

APPENDIX G:
Natural Heritage Review and DNR
Responses

From: [Drake, James F \(DNR\)](#)
To: [Ness, Jenna \(COMM\)](#)
Subject: RE: Alexandria to Big Oaks Transmission Line - RE: NHIS and SHPO for DNR Alts
Date: Friday, March 22, 2024 3:30:38 PM
Attachments: [image001.png](#)
[image002.png](#)

Hi Jenna,

I just came out of a meeting that included information relevant to this and wanted to update you for your files. Recent surveys for loggerhead shrikes indicate that they are no longer using the project area so impacts to this species are not anticipated. The seasonal restrictions on tree and shrub clearing are not required to avoid impacts to shrikes.

Jim

From: [Drake, James F \(DNR\)](#)
To: [Ness, Jenna \(COMM\)](#)
Cc: [Langan, Matthew A](#)
Subject: RE: Alexandria to Big Oaks Transmission Line - RE: NHIS and SHPO for DNR Alts
Date: Thursday, March 21, 2024 9:22:31 AM
Attachments: [image001.png](#)
[image002.png](#)

No problem about saving this as a PDF.

And just to be specific, the concerns I would have about species would be the same as in the letter for loggerhead shrike, butternut (surveying in T122N R25W Section 19 and T122N R26W Sections 13 and 24, if Section 13 is in the project impact area), and the Blanding's turtle avoidance measures in the first set of actions (those listed for the area between the Quarry Substation and the proposed Big Oaks Substation).

Jim

From: Ness, Jenna (COMM) <jenna.ness@state.mn.us>
Sent: Thursday, March 21, 2024 8:14 AM
To: Drake, James F (DNR) <James.F.Drake@state.mn.us>
Cc: Langan, Matthew A <Matthew.A.Langan@xcelenergy.com>
Subject: RE: Alexandria to Big Oaks Transmission Line - RE: NHIS and SHPO for DNR Alts

Great, thanks for your quick review Jim.

Would you be okay with me saving your email as a PDF to include as an attachment to the original NHIS letter as an Appendix in my environmental review document? That way I can show we looked into it. If not, should I have Xcel resubmit or would you write another letter?

Best,
Jenna

From: Drake, James F (DNR) <James.F.Drake@state.mn.us>
Sent: Wednesday, March 20, 2024 6:29 PM
To: Ness, Jenna (COMM) <jenna.ness@state.mn.us>
Cc: Langan, Matthew A <Matthew.A.Langan@xcelenergy.com>
Subject: RE: Alexandria to Big Oaks Transmission Line - RE: NHIS and SHPO for DNR Alts

The area in green in the figure below is what was submitted for NH review. Options 2 and 3 were not in there. That said, I looked at the NHIS and there are no new concerns for species in those area. Several of the points from the original letter would also apply to those crossings, though.

Jim

From: Ness, Jenna (COMM) <jenna.ness@state.mn.us>
Sent: Wednesday, March 20, 2024 2:06 PM
To: Drake, James F (DNR) <James.F.Drake@state.mn.us>
Cc: Langan, Matthew A <Matthew.A.Langan@xcelenergy.com>
Subject: RE: Alexandria to Big Oaks Transmission Line - RE: NHIS and SHPO for DNR Alts

Hi Jim,

Can you please assist us in figuring out which areas were used in your database search for the attached NHIS letter? We need to narrow this down because the DNR (e.g. Cynthia who sent us to you) requested new alternate alignments for the transmission line for this project that I want to ensure are covered by a NHIS review before I complete environmental review.

Matt (CCed) from Xcel explained that both shapefiles of the project route (green boundary in picture if you scroll to the beginning of this chain) and maps of the study area in pink were sent for the NHIS review.

Please let us know if you need more info. Thanks!

Jenna Ness

Environmental Review Manager
[Energy Environmental Review and Analysis](#)
651-539-1693
Minnesota Department of Commerce
85 7th Place East, Suite 280 | Saint Paul, MN 55101



From: Warzecha, Cynthia (DNR) <cynthia.warzecha@state.mn.us>
Sent: Wednesday, March 20, 2024 1:56 PM
To: Ness, Jenna (COMM) <jenna.ness@state.mn.us>
Cc: Drake, James F (DNR) <James.F.Drake@state.mn.us>; Langan, Matthew A <Matthew.A.Langan@xcelenergy.com>
Subject: Alexandria to Big Oaks Transmission Line - RE: NHIS and SHPO for DNR Alts

Hi Jenna,

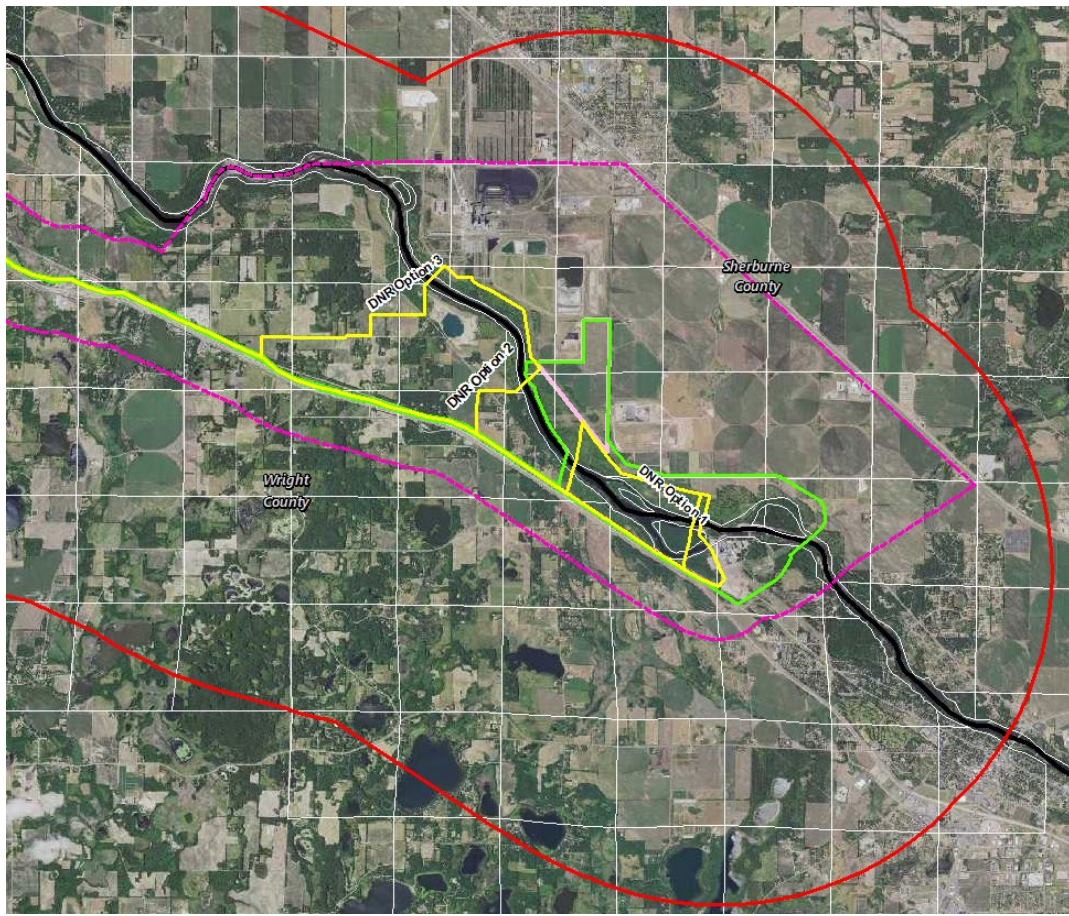
Please work directly with Jim Drake, copied on this message, for Natural Heritage Review questions related to the Alexandria to Big Oaks project. Jim prepared the attached NH letter (MCE 2023-00630).

Cynthia Warzecha

From: Langan, Matthew A <Matthew.A.Langan@xcelenergy.com>
Sent: Wednesday, March 20, 2024 1:24 PM
To: Ness, Jenna (COMM) <jenna.ness@state.mn.us>
Cc: Warzecha, Cynthia (DNR) <cynthia.warzecha@state.mn.us>
Subject: RE: NHIS and SHPO for DNR Alts

Ah, I see. Here are those letters, attached. See the notes below on both reviews. In short: the SHPO review (Dec. 2023 letter attached) covers/includes the area where the new alignment alternatives were proposed by DNR. So, no need to ask for additional review from SHPO. But this is less clear with DNR's NHIS review, so I've copied Cynthia on this note and hope she can help us track an answer down.

-
- For the SHPO literature review, we stated "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 Study Area was also extended on the north side of the river around the Big Oaks siting area. Below is a screen shot showing the study area (pink line) for the literature review. The red boundary represents where we requested and received SHPO and NHIS data.



- The NHIS Review request included the same maps showing the pink study area – which includes the area of the alternatives – however, the shapefile sent to the DNR only included the Project Route (green boundary) which does not include areas where DNR Options 2 and 3 are located. We will need DNR to confirm which area was used for their database search.

EXTERNAL - STOP & THINK before opening links and attachments.



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 observations 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 overlaid 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,

A handwritten signature in cursive script that reads "James Drake".

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

Cc: Melissa Collins, Owen Baird