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

October 7, 2022
Correspondence # MCE 2022-00465

Tyler Conley
Barr Engineering Company

RE: Natural Heritage Review of the proposed Northshore Mile Post 7 Railroad Relocation and Dam Ext.,

County	Township (N)	Range (W)	Section(s)
Lake	55	8	4, 6, and 9
Lake	56	7	31
Lake	56	8	20-22, 27-32, and 36

Dear Tyler Conley,

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 a Site of *High* Biodiversity Significance that overlaps the parts of the project area on the East Branch Beaver River and is immediately downstream of the project area on the nearby tributary. 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. This particular Site contains the following native plant communities (listed with their conservation status rank) in the direct vicinity of the proposed project:
    - Upland White Cedar Forest - *vulnerable to extirpation*
    - Aspen – Birch Forest, Balsam Fir Subtype - *secure*
    - Alder – (Maple – Loosestrife) Swamp - *secure*

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 me if you do not have access to the appropriate mapping services. For information on interpreting the data, reference the MBS Site Biodiversity Significance and Native Plant Community websites.

We encourage you to consider project alternatives that would avoid or minimize disturbance to this ecologically significant area. Actions to minimize disturbance may include, but are not limited to, the following recommendations:

- Minimize vehicular disturbance in the MBS Site (allow only vehicles/equipment necessary for construction activities);
- Do not park equipment or stockpile supplies in the MBS Site;
- Do not place spoil within MBS Site or other sensitive areas;
- Retain a buffer between proposed activities and the MBS Site;
- Use effective erosion prevention and sediment control measures;
- Inspect and clean all equipment prior to bringing it to the site to prevent the introduction and spread of invasive species;
- As much as possible, operate within already-disturbed areas;
- 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 are 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.

State-listed Species

- Smoky shrew (*Sorex fumeus*) has been found in the vicinity of the proposed project. Moist habitats are important and the preferred microhabitat includes a cool, damp forest floor with a thick litter layer, mossy-covered rocks, and decaying debris. They prefer larger and older forest blocks. Given the potential presence of these rare species, the DNR recommends that the use of erosion control mesh, if any, be limited to wildlife-friendly materials. The use of erosion control blanket shall be limited to 'bio-netting' or 'naturalnetting' types, and specifically not products containing plastic mesh netting or other plastic components. Also, be aware that hydro-mulch products may contain small synthetic (plastic) fibers to aid in their matrix strength. These loose fibers could potentially re-suspend and make their way into Public Waters.

- Alpine woodsia (*Woodsia alpina*) and rock fir moss (*Huperzia porophila*), both state-listed threatened plant species, along with intermediate sedge (*Carex media*) and Appalachian fir moss (*Huperzia appalachiana*) both state-listed species of special concern have been documented in

the vicinity of the proposed project. These species are typically found growing in moist, shaded crevices and ledges along cliffs.

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 endangered or threatened plants or animals, including their parts or seeds, without a permit. As alpine woodsia and rock fir moss have been documented in the vicinity of the proposed project, **a qualified surveyor is required to conduct a habitat assessment in any potential habitat that will be impacted by the proposed project**. **If the habitat for these species is documented and those areas cannot be avoided, a botanical survey will be required.** Surveys must be conducted by a surveyor on the attached list and follow the standards contained in the Rare Species Survey Process and Rare Plant Guidance. 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 (Reports.NHIS@state.mn.us) regarding this process.

- Twig rush (*Cladium mariscoides*) and neat spike rush (*Eleocharis nitida*), both state-listed plant species of special concern, has been documented in wet meadows in the direct vicinity of the proposed project. Black hawthorn (*Crataegus douglasii*) and Torrey's mannagrass (*Torreyochloa pallida*), also plant species of special concern, have been documented along streams in the vicinity of the proposed project. These species are found in shallow wetlands or along the edges of streams and lakes. We recommend minimizing or avoiding impacts to suitable habitat as feasible. Actions to minimize disturbance may include, but are not limited to, the following recommendations:
    - If possible, conduct the work under frozen ground conditions;
    - Use effective erosion prevention and sediment control measures;
    - Inspect and clean all equipment prior to bringing it to the site to prevent the introduction and spread of invasive species;
    - As much as possible, operate within already-disturbed areas;
    - 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 are 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.
- 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

- Canada lynx (*Lynx canadensis*), federally listed as threatened and a state-listed species of special concern, has been documented in the vicinity of the proposed project. This species is found in large tracts of boreal and mixed conifer-hardwood forests where they are highly dependent on snowshoe hares for prey. For additional information on this species, review the USFWS Canada Lynx Fact Sheet.

- 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

- The Environmental Assessment Worksheet should address whether the proposed project has the potential to adversely affect the above rare features and if so, it should identify specific measures that will be taken to avoid or minimize disturbance. Sufficient information should be provided so the DNR can determine whether a takings permit will be needed for any of the above protected species.

- 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,

Samantha Bump
Natural Heritage Review Specialist
Samantha.Bump@state.mn.us

Cc: Jessica Parson, Bill Johnson, and Brook Haworth

Inc: DNR List of Plant Surveyors