy Ann	26087 County Road 2	Saint Cloud, MN 56301
Nelson Gregory A	1830 40th St S	Saint Cloud, MN 56301
Nelson John C	24685 County Road 75	Saint Augusta, MN 56301
Ness John & Jennifer	526 Main St W	Melrose, MN 56352
Nesvold Kayla M and Bruggeman Sean	24300 18th Ave	Saint Augusta, MN 56301
Nett Ted & Karla	27522 County Road 23	Albany, MN 56307
Netter Tyler and Netter April	24328 18th Ave	Saint Augusta, MN 56301
New Ventures Enterprises LLC	2100 141st Ave	Clear Lake, MN 55319
Newman Logan and Newman Jessica	17142 Honeysuckle Rd	Cold Spring, MN 56320
Nicholas A Mccain	15751 Forsythe Ave NW	Clearwater, MN 55320
Nicholas Ellavsky	675 10th St	Clearwater, MN 55320
Nicholas Goedel & Emily Goedel	835 10th St	Clearwater, MN 55320
Nicholas Terhaar & Kinsey E Binnie	1180 Porter St	Clearwater, MN 55320
Nicol Barbara A and Nicol James J	3685 21st Ave S	Saint Cloud, MN 56301
Nicole Ann Cowley	914 Isabella Ave	Clearwater, MN 55320
Nicole M Boddy	640 8th St	Clearwater, MN 55320
Nicole Sprung & Ethan R Graca	776 Isabella Ave	Clearwater, MN 55320
Niehaus Heather M	27054 County Road 41	Albany, MN 56307
Niehaus Joseph M & Elizabeth J	13529 115th Ave	Osakis, MN 56360
Niehaus Joseph R	23102 County Road 42	Richmond, MN 56368
Niehaus, Dale & Rachel	14026 115th Ave	Osakis, MN 56360
Niehoff Gina N and Niehoff Mark A	725 Eagle Dr SW	Melrose, MN 56352
Nienaber Anne R	3801 Richter Ave	Saint Cloud, MN 56301
Nienaber John and Nienaber Rebecca	22056 Fairfax Rd	Clearwater, MN 55320
Nierenhausen Bradley M and Nierenhausen Caroline C	25347 153rd Ave	Cold Spring, MN 56320
Nierenhausen Eric G and Nierenhausen Audrey R	18120 260th St	Richmond, MN 56368
Nietfeld Michael L	9144 Ivy Rd	Saint Cloud, MN 56301

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Nikolas Kukert & Annmarie Kukert	820 Lauren Ct	Clearwater, MN 55320
Nistler Andrea A	5327 40th St S	Saint Cloud, MN 56301
Nistler David A	25565 County Road 136	Saint Cloud, MN 56301
Nistler George A and Nistler Andrea A	5327 40th St S	Saint Cloud, MN 56301
Nistler Michael A and Orourke Nistler Susan M	25417 County Road 2	Saint Cloud, MN 56301
Nistler Ralph & Sharron T	24636 18th Ave	Saint Augusta, MN 56301
Nix Thomas G & Kathleen M	210 6th St SW	Melrose, MN 56352
Noabso LLC	102 13Th Ave SE	Saint Joseph, MN 56374
Nordmann Christine C	503 1st St SW	Melrose, MN 56352
Norgren Peter L and Norgren Allison	43990 435th Ave	Sauk Centre, MN 56378
Norris C Steven & Danelle L	33497 County Road 30	Melrose, MN 56352
Norris Carl S & Danelle L	305 3rd Ave SW	Melrose, MN 56352
Northern Companies LLC	9979 185th Ave SE	Becker, MN 55308
Northern Oaks LLC	2275 197th St E	Clear Lake, MN 55319
Northern States Power Company	414 Nicollet Mall	Minneapolis, MN 55401
Notch David T	7949 Bluebird Ct	Saint Cloud, MN 56301
Notch Marvin J & Janet and Notch Neil; Notch Kevin; Notch Thomas; Sakry Jean	515 1st St SW	Melrose, MN 56352
Nowling Geraldine	39205 Wild Rose Ct	Sauk Centre, MN 56378
Ofallon Timothy J Ofallon Jennifer L	7928 Bluebird Ct	Saint Cloud, MN 56301
Ohara Timothy F	2227 37th St S	Saint Cloud, MN 56301
Okerlund Travis J and Okerlund Teresa K	2106 250th St	Saint Augusta, MN 56301
Olafson Curtis L & Lynda M	16335 County Road 160	Cold Spring, MN 56320
Olberding Paul K & Kim M	330 Country Club Rd SW	Melrose, MN 56352
Olson Kim & Sherry L	39387 County Road 187	Sauk Centre, MN 56378
Olson, Malcolm & Steven	14181 165th Ave	Becker, MN 55308
Omalley Jared and Omalley Genia	36253 Roanoke Ln	Melrose, MN 56352
Ondracek Don F & Karen M	4732 40th St S	Saint Cloud, MN 56301
Oneil Terra S and Richert Lynn R	2583 86th Ave	Saint Cloud, MN 56301
Onnen Living Trust	19309 180th Ave NW	Big Lake, MN 55309
Onyiah Leonard C & Constance	116 Walnut Cir	Rockville, MN 56320
Opatz Connie D and Opatz Brian L	21236 Franklin Rd	Clearwater, MN 55320
Opatz William L	33868 Ascot Rd	Grey Eagle, MN 56336
Oppong Oyinlola and Oppong Emmanuel	1455 Minnesota Blvd SE	Saint Cloud, MN 56304
Orbeck Kevin R & Kimberly A	31827 Sauk Valley Rd	Paynesville, MN 56362
Orozco Jose L and Orozco Bertha	219 6th St SW	Melrose, MN 56352
Ortega Lisa	222 1st St SW	Melrose, MN 56352

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Orth Derrick T	12868 Dairy Hill Rd	Saint Cloud, MN 56301
Orth Richard J & Debra J	25829 80th Ave	Saint Cloud, MN 56301
Osendorf Rosemary	110 Emerald Ave SW	Melrose, MN 56352
Ostendorf Floyd E & Tresa A	10875 Northridge Ln	Avon, MN 56310
Ostendorf Gary C & Cheryl A	25626 County Road 136	Saint Cloud, MN 56301
Ostendorf Leann J and Ostendorf Todd J	111 Par Dr SW	Melrose, MN 56352
Ostendorf Raymond R & Darlene	304 Main St W	Melrose, MN 56352
Otto Family LP	17820 30th Pl N	Plymouth, MN 55447
Outhwaite Larry and Outhwaite Jessica J	26047 County Road 2	Saint Cloud, MN 56301
Overman Dennis R and Welle Tracy L	326 Main St W	Melrose, MN 56352
Pabich Gregory J and Pabich Rose M	4902 Hidden Acres Cir	Saint Cloud, MN 56301
Pallow Janice M (Trustee)	13390 Stearns Line Rd	Sauk Centre, MN 56378
Pallow Ryan J & Brittney L	16026 Stearns Line Rd	Sauk Centre, MN 56378
Pamela D Campbell	2744 155th St NW	Monticello, MN 55362
Pamela Sawatzke	620 8th St	Clearwater, MN 55320
Park 5 Investments LLC	846 33rd St S	Saint Cloud, MN 56301
Park Pl Twnhm Lmted Ptnrsh	3601 18th St S	Saint Cloud, MN 56301
Parkway Transport Inc	PO Box 308	Clearwater, MN 55320
Pastian Allan D & Cheryl L	44124 435th Ave	Sauk Centre, MN 56378
Patricia A Borgmann Rev Trust	321 Morning View Ln	Sauk Centre, MN 56378
Patricia L Maile	225 Kothman Cir	Clearwater, MN 55320
Patrick & Judith Caveny Trust	37251 300th Ave	Melrose, MN 56352
Patrick W Slater	3133 Pearson Pkwy	Brooklyn Park, MN 55443
Pattnjimmie and Frank Amanda	22106 Fairfax Rd	Clearwater, MN 55320
Paul & Sonia Hajovy	10990 Kingsborough Ct	Cottage Grove, MN 55016
Paul A & Danielle M Carlson	665 Juliet Ave	Clearwater, MN 55320
Paul C Pfuhl & Joyce Johnson	13407 Acacia Ave NE	Monticello, MN 55362
Paul D Becker & Marcia A Becker Revocable Tr	14411 Appleton Ave NW	Monticello, MN 55362
Paul Davis & Nadyne Fletcher	1822 Haller Way	Saint Cloud, MN 56301
Paul E Kartak	12885 Aetna Ave NE	Monticello, MN 55362
Paul Eull	1033 Mitchell Ave	Clearwater, MN 55320
Paul Henry Deters	14636 Devitt Ave NW	Monticello, MN 55362
Paul J & Evelyn M Wurm Rev Tr	1445 137th St NW	Monticello, MN 55362
Paul J & Kimberley M Johnson	14966 Fillmore Ave NW	Clearwater, MN 55320
Paul V Huckenpoehler & Nicole E Petrowski	621 Hazel Ave E	Kimball, MN 55353
Paula J Lucius Rev Trust	3658 21st Ave S	Saint Cloud, MN 56301

**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Paulson Thomas W	4376 Clearwater Rd	Saint Cloud, MN 56301
Paulson Wayde A	9062 Ivy Rd	Saint Cloud, MN 56301
Payne Katie L	1572 39th St S	Saint Cloud, MN 56301
Peanut Hill Lakeshore Assn Inc	17476 Harbor Rd	Cold Spring, MN 56320
Pearson 1031 Holdings LLC	22168 Timberland Ct	Saint Augusta, MN 55320
Pearson Arlen & Norma	38254 County Road 186	Sauk Centre, MN 56378
Pearson Investments LLC	22168 Timberland Ct	Saint Augusta, MN 55320
Pearson Investments LLC	PO Box 669	Saint Cloud, MN 56302
Pearson Vanae R and Pearson Perry A	15150 Park Dr	Dayton, MN 55327
Pederson Douglas and Pederson Melainie	1011 Lawrence Cir	Sartell, MN 56377
Pelzer James L	3762 County Road 74	Saint Cloud, MN 56301
Penny A Hatcher Trust	3711 Lawndale Ln N	Plymouth, MN 55446
Penny L Gjevre Trust	610 Juliet Ave	Clearwater, MN 55320
Penta LLC	5481 W Mill Lake Rd SW	Farwell, MN 56327
Perez Marcelino & Veronica A D	225 6th St SW	Melrose, MN 56352
Perez Richard	308 1st St NW	Melrose, MN 56352
Peter J & Robin J Schmitz	13667 Meridian Ave N	Monticello, MN 55362
Peter N & Melody A Barrie	921 Isabella Ave	Clearwater, MN 55320
Petermeier Delbert J and Petermeier Dolores T	403 1st St NW	Melrose, MN 56352
Petermeier Donald A	44567 435th Ave	Sauk Centre, MN 56378
Petermeier Sydney R	315 2nd St SW	Melrose, MN 56352
Peters Family Trust	7572 Garrison Ave NE	Monticello, MN 55362
Peters Investments LLC	1620 S Hastings Way	Eau Claire, WI 54701
Peters Luke C	26465 County Road 50	Cold Spring, MN 56320
Peters Matthew C and Bodette Marie V; Peters Ferdinand F; Peters Luke C	PO Box 458	Cold Spring, MN 56320
Peterson Bros River Valley Farms	19993 182nd Ave NW	Big Lake, MN 55309
Peterson Daniel J	323 222nd St E	Clearwater, MN 55320
Peterson Jaclyn S and Orlando James A	1939 38th St S	Saint Cloud, MN 56301
Peterson Janet K and Jerzak Mark	24396 17th Ave	Saint Augusta, MN 56301
Peterson Lyndsey E	1649 Forest Glen Cir	Saint Augusta, MN 56301
Peterson Nathan K	22088 Fairfax Rd	Clearwater, MN 55320
Peterson Rodger L and Peterson Lorraine F	24380 19th Ave	Saint Augusta, MN 56301
Peterson Sarah	425 2nd St NW	Melrose, MN 56352
Peterson, David D & Carol J - Trust	14217 140th Ave	Becker, MN 55308
Petty Katie M and Petty Taylor	1698 Forest Glen Cir	Saint Augusta, MN 56301
Pfau Frederick	27786 County Road 30	Freeport, MN 56331



**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Pfeffer Victoria L	40062 Us Highway 71	Sauk Centre, MN 56378
Pfeil William B	840 Country Club Dr SW	Melrose, MN 56352
Pflipsen Ag Services LLC	15180 Stearns Line Rd	Sauk Centre, MN 56378
Pflipsen Michael & Marlene	213 8th Ave E	Melrose, MN 56352
Pfremmer Donovan W and Pfremmer Ruth A	415 2nd St NW	Melrose, MN 56352
Philippi Mark & Elizabeth	12424 Dairy Hill Rd	Saint Cloud, MN 56301
Phillips Scott A	1698 39th St S	Saint Cloud, MN 56301
Picksix LLC	3444 Deercreek Trl	Saint Cloud, MN 56301
Pierce Larry and Pierce Donna	140 Par Dr SW	Melrose, MN 56352
Piersak Kimberly and Piersak Jeffrey	26069 Bluebird Ln	Saint Cloud, MN 56301
Pierskalla Gary P & Linda A	324 8th St SE	Freeport, MN 56331
Pilot Travel Centers LLC	PO Box 54470	Lexington Ky 40555
Pine Eugene and Pine Cynthia	4384 Clearwater Rd	Saint Cloud, MN 56301
Pischke Robert & Kimberly	3635 Kings Rd	Chattanooga Tn 37416
Plaggerman Properties LLC	16785 County Road 44	South Haven, MN 55382
Platinum Dynasty LLC	3995 County Road 74	Saint Cloud, MN 56301
Poach Living Trust	15101 Barton Ave NW	Monticello, MN 55362
Poepping Glen T	25881 County Road 50	Cold Spring, MN 56320
Poetz Troy A and Poetz Nicole A	25273 31st Ave	Saint Cloud, MN 56301
Pohlad Karen R	115 Emerald Ave SW	Melrose, MN 56352
Poissant Joseph E	23654 Gaberdine Rd	Saint Augusta, MN 56301
Polinder Jason C & Samantha A	1693 Forest Glen Cir	Saint Augusta, MN 56301
Polman Gerald and Polman Chad	26756 County Road 9	Richmond, MN 56368
Pomps Tire Service Inc	1123 Cedar St	Green Bay, WI 54301
Porwoll Nicole and Stewart Luke	24450 19th Ave	Saint Augusta, MN 56301
Potter Investments, LLC	13000 Sherburne Ave	Becker, MN 55308
Powell Lisa M	56 33rd Ave S	Saint Cloud, MN 56301
Preusser Family Rev Trust	1918 40th St S	Saint Cloud, MN 56301
Pridgeon Jacob J	22184 Frankfurt Rd	Clearwater, MN 55320
Prill Paula	7595 N Shore Dr	Spicer, MN 56288
Prime Industrial Prop LLC	23300 Grandview Trl	Lakeville, MN 55044
Primera Iglesia Christiana Del Senor Jesucristo Hechos 238 Inc	PO Box 161	Pelican Rapids, MN 56572
Primus Francis A & Judy C	35528 Tulane Rd	Melrose, MN 56352
Primus Joseph R & Catherine	143 Meadowlark Ln SW	Melrose, MN 56352
Primus Melvin N & Brenda M	36756 350th Ave	Melrose, MN 56352
Primus Paul J & Amy J	37132 350th Ave	Melrose, MN 56352

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Primus Roger J & Laura	11469 County 51	Sauk Centre, MN 56378
Primus Thomas M and Primus Melanie V	25853 County Road 2	Saint Cloud, MN 56301
Proell Randal J & Susan A	1392 240th St	Saint Cloud, MN 56301
Professional Building Prtnsp	PO Box 104	Clearwater, MN 55320
Prom Steven J & Julie A	17302 260th St	Cold Spring, MN 56320
Prom Sylvester M	24102 County Road 75	Saint Augusta, MN 56301
Prosperity Avenue LLC	12925 Prosperity Ave	Becker, MN 55308
Przybilla Dewayne & Marjorie	4382 Clearwater Rd	Saint Cloud, MN 56301
Pullis Randall S	21248 Franklin Rd	Clearwater, MN 55320
Pundsack Earl J and Pundsack Tamara	37291 Springhaven Rd	Melrose, MN 56352
Pundsack Karen	22605 440th St	Freeport, MN 56331
Pundsack Karen L and Pundsack Greg W	22545 County Road 42	Richmond, MN 56368
Pundsack Loren P	126 Country Club Rd SW	Melrose, MN 56352
Quistorff Daniel & Mary Lou	12268 134th St	Osakis, MN 56360
Quistorff Mark J & Nancy	11267 137th Ave	West Union, MN 56389
R & D Property Holders LLC	8516 70th St NW	Annandale, MN 55302
R 260Th Storage LLC	524 Cypress Ct	Cold Spring, MN 56320
R D Offutt Company	700 7th St S	Fargo, ND 58103
Raab Robert F	12463 County Road 160	Saint Joseph, MN 56374
Rademacher Jennifer and Rademacher Ross R	916 Country Club Dr SW	Melrose, MN 56352
Rademacher Tony K & Lynn M	190 Meadowlark Ln SW	Melrose, MN 56352
Rahn David & Lisa	PO Box 97	Melrose, MN 56352
Raiche Audrey and Raiche Gene; Raiche Noah; Raiche Nathan	2832 County Road 74	Saint Cloud, MN 56301
Rakotz Dennis	37249 335th Ave	Melrose, MN 56352
Ralph J Doubek Rev Trust	18506 260th St	Richmond, MN 56368
Ralph J Eickhoff Trust	30722 293rd Ave	Freeport, MN 56331
Ramireddy Girishbabu and Ramireddy Jyothi	18310 Penick Rd	Waller Tx 77484
Ramirez Adam	22119 Fairmount Rd	Saint Cloud, MN 56301
Ramler Cynthia M and Ramler Michael P	1630 Field Dr	Victoria, MN 55386
Ramler Marvin E & Sandra	23157 County Road 9	Richmond, MN 56368
Ran Properties LLC	218 Stearns Dr	Sauk Rapids, MN 56379
Ran Properties LLC	PO Box 367	Sauk Rapids, MN 56379
Randall S Vetsch	717 10th St	Clearwater, MN 55320
Randall W & Michele R Papke	4791 150th St NW	Clearwater, MN 55320
Randy A Smith	3275 Manning Ave N	Lake Elmo, MN 55042
Randy E Inselman & Judith K Inselman	16313 Gowan Ave NW	Clearwater, MN 55320

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Randy M & Lisa M Harms	918 Isabella Ave	Clearwater, MN 55320
Randy Sonstebly & Jeff Eaton	16929 County Road 7 NW	Clearwater, MN 55320
Rangel Eduardo & Juana B	314 7th St NE	Melrose, MN 56352
Rangel Marcelina C and Gamino Clemente A	930 Railroad Ave NW	Melrose, MN 56352
Rapaway Troy W & Erica J	25690 County Road 136	Saint Cloud, MN 56301
Raske Craig & Bonnie	25455 31st Ave	Saint Cloud, MN 56301
Rau James and Henry Candace	20002 Manana Rd	Richmond, MN 56368
Rausch Dean M & Jessica L	27876 218th Ave	Richmond, MN 56368
Rausch Douglas D	27254 Clear Lake Rd	Richmond, MN 56368
Rausch Eugene J & Sherry A	402 12Th St N	Cold Spring, MN 56320
Rausch John Roman	219 1st St SW	Melrose, MN 56352
Ray W & Mary Ann Wilson	805 Ash St	Clearwater, MN 55320
Rea John P	PO Box 235	Richmond, MN 56368
Rebecca L Peterson 2007 Rev Trust	1010 S Benton Dr	Sauk Rapids, MN 56379
Reber Christopher	26063 County Road 2	Saint Cloud, MN 56301
Reber Todd & Deborah	29132 County Road 10	Albany, MN 56307
Red Stone Acres LLC	38739 County Road 10	Albany, MN 56307
Reed, Eugene L & Joan A	6766 Reed Rd SE	Osakis, MN 56360
Reed, Ross E	1608 W River Rd	Little Falls, MN 56345
Reese Aguirre L and Schramel Betsy M	25768 County Road 136	Saint Cloud, MN 56301
Reese Brandon R and Reese Kristen	14163 264th St	Cold Spring, MN 56320
Regency Builders Inc	6565 Riverview Loop NW	Sauk Rapids, MN 56379
Regina H Holland	1155 Porter St	Clearwater, MN 55320
Reich Brittany L and Reich Barton K	26112 Bluebird Ln	Saint Cloud, MN 56301
Reid P & Laurie A Mcfarlane	13670 Meridian Ave N	Monticello, MN 55362
Reiffenberger Kari L and Reiffenberger Ross R	42342 State Highway 28	Sauk Centre, MN 56378
Reinert Michael A	14545 Krypton St NW	Anoka, MN 55303
Reinke Brett & Karen	27124 County Road 41	Albany, MN 56307
Reiter Jacob R and Reiter Ashley R	26402 Hermitage Rd	Cold Spring, MN 56320
Reitmeier Craig & Laura	26673 Ranch Rd	Richmond, MN 56368
Reitmeier Dennis & Marilyn	25747 Hunter Rd	Richmond, MN 56368
Rejoice Lutheran Ch Clearwater	PO Box 307	Clearwater, MN 55320
Reller Mark and Reller Lea	12 Par Dr SW	Melrose, MN 56352
Reller Marlene	516 Main St W	Melrose, MN 56352
Renee C Cannon	16819 County Road 75 NW	Clearwater, MN 55320
Renee T Gorecki	654 9th St	Clearwater, MN 55320

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Ressemann Kolton	1737 Forest Glen Dr	Saint Augusta, MN 56301
Ressemann Tyler J and Ressemann Sarah A	4616 40th St S	Saint Cloud, MN 56301
Retka Richard	8518 County Road 6	Saint Cloud, MN 56301
Retzlaff Herbert W & Ricky L	24896 21st Ave	Saint Augusta, MN 56301
Reuter Tony & Nicole M	32304 County Road 11	Freeport, MN 56331
Reynaga Carmen	509 1st St SW	Melrose, MN 56352
Rhonda K Juell	1034 Nicole Ave	Clearwater, MN 55320
Rice Erich and Krzenski Sara	PO Box 114	Rockville, MN 56369
Richard & Shannon M Petty	1370 Sunrise Ct	Clearwater, MN 55320
Richard A & Linda Bergsten	2261 155th St NW	Monticello, MN 55362
Richard A Schaefer Rev Trust	3133 145th St NW	Monticello, MN 55362
Richard C & Peggy A Mortenson	681 Lake St N	Big Lake, MN 55309
Richard D & Angela K Pullen	14373 Custer Ave NW	Monticello, MN 55362
Richard D & Kristine Carlson	14373 Barton Ave NW	Monticello, MN 55362
Richard D Provo	640 9th St	Clearwater, MN 55320
Richard J & Christine Schyma	349 127th St NE	Monticello, MN 55362
Richard L Corcoran	626 Haeberle Ave	New Ulm, MN 56073
Richard M Stirling & Diane L Stirling Revocable Tr	15525 Grover Ave NW	Clearwater, MN 55320
Richard N Hansen	15033 Barton Ave NW	Monticello, MN 55362
Richard P Duchene & Karen A Duchene Trust	14684 Devitt Ave NW	Monticello, MN 55362
Richert Lynn R and Oneil Terra S	2583 86th Ave	Saint Cloud, MN 56301
Richter Charles J & Kay M	26352 Huckleberry Ct	Cold Spring, MN 56320
Richter Raymond L & Arlene	11670 County Road 139	Saint Cloud, MN 56301
Rick Kramer & Penny Spitzer	2108 155th St NW	Monticello, MN 55362
Ricker Ronald C & Corlyn M	39342 Wild Rose Ct	Sauk Centre, MN 56378
Rieland Courtney	18687 County Road 9	Avon, MN 56310
Rieland Paul G & Lisa K	709 Main St W	Melrose, MN 56352
Rien Charles A & Kathleen A	36077 County Road 65	Sauk Centre, MN 56378
Riley T Graham	790 Isabella Ave	Clearwater, MN 55320
Rising Chass W and Rising Kari A	4406 Walice Dr	Saint Cloud, MN 56301
Risto T & Deidre J Keranen	12511 Aetna Ave NE	Monticello, MN 55362
Ritt Melissa & Bryan	PO Box 212	West Union, MN 56389
Ritter Emily Jo and Ritter Joshua	366 Morning View Ln	Sauk Centre, MN 56378
Ritter Luverne & Jean	37133 County Road 173	Melrose, MN 56352
Rivera Raejeanna K and Pospisil Timothy C	510 Main St W	Melrose, MN 56352
Rivers Erik C & Catherine F	39947 Primrose Ln	Sauk Centre, MN 56378

**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Riverview Select Inc	PO Box 135	Greenwald, MN 56335
RJAE Properties LLC	PO Box 442	Sauk Rapids, MN 56379
RKE Enterprises LLC	2511 24th Ave S	Saint Cloud, MN 56301
RMCE Partnership	25479 County Road 10	Paynesville, MN 56362
Robak Joel N & Catherine M	26436 Hermitage Rd	Cold Spring, MN 56320
Robert & Rita Gerding Trust	261 Meadowlark Ln SW	Melrose, MN 56352
Robert C Agnew	17357 State Highway 24 NW	Clearwater, MN 55320
Robert E & Rosemary Burggraff	5390 160th St NW	Clearwater, MN 55320
Robert G & Beverly J Stavrum	15945 County Road 75 NW	Clearwater, MN 55320
Robert J & Kathy S Heig	17175 County Road 75 NW	Clearwater, MN 55320
Robert J & Lynne R Totz	535 Prairie St	Clearwater, MN 55320
Robert J Holthaus Rev Trust and Carol J Holthaus Rev Trust	2235 37th St S	Saint Cloud, MN 56301
Robert L Arvidson	505 9th St	Clearwater, MN 55320
Robert L Kalthoff & Renee J Kalthoff Family Trust	25404 County Road 177	Albany, MN 56307
Robert M Kartak & Paula S Kartak	12885 Aetna Ave NE	Monticello, MN 55362
Robert Preston & Jakeyell Jo Schindele	630 10th St	Clearwater, MN 55320
Robert S Merritt & Kathleen D Brannan Merritt	16603 Fillmore Ave NW	Clearwater, MN 55320
Robert W Mccabe & Ann M Mccabe Rev Trust	12755 46th St	Watertown, MN 55388
Robert W Zabinski 2003 Rev Trt	2705 County Road 6	Waite Park, MN 56387
Roberta M Behlke	1568 145th St NW	Monticello, MN 55362
Roberts David A and Shaw Patricia A	4555 40th St S	Saint Cloud, MN 56301
Robyn L Mosset	610 8th St	Clearwater, MN 55320
Rock Bottom Diesel LLC	226 Country Club Rd SW	Melrose, MN 56352
Rockstraw Company LLC	PO Box 63	Nisswa, MN 56468
Rodney & Kara Lange Rev Trust	8754 Old Highway Rd N	Saint Cloud, MN 56301
Rodney J Presser Trust & Debra K Presser Trust	15210 Curtis Ave NW	Monticello, MN 55362
Rodney M Anacker li	14331 Custer Ave NW	Monticello, MN 55362
Rodney R & Kimberly A Michel	785 145th St SW	Monticello, MN 55362
Rodney Ray Howell & Jenny Rae Lindberg	13865 Appleton Ave NW	Monticello, MN 55362
Rodriguez Yulisa Delgado	305 Main St W	Melrose, MN 56352
Roeder Donald J & Eileen	25500 County Road 74	Saint Cloud, MN 56301
Roehrl Melvin H & Anna M	323 3rd St SW	Melrose, MN 56352
Roelike Kayla and Roelike Russell R	35191 County Road 186	Melrose, MN 56352
Roelike Randall	34853 County Road 186	Melrose, MN 56352
Roering David B	30726 County Road 65	Melrose, MN 56352
Roettger Nan M and Roettger Harold J	2110 37th St S	Saint Cloud, MN 56301

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Roger A & Darnell J Hanson	1976 159th St NW	Monticello, MN 55362
Roger A & Julie K Hoglund	14595 Endicott Ave NW	Clearwater, MN 55320
Roger A Hinrichs	15766 Evans Ave NW	Clearwater, MN 55320
Roger C & Susan M Towler	1961 N Benton Dr	Sauk Rapids, MN 56379
Roger E & Alison M Laulainen	13435 Aladdin Ave NW	Monticello, MN 55362
Roger L Mergen Trust	29968 County Road 117	Albany, MN 56307
Rohde Ernest G and Rhode Sarah M	24489 18th Ave	Saint Augusta, MN 56301
Rohde Karen	8338 Parkington Ave NE	Otsego, MN 55330
Roldan Serafin Kabatay & Katrina Kimberly Hansmeier	825 10th St	Clearwater, MN 55320
Rollis H Anderson Family Partnership LLLP	725 Opportunity Dr	Saint Cloud, MN 56301
Roman W Landwehr Disclaimer Trust	2636 255th St	Saint Cloud, MN 56301
Ronald & Catherine Jaeger	16494 Isaak Ave NW	Clearwater, MN 55320
Ronald & Lori Young	3637 148th St NW	Monticello, MN 55362
Ronald A Morton Rev Trust Agreement and Mary K Morton Rev Trust Agreement	3690 21st Ave S	Saint Cloud, MN 56301
Ronald B Schabel Trust and Ronald B Schabel (Trustee)	16517 Gowan Ave NW	Clearwater, MN 55320
Ronald C Bienusa	3720 150th St NW	Clearwater, MN 55320
Ronald D & Patty L Johnson	14470 Devitt Ave NW	Monticello, MN 55362
Ronald D Reh & Julie M Reh	PO Box 134	Monticello, MN 55362
Ronald G Lahr Trust and Kay M Lahr Trust	23626 Gaberdine Rd	Saint Augusta, MN 56301
Ronald J & Susan E Korkowski	3305 Sunray Ct SW	Prior Lake, MN 55372
Ronald J Sunder & Jeanna M Sunder	1016 Nicole Ave	Clearwater, MN 55320
Ronald L Freeman & Carol Freeman	123 Bluebird Ln	Clearwater, MN 55320
Ronald M Gohl & Debra J Judd	14060 Barton Ave NW	Monticello, MN 55362
Ronning Nathan J and Rothstein Shalon	24443 17th Ave	Saint Augusta, MN 56301
Rooney Gary K	5223 40th St S	Saint Cloud, MN 56301
Rory J & Hope M Amundson	640 Juliet Ave	Clearwater, MN 55320
Rose M Nierenhausen Rev Trust	26989 Hidden Cove Rd	Cold Spring, MN 56320
Rosenberger Joseph & Alyssa	38917 Sauk River Byp	Melrose, MN 56352
Ross L Danielson & Terri M Danielson	3616 20th St NE	Buffalo, MN 55313
Rossman Ronald V & Nancy	9135 Old Highway Rd S	Saint Cloud, MN 56301
Rotar Family Rev Trust	3832 County Road 74	Saint Cloud, MN 56301
Rothfork Heather N and Rothfork Jesse S	22095 Fairmount Rd	Saint Cloud, MN 56301
Rothstein Anthony	26998 County Road 9	Richmond, MN 56368
Rothstein Duane and Rothstein Judith	205 Meadowlark Ln SW	Melrose, MN 56352
Rothstein Loren R and Rothstein Mary A	26616 County Road 161	Richmond, MN 56368
Rothstein Paul C & Ladonna	27373 Sauk Landing Rd	Paynesville, MN 56362

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Rothstein Ralph N & Joanne	26680 County Road 161	Richmond, MN 56368
Rothsten Loren R & Mary A	26596 County Road 161	Richmond, MN 56368
Roy F & Linda L Peterson	4628 150th St NW	Clearwater, MN 55320
Rq Investments	3030 Bryan St	Dallas Tx 75204
Ruben Barrientos Luna & Grenda Y Gutierrez	17082 County Road 75 NW	Clearwater, MN 55320
Rudolph Eugene W & Shirley C	8469 Highway 23 NE	Sauk Rapids, MN 56379
Ruegemer Dominic	4020 21st Ave S	Saint Cloud, MN 56301
Ruff Jason M & Shannon M	1606 Forest Glen Cir	Saint Augusta, MN 56301
Runge Cole R	27077 County Road 41	Albany, MN 56307
Ruprecht Jon M & Nicole R	24452 17th Ave	Saint Augusta, MN 56301
Ruprecht Robert M	2243 37th St S	Saint Cloud, MN 56301
Rural Cellular Corporation and Verizon Wireless Re Tax	PO Box 2549	Addison Tx 75001
Rush Mar Land Corporation	2998 150th St NW	Monticello, MN 55362
Russ Dennis E and Russ Carrie A	904 Railroad Ave NW	Melrose, MN 56352
Russell A & Beth A Martie	2955 150th St NW	Monticello, MN 55362
Russell E Willenbring Rev Trust and Trese C Willenbring Rev Trust	25704 County Road 50	Cold Spring, MN 56320
Russell Lorelie M	4715 40th St S	Saint Cloud, MN 56301
Russell V Martie Homestead Tr	2998 150th St NW	Monticello, MN 55362
Ruth C Peters Personal Residence Trust and Peters Luke C	26465 County Road 50	Cold Spring, MN 56320
Rutka Benjamin P	24423 19th Ave	Saint Augusta, MN 56301
Ryan & Alli Beste	630 8th St	Clearwater, MN 55320
Ryan Egdorf	940 Isabella Ave	Clearwater, MN 55320
Ryan J Moran & Whitney E Ledesma	960 Isabella Ave	Clearwater, MN 55320
Ryan L & Kalina C Skillingstad	667 9th St	Clearwater, MN 55320
Ryan Olson & Gillian Christianson	3355 150th St NW	Monticello, MN 55362
Ryan R & Sara Nelson	13073 Aladdin Ave NW	Monticello, MN 55362
S & A Holdings LLC	905 State Highway 24	Clearwater, MN 55320
S & S Mini Storage LLC	22 5th St SW	Melrose, MN 56352
Saatzer Karen and Heinen Kristen V	1222 13Th Ave SE	Saint Cloud, MN 56304
Sabrowsky Catherine R	4386 Clearwater Rd	Saint Cloud, MN 56301
Sadlo-Stich Patti	1689 Forest Glen Cir	Saint Augusta, MN 56301
Safe, LLC	16484 149th St SE	Big Lake, MN 55309
Sally D Berthiaume	13584 Acacia Ave NE	Monticello, MN 55362
Salzbrun Matthew and Salzbrun Lindsay R	26176 80th Ave	Saint Cloud, MN 56301
Salzer Arthur A & Sharon	35564 Rimcrest Rd	Freeport, MN 56331
Salzer Jeremy D	15073 Held Cir	Cold Spring, MN 56320

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Salzer Joseph A & Donna L	38631 Tamarack Ln	Avon, MN 56310
Salzl Bruce & Susan A and Salzl Tony; Salzl Laura	26556 290th St	Albany, MN 56307
Salzl Douglas L	25962 County Road 12	Paynesville, MN 56362
Salzl Stacy L and Salzl Peter G	28495 Kranz Lake Cir	Albany, MN 56307
Salzl Susan and Salzl Bruce	29018 263rd Ave	Albany, MN 56307
Samantha Potter & Shane Potter	5395 160th St NW	Clearwater, MN 55320
Sanchez Antonio and Sanchez Jazmine	169 Par Dr SW	Melrose, MN 56352
Sanchez Jose	2403 200th St E	Clearwater, MN 55320
Sanchez Linda Rubi Pesqueda	220 2nd St SW	Melrose, MN 56352
Sanco Properties LLC	1951 Old Highway 8 NW	New Brighton, MN 55112
Sand David F and Sand Michele L	848 Country Club Dr SW	Melrose, MN 56352
Sand Richard E & Catherine M	28407 County Road 176	Freeport, MN 56331
Sand Ryan P and Sand Lindsay	31682 293rd Ave	Freeport, MN 56331
Sandoval Jessie L and Sandoval Jesus J	8952 Ivy Rd	Saint Cloud, MN 56301
Sandra & Jeffrey Wallin	15181 Curtis Ave NW	Monticello, MN 55362
Sandra Gades	605 Juliet Ave	Clearwater, MN 55320
Sandra L Hodnefield Trust	23817 County Road 75	Saint Cloud, MN 56301
Sandra Mary Forsman	2602 147th St NW	Monticello, MN 55362
Sands Properties Inc	PO Box 6091	Minneapolis, MN 55406
Santana Edwin E & Ana M	301 Main St W	Melrose, MN 56352
Santos Vazquez Jr & Karli Vazquez	657 9th St	Clearwater, MN 55320
Sanz Kervin J	24317 17th Ave	Saint Augusta, MN 56301
Sara A Watters	650 10th St	Clearwater, MN 55320
Sara R Sell	1044 Nicole Ave	Clearwater, MN 55320
Sarah A Smith	675 8th St	Clearwater, MN 55320
Sarah M & Kelly J Larson	1320 Sunrise Ct	Clearwater, MN 55320
Sauer Ralph N & Carole M	27840 Island Lake Rd	Saint Joseph, MN 56374
Sauerer Rhonda and Klein Sharon; Zimmer Judy; Loso Susan; Ortloff Julie	12803 270th St	Saint Cloud, MN 56301
Sauk River Property LP	PO Box 7381	Saint Cloud, MN 56302
Savage Patrick M and Savage Christy J	24568 County Road 75	Saint Augusta, MN 56301
Scf Rc Funding Iii LLC	902 Carnegie Ctr	Princeton Nj 08540
Scf Rc Funding Iv LLC	212 S Horton Pkwy	Chapel Hill Tn 37034
Schaaf Roxanne M	25314 31st Ave	Saint Cloud, MN 56301
Schad Patrick L	908 Country Club Dr SW	Melrose, MN 56352
Schaefer Charles & Cheryl	27392 County Road 177	Paynesville, MN 56362
Schaefer Curt & Nicole	27657 County Road 12	Paynesville, MN 56362



**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Schaefer Gerald B & Debra A	27941 290th St	Albany, MN 56307
Schaefer Jill M and Lauer Eugene J	27605 County Road 12	Paynesville, MN 56362
Schaefer Julie M	1653 Forest Glen Cir	Saint Augusta, MN 56301
Schaefer Todd M	PO Box 515	Richmond, MN 56368
Schaefer, Terry	12120 Cedar Lake Rd	Minnetonka, MN 55305
Schaefer John M	7474 15th St NW	Annandale, MN 55302
Schany Marital Trust	22140 Oakdale Dr	Rogers, MN 55374
Scheeler Enterprises	25135 22nd Ave	Saint Cloud, MN 56301
Scheeler Holding LLC	15879 Evans Ave NW	Clearwater, MN 55320
Scheerle-Engelson Kayla and Scheerle-Engelson Matthew J	3812 Blueberry Ave S	Saint Cloud, MN 56301
Scheibmeir Marcella A	22074 Fairfax Rd	Clearwater, MN 55320
Schelonka Stanely J & Martha M	11820 260th St	Saint Cloud, MN 56301
Scherer Billy J and Scherer Trina C	25579 138th Ave	Cold Spring, MN 56320
Scherping Cody	37138 Rimcrest Rd	Freeport, MN 56331
Scherping Donald A	27003 County Road 30	Freeport, MN 56331
Scherping Samantha and Scherping Tony	30305 370th St	Melrose, MN 56352
Scherping Travis and Scherping Angela	27487 358th St	Freeport, MN 56331
Schirmers David A	43216 400th St	Sauk Centre, MN 56378
Schlangen Ralph S & Melissa A	5004 Hidden Acres Cir	Saint Cloud, MN 56301
Schlangen Steven L & Cheryl	28365 County Road 41	Albany, MN 56307
Schleper Virgil H and Schleper Jennifer M; Schleper Albert M	27747 County Road 128	Freeport, MN 56331
Schlicht Gail	205 Meadowlark Ln SW	Melrose, MN 56352
Schloegl Randy L	42507 County Road 188	Sauk Centre, MN 56378
Schmidt Family Living Trust	25091 63rd Ave	Saint Cloud, MN 56301
Schmidt John F and Sagissor Mary L	712 Main St W	Melrose, MN 56352
Schmidt Michael J & Denise	116 4th Ave NW	Melrose, MN 56352
Schmidt Robert W & Laura A	21774 Fairfax Rd	Clearwater, MN 55320
Schmidt Ronald D & Nancy	22630 County Road 44	Saint Augusta, MN 55320
Schmidt Troy A & Cynthia M	24454 18th Ave	Saint Augusta, MN 56301
Schmidt Wade T & Tonya A	3466 Deercreek Trl	Saint Cloud, MN 56301
Schmidt William & Joyce	21773 Fairfax Rd	Clearwater, MN 55320
Schmiesing Bonita S	29198 County Road 11	Freeport, MN 56331
Schmiesing Edward R & Judy R	417 Main St W	Melrose, MN 56352
Schmiesing Owen M and Schmiesing Nicole	24828 21st Ave	Saint Augusta, MN 56301
Schmitt Anthony L & Nancy K and Schmitt Chad A	25974 81st Ave	Saint Cloud, MN 56301
Schmitt Chad A	25982 81st Ave	Saint Cloud, MN 56301

**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Schmitt Chad A and Schmitt Anthony L & Nancy K	25974 81st Ave	Saint Cloud, MN 56301
Schmitt Don H & Leoba M	630 1st St S	Waite Park, MN 56387
Schmitt Peter & Jodi L	27772 County Road 113	Paynesville, MN 56362
Schmitt Randy J & Milissa K	27054 272nd St	Paynesville, MN 56362
Schmitz David C	16736 County Road 160	Cold Spring, MN 56320
Schmitz Donald W and Schmitz Marion D	684 Eagle Dr SW	Melrose, MN 56352
Schmitz Duane O & Patricia A	17998 Horseshoe Rd	Richmond, MN 56368
Schmitz Leonard & Mary Lee	14604 260th St	Cold Spring, MN 56320
Schmitz Math & Patricia	26567 County Road 9	Richmond, MN 56368
Schmitz Michael J	26702 Theresia Ter	Richmond, MN 56368
Schmitz Patrick R	8281 263rd St	Saint Cloud, MN 56301
Schmitz Paul A and Schmitz Roxanne	24947 Haywood Rd	Saint Cloud, MN 56301
Schmitz Rose Marie	23 13Th St S	Sauk Rapids, MN 56379
Schmitz Thomas R & Mary Beth	14562 260th St	Cold Spring, MN 56320
Schneider Harold & Mary L	395 Wellington Cir	Waite Park, MN 56387
Schneider Kenneth R	2135 Ruby Terrace Rd	Burtrum, MN 56318
Schneider Thomas R & Kimberly	38182 County Road 186	Sauk Centre, MN 56378
Schneider Zachary T and Chellgren Aryana M	253 Meadowlark Ln SW	Melrose, MN 56352
Schoenecker Peter J	1965 247th St	Saint Augusta, MN 56301
Scholtes Emmy E	4219 75th Ave SE	Saint Cloud, MN 56304
Schomer Daryl P and Schomer Julie K	26140 80th Ave	Saint Cloud, MN 56301
Schoolmeesters Jay & Joan	27038 County Road 177	Albany, MN 56307
Schott Kristina M and Schott Matthew	17581 County Road 83	Cold Spring, MN 56320
Schramel Michael and Schramel Arnold; Schramel Ronald; Schramel David	25791 176th Ave	Richmond, MN 56368
Schreifels Hunter M	9158 County Road 138	Saint Cloud, MN 56301
Schreiner Kevin C and Schreiner Sandra J	1363 240th St	Saint Cloud, MN 56301
Schroeder Dale & Linda	20444 Manana Rd	Richmond, MN 56368
Schroeder Delbert & Doris and Schroeder Lawrence & Marilyn	20447 728th Ave	Dassel, MN 55325
Schroeder Five LLC	25795 County Road 9	Richmond, MN 56368
Schroeder James B	24747 County Road 9	Richmond, MN 56368
Schroeder Lawrence E	20447 728th Ave	Dassel, MN 55325
Schrom Daniel A & Patricia K	2524 40th St S	Saint Cloud, MN 56301
Schuldt Jerome H & Marcia J	21252 Franklin Rd	Clearwater, MN 55320
Schulte Gregory R & Julie J	9218 Old Highway Rd S	Saint Cloud, MN 56301
Schultz Development Company LLC	8198 179th St NW	Clearwater, MN 55320
Schultz Jill M and Schultz Ricky L	1602 215th St	Saint Augusta, MN 55320

**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Schultz Ricky L and Schultz Jill	PO Box 794	Saint Cloud, MN 56302
Schulzetenberg Carl H & Kathryn R	33925 County Road 11	Freeport, MN 56331
Schulzetenberg Daniel H & J	28099 County Road 30	Freeport, MN 56331
Schulzetenberg Matthew and Schulzetenberg Jessica	28188 290th St	Freeport, MN 56331
Schutz Jason and Schutz Lina M	22087 Fairmount Rd	Saint Cloud, MN 56301
Schwab John D & Linda A	8974 Ivy Rd Birch Knl	Saint Cloud, MN 56301
Schwans Sales Enterprises	PO Box 35	Marshall, MN 56258
Schwartz Diane M and Schwartz James L	424 14th Ave N	Saint Cloud, MN 56303
Schwieters Barbara	7197 132nd St N	White Bear Lake, MN 55110
Schwing Gregory C and Schwing Isabel	3840 Cooper Ave S	Saint Cloud, MN 56301
Schwinghammer Andrew P and Schwinghammer Carissa M	1836 39th St S	Saint Cloud, MN 56301
Schwinghammer Wayne E and Schwinghammer Susan M	1790 245th St	Saint Augusta, MN 56301
Scott & Brooke Ziwicki	1225 Main St	Clearwater, MN 55320
Scott A & Anne L Christos	900 Kelsey Ave	Clearwater, MN 55320
Scott A & Lindsey J Ehrlichman	945 Kelsey Ave	Clearwater, MN 55320
Scott A & Teresa A Tellegen	13462 Meridian Ave N	Monticello, MN 55362
Scott A Brouwer & Lani F Brouwer	8547 Gatewater Dr	Monticello, MN 55362
Scott A Miller	PO Box 218	Clearwater, MN 55320
Scott C Sorenson & Colleen M Kelley Rev Trust	3835 40th St S	Saint Cloud, MN 56301
Scott J & Joanne I Sypnieski	13341 Acacia Ave NE	Monticello, MN 55362
Scott W Halek	1200 15th St S	Sartell, MN 56377
Scott Yoki & September Yoki	919 Isabella Ave	Clearwater, MN 55320
Secured Properties Plus LLC	PO Box 304	Clear Lake, MN 55319
Sedgeman Thomas C & Joyce E	44491 435th Ave	Sauk Centre, MN 56378
Senkler William & Rhoda	19754 County Road 145	Clearwater, MN 55320
Sentry Bank	PO Box 159	Saint Joseph, MN 56374
Seria LLC	3077 Aspen Lake Dr NE	Blaine, MN 55449
Servatius Gary E & Kathleen	22 5th St SW	Melrose, MN 56352
Severson Aremi Mata and Severson Joseph A	1616 Forest Glen Cir	Saint Augusta, MN 56301
Shady Oaks Ranch LLP	1813 Old County Road 6	Waite Park, MN 56387
Shamla Joy M and Shamla Gerald J	1584 39th St S	Saint Cloud, MN 56301
Shane & Kristen Triplett	675 9th St	Clearwater, MN 55320
Shane Marsyla	3589 150th St NW	Monticello, MN 55362
Shannan Anderson	16864 County Road 7 NW	Clearwater, MN 55320
Sharon P Schepers Rev Trust	1871 38th St S	Saint Cloud, MN 56301
Shaughnessy Patrick D and Shaughnessy Karen M	206 3rd Ave SW	Melrose, MN 56352

**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Shaum Samuel L and Shaum Joanna R	41232 435th Ave	Sauk Centre, MN 56378
Shaun A Villaverde & Laura B Garczynski	16922 County Road 75 NW	Clearwater, MN 55320
Shawn & Mary Thomes	924 Isabella Ave	Clearwater, MN 55320
Shawn A & Monica M Yeager	14577 Endicott Ave NW	Clearwater, MN 55320
Shawn Meyer & Stephanie Peterson	865 10th St	Clearwater, MN 55320
Shawn Thielen	1040 Nicole Ave	Clearwater, MN 55320
Shay Timmy	30507 273rd Ave	Albany, MN 56307
Shayne R Dahl & Susan R Dahl	525 9th St	Clearwater, MN 55320
Sheila K Thull Rev Trust and Dennis J Thull Rev Trust	28767 330th St	Freeport, MN 56331
Shem M Lafreniere	215 Kitty Dr	Clearwater, MN 55320
Sherburne Land Company LLC	17207 198th Ave NW	Big Lake, MN 55309
Sheree A Rinkenberger	14620 Devitt Ave NW	Monticello, MN 55362
Sherry Parker	674 9th St	Clearwater, MN 55320
Shiloh N Veit	634 9th St	Clearwater, MN 55320
Shon & Christina Thole Fam Tr	4889 150th St NW	Clearwater, MN 55320
Sieben Christine M	8245 Bel Clare Dr	Saint Cloud, MN 56301
Sieben David H & Bernadine	614 Main St W	Melrose, MN 56352
Sieben Joseph L & Angela J	PO Box 681	Waite Park, MN 56387
Sieben Ryan S	26412 County Road 50	Cold Spring, MN 56320
Silver Bullet Saddle Club	PO Box 399	Clearwater, MN 55320
Silverdale Development LLC	PO Box 247	Clearwater, MN 55320
Simon James & Vicki	12276 County Road 160	Saint Joseph, MN 56374
Simon James J & Tricia B	24266 County Road 75	Saint Augusta, MN 56301
Simon Richard & Jessie A	20835 County Road 75	Clearwater, MN 55320
Singh Jagjit and Kaur Jagdish	23057 County Road 75	Saint Cloud, MN 56301
SJ Properties of Clearwater LLC	2238 196th St E	Clearwater, MN 55320
Sjogren Mark R & Deborah M	3731 County Road 136	Saint Cloud, MN 56301
Skaalerud Mark and Skaalerud Brittney	24384 18th Ave	Saint Augusta, MN 56301
Skaggs Ashley and Skaggs Michael	7802 Bel Clare Dr	Saint Cloud, MN 56301
Skaggs Mackenzie M and Gross Logan P	1641 Forest Glen Cir	Saint Augusta, MN 56301
Skaggs Marvin & Sandra	7924 Bel Clare Dr	Saint Cloud, MN 56301
Skaggs Michael and Skaggs Ashley	7802 Bel Clare Dr	Saint Cloud, MN 56301
Skelton Charles D	2298 County Road 143	Clearwater, MN 55320
Sladky James A and Sladky Tricia J	21224 Franklin Rd	Clearwater, MN 55320
Slj LLC	27011 County Road 23	Albany, MN 56307
Smith Brett	1614 Forest Glen Cir	Saint Augusta, MN 56301

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Smith Brian C & Diane A	26194 80th Ave	Saint Cloud, MN 56301
Smith Dennis D & Patricia A	25909 Holly Rd	Saint Cloud, MN 56301
Smith Douglas R & Joann T	4625 40th St S	Saint Cloud, MN 56301
Smith, Christopher D & Sarah K	10633 County Road 31 SE	Osakis, MN 56360
Sok Chanthea L and Sok Vinny B	1801 Forest Glen Dr	Saint Augusta, MN 56301
Sommersby 45 Lex LLC	1289 Grand Ave	Saint Paul, MN 55105
Sommersby Holdings LLC	261 School Ave	Excelsior, MN 55331
Sorenson Derek K	4517 40th St S	Saint Cloud, MN 56301
Sorenson Karole	249 1st St	West Union, MN 56389
Sorg Tumbleweeds M and Sorg David	3677 21st Ave S	Saint Cloud, MN 56301
Sostak Sandi and Bauer Robert	1519 39th St S	Saint Cloud, MN 56301
Southern Minn Mun Power	500 1st Ave SW	Rochester, MN 55902
Southwest Resources LLC	11276 210th St W	Lakeville, MN 55044
Spaeth Rick A & Cathryn R	272 Meadowlark Ln SW	Melrose, MN 56352
Spanier Scott A	415 222nd St E	Saint Cloud, MN 56301
Spanier Scott A & June A	1524 39th St S	Saint Cloud, MN 56301
Spanier Thomas L	17420 113Th Ave N	Maple Grove, MN 55369
Spears Victor E & Frances	1852 County Road 143	Clearwater, MN 55320
Sperl Richard R & Josephine A	5300 Woodhill Rd	Minnetonka, MN 55345
Spoden Charles	3810 Richter Ave	Saint Cloud, MN 56301
St Alexis Church	11 Oak St	West Union, MN 56389
St Cloud Industrial Products	PO Box 1084	Saint Cloud, MN 56302
St Cloud Opportunites Inc and Sea Development LLC	PO Box 7716	Saint Cloud, MN 56302
St Cloud Truck Sales Inc	PO Box 1475	Saint Cloud, MN 56302
St Marys Help of Christians	24588 County Road 7	Saint Augusta, MN 56301
Stacy L Glaim	830 Lauren Ct	Clearwater, MN 55320
Stainbrook Scott K & Renotta	3312 40th St S	Saint Cloud, MN 56301
Stang Daniel and Stang Amy	16529 County Road 160	Cold Spring, MN 56320
Stang Gerald S & Margaret M	6086 106th St SE	Clear Lake, MN 55319
Stang Howard H & Susan L	6204 250th St	Saint Cloud, MN 56301
Stang Jacob R & Celestine R	24912 21st Ave	Saint Augusta, MN 56301
Stang Robert N & Jane and Stang Kerry J; Klein Stephanie A	25461 County Road 74	Saint Cloud, MN 56301
Stang Russell T & Annette M H	25722 County Road 136	Saint Cloud, MN 56301
Stang Ryan H	25287 County Road 74	Saint Cloud, MN 56301
Stang Walter D & Mary Lou	7614 County Road 138	Saint Cloud, MN 56301
Stanger Brenda and Schramel Dean	27187 Jade Rd	Saint Cloud, MN 56301

**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Stanger Brian J & Kathleen M	25022 Halfman Rd	Saint Cloud, MN 56301
Stanger Dale J and Stanger Anne S	27209 Jade Rd	Saint Cloud, MN 56301
Stangler Glen G & Peggy A	27212 County Road 41	Albany, MN 56307
Stanley & Dorothy Hultberg	14483 Barton Ave NW	Monticello, MN 55362
Statewide Estates LLC	17285 211Th Ave NW	Big Lake, MN 55309
Statz Ronald T & Marlene	27586 County Road 9	Richmond, MN 56368
Stearns Coop Electric Assn	PO Box 40	Melrose, MN 56352
Steffl Kayla M	1612 Forest Glen Cir	Saint Augusta, MN 56301
Steichen Peter D	8385 Old Highway Rd N	Saint Cloud, MN 56301
Steil Michael W & Katarina B	3543 Wildflower Rd S	Saint Cloud, MN 56301
Steil Paul	17116 Honeysuckle Rd	Cold Spring, MN 56320
Steil Ryan J	1665 Forest Glen Cir	Saint Augusta, MN 56301
Steinemann Jeremy	24786 21st Ave	Saint Augusta, MN 56301
Stelling Timothy S and Nathan J Stelling	14481 127th Ave	Osakis, MN 56360
Stepan Ashley M and Stepan Spencer F	2212 37th St S	Saint Cloud, MN 56301
Stepan Daniel & Jane	39762 Us Highway 71	Sauk Centre, MN 56378
Stepan Maurice L & Cynthia	42523 County Road 184	Sauk Centre, MN 56378
Stephanie Charlton	684 9th St	Clearwater, MN 55320
Stephen J & Cristin J Broughton	16000 Grunwald Ave NW	Clearwater, MN 55320
Stephen M Thompson	685 Juliet Ave	Clearwater, MN 55320
Stephen R Voigt Rev Trust and Debra M Voigt Rev Trust	5051 250th St	Saint Cloud, MN 56301
Stern Robert W & Robyn M	4378 Clearwater Rd	Saint Cloud, MN 56301
Steve & Mary Zachman	979 145th St NW	Monticello, MN 55362
Steven & Rita Drain Trust	25258 N Ranch Gate Rd	Scottsdale Az 85255
Steven C & Debra J Richter	5213 107th Ave N	Brooklyn Park, MN 55443
Steven D & Karen A Davis	1100 145th St NW	Monticello, MN 55362
Steven D & Ruth A Bradach	14305 Cushing Ave NW	Monticello, MN 55362
Steven D Langanki & Jackie A Langanki	14433 Clementa Ave NW	Monticello, MN 55362
Steven E & Mary A Swenson	2581 155th St NW	Monticello, MN 55362
Steven J & Kristine S Graeber	2147 159th St NW	Monticello, MN 55362
Steven J Little Rev Trust and Mary B Little Rev Trust	1610 39th St S	Saint Cloud, MN 56301
Steven Joerg & Darlys Joerg	19690 207th St NW	Big Lake, MN 55309
Steven P Grieppe	18900 Burns Pkwy	Anoka, MN 55303
Steven R Johnson Jr & Tara Lokensgard Johnson	15900 Clementa Ave NW	Monticello, MN 55362
Steven T & Molly E Exsted	3567 144th St NW	Monticello, MN 55362
Steven Vossen & Debra Vossen	154 Cardinal Ln	Clearwater, MN 55320

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Stewart Chad A	4252 Cooper Ave S	Saint Cloud, MN 56301
Stitt Michael D and Blake Allison J	1602 Forest Glen Cir	Saint Augusta, MN 56301
Stock Thomas R & Lori L	14242 264th St	Cold Spring, MN 56320
Stodolka Zachery and Stodolka Ashley	24488 19th Ave	Saint Augusta, MN 56301
Stoeckel Tamela L and Stoeckel Robert H li	1815 38th St S	Saint Cloud, MN 56301
Stokman Margaret R	602 Main St W	Melrose, MN 56352
Stolt Land Holdings LLC	14995 Industry Ave SE	Becker, MN 55308
Stommes Bryan and Stommes Amanda	25523 153rd Ave	Cold Spring, MN 56320
Stommes Dean J & Shareen M	106 13Th Ave N	Cold Spring, MN 56320
Stommes Roger L & Karen A	26424 Hermitage Rd	Cold Spring, MN 56320
Storbeck Susan and Storbeck Lee	3738 Bear Ridge Ct S	Saint Cloud, MN 56301
Store Master Funding Xii LLC	3503 Highpoint Dr N	Oakdale, MN 55128
Storms Jeffrey L	PO Box 143	Clearwater, MN 55320
Storms Lawrence E	21702 County Road 44	Clearwater, MN 55320
Storms Mark V	PO Box 45	Clearwater, MN 55320
Storms Mary B	21706 County Road 44	Clearwater, MN 55320
Storms-Listul Catherine	4609 40th St S	Saint Cloud, MN 56301
Stotesbery Patrick	24853 County Road 7	Saint Augusta, MN 56301
Stout Bryan D & Jill A	22154 Fairmount Rd	Saint Cloud, MN 56301
Stowe Jason W	1677 County Road 143	Clearwater, MN 55320
Stradtman Erik	4641 40th St S	Saint Cloud, MN 56301
Strang Properties LLC	2205 251st St	Saint Cloud, MN 56301
Stransky Gary and Bibeau Terese Ann	17564 Janssen Dr	Cold Spring, MN 56320
Strauch Kenneth and Kudrna Kathleen	3930 County Road 136	Saint Cloud, MN 56301
Stroeing Jeffery and Stroeing Marjorie; Stroeing Lisa	31581 County Road 11	Freeport, MN 56331
Strohschein Alyssa M and Strohschein Alan D	22065 3rd Ave E	Saint Cloud, MN 56301
Stulz Dean A & Genae M	1761 38th St S	Saint Cloud, MN 56301
Sturm Rick and Salzl Pamela K	27255 County Road 41	Albany, MN 56307
Styles Joseph R	PO Box 607	Saint Joseph, MN 56374
Styles Joseph R & Barbara K	2210 Chelmsford Ln	Saint Cloud, MN 56301
Sue Henstein	16087 Gowan Ave NW	Clearwater, MN 55320
Summit Stone Interiors Inc	15030 County Road 75 NW	Monticello, MN 55362
Sunde Kyle I	14215 264th St	Cold Spring, MN 56320
Sundell James D & Karen L	8258 County Road 6	Saint Cloud, MN 56301
Surma David E & Julie A	9197 Old Highway Rd S	Saint Cloud, MN 56301
Survival Trust	17426 N Palo Verde Dr	Sun City Az 85373

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Susan A Bell	720 Maple St	Clearwater, MN 55320
Susan L Valek	3111 145th St NW	Monticello, MN 55362
Susan Livermore-Costa Rev Trust	1218 Hickory Cir	Waconia, MN 55387
Susan Reuter	609 8th St	Clearwater, MN 55320
Susnik Barbara R	9115 Old Highway Rd S	Saint Cloud, MN 56301
Suzanne R Holewa	665 9th St	Clearwater, MN 55320
Svihel John P	1685 Forest Glen Cir	Saint Augusta, MN 56301
Sweeney Erik R and Larson Casey H	3806 Richter Ave	Saint Cloud, MN 56301
Swisshelm Village Apts 1 LP	1225 W Saint Germain St	Saint Cloud, MN 56301
Sy & Sons Inc	2354 Pheasant Ct	Saint Cloud, MN 56301
Symalla Gregory and Symalla Mathew R; Symalla Richard; Clary Julie	3265 Meadow Ln	Waite Park, MN 56387
Symanietz Richard Jr & Carol M	28265 County Road 10	Albany, MN 56307
Szabla Jason J & Christie	24480 17th Ave	Saint Augusta, MN 56301
T L Seanger LLC	PO Box 234	Melrose, MN 56352
T O Plastics Inc	830 County Road 75 NW	Clearwater, MN 55320
Tabitha L Wood	908 Isabella Ave	Clearwater, MN 55320
TAC Properties LLC	9954 166th Ct SE	Becker, MN 55308
Tadych Kevin	22064 3rd Ave E	Saint Cloud, MN 56301
Tadych Michael	2118 28th St S	Saint Cloud, MN 56301
Tallman Lori and Tallman Van	22092 Fairfax Rd	Clearwater, MN 55320
Tangen Jodi	1524 38th St S	Saint Cloud, MN 56301
Tau Midwest LLC	11995 El Camino Real	San Diego Ca 92130
Taylor Wrobel & Courtney Wrobel	840 Lauren Ct	Clearwater, MN 55320
Ted W & Shannan Daniels	1931 155th St NW	Monticello, MN 55362
Tedd J & Nancy J Louis	615 9th St	Clearwater, MN 55320
Tegels Eric J and Tegels Amanda J	41669 State Highway 28	Sauk Centre, MN 56378
Tegels Jason J and Tegels Holly A	410 Oak Street Cir S	Sauk Centre, MN 56378
Tegels, Joseph E	402 W 7th Ave	Osakis, MN 56360
Teigen Camille A and Teigen Matthew L	24237 County Road 75	Saint Augusta, MN 56301
Tellers Timothy E	24856 21st Ave	Saint Augusta, MN 56301
Terence J & Linda Borgerding	13780 Meridian Ave N	Monticello, MN 55362
Terence W Demarais Rev Trust & Nancy J Elwood Revocable Trust	14652 Devitt Ave NW	Monticello, MN 55362
Teresa A Banyai & Jeffrey Thorson	2119 159th St NW	Monticello, MN 55362
Teresa A Houck Rev Trust and Thomas L Houck Rev Trust	915 Oakridge Ave	Shoreview, MN 55126
Teresa S Block	230 Kothman Cir	Clearwater, MN 55320
Teri L Pikus	500 9th St	Clearwater, MN 55320



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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Terres Gary A & Lisa M	26502 272nd St	Paynesville, MN 56362
Terres Jamie R and Terres Tina A	350 Country Club Rd SW	Melrose, MN 56352
Terres Joshua J	37871 319th Ave	Melrose, MN 56352
Terres Turkey Properties LLC	PO Box 184	Melrose, MN 56352
Terri K Bidwell	1030 Porter St	Clearwater, MN 55320
Terwey Brothers	11468 282nd St	Saint Joseph, MN 56374
Terwey Noel J & Rebecca R	24976 163rd Ave	Cold Spring, MN 56320
Terwey Timothy L & Cynthia and Moorhouse Kari; Kuechle Leah; Heurung Sara	21813 Fairfax Rd	Clearwater, MN 55320
Tessmer, John S	PO Box 714	Wayzata, MN 55391
Tetrick Justin W & Tammy M	2287 200th St E	Clearwater, MN 55320
TGC Holdings LLC	313 8th Ave NW	Melrose, MN 56352
Thang Chad M	39343 Wild Rose Ct	Sauk Centre, MN 56378
The Big Oaks LLC	26545 Jade Rd	Saint Cloud, MN 56301
The Depot Forest LLC	8318 State Highway 23	Saint Cloud, MN 56301
The Stonecastle Group, LLP	3280 Navarre Ln	Wayzata, MN 55391
Theiler David and Theiler Bonnie; Theiler Jeron	39509 County Road 13	Melrose, MN 56352
Theis Gerald B & Renee L	26566 Hedgewood Rd	Richmond, MN 56368
Theis John E & Laurel M	26057 Heritage Rd	Cold Spring, MN 56320
Theisen Alois & Laura	12621 270th St	Saint Cloud, MN 56301
Theisen Jack A and Theisen Amber R	26075 Bluebird Ln	Saint Cloud, MN 56301
Theisen James A & Carol M	12114 260th St	Saint Cloud, MN 56301
Theisen Jerry & Kathy	11822 County Road 139	Saint Cloud, MN 56301
Theisen Mark A & Susan K	9389 County Road 138	Saint Cloud, MN 56301
Theisen Robert J & Julie	26751 County Road 2	Saint Cloud, MN 56301
Theisen Scott J & Marybeth W	9434 County Road 138	Saint Cloud, MN 56301
Thelen Bernadine and Thelen Timothy J	28024 County Road 23	Albany, MN 56307
Thelen Brian and Thelen Bradley	25014 288th St	Albany, MN 56307
Thelen Eleanor M	690 Minnesota St	Paynesville, MN 56362
Thelen Jared	28425 263rd Ave	Albany, MN 56307
Thelen Jason J	21667 County Road 42	Richmond, MN 56368
Thelen Jesse J	28322 273rd Ave	Albany, MN 56307
Thelen Mark M Jr & Lucy J	28004 County Road 12	Freeport, MN 56331
Thelen Peter S & Jill M	26677 County Road 161	Richmond, MN 56368
Thelen Timothy J and Thelen Bernadine	28024 County Road 23	Albany, MN 56307
Theodore C Shore & Kelsey M Shore	13788 County Road 75 NW	Monticello, MN 55362
Thielen Marvin J & Judy V and Thielen Chad R; Thielen Jackelyn M	31856 Riverview Rd	Melrose, MN 56352

**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Thieschafer Alicia	338 Country Club Rd SW	Melrose, MN 56352
Thieschafer Mary E	200 Meadowlark Ln SW	Melrose, MN 56352
Thiewes Zachariah & Chelsy	321 William St	West Union, MN 56389
Thoennes Bernard C and Thoennes Kathleen G	315 Country Club Rd SW	Melrose, MN 56352
Thole Alan	11337 205th Ave NW	Elk River, MN 55330
Thole David J & Gregory	606 NE Bockes Loop	Sheridan Or 97378
Thole Douglas and Yantes Sharon; Ergen Jane; Thole Anthony; Thole Joel	24619 County Road 75	Saint Augusta, MN 56301
Thom Travis A & Anna R	35562 County Road 29	Melrose, MN 56352
Thomas A Boone	PO Box 454	Clearwater, MN 55320
Thomas Bednarz & Debra Bednarz	3453 144th St NW	Monticello, MN 55362
Thomas D & Marla J Vanek	2272 137th St NW	Monticello, MN 55362
Thomas E Jahnke	PO Box 45	Longville, MN 56655
Thomas F & Lillian M Deters	1540 Crawford Ave	Falcon Heights, MN 55113
Thomas G & Karen M Mills	15766 Grover Ave NW	Clearwater, MN 55320
Thomas J & Kara J Gerold	14362 Duffield Ave NW	Monticello, MN 55362
Thomas James R and Thomas Rebecca L	39317 Wild Rose Ct	Sauk Centre, MN 56378
Thomas L Houck Revocable Trust	915 Oakridge Ave	Shoreview, MN 55126
Thomas M Tschida Rev Trust	1768 245th St	Saint Augusta, MN 56301
Thomas O Litzkow & Lynette Even	14787 Endicott Ave NW	Clearwater, MN 55320
Thomas R Jr & Marcy R Kickhafer	835 Isabella Ave	Clearwater, MN 55320
Thomas S & Royal M Jorgensen	504 Maine St	Tower City, ND 58071
Thomes Allan R and Linderholm Judith R	11444 County Road 139	Saint Cloud, MN 56301
Thomes Leroy & Marilyn	25505 County Road 50	Cold Spring, MN 56320
Thompson Jarrod C and Thompson Brittany	153 Par Dr SW	Melrose, MN 56352
Thompson Jerome & Gloriann	25701 County Road 136	Saint Cloud, MN 56301
Thompson Kirk D & Sharon B	23562 Gaberdine Rd	Saint Augusta, MN 56301
Thompson Terry D & Linda J	5237 40th St S	Saint Cloud, MN 56301
Thralow Matthew A & Kristine	27499 Jade Rd	Saint Cloud, MN 56301
Thull Gary B	28453 Oakview Rd	Freeport, MN 56331
Thull Jenna and Thull James	28305 330th St	Freeport, MN 56331
Thull Stanley & Joyce	33752 County Road 11	Freeport, MN 56331
Tibbetts Brian	24494 17th Ave	Saint Augusta, MN 56301
Tiller Corporation	10633 89th Ave N	Maple Grove, MN 55369
Timmers Edwin J & Mary A	159 222nd St E	Saint Cloud, MN 56301
Timmins Joint Revocable Trust	19870 Breckenridge Dr	Esteros Fl 33928
Timothy & Karen Schreifels Trust	3863 43rd Ave S	Saint Cloud, MN 56301

**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Timothy & Victoria L Cotter	15311 Ferman Ave NW	Clearwater, MN 55320
Timothy E Dickinson & Merri K Otto	15925 Gowan Ave NW	Clearwater, MN 55320
Timothy J Plas & Mary C Plas	15945 County Road 75 NW	Clearwater, MN 55320
Timothy L & Nanci M Richards	630 Juliet Ave	Clearwater, MN 55320
Timothy L Brion & Barbara L Brion	3624 150th St NW	Clearwater, MN 55320
Timothy P & Kristine E Murray	16095 Evans Ave NW	Clearwater, MN 55320
Timothy R & Kimberly Landecker	4877 150th St NW	Clearwater, MN 55320
Timothy T & Vickie Cotter	15083 County Road 75 NW	Clearwater, MN 55320
Timothy T Cotter	15311 Ferman Ave NW	Clearwater, MN 55320
Timothy W & Shannon L Avenson	725 Maple St	Clearwater, MN 55320
Timp Joel A	187 Par Dr SW	Melrose, MN 56352
Timp Robert R & Joann	35955 Rimcrest Rd	Freeport, MN 56331
Tina A Williams	784 Isabella Ave	Clearwater, MN 55320
TLBO Holdings LLC	13850 County Road 75 NW	Monticello, MN 55362
TLC Properties Inc	PO Box 865	Saint Cloud, MN 56302
Todd A & Heidi L Peper	930 Kelsey Ave	Clearwater, MN 55320
Todd J Potter Trust & Barbara A Potter Trust	5395 160th St NW	Clearwater, MN 55320
Todd W Rozenberg	741 127th St NE	Monticello, MN 55362
Toenies Annette M	814 Country Club Dr SW	Melrose, MN 56352
Toenies Paul R	31715 Riverview Rd	Melrose, MN 56352
Toenjes Bradley J & Barbara A	24485 17th Ave	Saint Augusta, MN 56301
Toenyan Brian D	712 Country Club Dr SW	Melrose, MN 56352
Tom E & Rose L Hoyt	16882 County Road 75 NW	Clearwater, MN 55320
Tomczik James G and Wolke Susan M	24683 18th Ave	Saint Augusta, MN 56301
Tomsche Connor N	309 2nd St SW	Melrose, MN 56352
Tongen Jeremy D	26120 Bluebird Ln	Saint Cloud, MN 56301
Torborg Family Rev Trust	8246 263rd St	Saint Cloud, MN 56301
Torborg Michael	PO Box 714	Saint Cloud, MN 56302
Torborg Michael G & Kimberly A	3631 255th St	Saint Cloud, MN 56301
Torborg Mike	PO Box 714	Saint Cloud, MN 56302
Toulouse Michael A & Kathryn	23852 Gaberdine Rd	Saint Augusta, MN 56301
TP St Cloud LLC	721 1st St	Hudson, WI 54016
Trantina Properties LLC	2300 6th St N	Saint Cloud, MN 56303
Trast Investment LLC	5123 60th St SE	Saint Cloud, MN 56304
Travis & Lori Bosacker	13850 County Road 75 NW	Monticello, MN 55362
Travis Brinkman & Rachel A Brinkman	990 Kelsey Ave	Clearwater, MN 55320

**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Travis Donatell	771 Isabella Ave	Clearwater, MN 55320
Travis G Schluter	805 Lauren Ct	Clearwater, MN 55320
Travis J & Leah M Johnson	1975 155th St NW	Monticello, MN 55362
Travis P & Jean M Eid	855 Spring St	Clearwater, MN 55320
Travis Winkelman	910 Kelsey Ave	Clearwater, MN 55320
Tree Land LLC	22 7th Ave N	Waite Park, MN 56387
Trent Coudron	14412 County Road 75 NW	Monticello, MN 55362
Trevor A & Meredith T Lee	9681 41st St NE	Saint, Michael, MN 55376
Trevor Ford & Shelby Ford	715 10th St	Clearwater, MN 55320
Tri Pal Development	13119 Crane St NW	Coon Rapids, MN 55448
Tri State Properties LLC	PO Box 7	Clearwater, MN 55320
Tri-County Action Program Inc	PO Box 683	Waite Park, MN 56387
Trigg Alex	25360 County Road 74	Saint Cloud, MN 56301
Trimpe Tyler M and Trimpe Allison	26067 Bluebird Ln	Saint Cloud, MN 56301
Troy & Grace Larson	16977 County Road 75 NW	Clearwater, MN 55320
Troy & Jeannette Saunders	15747 Evans Ave NW	Clearwater, MN 55320
Troy Boy Properties LLC	25113 21st Ave	Saint Cloud, MN 56301
Troy D Voigt & Tracey L Titus-Voigt Rev Trust	1810 245th St	Saint Augusta, MN 56301
Tschida Eugene B	225 1st St SW	Melrose, MN 56352
Tschida Joseph F & Susan M	25226 County Road 74	Saint Cloud, MN 56301
Tschida Scott E and Lashinski Lois	146 Meadowlark Ln SW	Melrose, MN 56352
Tshbacknine LLC	40204 Primrose Ln	Sauk Centre, MN 56378
Twin City Hoisting & Portable	2829 Anthony Ln S	Minneapolis, MN 55418
Twin Pines Catering Company	PO Box 38	Melrose, MN 56352
Tyler J Hartung	710 10th St	Clearwater, MN 55320
Tyler J Kroll	800 Lauren Ct	Clearwater, MN 55320
Tyler Knobbe & Kylie Knobbe	655 Juliet Ave	Clearwater, MN 55320
Tyler Thomas	620 9th St	Clearwater, MN 55320
Uhlenkamp Russell	40383 Us Highway 71	Sauk Centre, MN 56378
U-L Link LLC	1110 Sauk Ln	Sauk Centre, MN 56378
Umhoefer Margy K and Umhoefer James J	39336 Wild Rose Ct	Sauk Centre, MN 56378
Undersander Hal & Patricia	8705 Old Highway Rd N	Saint Cloud, MN 56301
Undersander Pamela J and Undersander Roy C	8503 Old Highway Rd N	Saint Cloud, MN 56301
Undersander Robert L and Kunath Caroline K; Undersander Eric J	8497 Old Highway Rd N	Saint Cloud, MN 56301
Union Dairy LLP	45383 Zellwood Rd	Sauk Centre, MN 56378
Union Dairy LLP	PO Box 922	Annandale, MN 55302

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
United Power & Land Co	414 Nicollet Mall	Minneapolis, MN 55401
Updike Jamie	4555 Mallard Ct NW	Sauk Rapids, MN 56379
Updike Marion L	15471 Oliva St	Becker, MN 55308
Uphus Joseph H & Kathryn A	1110 Sauk Ln	Sauk Centre, MN 56378
Uphus Terrence & Rhonda	35517 County Road 65	Melrose, MN 56352
Upward Dog LLC	PO Box 333	Clearwater, MN 55320
Urban Mark R and Urban Katie A	26131 80th Ave	Saint Cloud, MN 56301
Urke Adam I and Urke Joelle C	26087 Bluebird Ln	Saint Cloud, MN 56301
Us Bank Real Estate Tax and Frank Laudenbach Family Trust	PO Box 64142	Saint Paul, MN 55164
Utter Robin L and Utter David F	25436 County Road 74	Saint Cloud, MN 56301
V & J Farm LLC	40949 275th St	Belgrade, MN 56312
Valley Raymond & Janice	PO Box 338	Clearwater, MN 55320
Van Beusekom Brian P Jr	4240 Ximines Ln N	Plymouth, MN 55441
Vancleve Landan S	3902 255th St	Saint Cloud, MN 56301
Vanderby, Allen M & Dona L	10831 County Road 31 SE	Osakis, MN 56360
Vandereyk Brittney A	26176 Bluebird Ln	Saint Cloud, MN 56301
Vandereyk Thomas J and Vandereyk Pat	2204 37th St S	Saint Cloud, MN 56301
Vanhavermaet Gerald R & B J	38628 County Road 186	Sauk Centre, MN 56378
Vanheel Richard & Carla	117 Par Dr SW	Melrose, MN 56352
Vanvleet Nickolas H and Vanvleet Nancy K	1719 Southwood Trl	Saint Cloud, MN 56301
Vanvoorhis James L & Deborah M	21012 County Road 75	Clearwater, MN 55320
Vanzee Dale and Vanzee Janice	892 Country Club Dr SW	Melrose, MN 56352
Vanzuilen Jackie	26163 County Road 2	Saint Cloud, MN 56301
Vasek Michelle and Vasek Jay C	22187 3rd Ave E	Saint Cloud, MN 56301
Vaudt Thomas M	9042 Ivy Rd	Saint Cloud, MN 56301
Vaughan Jonathan L & Rebecca	2475 200th St E	Clearwater, MN 55320
Vearrier James J & Kimberly	PO Box 303	West Union, MN 56389
Veldhuizen Gina L	1629 Forest Glen Cir	Saint Augusta, MN 56301
Vern & Kim M Garberich	12910 Aetna Ave NE	Monticello, MN 55362
Vernon Johnson	625 Juliet Ave	Clearwater, MN 55320
Vernon S Hoium	4163 Stinson Blvd	Columbia Heights, MN 55421
Vicki L Baston Rev Trust and Baston David	25899 Holly Rd	Saint Cloud, MN 56301
Vickie L Hoglund	14314 Barton Ave NW	Monticello, MN 55362
Vicky L Hagberg Rev Trust	8702 Old Highway Rd N	Saint Cloud, MN 56301
Victor J & Judith A Dworshak	1179 Porter St	Clearwater, MN 55320
Vilma Salazar	4305 89th St NE	Monticello, MN 55362

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Virgil G Metzger Rev Trust	115 Garnet Ave SW	Melrose, MN 56352
Virginia A Schreifels Rev Trust	9182 County Road 138	Saint Cloud, MN 56301
Vivian K West Trust	118 Inger Pl	Buffalo, MN 55313
Vix Robert H and Hennes-Vix Tamara Jo	26404 County Road 50	Cold Spring, MN 56320
Vogel Timothy E and Vogel Laura R	38991 355th Ave	Melrose, MN 56352
Vogt Leeroy A & Linda L and Vogt Amy; Vogt Lee	38094 County Road 186	Sauk Centre, MN 56378
Vogt Sandra E	40024 Primrose Ln	Sauk Centre, MN 56378
Voigt David W	1661 Forest Glen Cir	Saint Augusta, MN 56301
Voigt Gregory R	4418 40th St S	Saint Cloud, MN 56301
Voigt James E & Jacqueline A	25614 Pleasant Rd	Saint Cloud, MN 56301
Voigt Jody M & Brenda L	5013 Hidden Acres Cir	Saint Cloud, MN 56301
Voigt Joseph & Kelly	24595 County Road 75	Saint Augusta, MN 56301
Voigt Merry Ann V and Voigt Jerry	24303 17th Ave	Saint Augusta, MN 56301
Voigt Todd	21342 County Road 44	Clearwater, MN 55320
Voller Kenneth & Linda	12868 124th St	Osakis, MN 56360
Vonco Iii, LLC	14000 Veit Pl	Rogers, MN 55374
Vorachit John B	4121 21st Ave S	Saint Cloud, MN 56301
Vorandesoto LLC	3435 Labore Rd	Vadnais Heights, MN 55110
Voss Taylor Y and Marsolek Clint A	10903 270th St	Saint Cloud, MN 56301
Wacker Jeffrey P	1993 247th St	Saint Augusta, MN 56301
Wade Donald L Jr & Lydia M	23712 Gaberdine Rd	Saint Augusta, MN 56301
Wagner Adam	2114 42nd St S	Saint Cloud, MN 56301
Wahl-Storbeck Susan and Storbeck Leroy K	3738 Bear Ridge Ct S	Saint Cloud, MN 56301
Walberg Michele A and Buermann Charles D	27255 Clear Lake Rd	Richmond, MN 56368
Waldoch Richard J	9134 County Road 138	Saint Cloud, MN 56301
Waletzko Thomas A & Patricia K	5016 Hidden Acres Cir	Saint Cloud, MN 56301
Walker Michael	8179 County Road 138	Saint Cloud, MN 56301
Wall Mitchell J and Wall Joan R	19 3rd Ave NW	Melrose, MN 56352
Wallace Todd M	319 Main St W	Melrose, MN 56352
Wallin Edward J & Susan	230 1st St	West Union, MN 56389
Walsh Gary D & Karla K	2135 County Road 6	Waite Park, MN 56387
Walsh Scott & Belinda	26129 County Road 2	Saint Cloud, MN 56301
Walsh, Dale A	4899 Smith Lake Rd SE	Osakis, MN 56360
Walsh, Roland A	22582 Fairfield Dr	Osakis, MN 56360
Walter Daniel and Walter Kris	3841 County Road 74	Saint Cloud, MN 56301
Walter Dennis V & Nona	211 Sinclair Lewis Ave	Sauk Centre, MN 56378

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Walter J Coudron Rev Trust	2417 143rd St NW	Monticello, MN 55362
Waltzing Mitchell P and Waltzing Jody A	34734 County Road 65	Melrose, MN 56352
Walz Gregory S	23522 County Road 12	Richmond, MN 56368
Walz Jonathan	25221 County Road 74	Saint Cloud, MN 56301
Walz Melvin L & Shirley M	25322 County Road 74	Saint Cloud, MN 56301
Walz Steven R & Nancy R	27884 County Road 2	Saint Joseph, MN 56374
Wanderscheid David & Cindy	38135 395th St	Sauk Centre, MN 56378
Wanderscheid David A & Mark A	38585 County Road 186	Sauk Centre, MN 56378
Wanderscheid Mary L	38552 County Road 186	Sauk Centre, MN 56378
Ward Jude	17494 Harbor Rd	Cold Spring, MN 56320
Ward Kevin J	27302 Ranch Rd	Richmond, MN 56368
Warnert Lois	32144 County Road 133	Saint Joseph, MN 56374
Warren W & Nancy A Voigt	5485 158th St NW	Clearwater, MN 55320
Warrior Properties LLC	40498 County Road 168	Melrose, MN 56352
Warzecha Alexander A and Warzecha Kaylee A	1610 Forest Glen Cir	Saint Augusta, MN 56301
Warzecha Joseph K & Michelle D	351 Country Club Rd SW	Melrose, MN 56352
Waste Management of Minnesota Inc	PO Box 1450	Chicago, IL 60690
Waters Clear LLC	640 Juliet Ave	Clearwater, MN 55320
Wayne & Laurie Steffans	14149 Cushing Ave NW	Monticello, MN 55362
Wayne L & Elizabeth M Hoglelund	11646 Laketowne Vw	Albertville, MN 55301
Wayne M & Mary J Thyren	9145 Annapolis Ln N	Maple Grove, MN 55369
Weaver Edward H Jr	1644 200th St E	Clearwater, MN 55320
Weber Anthony R & Paula R	26158 80th Ave	Saint Cloud, MN 56301
Weber Rick A	15742 Wake St NE	Ham Lake, MN 55304
Weeres Family LLC	4101 Clearwater Rd	Saint Cloud, MN 56301
Weeres Paula J	3817 38th St	Saint Cloud, MN 56301
Wegleitner Dale L and Wegleitner Joan M	624 Main St W	Melrose, MN 56352
Weiman Richard R and Weiman Sharon A	12656 Dairy Hill Rd	Saint Cloud, MN 56301
Weisbrich Timothy J & Brenda M	8601 Old Highway Rd N	Saint Cloud, MN 56301
Welko Properties	213 8th Ave NW	Melrose, MN 56352
Welle Craig M and Welle Jean	30063 370th St	Melrose, MN 56352
Welle David & Kathleen	36762 County Road 11	Freeport, MN 56331
Welle David E & Patricia M	26572 163rd Ave	Cold Spring, MN 56320
Welle Herbert & Rosalie	618 Main St W	Melrose, MN 56352
Welle Nicholas and Welle Amanda	4554 40th St S	Saint Cloud, MN 56301
Welle Peter J & Anne K	28093 7th St SW	Freeport, MN 56331

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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Welle Robert and Welle Tamara M	35596 County Road 11	Freeport, MN 56331
Wells Aaron R	1860 38th St S	Saint Cloud, MN 56301
Welsand Randy A & Maren K	1928 38th St S	Saint Cloud, MN 56301
Wendt Diane M	26225 82nd Ave	Saint Cloud, MN 56301
Wendy J Olson & Owen C Olson	15942 Fillmore Ave NW	Clearwater, MN 55320
Wenker Clarence & Mary Ann	418 1st St SW	Melrose, MN 56352
Wenker David R and Wenker Linda M	33672 343rd Ave	Melrose, MN 56352
Wenning Donald W & Mary	320 Main St W	Melrose, MN 56352
Wensman Rick J & Karla J	420 Main St W	Melrose, MN 56352
Werner Hailey L	1856 Forest Glen Dr	Saint Augusta, MN 56301
Wes & Patricia Mack	1733 155th St NW	Monticello, MN 55362
Wessel Jeffrey J & Sharon M	689 Eagle Dr SW	Melrose, MN 56352
West End Storage LLC	313 34th Ave S	Waite Park, MN 56387
Wheeler Nathan H & Kimberly K	2253 200th St E	Clearwater, MN 55320
Wheels Enterprise LLC	PO Box 233	Melrose, MN 56352
Wherry Katrina N and Wherry Sean P	1844 Coyote St	Clearwater, MN 55320
White Jeremy & Kari L	1692 Forest Glen Cir	Saint Augusta, MN 56301
White Oak Farm Limited Partshp	24948 County Road 75	Saint Augusta, MN 56301
Wicht Land Company LLLP	13411 County 46	Osakis, MN 56360
Wicht, John E, Iii & Joellyn M	13285 Basswood Ln	Rogers, MN 55374
Wickham Shawn L and Wickham Julie M	25475 58th Ave	Saint Cloud, MN 56301
Widor Scott	3872 21st Ave S	Saint Cloud, MN 56301
Wieber Kerry L & Joan M	27154 223rd Ave	Richmond, MN 56368
Wieber Kory	23545 County Road 42	Richmond, MN 56368
Wieber Richard	26599 Hedgewood Rd	Richmond, MN 56368
Wiechmann Aaron J	35236 County Road 65	Melrose, MN 56352
Wiechmann Jerome & Roseanne	226 Main St W	Melrose, MN 56352
Wiedl Esther O	103 Garnet Ave SW	Melrose, MN 56352
Wiehoff Scott & Laurie	314 Country Club Rd SW	Melrose, MN 56352
Wielenberg Donald and Maier Victoria L	27523 County Road 41	Albany, MN 56307
Wieling Delbert & Marian	413 1st St NW	Melrose, MN 56352
Wiener James N	39344 Wild Rose Ct	Sauk Centre, MN 56378
Wilcken Brandon J & Jill M	26122 80th Ave	Saint Cloud, MN 56301
Wild Rose Est Twhm Owners Assn	PO Box 105	Sauk Centre, MN 56378
Willard Daniel J & Kelly R	11900 County Road 139	Saint Cloud, MN 56301
Willard John J	9562 County Road 138	Saint Cloud, MN 56301



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<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Willard Ryan J	9354 County Road 138	Saint Cloud, MN 56301
Willenbring Chad and Welle Tina M	26129 Bluebird Ln	Saint Cloud, MN 56301
Willenbring David E & Vernon R	28457 Kranz Lake Cir	Albany, MN 56307
William A Allen	6823 Boudin St NE	Prior Lake, MN 55372
William G & Roselind Palm	8709 40 1/2 Ave N	New Hope, MN 55427
William Hirschi & Paige Robinson	970 Kelsey Ave	Clearwater, MN 55320
William J & Kelsey L Harps	665 10th St	Clearwater, MN 55320
William J & Mertice J Gohman	17032 County Road 75 NW	Clearwater, MN 55320
William J & Nancy C Schwartz	5350 160th St NW	Clearwater, MN 55320
William L & Marion G Meyer	153 Cardinal Ln	Clearwater, MN 55320
William M Everett	1235 Main St	Clearwater, MN 55320
William P & Kathleen M Reeves	5322 160th St NW	Clearwater, MN 55320
Williams Family Ltd Prtnshp li	1900 Veterans Dr	Saint Cloud, MN 56303
Williams Jessica L and Williams Jason D	24391 18th Ave	Saint Augusta, MN 56301
Wilson Michelle M and Wilson Gary	25715 County Road 136	Saint Cloud, MN 56301
Wilson Walden O & Corrine M	5143 40th St S	Saint Cloud, MN 56301
Wimmer John L & Joyce A	26934 County Road 161	Richmond, MN 56368
Wimmer Patrick M & Diane J	8300 263rd St	Saint Cloud, MN 56301
Win-Cloud Holdings LLC	PO Box 67	Rice, MN 56367
Windfeldt Beth M	3642 21st Ave S	Saint Cloud, MN 56301
Windfeldt Molly and Kuzma Susan M	1636 38th St S	Saint Cloud, MN 56301
Winkels James A & Lisa	25124 288th St	Albany, MN 56307
Winkels Jeffrey L & Kimberly A	23798 County Road 42	Richmond, MN 56368
Winkels Leander J & Karen B	29321 County Road 117	Albany, MN 56307
Winkels Richard G & Tamara J	3823 43rd Ave S	Saint Cloud, MN 56301
Winter John S & Susan M	24586 County Road 75	Saint Augusta, MN 56301
Winters John R & Catherine M	141 1st St	West Union, MN 56389
Winters Ronald & Nancy and Crown Gas LLC	15252 County 2	Osakis, MN 56360
Wiser Charles D	25515 58th Ave	Saint Cloud, MN 56301
Wisniewski Nathan	3867 County Road 74	Saint Cloud, MN 56301
Witte John H & Theresa J	1841 39th St S	Saint Cloud, MN 56301
Witte Michael	25488 County Road 74	Saint Cloud, MN 56301
Wittrock Linda M	1992 County Road 143	Clearwater, MN 55320
Witzman Paul L	24939 21st Ave	Saint Augusta, MN 56301
Woeste Daniel G	33368 Overton Rd	Melrose, MN 56352
Woeste Donald R and Woeste Agnes	208 Meadowlake Ln SW	Melrose, MN 56352

**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Woeste Joseph R	35609 County Road 65	Sauk Centre, MN 56378
Wolbeck Brianna	403 Main St W	Melrose, MN 56352
Wolbeck Josh J	42349 435th Ave	Sauk Centre, MN 56378
Wolfram John D & Lori Jo	1604 38th St S	Saint Cloud, MN 56301
Wollack Joshua and Saelee Arlun	26104 Bluebird Ln	Saint Cloud, MN 56301
Wollak Development Inc	6225 Lark Rd NW	Sauk Rapids, MN 56379
Wood Jeffrey C and Wood Julie	2117 37th St S	Saint Cloud, MN 56301
Wright Hennepin Co Op Electric Association	6800 Electric Dr	Rockford, MN 55373
Wu, Jeng Long & Beth	6650 County Road 3 SE	Osakis, MN 56360
Wurdak Nicole E	8911 Old Highway Rd S	Saint Cloud, MN 56301
Wurm Mitchell P	306 222nd St E	Saint Cloud, MN 56301
Wurzer Bryce A	25983 80th Ave	Saint Cloud, MN 56301
Wyett Rogosheske & Victoria Edick	645 9th St	Clearwater, MN 55320
Yanish Family LLC	2132 Baihly Hills Dr SW	Rochester, MN 55902
Yanta Mark A	8306 263rd St	Saint Cloud, MN 56301
Yasha Daryoush	2001 S Barrington Ave	Los Angeles Ca 90025
Young Richard L	36079 County Road 65	Sauk Centre, MN 56378
Yurczyk Shawn R & Sara J	7973 Bluebird Ct	Saint Cloud, MN 56301
Zabinski Dawn R	3815 County Road 146	South Haven, MN 55382
Zachary R Johnson & Marisa L Henrikson	725 Lauren Ave	Clearwater, MN 55320
Zachary T Lauer	680 8th St	Clearwater, MN 55320
Zahm Luke A	1924 38th St S	Saint Cloud, MN 56301
Zamora Enrique M and Melena Maria E; Cervantes Estefani M	197 Meadowlark Ln SW	Melrose, MN 56352
Zanda Kimberly M and Waldvogel Shawn G	517 2nd Ave SW	Melrose, MN 56352
Zehrer Thomas & Sandra	801 Pleasant St	Sauk Centre, MN 56378
Zenk Lukas and Zenk William	12311 County Road 160	Saint Joseph, MN 56374
Zenner Barry A & Wanda R	8402 Old Highway Rd N	Saint Cloud, MN 56301
Zenzen Jean	120 Garnet Ave SW	Melrose, MN 56352
Ziegler Calvin J	23224 County Road 7	Saint Augusta, MN 56301
Ziegler St Cloud LLC	901 W 94th St	Minneapolis, MN 55420
Zieglmeier Thomas & Cynthia	4026 255th St	Saint Cloud, MN 56301
Zierden Andrew	2312 200th St E	Clearwater, MN 55320
Zierden Donna M	117 River Oaks Dr	Cold Spring, MN 56320
Zierden Ryan A	134 Par Dr SW	Melrose, MN 56352
Zimmer Bradley G & Cara L	11769 280th St	Saint Joseph, MN 56374
Zimmer Isabelle	241 Broadway St W	Rockville, MN 56369

**Appendix M List of Landowners in the Project Study Area**

<b>Name</b>	<b>Address/Street</b>	<b>City, State, Zip</b>
Zimmer Michael J & Diane D	27675 115th Ave	Saint Joseph, MN 56374
Zimmer Michael M and Holdvogt Mary Ann Z	26500 County Road 2	Saint Cloud, MN 56301
Zimmer Steven J	3880 21st Ave S	Saint Cloud, MN 56301
Zimmerman Casey and Zimmerman Cory	24398 18th Ave	Saint Augusta, MN 56301
Zimmermann Kenneth H & Julie A	46262 370th St	Sauk Centre, MN 56378
Zion Church of Evangelical	705 Courthouse Sq	Saint Cloud, MN 56303
Zipoy Thomas A and Fruechte Todd H	25162 Augusta Dr	Saint Cloud, MN 56301
Zwack Benjamin R and Zwack Sara M	10551 270th St	Saint Cloud, MN 56301