414 Nicollet Mall
Minneapolis, MN 55401

December 11, 2023

—Via Electronic Filing—

Will Seuffert
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101

RE: IN THE MATTER OF THE APPLICATION FOR A ROUTE PERMIT FOR THE ALEXANDRIA TO BIG OAKS 345 KV TRANSMISSION PROJECT IN CENTRAL MINNESOTA
Docket No. E002, E017, ET2, E015, ET10/TL-23-159

Dear Mr. Seuffert:

In its December 5, 2023 Order in the above-referenced matter, the Minnesota Public Utilities Commission required that Northern States Power Company doing business as Xcel Energy, Great River Energy, Minnesota Power, Otter Tail Power Company, and Missouri River Energy Services on behalf of Western Minnesota Municipal Power Agency (Applicants) file two items prior to the public hearing for the Alexandria – Big Oaks 345 kV Transmission Project (the Project).[1]

The first item is the formal Natural Heritage Review and Minnesota Department of Natural Resources (MnDNR) concurrence. As noted in the Route Permit Application for the Project, the Applicants submitted a Natural Heritage Review request through the MnDNR Minnesota Conservation Explorer on August 15, 2023.[2] On November 16, 2023, the MnDNR provided its response to the Applicants' Natural Heritage Review request. A copy of MnDNR's response is provided as **Attachment A**.

The second item is an update informing the Commission of the status of the Applicants' consultation with the State Historic Preservation Office (SHPO), including SHPO's formal response to the Applicants' database request. On October 25, 2023, the Applicants sent SHPO a copy of the Phase Ia cultural resources literature review for

[1] The Project comprises the eastern segment of the Big Stone South – Alexandria – Big Oaks 345 kV Transmission Project.
[2] *See* Route Permit Application at Section 6.6.7.2.1.

the proposed route for the Project. A copy of this letter is provided as **Attachment B**. The Applicants also informed SHPO that they intend to complete a Phase I archaeological reconnaissance for portions of the Project where new ground disturbance is necessary for Project construction and maintenance. On December 8, 2023, the Applicants received a response from SHPO to their October 25, 2023 letter and a copy of this response is provided as **Attachment C**.

Portions of Attachment B are marked as "Trade Secret." Certain data contained therein is considered to be not-public data pursuant to Minn. Stat. § 13.02, subd. 9, and is Trade Secret information pursuant to Minn. Stat. § 13.37, subd. 1(b). This attachment contains maps that show the specific locations of sensitive archaeological and historic sites that are not to be publicly disclosed.

We have electronically filed this document with the Commission, and copies have been served on the parties on the attached service list. Please contact me at Matthew.A.Langan@xcelenergy.com or (612) 330-6954 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

DEPARTMENT OF NATURAL RESOURCES

Minnesota Department of Natural Resources
Division of Ecological & Water Resources
500 Lafayette Road, Box 25
St. Paul, MN 55155-4025

November 16, 2023
Correspondence # MCE 2023-00630

Jessica Butler
Barr Engineering Company

RE: Natural Heritage Review of the proposed Alexandria to Big Oaks 245 kV Transmission Line, Dodge, Sherburne, Stearns, Todd, and Wright Counties

Dear Jessica Butler,

As requested, the Minnesota Natural Heritage Information System has been reviewed to determine if the proposed project has the potential to impact any rare species or other significant natural features. Based on the project details provided with the request, the following rare features may be impacted by the proposed project:

Ecologically Significant Areas

- The Minnesota Biological Survey (MBS) has identified Sites of *High* or *Moderate* Biodiversity Significance in the vicinity of the proposed project. Sites of Biodiversity Significance have varying levels of native biodiversity and are ranked based on the relative significance of this biodiversity at a statewide level. Sites ranked as *High* contain very good quality occurrences of the rarest species, high quality examples of the rare native plant communities, and/or important functional landscapes. Sites ranked as *Moderate* contain occurrences of rare species and/or moderately disturbed native plant communities, and/or landscapes that have a strong potential for recovery. The Sites overlapping or adjacent to the proposed project are
    - Much of the non-farmed land within the project area near the proposed Big Oaks substation and Mississippi River crossings was designated as Sites of *High* or *Moderate* Biodiversity Significance. These areas include mapped examples of the following native plant communities, listed with their state conservation rank.
        - FFs59c – Elm – Ash – Basswood, S2: Imperiled,
        - FDs37b – Pin Oak – Bur Oak Woodland, S3: Vulnerable to Extirpation,

    - FFs68a – Silver Maple – (Virginia Creeper) Floodplain Forest, S3: Vulnerable to Extirpation,
    - FDs37 – Southern Dry-Mesic Oak (Maple) Woodland, S3S4: Vulnerable to Extirpation/Apparently Secure,
    - WMn82a – Willow – Dogwood Shrub Swamp S5: Secure,
- T126N R34W Sections 25 and 34-36, *Moderate*. There is a MHs38b – Basswood – Bur Oak – (Green Ash) Forest native plant community, with a state conservation rank of S3: Vulnerable to Extirpation, in sections 25 and 36,
- T124N R30W Sections 33 and 34, *Moderate*. There is a FDs37b – Pin Oak – Bur Oak Woodland native plant community, with a state conservation rank of S3: Vulnerable to Extirpation in these sections,
- T124N R31W Sections 34 and 35, *Moderate*. There is a MHs38c – Sugar Maple – Basswood – (Bitternut Hickory) Forest, with a state-conservation rank of S3: Vulnerable to Extirpation, in section 35. There have also been obserations of cerulean warbler (*Setophaga cerulea*), state-listed as a species of special concern in this Site. If feasible, avoid disturbance to this Site from May 15th through August 15th to avoid disturbance of nesting birds,
- T123N R30W Section 3, *Moderate*, and
- T123N R27W Section 7, *Moderate*.

Activities in utility rights-of-way can negatively affect adjacent native plant communities, especially through the introduction of invasive plant species. As such, disturbance near these ecologically significant areas should be minimized and we recommend the MBS Sites near the Big Oaks substation be avoided as much as possible. Actions to minimize disturbance may include, but are not limited to, the following recommendations:

- Confine construction activities to the existing rights-of-way;
- As much as possible, operate within already-disturbed areas;
- Retain a buffer between proposed activities and the MBS Site;
- Minimize vehicular disturbance in the area (allow only vehicles necessary for the proposed work);
- Do not park equipment or stockpile supplies in the area;
- Do not place spoil within MBS Sites or other sensitive areas;
- Inspect and clean all equipment prior to bringing it to the site to prevent the introduction and spread of invasive species;
- If possible, conduct the work under frozen ground conditions;
- Use effective erosion prevention and sediment control measures;
- Revegetate disturbed soil with native species suitable to the local habitat as soon after construction as possible; and

- Use only weed-free mulches, topsoils, and seed mixes. Of particular concern is birdsfoot trefoil (*Lotus corniculatus*) and crown vetch (*Coronilla varia*), two invasive species that are sold commercially and are problematic in prairies and disturbed open areas, such as roadsides.

MBS Sites of Biodiversity Significance and DNR Native Plant Communities can be viewed using the Minnesota Conservation Explorer or their GIS shapefiles can be downloaded from the MN Geospatial Commons. Please contact the NH Review Team if you need assistance accessing the data. Reference the MBS Site Biodiversity Significance and Native Plant Community websites for information on interpreting the data.

State-listed Species

- Blanding's turtles (*Emydoidea blandingii*), a state-listed threatened species, have been documented in the direct vicinity of the proposed project. Blanding's turtles use upland areas up to and over a mile distant from wetlands, waterbodies, and watercourses. Uplands are used for nesting, basking, periods of dormancy, and traveling between wetlands. Factors believed to contribute to the decline of this species include collisions with vehicles, wetland drainage and degradation, and the development of upland habitat. Any added mortality can be detrimental to populations of Blanding's turtles, as these turtles have a low reproduction rate that depends upon a high survival rate to maintain population levels.

  This project has the potential to impact this rare turtle through direct fatalities and habitat disturbance/destruction due to excavation, fill, and other construction activities associated with the project. Minnesota's Endangered Species Statute (*Minnesota Statutes*, section 84.0895) and associated Rules (*Minnesota Rules*, part 6212.1800 to 6212.2300 and 6134) prohibit the take of threatened or endangered species without a permit. **Given the project details, actions are required to avoid the potential take of Blanding's turtles. There are two sets of actions required, depending on the location. They are.**

  1. **In the area between the Quarry Substation and the proposed Big Oaks Substation, the following avoidance measures are required:**

     - Avoid wetland and aquatic impacts during hibernation season, between September 15th and April 15th, if the area is suitable for hibernation. Project activities that do not disturb the bottom of wetlands (e.g., working on the ice surface in frozen wetlands) will not have an impact.
     - To avoid inadvertent take, the use of wildlife friendly erosion control is required. Do not use products containing plastic mesh or other plastic components. Also, be aware that hydro-mulch products may contain small synthetic (plastic) fibers to aid in its matrix strength. These loose fibers could potentially re-suspend and make their way into

wetlands, streams, and lakes. Please review mulch products and do not allow any materials with synthetic (plastic) fiber additives in areas that drain to waterways.

- Construction areas, especially aquatic or wetland areas, should be thoroughly checked for turtles before the use of heavy equipment or any ground disturbance.
  - The Blanding's turtle flyer must be given to all contractors working in the area.
  - Monitor for turtles during construction and report any sightings to the DNR Nongame Specialist, Erica Hoaglund (Erica.Hoaglund@state.mn.us).
  - If turtles are in imminent danger they must be moved by hand out of harm's way, otherwise, they are to be left undisturbed.

If following the above avoidance measures is not possible, please contact NHIS.Review@state.mn.us as further action may be needed.

For additional information, see the Blanding's turtle fact sheet, which describes the habitat use and life history of this species. The fact sheet also provides two lists of recommendations for avoiding and minimizing impacts to this rare turtle.

2. **An avoidance plan is required for the portion of the project shown in Figure 2: Big Oaks Substation and Mississippi River Crossings attached to the MCE project.**

We do not currently have a template for avoidance plans. The plan needs to:

- Provide a description of the project activities and construction methods,
- Identify measures that will be taken to avoid take and minimize disturbance to the species, and
- Include a map of disturbance areas. This can include a map of potential Blanding's turtle summer, winter, and nesting habitat overlayed with timing of project impacts.

Measures to avoid or minimize disturbance include, but are not limited to, the following:

- Avoidance of suitable habitat,
- Timing the impacts to avoid incidental take,
- The recommendations listed in the Blanding's turtle fact sheet,
- Training for construction crew.

Please submit the completed avoidance plan to the NH Review Team (Reports.NHIS@state.mn.us).

- The loggerhead shrike (*Lanius ludovicianus*), a state-listed endangered bird, has been documented in the vicinity of the project site near the proposed Big Oaks substation and Mississippi River crossings. Loggerhead shrikes use grasslands that contain short grass and scattered perching sites such as hedgerows, shrubs, or small trees. They can be found in native prairie, pastures, shelterbelts, old fields or orchards, cemeteries, grassy roadsides, and

farmyards. **Given the potential for this species to be found in the vicinity of the project, tree and shrub removal is required to be avoided during the breeding season, April through July, in the area shown in Figure 2: Big Oaks Substation and Mississippi River Crossings attached to the MCE project.** If you cannot avoid tree removal during loggerhead shrike breeding period, a qualified surveyor needs to conduct a survey for active nests before any trees or shrubs will be removed. Requirements for surveys and lists of DNR certified lists of surveyors can be found at the Natural Heritage Review website. Survey results should be sent to the NH Review Team at Reports.NHIS@state.mn.us.

- Butternut (*Juglans cinerea*), a state-listed endangered plant, was documented on a riverbank terrace near the project area near Monticello. Most populations of this species in Minnesota are located in mature, mesic hardwood forests. This species is very susceptible to a lethal fungal disease called butternut canker (*Sirococcus clavigignenti-juglandacearum*). Nearly all of Minnesota's butternut populations are dead or dying from the fungus, triggering its protected status within the state.

  As this species has been documented in the vicinity of the proposed project, **a qualified surveyor is required to conduct a botanical survey of any deciduous trees in the proposed project area to be removed in Sherburne County and T123N R27W Section 7 and T122N R25W Sections 30-33 in Stearns County**. Also, as this species is highly susceptible to the butternut canker fungal disease, it is imperative to inspect and clean all equipment prior to bringing it to the site in these areas to prevent spread of invasive species.

  Surveys must be conducted by a qualified surveyor and follow the standards contained in the Rare Species Survey Process and Rare Plant Guidance. Visit the Natural Heritage Review page for a list of certified surveyors and more information on this process. Project planning should take into account that any botanical survey needs to be conducted during the appropriate time of the year, which may be limited. Please consult with the NH Review Team at Reports.NHIS@state.mn.us if you have any questions regarding this process.

- Marbled godwit (*Limosa fedoa*), a state-listed bird of special concern, has been documented in the vicinity of the project west of the Quarry substation. This species prefers to feed and nest in short upland grassland areas along the edges of seasonal wetlands but is also known to nest in adjacent cropland stubble if the adequate habitat is limited. If feasible, avoid impacts to nesting habitat between May and August in this region.

- The creek heelsplitter (*Lasmigona compressa*) and black sandshell (*Ligumia recta*), both state-listed mussel species of special concern, have been documented in the Mississippi River in the vicinity of the eastern terminus of the proposed project. Mussels are particularly vulnerable to deterioration in water quality, especially increased siltation. It is important effective erosion

prevention and sediment control practices be implemented and maintained throughout the duration of the project near the river to minimize impacts to these and other species.

- The Natural Heritage Information System (NHIS) tracks bat roost trees and hibernacula plus some acoustic data, but this information is not exhaustive. Even if there are no bat records listed nearby, all seven of Minnesota's bats, including the federally endangered northern long-eared bat (*Myotis septentrionalis*), can be found throughout Minnesota. During the active season (approximately April-November) bats roost underneath bark, in cavities, or in crevices of both live and dead trees. Tree removal can negatively impact bats by destroying roosting habitat, especially during the pup rearing season when females are forming maternity roosting colonies and the pups cannot yet fly. To minimize these impacts, the DNR recommends that tree removal be avoided from June 1 through August 15.

- Please visit the DNR Rare Species Guide for more information on the habitat use of these species and recommended measures to avoid or minimize impacts. For further assistance with these species, please contact the appropriate DNR Regional Nongame Specialist or Regional Ecologist.

Federally Protected Species

- To ensure compliance with federal law, conduct a federal regulatory review using the U.S. Fish and Wildlife Service's (USFWS) online Information for Planning and Consultation (IPaC) tool.

Environmental Review and Permitting

- Please include a copy of this letter and the MCE-generated Final Project Report in any state or local license or permit application. Please note that measures to avoid or minimize disturbance to the above rare features may be included as restrictions or conditions in any required permits or licenses.

The Natural Heritage Information System (NHIS), a collection of databases that contains information about Minnesota's rare natural features, is maintained by the Division of Ecological and Water Resources, Department of Natural Resources. The NHIS is continually updated as new information becomes available, and is the most complete source of data on Minnesota's rare or otherwise significant species, native plant communities, and other natural features. However, the NHIS is not an exhaustive inventory and thus does not represent all of the occurrences of rare features within the state. Therefore, ecologically significant features for which we have no records may exist within the project area. If additional information becomes available regarding rare features in the vicinity of the project, further review may be necessary.

For environmental review purposes, the results of this Natural Heritage Review are valid for one year; the results are only valid for the project location and project description provided with the request. If project details change or the project has not occurred within one year, please resubmit the project for review within one year of initiating project activities.

The Natural Heritage Review does not constitute project approval by the Department of Natural Resources. Instead, it identifies issues regarding known occurrences of rare features and potential impacts to these rare features. Visit the Natural Heritage Review website for additional information regarding this process, survey guidance, and other related information. For information on the environmental review process or other natural resource concerns, you may contact your DNR Regional Environmental Assessment Ecologist.

Thank you for consulting us on this matter and for your interest in preserving Minnesota's rare natural resources.

Sincerely,

James Drake
Natural Heritage Review Specialist
James.F.Drake@state.mn.us

Cc: Melissa Collins, Owen Baird

resourceful. naturally.
engineering and environmental consultants

BARR

October 25, 2023

Sarah Beimers
Environmental Review Program Manager
Minnesota State Historic Preservation Office
Administration Building #203
50 Sherburbe Avenue
Saint Paul, MN 55155

Re: Request for Review: Phase Ia Literature Review Report for the Alexandria to Big Oaks 345 kV Transmission Line Project in Douglas, Sherburne, Stearns, Todd, and Wright Counties, MN

Dear Ms. Beimers:

On behalf of Xcel Energy (Xcel), Barr Engineering Co. (Barr) completed a Phase Ia cultural resources literature review of the proposed route for the Alexandria to Big Oaks 345 kilovolt (kV) Transmission Line Project (the Project).

Xcel submitted a route permit application (RPA) for the Project to the Minnesota Public Utilities Commission (PUC) on September 29, 2023. This Phase Ia was completed concurrent with the filing of the RPA in an effort to understand how the Project may impact cultural resources, and to provide baseline information that Xcel can utilize as Project design is advanced.

On October 10, 2023, the Minnesota PUC issued an authorization for the route permit applicants, including Xcel, to initiate consultation with the State Historic Preservation Office under Minn. Stat. § 138.665 (Attachment A).

The Project consists of an approximately 105 to 108-mile long, new 345 kilovolt (kV) transmission line that will be installed primarily on existing infrastructure between the Western Minnesota Municipal Power Agency's existing Alexandria Substation in Alexandria, Douglas County and the new Big Oaks Substation that will be constructed on the north side of the Mississippi River in Becker, Sherburne County. The Project crosses Douglas, Sherburne, Stearns, Todd, and Wright counties.

A literature review was completed for the Project in August 2023. The literature review identified two previously recorded archaeological sites and one historic architectural resource within the proposed route. The previously recorded archaeological sites, 21SH0068 and 21SH0169, both consist of precontact lithic isolate sites. Both sites have previously been recommended not eligible for the National Register of Historic Places (NRHP). The previously recorded historic architectural resource consists of the St. Cloud, Mankato & Austin Railroad (SN-SJT-003), which is located within the proposed route near the Quarry Substation Bypass. The St. Cloud, Mankato & Austin Railroad is considered eligible for the NRHP.

Because the Project consists largely of stringing a second 345 kV circuit onto existing infrastructure, ground disturbance related to this aspect of the Project (stringing a second 345 kV circuit onto existing infrastructure) will be minimal; therefore, this portion of the Project is not anticipated to result in impacts to cultural resources.

Impacts to cultural resources would have the potential to occur in areas where new construction is proposed, which have been identified as the 67 to 78 locations where new structures will be built for the Project, the Alexandria Substation tap and expansion, the Riverview Substation bypass and expansion, the Quarry Substation bypass, the Mississippi River crossing alignment, and the new Big Oaks Substation footprint.

Xcel plans to complete a Phase I archaeological reconnaissance for the portions of the Project where new ground disturbance is necessary for Project construction and maintenance.

At this time, we are requesting comments from your office regarding the results of the literature review and the proposed survey methodology, pursuant to the responsibilities given the State Historic Preservation Office by the Minnesota Historic Sites Act (Minn. Stat. § 138.665-666) and the Minnesota Field Archaeology Act (Minn. Stat. § 138.40).

Please let us know if you have any questions and/or require any additional information to complete your review, and we look forward to hearing back from you.

Sincerely,

Veronica Parsell

Veronica Parsell
Senior Cultural Resources Specialist
Barr Engineering

Enc: Attachment A: Authorization to Consult
Phase Ia Literature Review Report

MINNESOTA
PUBLIC UTILITIES COMMISSION

October 10, 2023 Attachment A

TO: Xcel Energy
Matthew Langan
Principal Agent, Siting and Land Rights
414 Nicollet Mall, 414-6A
Minneapolis, MN 55401

Great River Energy
Dan Lesher
Manager, Transmission Permitting and Land Rights
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Maple Grove, MN 55369

Minnesota Power
Jim Atkinson
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30 West Superior Street
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Western Minnesota
Brian Zavesky, P.E.
Senior Transmission Engineer
Missouri River Energy Services
3724 West Avera Drive

Sarah Beimers
Environmental Review Program Manager
State Historic Preservation Office – MN Dept. of
Administration 50 Sherburne Avenue, Suite 203
Saint Paul, Minnesota 55155

FROM: Will Seuffert
Executive Secretary
Minnesota Public Utilities Commission

Re: Authorization to Initiate Consultation under Minn. Stat. § 138.665; In the Matter of the Application for a Certificate of Need for The Big Stone South – Alexandria – Big Oaks Transmission Project and The Application for a Route Permit for The Alexandria – Big Oaks 345 kV Transmission Project in Central Minnesota; MPUC Dockets TL-23-159 and CN-22-538.

Through this authorization, the Minnesota Public Utilities Commission ("Commission") intends to formalize the role of the Commission, the Department of Commerce—Energy Environmental Review and Analysis ("DOC-EERA"), and the above listed Applicant for a large electric power facility (as defined in Minn. Stat. § 216E.01, subd. 6) relative to the Commission's statutory responsibilities under Minn. Stat. § 138.665 to consult with the State Historic Preservation Office (SHPO).

In order to streamline the Commission's compliance with Minn. Stat. § 138.665, the Commission hereby authorizes the Applicant to initiate consultation with SHPO pursuant to Minn. Stat. § 138.665. Effective immediately, the Applicant and its authorized representatives may consult with SHPO to initiate review and consultation. Specifically, the Applicant is authorized to gather information to identify, and reevaluate if warranted, designated historic properties, and to work in coordination with other interested entities, including Tribal Nations and DOC-EERA, to assess the effects of proposed projects on designated historic properties as described in Minn. Stat. § 138.665. As appropriate, as part of its environmental review, DOC-EERA will coordinate with SHPO in evaluating the potential effect of alternative sites and routes on historic properties as described in Minn. Stat. § 138.665.

The Commission sits in a quasi-judicial capacity and makes siting and routing decisions based solely on the administrative record developed and the comments and information submitted by the parties and participants to Commission proceedings. The Commission is also subject to Minnesota's Open Meeting Law, Minn. Stat. Ch. 13D, which requires that Commission meetings be open to the public and the record be publicly available. Ex parte communications with Commissioners are prohibited, and Commissioners hear from interested entities and people on-the-record, either through written filings or at agenda meetings that are open to the public.

Accordingly, at the time the Applicant submits its prehearing testimony prior to the public hearing on the project, the Applicant shall file a compliance filing informing the Commission of the status of consultation with SHPO. This compliance filing should demonstrate that consultation has occurred, whether the proposed project will affect designated properties, and if so, identify any permit terms and conditions agreed upon by the applicant and SHPO to avoid or mitigate any adverse effects on the designated or listed properties. The Applicant should attach to its compliance filing a letter obtained from SHPO confirming that consultation has occurred and detailing any comments, concerns, and/or recommendations regarding the project from SHPO. If SHPO objects to the proposed project, this letter should detail SHPO's objection and any proposed permit terms and conditions that, if adopted, would resolve its objection. If SHPO's objection cannot be addressed through appropriate permit terms and conditions, the SHPO may request mediation as provided for in Minn. Stat. § 138.665.

Notwithstanding this authorization, the Commission retains ultimate responsibility for consultation under Minn. Stat. § 138.665 and for determining whether to permit a large electric power facility.

If you have any questions, please contact Craig Janezich at craig.janezich@state.mn.us or call at 651-201-2203.

Phase Ia Cultural Resources Literature Review

Alexandria to Big Oaks 345 kV Transmission Line Project
Douglas, Sherburne, Stearns, Todd, and Wright Counties, MN

Prepared for
Xcel Energy

October 2023

4300 Market Pointe Drive, Suite 200
Minneapolis, MN 55435
Phone: 952.832.2600
Fax: 952.832.2601

Executive Summary

In response to a request from Xcel Energy (Xcel), Barr Engineering Co. (Barr) completed a Phase Ia cultural resources literature review of the proposed route for the Alexandria to Big Oaks 345 kilovolt (kV) Transmission Line Project (the Project).

Xcel submitted a route permit application (RPA) for the Project to the Minnesota Public Utilities Commission (PUC) on September 29, 2023. This Phase Ia was completed concurrent with the filing of the RPA in an effort to understand how the Project may impact cultural resources, and to provide baseline information that Xcel can utilize as Project design is advanced.

The Project consists of an approximately 105 to 108-mile long, new 345 kilovolt (kV) transmission line that will be installed primarily on existing infrastructure between the Western Minnesota Municipal Power Agency's existing Alexandria Substation in Alexandria, Douglas County and the new Big Oaks Substation that will be constructed on the north side of the Mississippi River in Becker, Sherburne County. The Project crosses Douglas, Sherburne, Stearns, Todd, and Wright counties. It is partially located within the municipalities of Alexandria, Becker, Clearwater, Freeport, Melrose, Monticello, Rockville, Saint Cloud and Waite Park, Minnesota. A summary of the sections, townships, and ranges crossed by the Project is included in Appendix A.

A literature review was completed for the Project in August 2023. The literature review identified two previously recorded archaeological sites and one historic architectural resource within the proposed route. The previously recorded archaeological sites, 21SH0068 and 21SH0169, both consist of precontact lithic isolate sites. Both sites have previously been recommended not eligible for the National Register of Historic Places (NRHP). The previously recorded historic architectural resource consists of the St. Cloud, Mankato & Austin Railroad (SN-SJT-003), which is located within the proposed route near the Quarry Substation Bypass. The St. Cloud, Mankato & Austin Railroad is considered eligible for the NRHP.

Because the Project consists largely of stringing a second 345 kV circuit onto existing infrastructure, ground disturbance related to this aspect of the Project will be minimal; therefore, this portion of the Project is not anticipated to result in impacts to cultural resources.

Impacts to cultural resources would have the potential to occur in areas where new construction is proposed, which have been identified as the 67 to 78 locations where new structures will be built for the Project, the Alexandria Substation tap and expansion, the Riverview Substation bypass and expansion, the Quarry Substation bypass, the Mississippi River crossing alignment, and the new Big Oaks Substation footprint.

Xcel plans to complete a Phase I archaeological reconnaissance for the portions of the Project where new ground disturbance is necessary for Project construction and maintenance.

Contents

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Certification

Principal Investigator

Veronica Parsell
RPA #: 3532690

October 25, 2023
Date

1 Introduction

In response to a request from Xcel Energy (Xcel), Barr conducted a Phase Ia cultural resources literature review (Phase Ia) prior to the construction of an approximately 105 to 108-mile long, new 345 kilovolt (kV) transmission line circuit that will be installed primarily on existing infrastructure between the Western Minnesota Municipal Power Agency's existing Alexandria Substation in Alexandria, Douglas County and the new Big Oaks Substation that will be constructed on the north side of the Mississippi River in Becker, Sherburne County (the Project) (Figure 1). The Project crosses Douglas, Sherburne, Stearns, Todd, and Wright counties. The Proposed Route is partially located within the municipalities of Alexandria, Becker, Clearwater, Freeport, Melrose, Monticello, Rockville, Saint Cloud and Waite Park, Minnesota. A summary of the sections, townships, and ranges crossed by the Project is included in Appendix A. A detailed map book of the Project Study Area is included in Appendix B (Redacted).

Xcel submitted a route permit application (RPA) for the Project to the Minnesota Public Utilities Commission (PUC) on September 29, 2023. This Phase Ia was completed concurrent with the RPA in an effort to understand how the Project may impact cultural resources, and to provide baseline cultural resources information that Xcel can utilize as Project design is advanced.

Background research was completed through a records request from the Minnesota State Historic Preservation Office (SHPO). The records review focused on a 1-mile (mi) Project Study Area around the Proposed Route for the Project (1/2-mile on either side of the Proposed Route). The Proposed Route is defined as the area within which the PUC will authorize placement of the right-of-way (ROW) for the transmission line facilities. Barr gathered information about previously documented cultural resources in the Project Study Area as well as the environmental and cultural context of the region to assess the potential for the Project to impact cultural resources.

Key personnel committed to the cultural resources literature review include archaeological Principal Investigator Ms. Veronica Parsell and Mr. Mike Strong, GIS analyst, who created the report graphics. Ms. Anna Kadrie also assisted in compiling background information for the literature review.

This report presents a summary of the research design in Section 2 and the results of the background research in Section 3. Section 4 outlines the applicable regulations and guidelines governing the Project, while the results of the literature review are summarized in Section 5. The conclusions and recommendations are located in Section 6 and the references cited for this report appear in Section 7. Appendix A includes a table of the sections, townships, and ranges crossed by the Proposed Route. Appendix B includes a detailed Project map set, and Appendix C contains a table of the documented archaeological sites and historic architectural resources in the Project Study Area.

1.1 Project Description

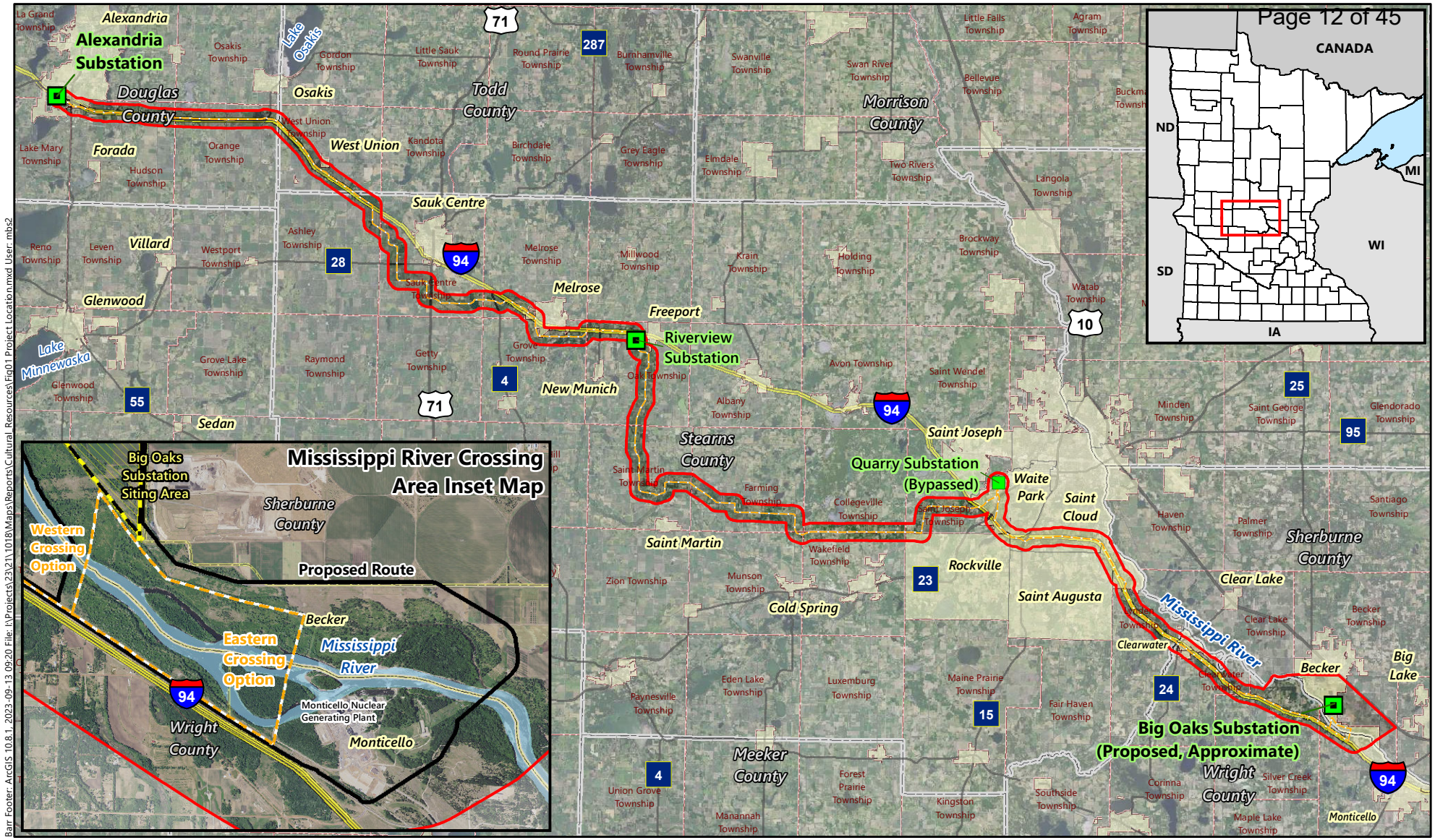
The Project involves placing a new 345 kV transmission circuit on existing CapX2020 transmission line structures that were previously permitted and constructed as double-circuit capable through two previous transmission line projects permitted by the PUC: the Monticello to St. Cloud 345 kV Transmission Line

Project (E002, ET2/TL-09-246) and the Fargo to St. Cloud 345 kV Transmission Line Project (E002, ET2/TL-09-1056).

At four locations along the Project, the new transmission line is proposed to deviate from the existing CapX2020 transmission line infrastructure, and associated facilities will also be altered or constructed, as described in the following sections.

Xcel anticipates that approximately 67 to 78 new structures will be constructed within the Proposed Route, depending on the Mississippi River crossing selected for the Project (see Section 1.1.4). 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 approximate location of these new structures are included in the map set in Appendix C.

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. 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 direct embedded in the ground.



Project Study Area
Anticipated Alignment
Project Substation
Bypassed Substation
Interstate Highway
US Highway
State Highway
County State-Aid Highway
Municipal Boundary
Civil Township
County Boundary
State Boundary

Miles
8 0 8

Figure 1

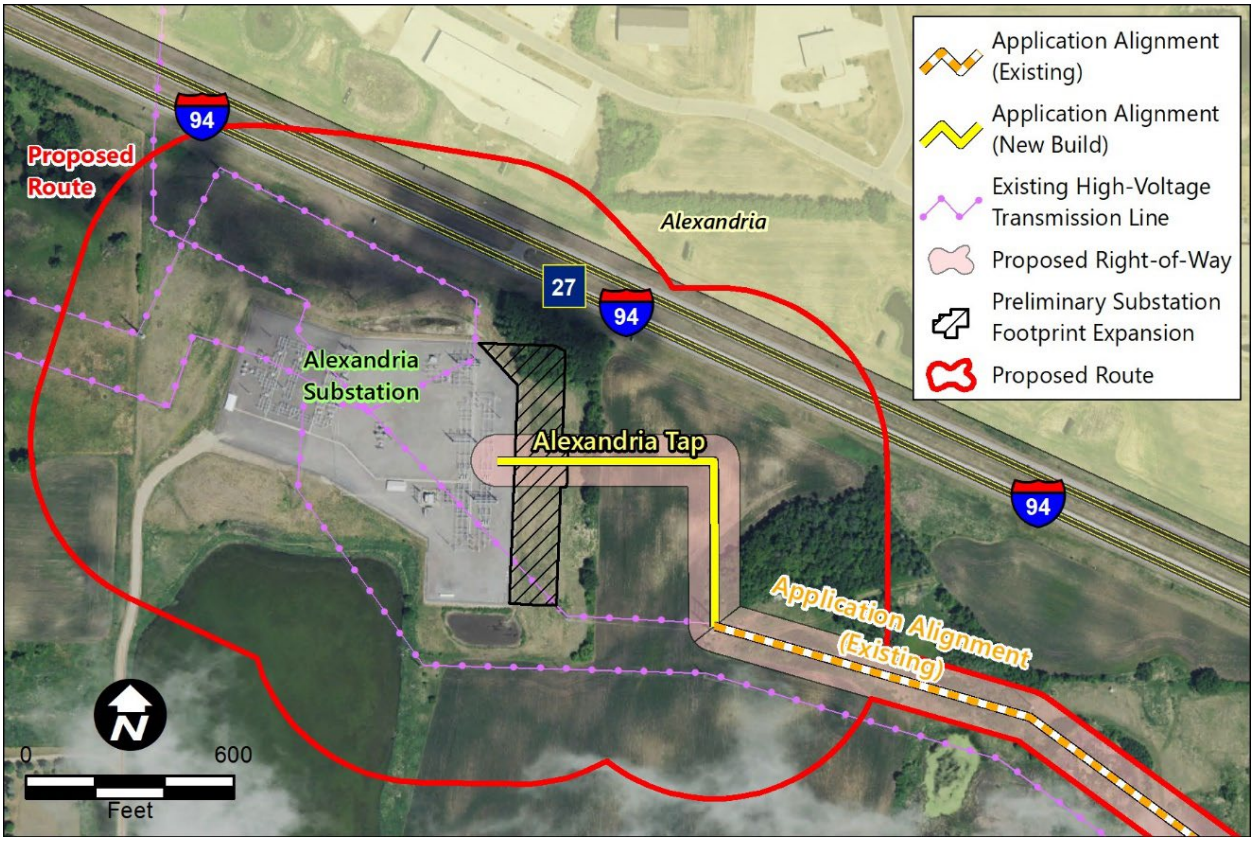
PROJECT LOCATION
ALEXANDRIA TO BIG OAKS
Phase Ia Cultural Resources Literature Review

1.1.1 Alexandria Substation Tap and Expansion

The existing Alexandria Substation is located 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 (Figure 2).

New substation equipment necessary to accommodate the proposed 345 kV transmission line will also 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 equipment (Figure 2).

Figure 2. Alexandria Substation Tap Detail



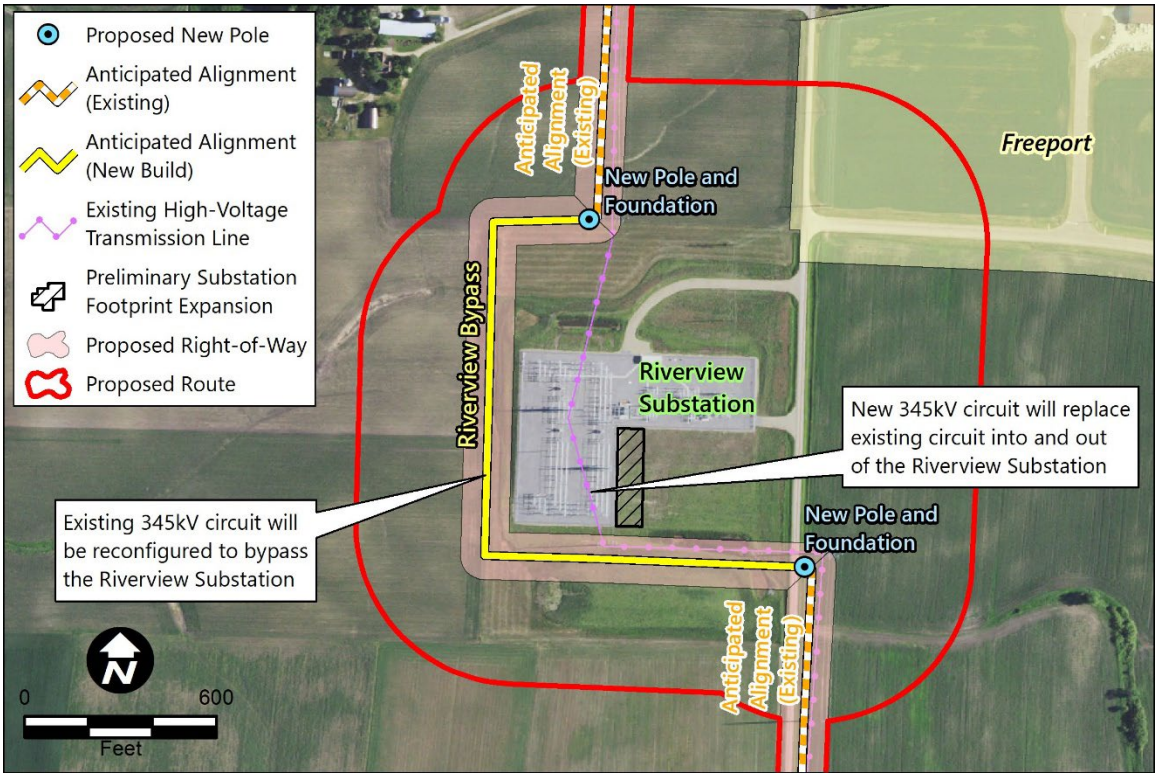
1.1.2 Riverview Substation Bypass and Expansion

The existing Riverview Substation is located 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 (Figure 3).

The existing 345 kV transmission line circuit running 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 0.2 acre to accommodate this new substation equipment.

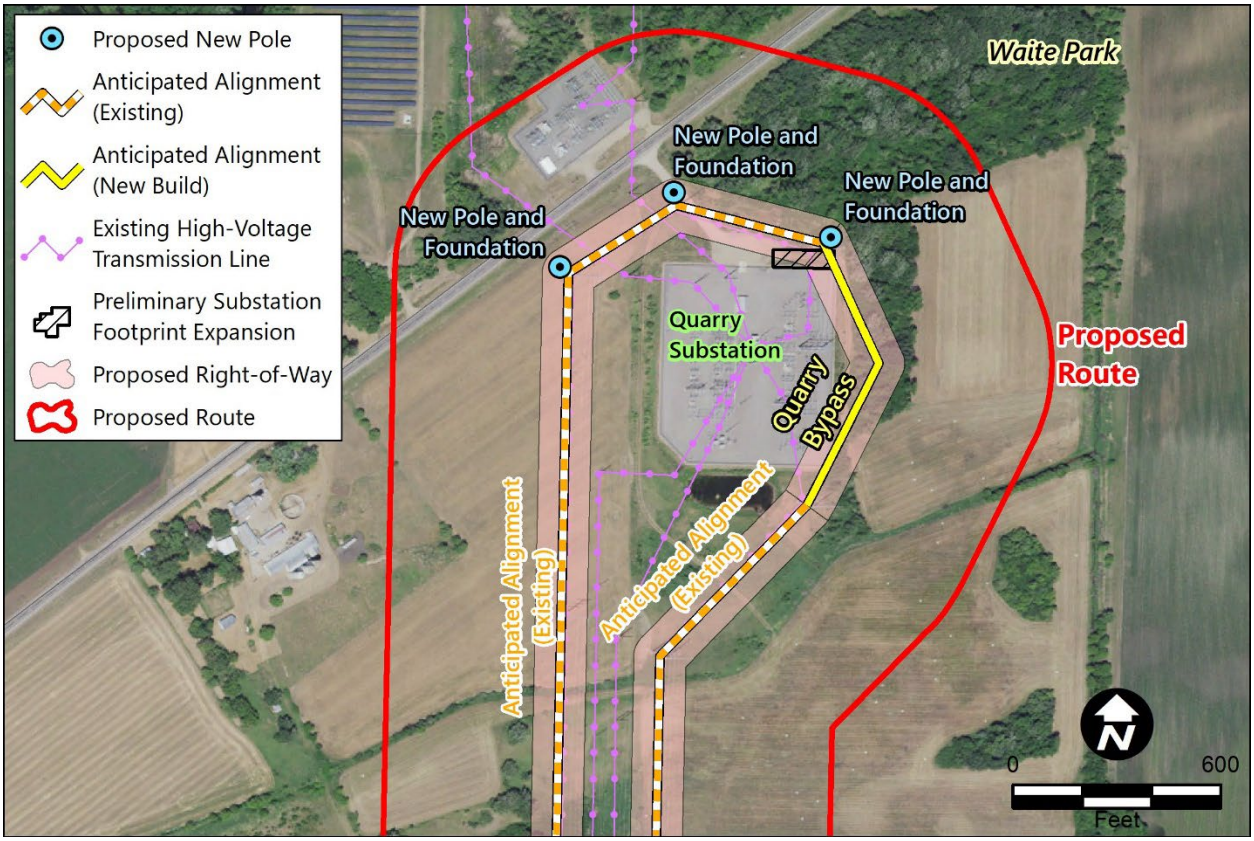
Figure 3. Riverview Substation Bypass Detail



1.1.3 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 mile of new transmission right-of-way around the Quarry Substation and expansion of the substation by approximately 0.3 acre (Figure 4).

Figure 4. Quarry Substation Bypass Detail



1.1.4 Mississippi River Crossing Alignment Options

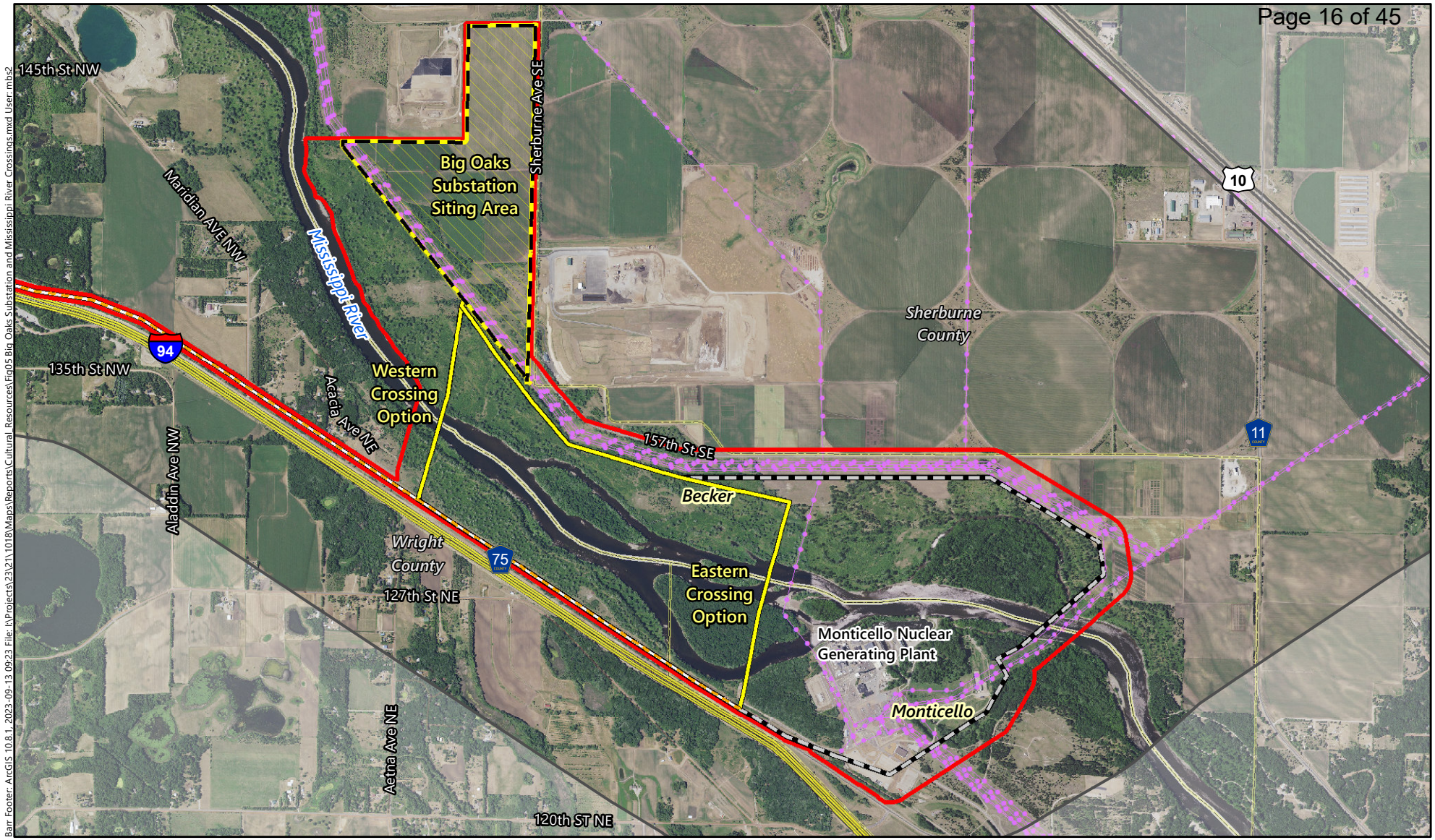
The easternmost portion of the Project will deviate from the existing CapX2020 infrastructure to connect to the new Big Oaks Substation, which is located northwest of the existing high voltage transmission line (HVTL) infrastructure. A new crossing over the Mississippi River near the city of Monticello will be constructed to connect the transmission line to the new substation (Figure 5). Two options are currently being considered by the Applicants for this river crossing:

1.1.4.1 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.

1.1.4.2 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. This option would include 2.1 miles of new transmission line right-of-way and would require the installation of two separate structures on an island in the Mississippi River.



Barr Footer: ArcGIS 10.8.1, 2023-09-13 09:23 File: I:\Projects\23\21\1018\Maps\Reports\Cultural_Resources\Fig05 Big Oaks Substation and Mississippi River Crossings.mxd User: mbs2

- Proposed Route
- Project Study Area
- Anticipated Alignment (Existing)
- Anticipated Alignment (New Build)
- Alignment Considered But Rejected
- Existing High-Voltage Transmission Line
- Municipal Boundary
- County Boundary

Feet
0 2,500

Figure 5

BIG OAKS SUBSTATION AND MISSISSIPPI RIVER CROSSINGS
ALEXANDRIA TO BIG OAKS
Phase Ia Cultural Resources Literature Review

1.1.5 Big Oaks Substation

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; however, a 250-acre portion of land has been identified as the location in which the substation will be constructed. This area is being referred to as the "Big Oaks Substation Siting Area" (Figure 5).

Big Oaks Substation will include eighteen 345 kV circuit breakers configured to accommodate the connection of up to twelve 345 kV transmission lines. The Big Oaks Substation will be located on a graded and fenced area of approximately 10 acres.

2 Research Design

Barr based the research design on the scope of the Project and in consideration of the requirements for considering Project-related effects to archaeological and historic resources pursuant to Minn. R. 7850.1900. Barr's methodology, therefore, focused on a Phase Ia cultural resources literature review of the Project Study Area in an effort to understand the locations and types of previously documented cultural resources, how the Project may impact cultural resources, and to provide baseline cultural resources information that Xcel can utilize as Project design is advanced.

2.1 Objectives

The Phase Ia literature review was conducted to document previously recorded archaeological sites and historic architectural properties within the Project Study Area. The Phase Ia literature review was also completed to determine whether the Project setting has the potential to contain intact cultural resources. This work was completed pursuant to the Secretary of the Interior's *Standards and Guidelines for Archeology and Historic Preservation* (48 Federal Register [FR] 44716 44740) (National Park Service 1983) and the Minnesota State Historic Preservation Office (SHPO) *Manual for Archaeological Projects in Minnesota* (Anfinson 2005).

2.2 Methods

The Phase Ia literature review included a data request to the Minnesota SHPO regarding previously documented archaeological sites and historic architectural resources in the Project Study Area. The Minnesota SHPO provided a Microsoft Access database of documented cultural resources, which included tabular information on resource locations and types. Barr also compiled an environmental and cultural context for the Project to gain an understanding of the types of cultural resources that may be located within the Proposed Route.

3 Background Research

The objective of the literature review is to identify any cultural resources present within the Project Study Area, as well as assess the effects of the Project on these resources, if identified.

Barr's cultural resources review focused on identifying archaeological and historic architectural resources. Archaeological resources are defined as any site 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 "buildings, bridges, tunnels, statues, and other structures that create tangible links to the American past, whether in relation to historical events and people, traditional ways of life, architectural design, or methods of construction"[1].

Once identified through documentary research and/or fieldwork, archaeological sites and historic architectural resources are evaluated for National Register of Historic Places (NRHP) eligibility based on the following criteria.

> "The quality of significance in American history, architecture, archaeology, engineering and culture is present in the districts, sites, buildings, structures and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:
>
> a. *That are associated with the events that have made a significant contribution to the broad patterns of our history; or*
> b. *That are associated with the lives of persons significant in our past; or*
> c. *That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or*
> d. *That have yielded or may be likely to yield, information important in prehistory or history" (36 CFR 60.4)."*

The purpose of this section is to provide a basic context through which to evaluate the results of Barr's research. This section briefly outlines the results of the cultural resources literature review and the environmental and cultural contexts for the Project.

3.1 Literature Review

The literature review was directed toward identifying previously recorded archaeological sites and historic architectural resources. Barr requested data from the Minnesota SHPO in March 2023 to identify previously documented cultural resources located within the Project Study Area. For the literature review, Barr consulted the following resources:

[1] https://www.nps.gov/orgs/1027/architecture.htm

- National Historic Landmark list;
- NRHP list;
- Archaeological Site Files;
- Historic Architectural Inventory.

The data provided by SHPO indicates that within the Proposed Route, two archaeological sites and one historic architectural resource have been documented (Appendix B). Within the Project Study Area, 11 additional archaeological sites and 78 additional historic architectural resources have been documented (Appendix B).

3.1.1 National Historic Landmarks List

There are no National Historic Landmarks located within the Project Study Area.

3.1.2 National Register of Historic Places (NRHP)

Within the Project Study Area, one property is listed in the NRHP, and three additional properties are considered eligible for the NRHP. Of these, one of the properties considered NRHP-eligible is located within the Proposed Route.

The Saint Mary Help of Christians Church and Rectory (NPS #82003049, SN-SAT-001 and SN-SAT-002) is located at the edge of the Project Study Area in Saint Augusta, Stearns County. The property consists of a circa (ca.) 1873 Gothic Revival church and ca. 1890 rectory and was listed in the NRHP in 1982. The property is significant as a representation of one of several German catholic communities in rural Stearns County. The Saint Mary Help of Christians Church and Rectory is located at the edge of the Project Study Area

The Burgen Lake Rest Area (DL-HUD-010) consists of a 1971 modernist "funk/revival" rest stop and is one of only two rest stops in the entire state of Minnesota eligible for the NRHP (Cipolle 2022). The Burgen Lake Rest Area is located within the Project Study Area.

Archaeological site 21WR0136 represents the former location of the mid-nineteenth century Town REDACTED, which was founded in 1856 but disappeared by the early twentieth century. The site may yield data regarding the development and settlement of the town, and is therefore considered eligible for the NRHP, though additional research and investigation is needed to confirm this recommendation.

St. Cloud, Mankato & Austin Railroad (SN-SJT-003) is located within the Proposed Route near the Quarry Substation Bypass (Appendix B, Figure B51). The St. Cloud, Mankato & Austin Railroad Company was incorporated in 1865, and began construction of a line from St. Cloud to Willmar in 1885 (Schmidt et al. 2007). The St. Cloud, Mankato & Austin Railroad was purchased by the St. Paul Minneapolis and Manitoba Railway Company in 1886, who completed the St. Cloud to Willmar line (Schmidt et al. 2007). This railroad is considered eligible for the NRHP.

3.1.3 Archaeological Site Files

The data provided by SHPO indicate that two archaeological sites are located within the Proposed Route (Appendix B, Figures B62 and B70). Archaeological sites 21SH0068 and 21SH0169 both consist of precontact lithic isolates. Site 21SH0068 is located within the Big Oaks Substation Siting Area while site 21SH0169 is located REDACTED within the existing Xcel CapX2020 transmission line ROW. Neither site is considered eligible for the NRHP.

Within the Project Study Area, 11 additional archaeological sites have been documented. These include three precontact lithic scatters, three isolated finds, three artifact scatters, one structural ruin, and one site containing both structural ruins and an associated artifact scatter. A table of the documented archaeological sites within the Project Study Area is included in Appendix C.

3.1.4 Historic Architectural Inventory

The data provided by SHPO indicate that 79 historic architectural resources have been identified within the Project Study Area. This includes one resource located within the Proposed Route. A table of the documented historic architectural properties within the Project Study Area is included in Appendix C.

The historic architectural resource within the Proposed Route consists of the St. Cloud, Mankato & Austin Railroad (SN-SJT-003), which is described in Section 3.1.2.

3.2 Environmental Context

Barr reviewed Chapters 3 and 8 of the *MnModel, Phase 3*, prepared by the Minnesota Department of Transportation (MnDOT), for information pertaining to the Archaeological Region in which the Project Study Area is located, which provides and understanding the precontact archaeological site settings in the Project Study Area (Gibbon et al. 2002; Hobbs et al. 2002). Barr also reviewed the ecological classification system (ECS) for Minnesota developed by the Minnesota Department of Natural Resources and the U.S. Fish and Wildlife Service, which identifies, describes, and maps progressively smaller areas of land with increasingly uniform ecological features (MN DNR 2023). The ECS provides an understanding of the Project Study Area's physiography, climate, and flora and fauna.

3.2.1 Archaeological Region

The Project Study Area is located within the Central Lakes Deciduous Archaeological Region (Region 4), which covers most of central Minnesota (Gibbon et al. 2002). 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 (Gibbon et al. 2002). 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 (Gibbon et al. 2002). 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 (Gibbon et al. 2002).

3.2.2 Environmental (ECS) Setting

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. The subsections crossed by the Proposed Route include, from west to east, the Hardwood Hills, Minnesota River Prairie, Anoka Sand Plain, and Big Woods. General physiography and geomorphology for each subsection is outlined below.

The Hardwood Hills subsection is characterized by steep slopes, high hills, and lakes formed in glacial end moraines and outwash plains (MN DNR 2023). 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 high ridge of the Alexandria Moraine is the headwaters region for many rivers and streams that flow east and west; the Chippewa, Long Prairie, Sauk, and Crow Wing are the major rivers in this subsection and the Mississippi River forms part of the eastern boundary. The

Hardwood Hills subsection is split by the Continental Divide and waters north of the divide eventually flow toward Hudson Bay and waters south of the divide flow into the Mississippi River system.

The Minnesota River Prairie subsection is characterized by large till plains that are bisected by the broad valley of the Minnesota River (MN DNR 2023). 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. 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 (MN DNR 2023). Poorly drained soils are extensive throughout this subsection (Gibbon et al. 2002). Presettlement vegetation consisted mainly of tallgrass prairie with islands of wet prairie (MN DNR 2023). Silver maple, elm, cottonwood, and willow forests would have been present on floodplains along the rivers and streams throughout this subsection (MN DNR 2023).

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 (MN DNR 2023). 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 (MN DNR 2023). 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. Drainage within this subsection is undeveloped and is generally controlled by groundwater, with no inlets or outlets. The “Big Woods” consisted of Northern red oak, sugar maple, basswood, and American elm (MN DNR 2023). Wet prairies were interspersed with forest throughout the landscape. Soils are predominantly loamy and range from loam to clay loam formed by the calcareous glacial till of the Des Moines Lobe.

The climate of this region ranges from the mid- to upper-70s Fahrenheit in the summer to the mid-teens to low-twenties in the winter (Gibbon et al. 2002). The growing season is approximately 140 to 155 days. Annual precipitation ranges from 25 inches to 32 inches (MN DNR 2023).

Bison dominated the upland fauna in the prairies of the region through the Late Holocene period, with large elk herds also present (Gibbon et al. 2002). White-tailed deer could be found along the Minnesota River valley and in the Big Woods, where turkey, wolf, black bear, and bobcat would also have been present. Fish, waterfowl, and aquatic mammals would have been abundant in the many shallow lakes and

rivers located throughout these subsections. Edible plants would have included water lilies and cattails in the water and upland plants such as prairie turnip, ground plum, and acorns (Gibbon et al. 2002).

3.3 Cultural Contexts

The following summaries provide a context through which to examine the cultural history of the Project Area. These contexts are based on information found in *Archaeology of Minnesota: The Prehistory of the Upper Mississippi River Region*. (Gibbon 2012), a series of statewide historic contexts developed by the Minnesota SHPO (Dobbs 1990a; Dobbs 1990b; SHPO 1993), as well as available Euroamerican county and state histories (e.g., Blegen 1963; Brunt 1921; Larson 1916). Archaeological sites are not well documented in Jackson or Martin Counties. In Jackson County, only 87 resources have been recorded (MDA State Archaeologist 2022a). In Martin County, 124 archaeological resources have been documented (MDA State Archaeologist 2022a).

3.3.1 Precontact Cultural Setting

The precontact occupation of southern Minnesota has been divided into four periods based on the material culture present at a site and the subsistence patterns interpreted from the artifact assemblage (Gibbon 2012). These include Paleoindian, Archaic, Woodland, and Late Precontact. While sites identified in Jackson and Martin Counties represent some of these occupational periods, the majority of the documented precontact sites do not contain diagnostic artifacts and therefore cannot be attributed to specific cultural occupations.

The Paleoindian period encompasses the cultural remains of the earliest recorded occupations in the region. Paleoindian sites date to early postglacial times, after 12,000 BP (years Before Present). Paleoindian sites are generally identified through the presence of fluted projectile points, a characteristic artifact type for the Paleoindian period. Although Paleoindian projectile points are some of the most widely distributed types across North America, they are underrepresented in Minnesota (Gibbon 2012).

The Archaic period is identified by archaeologists as the timespan when more localized seasonal settlement and subsistence patterns replaced the broad seasonal migration patterns of the Paleoindian period. In Minnesota, the beginning of the Archaic period coincides with a warmer, drier postglacial environment. Spruce forests retreated north with the glaciers, and melting glacial ice formed large lakes and rivers. As a result, Archaic period subsistence included more aquatic resources, such as fish and shellfish, as well as smaller game and the foraging of wild plants (Gibbon et al. 2002).

The innovation of ceramic technology, construction of earthen mounds, and the emergence of cultigens generally define the transition to the Woodland time period. Woodland period sites are often identifiable through recovered pottery sherds, in addition to stylistic projectile points. Earthen mounds are also a significant feature from the Woodland period.

Influences from three cultural traditions define the Late Precontact period in southern Minnesota: Mississippian, Plains Village, and Oneota (Fleming et al. 2018). Sites from each of these cultural traditions have been identified in the area comprising Douglas, Sherburne, Stearns, Todd, and Wright counties.

3.3.2 Native American Cultural Setting

The Project is located on land that belonged to the Dakota and the Ojibwe (https://native-land.ca/). The Ojibwe arrived in Minnesota hundreds of years ago, following a migration along the Great Lakes from the Atlantic Coast. They were led by a prophecy to go to "the land where food grows on water" and settled in the Mississippi Headwaters region in the mid-eighteenth century (Benton-Banai 1988). Between 1805 and 1867, a series of treaties between the federal government and tribes including the Dakota, Ojibwe, Ho-Chunk, Menominee, Sac, and Fox resulted in the opening of Minnesota to Euroamerican settlement (Minnesota Indian Affairs Council et al. 2011).

Minnesota is the Dakota homeland. The confluence of the Minnesota River with the Mississippi River is known as *Bdote* in Dakota – "the point of origin and a center point for spirituality for Dakota people" (Fleming et al. 2018: p. 57). Prior to Euroamerican settlement, the Dakota were plentiful and prosperous in Minnesota. As Euroamerican settlers expanded into these states, the Dakota were subjected to war and disease. Following the Dakota War in 1862, the Dakota underwent forced removal (MDA State Archaeologist 2022b).

The Project is located within the boundaries of the 1847 Ojibwe Land Cession Treaties and the 1851 Dakota Land Cession Treaties, also referred to as the 1851 Treaties with the Dakota at Traverse des Sioux and Mendota (Minnesota Historical Society nd; Minnesota Indian Affairs Council et al. nd[a]).

The 1847 Ojibwe Land Cession Treaties, which comprised two separate treaties; the Chippewa of the Mississippi & Lake Superior Signed August 2, 1847 in Fond du Lac, Minnesota and the Pillager Band of Chippewa Indians Signed August 21, 1847 at Leech Lake, Minnesota, represented a four-way deal in which the Ojibwe ceded land to the U.S. government, who then ceded it to the Ho-Chunk and Menominee people. The ceded tract was also then used jointly by the Ojibwe and Dakota tribes for hunting, and as a result became a place of frequent conflict (Minnesota Indian Affairs Council et al. nd[b]). The Ho-Chunk and Menominee never moved to this land, and eventually ceded it back to the United States (Minnesota Indian Affairs Council et al. nd[b]).

The 1851 Dakota Land Cession Treaties represented the near-complete loss of Dakota land in Minnesota to the United States. Over 35 million acres were lost through these treaties, with the Dakota maintaining only a strip of land 20 miles wide on the north and south sides of the Minnesota River (Minnesota Indian Affairs Council et al. nd[a]).

The U.S. was to pay $3,750,000 (roughly 12 cents per acre) to the Dakota over decades; however, the Dakota saw little of this money. Debt payments, inflated by traders in the area, were subtracted first. Then another $60,000 was paid to white tradesmen who were to help prepare the Dakota for a transition to farming. The remainder was then placed in trust with 5 percent to be paid to the Dakota annually. Of these yearly payments, half was then used to buy goods and services from the traders (Minnesota Indian Affairs Council et al. nd[a]).

While the following narrative focuses on historic Euroamerican activities within present-day Minnesota, it is important to acknowledge that Native American nations played a vital role in Minnesota's history and

continue to influence its culture today. Ojibwe and Dakota peoples have demonstrated resilience and resistance in the face of concerted efforts to remove them from their land and culture. Despite these attempts at removal, many native peoples continued to return to their homeland.

3.3.3 Historic Cultural Setting

At the end of the American Revolution, the U.S. acquired all of the land east of the Mississippi River in the Second Treaty of Paris (Blegen 1963). This acquisition included the north-central, northeast, and east-central portions of Minnesota. In 1803, the United States acquired the majority of what was to become Minnesota from France as part of the Louisiana Purchase (Blegen 1963). After spending most of the first half of the nineteenth century changing hands between Spain, France, and the U.S., the region was formed into the Minnesota Territory in 1849. Nine years later it became the thirty-second state (Blegen 1963).

3.3.3.1 Statehood

As Minnesota entered the Union in 1858, tensions between the North and South were coming to a head over the issue of slavery. When the Civil War started in 1861, Minnesota largely supported the Union, and provided approximately 22,000 troops to the war effort (Blegen 1963). By the second year of the war, Minnesota was facing its own war: the Dakota War (Blegen 1963). The war was a result of growing tensions between the Dakota and the U.S. government over violations of the Treaty of Traverse des Sioux and the Treaty of Mendota, as well as unacceptable payments by Indian agents. Due to an impasse over negotiations, a Dakota hunting party attacked and killed five white settlers, leading to the attack of settlements throughout the Minnesota River valley (Blegen 1963). These battles continued for several months, until most of the Dakota were captured. Eventually, 38 Dakota were hanged, the largest one-day execution in U.S. history (Blegen 1963). By April of 1863, the remaining Dakota in the region were expelled to South Dakota and Nebraska (Blegen 1963).

After the Civil War, thousands of Americans came to Minnesota to take advantage of the state's cheap and fertile land (Brunt 1921). Largely due to advertisements by the railroad industry, the state's population quickly tripled (Brunt 1921). Many of these new settlers came to the area to farm and cut timber, becoming the backbone of the state's early economy (Brunt 1921). To further economic success, local Grange chapters were established (Brunt 1921). The organization had great political influence on important farming matters, and also provided education on new farming methods.

By the end of the nineteenth century, Minnesota's industrial development began to take shape (Clark 1989). The state became one of the first to develop hydroelectric power with the building of a hydroelectric power plant in Saint Anthony Falls. The discovery of iron in the Mesabi Range and the Vermilion Range near Lake Superior in the 1880s established Minnesota's iron mining industry (Clark 1989).

3.3.3.2 Douglas County

Douglas County was established by the Minnesota Territorial Legislature in 1858, but before Minnesota's statehood was approved. It was then organized on June 15, 1866. The county was named after Stephen Arnold Douglas, who was a statesman and leader in Minnesota's Democratic party (Upham 1920). The first Euroamerican settlers in Douglas County were Alexander and William Kinkaid, who settled at the junction of Agnes and Winona Lake, in present-day Alexandria (Larson 1916). Alexandria was named for Alexander

Kincaid and became the county seat. The Kincaid brothers arrived in the area in 1858 from Wilmington, Delaware (Larson 1916).

3.3.3.3 Todd County

Todd County was established by the Minnesota Territorial Legislature in February 1856. Fort Ripley, a U.S. military installation that is today known as Camp Ripley, was located within the original boundaries of Todd County. During that time Young John Baines Smith Todd was in command of the Fort, and the county was named after him. When Minnesota's statehood was approved in 1858, the county lines were changed. Land east from the junction of the Crow Wing and Long Prairie Rivers becoming Morrison County. Todd County was fully organized in 1867 and its boundaries have not changed since (Todd County 2021). Todd County is located in the geographical center of Minnesota. The vegetation in the area is considered "transitional," as it is where eastern forest meets the western prairie (Todd County 2021).

3.3.3.4 Stearns County

Stearns County borders the Mississippi River, and as a result many explorers traveled through its borders, including Lewis & Clark in 1805. Stearns county was officially established in February 1855, also before Minnesota's statehood was approved. It was originally supposed to be named Stevens County after Governor Isaac I. Stevens, who conducted an expedition to the area in 1853. However, the name was changed to honor Charles Thomas Stearns, a member of the Minnesota Territorial Council (Stearns County nd). St. Cloud is the county seat and was established in 1856 at the confluence of the Mississippi and Sauk Rivers (Stearns County nd).

3.3.3.5 Sherburne County

Sherburne County was established in February 1856. The county was named after Moses Sherburne, an associate justice in the Supreme Court of the Minnesota Territory from 1853 to 1857 (Upham 1920). Sherburne County formed from Benton County and the Mississippi River forms the county's southern border. The St. Paul, Minneapolis & Manitoba Railroad was established through the county in 1867 (Winchell et al. 1881). Settlement in the county increased after the construction of the railroad, and an ice harvesting industry on Big Lake was created. Big Lake Ice was known for its clarity and shipped to many cities by rail, including Minneapolis and Chicago (Sherburne History Century nd).

3.3.3.6 Wright County

Wright County was established in 1855, before Minnesota joined the Union. The county was named after New York politician Silas Wright, a former U.S. senator (Upham 1920). It is bordered to the north by the Mississippi River and to the east by the Crow River. Monticello was named the county seat at the time the county was established; however, in 1868 Buffalo became the county seat. A majority of the Euroamerican settlers in Wright County came from Germany and Sweden (Wright County nd). The first known settlers were John McDonald and David McPherson, who arrived in 1852 and settled in present-day Otsego (Winchell et al. 1881). Wright County is currently one of the fastest-growing areas in the state, due to its proximity to the Twin Cities Metropolitan Area (Wright County nd).

4 Applicable Regulations

This section describes the regulations that require consideration of project-related effects to cultural resources.

4.1 Federal Regulations

Section 106 of the National Historic Preservation Act (NHPA) requires that federal agencies assess the effects of their projects on cultural resources eligible for or listed in the NRHP. Section 106 of the NHP applies to any federal agency undertaking that has the potential to affect NRHP-eligible or listed cultural resources, should they be present. This federal agency action may include permitting funding, or other approval of project activities. The current Project is not currently anticipated to have federal involvement and is therefore not considered an undertaking subject to Section 106 of the NHPA.

4.2 State Regulations

The Project requires a route permit from the Minnesota PUC. As outlined in Minn. R. 7850.1900, the application for a route permit must include a description of the effects of the project on archaeological and historic resources.

Additional state laws governing cultural resources include the Minnesota Historic Sites Act (Minnesota Statutes, sections 138.661 to 138.669) and the Field Archaeology Act (Minnesota Statutes, sections 138.31 to 138.42). The Minnesota Historic Sites Act (Minnesota Statutes, sections 138.661 to 138.669) requires that state agencies consult with the SHPO before undertaking or licensing projects that may affect properties listed on the State or National Registers of Historic Places. The Minnesota Field Archaeology Act (Minnesota Statutes, sections 138.31 to 138.42) establishes the position of State Archaeologist and requires State Archaeologist approval and licensing for any archaeological work that takes place on non-federal public property.

Under the Minnesota Private Cemeteries Act (MS 307.08), if human remains are encountered during construction, construction at that location must be halted immediately and local law enforcement and the Office of the State Archaeologist (OSA) must be contacted. Construction cannot proceed at that location until authorized by local law enforcement and the OSA.

5 Results

The cultural resources records check identified two archaeological sites and one historic architectural resource within the Proposed Route. The archaeological sites both consist of precontact lithic isolates that are not eligible for the NRHP. The historic architectural resource consists of the St. Cloud, Mankato & Austin Railroad, which is considered eligible for the NRHP.

Within the Project Study Area, 37 additional archaeological sites and 179 additional historic architectural resources have been documented, indicating that the area in and around the Proposed Route was utilized consistently throughout history.

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

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

Impacts to cultural resources would have the potential to occur in areas where new construction is proposed, which have been identified as the new structure locations, the Alexandria Substation tap and expansion, the Riverview Substation bypass and expansion, the Quarry Substation bypass, the Mississippi River crossing alignment, and the new Big Oaks Substation footprint. Currently, Xcel anticipates that the majority of the 67 to 78 new structures that will be built for the Project will have an accompanying concrete foundation. Each foundation will result in approximately 115 square feet of disturbance.

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 NRHP. However, as the existing infrastructure already crosses the resource in this area and no new construction is anticipated in its vicinity, the Project is not anticipated to adversely affect the St. Cloud, Mankato & Austin Railroad.

Xcel is planning to conduct a Phase I archaeological reconnaissance in areas of new ground disturbance for the Project, including as the new structure locations, the Alexandria Substation tap and expansion, the Riverview Substation bypass and expansion, the Quarry Substation bypass, the Mississippi River crossing alignment, and the new Big Oaks Substation footprint.

6 Conclusions and Recommendations

Xcel has submitted a RPA to the PUC for an approximately 105 to 108-mile long, new 345 kilovolt (kV) transmission line that will be installed primarily on existing infrastructure between the existing Alexandria Substation in Alexandria, Douglas County and the new Big Oaks Substation that will be constructed on the north side of the Mississippi River in Becker, Sherburne County. At four locations along the route, the transmission line is proposed to deviate from the existing infrastructure, and four associated facilities will also be altered or constructed. Xcel anticipates that approximately 67 to 78 new structures will be constructed for the Project.

Barr, on behalf of Xcel, completed a Phase Ia cultural resources literature review for the Project in an effort to understand how the Project may impact cultural resources, and to provide baseline cultural resources information that Xcel can utilize as Project design is advanced.

A records check completed through a data request to the Minnesota SHPO identified two previously recorded archaeological sites and one historic architectural resource within the Proposed Route for the Project. The archaeological sites consist of isolate artifacts were previously recommended not eligible for the NRHP. The previously recorded historic architectural resource consists of the St. Cloud, Mankato & Austin Railroad (SN-SJT-003), which is considered eligible for the NRHP. However, as the existing infrastructure already crosses the resource in this area and no new construction is anticipated in its vicinity, the Project is not anticipated to adversely affect the St. Cloud, Mankato & Austin Railroad.

In addition, because the Project consists largely of stringing a second 345 kV circuit onto existing infrastructure, ground disturbance related to this aspect of the Project will be minimal. The majority of the Project, therefore, is not anticipated to result in impacts to cultural resources.

Impacts to cultural resources would have the potential to occur in areas where new construction is proposed. Xcel is planning to conduct a Phase I archaeological reconnaissance in areas of new ground disturbance for the Project, including the new structure locations, the Alexandria Substation tap and expansion, the Riverview Substation bypass and expansion, the Quarry Substation bypass, the Mississippi River crossing alignment, and the new Big Oaks Substation footprint.

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Appendix A

Sections, Townships, and Ranges crossed by 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

City or Township Name	Township and Range	Sections
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

Appendix B

Detailed Project Map Set

PUBLIC DOCUMENT - TRADE SECRET DATA EXCISED

REDACTED

- Historic Architectural Resource Location
- Archaeological Site Location
- Anticipated Alignment (Existing)
- Anticipated Alignment (New Build)
- 150-Foot Right-of-Way
- Proposed Route
- Existing High-Voltage Transmission Line
- Preliminary Substation Footprint Expansion
- Project Study Area
- Municipal Boundary
- Civil Township

Appendix B, Map B1
ALEXANDRIA TO BIG OAKS
Phase Ia Cultural Resources Literature Review

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Xcel Energy®

Appendix C

Table of Documented Archaeological Sites and Historic Architectural Resources in the Project Study Area

Resource Number	Resource Type	NRHP Eligibility	Location
21SH0035	Lithic Scatter	Unevaluated	Project Study Area
21SH0036	Lithic Scatter	Unevaluated	Project Study Area
21SH0068	Isolated Find	Not Eligible	Proposed Route
21SN0017	Lithic Scatter	Unevaluated	Project Study Area
21SN0033	Artifact Scatter	Unevaluated	Project Study Area
21SN0034	Artifact Scatter	Unevaluated	Project Study Area
21SN0060	Isolated Find	Not Eligible	Project Study Area
21SN0139	Isolated Find	Not Eligible	Project Study Area
21SN0140	Isolated Find	Not Eligible	Project Study Area
21SN0169	Isolated Find	Not Eligible	Proposed Route
21SNw	Structural Ruin	Unevaluated	Project Study Area
21WR0117	Artifact Scatter	Unevaluated	Project Study Area
21WR0136	Artifact Scatter, Structural Ruin	Considered Eligible	Project Study Area
DL-ALE-134	Bridge 21814	Unevaluated	Project Study Area
DL-ALE-137	Trunk Highway 29	Unevaluated	Project Study Area
DL-HUD-004	Bridge 21819	Unevaluated	Project Study Area
DL-HUD-010	Burgen Lake Rest Area	Considered Eligible	Project Study Area
DL-ORA-002	Bridge 21820	Unevaluated	Project Study Area
DL-ORA-003	Bridge 21821	Unevaluated	Project Study Area
SH-BKT-017	farmstead	Unevaluated	Project Study Area
SN-FAR-005	Farming Elementary School	Unevaluated	Project Study Area

Resource Number	Resource Type	NRHP Eligibility	Location
SN-GRV-003	Bridge No. L8457	Unevaluated	Project Study Area
SN-LYN-001	Bridge No. 91255	Unevaluated	Project Study Area
SN-LYN-010	farmstead	Unevaluated	Project Study Area
SN-LYN-016	house	Unevaluated	Project Study Area
SN-MLT-001	Bridge No. 4286	Unevaluated	Project Study Area
SN-MLT-002	Bridge No. L8462	Unevaluated	Project Study Area
SN-MLT-004	Bridge No. 5917	Unevaluated	Project Study Area
SN-OAK-001	New Munich Ballroom (burned 1998)	Unevaluated	Project Study Area
SN-OAK-008	Pfau Farmstead	Unevaluated	Project Study Area
SN-SAT-001	St. Mary Help of Christians Church	NRHP Listed	Project Study Area
SN-SAT-002	St. Mary Help of Christians Rectory	NRHP Listed	Project Study Area
SN-SAT-008	St. Augusta Stage Stop	Unevaluated	Project Study Area
SN-SAT-010	house	Unevaluated	Project Study Area
SN-SAT-011	White Oak Farm	Unevaluated	Project Study Area
SN-SAT-012	house	Unevaluated	Project Study Area
SN-SAT-013	house	Unevaluated	Project Study Area
SN-SAT-014	Rocking Horse Farm	Unevaluated	Project Study Area
SN-SAT-015	house	Unevaluated	Project Study Area
SN-SAT-016	house	Unevaluated	Project Study Area
SN-SAT-017	house and outbuildings	Unevaluated	Project Study Area
SN-SAT-019	house	Unevaluated	Project Study Area

Resource Number	Resource Type	NRHP Eligibility	Location
SN-SAT-022	Rocking Horse Farm	Unevaluated	Project Study Area
SN-SAT-023	house	Unevaluated	Project Study Area
SN-SCC-1679	house	Unevaluated	Project Study Area
SN-SCC-1680	house and garage	Unevaluated	Project Study Area
SN-SCC-1682	house	Unevaluated	Project Study Area
SN-SCC-1683	house and outbuildings	Unevaluated	Project Study Area
SN-SCC-1684	house and outbuildings	Unevaluated	Project Study Area
SN-SCC-1685	house	Unevaluated	Project Study Area
SN-SCC-1686	house	Unevaluated	Project Study Area
SN-SJT-003	St. Cloud, Mankato & Austin Railroad	Considered Eligible	Proposed Route
SN-SJT-004	Cold Spring Pearl Pink Granite Quarry	Unevaluated	Project Study Area
SN-SJT-005	Undersander Farmstead	Unevaluated	Project Study Area
SN-SJT-006	Undersander/Hengel Farmstead	Unevaluated	Project Study Area
SN-SKT-020	Farmstead	Unevaluated	Project Study Area
SN-SKT-023	Farmstead	Unevaluated	Project Study Area
SN-SKT-024	Farmstead	Unevaluated	Project Study Area
SN-SKT-029	House and Outbuildings	Unevaluated	Project Study Area
TO-WUV-006	St. Alexius Church	Unevaluated	Project Study Area
TO-WUV-007	St. Alexius Priory (razed 1978)	Unevaluated	Project Study Area
WR-CWC-054	Thomas Porter House	Unevaluated	Project Study Area
WR-CWT-012	house and outbuildings	Unevaluated	Project Study Area

Resource Number	Resource Type	NRHP Eligibility	Location
WR-CWT-013	farmstead	Unevaluated	Project Study Area
WR-CWT-014	house and outbuildings	Unevaluated	Project Study Area
WR-CWT-016	barn	Unevaluated	Project Study Area
WR-MCT-003	Bridge No. 5434	Unevaluated	Project Study Area
WR-MCT-004	house	Unevaluated	Project Study Area
WR-SCK-002	house	Unevaluated	Project Study Area
WR-SCK-003	house and garage	Unevaluated	Project Study Area
WR-SCK-004	house	Unevaluated	Project Study Area
WR-SCK-005	house	Unevaluated	Project Study Area
WR-SCK-006	house and garages	Unevaluated	Project Study Area
WR-SCK-007	house and garage	Unevaluated	Project Study Area
WR-SCK-009	house	Unevaluated	Project Study Area
WR-SCK-010	house	Unevaluated	Project Study Area
WR-SCK-011	house and garage	Unevaluated	Project Study Area
WR-SCK-013	house and outbuildings	Unevaluated	Project Study Area
WR-SCK-014	house	Unevaluated	Project Study Area
WR-SCK-015	house and garage	Unevaluated	Project Study Area
WR-SCK-016	house and garage	Unevaluated	Project Study Area
WR-SCK-017	Institutional Property	Unevaluated	Project Study Area
WR-SCK-018	house and garage	Unevaluated	Project Study Area
WR-SCK-019	house	Unevaluated	Project Study Area

Resource Number	Resource Type	NRHP Eligibility	Location
WR-SCK-020	house and outbuildings	Unevaluated	Project Study Area
WR-SCK-021	house and outbuildings	Unevaluated	Project Study Area
WR-SCK-022	Hasty Inn	Unevaluated	Project Study Area
WR-SCK-023	house	Unevaluated	Project Study Area
WR-SCK-024	Highland Cemetery	Unevaluated	Project Study Area
WR-SCK-025	house and outbuildings	Unevaluated	Project Study Area
WR-SCK-026	house	Unevaluated	Project Study Area
WR-SCK-027	garage	Unevaluated	Project Study Area

DEPARTMENT OF ADMINISTRATION
STATE HISTORIC PRESERVATION OFFICE

December 8, 2023 **VIA EMAIL ONLY**

Veronica Parsell
Barr Engineering Company
4300 MarketPointe Drive, Suite 200
Minneapolis MN 55435

RE: Alexandria to Big Oaks 345 kV Transmission Line Project (Project)
Douglas, Sherburne, Stearns, Todd, and Wright Counties Minnesota
SHPO Number: 2024-0014

Dear Ms. Parsell,

Thank you for initiating coordination with our office regarding the completion of cultural resources studies for the above-referenced Project. We have completed a review of information received in our office on October 25, 2023 which included the report titled Phase Ia *Cultural Resources Literature Review Alexandria to Big Oaks 345 kV Transmission Line Project, Douglas, Sherburne, Stearns, Todd, and Wright Counties, MN (*dated October 2023) as prepared by Barr for Xcel Energy.

We understand that Xcel Energy (Xcel) has submitted to the Minnesota Public Utilities Commission (MnPUC) a route permit application to construct a new, approximately 105-mile-long, 345-kV transmission line between the Western Minnesota Municipal Power Agency's existing Alexandria Substation in Douglas County and the proposed, new Big Oak Substation in Becker, Sherburne County. The documentation submitted on October 25th also clarifies that the scope of the Project involves both "stringing" of a second circuit onto existing transmission line infrastructure and also new construction of bypass alignments and substation construction/expansion areas along the route. The scope and nature of the proposed Project is well understood through descriptions provided in the Phase Ia report.

Because the regulatory requirements have not yet been fully defined, our comments on the Phase Ia report are meant to inform any future federal or state determinations and findings related to the Project's effects on significant historic, architectural, and archaeological properties. The Phase Ia report indicates that the records review of currently recorded historic, architectural, and archaeological resources focused on a 1-mile Project Study Area, ½ mile on either side of the Proposed Route for the Project.

Historic/Architectural
The Phase Ia report indicates that one historic property currently listed in the National Register of Historic Places (NRHP) is located within the Project Study Area. This property is the Saint Mary Help of Christians Church and Rectory [SN-SAT-00001 and SN-SAT-00002] in Saint Augusta, Stearns County. Although the report states that the designated historic property is not located within the Proposed Route, it will be important to clarify and assess the nature of potential Project effects within a reasonable viewshed or setting of this historic property.

Additionally, two historic/architectural properties previously determined eligible for listing in the NRHP

are also within the Project Study Area:

- Burgen Lake Rest Area [DL-HUD-00010]; and
- St. Cloud, Mankato & Austin Railroad [SN-SJT-00003].

The statement in the Phase Ia report which indicates that the Project will not result in any anticipated effects to the NRHP eligible properties will need to be supported with adequate documentation for our review and comment.

The Phase Ia report also indicates the presence of 79 previously inventoried historic/architectural properties within the Project Study Area (Appendix C) which have not been subject to intensive level survey and evaluation.

Depending on the eventual federal and/or state regulatory requirements for the Project, other previously recorded and unevaluated properties listed in Appendix C which have the potential to be affected by the proposed Project, may also require updated survey documentation.

Archaeology

An archaeological survey of areas of new ground disturbance is appropriate for this Project. We agree that areas where the ground surface will not be disturbed, because the Project consists of stringing wire along existing structures, do not need to be surveyed. Please note that archaeological sites 21DLf, 21SH0036, 21SH0068, and 21SN0169 are in our records as unevaluated for NRHP eligibility and appear to be within the proposed Project footprint. Please provide either an evaluation of these archaeological sites or a description of how impacts to these sites will be avoided by the proposed Project. Also note that archaeological site 21WR0136 was previously determined eligible for listing in the NRHP and appears to be within the proposed Project footprint. Please provide a description of how this site will be avoided by the Project. We recommend digitizing the archaeological site boundaries from archaeological site forms for use in determining whether the Project will impact an archaeological site instead of using center-point UTMs or other coordinate locations.

As stated above, this comment letter is intended as technical assistance only and does not address the requirements of Section 106 of the National Historic Preservation Act of 1966 and 36 CFR § 800. If the Project requires a federal permit, then review and consultation with our office will need to be initiated by the USACE. Be advised that comments and recommendations provided by our office at this time may differ from findings and determinations made by the federal agency as part of review and consultation under Section 106.

We look forward to further consultation on the Project. Please feel free to contact me at 651-201-3290 or sarah.beimers@state.mn.us if you have any questions regarding the comments provided in this letter.

Sincerely,

Sarah J. Beimers
Environmental Review Program Manager