



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, March 19, 2025

Agenda Item

Item 6. A. – LMRWD Permit Renewals

Prepared By

Linda Loomis, Administrator

Summary

There is only one permit renewal this month. MnDOT has requested that LMRWD Permit No. 2022-019 be renewed, as they plan to work on the east bound bridge this year. Young Environmental has reviewed the renewal request and recommends that the permit be renewed. Details of the permit renewal request is attached for the Board's information. The Technical Memorandum issued for the original approval is also attached.

Attachments

Technical Memorandum – March 2025 Permit Renewal Requests dated March 12, 2025

Technical Memorandum – TH 494 SP 2785-433 LMRWD (No. 2022-019) dated July 13, 2022

Recommended Action

Motion to renew permits requests as recommended in Technical Memorandum – March 2025 Permit Renewal Requests dated March 12, 2025

Technical Memorandum



To: Linda Loomis, Administrator
Lower Minnesota River Watershed District (LMRWD)

From: Rachel Kapsch, Water Resources Scientist
Erica Bock, Staff Water Resources Scientist II

Date: March 12, 2025

Re: March 2025 Permit Renewal Requests

Per Lower Minnesota River Watershed District (LMRWD) Rule A, it is the permittee's responsibility to request permit renewals when necessary. However, LMRWD staff has taken a proactive approach by sending out a reminder two months prior to permit expiration to current permit holders with upcoming permit expirations.

Table 1 summarizes the permittees who have received permit expiration reminder emails. If a project is not complete, the LMRWD will renew the permit to maintain permitting authority throughout all close out procedures. Requests for information regarding changes to project scope since the original permit issuance and project close out materials are also included on permit expiration reminder emails.

SUMMARY

Table 1. Summary of March 2025 LMRWD Permit Renewal Requests

LMRWD No.	Project Name	City	Previous Expiration Date	Recommended Expiration Date
2022-019	Trunk Highway 494 SP 2785-433	Eagan/Bloomington	April 10, 2025	April 10, 2026
Reason for Extension: Under active construction				

Recommendations

Based on review of the permit expiration, we recommend approval of permit renewal.

Technical Memorandum

To: Linda Loomis, Administrator
Lower Minnesota River Watershed District

From: Hannah LeClaire, PE
Katy Thompson, PE, CFM

Date: July 13, 2022

Re: TH 494 SP 2785-433 (LMRWD No. 2022-019)

The Minnesota Department of Transportation (MnDOT) has applied for an individual project permit from the Lower Minnesota River Watershed District (LMRWD) for a road and bridge construction project on Trunk Highway (TH) 494 between Pilot Knob Road in Eagan and 24th Avenue in Bloomington, as shown in Figure 1. MnDOT has provided site plans for the TH 494 SP 2785-433 project (Project) along with the permit application.

The proposed project scope includes rehabbing five bridges, repairing sections of pavement, replacing lighting, reconstructing a pedestrian trail, and improving drainage. The Project will disturb approximately 10.66 acres and create 0.05 acres of new impervious surfaces. The Project intersects the Steep Slopes Overlay District and the High Value Resource Area (HVRA) associated with the Gun Club Lake Fen complex in Dakota County. To avoid traffic interruptions, construction work is proposed to be conducted from under the bridges located within the Minnesota River floodplain. The applicant proposes to commence construction in April 2023.

Because the Project is located within MnDOT right-of-way, it requires an LMRWD individual permit and, as such, is subject to an LMRWD permitting review.

Summary

Project Name: TH 494 SP 2785-433

Purpose: Road reconstruction and bridge rehabilitation

<u>Project Size:</u>	10.66 acres disturbed; 0.99 acres existing impervious; 1.04 acres proposed impervious; net increase of 0.05 acres new impervious
<u>Location:</u>	TH 494 between Pilot Knob Road in Eagan and 24th Avenue in Bloomington
<u>Applicable LMRWD Rules:</u>	Rule B—Erosion and Sediment Control Rule C—Floodplain and Drainage Alteration
<u>Recommended Board Action:</u>	Conditional approval

Discussion

The LMRWD received the following documents for review:

- LMRWD email permit application by MnDOT; received April 21, 2022
- Br 9217E and 9217W 60 percent Bridge Plans by MnDOT; dated March 3, 2022; received April 21, 2022
- Br 19825, 27765, and 27767 95 percent Bridge Plans by MnDOT; dated April 5, 2022; received April 21, 2022
- 95% Construction Plan Set by MnDOT, June 1, 2022; received June 8, 2022
- TH 494 Floodplain Impacts by MnDOT; dated January 18, 2022; received April 21, 2022
- Hydraulic Memo for Temporary Construction Impacts by MnDOT; dated December 2, 2021; received April 21, 2022
- Permit Cover Letter by MnDOT; dated April 21, 2022; received April 21, 2022
- HECRAS model for Temporary Construction Impacts by MnDOT; dated October 12, 2020; received April 21, 2022

The application was deemed complete on June 24, 2022, and the documents received provide the minimum information necessary for permit review.

Rule B—Erosion and Sediment Control

The LMRWD regulates land-disturbing activities that affect one acre or more under Rule B as well as land-disturbing activities that involve the displacement or removal of 5,000 square feet or more of surface area or vegetation or the excavation of 50 cubic yards or more of earth within an HVRA. The proposed Project would disturb approximately 10.66 acres, of which approximately 1.8 acres lie within the HVRA. Although a portion of this disturbance lies outside the LMRWD boundary, the entire project area drains to the LMRWD and therefore was reviewed as part of this permit. The applicant has provided an erosion and sediment control plan and a Stormwater Pollution Prevention Plan. The

Project generally complies with Rule B, but a copy of the NPDES permit and contact information for the contractor and person(s) responsible for the inspection and maintenance of the erosion and sediment control features are needed before the LMRWD can issue a permit.

Rule C—Floodplain and Drainage Alteration

The Project is located in the Minnesota River floodplain, shown on the Dakota County Flood Insurance Rate Map (FIRM) Panels 27037C0081E and 27037C0080E (effective March 16, 2016). The effective FIRM from 2016 shows the Project in a FEMA Zone AE (or 100-year floodplain) with a 100-year elevation of 714.1 NAVD88.

To effectively construct repairs to the Minnesota River Bridge, Numbers 9217E and 9217W, construction work will need to be conducted from under the bridges. Approximately 55,529 cubic yards of temporary fill (a combination of class 2 aggregate, clay core, coarse aggregate, and common borrow) will be brought on-site within the Minnesota River floodplain to level the ground surface around bridge piers to create stable areas for the equipment needed to build shoring towers. Temporary berms will also be constructed around the piers to reduce the risk of flooding the construction site. The temporary fill will need to be in place for the duration of the construction project, which is expected to last about three years. BMPs will be used around fill areas to contain fill and prevent erosion and washout. All temporary fill will be removed from the Project at the end of construction, and the site will be restored to its pre-project condition and grades.

Some permanent grading is required under Bridges 9217E and 9217W to reestablish the ground elevations that were in place when the bridge was originally constructed in 1981. MnDOT has stated that gullies have formed from years of scour and erosion, and it would like to protect the pier footings from further degradation. The grading activities are required to repair and prevent pier scour, protect public infrastructure, and restore the original pier design. Fill associated with this work is not considered floodplain fill that would affect the 100-year flood elevation.

The applicant revised the effective HEC-RAS model, and submitted the results to demonstrate the hydraulic impacts on the 100-year flood elevation due to the temporary fill. The results showed a maximum 0.29-foot increase in the 100-year flood elevation immediately upstream of the 494 bridge and would propagate upstream until reaching 0.01 feet in Carver, at the limits of the model. The Minnesota Department of Natural Resources floodplain unit determined that the proposed temporary impacts were acceptable because of the nature of the river valley in this area and the lack of impacts on floodplain properties. The only property affected by this proposed temporary stage increase is the Black Dog Power Plant. The Black Dog Power Plant will be notified of the 0.26-foot increase in water surface elevation prior to construction. The Project meets the minimum requirements of Rule C.

Rule F—Steep Slopes Rule

Although the Project intersects the Steep Slopes Overlay District, it is exempt from Rule F because the work being done within the Steep Slopes Overlay District consists of reconstructing and repairing the existing approach panels and will not affect native soils.

Recommendations

Based on our review of the Project, we recommend conditional approval, given the special stipulation that MnDOT is required to notify the Black Dog Power Plant of the temporary stage increase and contingent on the receipt of the following:

- A copy of the NPDES permit
- Contact information for the contractor(s) and/or the person(s) responsible for inspection and maintenance of all erosion and sediment control features

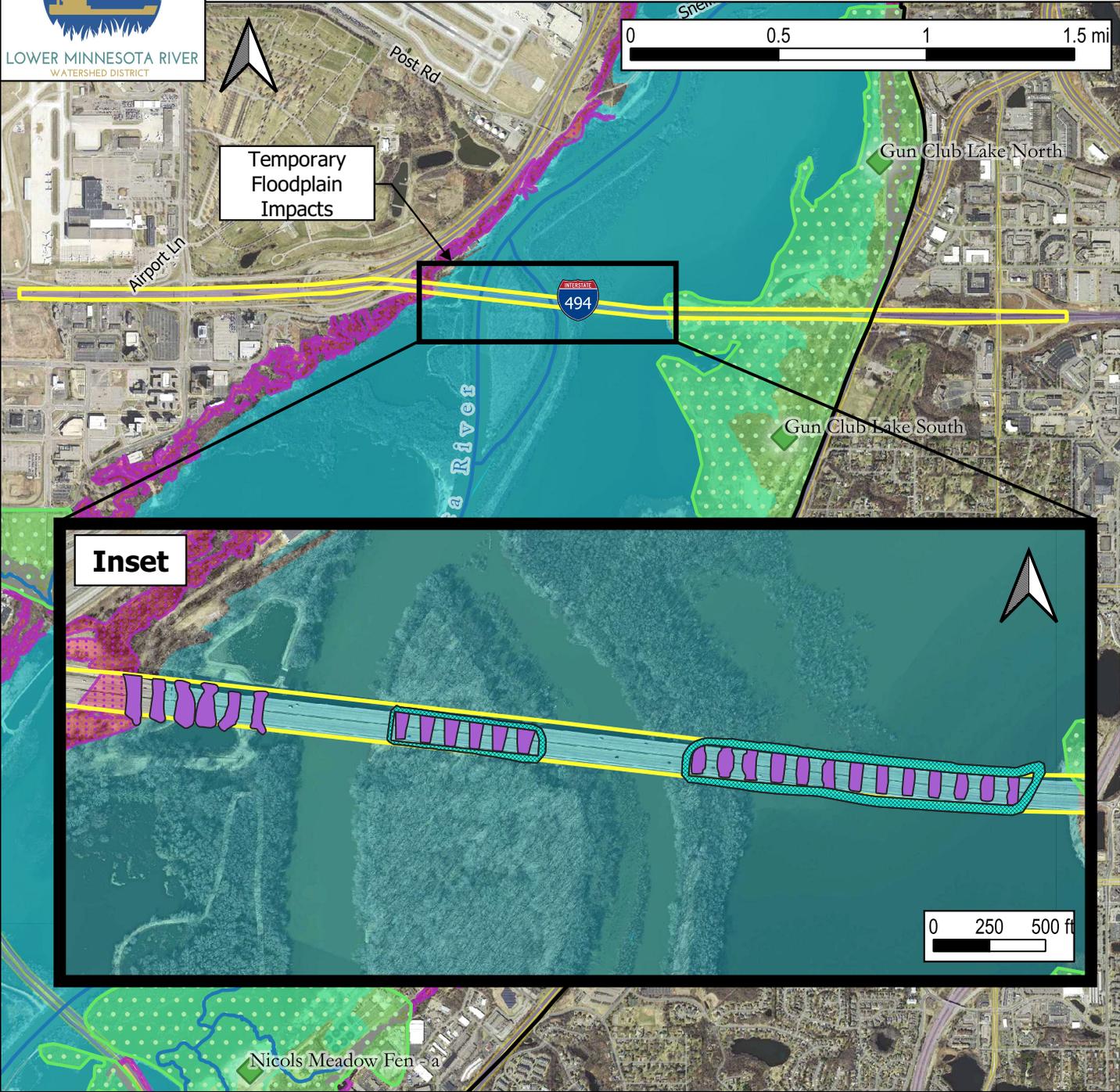
Further, we recommend continued coordination with MnDOT to ensure that the conditional approval does not lapse before the Project begins construction.

Attachment

- Figure 1—TH 494 SP 2785-433 Project Location Map



Figure I:TH 494 SP 2785-433 Project Location



Legend

-  Project Location
-  LMRWD Calcareous Fens
-  TH494 Project Site
-  Temporary Berm
-  Temporary Pier Leveling Extents
-  100-yr Floodplain
-  High Value Resource Area
-  Steep Slopes Overlay District
-  LMRWD Boundary
-  County Boundaries
-  Public Watercourses

LMRWD Watershed Location Map

