



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting

Wednesday, October 9, 2024

Agenda Item

Item 6. B. - Minnesota River Greenway Bridge (LMRWD No. 2023-010)

Prepared By

Linda Loomis, Administrator

Summary

Dakota County has applied for a permit to construct a bridge over the Union Pacific Railroad for the MN River Greenway Trail. Young Environmental Consulting Group, on behalf of the LMRWD, has reviewed the application and recommends conditional approval of the permit contingent upon the receipt of the a copy of the NPDES construction stormwater permit, Name and contact information for the person(s) responsible for erosion control inspection and maintenance, name and contact information of all contractors undertaking land-disturbing activities as part of the project, an executed agreement with UPRR and final construction plans signed by a professional engineer.

Attachments

Technical Memorandum – Minnesota River Greenway Bridge (LMRWD No. 2023-010) dated October 2, 2024

Recommended Action

Motion to conditionally approve a permit for the Minnesota River Greenway Bridge (LMRWD No. 2023-010) contingent upon receipt of the following:

- Copy of the NPDES construction stormwater permit
- Name, address, and phone number for the person(s) responsible for erosion control inspections and maintenance
- Name, address, and phone number(s) of all contractors undertaking land-disturbing activities as part of the project
- Executed agreement with the UPRR
- Final construction plans signed by a professional engineer

Technical Memorandum



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

From: Rachel Kapsch, Water Resources Scientist
Hannah LeClaire, PE, Water Resources Engineer

Date: October 2, 2024

Re: Minnesota River Greenway Bridge (2023-010)

Dakota County has applied for an individual project permit from the Lower Minnesota River Watershed District (LMRWD) to provide passage over the Union Pacific Railroad (UPRR) right-of-way (ROW) and to access an existing Dakota County trailhead near Trunk Highway 13 and Lone Oak Road in Eagan, Minnesota. The project site is located entirely within Fort Snelling State Park and the LMRWD. The applicant's engineer, Bolton & Menk, along with Joe Morneau with Dakota County, submitted the permit application, associated application exhibits, and site plans for the Minnesota River Greenway Bridge project.

The project site is located on State Park property (owned by the Minnesota Department of Natural Resources [MNDNR]), on a 100-foot corridor owned by UPRR (single track), and on an easement for a power transmission line owned and operated by Xcel Energy. Much of the project area is within a delineated wetland and with interspersed grasses, reeds, and trees. The applicant proposes to install a 1,350-foot pedestrian bridge to allow passage over the UPRR ROW and access an existing trailhead (Figure 1 and 2). The bridge would connect the existing trailhead to the proposed Minnesota River Greenway Trail that was approved for a permit in May 2024 (LMRWD Permit No. 2023-007). The bridge will be supported by 14 piers of varying dimensions. The pier columns will extend below ground level to the footing, with the top of the foot 1–2 feet below final grade. Each footing will be supported by eight friction pilings approximately 60 feet long. The project includes 2.1 acres of land disturbance and will create 0.6 acres of impervious area.

The project is located within the High Value Resource Area (Gun Club Lake Fen HVRA) and the Minnesota River floodplain. The applicant proposes to begin construction in May 2025. From LMRWD's review, it was determined that the project triggers LMRWD Rule B – Erosion and Sediment Control and Rule C – Floodplain and Drainage Alteration. After discussions with the MNDNR, Rule D – Stormwater Management was not applied to this project. It was determined that installing additional stormwater management systems beyond flow dispersal would cause greater adverse impacts to the fen. Therefore, Rule D was not reviewed as part of this project.

SUMMARY

Project Name:

Minnesota River Greenway Bridge

Purpose:

Install a pedestrian bridge over the UPRR ROW to connect to the existing trail

Project Size:

Area Disturbed	Existing Impervious Area	Proposed Impervious Area	Net Change in Impervious Area
2.1 acres	0.1 acres	0.7 acres	0.6 acres

Location:

2997 Sioux Trail | Eagan, MN 55121

LMRWD Rules:

Rule B – Erosion and Sediment Control
Rule C – Floodplain and Drainage Alteration

Recommended Board Action:

Conditional approval

DISCUSSION

The LMRWD received the following documents for review:

- LMRWD online permit application; received May 21, 2024.
- Dakota County submitted the following exhibits on May 21, 2024:
 - Applicable bridge plans; dated November 3, 2022.
 - Figure 1: Location Map; dated April 2024.
 - Figure 2: Proposed Aquatic Resource Impacts; dated May 2024.
 - Railroad crossing plans; dated November 4-5, 2021.
- Dakota County submitted the following exhibits on June 11, 2024:
 - Cooperative Agreement Between the State of Minnesota and the County of Dakota (Fort Snelling State Park, Dakota County Minnesota River Greenway Trail / State Park Segment); dated January 30, 2017.
 - Amendment No. 1 to Contract No. 120619; dated December 13, 2019.
 - Amendment No. 2 to Contract No. 120619; signed January–February 2023.
 - Email chain between Dakota County and the UPRR consultant; dated December 2020–January 2023.
- Dakota County submitted the following exhibits on August 21, 2024:
 - Revised Trail Plan (Sheet 2 of 3); dated August 12, 2024.
 - Minnesota River No Rise Certification; dated May 19, 2023.
 - Bridge Plans; dated July 11, 2024.
 - Public Highways Overpass Agreement; dated October 17, 2023.
 - Rule C Narrative.

- Dakota County submitted the following exhibits on September 10, 2024:
 - Revised Permit Application.
 - Revised Rule C Narrative.
 - Revised Stormwater Pollution Prevention Plan (SWPPP); dated September 9, 2024.

The application was deemed complete on September 10, 2024, 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. The proposed project would disturb approximately 2.1 acres within the LMRWD boundary. The applicant has provided an erosion and sediment control plan (trail plan) that includes temporary best management practices such as silt fencing and sediment control logs. The applicant has also provided a SWPPP. The project generally complies with Rule B, but a copy of the National Pollutant Discharge Elimination System (NPDES) construction stormwater permit, contact information for the contractor, final construction plans signed by a professional engineer, and an executed agreement with UPRR are needed before the LMRWD can issue a permit.

Rule C – Floodplain and Drainage Alteration

The LMRWD requires the applicant to provide documentation that the proposed floodplain fill will not cause an increase in 100-year water surface elevations. The project is located within the Minnesota River 100-year floodplain, as seen on the Dakota County Flood Insurance Rate Map (FIRM) Panel 27037C0081E, effective December 2, 2011. The FIRM shows the project in FEMA Zone AE with a published base flood elevation (BFE) of 714.2 and a modeled 100-year water surface elevation of 714.14. The project proposes 22 cubic yards of cut and 69 cubic yards of fill within the floodplain and no compensatory storage. The project proposes constructing a 1,350-foot pedestrian bridge over the UPRR with trail elevations of 714.69 or higher. The bridge will be supported using 14 concrete piers, 6 of which are within the floodplain. Minor embankment grading is required within the floodplain, where the trail ties into existing grade. A no-rise certification was submitted for the project, which shows no change in the water surface elevation (WSE) due to the proposed fill and pier construction within the floodplain. This complies with Minnesota no-rise certification levels, which require evidence that a project will not impact the floodway width or 100-year flood elevation (will not raise or lower it by more than 0.00 feet). Coordination between the MNDNR and Dakota County is ongoing to ensure the project mitigates any potential risks to the local hydrology and ecosystem.

Recommendations

Based on review of the project, we recommend conditional approval contingent on receipt of the following:

- Copy of the NPDES construction stormwater permit
- Name, address, and phone number for the person(s) responsible for erosion control inspections and maintenance
- Name, address, and phone number(s) of all contractors undertaking land-disturbing activities as part of the project
- Executed agreement with the UPRR (the agreement is time-sensitive and must be procured

shortly before the anticipated construction start date)

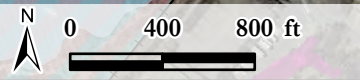
- Final construction plans signed by a professional engineer

Attachments

- Figure 1—MN River Greenway RR Bridge Project Location
- Figure 2—MN River Greenway RR Bridge Project Location



Figure I: MN River Greenway RR Bridge Project Location
LMRWD No. 2023-010



Legend

- Project Location
- Railroad
- Construction Limits
- Previous Permits
- FEMA Cross Sections
- Public Waterbodies
- Steep Slope Overlay District
- 100-yr Floodplain
- Floodway
- High Value Resource Area

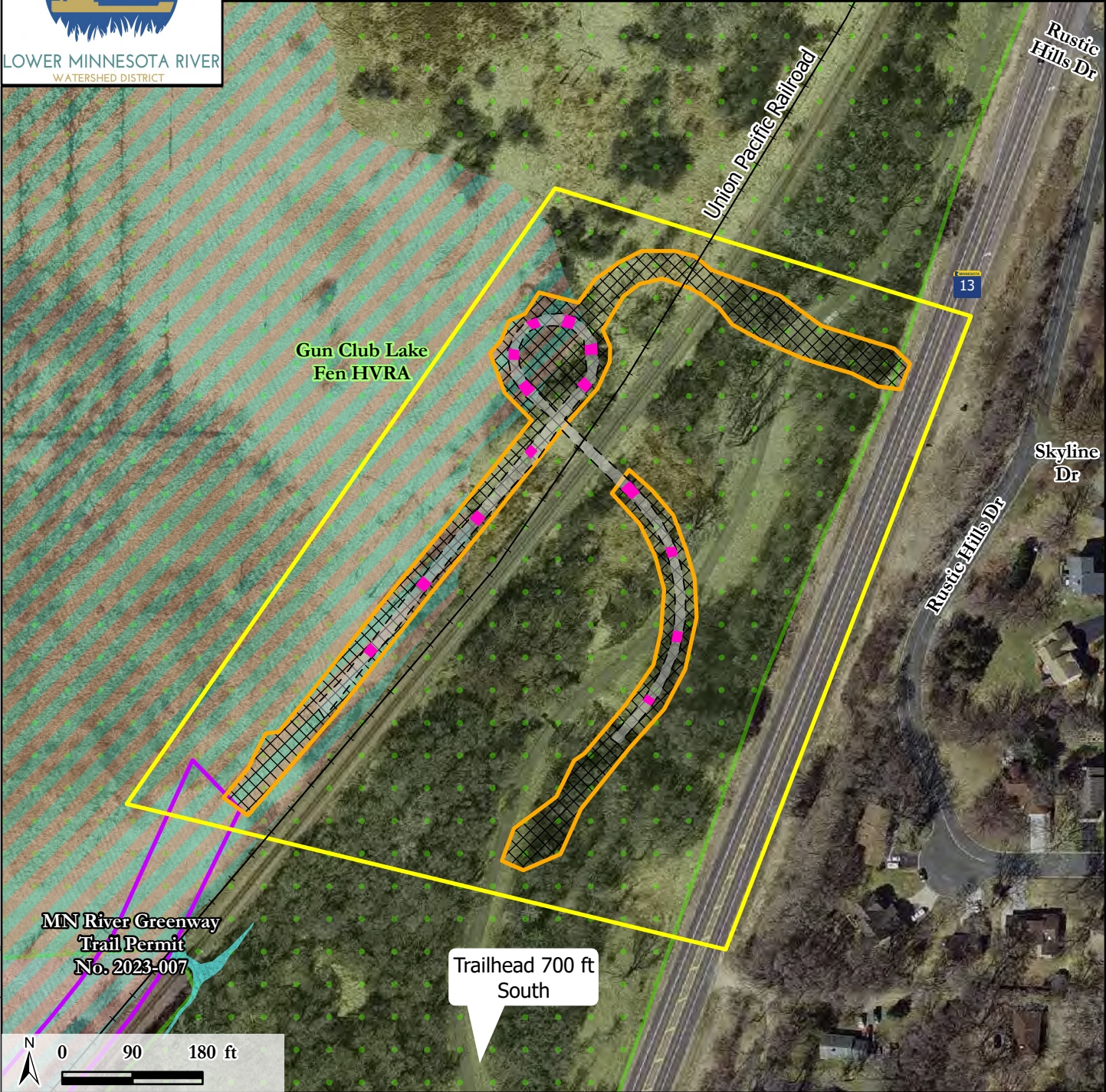
LMRWD Watershed Location Map

Young Environmental Consulting Group, LLC

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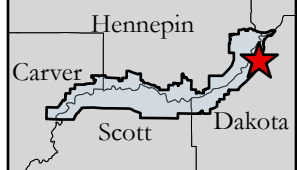
Figure 2: MN River Greenway RR Bridge Project Location
LMRWD No. 2023-010



Legend

- Project Location
- Construction Limits
- High Value Resource Area
- 100-yr Floodplain
- Floodway
- Proposed Bridge
- Previous Permits
- Railroad
- Piers

LMRWD Watershed Location Map



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