Please note the meeting will be held in person at the Carver County Government Center on the Wednesday, June 21, 2023. The meeting will also be available virtually using this link.

LOWER MINNESOTA RIVER WATERSHED DISTRICT

Lower Minnesota River Watershed District

7:00 PM

Wednesday, June 21, 2023

Carver County Government Center

602 East Fourth Street, Chaska, MN 55318

Agenda Item	Discussion
1. Call to order	A. Roll Call
2. Approval of agenda	
3. Citizen Forum	*Citizens may address the Board of Managers about any item not contained on the regular agenda. A maximum of 15 minutes is allowed for the Forum. If the full 15 So are not needed for the Forum, the Board will continue with the agenda. The Board will take no official action on items discussed at the Forum, with the exception of referral to staff or a Board Committee for a recommendation to be brought back to the Board for discussion or action at a future meeting.*
4. Consent Agenda	*All items listed under the consent agenda are considered to be routine by the Board of Managers and will be enacted by one motion and an affirmative vote of a majority of the members present. There will be no separate discussion of these items unless a Board Member or citizen request, in which event, the items will be removed from the consent agenda and considered as a separate item in its normal sequence on the agenda.* A. Approve Minutes April 19, and May 9, 2023 Regular Meeting B. Receive and file May 2023 Financial reports C. Approval of Invoices for payment i. Clifton Larson Allen (CLA) – Financial services through May 2023 ii. Daniel Hron – July 2023 office rent iii. Rinke Noonan –May 2023 Legal Services iv. Metro Sales – May 2023 payment on copier maintenance agreement v. TimeSaver Off Site Secretarial, Inc. - Preparation of April 2023 meeting minutes vi. US Bank Equipment Finance – June 2023 copier lease payment vii. Young Environmental Consulting Group, LLC – May 2023 technical, and Education & Outreach services viii. Naiad Consulting, LLC – May 2023 administrative services, mileage & expenses ix. Barr Engineering – May 2023 services related to Area #3 (wetland delineation & Threatened and Endangered Species Review) x. Bolton & Menk – May 2023 services related to Vernon Avenue xi. I & S Group, Inc. – April 2023 services related to Vernon Avenue

	xii. 106 Group – May 2023 services related to Area #3 xiii. 106 Group – May 2023 services related to Vernon Avenue xiv. RailPros – May 2023 invoice for railroad flagging services related to Vernon Avenue xv. 4M Fund – April Bank service charges D. Report on Citizen Advisory Committee meeting minutes E. LMRWD Permit Renewals F. LMRWD Permit Program Summary G. Request to reimburse 2022 Educator Mini-grant for Black Hawk Middle School H. Concourse G Infill Pods 2-3 Phase 1 & 2 (LMRWD No. 2023-012) Administrative Approval
5. New Business/ Presentations	A. Eagan River Valley Acres (RVA) – Funding Request Review B. Lower MN River East One Watershed One Plan Governance
6. Old Business	A. 2021 Financial Audit B. 2027 World EXPO – "Healthy People, Healthy Planet – Wellness and Well Being for All" – no new information to report since the last update C. 2023 Cost Share Applications D. City of Carver Levee – received $3,000,000 in funding from state of Minnesota E. Dredge Management F. Watershed Management Plan – no new information since last update G. 2023 Legislative Action H. Education & Outreach – no new information since last update I. LMRWD Projects *(only projects that require Board action will appear on the agenda. Informational updates will appear on the Administrator Report)* i. Area #3 ii. Spring Creek iii. LMRWD 2023 Gully Assessments J. Permits & Project Reviews *(only projects that require Board action will appear on the agenda. Informational updates will appear on the Administrator Report)* i. Shakopee Mdewakanton Sioux Community Organic Recycling Facility (LMRWD No. 2022-016) ii. AT & T Bloomington to Eureka Fiber (LMRWD No. 2023-009) iii. Lilydale LGU Permit iv. 535 Lakota Lane, Chanhassen – work without a permit
7. Communications	A. Administrator Report B. President C. Managers D. Committees E. Legal Counsel F. Engineer
8. Adjourn	Next meeting of the LMRWD Board of Managers is 7:00 pm Wednesday, July 19, 2023.

Upcoming meetings/Events

Managers are invited to attend any of these meetings. Most are free of charge and if not the LMRWD will reimburse registration fees.

- Lower MN River East 1W1P Advisory Committee meeting and Steering Committee – Wednesday, June 21, 2023, 10:00 am and 1:00 pm respectively – virtual only
- Minnesota Watersheds Summer Tour – June 21 & 22; Albert Lea, MN
- Lower MN River East 1W1P Policy Committee meeting – July 20, 2023, 3:00pm to 5:00 pm, in-person at 181 W Minnesota Street, Le Center, MN. Contact Administrator for information to participate virtually
- UMWA (Upper Mississippi Waterway Association) monthly meeting – July 20, 11:30 am to 1:00 pm, Lilydale Pool & Yacht Club
- Salt Symposium – August 1 & 2, virtual only
- LMRWD Citizen Advisory Committee meeting – Tuesday, August 1, 2023, 4:30pm, location to be determined

For Information Only

- **WCA Notices**
  - City of Chaska – Notice of Decision – No Loss, Structures, Inc. (LMRWD N. 2022-036)
  - City of Bloomington – Notice of Decision – No Loss, City stormwater infrastructure maintenance and repair
  - City of Shakopee – Notice of Application - Reliakor
- **DNR Public Waters Work permits**
  - Scott County, City of Savage – Request for Comments for Stream barbs/Vanes/J hooks, Riprap for Eagle Creek stream bank stabilization.
  - Scott County, City of Savage – Permit Issued for Eagle Creek stream bank stabilization
- **DNR Water Appropriation permits**
  - Dakota County – sand/gravel pit temporary dewatering related to the search for Bryce Borca
  - Scott County – Well Assessment 2023-0621
  - Scott County, City of Savage – Permit issued for Eagle Creek stream bank stabilization.
  - Scott County, City of Savage – Amended Water Appropriation Permit for Eagle Creek stream bank stabilization to administratively correct permit number.
  - Scott County – MnDOT – TH 13 Permit terminated
  - Scott County - MnDOT – TH 13 permit re-instated

Item 4A
LMRWD 6-21-2023

LOWER MINNESOTA RIVER WATERSHED DISTRICT

Minutes of Regular Meeting
Board of Managers
Wednesday, April 19, 2023
Carver County Government Center, 602 East 4th Street, Chaska, MN 7:00 p.m.
Approved _____

1. **CALL TO ORDER AND ROLL CALL**
   On Wednesday, April 19, 2023, at 7:00 PM CST, in the Board Room of the Carver County Government Center, 602 East 4th Street, Chaska, Minnesota, President Hartmann called to order the meeting of the Board of Managers of the Lower Minnesota River Watershed District (LMRWD).

   President Hartmann asked for the roll call to be taken. The following Managers were present: Manager Laura Amundson, President Jesse Hartmann, and Manager Lauren Salvato. In addition, the following attended the meeting in-person: Linda Loomis, Naiad Consulting, LLC, LMRWD Administrator; Della Schall Young, Young Environmental Consulting Group, LLC, LMRWD Technical Consultant; Troy Kuphal, District Director and Shelby Roberts, Public Outreach Specialist, Scott Soil and Water Conservation District; Lindsey Albright, Water Resource Specialist, Dakota County Soil and Water Conservation District; and Patty Thomsen, LMRWD Citizen Advisory Committee member. John Kolb, Rinke Noonan, LMRWD legal counsel; Ben Burnett, Prior Lake Spring Lake Manager; and Scott County Commissioner Jody Brennan; joined the meeting virtually. Hannah LeClaire, Young Environmental Consulting Group joined the meeting at 8:56 pm.

2. **APPROVAL OF THE AGENDA**
   Administrator Loomis asked to add Items 4. C. xii. – TimeSaver Off Site Secretarial, Inc., Preparation of March 15, 2023, meeting minutes invoice.

   President Hartmann made a motion to approve the agenda with the addition of Item 4. C. xii. – TimeSaver Off Site Secretarial, Inc., Preparation of March 15, 2023, meeting minutes invoice. Manager Salvato seconded the motion. Upon a vote being taken motion carried unanimously.

3. **CITIZEN FORUM**
   Administrator Loomis said she had not received communication from anyone that wished to address the Board, and no one present at the meeting asked to address the Board.

4. **CONSENT AGENDA**
   President Hartmann introduced the item.

   A. Approve Minutes March 15, 2023, Regular Meeting

   B. Receive and file March 2023 Financial Report

   C. Approval of Invoices for payment

   i. **Clifton Larson Allen (CLA) - Financial services through March 2023**

   ii. **Redpath and Company LLC – assistance with 2021 Audit**

iii. **Inter-Fluve, Inc. – Area #3 services through February 28, 2023**
iv. **Rinke Noonan, Attorneys at Law – March 2023 legal services**
v. **TimeSaver Off Site Secretarial, Inc. - Preparation of February 15, 2023 meeting minutes**
vi. **US Bank Equipment Finance – payment on copier lease**
vii. **Young Environmental Consulting Group, LLC – March 2023 technical, and Education and Outreach services**
viii. **Naiad Consulting, LLC – March 2023 administrative services, mileage, and expenses**
ix. **Dakota County SWCD – Q1 2023 monitoring, and education services**
x. **Frenette Legislative Advisors – March and April 2023 legislative services**
xi. **Daniel Hron – May 2023 office rent**
xii. **TimeSaver Off Site Secretarial, Inc. – Preparation of March 15, 2023, meeting minutes**

D. Report on Citizen Advisory Committee meeting minutes

E. Receive 2022 Annual Report and Authorize Distribution

President Hartmann made a motion to approve the Consent Agenda as amended under the approval of the agenda. Manager Salvato seconded the motion. Upon a vote being taken motion carried unanimously.

5. NEW BUSINESS/PRESENTATIONS

A. 2022 Scott County Monitoring report

Administrator Loomis introduced and provided background on this item. She stated that Shelby Roberts and Troy Kuphal from Scott Soil & Water Conservation District were in attendance to present their 2022 monitoring conducted on behalf of the LMRWD in Scott County.

Ms. Roberts, Communication Specialist at the Scott SWCD, came forward and reviewed the presentation containing the 2022 monitoring results. She reviewed the areas where the monitoring was done within the District. She reviewed the thermal monitoring that was done in Eagle Creek and the results of the monitoring. She discussed the monitoring results from Dean Lake. She also reviewed the monitoring results at the groundwater wells. She recommended continuing the monitoring they have been doing with minimal changes, at Eagle Creek, Dean Lake, and in the groundwater wells.

Manager Salvato asked if there is anything more that can be done in the Eagle Creek area with the E. coli. Ms. Young stated that they have discussed doing a bacteria source identification study. She stated that this is concerning, but they want to think about a coordinated effort on the time of year that it is seen and if something is changing that is causing this.

Ms. Young stated that the decrease in water levels of the wells is concerning. She asked when this is recognized if they could be made aware of this so that the DNR can be notified and withdrawals in the area can be investigated. Mr. Kuphal explained that there is not anything in place currently in terms of notifying the district. He stated that there could be a monthly or quarterly report to the district on the results. Ms. Young added that she would like it to be more frequent than quarterly so that they can coordinate with the cities or the county.

Ms. Young stated that fluctuations of fen levels is something that is in statute and is of high concern and has the possibility of changing the character of the fens. She stated that they may

want to be more proactive with this and request the data more frequently and work with the DNR to see if they have mitigation measures in place to address the appropriation.

Lindsey Albright, Dakota Soil and Water, asked if there was a way that the district could get added to the DNR's database so that they can view the data. Ms. Young stated that this information is being monitored but the DNR is not as proactive monitoring this data as the LMRWD would like.

Manager Salvato asked about the additional costs. Mr. Kuphal explained that they kept the budget the same this year and may have more expenses. He stated that next year there will be an increase. Administrator Loomis added that there is a maximum, not to exceed number, which is rarely reached.

Administrator Loomis stated that there has been a lot of requests for increase of appropriations that need to be discussed with the DNR.

Manager Amundson asked about the high chloride levels in August and if that was the result of low water levels. Ms. Roberts stated that was likely the cause but stated that there is not much of a concern for chloride in Eagle Creek. Mr. Kuphal added that it is not unlikely to see this increase due to concentration.

Mr. Kuphal explained that in the agreement there is not a line item under Deans Lake for equipment. He stated that there was some vandalism on the ultrasonic sonar that reads the water levels and shared concern that the device was damaged and may cost $300 to repair or replace this. He asked if part of the budget could be used for equipment replacement. The Board said yes.

Manager Salvato made a motion to approve Agreement between the Lower Minnesota River Watershed District and the Scott Soil and Water Conservation District for Monitoring, Technical, Education and other Conservation Services and 2023 Statement of Work and authorize execution. President Hartmann seconded the motion. Upon a vote being taken motion carried unanimously.

B. Appletree Condominium 2023 Cost Share Project

Administrator Loomis introduced and provided background on this item. She stated that there is a greater number of people interested in this cost share program than previous years. She shared concerns with potentially exceeding the budgeted amount. She stated that if this project and the Bloomington Neighbors Nurturing Nature project is approved that they may not approve them at the full amount.

Manager Salvato recommended making more stringent criteria for projects under this program.

Ms. Young recommended holding the applications from consideration at this meeting and consider all applications after the May 15 deadline and also checking in with the applicants if they would still have a viable project if they received less than their requested amount.

Administrator Loomis agreed with this suggestion. She stated that they are more conservative with their cost share program than other watershed districts. She suggested having different

categories for these cost share projects. She recommended that applicants apply this year for projects that will be done next year.

Manager Amundson made a motion to table the Appletree Condominium cost share application and the Bloomington Neighbors Nurturing Nature cost share application until all after the May 15 deadline to consider all application received at the June Board Meeting. Manager Salvato seconded this motion. Upon a vote being taken motion carried unanimously.

C. Bloomington Neighbors Nurturing Nature Cost Share Application

This item was discussed and voted on in conjunction with item B.

Manager Amundson made a motion to table the Appletree Condominium cost share application and the Bloomington Neighbors Nurturing Nature cost share application until all after the May 15 deadline to consider all application received at the June Board Meeting. Manager Salvato seconded this motion. Upon a vote being taken motion carried unanimously.

D. 2022 Dakota County Monitoring Report

Administrator Loomis introduced Lindsey Albright, Water Resource Specialist for the Dakota County Soil and Water Conservation District. Ms. Albright presented a report on the results of 2022 monitoring in Dakota County.

Ms. Albright reviewed the results of the fen well monitoring in Quarry Island, Fort Snelling, and Nichols Fens. She discussed the devices used for monitoring. She reviewed the trends at each site. She recommended continuing data sharing and looking at the viability of continuing to monitor all of the wells.

Ms. Young shared the importance of Ms. Albright's monitoring. She stated that the LMRWD recently spoke with the DNR and since the MET Council is doing monitoring that the district should look at stopping monitoring. She said that they are not in agreement with this as the data that the LMRWD is looking at is different than what the MET Council is looking at.

Manager Salvato asked if the fen stewardship does any vegetation sampling and how often this is being done. Ms. Young stated that this has happened at Nichols and other locations are being looked at now. She stated that the DNR did not have the capacity to sample vegetation, so the LMRWD has taken it on.

Manager Amundson asked why the water levels fluctuate so much. Ms. Young explained that with Nichols there is some sensitivity with the pumping that is happening through the MET Council. She stated that at some of the other fens they are looking at this with the DNR to determine what might be causing these trends.

6. OLD BUSINESS

A. 2021 Financial Audit

Administrator Loomis introduced and provided an update on the status of the audit. She stated that they have not yet received the audit, but the auditor said that he would have the report to them by April 15th. She noted that it was not received by that date and has not gotten a response back from the auditor. She added that the accountant has spoken to another accounting firm about taking over the 2021 audit to get this done.

Manager Salvato asked how much money has been spent on the audit. Administrator Loomis stated that Global Portfolio Consulting has been paid $12,000-$13,000 to get started on the audit.

Attorney Kolb mentioned that he can help come up with a plan of how to handle this.

Manager Salvato made a motion to authorize the Administrator to retain a new auditor for the 2021 Financial Audit if the audit is not forthcoming from Global Portfolio Consulting, LLP. President Hartmann seconded the motion. Upon a vote being taken motion carried unanimously.

B. 2027 World EXPO – "Healthy People, Healthy Planet – Wellness and Well Being for All"

Administrator Loomis introduced and provided background on this item. She stated that the site the World Expo is planning on using is across the street from the Kelly Farm. She added that she met with the city, and they were talking about turning portions of the Kelly property to the US Fish and Wildlife Service. She noted that she had a conversation with Manager Barisonzi who has concerns about the proposal and is concerned with waiting until after the proposal is awarded. He is concerned that promises made have been made that may negatively impact nearby sensitive areas. She noted that Manager Barisonzi has spoken with environmental groups that are very concerned about this and are concerned that nearby areas, like Ike's Creek and the Minnesota Valley National Wildlife Refuge, may be very sensitive to impacts from this event.

Manager Salvato asked what it means that the city would have no control if the State Department takes over. Administrator Loomis explained that this means that there may be lots of variance requests. She stated that this seems to be very political. She added that there may be a petition started by some of the concerned environmental groups.

Manager Amundson stated that it would be premature to take an action on this at this point. Manager Salvato agreed.

C. Twin Cities Metro Watershed Management Organizations Chloride Management report

Administrator Loomis introduced and provided background on this item. She shared that at the last meeting, the Board had asked what other watersheds were doing with respect to regulating chlorides. She stated that Young Environmental did an investigation and the results of their research is presented in a technical memorandum with some recommendations made.

Manager Amundson asked about the timing of the phases. Ms. Young explained that the phased approach was to help get grounded in putting out education material and then coordinating to see what the financial impact would be to incorporate the chloride monitoring. She stated that phase 1 and phase 2 could happen relatively soon and happen in tandem. She added that phase 3 will be the biggest phase and should happen next year. She noted that phase 4 is longer term.

Manager Salvato asked where the phased approach comes from and once this plan is in place what is the reaction of the stakeholders. Ms. Young said that since chloride has become a greater concern a lot of people know that this is coming. She emphasized the importance of education. Manager Salvato suggested that something should be added to the website. She shared concerns with spending $6,000 on a video and asked what impact the video would have. Ms. Young stated that they have been studying this and have been looking into how people are accessing and looking at the website or social media to get this information.

Manager Salvato made a motion to direct staff to begin implementation of recommendation contained in Technical Memorandum – Twin Cities Metro Watershed Management Organizations Chloride Management Research dated April 13, 2023. President Hartmann seconded the motion. Upon a vote being taken motion carried unanimously.

D. City of Carver Levee

No new information to report since last update.

E. Dredge Management

i. Vernon Avenue Dredge Material Management site

Administrator Loomis introduced and provided background on this item. She stated that there was a kick-off meeting for this project with all of the partners. Bolton & Menk has contacted the Union Pacific Railroad because two rail lines cross Vernon Avenue. She noted that the LMRWD has received a quote from RailPro for flagging.

Manager Amundson asked why the LMRWD will be hiring the flaggers and not Bolton & Menk. Ms. Young explained that this is because of how the contract is written.

President Hartmann made a motion to execute quote for flagging from RailPro. Manager Salvato seconded the motion. Upon a vote being taken motion carried unanimously.

ii. Private Dredge Material Placement

No new information to report since last update.

F. Watershed Management Plan

No new information to report since last update.

G. 2022 Legislative Action

Administrator Loomis shared that Manager Barisonzi asked her to speak with Ted Suss at the Friends of the Minnesota Valley about the River Watch program. She stated that Friends of the Minnesota Valley want funding from the State got this Program and it was not put into any of the funding bills. She added that Mr. Suss wanted to coordinate with Lisa Frenette, Legislative Liaison to the LMRWD, to help with approaching the legislature to get funding for both the MN Valley and the Red River Valley programs.

Administrator Loomis also mentioned that Ms. Frenette will not be working with the Red River Basin Board in the future. She noted that Ms. Frenette sat on the drainage work group and wondered if the Board wanted her to sit on this group on behalf of the LMRWD.

She stated that Ms. Frenette also had talked to BWSR about using money from the dredge management grant to do sediment reduction projects. She stated that BWSR had asked for the LMRWD to send a request for that. Such a letter has been sent to BWSR and receipt of the request has been acknowledged by BWSR.

H. Education and Outreach Plan

Administrator Loomis introduced and provided background for this item. She stated that they received a quote for an outreach video on how to manage steep slopes and other informational items. She shared the other outreach opportunities at upcoming events.

Manager Salvato shared concerns about the price. She asked about the protocol of getting more than one quote. Administrator Loomis stated that they can go out and get more quotes.

President Hartmann asked what the budget would look like with this expense. Administrator Loomis stated that if a river tour is not done this year, this cost would replace that.

President Hartmann made a motion to table this item until May meeting to get additional quotes. Manager Salvato seconded the motion. Upon a vote being taken motion carried unanimously.

I. LMRWD Projects

(Only projects that require Board action will appear on the agenda. Informational updates will appear on the Administrator Report)

i. Area #3

Administrator Loomis shared that Manager Salvato had requested more information on the levy and how to pay for the 50% of any bonding money that would come from the State. She stated that a decision does not have to be made until the preliminary levy is set. She explained how the levying would work. She noted that the average homeowner in the watershed pays $20 a year for the levy, which will change depending on different things. She stated that if the entire $2,750,000 was levied in 2024, the average would become about $85 for the whole year for a homeowner in the district. She explained the additional costs that are related to bonding. She recommended just doing a one-time levy.

The Board discussed the size and funding of the project.

J. Project/Plan Reviews

(Only projects that require Board action will appear on the agenda. Informational updates will appear on the Administrator Report)

i. Permit Renewals

Administrator Loomis introduced and provided background for this item. She noted that this item will be on the consent agenda at future meetings. She reviewed the permit renewal for MN Mash.

President Hartmann made a motion to extend the permit for MN Mash and the 130th Street Extension. Manager Amundson seconded the motion. Upon a vote being taken motion carried unanimously.

ii. Chaska West Creek Apartments (LMRWD No. 2022-005)

Administrator Loomis introduced this item and shared the recommendation for a conditional approval.

Manager Salvato made a motion to conditionally approve a permit for Chaska West Creek Apartments (LMRWD No. 2022-005) contingent upon receipt of final construction plans signed by a professional engineer; name and contact information for all contractors(s) undertaking land disturbing activities as part of the proposed project; name and contact information for the person(s) responsible for erosion control inspections and maintenance; a signed copy of the final plat filed with Carver County; and a copy of the NPDES construction stormwater permit. Manager Amundson seconded the motion. Upon a vote being taken motion carried unanimously.

iii. MN River Greenway Trail (LMRWD No. 2023-007)

Administrator Loomis introduced this item and shared the recommendation for a conditional approval.

Ms. LeClaire explained what was going on with the bridge permit for this project.

Manager Amundson made a motion to conditionally approve a permit for MN River Greenway Trail (LMRWD No. 2023-007) contingent upon receipt of the name and contact information for all contractors(s) undertaking land disturbing activities as part of the

proposed project; name and contact information for the person(s) responsible for erosion control inspections and maintenance; receipt of final construction plans signed by a professional engineer; a copy of permit approval from the Minnesota DNR; and a copy of the NPDES construction stormwater permit. President Hartmann seconded the motion. Upon a vote being taken motion carried unanimously.

iv. Chaska Tech Center (LMRWD No. 2023-008)
Administrator Loomis introduced and provided background on this item and shared the recommendation for conditional approval.

Manager Salvato made a motion to conditionally approve a permit for Chaska Tech Center (LMRWD No. 2023-008) contingent upon receipt of a copy of the NPDES construction stormwater permit; a copy of executed maintenance agreement recorded with Carver County; copy of applicable Minnesota Department of Natural Resources and US Army Corps of Engineers permits; and a copy of the executed purchase agreement. President Hartmann seconded the motion. Upon a vote being taken motion carried unanimously.

v. Permit Program Summary
Administrator Loomis introduced and provided background on this item. She noted that this item will be on the consent agenda at future meetings.

vi. 535 Lakota Lane, Chanhassen – work without a permit
Administrator Loomis introduced this item and provided updates on communications with the property owner.

6. COMMUNICATIONS

A. **Administrator Report:** Administrator Loomis reviewed her report. She stated that she attended the River Resource Forum and the Metro Minnesota Watersheds meeting. She asked if the Board would like someone from the Minnesota Watersheds to attend to May meeting to bring forward more information. The Board recommended waiting a year to join to see how things go and get feedback from others who are involved.

B. **President:** No report
C. **Managers:** No report
D. **Committees:** No report
E. Legal Counsel: No report
F. **Engineer:** No report

7. ADJOURN

At 9:31 PM, President Hartmann made a motion to adjourn the meeting. Manager Salvato seconded the motion. Upon a vote being taken motion carried unanimously.

The next meeting of the LMRWD Board of Managers meeting will be 7:00, Tuesday, May 9, 2023, and will be held at the Carver County Government Center, 602 East 4th Street, Chaska, MN. Electronic access will also be available.

_____
Attest: Lauren Salvato, Secretary

_____
Linda Loomis, Administrator

Item 4A
LMRWD 6-21-2023

LOWER MINNESOTA RIVER WATERSHED DISTRICT

Minutes of Regular Meeting
Board of Managers
Wednesday, May 9, 2023
Carver County Government Center, 602 East 4th Street, Chaska, MN 7:00 p.m.
Approved _____

1. **CALL TO ORDER AND ROLL CALL**
   On Tuesday, May 9, 2023, at 7:00 PM CST, in the Board Room of the Carver County Government Center, 602 East 4th Street, Chaska, Minnesota, President Hartmann called to order the meeting of the Board of Managers of the Lower Minnesota River Watershed District (LMRWD).

   President Hartmann asked for the roll call to be taken. The following Managers were present: Manager Laura Amundson, President Jesse Hartmann, and Manager Lauren Salvato. In addition, the following attended the meeting in-person: Linda Loomis, Naiad Consulting, LLC, LMRWD Administrator; and Della Schall Young, Young Environmental Consulting Group, LLC, LMRWD Technical Consultant. John Kolb, Rinke Noonan, LMRWD legal counsel, joined the meeting virtually. Hannah LeClaire, Young Environmental Consulting Group joined the meeting virtually at 7:52 pm.

2. **APPROVAL OF THE AGENDA**
   Administrator Loomis asked that the meeting minutes from the April 19, 2023 Board meeting be removed from the agenda.

   President Hartmann made a motion to approve the agenda with the April 19, 2023 regular meeting minutes removed from the consent agenda. Manager Salvato seconded the motion. Upon a vote being taken motion carried unanimously.

3. **CITIZEN FORUM**
   Administrator Loomis said she had not received communication from anyone that wished to address the Board, and no one present at the meeting asked to address the Board.

4. **CONSENT AGENDA**
   President Hartmann introduced the item.

   ~~**A. Approve Minutes April 19, 2023, Regular Meeting**~~
   B. Receive and file April 2023 Financial Report
   C. Approval of Invoices for payment
      i. **Clifton Larson Allen (CLA) - Financial services through April 2023**
      ii. **Scott Soil & Water Conservation District - Q1 2023 monitoring, TACS & education services**
      iii. **Rinke Noonan, Attorneys at Law – April 2023 legal services**
      iv. **US Bank Equipment Finance – payment on copier lease**

v. **Young Environmental Consulting Group, LLC – April 2023 technical, and Education and Outreach services**

vi. **Naiad Consulting, LLC – April 2023 administrative services, mileage, and expenses**

vii. **Sponsor Minnesota River Congress**

D. Report on Citizen Advisory Committee

E. LMRWD Permit Renewals

F. LMRWD Permit Program Summary

G. Financial Assurance Release

H. Quarry Lake Playground – Administrative permit approval

President Hartmann made a motion to approve the Consent Agenda as amended under the approval of the agenda. Manager Salvato seconded the motion. Upon a vote being taken motion carried unanimously.

5. NEW BUSINESS/PRESENTATIONS

A. Discussion of outreach message

Administrator Loomis introduced and provided background on this item. She shared that The LMRWD has been invited to make a presentation at the 15th Minnesota River Congress on June 16th and the Board will also be able to engage the public at County Fairs throughout the Minnesota River Basin. She requested feedback on what kind of message the Board would like to have when engaging with the public.

The Board discussed their message and materials to use when attending these events and engaging with the public.

B. Metro Children's Water Festival

Administrator Loomis introduced and provided feedback on this item. She stated that the Metro Children's Water Festival will be held the last Wednesday in September. She noted that the LMRWD has always helped fund this event. She shared that they are requested to fund 6 buses for the event. She added that Manager Salvato has been invited to the event to make a presentation.

Manager Barisonzi made a motion to The motion was seconded by President Hartmann. Upon a vote being taken motion carried unanimously. Manager Salvato abstained.

6. OLD BUSINESS

A. 2021 Financial Audit

Administrator Loomis introduced and provided an update on this item. She shared that they are nearly a year and a half behind on getting their audit to the State. She explained that the office of the State auditor has suggested that they have the legal counsel send a letter to the hired auditor asking for a detailed account of what has been spent to date on the audit and refund any money unearned. She added that the auditor was paid over $17,000. She said Attorney Kolb stated he is willing to send a letter. She added that the representative from the office of the State auditor suggested approaching BWSR to complete the audit. Ms. Frenette is discussing this option with BWSR. She noted that the accountant is also checking around for other firms that could do this audit.

Attorney Kolb stated that it is appropriate that they send this letter to the auditor and express to the auditor that we disagree with their characterization of what has happened and that the

LMRWD considers this a breach of the agreement. He noted that the current accountant and past audit firms would agree with this assessment. He said that he would ask for a detailed account of everything spent.

Administrator Loomis noted that the auditor would not return her emails or phone calls until after Attorney Kolb reached out. She stated that if the legal counsel sends a letter she assumes that they will get some kind of response. She shared that they would also request that any work that has been completed by given to them along with the refund of funds not used. She mentioned that the representative from the office of the State auditor also suggested doing a two-year audit since it is coming time for the 2022 audit to be completed.

The Board asked if this would present a problem for them since the audit is so far behind. Administrator Loomis stated that it shouldn't as the State auditor and BWSR understand that this is not a problem that was caused by any action, or inaction by the Board of Managers; the LMRWD retained and auditor that has not performed. Both agencies agree that this is not a fault of the LMRWD.

B. 2027 World EXPO – "Healthy People, Healthy Planet – Wellness and Well Being for All"
No new information to report since the last update.

C. 2023 Cost Share Applications
This item was tabled at the April meeting until the June 21, 2023, meeting. Administrator Loomis did provide an update to the Board on the cot share applications received.

D. City of Carver Levee
No new information to report since the last update.

E. Dredge Management

i. Vernon Avenue Dredge Material Management site
Administrator Loomis introduced and provided background on this item. She noted a lot is happening on this site, including a communication cable that is being planned to run through this area. She added that the soil borings were taken.

ii. Private Dredge Material Placement
No new information to report since last update.

F. Watershed Management Plan

Administrator Loomis introduced and provided background on this item. She shared that the LMRWD received a question from the city of Chanhassen concerning using permeable pavement and how the LMRWD would view that. She stated that Young Environmental sent a memo to Chanhassen.

The Board discussed this item.

President Hartmann made a motion to approve maintenance and use requirements when reviewing proposed developments within the LMRWD that permeable pavers should be installed in only low-traffic and low-impact areas with interlocking pavers in areas without snowplow traffic, the ratio of drainage area to permeable pavement area should not exceed 2:1, upgradient drainage areas should be vegetated or contain other sediment-control BMPs, and maintenance to remove sediment should occur at a minimum frequency of twice per year with annual filtration monitoring to assess the product's efficacy. Manager Salvato seconded the motion. Upon a vote being taken motion carried unanimously.

G. 2022 Legislative Action

No new information to report since the last update.

H. Education and Outreach Plan

Administrator Loomis introduced and provided background on this item. She shared the idea of using dues from the Minnesota Watershed to be used for education and outreach. She added that they were approached by someone who does water education videos and marketing. She noted that the price was lower than the quote we had received from the videographer that staff had spoken to, but the videos would be more generic and not specific to the LMRWD. She said staff was planning to reach out to videographers that had responded to the LMRWD request for proposals when the 60th Anniversary video was developed.

Manager Salvato made a motion to direct budget for Minnesota Watershed Dues to Education and Outreach. President Hartmann seconded the motion. Upon a vote being taken motion carried unanimously.

I. LMRWD Projects

(Only projects that require Board action will appear on the agenda. Informational updates will appear on the Administrator Report)

i. Area #3

Administrator Loomis introduced and provided background on this item. She shared that she heard from several managers on the Area #3 project. She reviewed the project at Area #3, which is in Eden Prairie. It was first identified in 2008/2009. In 2010, the LMRWD prepared a report.

The City has maintained that stabilizing the riverbank is the responsibility of the LMRWD. In 2020, the LMRWD retained a consultant to validate the 2010 report and evaluate the solutions recommended. She stated that the estimates of the costs have increased quite a bit since 2010 and could total approximately $5.5 million. She noted that they are attempting to get funding from the legislature and Eden Prairie. She added that they are currently working on permitting for this project. She stated that the Board will need to consider how they will raise their share of the cost of the project. She stated that staff will try to bring forward as much information as possible before the Board has to decide how to raise the match. She added that this area is on private property, all owned by one family. She stated that the family has not been very responsive. She added that the LMRWD will likely bid this project in January. She noted that this area contributes significant sediment to the Minnesota River.

ii. LMRWD Chloride Management

Administrator Loomis introduced this item and provided an update on the project.

iii. Minnesota River Floodplain Model Update

Administrator Loomis introduced this item and provided an update on the project.

J. Project/Plan Reviews

(Only projects that require Board action will appear under this item. Informational updates will appear under item 4.G – LMRWD Permit Program Summary)

i. Structures, Inc. (LMRWD No. 2022-036)

Administrator Loomis introduced and provided background on this item. She reviewed the requested amendment to the permit.

President Hartmann made a motion to conditionally approve project amendments contingent upon receipt of final construction plans signed by a professional engineer, name and contact information for all contractors undertaking land-disturbing activities as

part of the proposed project, name and contact information for the person(s) responsible for erosion control inspections and maintenance, copy of NPDES construction stormwater permit, and documentation that the applicant has received approval for the project from the City of Chaska. Manager Kuplic seconded the motion. Upon a vote being taken motion carried unanimously.

ii. **Eagle Creek Bridge Slope Stabilization (LMRWD No. 2023-002)**
Administrator Loomis introduced and provided background on this item. She shared that Young Environmental has recommended conditional approval.

Manager Amundson made a motion to conditionally approve a permit for Eagle Creek Bridge Slope Stabilization (LMRWD No. 2023-002) contingent upon receipt of the name and contact information for all contractors undertaking land-disturbing activities as part of the proposed project, name and contact information for the person(s) responsible for erosion control inspections and maintenance, and a copy of the approved MnDNR permit. Manager Salvato seconded the motion. Upon a vote being taken motion carried unanimously.

iii. **535 Lakota Lane, Chanhassen – work without a permit**
Administrator Loomis introduced this item and provided updates on communications with the City and the property owner.

6. COMMUNICATIONS

A. **Administrator Report:** Administrator Loomis stated that she did not have anything to add to her report.
B. **President:** No report
C. **Managers:** No report
D. **Committees:** No report
E. Legal Counsel: No report
F. **Engineer:** No report

7. ADJOURN

At 8:26, President Hartmann made a motion to adjourn the meeting. Manager Barisonzi seconded the motion. Upon a vote being taken motion carried unanimously.

The next meeting of the LMRWD Board of Managers meeting will be 7:00, Wednesday, June 21, 2023, and will be held at the Carver County Government Center, 602 East 4th Street, Chaska, MN. Electronic access will also be available.

_____
Attest: Lauren Salvato, Secretary

_____
Linda Loomis, Administrator

LOWER MINNESOTA RIVER
WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, May 9, 2023

Agenda Item
Item 4. D. - Report on Citizen Advisory Committee meeting minutes

Prepared By
Linda Loomis, Administrator

Summary
There were not any notes from the May 9, 2023, meeting of the Citizens Advisory Committee (CAC), as the group toured the Blue Lake Wastewater Treatment Plant in Shakopee and there was no time for a business meeting.

On June 6, 2023, Greg Genz, a member of the CAC was kind enough to volunteer his pontoon boat for a trip down the Minnesota River. Managers were invited to attend. Manager Kuplic joined the CAC. The trip started at the Riverside Park boat launch in the city of Carver and ended at Watergate Marina in St. Paul. Jen Dullum and Erica Bock from Young Environmental ferried everyone from Watergate Marina to Carver. (Thank You!) This was a great opportunity for CAC members to learn more about the LMRWD and the MN River.

The next meeting of the CAC will be August 1, 2023. The CAC is arranging a tour of native landscapes with the Wild Ones, a native plant gardening group.

Attachments
No attachments

Recommended Action
No action recommended

LOWER MINNESOTA RIVER
WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, June 21, 2023

Agenda Item
Item 4. E. – LMRWD Permit Renewals

Prepared By
Linda Loomis, Administrator

Summary
Technical Memorandum – June 2023 Permit Renewal Requests dated June 14, 2023, is attached with permit renewals that have been requested.

Attachments
Technical Memorandum – June 2023 Permit Renewal Requests dated June 14, 2023

Recommended Action
Motion to approve permit extensions contained in Table 1 in Technical Memorandum – June 2023 Permit Renewal Requests dated June 14, 2023

Young Environmental Consulting Group, LLC

Technical Memorandum

To: Linda Loomis, Administrator
Lower Minnesota River Watershed District

From: Erica Bock, Water Resources Scientist
Hannah LeClaire, PE, Project Manager

Date: June 14, 2023

Re: June 2023 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 monthly reminders to current permit holders with upcoming permit expirations.

Table 1 summarizes the permittees who have responded to the permit expiration reminder, confirmed that no significant changes to the proposed project have occurred since the original permit was issued, and requested a permit extension to complete their projects.

Table 1. Summary of June 2023 LMRWD permit renewal requests

LMRWD No.	Project Name	City	Previous Expiration	Recommended Expiration Date
2020-113	Fort Snelling Redevelopment	Fort Snelling	08/19/2023	08/19/2024
	Reason for Extension: construction is still in progress			
2021-030	Building Renovation for Park Jeep	Burnsville	6/21/2023	8/15/2023
	Reason for Extension: unforeseen weather delays and on-going construction			

Recommendation

Staff recommends renewing the permits provided in Table 1.

LMRWD Permit Program Summary

Permit Number	Project Name	Status	Pre-Permit Meeting	Date Received	Date Considered Complete	Board Actions			Permit Issued	Permit Expiration Date	First Renewal Expiration	Second Renewal Expiration	Construction Completed	Date Permit Closed
						Information Only	Conditional Approval	Approval						
2019-065	TH 101 Chanhassen	Closed		11/8/2019				11/20/2019	11/20/2019	1/20/2020				11/22/2022
2019-085	Minnesota Bluffs LRT Regional Trail Repair	Closed		12/12/2019					5/20/2020	6/1/2023				7/22/2022
2020-100	Peterson Farms Road Maintenance	Closed		5/6/2020	5/6/2020			5/20/2020	5/21/2020	5/21/2021				8/11/2022
2020-103	Prairie Heights Development	Expired		5/27/2020	6/5/2020		6/17/2020		10/23/2020	10/23/2021				
2020-105	Freeway Landfill	Pre-Permit		8/19/2022		9/21/2022								
2020-110	CSAH 11 Reconstruction	Construction Complete		9/28/2020	11/3/2020		12/16/2020		4/13/2021	4/13/2022	4/20/2023			
2020-112	Vierling Industrial Project	Closed		6/25/2020	6/29/2020		7/15/2020							10/14/2022
2020-113	Fort Snelling Redevelopment (2019-057)	Active		7/20/2020	8/12/2020		8/19/2020		9/11/2020	8/19/2022	8/19/2023	8/19/2024		
2020-115	Quarry Lake Park Improvements	Closed		7/23/2020	9/8/2020		9/16/2020		9/16/2020	9/16/2021				3/17/2022
2020-116	Shakopee Memorial Bridge	Closed		8/24/2020	10/5/2020		10/21/2020		10/23/2020	10/23/2021				7/20/2022
2020-117	Greystone HQ	Closed		7/24/2020	9/10/2020			9/16/2020	9/16/2020	9/16/2021				10/3/2022
2020-123	Gaughan Companies Demolition	Closed		8/27/2020	8/27/2020			9/16/2020	9/17/2020	9/17/2021				10/15/2021
2020-123 (amended)	Shakopee Flats	Closed							2/17/2021	9/17/2021				
2020-126	Texas Roadhouse	Closed		9/17/2020	11/5/2020			11/18/2020	11/19/2020	11/18/2021				7/26/2022
2020-132	77th Underpass	Active	10/18/2020	10/21/2020	11/12/2020	11/18/2020	12/16/2020		7/27/2021	7/27/2022	7/27/2023			
2020-133	Shakopee Mix Use	Closed	10/29/2020	11/2/2020	11/2/2020			11/18/2020						
2020-135	Canterbury Crossings	Active		11/19/2020	12/3/2020		12/16/2020		5/11/2021	5/11/2022	4/20/2023	4/20/2024		
2021-002	CSAH 61 Drainage Ditch	Active		2/1/2021	10/11/2021			10/20/2021	10/21/2021	5/31/2022				
2021-003	Southwest Logistics Center	Closed		2/11/2021	3/12/2021		3/17/2021		4/21/2021	4/21/2022				11/22/2022
2021-007	Burnsville Cemetery Expansion	Expired	3/5/2021	9/2/2021	9/17/2021		10/20/2021		11/17/2021	10/20/2022				
2021-009	Burnsville Industrial IV	Closed	4/2/2021	3/22/2021	3/31/2021		4/21/2021		4/23/2021	4/21/2022				10/5/2022
2021-011	2021 Shakopee Street Reconstruction	Closed	3/30/2021	3/30/2021	4/16/2021		4/21/2021		4/28/2021	4/28/2022				7/25/2022
2021-012	Canterbury Park Parking Lots Phase 2	Closed	4/1/2021	4/2/2021	4/10/2021		4/21/2021		5/11/2021	5/11/2022				7/25/2022
2021-013	Summerland Place	Closed		4/8/2021	5/27/2021		4/21/2021		4/26/2021	4/22/2022				3/22/2022

Permit Number	Project Name	Status	Pre-Permit Meeting	Date Received	Date Considered Complete	Board Actions			Permit Issued	Permit Expiration Date	First Renewal Expiration	Second Renewal Expiration	Construction Completed	Date Permit Closed
						Information Only	Conditional Approval	Approval						
2021-015	Stagecoach Rd Improvements	Closed	4/16/2021	4/12/2021	4/30/2021		5/5/2021		5/7/2021	5/5/2022				3/23/2022
2021-016	Whispering Waters	Active		4/14/2021	6/4/2021		6/16/2021		7/13/2021	7/13/2022				
2021-017	Capstone35	Closed		4/20/2021	5/12/2021		5/19/2021		8/19/2021	8/17/2022				11/22/2022
2021-018	Jefferson Court	Active		4/22/2021	5/17/2021		6/2/2021		6/3/2021	6/2/2022	6/2/2023	6/2/2024		
2021-019	Cretex Site	Closed	4/23/2021	4/26/2021	4/30/2021		5/5/2021		5/7/2021	5/5/2022				5/5/2022
2021-020	Core Crossing Apartments (Prev. Southbridge)	Construction Complete		6/14/2021	7/13/2021		7/21/2021		8/5/2021	6/15/2023	6/17/2023		11/1/2022	
2021-022	2021 Security & Safety Center	Active		5/18/2021	10/29/2021		11/17/2021		3/18/2022	3/18/2023	3/18/2024			
2021-023	106th Improvements Project	Construction Complete		5/25/2021	5/28/2021		6/2/2021		6/17/2022	6/17/2022	6/17/2023		4/17/2023	
2021-025	TH13/Dakota Ave Improvement	Active		6/11/2021	6/15/2021		2/16/2022		5/20/2022	5/20/2023	5/20/2024			
2021-030	Building Renovation Park Jeep	Active		7/9/2021	7/16/2021		9/15/2021		6/21/2022	6/21/2023	8/15/2023			
2021-031	Caribou Coffee	Closed	6/1/2021	7/9/2021	8/10/2021		8/18/2021		8/19/2021					10/4/2022
2021-033	MN MASH	Active	6/23/2021	9/17/2021				6/15/2022	6/17/2022	6/17/2023	11/30/2023			
2021-034	Circle K Holiday Station Stores	Closed	8/25/2021	7/26/2021	9/10/2021		9/15/2021		10/19/2021	9/15/2022				7/12/2022
2021-035	I35W Frontage Trail	Active		12/15/2021	12/22/2021		1/19/2022		11/3/2022	11/3/2023				
2021-039	River Bluffs Improvements	Active		7/23/2021	8/12/2021		8/18/2021		10/1/2021	8/18/2022				
2021-040	Canterbury Independent Senior Living	Active		8/11/2021	8/19/2021		9/15/2021	9/15/2022	8/19/2022	10/1/2023				
2021-041	Line 0832	Closed		9/7/2021	9/7/2021		9/15/2021		9/17/2021	9/15/2022				6/27/2022
2021-042	Hwy 13 & Lone Oak	Active		8/27/2021	9/16/2021		10/20/2021		10/22/2021	10/22/2022	6/30/2023			
2021-045	Triple Crown Residences Phase II	Active		9/22/2021	10/27/2021		11/17/2021		11/19/2021	11/17/2023				
2021-046	CenterPoint Dakota Station Facility	Closed		9/21/2021	10/15/2021		10/20/2021		10/22/2021	10/22/2022				9/12/2022
2021-047	River Valley Industrial Center	On Hold		9/21/2021										
2021-049	Stump Road Maintenance	Closed	10/20/2021	10/22/2021	10/29/2021		11/17/2021		11/19/2021	11/17/2022				9/5/2022
2021-052	Shakopee Dental Office	Construction Complete		11/3/2021	12/14/2021		12/15/2021		12/17/2021	12/15/2022			12/1/2022	
2021-057	Cliff Road Ramps	Active		12/14/2021	1/4/2022		1/19/2022		6/8/2022	6/8/2023	12/1/2023			
2021-058	Perimeter Gate Improvements	Active		12/15/2021	12/16/2021		1/19/2022		4/27/2022	4/27/2023	10/31/2023			
2022-002	CenterPoint MBL Nicollet River Crossing	Construction Complete		1/18/2022			3/16/2022		4/25/2022	4/25/2023	10/31/2023		12/17/2022	

Permit Number	Project Name	Status	Pre-Permit Meeting	Date Received	Date Considered Complete	Board Actions			Permit Issued	Permit Expiration Date	First Renewal Expiration	Second Renewal Expiration	Construction Completed	Date Permit Closed
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2022-003	Ivy Brook Parking East	Construction Complete		1/19/2022	2/25/2022		3/16/2022		5/16/2022	5/16/2023			2/16/2023	
2022-004	CHS Savage Terminal	Incomplete		1/27/2022										
2022-005	Chaska West Creek Apt	Active		2/8/2022	3/29/2023		4/19/2023		6/6/2023	6/6/2024				
2022-007	Engineered Hillside	Expired		2/15/2022	3/14/2022			4/20/2022	4/21/2022	4/21/2023				
2022-008	Ivy Brook Parking West	Construction Complete		2/16/2022	2/25/2022		3/16/2022		5/31/2022	5/31/2023			2/27/2023	
2022-010	Quarry Lake Trail and Ped Bridge	Active		2/24/2022			4/20/2022		3/1/2023	3/1/2024				
2022-011	Biffs, Inc.	Active		2/28/2022	3/29/2022		4/20/2022		8/16/2022	8/16/2023				
2022-013	Normandale & 98th St	Active		3/22/2022	4/1/2022		4/20/2022		4/22/2022	4/22/2023	11/30/2023			
2022-014	TH41 & CSAH61 Improvements	Active	1/6/2022	3/23/2022	5/11/2022		5/18/2022		12/13/2022	12/13/2023				
2022-015	Xcel Driveway	Incomplete	5/25/2023	4/20/2022										
2022-016*	ORF Relocation Rule B*	Conditional Approval		4/20/2022			6/21/2023							
2022-017	PLOC 2022 Bank Stabilization	Active		6/30/2022	7/5/2022			7/20/2022	7/21/2022	7/21/2023				
2022-019	I494 SP 2785-433	Active		4/21/2022	6/24/2022		7/20/2022		4/10/2023	4/10/2024				
2022-021	CenterPoint Oak St N	Construction Complete		4/29/2022				6/15/2022	6/17/2022	6/17/2023			3/14/2023	
2022-022	Ace Rent A Car	Incomplete		5/10/2022										
2022-023	494 Corridors of Commerce	Pre-Permit	5/3/2022	5/19/2022		7/20/2022								
2022-024	Gedney Pickles Holding Pond Restoration	Construction Complete	6/16/2022	8/10/2022			9/21/2022		11/14/2022	11/14/2023				
2022-026	10521 Spyglass Dr	Construction Complete	5/31/2022	7/13/2022	8/8/2022			7/20/2022	8/8/2022	8/8/2023			11/30/2022	
2022-027	Ivy Brook Northeast	Active		7/5/2022			8/17/2022		8/31/2022	8/31/2023				
2022-028	Quarry Lake Park Restroom	Active		7/6/2022	7/8/2022		7/20/2022		7/22/2022	7/22/2023				
2022-029	Reliakor	Closed		7/20/2022			8/17/2022		9/19/2022	9/19/2023				10/28/2022
2022-030	Frenchies Metals	Incomplete		7/22/2022										
2022-031	RSI Marine	Pre-Permit		7/18/2022		8/17/2022								
2022-034	Valleyfair Parking	Conditional Approval		9/26/2022	10/11/2022		10/19/2022							
2022-036	Structures Inc. Amendment	Conditional Approval		10/6/2022	12/2/2022		5/9/2023							
2022-037	Peterson Wetland Bank	Incomplete		5/23/2023		11/16/2022								

Permit Number	Project Name	Status	Pre-Permit Meeting	Date Received	Date Considered Complete	Board Actions			Permit Issued	Permit Expiration Date	First Renewal Expiration	Second Renewal Expiration	Construction Completed	Date Permit Closed
						Information Only	Conditional Approval	Approval						
2022-039	Former Knox Site	Active		11/3/2022	12/19/2022		1/18/2023		6/6/2023	6/6/2024				
2022-040	Burnsville Sanitary Landfill	Conditional Approval		11/21/2022	2/15/2023		3/15/2023							
2022-041	35W SP 2782-352	Active		12/15/2022	2/10/2023		2/15/2023		4/10/2023	4/10/2024				
2022-042	3rd Street Bridge Replacement	Conditional Approval		12/16/2022	2/2/2023		2/15/2023							
2023-001	Lakota Lane After-the-Fact	Under Review		1/10/2023										
2023-002	Eagle Creek Bridge	Conditional Approval		1/13/2023	4/19/2023		5/9/2023							
2023-003	Ernst & Reidele Potential Development	No Permit Required		1/17/2023										
2023-004	CenterPoint Hwy 13 and Lynn Project	No Permit Required		1/24/2023										
2023-005	Cargill Savage West Safety Improvement Project	No Permit Required		1/25/2023										
2023-006	Borca Family DNR Dewater Review	No Permit Required		1/23/2023										
2023-007	MN River Greenway Trail	Conditional Approval		3/1/2023	3/15/2023		4/19/2023							
2023-008	Chaska Tech Center	Active		3/4/2023	4/11/2023		4/19/2023		5/15/2023	5/15/2024				
2023-009*	AT&T Bloomington to Eureka Fiber	Conditional Approval		3/31/2023	5/19/2023		6/21/2023							
2023-010	MN River Greenway RR Bridge	On Hold	4/5/2023											
2023-011	Quarry Lake Playground	Active		4/19/2023	4/24/2023	5/9/2023		4/24/2023	4/24/2023	4/24/2024				
2023-012	Concourse G Infill Pods 2-3	Active		5/4/2023	5/30/2023	6/21/2023		5/31/2023	5/31/2023	5/31/2024				
2023-013	Merriam Junction Trail	Incomplete	4/5/2023	5/8/2023										
2023-014	KTI Fencing Property	Incomplete		5/16/2023										
2023-015	City of Bloomington Storm Sewer Maintenance	Incomplete		5/24/2023										
2023-016	MAC Pond Maintenance Activities	Under Review		6/9/2023										

Permit Number	Project Name	Status	Pre-Permit Meeting	Date Received	Date Considered Complete	Board Actions			Permit Issued	Permit Expiration Date	First Renewal Expiration	Second Renewal Expiration	Construction Completed	Date Permit Closed
						Information Only	Conditional Approval	Approval						

**Conditional Approval, staff recommendation only, has not yet been presented to the Board for action*

STATUS DEFINITIONS:
Active Permit: Applicant has a valid permit issued by LMRWD
Cancelled by Applicant: Applicant withdrew their application for a LMRWD permit
Closed: Applicant has indicated the project has completed construction and that the permit file may be closed
Conditional Approval: LMRWD managers conditionally approved the permit application, pending receipt of additional information from applicant
Expired: Applicant either obtained conditional approval, approval, and/or was issued a permit and the expiration date has passed
Incomplete: Applicant applied for a permit, but the application is incomplete
No Permit Required: Applicant applied for a permit, but during the completeness review, it was determined that the project did not trigger the regulatory thresholds
On Hold: Applicant requested their application be placed on hold
Pre-Permit: Applicant has requested pre-permit application reviews or meetings, but has not yet applied for a permit from LMRWD
Under Review: Permit application is complete and under review by LMRWD staff
Construction Complete: project construction is complete but permit is not closed

LOWER MINNESOTA RIVER
WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, June 21, 2023

Agenda Item
Item 4. G. – Request for reimbursement for 2022 Educator Mini-grant Program

Prepared By
Linda Loomis, Administrator

Summary
In 2022, the LMRWD Board of Managers approved two educator mini-grants. One for Jefferson High School and one for Black Hawk Middle School. Jefferson High School asked for funding to provide bus transportation and equipment to sample Nine Mile Creek (within the LMRWD) for dissolved Oxygen, turbidity, microorganisms and water quality. It turned out that Jefferson High School did not need the grant, funding came from another source.

Black Hawk Middle School was approved for a grant to purchase equipment to allow 7th grade students to study wetland ecology in the pond on the school campus. The grant allowed teacher Shannon Lee to purchase waders, field microscopes and other equipment needed to study wetlands. Ms. Lee is requesting reimbursement for the purchases and has provided a report, pictures, and receipts. The Board should review the report and authorize reimbursement.

Solicitations for 2023 Educator Mini-grants were sent to teachers in May.

Attachments
Final report from Black Hawk Middle School Educator Mini-grant

Recommended Action
Motion to reimburse Black Hawk Middle School $500 for the costs of the project.

Educator Mini-Grant Program
Reimbursement and Reporting Request Form

Name of School/Organization:

Black Hawk Middle School

First Name: Shannon

Last Name: Lee

Email: shannon.lee@district196.or(

Phone: 651-683-8521

Address of School/Organization

Street Address:

1540 Deerwood Drive

Address line 2:

City: Eagan

State: MN

Zip Code: 55122

When and where did the activity/project take place?

The week of Monday May 22, 2023. A small pond next to Black Hawk Middle School.

Describe how your activity or project engaged participants?

Students have the opportunity to spend time outside studying the ecosystem of a pond. Many kids in a suburb don't spend much time outside paying attention to nature. As we work on our Field and Pond Study guide. I see and hear them talking about plants and animals in different ways. They are naming parts of the ecosystem and noticing organisms that they didn't know existed. I have been surprised at how excited they get when they see a microorgansim move while looking at them in a microscope. We use microscopes in class, but I think getting their own samples changes they way they look at things.

We also study the water quality of the pond and how it supports life in the aquatice ecosystem. I like giving them the chance to use real water testing supplies to check for dissolved minerals. I think some kids see possibilities for further study and maybe careers. The fields of study that open up to them during this activity are different from what we study inside a classroom.

Total number of participants:

165 plus another 5 classes ı

List your relevant expenses:

Pocket Microscopes = 270.00
Pond Master Test Kit = 34.98
pH Test Strips = 21.54
4 chest waders = 159.96
7 in 1 Test Kit = 10.99
Ice Cube Trays = 12.98
Total = 510.45

Refund amount (cannot be more than the original award amount):

$ 500

Please provide information for the check recipient:

First Name: Kristen

Last Name: Powell

Street Address: 1540 Deerwood Drive

Address line 2:

City: Eagan

State: MN

Zip Code: 55122

Please submit photos of your activity or project in action. Include the photographer's name in the photo file name and email to admin@lowermnriverwd.org.

amazon.com

Final Details for Order #113-0236502-1710618

Paid By: Independent School District 196
Placed By: Kristen Powell
Order Placed: April 20, 2023
Amazon.com order number: 113-0236502-1710618
Order Total: $159.96

Business order information

Deliver to:(building): Black Hawk Middle School
Deliver to:(name): Kristen Powell
Purchase description details: Waders for 7th grade science

Shipped on April 20, 2023

Items Ordered — **Price**

1 of: *SaphiRose Men's Bootfoot Chest Wader 2-Ply Nylon/PVC Waterproof Fishing & Hunting Waders with Boots Hanger for Men and Women Camouflage Men 9/Women 11* — $39.99
Sold by: SaphiRose (seller profile) | Product question? (Ask Seller)
Condition: New

Shipping Address:
ISD196 - Central Receiving - BHMS
4187 BRADDOCK TRL
EAGAN, MN 55123-1575
United States

Shipping Speed:
FREE Prime Delivery

Item(s) Subtotal:	$39.99
Shipping & Handling:	$0.00
Total before tax:	$39.99
Sales Tax:	$0.00
Total for This Shipment:	**$39.99**

Shipped on April 20, 2023

Items Ordered — **Price**

1 of: *SaphiRose Men's Bootfoot Chest Wader 2-Ply Nylon/PVC Waterproof Fishing & Hunting Waders with Boots Hanger for Men and Women Camouflage Men 9/Women 11* — $39.99
Sold by: SaphiRose (seller profile) | Product question? (Ask Seller)
Condition: New

Shipping Address:
ISD196 - Central Receiving - BHMS
4187 BRADDOCK TRL
EAGAN, MN 55123-1575
United States

Shipping Speed:
FREE Prime Delivery

Item(s) Subtotal:	$39.99
Shipping & Handling:	$0.00
Total before tax:	$39.99
Sales Tax:	$0.00
Total for This Shipment:	**$39.99**

Shipped on April 20, 2023

Items Ordered	Price
1 of: *SaphiRose Men's Bootfoot Chest Wader 2-Ply Nylon/PVC Waterproof Fishing & Hunting Waders with Boots Hanger for Men and Women Camouflage Men 9/Women 11* Sold by: SaphiRose (seller profile) | Product question? (Ask Seller) Condition: New	$39.99

Shipping Address:		
ISD196 - Central Receiving - BHMS 4187 BRADDOCK TRL EAGAN, MN 55123-1575 United States	Item(s) Subtotal: Shipping & Handling: Total before tax: Sales Tax:	$39.99 $0.00 $39.99 $0.00
Shipping Speed: FREE Prime Delivery	**Total for This Shipment:**	**$39.99**

Shipped on April 22, 2023

Items Ordered	Price
1 of: *SaphiRose Men's Bootfoot Chest Wader 2-Ply Nylon/PVC Waterproof Fishing & Hunting Waders with Boots Hanger for Men and Women Black Men 12* Sold by: SaphiRose (seller profile) | Product question? (Ask Seller) Condition: New	$39.99

Shipping Address:		
ISD196 - Central Receiving - BHMS 4187 BRADDOCK TRL EAGAN, MN 55123-1575 United States	Item(s) Subtotal: Shipping & Handling: Total before tax: Sales Tax:	$39.99 $0.00 $39.99 $0.00
Shipping Speed: FREE Prime Delivery	**Total for This Shipment:**	**$39.99**

Payment information

Payment Method:		
Visa | Last digits: 1002	Item(s) Subtotal: Shipping & Handling: Total before tax: **Estimated Tax:** **Grand Total:**	$159.96 $0.00 $159.96 $0.00 **$159.96**
Credit Card transactions	Visa ending in 1002: April 22, 2023: $159.96	

To view the status of your order, return to Order Summary .

amazon.com

Final Details for Order #112-9433010-9136250

Paid By: Independent School District 196
Placed By: Kristen Powell
Order Placed: April 18, 2023
Amazon.com order number: 112-9433010-9136250
Order Total: $34.98

Business order Information

Deliver to:(building): Black Hawk Middle School
Deliver to:(name): Kristen Powell
Purchase description details: Science supplies - 7th grade

Shipped on April 18, 2023

Items Ordered	Price
1 of: *API POND MASTER TEST KIT Pond Water Test Kit 500-Test* Sold by: Amazon.com Condition: New	$34.98

Shipping Address:
ISD196 - Central Receiving - BHMS
4187 BRADDOCK TRL
EAGAN, MN 55123-1575
United States

Shipping Speed:
FREE Prime Delivery

Item(s) Subtotal:	$34.98
Shipping & Handling:	$0.00
Total before tax:	$34.98
Sales Tax:	$0.00
Total for This Shipment:	**$34.98**

Payment information

Payment Method:
Visa | Last digits: 1002

Item(s) Subtotal:	$34.98
Shipping & Handling:	$0.00
Total before tax:	$34.98
Estimated Tax:	$0.00
Grand Total:	**$34.98**

Credit Card transactions — Visa ending in 1002: April 18, 2023: $34.98

To view the status of your order, return to Order Summary .

amazon.com

Final Details for Order #112-5630194-2116258

Paid By: Independent School District 196
Placed By: Kristen Powell
Order Placed: April 18, 2023
Amazon.com order number: 112-5630194-2116258
Order Total: $21.54

Business order information

Deliver to:(building): Black Hawk Middle School
Deliver to:(name): Kristen Powell
Purchase description details: Science supplies - 7th grade

Shipped on April 21, 2023

Items Ordered	Price
1 of: *Hach 2745650 pH Test Strips, 4-9 pH Units* Sold by: Hach Company (seller profile) Condition: New	$21.54

Shipping Address:
ISD196 - Central Receiving - BHMS
4187 BRADDOCK TRL
EAGAN, MN 55123-1575
United States

Shipping Speed:
Economy Shipping

Item(s) Subtotal:	$21.54
Shipping & Handling:	$0.00
Total before tax:	$21.54
Sales Tax:	$0.00
Total for This Shipment:	**$21.54**

Payment information

Payment Method:
Visa | Last digits: 1002

Item(s) Subtotal:	$21.54
Shipping & Handling:	$0.00
Total before tax:	$21.54
Estimated Tax:	$0.00
Grand Total:	**$21.54**

Credit Card transactions — Visa ending in 1002: April 21, 2023: $21.54

To view the status of your order, return to Order Summary .

amazon.com

Final Details for Order #112-0061877-3397005

Paid By: Independent School District 196
Placed By: Kristen Powell
Order Placed: April 18, 2023
Amazon.com order number: 112-0061877-3397005
Order Total: $23.97

Business order information

Deliver to:(building): Black Hawk Middle School
Deliver to:(name): Kristen Powell
Purchase description details: Science supplies - 7th grade

Shipped on April 19, 2023

Items Ordered	Price
1 of: *Umlecoa 7 in 1 Aquarium Test Kit for Freshwater and Saltwater - 125 Aquarium Test Strips with Test Tube & Thermometer - Fast & Accurate Water Testing* Sold by: Umlecoa Warehouse (seller profile) Condition: New	$10.99

Shipping Address:
ISD196 - Central Receiving - BHMS
4187 BRADDOCK TRL
EAGAN, MN 55123-1575
United States

Shipping Speed:
Standard Shipping

Item(s) Subtotal:	$10.99
Shipping & Handling:	$0.00
Total before tax:	$10.99
Sales Tax:	$0.00
Total for This Shipment:	**$10.99**

Shipped on April 19, 2023

Items Ordered	Price
2 of: *Small Size 4 Pack Ice Cube Trays for Mini Fridge Freezer - Stackable Plastic Easy Release Molds* Sold by: BetterBize (seller profile) Condition: New	$6.49

Shipping Address:
ISD196 - Central Receiving - BHMS
4187 BRADDOCK TRL
EAGAN, MN 55123-1575
United States

Shipping Speed:
Standard Shipping

Item(s) Subtotal:	$12.98
Shipping & Handling:	$0.00
Total before tax:	$12.98
Sales Tax:	$0.00
Total for This Shipment:	**$12.98**

Payment information

Payment Method: Visa | Last digits: 1002	Item(s) Subtotal: $23.97 Shipping & Handling: $0.00 --- Total before tax: $23.97 **Estimated Tax:** $0.00 --- **Grand Total:** **$23.97**
Credit Card transactions	Visa ending in 1002: April 19, 2023: $23.97

To view the status of your order, return to Order Summary .

amazon.com

Final Details for Order #112-1427150-2817012

Paid By: Independent School District 196
Placed By: Kristen Powell
Order Placed: April 10, 2023
Amazon.com order number: 112-1427150-2817012
Order Total: $270.00

Business order information

Deliver to:(building): Black Hawk Middle School
Deliver to:(name): Kristen Powell

Shipped on April 11, 2023

Items Ordered	Price
20 of: *Carson MicroBrite 20x-40x LED Lighted Pocket Microscope for Learning, Education and Exploring (MM-24)* Sold by: Amazon (seller profile) Business Price Condition: New	$13.50

Shipping Address:
ISD196 - Central Receiving - BHMS
4187 BRADDOCK TRL
EAGAN, MN 55123-1575
United States

Shipping Speed:
FREE Prime Delivery

Item(s) Subtotal:	$270.00
Shipping & Handling:	$0.00
Total before tax:	$270.00
Sales Tax:	$0.00
Total for This Shipment:	**$270.00**

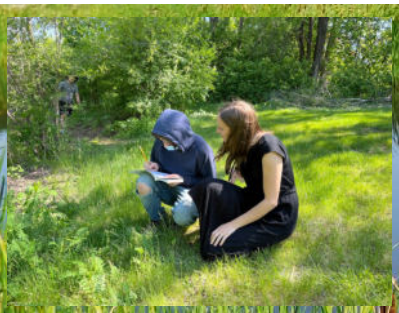
Payment information

Payment Method:
Visa | Last digits: 1002

Item(s) Subtotal:	$270.00
Shipping & Handling:	$0.00
Total before tax:	$270.00
Estimated Tax:	$0.00
Grand Total:	**$270.00**

Credit Card transactions — Visa ending in 1002: April 11, 2023: $270.00

To view the status of your order, return to Order Summary .



Black Hawk Middle School 7th Grade Pond Study

Photos by Shannon Lee

LOWER MINNESOTA RIVER
WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, June 21, 2023

Agenda Item
Item 4. H. - Concourse G Infill Pods 2-3 Phase 1 & 2 (LMRWD No. 2023-012) Administrative Approval

Prepared By
Linda Loomis, Administrator

Summary
The Metropolitan Airport Commission (MAC) plans capital improvements at the Minneapolis/St. Paul Airport annually. (MAC) does not have an LGU permit from the LMRWD, so work that triggers LMRWD rules require a permit from the LMRWD. The Concourse G Infill project met the qualifications for an Administrative approval, which was granted. Details of the project and the LMRWD review of the project, performed by Young Environmental Consulting Group is attached for the Board's information.

Attachments
Technical Memorandum - Concourse G Infill Pods 2-3 Phase 1&2 (LMRWD No. 2023-012) Administrative Approval

Recommended Action
No action recommended

Young Environmental Consulting Group, LLC

Technical Memorandum

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

From: Erica Bock, Water Resources Scientist
Hannah LeClaire, PE, Project Manager

Date: June 14, 2023

Re: Concourse G Infill Pods 2-3 Phase 1 & 2 (LMRWD No.2023-012)
Administrative Approval

The Metropolitan Airports Commission (MAC) has applied for an individual project permit from the Lower Minnesota River Watershed District (LMRWD) for phases 1 and 2 of the Concourse G Infill Pods 2-3 (Project). The overall project will span multiple years, intended to expand Concourse G at Terminal 1 along outbound Glumack Drive at the Minneapolis-St. Paul International Airport Campus. Phase 1 of the Project includes removal and replacement of concrete pavement to support the realignment of the storm sewer and duct bank (Figure 1). Phase 2 of the Project includes reconstruction of apron, taxiway, and deicing pad pavements to support a future concourse building expansion on the public side of the concourse (Figure 2). The applicant's engineer, Kimley-Horn, submitted the permit application, associated applicant exhibits, and site plans for the Concourse G Infill Pods 2-3 project.

Because Phase 1 and 2 of the Project use the same regional stormwater treatment, support the same development project, and occur within the same construction limits, the LMRWD prefers to issue the project as one permit. Phase 1 and 2 of the Project will disturb 1.8 acres and create no new impervious area. There will be a total of 1.7 acres of reconstructed impervious in the project area. Phase 1 of the project began construction June 1. Phase 2 of the project plans to begin in July of 2023. Because MAC does not have its LMRWD municipal permit, this project requires an LMRWD individual permit.

Summary

Project Name: Concourse G Infill Pods 2-3 Phase 1 and 2

Purpose: Site and utility projects to realign storm sewer, duct bank, and roadway lighting along Glumack Drive to prepare foundations for expansions to Concourse G.

Project Size:

Area Disturbed	Existing Impervious Area	Proposed Impervious Area	Net Increase Impervious Area
1.8 acres	1.78 acres	1.68 acres	-0.1 acres

Location: Glumack Drive, Terminal 1, Minneapolis-St. Paul International Airport (MSP)

LMRWD Rules: Rule B – Erosion and Sediment Control
Rule D – Stormwater Management

Recommended Board Action: Information Only

Discussion

The LMRWD received the following documents for review:

- LMRWD online permit application; received May 4, 2023
- Final Signed Phase 1 Construction plans, by Alliiance; received May 18, 2023
- Bid Set Phase 2 Construction plans, by Alliiance; dated May 15, 2023; received May 18, 2023
- Concourse G Infill Pods 2-3 Phase 1 and 2 – Existing Regional Stormwater Management Review, by Kimley-Horn; dated May 16, 2023; received May 18, 2023
- Preliminary Design of Retention Pond for I-494 Watershed at Fort Snelling National Cemetery, by Liesch Associates, Inc.; dated August 1999; received May 24, 2023
- 2001 Runway 17-35 Trunk Storm Sewer Phase III: Water Quality Ponds, by URS; dated April 2, 2001; received May 24, 2023
- Draft Runway 17-35 Stormwater Management Plan, by Liesch Associates, Inc.; dated January 2002; received May 24, 2023
- Individual National Pollutant Discharge Elimination System (NPDES) permit; received May 25, 2023

- Subcontractor information; received May 25, 2023
- Minnesota Pollution Control Agency (MPCA) Application Complete Letter; received May 30, 2023

The application was deemed complete on May 30, 2023, 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 **1.8 acres** within the LMRWD boundary. The applicant has provided an erosion and sediment control plan, a Stormwater Pollution Prevention Plan (SWPPP), and a copy of the facilities' Individual NPDES Permit. Chapter 9, Section 1.1, of their permit states that any construction activities occurring at MSP are governed by this individual permit and construction activities are exempt from having to obtain coverage under the NPDES General Stormwater Permit for Construction Activities. Kimley-Horn also provided contact information for the contractors and site inspectors. The project complies with Rule B.

Contractor:
Ed Kieger
Minnesota Paving and Materials
651-328-3275
Ed.Kieger@minnpm.com

Site Inspector:
Allan Sapp
612-280-3851
Allan.Sapp@kimley-horn.com

Rule D – Stormwater Management

The Project proposes to reconstruct **1.68** acres of impervious surfaces as part of Phase 1 and 2 and as such triggers LMRWD Rule D Stormwater Management. The existing impervious surface within the project area drains to MAC Pond #2 (Figure 3). The applicant provided construction plans and accompanying design report for the existing stormwater pond. The stormwater pond was constructed in the early 2000s to comply with the MAC's NPDES permit, which required removal of total suspended solids (TSS). It was estimated that 90% of annual runoff flows to the stormwater pond. The TSS removal efficiency was estimated to be between 88% and 96%.

Table 1 summarizes the design features of the stormwater pond:

Watershed Area	Normal Pool Depth	Normal Pool Volume	Live Storage Depth	Live Storage Volume
312 acres	5 feet	12.6 acre-feet	3 feet	9.5 acre-feet

Although the existing stormwater pond was not originally designed in accordance with today's standards, it does provide essential rate control, volume control, and water quality benefits. Over the years, the MAC has continued to comply with their NPDES permit through maintenance of this pond. There is no increase in impervious surface proposed for this project, and reconstruction of the existing impervious surface will not increase discharges to the pond, volume of runoff, or nutrient load. Long-term planning and upcoming capital improvement projects for the MSP airport have recently prompted the need to update stormwater management in the area to determine how regional stormwater treatment can be implemented to meet water resource goals.

A meeting was held on May 21 and May 25 with LMRWD, Kimley-Horn, and MAC to discuss the project schedule, LMRWD permitting requirements, and current stormwater management for the site. Project staff informed the LMRWD that the expected construction start date for Phase 1 was June 1, 2023. They acknowledged that the project triggers Rule D and that projects must be approved by the LMRWD Board of Managers before a permit can be issued. However, because the MAC is currently undergoing a stormwater management study to determine treatment of existing impervious surfaces, they do not yet have updated information on the treatment capacity of MAC Pond #2. The stormwater management study has an anticipated completion date of late 2023 with the expectation that new regional stormwater facilities will provide treatment for the MAC's capital improvement projects.

Recommendations

Because the project is not creating new impervious surface and all reconstructed impervious surfaces drain to existing stormwater management facilities, the information submitted was considered complete with the expectation that the LMRWD will receive a copy of the final stormwater report showing existing treatment. In addition, it is expected that MAC will continue to treat the impervious surfaces of the MSP campus as needed in accordance with their current Individual NPDES Permit.

Staff recommended approval of an LMRWD permit for the Project to accommodate the rigid construction timelines for Phase 1 and 2. The LMRWD Administrator signed and issued the permit on May 31, 2023. The MAC is interested in obtaining their local governmental unit (LGU) permit and the LMRWD intends to work closely with MAC to

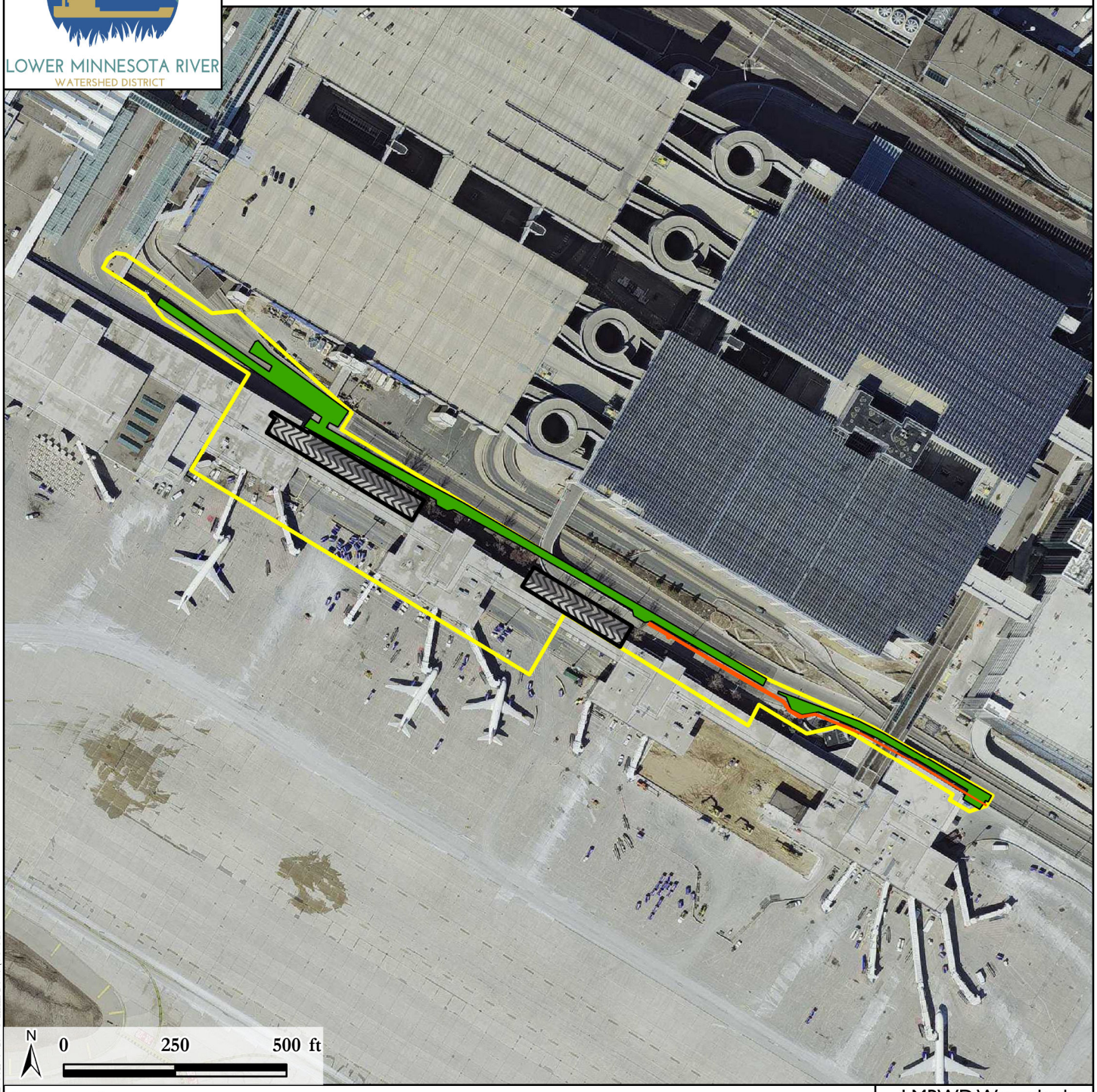
ensure that their design standards meet the LMRWD's minimum requirements. This memorandum acts as notification that a permit was issued for the Concourse G Infill Pods 2-3 project and no Board action is required at this time.

Attachments

- Figure 1—Concourse G Infill Pods 2-3 Phase 1 Project Location Map
- Figure 2—Concourse G Infill Pods 2-3 Phase 2 Project Location Map
- Figure 3—MAC Drainage Areas

LOWER MINNESOTA RIVER
WATERSHED DISTRICT

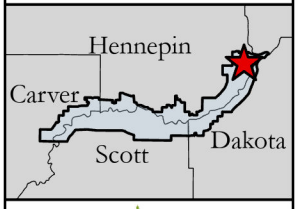
Figure 1: Concourse G Infill Pods Phase 1 Project Location
LMRWD No. 2023-012



Legend

- Project Location
- Reconstructed Concrete Pavement
- Reconstructed Concrete Walk
- Proposed Pods

LMRWD Watershed Location Map

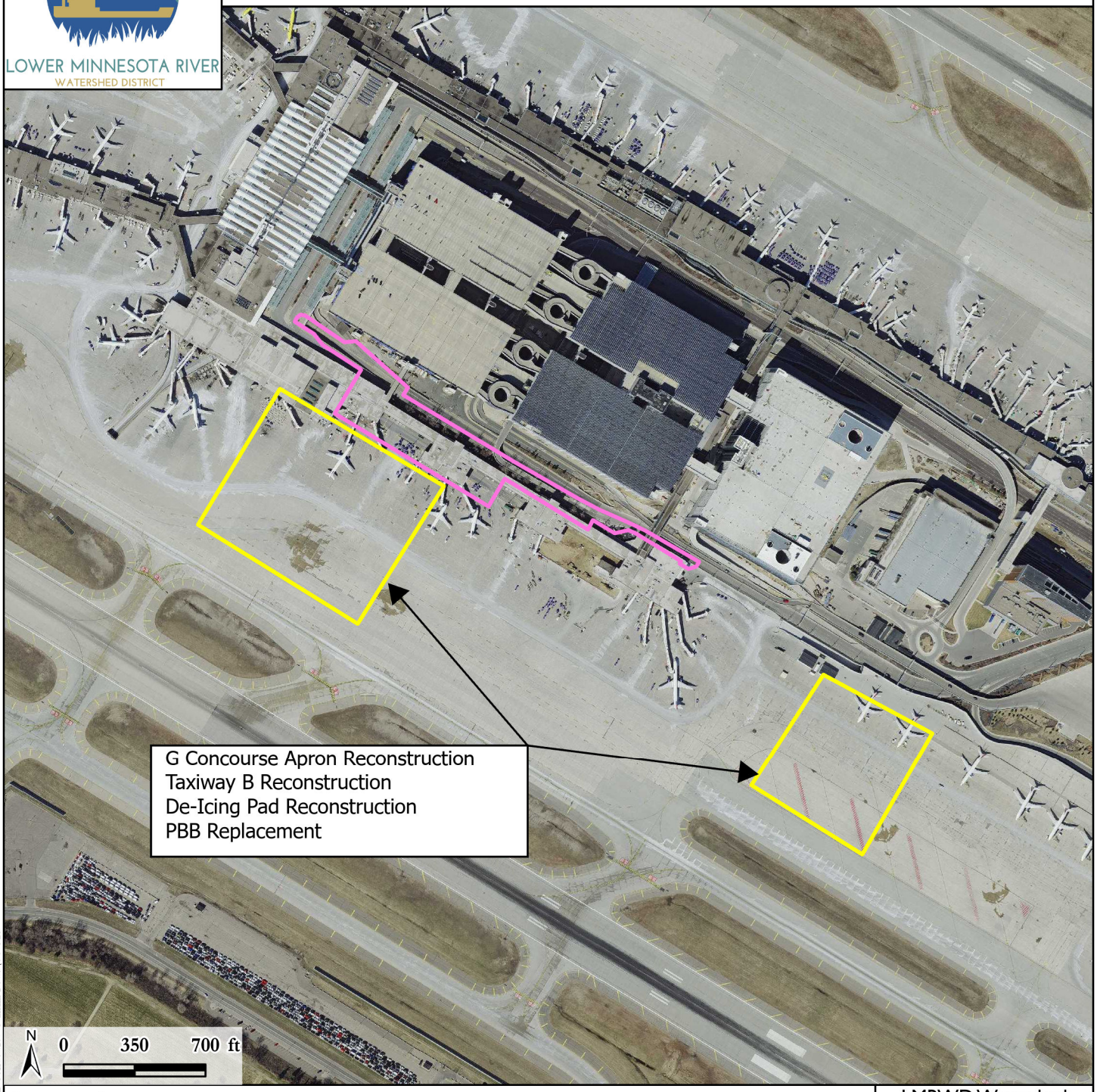


Young Environmental Consulting Group, LLC

Projects\LMRWD\Project Reviews\02 In Process\2023-012 Concourse G Infill Pods\04 GIS

Figure 2: Concourse G Infill Pods Phase 2 Project Location
LMRWD No. 2023-012

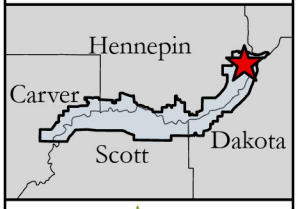
LOWER MINNESOTA RIVER
WATERSHED DISTRICT



Legend

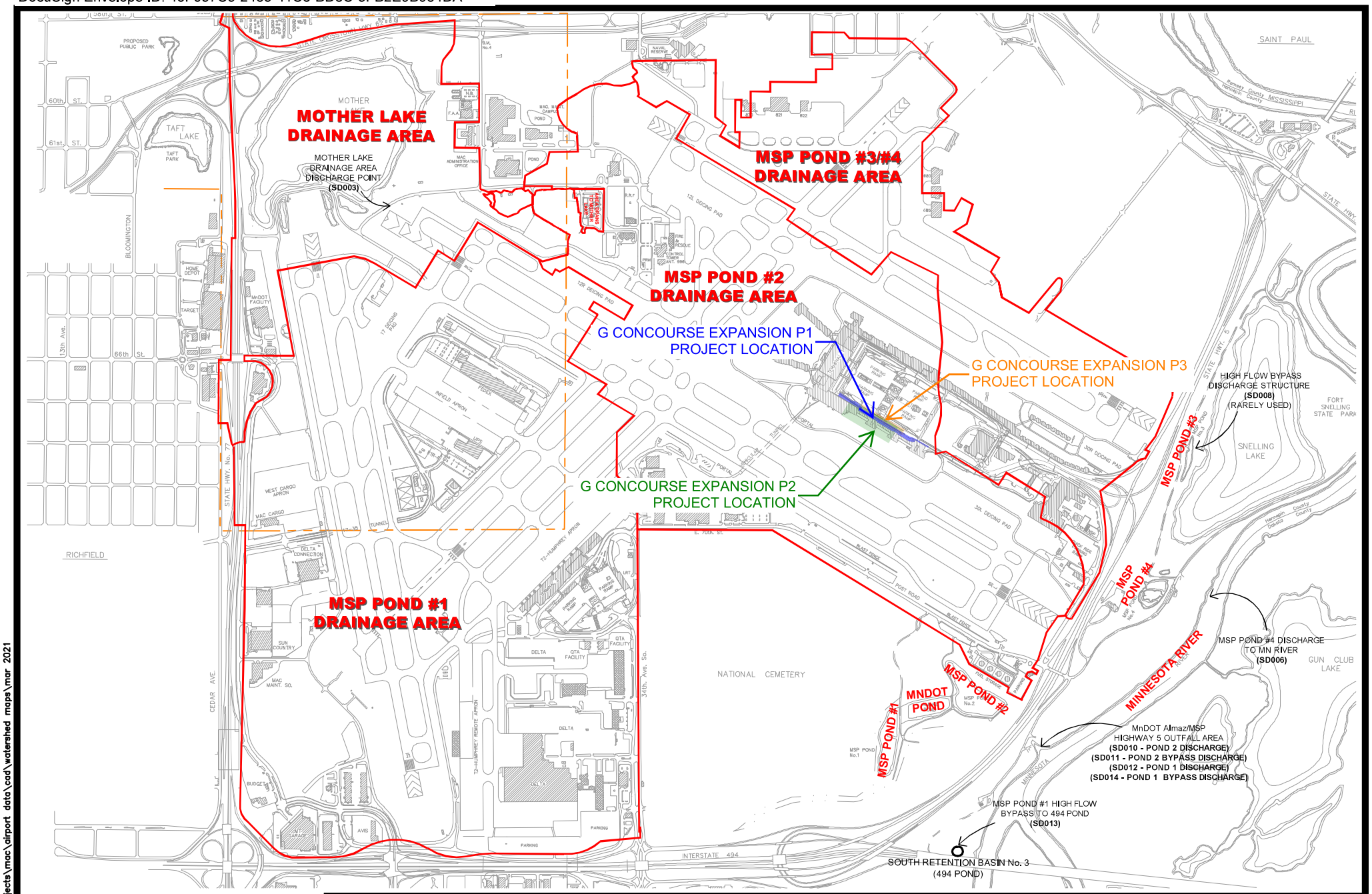
- Phase 2 Project Location
- Phase 1 Project Location

LMRWD Watershed Location Map



Young Environmental Consulting Group, LLC

Projects\LMRWD\Project Reviews\02 In Process\2023-012 Concourse G Infill Pods\04 GIS



Terracon
Consulting Engineers & Scientists

Mpls-St. Paul International Airport	Jun 21
MSP Drainage Areas	Figure 1

MOK 03-04-21 n:\liesch_projects\mac\airport data\cad\watershed maps\mar 2021

LOWER MINNESOTA RIVER
WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, June 21, 2023

Agenda Item
Item 5. A. – Eagan River Valley Acres (RVA) – Funding Request Review

Prepared By
Linda Loomis, Administrator

Summary
When the LMRWD held its municipal coordination meeting with the City of Eagan, the City asked about LMRWD financial participation in this project. The City has submitted the proposal for the project and Young Environmental Consulting Group reviewed the project on behalf of the LMRWD. The evaluation and recommendations are attached in Technical Memorandum – Eagan River Valley Acres (RVA) – Funding Request dated June 14, 2023.

Funds for the projects will come from the Watershed Resource Restoration Fund.

Attachments
Technical Memorandum – Eagan River Valley Acres (RVA) – Funding Request dated June 14, 2023

Recommended Action
Motion to conditionally approve funding request as recommended

Young Environmental Consulting Group, LLC

Technical Memorandum

To: Linda Loomis, Administrator
Lower Minnesota River Watershed District

From: Erica Bock, Water Resources Scientist
Hannah LeClaire, PE, Water Resources Engineer
Della Schall Young, PMP, CPESC, CTF, Project Manager

Date: June 14, 2023

Re: Eagan River Valley Acres (RVA)—Funding Request Review

At the January 17, 2023, Lower Minnesota River Watershed District (LMRWD) Municipal Coordination meeting with the City of Eagan (City), the City shared that there is a planned public improvement project for River Valley Acres (RVA) that was expected to start in the upcoming months. The LMRWD reminded the City that the LMRWD is open to partnership opportunities and funding support for gully improvement projects that potentially reduce sediment load to the Minnesota River.

On April 6, 2023, the City submitted a plan set and cost estimate for the RVA ravine stabilization for the LMRWD to consider for Water Resource Restoration funds. Young Environmental Consulting Group, LLC, (Young Environmental) reviewed the project in line with the previously developed evaluation form (Attachment 1) and reached out to the City with follow-up questions on April 20, 2023. The City provided additional information about the project on May 31, 2023. This memo summarizes Young Environmental's funding evaluation of the project.

RVA Project Request and Evaluation

The City is requesting funding from the LMRWD to stabilize a ravine located in the Steep Slopes Overlay District (SSOD) on public land near the north corner of the property at 1715 Yankee Doodle Road, Eagan, MN 55121 (Figure 1). Approximately 5.6 acres of developed land drains toward the top of the slope into the existing storm sewer system, which discharges into a City stormwater pond (located northeast of the ravine). The existing storm sewer system is undersized resulting in periodic surcharges leading to overland flow that has caused erosion of two ravines, shown in the pictures in Attachment 2. The cost for the ravine stabilization is $56,925 (Attachment 3).

The project proposes to modify the existing manhole at the top of the slope by adding a flow splitter. The flow splitter will connect to new storm sewer placed within existing ravine #1 to safely convey overland flow down the steep slope. Riprap will be placed over the pipe to further protect the ravine from erosion. Ravine #2 will be restored with controlled fill and graded to match the existing slope. Both ravines will be seeded with appropriate native seed mix and stabilized with biodegradable netting erosion control blankets. The proposed design components can be seen in the Grading and Restoration Plan, included as Figure 2.

Construction is proposed for the winter of 2023-2024. The City is requesting $42,694, which is 75% of the estimated total project cost for the ravine stabilization (Attachment 2). This ravine has not been evaluated by Young Environmental during previous gully surveys.

Table 1 shows the scoring of the project based on alignment with goals, policies, and strategies of the LMRWD Watershed Management Plan.

Table 1: City of Eagan RVA Project Funding Request Scoring

Scoring Metric	Scoring Comments	Additional Point Opportunities	Project Score	Max Points
1. Project Type	The RVA Project addresses goals within the City's 2040 Comprehensive Plan and Surface Water Management Plan. Additionally, this is a gully (ravine) restoration project located within the SSOD, which is a high priority of the LMRWD.	The RVA Project is not listed as a Capital Improvement Project in the City's 2040 Comprehensive Plan and Surface Water Management Plan. The project is also not a direct tributary to the Minnesota River.	19	24
2. Plan Goals Addressed	Ravine stabilization addresses Goal 2: Surface Water Management and Goal 7: Erosion and Sediment Control in the LMRWD Watershed Management Plan.	The RVA Project only address two out of the nine LMRWD Watershed Management Plan Goals.	2	9
3. Water Capture	The project does not provide volume control and no points were awarded for this category.	The Water Capture Score gives credit to projects that meet or exceed the standards for stormwater runoff volume management.	0	7

Scoring Metric	Scoring Comments	Additional Point Opportunities	Project Score	Max Points
4. Pollutant Management	The project provides pollutant management by stabilizing the ravine, which will greatly reduce total suspended solids (TSS) and total phosphorus (TP) downstream. The project engineer estimates that approximately 16 tons of sediment and 3.2 pounds of TP are lost from this ravine annually. The project will stabilize the ravine to prevent further soil and nutrient loss.	Maximum points awarded.	7	7
5. Habitat Restoration	This project provides a secondary benefit to habit by seeding the disturbed areas with native seed mixtures that provide food and habitat for wildlife.	Projects that include habitat creation or enhancement as the primary purpose of the project receive a score of seven.	3	7
6. Bank Stabilization	The project proposes ravine bank restoration. The ravine exhibits several traits of instability, including fallen trees, undercut banks, lack of vegetation, and incision (Attachment 2).	Maximum points awarded.	7	7
7. Watershed Benefits	The ravine discharges to a public stormwater pond and then into Gravel Pit Lake (DNR Public Water 19012800), which ultimately drains to the Minnesota River. Gravel Pit Lake is located in the Minnesota River floodplain.	Because the project is located in the downstream portion of the watershed, it has low to moderate watershed benefits.	3	7
8. Partnership Opportunities	The City has provided funding details and intends to contribute the remaining funds to implement the project. As part of LMRWD Strategy 7.3.1, the LMRWD aims to partner with local governmental units (LGUs) to fund projects that address gully erosion.	Maximum points awarded.	7	7

Scoring Metric	Scoring Comments	Additional Point Opportunities	Project Score	Max Points
9. Public Education	The project is located on public land but is not easily accessible.	Opportunities to incorporate public education and signage are limited. The project received one point because it is on public land.	1	7
Total Score			**49**	**82**

Project Scoring

Based on the presented information, the RVA Project received a score of 49 points out of a maximum 82 points, placing it in the moderate-to-high priority category for the LMRWD (Table 1, Attachment 1). This category qualifies the project for partial funding.

Funding Recommendation

Staff recommends contributing 15% of the project cost, which equates to $8,539 of the estimated project cost. The final contributed dollar amount will be based on the awarded construction contract. The project addresses several goals in both the LMRWD Watershed Management Plan as well as the City's comprehensive plan and surface water management plan. It proposes to stabilize a gully located in the SSOD, which remains a high priority for the LMRWD. Furthermore, the project follows the LMRWD's strategy of partnering with municipalities to leverage financial resources and improve natural resources within the LMRWD boundaries.

Before funds can be released, the following information is required:

- Documentation that the project meets the permitting requirements of the LMRWD and other regulatory agencies
- Final signed construction plans and specifications
- Awarded contract and bid information
- Executed grant and maintenance agreement
- Payments from the LMRWD are reimbursement-based and require receipts of paid invoices as well as a summary of the work completed as part of the receipt/invoice

Attachments

Figure 1—Eagan River Valley Acres Project Ravine Stabilization Location Map

Figure 2—Grading and Restoration Plan

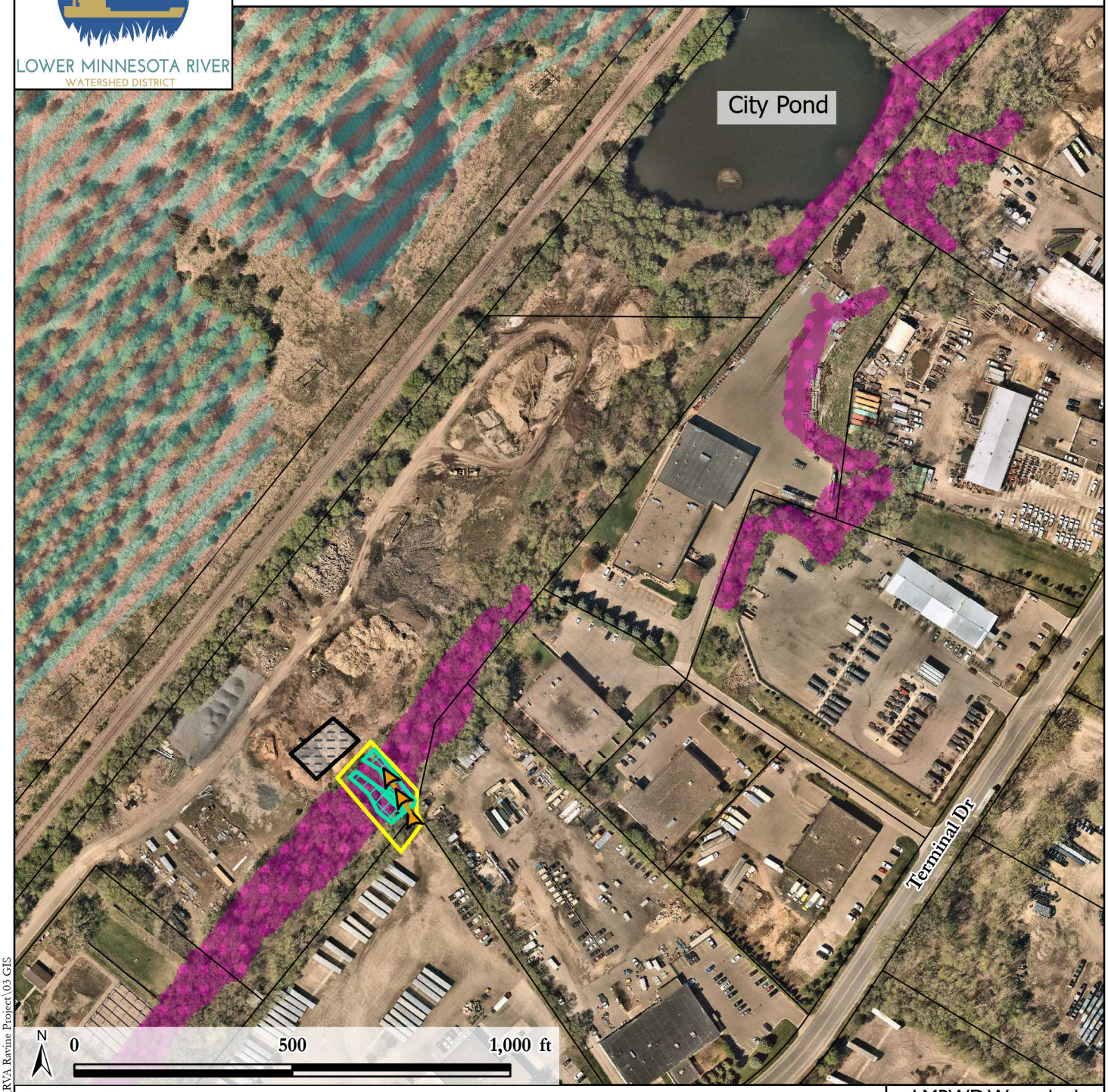
Attachment 1—Funding Request Evaluation

Attachment 2—Ravine Stabilization Site existing conditions photos

Attachment 3—City of Eagan RVA Site Improvements Cost Estimate

Eagan River Valley Acres Project
Ravine Stabilization

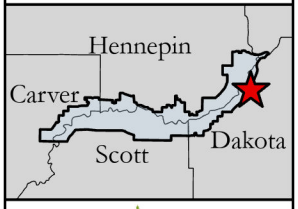
LOWER MINNESOTA RIVER
WATERSHED DISTRICT



Legend

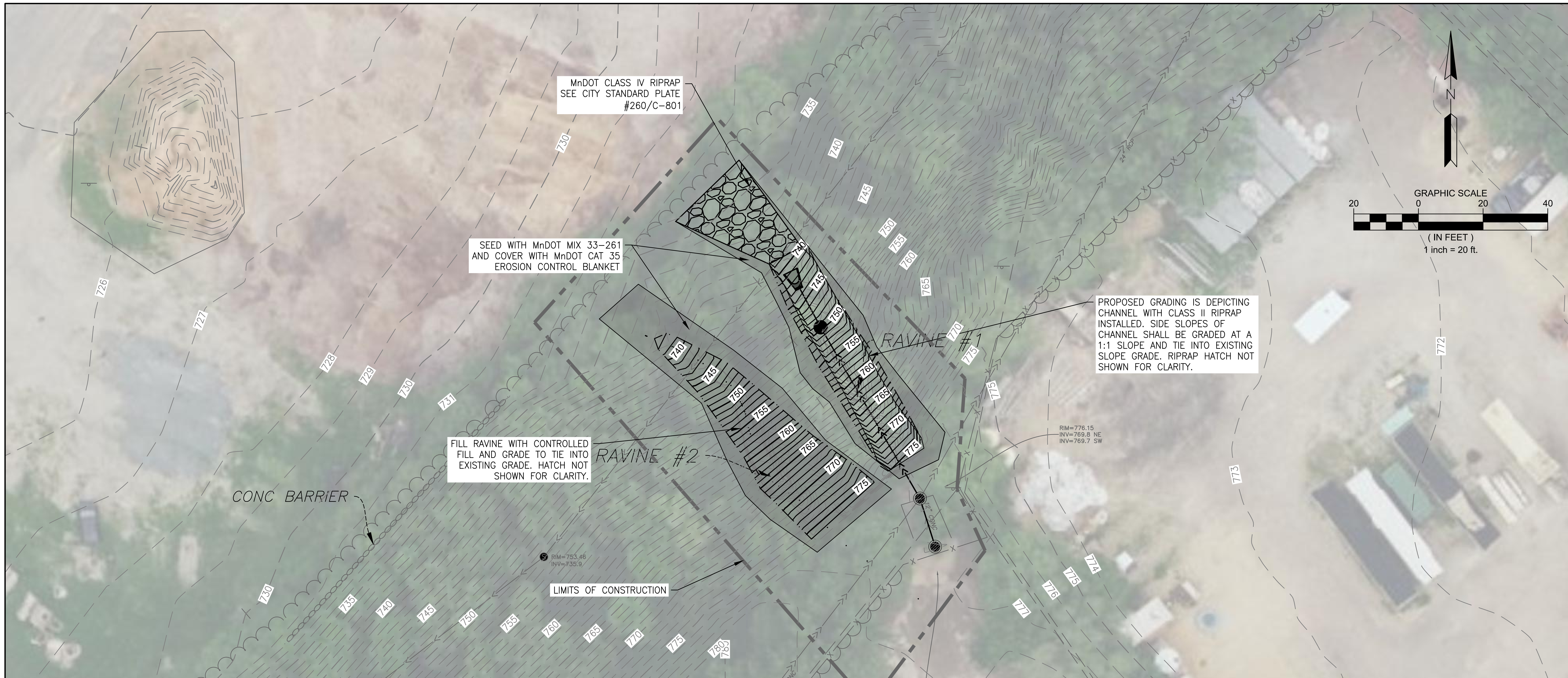
- Limits of Construction
- Construction Staging Area
- Ravine
- Proposed Storm Sewer
- Floodway
- Parcels
- Steep Slope Overlay District

LMRWD Watershed Location Map



Young Environmental Consulting Group, LLC

Projects\LMRWD\Municipal Oversight\Eagan\05 Grants\RVA Ravine Project\03 GIS



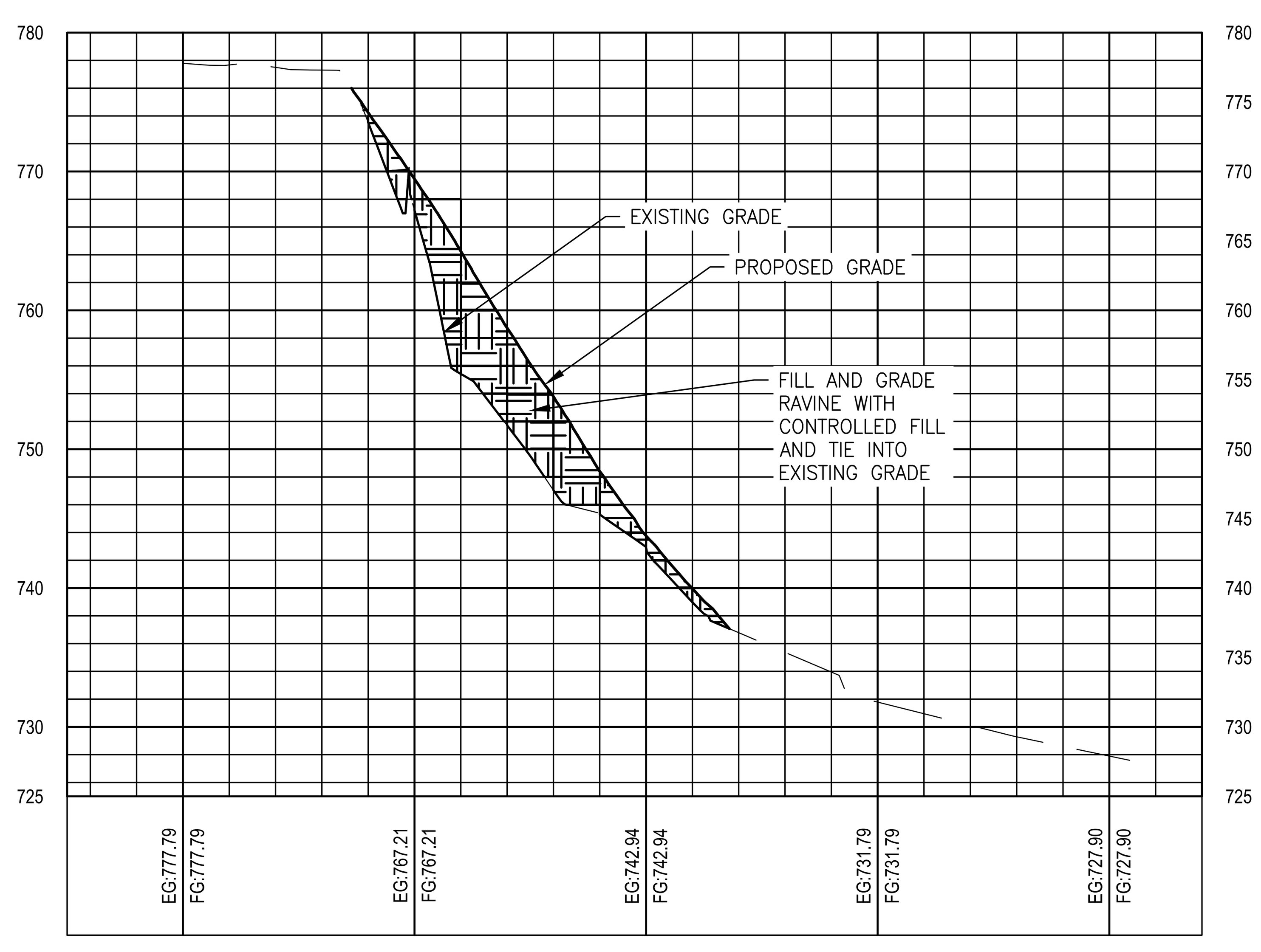
GRADING & RESTORATION LEGEND

- PROPERTY LINE
- EASEMENT LINE
- LIMITS OF CONSTRUCTION
- 9XX EXISTING CONTOUR
- 9XX PROPOSED CONTOUR
- PROPOSED CLASS IV RIPRAP
- PROPOSED MN NATIVE SEED MIX 33-261 AND CATEGORY 35 EROSION CONTROL BLANKET
- CONTROLLED FILL

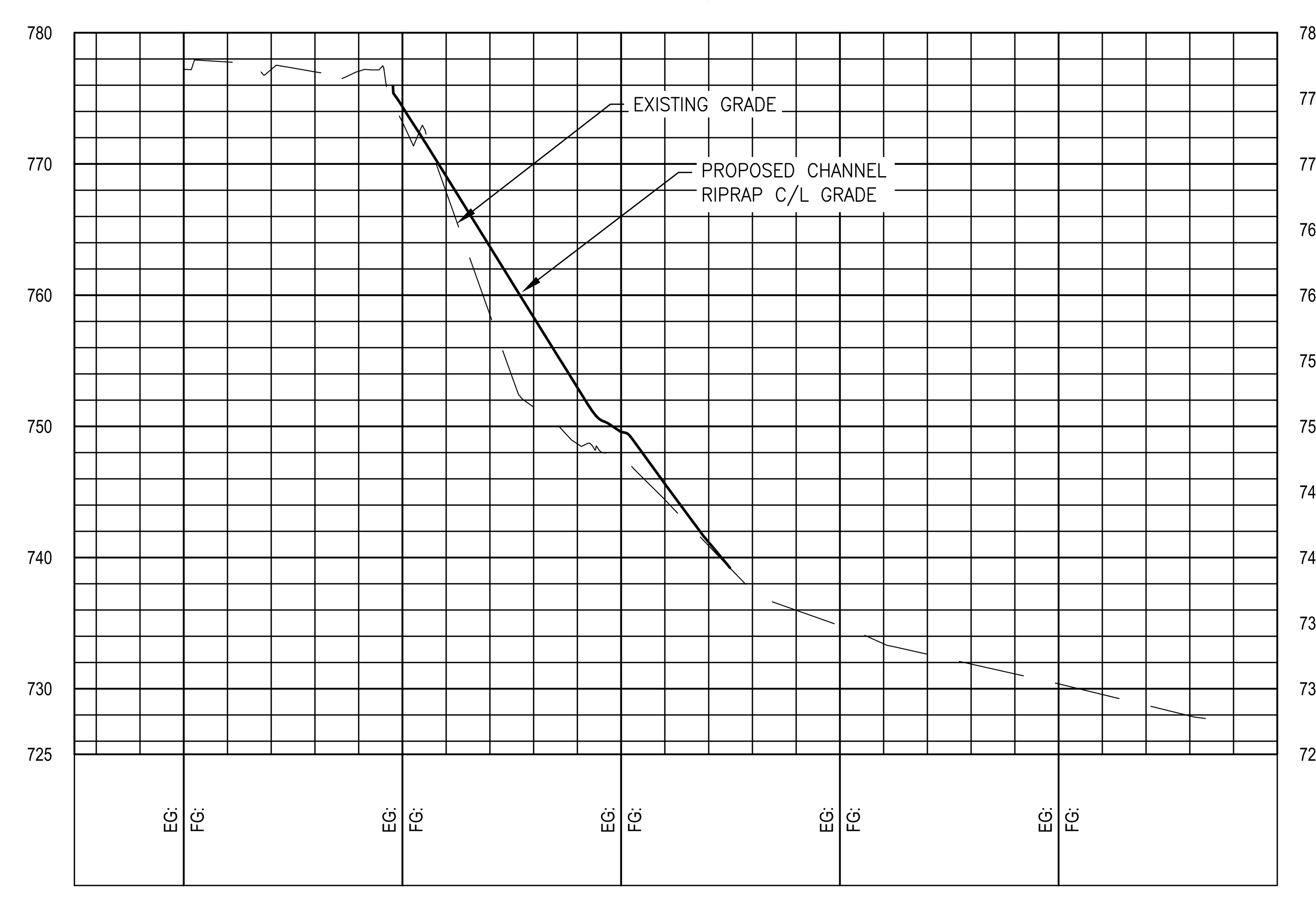
NOTES

1. CONTRACTOR SHALL OBTAIN ENGINEER'S AND CITY'S APPROVAL PRIOR TO DISTURBING AREA OUTSIDE EXISTING CITY EASEMENT. IF APPROVAL IS NOT PROVIDED, CONTRACTOR SHALL LIMIT EXCAVATION SOLELY TO AREAS WITHIN CITY PROPERTY AND EASEMENT.
2. CONTRACTOR SHALL USE CONSTRUCTION MATTING AND LOW-IMPACT EQUIPMENT WITH RUBBER TRACKS TO MINIMIZE SOIL DISTURBANCE.
3. CONTRACTOR SHALL RESTORE ACCESS ROUTE AND OTHER DISTURBED AREAS TO EXISTING CONDITIONS PRIOR TO SEEDING.
4. SEE SHEET C-002 FOR ADDITIONAL NOTES.

Ravine 2 PROFILE



Ravine 1 PROFILE



GRAPHIC SCALE
30 0 30 60
(IN FEET)
1 inch = 30 ft.

WARNING:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND/OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

CALL BEFORE YOU DIG

GOPHER STATE ONE CALL

TWIN CITY AREA: 651-454-0002
TOLL FREE 1-800-252-1166

Stantec

2080 WOODDALE DRIVE, SUITE 100
WOODBURY, MN 55125
PHONE: 651-294-4580
FAX: 651-228-1969

CLIENT:

EAGAN

CITY OF EAGAN
3501 COACHMAN POINT
EAGAN, MN 55122

PROJECT TITLE:

CITY PROJECT XXX
EAGAN RVA RAVINE AND DREDGING PROJECT
CITY OF EAGAN
DAKOTA COUNTY, MINNESOTA

ISSUE NO.	DESCRIPTION	DATE
1	90% CONSTRUCTION PLANS	09/13/2022

CERTIFICATION:

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

NOT FOR CONSTRUCTION

License #: 44653
Date: XX/XX/2022

PROJECT NO.: 227704210

DWN BY:	CHK'D BY:	APP'D BY:
JTW	MA	TES

ISSUE DATE: 09/13/2022

ISSUE NO.: 1

SHEET TITLE:
GRADING AND RESTORATION PLAN

SHEET NO.:
C-301

Attachment 1—Funding Request Evaluation

Funding Request Evaluation

LMRWD continues to receive inquiries from municipalities and other partners for project funding support. Historically, because the requests were infrequent and appeared to compete with other requests or priorities, the decision to provide financial assistance was not supported by documented criteria nor scoring. Recently, with the request from the City of Carver for the levee project, Young Environmental developed the following scoring system, which was applied to this request.

The goal of the scoring system is to establish impartial and fair evaluations for all District funding requests based on the project's alignment with the goals, policies, and strategies of the LMRWD Watershed Management Plan. Projects are scored on nine different metrics, detailed below, for a possible 82 points.

1. **Project Type (Maximum 24 points):** The Project Type Score considers whether a proposed project is tributary to an impaired waterway, if it solves an issue previously identified by the community or LMRWD plans, and whether the project is explicitly included in the community or LMRWD plans. Points are awarded based on how well the project aligns with the community or LMRWD plans.
2. **Plan Goals (Maximum 9 points):** The Plan Goals Score gives credit depending on how well-aligned a proposed project is with the goals of the LMRWD Watershed Plan. Projects are assigned a score of 0 through 9 based on how many of the LMRD's goals are addressed.
3. **Water Capture (Maximum 7 points):** The Water Capture Score gives credit to projects that meet or exceed the standards for stormwater runoff volume management. Projects are assigned a score of 0 to 7 based on the amount of volume reduction that the proposed project provides.
4. **Pollutant Management (Maximum 7 points):** The Pollutant Management Score gives credit to projects that meet or exceed the amount of water quality treatment provided beyond what is required for regulatory purposes. Projects without a pollutant reduction component will receive a score of 0, whereas those that reduce pollutant loading to downstream resources can receive a score of up to 7.
5. **Habitat Restoration (Maximum 7 points):** The Habitat Restoration Score gives credit to projects that provide habitat benefits. Projects with no habitat benefit receive a score of 0. Projects likely to achieve habitat benefits as a secondary project benefit receive a score of 3. Projects that include a replacement of the existing habitat with an improved habitat receive a score of 5. Projects that include habitat creation or enhancement as the primary purpose of the project receive a score of 7.

6. **Bank Stabilization (Maximum 7 points):** The Bank Stabilization Score gives credit to projects that restore or stabilize degraded gullies, streambanks or shorelines. A project is assigned a bank stabilization score based on the length of the gully, streambank, or shoreline restored or stabilized and the level of existing degradation. This metric is only applied to projects with a designed restoration component (versus indirect benefits). Projects without a designed bank or shoreline restoration component are assigned a score of 0.
7. **Watershed Benefits (Maximum 7 points):** The Watershed Benefits Score gives credit to projects that provide benefits beyond the immediate site location. Scores are based on where the proposed project is located within the watershed, giving greater weight to those near headwaters.
8. **Partnership Opportunities (Maximum 7 points):** The Partnership Opportunity Score gives credit to projects that allow the LMRWD to partner with other organizations. The LMRWD is interested in being a project partner with its member communities. A project receives the maximum score of 7 if one or more of the partners is a financial contributor to the project.
9. **Public Education (Maximum 7 points):** The Public Education Score gives credit to projects that spread awareness of the LMRWD's projects and their benefits to the public. The score is based on the accessibility of the final project, giving the greatest weight to those on public lands with public access.

Using the total points scored, projects fit in one of four priority categories (e.g., low, low-to-moderate, moderate-to-high, high), as shown in Table 1.

Table 1. LMRWD Funding Request Scoring Priority

Project Score	Priority	Recommended Action
0–19	Low	Do not recommend funding requests at this time; additional information may be needed to evaluate the potential project more fully.
20–40	Low-to-Moderate	Work with project sponsors to incorporate more District goals, policies, or strategies.
41–61	Moderate-to-High	Consider partial funding requests, with funding amount and design components that align with District priorities.
62–82	High	Recommend full funding request as presented.

Attachment 2— Ravine Stabilization Site existing conditions photos

OPINION OF PROBABLE COST
CITY OF EAGAN
EAGAN RVA SITE IMPROVMENTS - RAVINE STABILIZATION & POND CP-8 SEDIMENT REMOVAL
227704210
90% PLANS
October 3, 2022

RAVINE AND CP-8 SEDIMENT DELTA REMOVAL - COMBINED PROJECT COST						RAVINE (ONLY) PORTION OF COST			
NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE	UNIT	QUANTITY	UNIT PRICE	**TOTAL PRICE**
BASE BID SCHEDULE									
1	MOBILIZATION	LS	1	$ 11,000.00	$ 11,000.00	LS	1	$ 5,500.00	$ 5,500.00
2	TEMPORARY DEWATERING	LS	1	$ 30,000.00	$ 30,000.00				$ -
3	TREE REMOVAL	EA	20	$ 550.00	$ 11,000.00	EA	10	$ 550.00	$ 5,500.00
4	BRUSH CLEARING	AC	0.43	$ 10,000.00	$ 4,300.00	AC	0.2	$ 10,000.00	$ 2,000.00
5	MUCK EXCAVATION - OFFSITE (E[illegible])	CY	1915	$ 70.00	$ 134,050.00				$ -
6	SILT FENCE	LF	870	$ 3.00	$ 2,610.00	LF	200	$ 3.00	$ 600.00
7	FLOATING SILT CURTAIN, TYPE S[illegible]ILL WATER - M[illegible]INT[illegible]INED	LF	750	$ 5.00	$ 3,750.00				$ -
8	INLET PROTECTION	EA	2	$ 200.00	$ 400.00				$ -
9	12" HDPE STORM PIPE	LF	88	$ 100.00	$ 8,800.00	LF	88	$ 100.00	$ 8,800.00
10	12" FLARED END SECTION (HDPE	EA	1	$ 500.00	$ 500.00	EA	1	$ 500.00	$ 500.00
11	CONNECT PIPE TO EXISTING STR[illegible]CTURE	EA	1	$ 2,000.00	$ 2,000.00	EA	1	$ 2,000.00	$ 2,000.00
12	NYLOPLAST STORM STRUCTURE [illegible]ND FITTINGS	EA	1	$ 8,000.00	$ 8,000.00	EA	1	$ 8,000.00	$ 8,000.00
13	CONTROLLED FILL (CV) (P)	CY	95	$ 50.00	$ 4,750.00	CY	95	$ 50.00	$ 4,750.00
14	EROSION CONTROL BLANKET CA[illegible]EGORY 35	SY	2500	$ 5.00	$ 12,500.00	SY	650	$ 5.00	$ 3,250.00
15	MnDOT CLASS II RIPRAP	TON	80	$ 80.00	$ 6,400.00	TON	80	$ 80.00	$ 6,400.00
16	MnDOT CLASS IV RIPRAP	TON	65	$ 120.00	$ 7,800.00	TON	65	$ 120.00	$ 7,800.00
17	GEOTEXTILE FABRIC TYPE IV (NO[illegible]-WOV[illegible]N)	SY	450	$ 3.50	$ 1,575.00	SY	450	$ 3.50	$ 1,575.00
18	MN DOT SEED MIX 33-261	LB	20	$ 25.00	$ 500.00	LB	10	$ 25.00	$ 250.00
	TOTAL CON[illegible]STRUCTION COST ESTIMATE				**$ 249,935.00**	**RAVINE PORTION OF COST (EST.)**			**$ 56,925.00**

Not part of this funding request

LOWER MINNESOTA RIVER
WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, June 21, 2023

Agenda Item
Item 5. B. – Lower Minnesota River East One Watershed One Plan Governance

Prepared By
Linda Loomis, Administrator

Summary
The Policy Committee for the Lower Minnesota River East One Watershed One Plan (LMRE 1W1P) is being asked to consider governance models to implement the LMRE 1W1P once it has been adopted. Several models have been presented by the MN Board of Water and Soil Resources (BWSR) to consider. Manager Amundson, who represents the LMRWD on the LMRE 1W1P Policy Committee, and I met with legal counsel to discuss the pros and cons of the models presented.

A draft plan is not available for review yet. However, the Policy committee is being asked to consider what kind of structure (and how it will be governed) will be developed to implement the plan. There may be drawbacks with each of the models proposed by BWSR. Staff and BWSR are pushing for a decision and would like direction from the Policy Committee to be provided at the July 20, 2023 Policy Committee meeting.

John Kolb, legal counsel for the LMRWD, has been involved with the development of other 1W1Ps, and will have more information for the Board to consider. Information provided by BWSR is attached along with a list of questions to consider when choosing a form of governance (the version of this document has comments provided by BWSR). A response from BWSR to questions posed by Scott County is attached too.

Attachments
MCIT - ABCs of JPEs: A Joint Powers Analysis and Worksheet
MN BWSR – Operational Structures for Water Management
Organizational Arrangement – Lower Minnesota River East One Watershed One Plan – Questions to Consider (with comments from BWSR)
Questions from Scott WMO and answers from BWSR dated 5-3-2020

Recommended Action
No action recommended

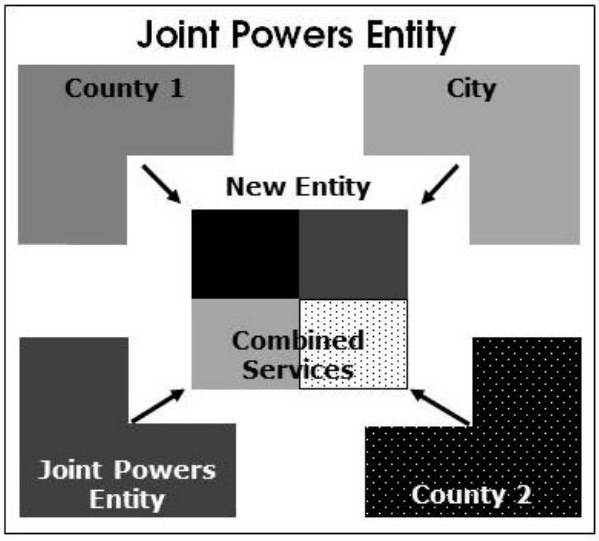
Minnesota Counties Intergovernmental Trust
MCIT Resource
100 Empire Drive, Suite 100, St. Paul, MN 55103-1885 • 651.209.6400 • 866.547.6516 • MCIT.org

The ABC's of JPEs: A Joint Powers Analysis and Worksheet

Date: *January 2023*

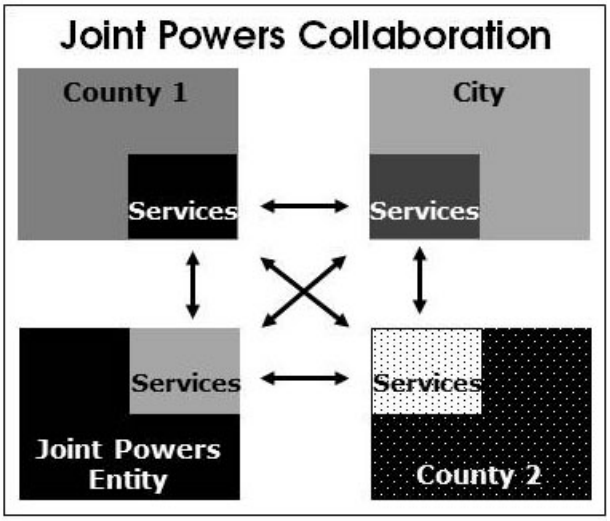
Public entities may look to the joint exercise of powers to deliver services efficiently and effectively. Protection is granted to governmental units (as defined by statute) that come together in accordance with Minnesota Statutes, Section 471.59 ("Joint Powers Act"). Specifically, this law provides that regardless of the number of participating governmental units, the joint powers may be treated as one governmental unit for purposes of liability.

Public entities coming together under the Joint Powers Act are required to enter into a joint powers agreement. A joint powers agreement can take different forms depending on the needs of the parties. A single set of liability limits for state tort claims apply when formed and operating pursuant to the statute. The agreement is the legal document that outlines how governmental units will work together. A joint powers agreement can be used to consolidate and transfer operations to a new entity (joint powers entity (JPE)) or it can resemble a contract where governmental units agree to collaborate and deliver a service (joint powers collaboration (JPC)).



Examples best suited to a joint powers entity:

- Joint health and human services board
- Minnesota Counties Intergovernmental Trust
- Regional adult mental health consortium



Examples best defined as a joint powers collaboration:

- Sharing an employee
- Joint ownership of a sand/salt shed
- Law enforcement assistance agreement

Joint Powers Agreement

When deciding to work with other governmental units, MCIT recommends doing so with a joint powers agreement. The agreement generally establishes either a joint powers entity or a joint powers collaboration.

Joint Powers Entity

A joint powers agreement may establish a separate, free-standing entity that may be subject to liability apart from its constituent members *if*:

- A separate board is established that operates autonomously from the boards of its constituent members.
- The joint powers could be held liable to a third party for damages caused by its activities, such as making independent decisions to receive or disburse funds, entering into contracts in the name of the group rather than under the name of a constituent member (e.g., county), employing staff or owning property in the name of the joint powers organization.

Joint Powers Collaboration

When governmental units develop a joint powers agreement in which they document their agreement to collaborate and deliver a service, they do not need to establish a separate, free-standing entity. The ability to make decisions remains with the governing body of each party to the agreement. Establishing a board is not always necessary. If a board or committee is established, it acts solely in an advisory capacity to the forming member boards.

Operation, form and coverage will eventually determine whether the group is forming an entity or engaging in a collaboration. How the joint powers will *operate* determines how the joint powers should *form,* which determines whether *coverage* will be needed.

Joint Powers Questionnaire

When representatives of each governmental unit discuss how they will operate, the following questions should be considered. MCIT recommends that members analyze their responses to the following questions in light of the criteria previously outlined. This list is not all inclusive but provides a basis for the discussion regarding operations.

Questions to Ask	Importance
Coming Together	
Who are the participating members?	**Minn. Stat. § 471.59*, Subd. 1** defines the term "governmental units." Only those governmental units defined by statute may enter into a joint powers agreement.
What are your common goals? • Which services or powers will be shared? • How do you plan to carry out or accomplish your goals?	A JPA under **Minn. Stat. § 471.59, Subd. 2** must define the purpose, as well as provide for the method by which the purpose sought will be accomplished or the manner in which the power will be exercised.

Questions to Ask	Importance
Why are you coming together? • To share ownership of property or to share operation of a facility? • To share an employee? • To carve out powers and establish a joint powers entity (e.g., regional mental health consortium) • To access funding sources? • To establish common procedures and protocols? • To provide services jointly? • Other reasons?	In addition to the purpose for the joint exercise of powers, the reason that you come together establishes the basic groundwork for drafting the joint powers agreement. Note: Certain entities are subject to additional regulation under Minn. Stat. § 471.59 including, but not limited to: • Subd. 11: Joint powers board established to issue bonds • Subd. 11: Family services collaborative under section 124D.23 or a children's mental health collaborative under section 124D.23 • Subd. 12: Joint exercise of peace officer or police powers • Subd. 13: Joint powers board for housing
Governance	
Will you need to establish a board or committee? • If so, explain duties, board make up, etc. • If a board is established and granted the authority to act autonomously from the boards of the participating governmental units, the joint powers agreement has established a joint powers entity.	**Minn. Stat. § 471.59, Subd. 2. Agreement to State Purpose:** "When the agreement provides for use of a joint board, the board shall be representative of the parties to the agreement. … Irrespective of the number, composition, terms or qualifications of its members, such boards are deemed to comply with statutory or charter provisions for a board for the exercise by any one of the parties of the power which is subject to the agreement."
Will the board have a name?	Although not specifically mentioned in statute, operating as a named organization may give the appearance that a separate legal entity exists. If a collaboration, ensure grants applications, contracts, etc. are not in the name of the board or collaboration.
Will the board have bonding authority?	**Minn. Stat. § 471.59, Subd. 11. Joint Powers Board:** "... A joint powers board established under this section may issue obligations and other forms of indebtedness only in accordance with express authority granted by the action of the governing bodies of the governmental units that established the joint board. …The joint powers board established under this subdivision must be composed solely of members of the governing bodies of the governmental units that established the joint powers board."
Operations: Contracts	
Will you enter into contracts to accomplish your goals?	**Minn. Stat. §471.59, Subd. 3. Disbursement of funds:** "… Contracts let and purchases made under the agreement shall conform to the requirements applicable to contracts and purchases of any one of the parties, as specified in the agreement."

Questions to Ask	Importance
In whose name will contracts be executed and who will have the authority to sign? • Fiscal agent? • Individual participating member? • In the name of the collaborating group?	The party in whose name a contract is executed and signed is the party that is obligated to carry out the contract. • If a contract is executed in the name of the fiscal agent on behalf of the participating governmental units, it is important to understand that the fiscal agent may be held liable according to the terms of the agreement. • JPC contracts must be executed and signed by the board of the participating governmental units. • If a joint powers board is granted the authority to enter into contracts executed in the name of the joint powers entity and signed by the joint powers board chair, the joint powers agreement has established a separate, free-standing entity with the authority to act autonomously from the boards of the governmental units that established the separate, free-standing entity.
Operations: Personnel	
Will personnel be needed?	This is an area that may create significant risk. Failing clearly to define and document intentions and procedures with respect to employees may result in misunderstandings and disagreements as to which entity is the employer. • The location from which the employee operates may be interpreted as the employer's premises. • The name of the entity shown on the employee's paycheck may be interpreted as the employer. • The party supervising or controlling the activities of the employee may be seen to be the employer. • The party that establishes the employee's personnel policies, job duties and defines the manner in which services are to be provided may be seen to be the employer. MCIT recommends defining and documenting the intent of the parties to the joint powers agreement prior to execution.
Joint powers collaboration	A JPC will not have employees. Employees of the participating members may be assigned duties but remain employees of the participating member.

Joint powers entity	A JPE may have employees, may enter into agreements with the participating governmental unit(s) to share their employee(s) or may enter into independent contractor agreements.
	• If a JPE has employees, consideration should be given as to who will conduct the interviews, hire and fire, and develop job descriptions.
	• A JPE with employees will be subject to public-sector employment requirements
	  ▪ Veterans Preference Act
	  ▪ Public Employees Labor Relations Act (PELRA)

Questions to Ask	Importance
	▪ Pay equity reporting ▪ Loudermill hearing before termination ▪ Public Employees Retirement Association (PERA) ▪ Other requirements, such as wage and benefit administration, unemployment and AWAIR (a workplace accident and injury reduction program) • A JPE may contract for human resources services: ▪ Paychecks must be in the name of the JPE ▪ Policies and procedures must be in the name of the JPE
Budget and Finance	
Where will you obtain funding and how will those funds be expended?	**Minn. Stat. § 471.59, Subd. 3 Disbursement of funds:** "… Strict accountability of all funds and report of all receipts and disbursements shall be provided for."
Joint powers collaboration	Funds are obtained and expended by the participating governmental units.
Joint powers entity	JPE may receive and disburse funds in the name of the JPE. JPE must have segregated bank accounts and its own tax identification number.
How will expenses, revenue and resources be allocated: population, percentage, equal shares, services provided on an in-kind basis?	Although this information is not required by statute, it is recommended that participating members make this determination prior to drafting the agreement. This may save expensive and time-consuming disagreements after the fact.
Fiscal agent?	Although these factors are not specifically required in the statute, determining this in advance is advantageous to the group. The statute does require a strict accountability of funds.
Joint powers collaboration	When a participating governmental unit acts as the fiscal agent and receives and disburses funds on behalf of the collaborating units, it is important to understand the fiscal agent may be the responsible/liable party.
Joint powers entity	The JPE should clearly define the expectations and responsibilities of the fiscal agent: • Which party will serve as fiscal agent? • For how long? • Will the fiscal agent change? If so, define circumstances in which a change may be made?

Questions to Ask	Importance
Property	
Will the property or facility be shared, jointly owned or jointly operated?	Although the statute only requires the agreement to address distribution of property upon completion of the joint powers agreement, MCIT recommends determining how the ownership, operation, storage and/or use of property will be handled in advance of developing the joint powers agreement.
Who will own the property?	Liability typically follows ownership. Therefore, participating members should be aware of potential responsibilities. If property is owned in the name of the new joint powers organization, establishing a joint powers entity may be necessary.
Where will property be stored/kept?	The party storing or keeping property may have some liability should the property sustain damage.
Which party will provide coverage?	Determining whether coverage will be placed and by whom is important to avoid misunderstandings after the fact.
How will costs be allocated?	• Cost of coverage? • Deductibles? • Maintenance and repair?
Legal Advice	
Who will serve as legal counsel? Joint Powers Collaboration Joint Powers Entity	Each participating governmental unit must receive individual legal advice. Identify the JPE's attorney: • Private counsel • County attorney • City attorney Is there a conflict of interest for the person chosen?
Membership	
Will parties be allowed to join after the fact? • If so, define the terms • What are the financial issues?	Although not required by statute, defining the procedure for adding new parties may prevent rewriting the entire joint powers agreement with all new signatures each time a member is added.

Questions to Ask	Importance
Will parties be allowed to withdraw from the agreement prior to expiration? • If so, define the terms • What are the financial issues?	The statute addresses dissolution, not withdrawal. What happens if one or more parties choose to withdraw from the agreement prior to expiration?
Dissolution	
What happens when the agreement ends?	**Minn. Stat. § 471.59, Subd. 4. Termination of Agreement:** "Such agreement may be continued for a definite term or until rescinded or terminated in accordance with its terms."
How will you dispose of jointly owned assets or jointly owned property?	**Minn. Stat. § 471.59, Subd. 5. Shall provide for distribution of property.** "Such agreement shall provide the distribution of property acquired as the result of such joint or cooperative exercise of powers, and the return of any surplus money in proportion to the contributions of the several contracting parties after the purpose of the agreement has been completed."

*For further explanation, see Minnesota Statutes Section 471.59

Liability

Members must also look at potential liabilities they might face because of their joint powers agreement. Although the protections from liability may be limited by Minnesota Statutes, Section 471.59, anytime members come together under a cooperative arrangement, activities or operations may expose the group to potential liability.

Joint Powers Entity

When forming a joint powers entity, MCIT recommends clearly transferring liability to the new joint powers entity. As such, the JPE should agree to protect, defend and hold the individual participants harmless from potential liability claims. With few exceptions, such a provision is required for MCIT membership.

The following is sample hold harmless and indemnification language that should be modified or tailored to fit each individual situation:

The [name of joint powers entity] agrees to defend, indemnify, and hold [name of individual participating members], its employees and officials harmless from any claims, demands, actions or causes of action, including reasonable attorney's fees and expenses arising out of any act or omission on the part of [name of joint powers entity] in the performance of or with relation to any of the work or services to be performed or furnished by [name of joint powers entity] under the agreement.

Joint Powers Collaboration

Although a joint powers agreement may not establish a separate, free-standing entity that may be subject to independent liability, important liability concerns remain.

Even though liability for damages is capped at the limit for one governmental entity, the statute does not state *which* of the participating entities will be responsible for paying those damages or for defending claims. It also does not state how potential damages should be allocated. If the intent of the joint powers collaboration is to share the cost of a claim, MCIT recommends specifying how those costs will be allocated in the agreement.

Example: The county, city and state jointly share ownership of a highway garage/maintenance facility. The costs involved in building the garage were split among the parties based upon the percentage of the facility that each would occupy. The city occupies only 10 percent of the building, the county occupies 35 percent and the state occupies the majority at 55 percent. The county agreed to maintain the common areas: hallways, restrooms, parking lot, etc.

A member of the public visits the building for a meeting with state staff members. The visitor trips on a bump in the blacktop in the parking lot, falling and breaking his hip.

Which party should be held responsible if there is a determination of negligence? Should it be the state because the visitor was the state's client? Should it be the county because it agreed to maintain the parking lot? Should the city be required to contribute based on its occupancy? If the costs are shared, what percentage should each party contribute?

Participating members of the joint powers collaboration should clearly apportion costs and responsibilities prior to drafting the agreement. MCIT recommends reaching an understanding *before* a claim occurs. Failing to do so opens the door to bringing all of the participating members into a claim or suit. The potential for disagreements after the fact can be difficult, time consuming and expensive.

Coverage for the Joint Exercise of Powers

Joint Powers Entity

When public entities consolidate and transfer duties to a new joint powers entity pursuant to Minnesota Statutes, Section 471.59, the new entity becomes a separate and distinct legal entity that has all the privileges, obligations and risks of its creating members. Therefore, the operations of the JPE and actions of the board and employees expose the entity to its own potential liability for claims and lawsuits.

A forming member's MCIT coverage is not extended to a joint powers entity. As a separate and distinct legal entity, the joint powers entity must place its own liability coverage to protect the entity, board and when applicable, the entity's employees.

Joint Powers Collaboration

Conversely, separate coverage is not necessary when MCIT members enter into a joint powers collaboration *if* the decision making remains with the individual parties to the agreement.

Frequently Asked Question

Members often ask if their MCIT coverage extends to county commissioners, other elected officials and employees serving on the joint powers board for claims arising out of those activities. Under the definition of "covered party," those individuals serving on other such boards are covered by their MCIT liability coverage, but *only* for their individual actions. The forming member's MCIT coverage does *not* extend to such an individual when a claim is made against a JPE board or as a whole or against an individual's conduct arising from the joint powers entity.

Securing Coverage for a Joint Powers Entity

Members may seek coverage for their joint powers entity with MCIT. Membership in MCIT requires the entity be subject to Minnesota Statutes, Chapter 466. This statute provides certain immunities and defenses to qualified entities in Minnesota. The statute also places a cap on the amount of damages that these entities are required to pay in the event they are found to be liable. Prospective members are encouraged to secure a legal opinion to determine their ability to qualify for the protections of Minnesota Statutes, Chapter 466.

Like all entities requesting membership, the joint powers entity must complete a risk assessment and provide MCIT copies of governing documents, such as its joint powers agreement and bylaws. Using this information, MCIT evaluates eligibility for membership. The cost of coverage for the new JPE depends on its size and operations. The cost of coverage/contribution is based on factors such as number of employees and board members, amount of property owned and the entity's published budget.

With few exceptions, if the joint powers entity would like membership in MCIT, the agreement must include all the Joint Powers Act requirements and transfer liability to the new entity via an appropriate hold harmless and indemnification clause. MCIT recommends specific language stating the entity will comply with the Open Meeting Law, Minnesota Statutes, Chapter 13D.

As a member of MCIT, the joint powers entity is provided the same coverage as all other public entities that participate in the program. MCIT's coverage is designed to address exposures unique to public entities. This includes coverage for Open Meeting Law and Minnesota Government Data Practices Act violations, employment claims and excessive force claims.

Members should contact their MCIT risk management consultant for information about the types of coverage available to the joint powers entity and the cost for it.

Risk Management Recommendations

Whether the joint powers agreement forms a new entity or a collaboration among the members, the following steps should be taken by the forming parties:

- Form in accordance with the Joint Powers Act: Minn. Stat., § 471.59
- Develop a clear understanding of the nature and intent of the agreement
- Clearly communicate the intended operations to legal counsel or the county attorney
- Form the agreement in accordance with the operations
- Operate in accordance with the form of the agreement

Risk Management Recommendations Specifically for JPEs

- Provide separate coverage for the joint powers entity
- Transfer liability to the joint powers entity
- Ensure that the JPE protects, defends and holds the individual participating members harmless from potential liability claims

Risk Management Recommendations Specifically for JPCs

- Define how liability will be allocated prior to receiving a potential claim
- Allocate costs and responsibilities in the joint powers agreement

BOARD OF WATER AND SOIL RESOURCES

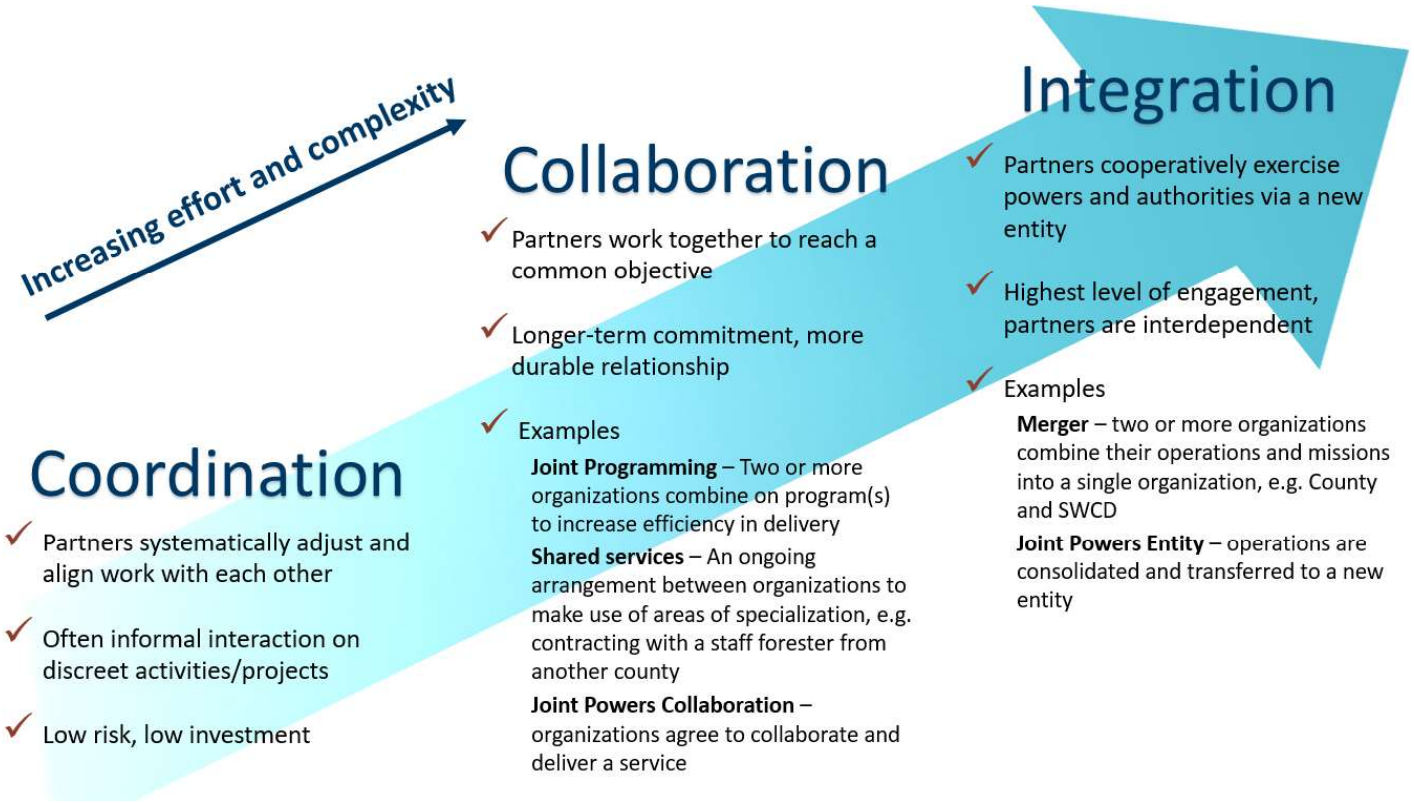
One Watershed, One Plan

Organizational Structures for Water Management

Supporting information for Section III of the 1W1P Operating Procedures and Section III.G.1 of the 1W1P Plan Content Requirements

This document provides considerations for local government units working as a partnership and defines different levels of collaboration. The last page includes a table that outlines the types of formal agreements and recommendations for their use in relation to the One Watershed, One Plan program.

Partnerships vary in level of effort (commitment to working together) and integration (formality of agreement). The purpose for working together should drive the type of partnership that gets established. The following graphic illustrates the continuum of these working relationships and does not indicate a desired progression. In other words, integration is simply the far end of the spectrum, not necessarily an end goal.



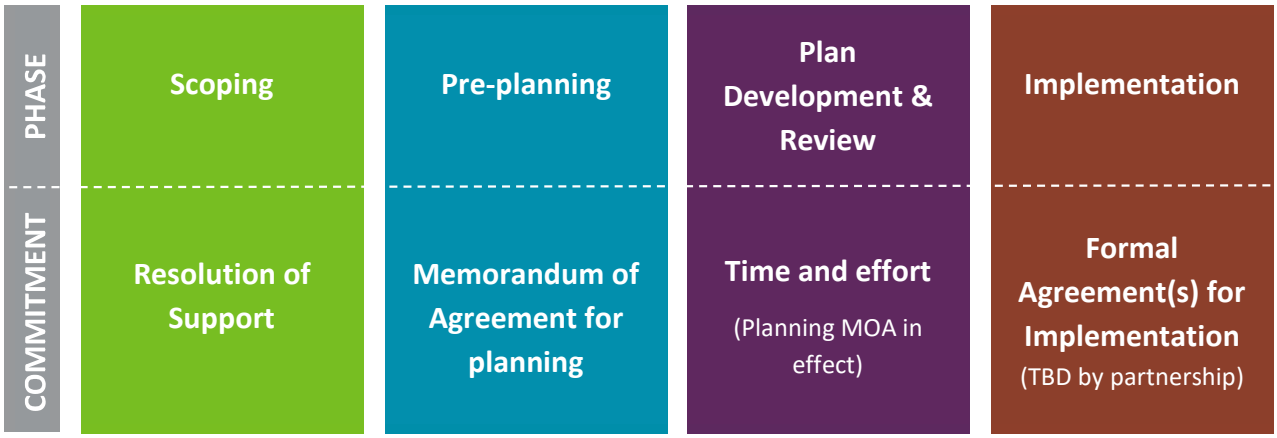
Through the One Watershed, One Plan program, partnerships of local governments come together to develop comprehensive watershed management plans. There are many benefits of being in partnership together:

- Improved efficiency in service delivery
- More consistent application of regulations
- Leverage of diverse strengths among the partners

- Distribution of workload
- More specialization in areas where staff are limited (through shared services)
- Shared risk in major capital projects

Planning Phases and Commitments

The planning partnership will likely enter into at least two agreements throughout the different phases of the One Watershed, One Plan process. As a first step, individual local governments may wish to pass a resolution of support as a signal of intent to participate in the program. This is not a requirement of 1W1P, but is considered a best practice. During the pre-planning phase, participating partners *must* enter into a Memorandum of Agreement (MOA) or other type of formal agreement (see section III.A of the One Watershed, One Plan Operating Procedures). The planning agreement will be in effect for the duration of the plan development and review process. Once the plan has been approved by the BWSR Board: if the planning partnership wishes to access BWSR's watershed-based funding, they will need to establish one or more formal agreements for plan implementation, the details of which should be driven by the actions included in the plan (e.g. shared services, collaborative grant-making) and the partnership's need to manage risk.



Formal Agreement Types and Recommended Uses

The One Watershed, One Plan program requires partnerships to establish a formal agreement during the plan development phase. BWSR suggests a formal agreement for the purposes of implementing their plan together (formal agreements are required for BWSR watershed-based funding). Formal agreements help manage risk and protect individual local governments from potential liabilities that could be associated with working in a partnership (see MN Statute §471.59). Note that a Joint Powers Agreement (JPA) only establishes a new entity if a Joint Powers Entity (JPE) is specifically formed. Both JPAs and JPEs are governed by MN Statute §471.59.

The information in the following table should not be considered legal advice; legal counsel of the participating organizations should be involved in crafting any new formal agreement. *The ABCs of JPEs* is a useful reference from the Minnesota Counties Intergovernmental Trust: https://www.mcit.org/resource/the-abcs-of-jpes-joint-powers-entities/.

Coordination

Collaboration

Integration

Formal Agreement Type	Considerations for One Watershed, One Plan (1W1P)
Memorandum of Agreement (MOA) / Memorandum of Understanding (MOU) ■ Does not create a new entity (layer of government) ■ Formal and outward commitment to work together as a partnership ■ Specifies mutually-accepted expectations and guidelines between partners ■ Not legally enforceable (if not being used as a contract or when MN Statute §471.59 is not referenced)	■ Signals intent of partners to work together; establishes roles and expectations. ■ Recommended formal agreement type for planning; meets minimum 1W1P program requirements for planning. ■ A partnership established with an MOA cannot receive funds directly (one member must be designated as a fiscal agent).Places risk associated with grant agreements – and control of dollars – on the grantee instead of legally sharing among the partners. (The risk for developing a plan is low; risks associated with implementation are higher. A JPA is recommended for implementation grants.)
Joint Powers Agreement (JPA) establishing a **Joint Powers Collaboration (JPC)** ■ Agreement to jointly deliver a service or product or manage or own property **without creating a new entity (any board associated with a JPA is advisory only)** ■ Legally binding ■ Must meet requirements of MN Statute §471.59	■ An existing JPA can be used as a formal agreement for plan development, provided it covers the elements required in the 1W1P Operating Procedures and all the required partners are involved. ■ A JPA is recommended for implementation grants and shared services. ■ How the partners distribute risk and dollars depends on the structure of the agreement and any other agreements between partners. (One partner acts as a grantee and fiscal agent, as with MOA/MOU).
Joint Powers Agreement (JPA) establishing a **Joint Powers Entity (JPE)** ■ Establishes a new entity or board that operates autonomously from the members ■ Risk and liability are transferred to the new entity ■ Legally binding ■ Must meet requirements of Minnesota Statute §471.59	■ The decision to use a JPE for plan implementation depends on the activities that will be pursued and the amount of risk and liability acceptable to the partners; consult legal counsel. ■ A JPE can accept grant funds (and associated risk for contracts) and hire staff.

Organizational Arrangement-Lower Minnesota River East One Watershed One Plan

Questions to Consider

Question	Joint Powers Collaboration	Joint Powers Entity
How does the partnership want to share services? This can include equipment, staff, and TSAs?	Under a Joint Powers Collaboration, you would have the ability to share services throughout the watershed, but would need additional subcontracts/agreements.	Under a Joint Powers Entity, you would have the ability to share services throughout the watershed without additional subcontracts/agreements.
How does the partnership want to share different watershed-based implementation funding sources?	No difference within a Collaboration or Entity in the ability to share different WBIF funding sources. **How Metro WBIF funds are utilized with Lower Minnesota River East 1W1P planning efforts are determined by metro entities not by the partnership*.*	
Does the partnership want the ability to hire staff directly? Or does the partnership want to hire staff through existing local government units?	Under a Joint Powers Collaboration, you would not have the ability to hire staff directly. You would only be able to hire staff through existing local government units.	Under a Joint Powers Entity, you would have the ability to hire staff directly. You would also be able to hire staff through existing local government units. **Optional**

Lower Minnesota River East Watershed

Question	Joint Powers Collaboration	Joint Powers Entity
Does the partnership want to own equipment?	Under a Joint Powers Collaboration, you would not have the ability to own equipment. You would only be able to own equipment through existing local government units.	Under a Joint Powers Entity, you would have the ability to own equipment. You would also be able to own equipment through existing local government units. **Optional**
Who does the partnership want liability to fall on?	Liability would fall on each individual local government unit. Need a process in place to provide checks and balances to hold that entity accountable. Liability is greater for each LGU.	Liability would mostly fall on the entity. Still would need a process in place to provide checks and balances. There is less liability for each LGU. **Insurance would be required for entity.**
How does the partnership want to go about decision making items?	Under a Joint Powers Collaboration, the decision-making process would require individual board action from each local government unit. **There are some decision-making processes that may not require all local boards approval.**	Under a Joint Powers Entity, the decision-making process would require a Joint Powers Board approval and would not need to go to each local government unit's board for approval.

Lower Minnesota River East Watershed

Question	Joint Powers Collaboration	Joint Powers Entity
What does the process look like for entering into agreements, contracts, etc.?	Under the Joint Powers Collaboration, you would not have the ability to enter into agreements, contracts, etc. under the partnership. Each local government unit would have to enter into separate agreements, contracts, etc. Additionally, the fiscal agent would have to enter into a grant agreement with BWSR and would be liable for all WBIF funds.	Under the Joint Powers Entity, you would have the ability to enter into agreements, contracts, etc. under the partnership. There may be times where individual local government units would have to enter into separate agreements, contracts, etc. The entity would enter into a grant agreement with BWSR and would be liable for WBIF funds.
Would the policy committee like to see dues set aside for the partnership that would assist with implementation efforts of the plan?	Under a Joint Powers Collaboration, you would not have the ability to set dues for all members of the partnership.	Under a Joint Powers Entity, you would have the ability to set dues for all members of the partnership. **Optional**
What threshold of funds does the partnership want to set aside to pay for staff's time (administration, technical assistance, education)?	No difference within a Collaboration or Entity in the ability to set a threshold of WBIF funds that can be utilized for these expenses.	

Lower Minnesota River East Watershed

Question	Joint Powers Collaboration	Joint Powers Entity
What type of staff roles, if any, would the policy committee like to see that doesn't already exist or is limited with current local government units?	Different roles for partners would have to be spelt out in detail within the Joint Powers Agreement. Will need a day-to-day coordinator, fiscal agent, and legal counsel to assist with planning efforts.	
Does the policy committee want additional committees formed to assist with planning efforts?	A Policy Committee and Advisory Committee would need to continue throughout planning efforts. The Policy Committee would be making recommendations to each individual LGU board, but would not be making final decisions.	The Advisory Committee would need to continue throughout planning efforts. Have the ability to create an executive committee to reduce the number of meetings each joint powers board member would need to attend for decision making items. **Optional**
Voting Structure	Voting is done by individual boards that are part of the JPA. Would need to set up some type of voting structure for decision making items. Would have the ability to reduce the number of decision-making items that come to individual boards (ex: set funding threshold for project approval).	Each entity that is a part of the JPA would be a part of the Joint Powers Board and has the ability to vote. Each entity would have one vote within the Joint Powers Board.

Lower Minnesota River East Watershed

Question	Joint Powers Collaboration	Joint Powers Entity
What are the obligations for Local Government Unit Board Members?	Would need to have one board member sit on Policy Committee. Would need local boards to be involved with decision making process for agreements, contracts, workplans, and other items.	Would need to have one board member sit on the Joint Powers Board. Would need a board member that sits on the Joint Powers Board to be involved with decision-making process items. Liability would mostly fall on the entity. Still would need a process in place to provide checks and balances. Liability is less for each LGU. **Insurance would be required for entity.**
Others?		

Lower Minnesota River East Watershed

Key Attributes of Organizational Arrangements

Rank each attribute on a scale of 1 to 5. 1 is considered the lowest score. 5 is considered the highest score.

Type of Attribute	Joint Powers Collaboration	Joint Powers Entity
Efficiency		
Obligation for Local Boards		
Liability Composition		
Structure of Organization		
Ability to Share/Leverage Services		
Ability to Share/Leverage Funds		
Decision Making Process		
Total Score:		

5/3/23

Questions from Scott WMO and answers from BWSR related to the One Watershed One Plan (1W1P) and Watershed-based Implementation Funding programs

Q1. The County and SWMO feel the group has done great work and can continue to carry on this effort under a JPC, MOA, or no formal agreement at all. Each entity can certainly agree to implement the Plan activities without any other organization agreements beyond the Plan. We would like to see that as an option please. (Not a question, but a request to update the attachment.)

A1. For entities to receive Statewide "non-Metro" WBIF funds, there must be an implementation agreement in place with other members of the planning partnership – see below for more details.

Background: BWSR's Watershed-based Implementation Funding Program (WBIF) is a statewide program, however, there are differences between how the funding is allocated and requirements for eligibility between Metro WBIF (Twin Cities Metro area) and Statewide WBIF (may include Metro areas like in the Lower MN East Watershed).

For the **Statewide WBIF funds** that will be allocated to the Lower MN East Partnership for your Comprehensive Watershed Management Plan (CWMP) developed through the 1W1P Program, the FY22-23 WBIF Policy states the following:

For areas outside of the seven-county Twin Cities Metropolitan Area: To be eligible, local governments must have a current state approved and locally adopted comprehensive watershed management plan authorized under Minnesota statutes §103B.101, Subd. 14 or §103B.801 ***and have entered into an implementation agreement*** *with other members of the planning partnership. If a local government within the geographic area of the plan has not adopted the plan, these funds can still be spent on implementation in that area by another eligible local government.*

It will be up to the Scott WMO to decide whether to enter into this agreement or not. If you decide not to sign onto the joint powers agreement (JPA), Scott WMO or other entities may be able to receive funding through subcontracts but that is up to the LME Partnership. Also, depending on how the JPA is written, it is usually a condition of the JPA that the entity has to adopt the CWMP to be part of the joint powers (entity or collaboration). For Metro entities, this could be an adoption of the CWMP in addition to their local plan. For entities outside the Metro, this adoption of the CWMP would *replace* their County Water Plan for that area of the county.

Note that *for Statewide WBIF grants, BWSR almost always only allows 1 grantee/fiscal agent per funding allocation* so entities will enter into subcontracts/subagreements with other partners. This is different from the Metro WBIF "Convene Process", where multiple entities have grant agreements with BWSR in the same allocation area.

As a reminder, the participation in the One Watershed, One Plan Program and decision whether or not to be involved in the implementation of a CWMP is *voluntary* so participation is up to each individual entity.

For the **Metro area**, current WBIF Policy states the following:

In the seven-county Twin Cities Metropolitan (Metro) Area: To be eligible, counties, watershed districts, watershed management organizations, soil and water conservation districts, and municipalities[1] must have a current state approved and locally adopted watershed management plan as required under §103B.231, county groundwater plan authorized under §103B.255, or soil and water conservation district comprehensive plan under Minnesota statutes §103C.331, Subd. 11. Participants, including one representative from each watershed district, watershed management organization, soil and water conservation district[2], county with a county groundwater plan, and up to two municipalities, must coordinate within the designated watershed planning areas before submitting a watershed-based implementation funding budget request that is prioritized, targeted and measurable. BWSR reserves the right for the Executive Director to determine if sufficient coordination exists to meet the goals of the program. Appeals of an Executive Director decision may be made to the BWSR Central Region Committee.

So, for entities to receive Metro WBIF funds, there is no requirement for an implementation agreement. But eligible entities do need to convene and decide on what projects/programs (using eligible plans) to spend the funding. It is up to the Metro entities on how many individual grant agreements they want to enter into with BWSR per allocation area.

In addition, **regarding your reference to an MOA**, our understanding from Minnesota Counties Intergovernmental Trust (MCIT) is that a joint powers agreement (whether it is for a JPE or JPC) that references joint powers law is a more durable form of an agreement compared with an MOA for reducing liability for implementation. But a reminder that we are not legal staff so recommend talking to your county attorney and insurer (MCIT). Attached are a couple documents that might be helpful – the *ABC's of JPEs* (MCIT) and *Organizational Structures for Water Management* (starts on page 49 of BWSR's 1W1P Guidebook).

Q2. We would like an update please from BWSR what impact this will have on our WBIF funding as that is a critical decision factor. Would different organization structures have different impacts on WBIF, including the option to have no organizational structure?

A2. The type (joint powers entity or joint powers collaboration) of organizational arrangement that the Lower MN East Partnership decides to form *will not impact* Metro WBIF funding.

Background: Current WBIF funding allocations are derived from a formula based on private land and public waters. **Statewide**, there is base of $250,000 for each allocation area. The land area used for statewide allocations *does not include the metro area*. In other words, the determination of Statewide WBIF allocation for the LME planning area will not include land area in Scott County. For the last round of **Metro WBIF**, there was a $75K minimum.

For FY22-23 **Metro WBIF**, the following amounts were allocated (see Table 2) to related Metro areas (see allocation map for "Watershed Planning Areas"). At this time, we are hopeful similar amounts will be allocated to these areas for FY24-25 WBIF, but it is not known since the legislature has not yet appropriated funding and our Board has not approved the related policy.

- $127,058 was allocated to the Lower MN River Watershed Planning Area
- $601,647 was allocated to the Scott County Watershed Planning Area
- $82,806 was allocated to the Prior Lake-Spring Lake Watershed Planning Area

For FY24-25 **Statewide WBIF** for the Lower MN East (LME) area, again at this time we don't know a funding amount because the legislature has not yet appropriated funding and our Board has not approved the related policy. Looking at similar watersheds with similar land areas, the funding amount could be somewhere between $350,000-$450,000 for LME but note that is just an estimate at this time and we can provide a better estimate once we know the final appropriation amount and run the formula.

Note that as part of **Metro WBIF**, the "convene" groups in each of the allocation areas have many options available to them related to how to use Metro WBIF funds. See the WBIF FAQs #Q25, #Q28, and #Q29 related to pooling funding and spending funds outside the Metro area. We are happy to provide examples from Lower St. Croix, Rum, and Cannon watershed partnerships as they all include metro partners and are taking different approaches. One of the FAQs is shown below.

- *Q28: For metro areas with approved Comprehensive Watershed Management Plans (Lower St. Croix, Cannon, Rum) developed through the One Watershed, One Plan program, how can allocated funds be used?*
  A: Similar to FY20-21, decision-making representatives that form Metro partnerships through the convene meeting process will be able to decide to use all or a portion of their funding on activities in Comprehensive Watershed Management Plans or eligible Metro water plans (see FY22-23 WBIF Policy) to provide the most flexibility to local decision-makers.

Again, the type of organizational arrangement that the LME Watershed Partnership decides on will not have an impact on WBIF funding amounts (Metro or Statewide).

Q3. Would we need to redraw the boundaries of the Lower MN East Planning Area to exclude the metro to avoid WBIF impacts?

A3. No. As mentioned above, there will not be any funding impacts.

Background: As a reminder, your Lower MN East Watershed Partnership followed BWSR's 1W1P Operating Procedures Policy (page 4) related to boundary establishment for the 1W1P planning process which included getting concurrence from local participants within and adjacent to the planning boundaries. Here is the map.

Our 1W1P Operating Procedures Policy (page 7) states that "*The decision to adopt the plan or not is an individual government decision"* and *"In the case that a required participant decides not to formally adopt the plan…the remaining local governments will need to assess whether the plan can be successfully implemented without adoption by the particular local government".*" As a reminder, Metro entities are optional (not required) participants in the One Watershed, One Plan planning process. So unless a required entity (LeSueur and Rice Counties or SWCDs) decides not to adopt the CWMP, the Partnership would be able to move forward with implementation. Stated another way, if one of the Metro entities decided not to adopt the CWMP, the Partnership could move forward with

implementation. If all of the entities in Scott County decide not adopt the CWMP, then your LME Partnership could discuss whether the CWMP could be still be successfully implemented with existing funding sources and decide at that time if you want to adjust the plan's boundary (boundary amendment/adjustment procedures can be found in our Policy - page 4). A reminder that Metro entities to date have adopted CWMPs in addition to their local plans and entities outside the Metro are required to adopt the CWMP which replaces their local water plans.

Note the decision to adopt the CWMP and sign a joint powers agreement are separate decisions for each entity to consider. An entity could decide to adopt the CWMP and not sign onto a joint powers agreement. However, JPAs usually require the adoption of the CWMP to join the joint powers (collaboration or entity).

Q4. When discussing a new Watershed Management Entity or Boundary Change, WDs and WMOs must have the consent of all the impacted LGUs (or at least support from the majority). What Statutes apply when discussing this type of JPE? Is it the same? Is it different?

A4. As you know, there are different statues related to Metro entities, such as forming a new WD. This is not the same as that; this is an agreement for existing entities to cooperate for implementation of the Comprehensive Watershed Management Plan developed through the 1W1P Program. See Minnesota Statutes 2022, section 471.59 (Joint Exercise of Powers). More on this below (see Q6/A6).

Q5. I cannot imagine forming a new Watershed Management Entity without open transparency and support of the public and LGUs (cities/townships/WDs/tribal nations). Even a JPC should have some level of input from the LGUs. What are the required input and outreach/engagement processes? Is there a comment period etc.? I'm sure everyone feels the same and we just haven't asked those questions yet. However, understanding who actually needs to be involved in the decision making, including the time and effort needed to form a JPE, vs a JPC, MOA, or nothing would definitely have an impact on deciding which path to follow.

A5. There are no specific requirements for input and outreach/engagement to form a joint powers (entity or collaboration) to implement the CWMP.

Background: Lower MN East Policy Committee members and staff have been encouraged to discuss this topic with their local boards which many of them have done and if a local board or the Partnership wanted to do additional outreach, that would be up you.

However, there are specific 1W1P Program Policy (see pages 10-11) requirements for formal review of the Comprehensive Watershed Management Plan itself, which needs to a section on how the Partnership proposes to implement the Plan through organization structures or formal agreements. So, there will be a review of this content as part of the public process for reviewing the entire plan. It is up to your LME Watershed Partnership to determine how much additional outreach beyond what is required you want to do.

Q6. To my knowledge (and per BWSRs website) there are only 3 LGUs with Water Resource Planning Authority in MN: Counties, SWCD's, and WD/WMOs. Which category does the entity we have been discussing fall?

A6. A joint powers agreement does not create an entity with new authorities. See Minnesota Statutes 2022, section 471.59 (Joint Exercise of Powers).

Background: A joint powers agreement allows a joint exercise of existing powers and "*may jointly or cooperatively exercise any power common to the contracting parties or any similar parties*". The purpose of a JPA is simply an agreement between existing entities to implement the Comprehensive Watershed Management Plan and it provides the ability to manage grant funding, contracts, and other shared services. Again, please refer to the attached documents from MCIT and BWSR.

The ability to develop and implement Comprehensive Watershed Management Plans through the 1W1P Program was granted in Minnesota Statutes 2022, section 103B.101, subdivision 14 and Minnesota Statutes 2022, section 103B.801.

LOWER MINNESOTA RIVER
WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, June 21, 2023

Agenda Item
Item 6.A. – 2021 Annual Financial Audit

Prepared By
Linda Loomis, Administrator

Summary
Redpath and Company has agreed to perform a two year audit of the LMRWD financials. The cost proposed by Mr. Andy Hering of Redpath is $25,000 per year and the audit work will begin July 1. The two years will be audited at once to get the audits caught up. This is not a commitment for future audit work. Redpath and Company completed the 2020 financial audit (and previous years) for the LMRWD.

A letter of engagement is being drafted and I will execute the letter when it is received.

The LMRWD should advertise for proposals to perform the 2023 and subsequent years audits. The Board should authorize advertising for audit proposals.

Attachments
No attachments.

Recommended Action
Motion to authorize advertisement for audit services.

LOWER MINNESOTA RIVER
WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, June 21, 2023

Agenda Item
Item 6. B. - 2027 World EXPO – "Healthy People, Healthy Planet – Wellness and Well Being for All"

Prepared By
Linda Loomis, Administrator

Summary
Bloomington City Manager, James Verbrugge, was invited to the June 21st Board of Managers meeting. Bureau International des Expositions (BIE) will be making its announcement on June 21, 2023, in Paris France. Mr. Verbrugge was therefore not available. He has confirmed that he will attend the July 19, 2023 meeting of the Board of Managers.

Here is a link to the news item regarding the selection: https://www.bie-paris.org/site/en/news-announcements/expo-2027-28-en/specialised-expo-2027-28-host-country-to-be-elected-on-21-june

Attachments
No attachments

Recommended Action
No action recommended

LOWER MINNESOTA RIVER
WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, June 21, 2023

Agenda Item
Item 6. C. – 2023 Cost Share Applications

Prepared By
Linda Loomis, Administrator

Summary
At the April 2023, meeting of the LMRWD Board of Managers, the Board tabled approval of two Cost Share applications to the June 21, 2023 meeting. Since that time three (3) more applications have been received. Briefly, the applications are as follow:

Appletree Condominiums	8121 34th Avenue South	$7,500.00
Bloomington Neighbors Nurturing Nature	4551 102nd Street West	$7,444.00
DaGiau	4624 Overlook Drive, Bloomington	$2,500.00
Cartwright	11115 Normandale Boulevard, Bloomington	$1,316.00
Scarborough Townhome	10337 Scarborough Road Bloomington	$7,500.00
TOTAL:		**$26,260.00**

The 2023 Budget includes $20,000 for this program. This is the first time, since I have joined the LMRWD, that this program has received application requests that have exceeded the budgeted amount. A spreadsheet is attached that shows the applications received and the amount that has been funded. In past years some projects have been funded through this program, such as the historical landslide project, the Nonyphenol study and the Water Storage Initiative headed up by the Coalition for a Clean Minnesota River.

If the Board chooses to fund all applications at the total amount requested additional money could come from the Water Resource Restoration line of the Budget.

Applications are attached.

Appletree Condominiums ($7,500) is a repeat applicant. In 2021, Appletree requested funding to remove buckthorn and other invasive species to restore an area behind the building where a fire road that was no longer required was removed. The Condominium Association now plans to continue restoration on the steep slope behind the building. Volunteers from the Condominium Association have also been working with US Fish & Wildlife Service to remove buckthorn on the Refuge.

Bloomington Neighbors Nurturing Nature ($7,444) is a new applicant. This project plans to remove invasive species around a pond on the campus of Olson Elementary School. The area would be replanted with native perennials. This project presents the potential for an Educator Mini-grant once the pond is restored.

4624 Overlook Drive ($2,500) is a repeat applicant. In 2022, Gianna DaGiau and Kevin Batko planted the boulevard in the front of their home to capture rainwater. They have been very good about using the project to educate neighbors about the benefits of managing rainwater. This project will allow the homeowners to construct and plant a raingarden to collect run-off from the roof of the home.

11115 Normandale Boulevard ($1,316) is a new applicant, who learned about the program from Gianna DaGiau. This project is for a raingarden to collect run-off from the roof of the home and the driveway.

Scarborough Townhomes ($7,500) is a new applicant. This project plans to restore the riparian zone around two stormwater ponds. Invasive species will be removed, and native species will be planted. The Townhome Association has been working with the city to plan the project. The intent of the project is to replant an area that has become overgrown with invasive species and replant with native species that will provide a filter for run-off flowing into the ponds and the amount reaching the ponds.

Grant agreements between the LMRWD and each applicant have been prepared and are attached to each application.

Attachments
Spreadsheet with all Cost Share Projects since 2014
Appletree Condominium 2023 Cost Share Application
Bloomington Neighbors Nurturing Nature Application
4624 Overlook Drive Application
11115 Normandale Boulevard Application
Scarborough Townhomes Application

Recommended Action
Determine amount to grant to each application and make a motion to approve the applications

	A	B	C	D	E	F	G	H	I	J	K	L
1	**Applicant**	**Application year**	**Address of Project**		**Grant requested**	**Amount Approved**	**Amount reimbursed**					
2	South West Metro Education	2014	401 East 4th Street, Chaska		$ 1,187.00	$ 1,187.00	$ 3,601.00	Completed 2014	Southwest Education Cooperative			
3	Continental Machine	2014	5505 West 123rd Street, Savage		$ 2,255.25	$ 2,255.25	$ -	Project never completed	Continental Machine			
4	Scott County SWCD	2014	Scott County SWCD	Rain Gardens	$ 1,750.00	$ 1,750.00	$ -	No applications were received in 2014, the LMRWD and the SWCD have since agreed that the SWCD would fund applications as they came in under the TACS (Technical Assistance and Cost Share) section of the agreement between us.				
5	South West Metro Education	2014	Carver County Government Center		$ 800.00	$ 800.00	$ 1,237.76	Completed 2014	Southwest Education Cooperative			
6												
7				**TOTALS:**	$ 5,992.25	$ 5,992.25	**$ 4,838.76**					
8												
9	City of Savage	2015	Dakota Ravine		$ 5,000.00	$ 5,000.00	$ -	Project completed without LMRWD participation	City of Savage			
10							**$ -**					
11												
12	Chimney Pines Home Owners	2016	Spyglass Drive, Eden Prairie	Storm Water Pond buffer	$ 2,373.39	$ 2,373.39	$ 2,773.39		Chimney Pines Homeowners Assoc.			
13												
14				**TOTALS:**	$ 2,373.39	$ 2,373.39	**$ 2,773.39**					
15												
16	Chimney Pines Home Owners	2017	Spyglass Drive, Eden Prairie	Storm Water Pond buffer	$ 2,314.30	$ 2,314.30	$ 2,314.30	Completed 2017	Chimney Pines Homeowners Assoc.			
17	Janezich	2017	10217 Tenth Avenue Circle, Bloomington	rain gardens, rock gabion	$ 2,500.00	$ 2,500.00	$ 2,500.00	Completed 2017	Janezich			
18	Forde	2017	99112 2nd Avenue S. Bloomington	rain gardens	$ 2,500.00	$ 2,500.00	$ 2,500.00	Completed 2017	Forde/Rick			
19	Carver County	2017	Carver County Government Center	turf replacement	$ 8,336.00	$ 8,336.00	$ 3,555.19	Completed 2017	Carver County WMO			
20	Unity of the Valley	2017	4011 Hwy. 13, Savage	rain garden			$ 750.00	completed through Scott SWCD	Unity of the Valley Spiritual Center			
21	Rathjen	2017	7326 132nd Circle, Savage	rain garden			$ 500.00	completed through Scott SWCD	Rathjen			
22												
23				**TOTALS:**	$15,650.30	$15,650.30	**$12,119.49**					
24												
25	Bergo	2018	727 7th Street, Chaska	rain garden	$ 2,281.73	$ 2,281.73	$ 2,338.48	Completed 2018	Bergo			
26	Chimney Pines Home Owners	2018	Spyglass Drive, Eden Prairie	Storm Water Pond buffer	$ 2,270.74	$ 2,270.74	$ 1,791.82	Completed 2018	Chimney Pines Homeowners Assoc.			
27	City of Carver	2018	Main St. & Broadway	sump manholes	$ 4,800.00	$ 4,500.00	$ -	reimbursement not requested yet	City of Carver			
28	Larson	2018	10831 Quebec Avenue, Bloomington	rain barrels & tree	$ 2,220.00	$ -	$ -	Project not approved as submitted	Nelson			
29	Siedenfeld/Zepeda	2018	3113 Chelsea Court, Burnsville	rain garden			$ 250.00	Landscaping for Clean Water	Zapeda			
30	Schwartz	2018	3100 Chelsea Court, Burnsville	rain garden			$ 250.00	Landscaping for Clean Water	Schwartz			
31	Glassen	2018	1437 Valley Drive, Burnsville	rain garden			$ 250.00	Landscaping for Clean Water	Glassen			
32	Carver County	2018	Audubon/East Creek Diversion Channel	prairie restoration	$ 1,200.00	$ 1,200.00	$ -	project completed - never requested payment	Carver County WMO			
33	Freshwater	2018	Freshwater	historical landslide project	$10,000.00	$10,000.00	$10,000.00	Completed 2018				
34												
35				**TOTALS:**	$22,772.47	$20,252.47	**$14,880.30**					
36												
37	Chimney Pines Home Owners	2019	Spyglass Drive, Eden Prairie	Storm Water Pond buffer	$ 5,703.32	$ 2,770.74	$ 2,129.17	Completed	Chimney Pines Homeowners Assoc.			
38	Rathjen	2019	MNDNR property in Savage	oak savannah restoration	$ 1,627.40	$ 1,627.40	$ 1,327.08	Completed	Rathjen			
39	Freshwater	2019	Study	nonyphenol study	$10,000.00	$10,000.00	$10,000.00	project completed in 2021 delayed because of COVID - payment made in July 2021	Freshwater			
40	Glassen	2019	1437 Valley Drive, Burnsville	rain garden	$ 785.00		$ 250.00	Applicant went through Dakota Landscaping for Clean Water program	Glassen			
41	MN River Congress	2019	MN River Congress - Coalition for a Clean MN River	water storage initiative	$10,000.00	$10,000.00	$ 5,000.00	grant spread across 2 years				
42												
43				**TOTALS:**	$28,115.72	$24,398.14	**$18,706.25**					
44												
45	Braun	2020	10312 Portland Ave. Bloomington	cistern for irrigation	$ 2,418.00	$ 2,418.00	$ 2,018.00	$400 withheld until final report received	Hoffman			
46	Sullivan	2020	4419 W. Old Shakopee Rd. Bloomington	rain garden	$ 1,240.50	$ 1,240.50	$ 1,240.50	completed	Sullivan			
47	Larson	2020	1033 Sunnyridge, Carver	rain garden	$ 2,500.00	$ 2,500.00	$ 2,500.00	completed	Larson			
48	Mueller	2020	10745 Lyndale Bluffs Trail	invasive species removal	$ 2,419.00	$ -	$ -	Application pending	Mueller			
49	Zepeda	2020	3113 Chelsea Court, Burnsville	residential rain garden			$ 250.00	Landscaping for clean water	Zapeda			
50	Friends of the MN Valley	2020	Friends of the MN Valley	matching funds for River Watch	$10,000.00	$10,000.00	$10,000.00					
51	MN River Congress	2020	MN River Congress - Coalition for a clean MN River	water storage initiative	$ 5,000.00	$ 5,000.00	$ 5,000.00	second half of 2019 commitment				
52												
53					$23,577.50	$21,158.50	**$21,008.50**					
54												
55	Ali-Sinner	2021	11300 Goodrich Road, Bloomington	Residential rain garden	$ 500.00	$ -	$ -	project cancelled	Ali-Sinner			
56	Sarazine	2021	11451 Landing Road, Eden Prairie	slope stabilization & manage roof drains	$ 2,500.00	$ 2,500.00	$ 2,500.00	Project completed June 2022	Sarazine			
57	Jefferson High School	2021	4001 West 102nd Street, Bloomington	rain garden	$ 3,250.00	$ 3,200.00		Project is complete - awaiting report	Jefferson Highschool			
58	MN River Chloride Project	2021	Riley/Purgatory/Bluff Creek WD	match to 2019 WBF grant	$ 3,300.00	$ 3,300.00	$ 3,300.00	This amount is a match required by BWSR WBIF	LMRWD Contribution to Hennepin County - MN River Chloride Initiative			
59	Appletree Condominiums	2021	8121 34th Ave. S. Bloomington	slope stabilization	$ 7,500.00	$ 7,500.00	$ 7,500.00	Project completed in August 2022	Appltree Condominiums			
60												
61					$17,050.00	$16,500.00	**$13,300.00**					
62												
63	DeGiau	2022	4624 Overlook Drive, Bloomington	boulevard rain garden	$ 2,500.00	$ 2,500.00	$ 2,500.00	Completed 2022	DeGaui			
64	Thomsen	2022	11533 Palmer Circle_Bloomington	front yard rain garden	$ 2,500.00	$ 2,500.00		In progress	Thomsen			
65	Larson	2022	1033 Sunny Ridge_Carver	habitat restoration	$ 1,641.00	$ 1,641.00	$ 1,935.88	Completed 2022	Larson			
66	Sutton Place Condo Assoc.	2022	11073 Oregon Circle, Bloomington	rain garden/low salt landscaping	$ 7,500.00	$ 7,500.00		In progress	Summit Townhomes			
67	Laabs	2022	4562 McColl Drive, Savage	stormwater plan development	$ 2,500.00	$ 2,500.00		In progress	Laabs			

	A	B	C	D	E	F	G	H	I	J	K	L
68												
69					$16,641.00	$16,641.00	**$ 4,435.88**					
70												
71	Appletree Condominiums	2023	8121 34th Ave. S. Bloomington	slope stabilization	$ 7,500.00							
72	Neighbors Nurturing Nature	2023	4551 102nd Street West, Bloomington	Habitat improvement	$ 7,444.00							
73	DaGiau	2023	4624 Overlook Drive	raingarden	$ 2,500.00							
74	Cartwright	2023	11115 Normandale Blvd	raingarden	$ 1,316.00							
75	Salvato											
76	Scarborough Townhomes	2023			$ 7,500.00							
77	Hoekstra											
78	Cambridge											
79												
80					$26,260.00							
81			Master water steward									
82		2015	Adam Frey									
83		2018	Lori Rathjen									
84		2019	Dustin Braun									

LOWER MINNESOTA RIVER
WATERSHED DISTRICT

Cost Share Grant Application 2023

Application type (check one) ☐ Homeowner ☑ Non-profit - 501(c)(3) ☐ School

☐ Business or corporation ☐ Public agency or local government unit

Project type (check all that apply) ☐ Raingarden ☑ Vegetated Swale ☑ Infiltration Basin

☐ Wetland restoration ☑ Buffer/shoreline restoration ☐ Conservation practice ☑ Habitat restoration

☐ Pervious hard surface ☑ Other Steep Slope Overlay District

Applicant Information

Name of organization or individual applying for grant (to be named as grantee):

Appletree Condominium Association

Address (street, city and ZIP code):

8121 34th Ave. S., Bloomington MN 55425

Phone: Email address:

Primary Contact (if different from above)

Name of organization or individual applying for grant (to be named as grantee):

Tom Fahey, primary contact.

Address (street, city and ZIP code):

8121 34th Ave. S., Unit 201, Bloomington MN 55425

Phone: 651-503-8903

Email address: thfahey@comcast.net

Project location

Address (street, city and ZIP code):

8121 34th Ave. S., Bloomington MN 55425

Property Identification Number (PID)

There are 45 separate condominium units, each owned separately.

Property owners:

See Exhibit #6 for list of all 45 Property Owners and associated PID.

Project Summary

Title Erosion Control & Maintenance Project - Phase 2

Total project cost $20,081 Grant amount requested $7500

Estimated start date May 2023 Estimated completion date September 2023

Is project tributary to a water body? ☐ No, water remains on site ☑ Yes, indirectly ☑ Yes, directly adjacent

Is this work required as part of a permit? ☑ No ☐ Yes
(If yes; describe how the project provides water quality treatment beyond permit requirement on a separate page.)

Project Details

Checklist To be considered complete the following must be included with the application.

- ☑ location map (Exhibit #1)
- ☑ site plan & design schematic (Exhibit #2)
- ☑ contracted items (Exhibit #4)
- ☑ project timeline & detailed schedule (Exhibit #5)
- ☑ proof of property ownership (Exhibit #6)
- ☑ plant list & planting plan (Exhibit #3)

Project description Describe the project, current site conditions, as well as site history, and past management. Note any potential impacts to neighboring properties.

See Exhibit #1 - Location Maps

Project Description, Site History & Past Management - See page 1 of file named "TEXT for APPLICATION ..."

Past Management, Current Site Conditions & Impacts to Neighboring Properties - See pages 2 - 4 of file named "TEXT for APPLICATION ..."

What are the project objectives and expected outcomes? Give any additional project details.

See Exhibit #2 - Site Plan & Design Schematic

See Exhibit #3 - Plant List & Planting Plan

See Exhibit #4 - Contracted Items

See Exhibit #5 - Project Timeline and Detailed Schedule

Project Objectives and Expected Outcomes - See page 5 of file named "TEXT for APPLICATION ..."

Which cost share goals does the project support? (check all that apply)

- ☑ improve watershed resources
- ☑ foster water resource stewardship
- ☑ increase awareness of the vulnerability of watershed resources
- ☑ increase familiarity with and acceptance of solutions to improve waters

How does the project support the goals you checked?

How Project Supports Goals - See page 6 of file named "TEXT for APPLICATION ..."

Project Details (continued)

Project benefits Estimate the project benefits in terms of restoration and/or annual pollution reduction. If you are working with a designer or contractor, they can provide these numbers. If you need help contact the district administrator. Computations should be attached.

Benefit	Amount	
Water captures*	*All captured uphill of Vegetative Swale.	gal/year
Water infiltrated**	**Prairie plants & Veg.Swale allows infiltration	gal/year
Phosphorus removed		lbs/year
Sediment removed^^	^^Sediment runoff on steep&gradual areas reduced	lbs/year
Land restored^	approx. 23,000	sq. ft.

*New Prairie grasses & forbs on steep slope & dirt piled on brush berm will capture all rainfall & snowmelt from 10,000sq.ft. slope.

**Water that is captured & doesn't escape by evaporation or transpiration will infiltrate from 10,000sq.ft. of slope.

^^5000 sq.ft. Buckthorn Replacement seed mix area has much loose top soil. Reduced sediment both there & on 10,000sq.ft. steep slope area.

^ Seeding & Plug Planting Area on Steep Slope 315' X 32' =10,080 sq ft
Buckthorn Replacement & Woodland seeding on gradual sloped areas =10,000 sq ft.
Infiltration Basin (30' X 35') & Vegetated Swale (330' X 7') =3360 sq ft

How will you share the project results with your community and work to inform others about your projects environmental benefit?

Share Project Results & Environmental Benefits - See page 6 of file named "TEXT for APPLICATION ..."

Please note that by obtaining cost share funding from the Lower Minnesota River Watershed District, your project may be shared with the community through our website, social media, or other media. Your project may also be highlighted on a tour or training event, with prior notice and agreement.

Maintenance Describe the anticipated maintenance and maintenance schedule for your project.

Anticipated Maintenance and Maintenance Schedule - See page 7 of file named "TEXT for APPLICATION ..."

I acknowledge that receipt of a grant is contingent upon agreeing to maintain the project for the number of years outlined in the cost share guidelines. ☑ Yes

Authorization

Name of landowner or responsible part Maureen Olstad,Pres.&Tom Fahey,VP Appletree Condo Assoc.

Signature Maureen M Olstad / Tom Fahey Date 3/23/2023 23 MAR 2023

Type or handwrite your answers on this form. Attached additional pages as needed.

For questions, contact Linda Loomis at Naiad Consulting@gmail.com or call 763-545-4659.

Mail the completed application to

Lower Minnesota River Watershed District
c/o Linda Loomis, Administrator
112 E. Fifth St., Suite 102
Chaska, MN 55318

or email to:

Linda Loomis, Administrator
naiadconsulting@gmail.com

2023 Cost Share Worksheet

Labor Costs (contractors, consultants, in-kind labor)

Service Provider	Task	# Hours	Rate/Hour	Requested Funds from LMRWD	Matching/In-Kind Funds	Total Cost
Volunteers	PREPARATION OF seeding & plug areas	235	$20	0	$4700	$4700
Volunteers	SEEDING & PLANTING	260	$20	0	$5200	$5200
Volunteers	1st YEAR MAINTENANCE	81	$20	0	$1620	$1620
Tools for Volunteers - Maintenance efforts	Gardening Tools, Weed Whip, etc.			0	est. $600	est. $600
MNL (Minnesota Native Landscapes)	provider of seed (see Materials below)					
Natural Shore Technologies	provider of flats of plugs (see Materials below)					
Gerten's Green Houses	erosion blankets & straw bails (see Materials below)					
			Total:	$ 0	$ $12,120	$ 12,120

Project Materials

Material Description	Unit Cost	Total # of Units	Requested Funds from LMRWD	Matching/In-Kind Funds	Total Cost
Mesic Prairie (1), Buckthorn Replacement (1), Upland Dry Prairie(1), MN Woodland (1) seed	5000sq ft=varies	4	$459.12	$461.22	$920.34
Unit Prices: Mesic $125, Buckthorn R. $130, Upland Dry $135, Woodand $465, Tax $65.34	see description				
Rain Garden Bundle -- 50 Plants, 11 species	$176.88	1	$176.88	0	$176.88
Monarch Mania Bundle Flats of plugs (32 plugs/per flat in 3" containers)	1 Flat = $68.80	30	$2064.00	0	$2064.00
Side Oats Grama (10 flats), Blue Grama (10 flats), Prairie Dropseed (20 flats)	1 Flat = $68.80	40	$2752.00	0	$2752.00
Short Prairie Bundle (10 flats)	1 Flat = $68.80	10	$688.00	0	$688.00
50 Erosion blankets (4' X 50') @ $25/ea =$1250 & 10 bales of straw @ $11/bale = $110	see description	see description	$1360.00	0	$1360.00
		Total:	$ 7500.00	$ 461.22	$ 7961.22

Total Requested Funds from LMRWD*:	$ $7500.00	(A)
Total Matchin/In-Kind Funds:	$ $12,581.22	(B)
Project Total:	$ $20,081.22	(C)

*Please note: total requested funds (A) cannot be more than 50% of the Project Total (C)

Cost Share Grant – TEXT for APPLICATION 2023

Appletree Condominium Association

Project Title: Erosion Control & Maintenance Project - Phase 2

Project Details

Project Description: *Describe the project, current site conditions, as well as site history, and past management. Note any potential impacts to neighboring properties.*

This grant request is for the 2nd Phase of a multiphase project. In September 2021 the LMRWD Board approved Appletree Condominium Association's 2021 Cost Share Grant Application for Phase 1 of the Erosion Control Project & Maintenance project at 8121 34th Ave. S., Bloomington. See Exhibit #1 - Location Maps.

Site History: The property was developed in 1984 when a 45-unit condominium building was constructed. A detailed site history prior to 2020 was included in the 2021 Cost Share Grant Application.

Past Management: Phase 1 of this project was completed in September 2022. FIGURE 1 below shows completed Phase 1. A Final report was submitted in October 2022 and LMRWD grant funds were distributed the same month. The project removed approximately 20 tons of gravel from 4,000 sq ft of semi-impervious surface; added topsoil and sowed Mesic Prairie SW seed mix. Volunteer labor prepared and planted turf grass seed on another approximate 1500 sq ft. on the east side of the building, not visible in FIGURE 1.

In spring 2020, drain tile was installed next to the south side of the building, in coordination with an engineer; general contractor; and City of Bloomington. The approximate 300 feet along the building had river rock laid over the drain tile at time of installation, extending 2-3 ft from the building. The drain continues from the east side of the building another 130 ft, buried without river rock at the surface. This effort to control erosion on the south side of the building was done at a cost of $25,000 and funded entirely by the condo Association.

FIGURE 1. October 02, 2022 Looking east. Canadian Wild Oats nurse crop for the Mesic Prairie SW seed. Rock covering drain tile is visible near building. Silt fence was removed except for top of 2 test areas.

Cost Share Grant – TEXT for APPLICATION 2023

Appletree Condominium Association

***Past Management & Current Site Conditions*:** Exhibit #2 (Site Plan is an aerial view with annotations, as well as a legend. It provides both current conditions at the 8121 34th Ave S, Bloomington, MN 55425 project site, and the planned project work for Phase 2.

In the Spring of 2022 as part of the Erosion Control & Maintenance Project Phase 1, buckthorn and other brush were removed from the top 10 to 15 feet of the steep slope, totaling over 3000 sq. ft of area. This was done to provide added sunlight for the Mesic Prairie plantings on the relatively flat surface near the condo building. Volunteers were then recruited from Appletree Condo Association to remove larger trees further down the steep slope (mainly boxelder trees) that could shade the prairie plantings planned for Phase 2 on the steep slope. To reduce the risk of erosion, the cut tree branches and other brush were used to construct a 350 ft long berm approximately halfway down the steep slope running the entire length of the property.

In 2022 the contractor for Phase 1 of the project, Hantho Outdoor Services was supposed to include a cover crop 10 to 15 feet beyond the silt fences, down the embankment. They never competed that portion of the project and 2 test areas were completed by Appletree Condo Association volunteers instead. See FIGURE 2 below, showing photos of 2 test areas just prior to weeding, erosion blanket, seeding and planting.

FIGURE 2. Aug 01, 2022. East Test Area (left). West Test Area (Right) After staking out locations & Before weeding, terracing, seeding, covering with erosion blankets & planting plugs.

Exhibit #2 shows the 2 test areas, which were not part of the Phase 1 Grant Request. The west test area (35'X20') and the east test area (25'X25') were completed 10 & 12 August 2022 respectively, with volunteer hours and Appetree Condo Association funds. This included clearing the areas of weeds; terracing the steep slope for planting ease; sowing prairie seeds; covering with erosion blankets & planting plugs of prairie forbs & grasses; watering as needed. Also, where needed, wood from cut boxelder trees was used to build wood steps for access and build a small wall for erosion control. FIGURE 3. shows East Test Area planting on 12 August.

In addition, the silt fence at the top of the steep slope was retained the summer of 2022 and was removed 01 October, from the top of the steep slope except for two lengths of 35 ft and 25 ft. The silt fence only remains where two test areas on the steep south facing slope were planted in August 2022 & will be removed in 2023.

Not shown in Exhibit #2 is an area at SW corner of the building in need of a retaining wall for erosion control and possible need of draintile. A separate project for this work has been proposed. The Appetree Condo Association will be coordinating with City of Bloomington and Hennepin County on this separate project as needed. The Association will be exploring a possibe Good Steward or Opportunity Grant from the county.

FIGURE 3. 12Aug2022, photos of planting East Test Area. Top, part way through (pictured from ground level). Bottom, almost done (pictured from above looking out condo bldg. window.

Impacts to Neighboring Properties: Apartment buildings on property to both our west and northeast, along the Steep Slope Overlay District are currently under construction. Representatives from the Risor apartments on the west, and The Ardor on the northeast, were contacted prior to and during Phase 1. We informed them of the Erosion Control and Prairie restoration work and discussed teaming to do similar work on their properties. They are supportive of our efforts but have not committed to our proposals yet.

The MN Valley National Widlife Refuge (NWR) is our neighbor to the south. We started discussions with MN Valley NWR in November 2021 about teaming to remove buckthorn on both our properties near our shared property line. One year later, in November 2022 we had a buckthorn cutting & hauling event with over 20 volunteers from NWR and the Appletree Condo Association. We plan to continue similar outreach with all our neighbors and encourage stewardship of our water and land resources during Phase 2.

Cost Share Grant – TEXT for APPLICATION 2023

Appletree Condominium Association

Project Objectives and Expected Outcomes: Main Objective is to expand on a project already started to maintain the stability of the steep slope by reducing the risk of erosion on Appletree Condo Association's property in the Steep Sope Overlay district. Last year over 8000 sq ft were addressed with a Lower MN River Watershed District (LMRWD) grant.

This year, an aggressive goal is to address approximately 23,000 sq ft. on Appletree Condo Association property, with focus on the steep slope where the 2 test areas were competed last summer.

First focus will be on completing the seeding and planting of plugs in the 10 areas labelled "NEW" in Exhibit #2 (approx. 10,000 sq ft).

Second focus will be on seeding with Buckthorn Replacement mix & Woodland mix on relatively flat areas east and south of the steep slope area (approx. 10,000 sq ft).

A third focus will be on final completion of the Vegetative Swale and the Infiltration Basin (approx. 3,400 sq ft). At a minimum, dirt from immediately uphill of the existing brush berm will be hand dug to form a depression and the dirt will be deposited on the brush berm to begin completion of the Vegetative Swale. This same excavation was done last year on the two test areas. Final completion of the Vegetative Swale and the Infiltration Basin may require additional excavation and sourcing of top soil. In addition, it may be determined necessary to include final completion of the Vegetative Swale and the Infiltration Basin with a separate project for a retaining wall and drain tile near SW corner of the building. Three possible companies were interviewed in October 2022 for this retaining wall and drain tile project and follow-up discussions have been held this winter with representatives from one of the companies. Also a preliminary discussion was completed recently with Ellen Sones, Landscape Architectural Specialist at Hennepin County regarding a possible Good Steward or Opportunity Grant from the county for the retaining wall and drain tile.

Additional objectives include efforts to publicize water resources stewardship and expand the area addressed with introduction of native plants and reduction of invasive species on both public (MN Valley NWR) and private properties nearby. The long-term outcome envisioned would be a relatively invasive species free area along the Steep Slope Overlay District extending from the MN Valley NWR gravel access road near the visitor center on the east to the City of Bloomington's Forest Glen Park/Ike's Creek near MN Valley NWR Bass Pond area on the west.

Additional Project Details:

See Exhibit #2 - Site Plan & Design Schematic

See Exhibit #3 - Plant List & Planting Plan

See Exhibit #4 - Contracted Items -

See Exhibit #5 - Project Timeline and Detailed Schedule

Cost Share Grant – TEXT for APPLICATION 2023

Appletree Condominium Association

Which cost share goals does the project support? (check all that apply)

X Improve Water Resources

Phase 2 of the Erosion Control and Maintenance Project will protect the water quality of nearby Long Meadow Lake and the Minnesota River by minimizing erosion, nutrients and other contaminant loadings from the steep slope in and near the project area as well as reducing sedimentation down gradient.

X Foster Water Resources Stewardship
X Increase awareness of the vulnerability of watershed resources
X Increase familiarity with and acceptance of solutions to improve waters

Lessons learned and contacts made during the project's Phase 1 have been invaluable. Relationships have developed with a nonprofit, Bloomington Neighbors Nurturing Nature (BNNN) and with representatives at the MN Valley NWR as well as with City of Bloomington. In fact, this Grant's Primary Contact, Tom Fahey has begun leading a volunteer buckthorn removal effort, because of these connections at Forest Glen Park along Ike's Creek. Outreach to neighbors as well as coordination with BNNN and MN Valley NWR are planned to continue as part of Phase 2. We will continue to reach out to foster stewardship as well as to increase both awareness of vulnerability and familiarity/acceptance of solutions.

How will you share the project results with your community and work to inform others about your projects environmental benefit?

1. We will reach out to the following organizations and request that our efforts be publicized.
   Org. #1 - City of Bloomington
   - Sustainability Updates, a monthly email communication
     Contact: Dave Hanson Assistant Director, Parks & Natural Resources, 952-563-8765
     and <bloomington@service.govdelivery.com>
   - Bloomington Briefing, a monthly US mail to all Bloomington residents
     Contact: Ching Lo, Communications Specialist <clo@BloomingtonMN.gov> ,952-563-8822

   Org. #2 - University of MN Extension, Master Naturalist Program
   - MN Master Naturalist Weekly Volunteer Update, an email communication
     Contact: Amy Rager, Educator, Master Naturalist & Volunteer Mgr, 320-589-1711 Ext: 2129
     and info@minnesotamasternaturalist.org or call 888-241-4532

2. We will reach out to the following organizations and request new &/or additional teaming efforts.
   Org. #1 - Bloomington Neighbors Nurturing Nature (BNNN)
   - Contact: Dan Niziolek, President BNNN dan.j.niziolek@gmail.com

   Org. #2 – MN Valley National Wildlife Refuge
   - Contacts: Sarah Inouye, Volunteer Coordinator & Vicki Sherry, Wildlife Biologist

   Org. #3 – Great River Greening
   - Contact: Sara Nelson, Ecologist snelson@greatrivergreening.org

   Org. #4 – Hennepin County, Conservation & Natural Resources
   - Contacts: Kristine Mauer, Conservation Ecologist 612-348-6570 & Ellen Sones, Landscape Architectural Specialist, 612-596-1173

   Org. #5 – The Risor, 55 & over senior apartments (our neighbors to the west)
   - Contacts: Risor Project Manager, John Gran
     and their contractor from Autumn Ridge Landscaping, Trent Lubbers & Jim Varty

   Org. #6 – The Ardor, market rate apartments (our neighbors to the east)
   - Contacts: The Ardor Project Managers, Carl Kaeding and Brody Nordland

Anticipated Maintenance and Maintenance Schedule: The Appletree Condo Association's Landscape Committee plans to perform maintenance.

Throughout the growing season in the first year, watering and weeding will be done as needed. This same procedure was used last year on the two test sites.

A weed whip will be purchased for use in following years in early April to remove the previous year's growth as a substitute for burning/grazing. In addition, weeding will be performed on the following schedule for the next 5 years:

- May & June – remove weeds after spring growth has started, and
- September – remove weeds prior to weeds going completely to seed.

The calculation of first Year Maintenance hours in the Grant Application also included picking up supplies, seeds and plugs.

EXHIBIT #1 - Location Maps

8121 34th Ave S., Bloomington MN, 55425

Source: [Public Map Viewer (arcgis.com)]

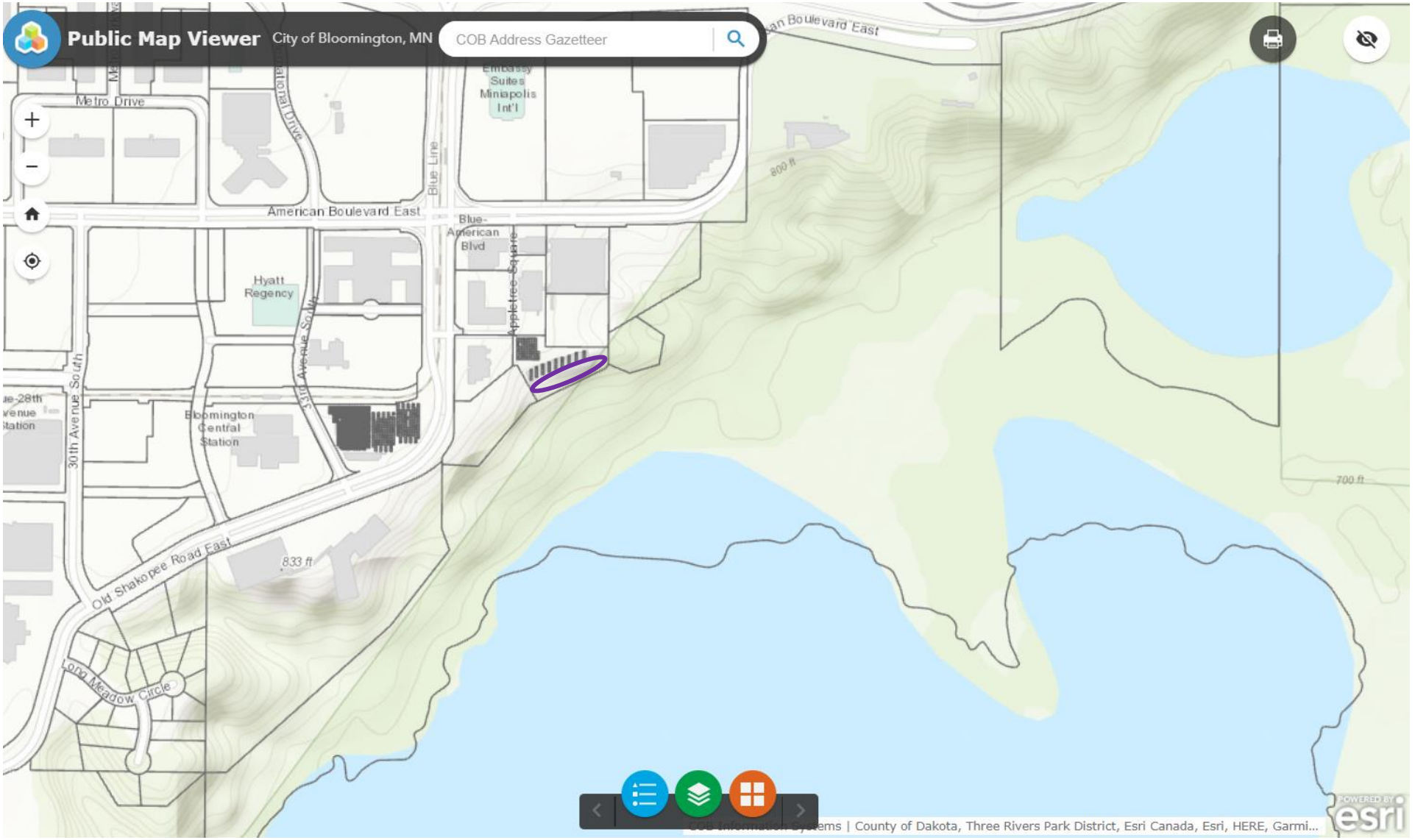


EXHIBIT #1 - Location Maps

8121 34th Ave S., Bloomington MN, 55425

Source: [Public Map Viewer (arcgis.com)]

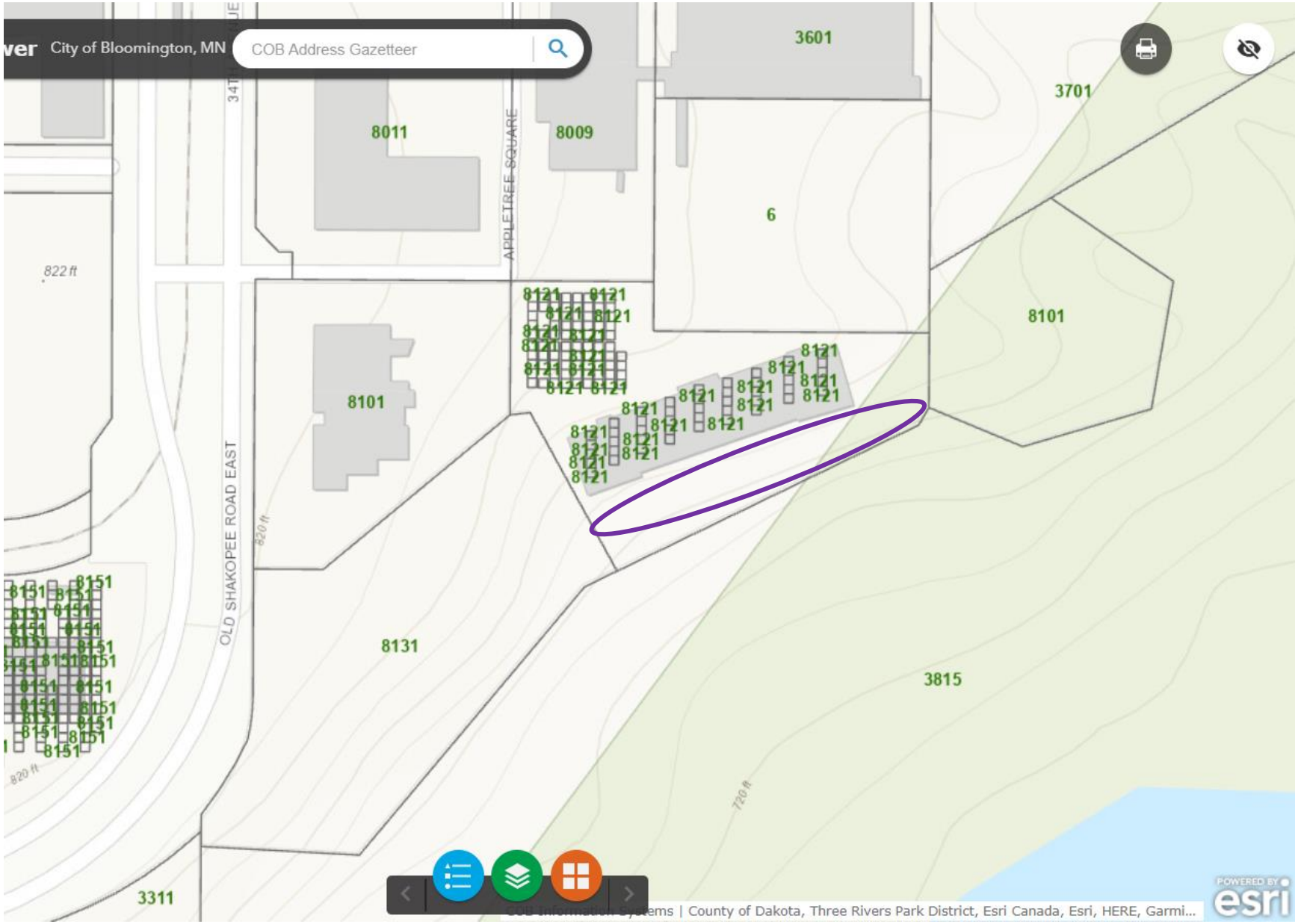


EXHIBIT #1 - Location Maps
8121 34th Ave S., Bloomington MN, 55425

Legend

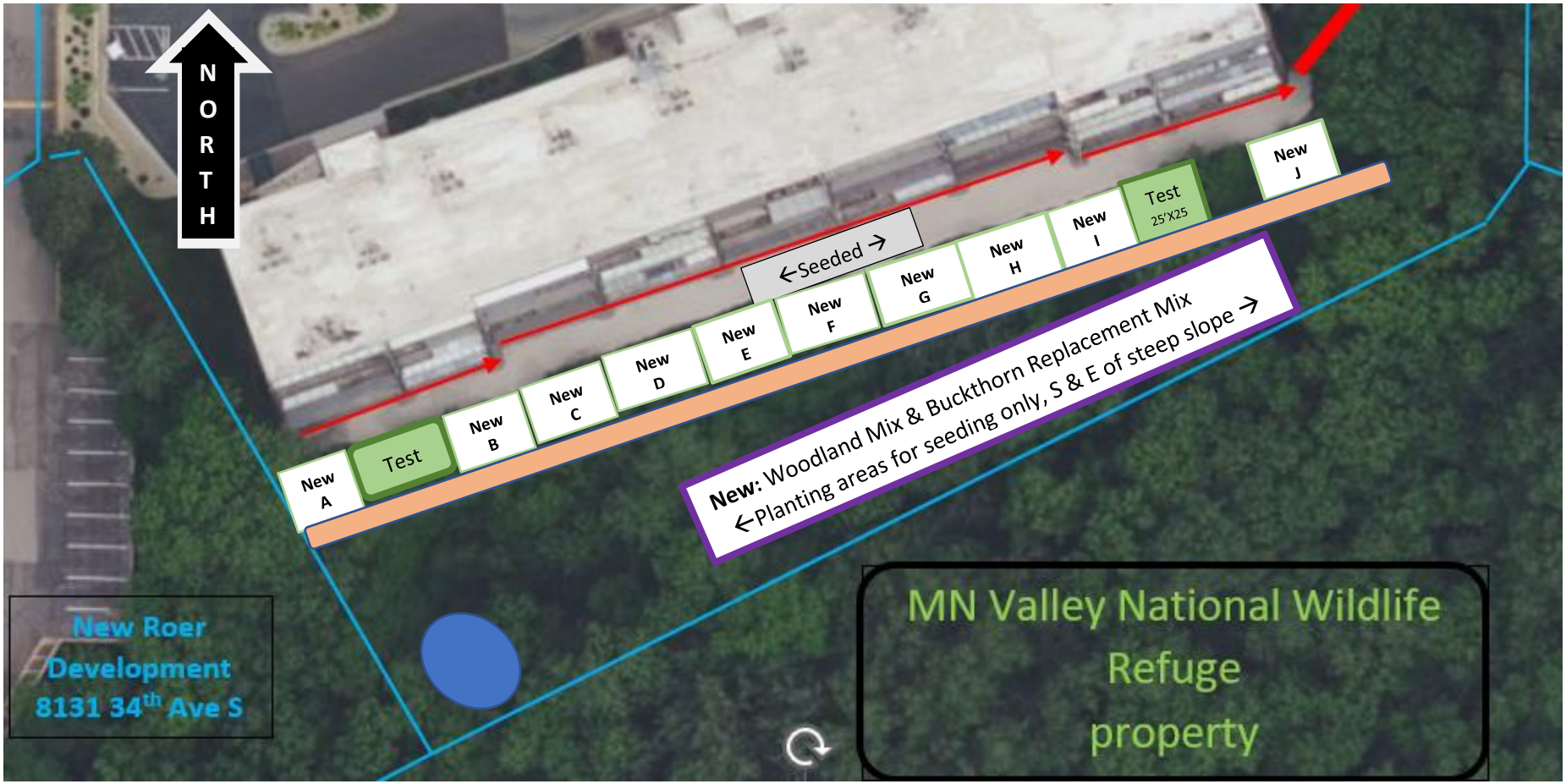
Draintile buried along entire southside of building with river rock at the surface.

Drain extends underground from east side of building approx 130' to the edge of bluff**.**

Property lines. (Bldg is about 307' long. South property line is about 90-110' from SW corner of bldg. & about 45-55' from SE corner of bldg.)

Project Area at 8121 34th Ave. S., Bloomington MN 55425

EXHIBIT #2 - Site Plan & Design Schematic



Legend

Property lines. (Bldg is about 307' long. South property line is about 90-110' from SW corner of bldg. & about 45-55' from SE corner of bldg.)

Completed Work:

Draintile buried along entire southside of building with river rock at the surface.

Drain extends underground from east side of building approx 130' to the edge of bluff.

← Seeded → ***Approximately 300ft X 12 ft (3600 sq ft) Prairie Mesic seeding completed in 2022 Phase 1 as part of the 2021 LMRWD Grant.***

Test 2 Test (35'X20' & 25'X25') areas cleared; terraced for planting ease, wood steps & erosion control; laid seed, erosion blankets & plugs of prairie forbs & grasses.

Proposed Work in 2023 Phase 2:

New 10 plots, seed & plugs as 2022 test areas. Vegetated Swale (about 330'X7'). Infiltration Basin (about 35'X30'). **New:** seed only

Exhibit #3 - Plant List & Planting Plan

1. Plant List & general location to be planted.

1.1 Grasses for Top of Slope (1st 3-7 ft of 10 NEW areas A thru J)

Side Oats Grama (Bouteloua curtipendula)
Prairie Dropseed (Sporobolus heterolepis)
Blue Grama (Bouteloua gracilis)

1.2 Grasses & Forbs for 10 NEW areas A thru J, and Forbs only for Vegetated Swale

GRASSES - Short Prairie Garden Bundles

- Butterfly Weed (Asclepias tuberosa)
- Sideoats Grama (Bouteloua curtipendula)
- Lance Leaved Tickseed (Coreopsis lanceolata)
- White Prairie Clover (Dalea candida)
- Purple Prairie Clover (Dalea purpurea)
- Dotted Blazing Star (Liatris pycnostachya)
- Little Bluestem (Schizachyrium scoparium)
- Aromatic Aster (Symphyotrichum oblongifolium)

FORBS - Monarch Mania Bundles (*Plus 2 additional forbs)

- Swamp Milkweed (Asclepias incarnata)
- Butterflyweed (Asclepias tuberosa)
- Purple Coneflower (Echinacea purpurea)
- Meadow Blazing Star (Liatris ligulistylis)
- Black-eyed Susan (Rudbeckia hirta)
- Stiff Goldenrod (Solidago rigida)
- Sky Blue Aster (Symphyotrichum oolentangiense)
- Hoary Vervain (Verbena stricta)
- *Oxeye (Heliopsis helianthoides) **
- *Pale Purple Coneflower (Echinacea pallida) **

1.3 Proposed Plants for Infiltration Basin

- Sweet Flag (Acorus americanus)
- Big Bluestem (Andropogon gerardii)
- Swamp Milkweed (Asclepias incarnate)
- Canada Bluejoint (Calamagrostis canadensis)
- Lake Sedge (Carex lacustris)
- Joe Pye Weed (Eutrochium maculatum)
- Sneezeweed (Helenium autumnale)
- Blue Flag Iris (Iris versicolor)
- Blue Lobelia (Lobelia siphilitica)
- Obedient Plant (Physostegia virginiana)
- New England Aster (Symphyotrichum novae-angliae)
- Blue Vervain (Verbena hastata)

Exhibit #3 - Plant List & Planting Plan

2. Planting Plan

2.1. Proposed Timeline for picking up flats of plugs with grasses & forbs

May 15th for planting at top 3-7 ft of slope in the 10 NEW areas A thru J.
10 flats (3" containers) Side oats Grama &
10 flats (3" containers) Blue Grama.

June 15th for planting in 5 of the 10 NEW areas A thru J.
5 flats (3" containers) Short Prairie Garden Bundle
10 flats (3" containers) Monarch Mania Bundle.

July 14th for planting in the other 5 of the 10 NEW areas A thru J.
5 flats (3" containers) Short Prairie Garden Bundle
10 flats (3" containers) Monarch Mania Bundle
AND 2 flats (3" containers) for Infiltration Basin (if ready for planting).

July 28th for planting at top 3-7 ft of slope in the 10 NEW areas A thru J.
20 flats (3" containers) Prairie Dropseed
AND 10 flats (3" containers) Monarch Mania Bundle for Vegetative Swale (if ready for planting).

2.2. Hours estimates of tasks, listed in approx. timeline order:

1. Cut & remove approx. 4 to 5 trees on south slope between stacks 4 & 7 to allow sufficient sunlight for the prairie plants on the steep slope: =16 hrs
2. Pull remaining buckthorn stumps and roots that were cut last November in the shaded, flat, wooded area at the base of the steep slope: =16 hrs
3. Distribute seeds from Woodlands seed Mix over approx. 5000 sq ft in the wooded area: = 4 hrs
4. Distribute seeds from the Buckthorn Replacement seed Mix over approx. 5000 sq ft in the sunny areas at the base of the steep slope: = 4 hrs
5. Excavate topsoil from Infiltration Basin area and Add the top soil to brush berm that will be a Vegetated swale. Also use soil from retaining wall construction if psbl and from the upslope side of the brush berm: = 60 hrs.
6. Prep soil on 1st 3 to 7 feet immediately below top of slope for planting plugs (300ft X 5ft):=15 hrs
7. Sow seed & Erosion blanket install on 1st 3 to 7 feet immediately below top of slope: = 8 hrs
8. Plant 2 rows of grass plugs on 1st 3 to 7 feet immediately below top of slope: = 14 hrs
9. 10 NEW areas - Prep for planting on rest of steep slope (300ft X 30ft): remove existing invasive plants & stumps & terrace slope & use cut stumps for retaining wall and steps/stepping areas as needed: = 120 hrs
10. 10 NEW areas - Seeding & Erosion blanket install, including staking on steep slope (300ft X 30ft) & clean up: = 42 hrs
11. 10 NEW areas - Planting & labeling plugs on steep slope: = 120 hrs
12. Preparation Infiltration Basin for Planting = 8 hrs
13. Infiltration Basin area - Planting & labeling plugs = 8 hrs
14. Plant another 2 rows of grass plugs on 1st 3 to 7 feet immediately below top of slope: = 20 hrs
15. Vegetated Swale area - Planting & labeling plugs = 40 hrs
16. 1st Year Maintenance – weeding, watering, picking up supplies, seeds and plugs, etc. the first season: = 81 hrs

TOTAL: 576 hrs X $20/hr = $11,520

Exhibit #3 - Plant List & Planting Plan

2. Planting Plan (cont.)

2.3. Same Hours Estimate as Above in 2.2. - grouped by categories of work & itemized

(The below 3 categories are included in the "Labor Costs" section of 2023 Cost Share Worksheet)

PREPARATION OF seeding & plug areas: 235 Hours

- Cut & remove approx. 4 trees on south slope between stacks 4 & 7 to allow sufficient sunlight for the prairie plants on the steep slope: =16 hrs
- Pull remaining buckthorn stumps and roots that were cut last November in the shaded, flat, wooded area at the base of the steep slope: =16 hrs
- Excavate topsoil from Infiltration Basin area and Add the top soil to brush berm that will be a Vegetated swale. Also use soil from retaining wall construction if psbl and from the upslope side of the brush berm: 60 hrs
- Prep soil on 1st 3-7 feet immediately below top of slope for planting plugs (300ft X 5ft) = 15 hrs
- 10 NEW areas - Prep for planting on rest of steep slope (300ft X 30ft): remove existing invasive plants & stumps & terrace slope & use cut stumps for retaining wall and steps/stepping areas as needed: = 120 hrs
- Prep Infiltration Basin for Planting = 8 hrs

SEEDING & PLANTING: 260 Hours

- Distribute seeds from the Woodlands seed Mix over approx. 5000 sq ft in the wooded area: = 4 hrs
- Distribute seeds from the Buckthorn Replacement seed Mix over approx. 5000 sq ft in the sunny areas at the base of the steep slope: = 4 hrs
- Plant grass plugs on 1st 3-7 feet immediately below top of slope = 42 hrs
- 10 NEW areas - Seeding & Erosion blanket install by staking on steep slope (300ft X 30ft): 42 hrs
- 10 NEW areas - Planting & labeling plugs on steep slope: = 120 hrs
- Infiltration Basin area - Planting & labeling plugs = 8 hrs
- Vegetated Swale area - Planting & labeling plugs = 40 hrs

1st YEAR MAINTENANCE: 81 Hours

- weeding, watering, picking up supplies, seeds and plugs

NOTE: *Aso estimating approximately $600 required for purchase of maintenance tools.*

end

Exhibit #4 - Contracted Items

1. Prairie Grass & Forb Plugs

Natural Shore Technologies , Inc.
6275 Pagenkopf Road
Maple Plain, MN 55359
612-703-7581 rob.L@naturalshore.com

Invoice

DATE	INVOICE #
2/22/2023	5475

BILL TO

Tom Fahey
Appletree Condo Assoc Board Mbr
thfahey@comcast.net

DUE DATE	PROJECT
5/15/2023	

QUANT...	DESCRIPTION	RATE	AMOUNT
320	3" Side Oats Grama (Bouteloua curtipendula)	2.00	640.00T
320	3" Blue Grama (Bouteloua gracillis)	2.00	640.00T
	Proposed pick-up May 15		
	Sales Tax when selling in Hennepin County	7.525%	96.32
		Total	$1,376.32
		Payments/Credits	$0.00
		Balance Due	$1,376.32

Exhibit #4 - Contracted Items

1. Prairie Grass & Forb Plugs (continued)

Natural Shore Technologies , Inc.
6275 Pagenkopf Road
Maple Plain, MN 55359
612-703-7581 rob.L@naturalshore.com

Invoice

DATE	INVOICE #
2/22/2023	5476

BILL TO

Tom Fahey
Appletree Condo Assoc Board Mbr
thfahey@comcast.net

DUE DATE	PROJECT
6/15/2023	

QUANT...	DESCRIPTION	RATE	AMOUNT
20	3" Lance-leaved Tickseed (Coreopsis lanceolata)	2.00	40.00T
20	3" White Prairie Clover (Dalea candida)	2.00	40.00T
20	3" Purple Prairie Clover (Dalea purpurea)	2.00	40.00T
20	3" Dotted Blazing Star (Liatris punctata)	2.00	40.00T
20	3" Side Oats Grama (Bouteloua curtipendula)	2.00	40.00T
20	3" Little Bluestem (Schizachyrium scoparium)	2.00	40.00T
20	3" Aromatic Aster (Symphyotrichum oblongifolium)	2.00	40.00T
20	3" Butterfly Weed (Asclepias tuberosa)	2.00	40.00T
32	3" Swamp Milkweed (Asclepias incarnata)	2.00	64.00T
32	3" Butterfly Weed (Asclepias tuberosa)	2.00	64.00T
32	3" Purple Coneflower (Echinacea purpurea)	2.00	64.00T
32	3" Meadow Blazing Star (Liatris ligulistylis)	2.00	64.00T
32	3" Black-eyed Susan (Rudbeckia hirta)	2.00	64.00T
32	3" Stiff Goldenrod (Solidago Rigida)	2.00	64.00T
32	3" Hoary Vervain (Verbena stricta)	2.00	64.00T
32	3" Sky Blue Aster (Symphyotrichum oolentangiense)	2.00	64.00T
32	3" Grey Headed Coneflower (Ratibida pinnata)	2.00	64.00T
32	3" Anise Hyssop (Agastache foeniculum)	2.00	64.00T
	Proposed Pick-up June 15		
	Sales Tax when selling in Hennepin County	**Total** 7.525%	$1,032.24
		Payments/Credits	$0.00
		Balance Due	$1,032.24

Exhibit #4 - Contracted Items

1. Prairie Grass & Forb Plugs (continued)

Natural Shore Technologies , Inc.
6275 Pagenkopf Road
Maple Plain, MN 55359
612-703-7581 rob.L@naturalshore.com

Invoice

DATE	INVOICE #
2/22/2023	5477

BILL TO

Tom Fahey
Appletree Condo Assoc Board Mbr
thfahey@comcast.net

DUE DATE	PROJECT
7/14/2023	

QUANT...	DESCRIPTION	RATE	AMOUNT
20	3" White Prairie Clover (Dalea candida)	2.00	40.00T
20	3" Purple Prairie Clover (Dalea purpurea)	2.00	40.00T
20	3" Aromatic Aster (Symphyotrichum oblongifolium)	2.00	40.00T
20	3" Lance-leaved Tickseed (Coreopsis lanceolata)	2.00	40.00T
20	3" Dotted Blazing Star (Liatris punctata)	2.00	40.00T
20	3" Butterfly Weed (Asclepias tuberosa)	2.00	40.00T
20	3" Little Bluestem (Schizachyrium scoparium)	2.00	40.00T
20	3" Side Oats Grama (Bouteloua curtipendula)	2.00	40.00T
1	Rain Garden Bundle -- 50 Plants, 11 species	164.50	164.50T
32	3" Swamp Milkweed (Asclepias incarnata)	2.00	64.00T
32	3" Butterfly Weed (Asclepias tuberosa)	2.00	64.00T
32	3" Purple Coneflower (Echinacea purpurea)	2.00	64.00T
32	3" Meadow Blazing Star (Liatris ligulistylis)	2.00	64.00T
32	3" Black-eyed Susan (Rudbeckia hirta)	2.00	64.00T
32	3" Stiff Goldenrod (Solidago Rigida)	2.00	64.00T
32	3" Hoary Vervain (Verbena stricta)	2.00	64.00T
32	3" Smooth Blue Aster (Symphyotrichum laeve)	2.00	64.00T
32	3" Bergamot (Monarda fistulosa)	2.00	64.00T
32	3" Pale Purple Coneflower (Echinacea pallida)	2.00	64.00T
	Proposed Pick-up July 14		
	Sales Tax when selling in Hennepin County	Total 7.525%	$1,209.12 84.62
		Payments/Credits	$0.00
		Balance Due	$1,209.12

Exhibit #4 - Contracted Items

1. Prairie Grass & Forb Plugs (continued)

Natural Shore Technologies , Inc.
6275 Pagenkopf Road
Maple Plain, MN 55359
612-703-7581 rob.L@naturalshore.com

Invoice

DATE	INVOICE #
2/22/2023	5478

BILL TO

Tom Fahey
Appletree Condo Assoc Board Mbr
thfahey@comcast.net

Current Plan - Aug 15th Pick-up.

DUE DATE	PROJECT
7/15/2023	

QUANT...	DESCRIPTION	RATE	AMOUNT
640	3" Prairie Dropseed (Sporobolus heterolepsis)	2.00	1,280.00T
32	3" Swamp Milkweed (Asclepias incarnata)	2.00	64.00T
32	3" Butterfly Weed (Asclepias tuberosa)	2.00	64.00T
32	3" Purple Coneflower (Echinacea purpurea)	2.00	64.00T
32	3" Meadow Blazing Star (Liatris ligulistylis)	2.00	64.00T
32	3" Black-eyed Susan (Rudbeckia hirta)	2.00	64.00T
32	3" Stiff Goldenrod (Solidago Rigida)	2.00	64.00T
32	3" Hoary Vervain (Verbena stricta)	2.00	64.00T
32	3" Sky Blue Aster (Symphyotrichum oolentangiense)	2.00	64.00T
32	3" Oxeye (Heliopsis helianthoides)	2.00	64.00T
32	3" Pale Purple Coneflower (Echinacea pallida)	2.00	64.00T
	Proposed Pick-up July or August 15		
	Sales Tax when selling in Hennepin County	7.525%	144.48
		Total	$2,064.48
		Payments/Credits	$0.00
		Balance Due	$2,064.48

Exhibit #4 - Contracted Items

2. Seed

Tom Fahey
Appletree Condo Installation

Colleen Quiram

colleen.quiram@mnlcorp.com

3/6/2023

Total Seed Packets:	4	$855.00
Delivery/Shipping:	TBD	$0.00
	Total:	**$855.00**
	Tax	$65.34

Species/Seed Mix Name	Common Name	Size	Quantity	Unit Price	Ext. Price	Notes
MNL Mesic Prairie	5,000 Sq ft Packet	5000	1	$125.00	*$125.00*	
MNL Upland Dry Prairie	5,000 Sq ft Packet	5000	1	$135.00	*$135.00*	
MNL Buckthorn Replacement	5,000 Sq ft Packet	5000	1	$130.00	*$130.00*	
MNL Minnesota Woodland	5,000 Sq ft Packet	5000	1	$465.00	*$465.00*	

EXHIBIT 5 Project Timeline and Detailed Schedule

Time Block Scheduled (#1)	Actual Block (Day/Date) (#2)	Estimated # Volunteers	Estimated Total Hours	Planned Task #1
T.B.D.		1	3	Maintenance: Pick Up Supplies
T.B.D.		1	3	Maintenance: Pick Up Seed
T.B.D.		2	**16**	Cut down 4 or 5 trees on S. slope
T.B.D.		2	**16**	Prep gradual slope:Pull Buckthorn stumps cut '22
T.B.D.		2	**4**	Distribute Woodland seed mix
T.B.D.		2	**4**	Distribute Buckthorn Replacement seed Mix
T. B. D.		?	**60**	Haul & fill Topsoil for Veg. swale
T. B. D.		1	3	Maintenance: Pick Up Tools
Sat., May 6th (AM)		4	**6**	Prep: Blocks A1, B1, C1 & D1
Mon., May 8th (PM)		4	**6**	Prep: Blocks E1, F1, G1 & H1
Tues., May 9th (AM)		2	**3**	Prep: Blocks I1 & J1
Thur., May 11th (AM)		2	**4**	Sow & Cover Seed: Blocks A1, B1, C1, D1, E1
Sat., May 13th (AM)		2	**4**	Sow & Cover Seed: Blocks F1, G1, H1, I1, J1
Mon., May 15th (AM)	15-May	2	6	Maintenance: Pick Up Plants 10 flats Side-Oats Grama (320 plugs) & 10 flats Blue Grama (320 plugs).
Tues., May 16th (AM)		2	**4**	Plant Plugs: Blocks A1 & B1, C1
Wed., May 17th (PM)		2	**4**	Plant Plugs: Blocks D1, E1 & F1
Sat., May 20th (AM)		3	**6**	Plant Plugs: Blocks G1 H1, I1 & J1
T.B.D.		2	8	Weeding & Watering as needed
Mon., May 31st (PM)		3	**12**	Prep Block C2
Tues., June 1st (AM)		3	**12**	Prep Block E2
Sat., June 3rd (AM)		6	**24**	Prep Block F2 & G2
Tues., June 6th (AM)		3	**12**	Prep Block I2
Sat., June 10th (AM)		4	**12**	Sow & Cover Seed: Blocks C2, E2 & F2
Tues., June 13th (AM)		3	**9**	Sow & Cover Seed: Blocks G2,I2 & Clean-up
T.B.D.		2	8	Weeding & Watering as needed
Thurs., June 15th (AM)	15-Jun	2	6	Maintenance: Pick Up Plants 10 flats (320 plugs) for Monarch Butterfly & 5 flats for Short Prairie (160 plugs).
Sat., June 17th (AM)		6	**24**	Plant Plugs: Block C2 & E2
Tues., June 20th (AM)		3	**12**	Plant Plugs: Block F2
Wed., June 21st (PM)		3	**12**	Plant Plugs: Block G2
Thur., June 22nd (AM)		3	**12**	Plant Plugs: Block I2
T.B.D.		2	8	Weeding & Watering as needed
Mon., June 26th (PM)		4	**12**	Prep Block A2
Tues., June 27th (AM)		4	**12**	Prep Block B2
Wed., June 28th (PM)		4	**12**	Prep Block D2
Thurs., June 29th (AM)		4	**12**	Prep Block H2
Mon., July 10th (PM)		4	**12**	Prep Block J2
Tues., July 11th (AM)		2	**8**	Sow & Cover Seed: Blocks A2 & B2
Wed., July 12th (PM)		2	**8**	Sow & Cover Seed: Blocks D2 & H2
Thurs., July 13th (AM)		2	**5**	Sow & Cover Seed: Block J2 & Clean-up
T.B.D.		2	8	Watering as needed

EXHIBIT 5 Project Timeline and Detailed Schedule

				10 flats (320 plugs) for Monarch Butterfly & 5 flats for Short Prairie (160 plugs) & Rain Garden Bundle (50 plugs, 11 different species):
Fri., July 14th (AM)	14-Jul	2	6	Maintenance: Pick Up Plants (see above for list)
Sat., July 15th (AM)		6	**24**	Plant Plugs: Block A2 & B2
Tues., July 18th (AM)		4	**12**	Plant Plugs: Block D2
Wed., July 19th (PM)		4	**12**	Plant Plugs: Block H2
Thur., July 20th (AM)		4	**12**	Plant Plugs: Block J2
Sat., July 22nd (AM)		2	**8**	Prep: Infiltration Basin
Mon., July 24nd (PM)		2	**8**	Plant: Infiltration Basin
T.B.D.		2	8	Watering as needed
				Maintenance: Pick Up Plants 20 flats Prairie Dropseed (640 plugs) & 10 flats (320 plugs) for
Fri., July 28th (AM)	28-Jul	2	6	Monarch Butterfly
Sat., July 29th (AM)		4	**8**	Plant: Blocks A1, B1,C1 & D1
Tues., July 31st (AM)		3	**6**	Plant: Blocks E1, F1,G1 & H1
Thur., Aug. 2nd (AM)		3	**6**	Plant Blocks I1 & J1
T.B.D.		?	**40**	Planting Plugs: Vegetative Swale
Tue.-Fri, Sept. 5th-9th		4	8	Weeding & Maintenance

SUMMARY

TASK	HOURS	NOTES
Cut Trees	16	
Prep: Gradual slope area	16	
Seeding: Gradual slope area	8	
Prep: Blocks A1-J1	15	Blocks A1 to J1 are 3-7ft top to bottom
Seeding: Blocks A1-J1	8	
Plant Plugs: Blocks A1-J1	34	
Prep: Blocks A2-J2	120	Blocks A2-J2: approx. 25ft top to bottom
Seeding: Blocks A2-J2	42	
Plant Plugs: Blocks A2-J2	120	
Prep: Infiltration Basin	8	
Plant Plugs: Infiltration Basin	8	
Watering, Weeding & Maint.	81	
Prep: Vegetative Swale	60	
Plant Plugs: Veg. Swale	40	
	576	**TOTAL HOURS**

Grouping as in Cost Share Worksheet		
PREPARATION OF Seeding & Plugs areas	235	
SEEDING & PLANTING	260	
1ST Yr Watering, Weeding & Maintenance	81	
	576	**TOTAL HOURS - cross check**

NOTE: Pages 3 & 4 will be used to track volunteers' actual hours during the project & will be included in Final Report.

EXHIBIT 5 Project Timeline and Detailed Schedule

Time Block Scheduled (#1)	Actual Period of Hrs worked (#2)	# of workers (#2)	Total Hours (#2)	Actual Tasks Completed & Comments
T.B.D.				
T.B.D.				
T.B.D.				
T.B.D.				
T.B.D.				
T.B.D.				
T. B. D.				
T. B. D.				
Sat., May 6th (AM)				
Mon., May 8th (PM)				
Tues., May 9th (AM)				
Thur., May 11th (AM)				
Sat., May 13th (AM)				
Mon., May 15th (AM)				
Tues., May 16th (AM)				
Wed., May 17th (PM)				
Sat., May 20th (AM)				
T.B.D.				
Mon., May 31st (PM)				
Tues., June 1st (AM)				
Sat., June 3rd (AM)				
Tues., June 6th (AM)				
Sat., June 10th (AM)				
Tues., June 13th (AM)				
T.B.D.				
Thurs., June 15th (AM)				
Sat., June 17th (AM)				
Tues., June 20th (AM)				
Wed., June 21st (PM)				
Thur., June 22nd (AM)				
T.B.D.				
Mon., June 26th (PM)				
Tues., June 27th (AM)				
Wed., June 28th (PM)				
Thurs., June 29th (AM)				
Mon., July 10th (PM)				
Tues., July 11th (AM)				
Wed., July 12th (PM)				
Thurs., July 13th (AM)				
T.B.D.				

EXHIBIT 5 Project Timeline and Detailed Schedule

Time Block Scheduled (#1)	Actual Period of Hrs worked (#2)	# of workers (#2)	Total Hours (#2)	Actual Tasks Completed & Comments
Fri., July 14th (AM)				
Sat., July 15th (AM)				
Tues., July 18th (AM)				
Wed., July 19th (PM)				
Thur., July 20th (AM)				
Sat., July 22nd (AM)				
Mon., July 24nd (PM)				
T.B.D.				
Fri., July 28th (AM)				
Sat., July 29th (AM)				
Tues., July 31st (AM)				
Thur., Aug. 2nd (AM)				
T.B.D.				
Tue.-Fri, Sept. 5th-9th				

Exhibit #6 - Proof of Property Ownership

Appletree Condominium Association Owners

Pins No	Owners Name	Location	Site Unit #
0602723240019	RITENOUR, WILLIAM	8121 34TH AVE S 101	101
0602723240020	MORZENTI, JESSE	8121 34TH AVE S 102	102
0602723240021	ANDERSON, STEVEN	8121 34TH AVE S 103	103
0602723240022	TSCHIDA, LEONARD	8121 34TH AVE S 104	104
0602723240023	KOPF, ANN	8121 34TH AVE S 105	105
0602723240024	PEDERSON, GREGG L	8121 34TH AVE S 106	106
0602723240147	HAUGE, ROGER	8121 34TH AVE S 106	107
0602723240026	ROOD, JAMES L	8121 34TH AVE S 108	108
0602723240027	WOLLACK, FORREST L	8121 34TH AVE S 109	109
0602723240028	BOISCLAIR-,FAHEY ANNE L	8121 34TH AVE S 201	201
0602723240029	ANDERSEN, KEITH	8121 34TH AVE S 202	202
0602723240030	ROCKWELL, ROSEMARY T TRUST	8121 34TH AVE S 203	203
0602723240031	MELLING, DUANE B TRUST	8121 34TH AVE S 204	204
0602723240032	OLSON, R. ERIC	8121 34TH AVE S 205	205
0602723240033	WARD, LLOYD C	8121 34TH AVE S 206	206
0602723240034	HARTMANN, STEVEN G	8121 34TH AVE S 207	207
0602723240035	DONDLINGER, ANN K	8121 34TH AVE S 208	208
0602723240036	BURKE, PHILIP ALAN	8121 34TH AVE S 209	209
0602723240037	BOTT, MICHAEL J	8121 34TH AVE S 301	301
0602723240038	WALTERS, KATHRYN A	8121 34TH AVE S 302	302
0602723240039	DELORIA, LAUREL B	8121 34TH AVE S 303	303
0602723240040	CARLSON, DANIEL C	8121 34TH AVE S 304	304
0602723240041	MADY, JOHN S	8121 34TH AVE S 305	305
0602723240042	HAUKOOS, RONALD	8121 34TH AVE S 306	306
0602723240043	WUEST, PAMELA	8121 34TH AVE S 307	307
0602723240044	PEDERSON, BRADLEY F	8121 34TH AVE S 308	308
0602723240045	JOHNSON, KAREN M	8121 34TH AVE S 309	309
0602723240046	HANKE, NANCY H	8121 34TH AVE S 401	401
0602723240047	HUMPHREY, JUDSON B	8121 34TH AVE S 402	402
0602723240048	BARENSCHEER, JAMES	8121 34TH AVE S 403	403
0602723240049	SIMPSON, JAMES R	8121 34TH AVE S 404	404
0602723240050	NORTH, NICOLE	8121 34TH AVE S 405	405
0602723240051	DOTY, PAMELA	8121 34TH AVE S 406	406
0602723240052	WHITNEY, ROBERT R TRUST	8121 34TH AVE S 407	407
0602723240053	FAHEY, THOMAS H. III	8121 34TH AVE S 408	408
0602723240054	DONDLINGER, PAUL J	8121 34TH AVE S 409	409
0602723240055	HALL, DOUGLAS E.	8121 34TH AVE S 501	501

Exhibit #6 - Proof of Property Ownership (page 2 of 2)

Pins No	Owner's Name	Location	Site Unit #
0602723240056	FORS, LENNART C.	8121 34TH AVE S 502	502
0602723240057	KOPPEN, MARK D TRUST	8121 34TH AVE S 503	503
0602723240058	ERIC JENSEN	8121 34TH AVE S 504	504
0602723240059	GUELICH, JOYCE F	8121 34TH AVE S 505	505
0602723240060	WOLFF, BARBARA L	8121 34TH AVE S 506	506
0602723240061	OLSTAD, KENNETH L	8121 34TH AVE S 507	507
0602723240062	HALER, SCOTT N	8121 34TH AVE S 508	508
0602723240063	SKAAR, OMMUND D	8121 34TH AVE S 509	509

LOWER MINNESOTA RIVER WATERSHED DISTRICT

2023 COST SHARE INCENTIVE AND WATER QUALITY RESTORATION PROGRAM

Cost Share Grant Agreement

The parties to this Agreement, made this _____ day of _____ 2023, are the Lower Minnesota River Watershed District, a Minnesota Watershed District ("LMRWD") a public body with purposes and powers set forth in Minnesota Statutes Chapters 103B and 103D and Appletree Condominium Association ("APPLICANT"). The purpose of this Agreement is to provide for the installation and maintenance of a project designed to protect and improve natural resources within the District, by managing storm water and said project to be located at: 8121 34th Avenue South, Bloomington, MN 55425.

1. Scope of Work. APPLICANT will install the Project in accordance with the Application submitted to the LMRWD, attached as Exhibit A. A final report must be presented to the LMRWD at the time a request is made for reimbursement of expenses as specified in Section 2 of this Agreement.

2. Reimbursement. When the installation of the project is complete in accordance with Exhibit A, the LMRWD, on receipt of adequate documentation, will reimburse the APPLICANT up to 50% of the APPLICANT's cost to install the Project, including materials, equipment rental, delivery of materials and labor, in an amount not to exceed $7,500. APPLICANT will document with receipts all direct expenditures. At the time reimbursement is requested, APPLICANT will provide the LMRWD with copies of all documents concerning the work.

3. Public Access. LMRWD may enter APPLICANT's property at reasonable times to inspect the work to ensure compliance with this Agreement and monitor or take samples for the purpose of assessing the performance of the Project. APPLICANT will permit the LMRWD, at its cost and discretion, to place reasonable signage on APPLICANTs property informing the general public about the Project and the LMRWD's Cost Share Incentive and Water Quality Restoration Program. The LMRWD may request APPLICANT’s permission to allow members of the public periodically to enter APPLICANT's property to view the Project in the company of a LMRWD representative. This paragraph does not create any right of public entry onto APPLICANT's property except as coordinated with APPLICANT and accompanied by a LMRWD representative.

4. Maintenance. APPLICANT will maintain the Project for at least five (5) years from the date installation is complete. If APPLICANT does not do so, the LMRWD will have a right to reimbursement of all amounts paid to APPLICANT, unless:

    a. The LMRWD determines that the failure to maintain the Project was caused by reasons beyond the APPLICANT's control; or

    b. APPLICANT has conveyed the underlying property, provided APPLICANT notifies the LMRWD at least 30 days before the property is conveyed and facilitates communication between the LMRWD and the prospective owner regarding continued maintenance of the project.

5. Agreement Void. This Agreement is void if the project installation in not complete by November 30, 2023. This Agreement may not be modified in any way except in writing and signed by both parties.

6. Indemnification. The LMRWD will be held harmless against all liability and loss in connection with the installation of the Project.

7. Compliance with Laws. APPLICANT is responsible to comply with any permits or other legal requirements applicable to the work.

8. Notices. Any notice or demand, authorized or required under this Agreement shall be in writing and shall be addressed to the other party as follows:

To LMRWD:

Administrator
Lower Minnesota River Watershed District
112 East Fifth Street, Suite 102 Chaska, MN 55318

To APPLICANT:

Tom Fahey, Primary Contact
Appletree Condominium Association
8121 34th Avenue South, Unit 201
Bloomington, MN 55425

The parties being in agreement to be signed as follows:

APPLICANT:	LOWER MINNESOTA RIVER WATERSHED DISTRICT:
By:_____	By:_____
Its:_____	Its:_____President_____
Date:_____	Date:_____

LOWER MINNESOTA RIVER
WATERSHED DISTRICT

Cost Share Grant Application 2023

Application type (check one) ☐ Homeowner ☑ Non-profit - 501(c)(3) ☐ School
☐ Business or corporation ☐ Public agency or local government unit

Project type (check all that apply) ☐ Raingarden ☐ Vegetated Swale ☐ Infiltration Basin
☐ Wetland restoration ☑ Buffer/shoreline restoration ☐ Conservation practice ☑ Habitat restoration
☐ Pervious hard surface ☑ Other_____

Applicant Information

Name of organization or individual applying for grant (to be named as grantee):
Bloomington Neighbors Nurturing Nature
Address (street, city and ZIP code):
10125 Drew Ave S
Phone:
612-222-8580
Email address:
dan.j.niziolek@gmail.com

Primary Contact (if different from above)

Name of organization or individual applying for grant (to be named as grantee):

Address (street, city and ZIP code):

Phone:

Email address:

Project location

Address (street, city and ZIP code):
4551 102nd Street West
Property Identification Number (PID)
1902724120004
Property owners:
(Bloomington) Indepedent School District 271

Project Summary

Title Olson Natural Area Wetland Restoration

Total project cost $16,789

Grant amount requested $7,444

Estimated start date When grant contracted

Estimated completion date June 2025 (or sooner if grant requires)

Is project tributary to a water body? ☐ No, water remains on site ☐ Yes, indirectly ☑ Yes, directly adjacent

Is this work required as part of a permit? ☑ No ☐ Yes
(If yes; describe how the project provides water quality treatment beyond permit requirement on a separate page.)

Project Details

Checklist To be considered complete the following must be included with the application.

- ☑ location map
- ☑ site plan & design schematic
- ☐ contracted items
- ☑ project timeline
- ☑ proof of property ownership
- ☑ plant list &planting plan (if project includes plants)

Project description Describe the project, current site conditions, as well as site history, and past management. Note any potential impacts to neighboring properties.

The Olson Natural Area Wetland Restoration Project is a multiphase restoration and environmental education project to be conducted by a community-public school partnership that is lead by Bloomington Neighbors Nurturing Nature (BNNN). The end goal is the restoration of a natural wetland that will serve as a centerpiece of environmental education for the Olson Middle and Elementary Schools. Phase 1 (the basis of this grant request) will restore a native shoreline buffer/habitat, native emergents, and upland habitat, as well as start water sampling and create initial environmental education features. Future phases will address storm water system inflows to support the full restoration of the wetland. In addition, additional environmental eduction features will be created.

Currently, the 3 acre site is overrun with invasive plants (e.g. purple loosestrife, buckthorn, and honeysuckle) and unmanaged prolific trees (e.g. ash and basswood) as well as lacks appropriate native vegetation. This results in significant erosion issues, lack of habitat, and excessive nutrient flow into the wetland. There are remnant native plants, including pagoda dogwood, Solomon's Seal, and sedges. The wetland has 2 storm water inflows (which will be addressed in future phase) that deposit sediment, vegetation debris, chemicals, and garbage. There is a rustic school amphitheater on one side of the wetland and a primitive dirt path that goes around the upland edge of the wetland.

All historical photos and maps indicate the wetland was/is natural. Sometime in the past, the wetland was integrated into the city storm sewer infrastructure. In addition, the school property parking lot drains into the wetland. The site receives minimal maintenance, generally in the form of mowing and brush removal along the exterior edge. The site is currently used by Olson teachers for limited environmental education. The city currently does not collect water samples from the wetland/storm pond, but is willing to assist and support future water sampling, including involving students.

The wetland is designated by the Nine Mile Creek Watershed as a High Priority Wetland – Protection.

What are the project objectives and expected outcomes? Give any additional project details.

Project Goal:
Restore degraded wetland and create an environmental education resource for Bloomington Public Schools. Restoration will 1) improve water quality, 2) decrease shoreline erosion, 3) remove invasive plants, 4) reestablish native vegetation to support pollinators, wildlife, and sustainable landscaping, and 5) increase environmental education opportunities for public school students.

Grant Objectives:
Decrease non-native species on site -
- Success will be measured by a 75% decrease in buckthorn and non-native species in 2½ years.

Increase native species on site -
- Success will be measured by an increase in native vegetation by 200% in 2½ years.

Increase in habitat -
- 3 acres restored in 2½ years

Improved environmental education and water resources awareness -
- Success will be measured by completion of three new environmental education features, including the initiation of regular water sampling

Increased water resources education and involvement in the restoration project by students, teachers, and community members.
- Success will be measured by the involvement of more than 50 individual resident volunteers in 2½ years.

Grant Details
- Restoration and Environmental Education Design Plan - Meet with teachers and District staff to record teachers' current environmental education on the site and identify new features
- Remove buckthorn, invasive vegetation, and inappropriate densities (overpopulated) of trees to: 1) support native vegetation, 2) reduce plant matter levels entering wetland, 3) reduce shoreline erosion, and 4) reduce deterioration of habitat. Techniques will be non-chemical and prevent erosion during the project. Removal will include hand tool plant removal, occultation, buckthorn bagging, and potentially biological (beetles) control of purple loosestrife. The former strategies have proven successful in other restoration efforts.
- Plant Native Vegetation – plant location-appropriate native vegetation to 1) create natural shoreline buffer strip to decrease shore land erosion and excessive plant matter entering pond and 2) create appropriate vegetation throughout the site to support a healthy ecosystem and habitat for pollinators and wildlife.
- Implement Environmental Education Design – install and create features to support, enhance, and grow environment education for the Public Schools. Potential features include: demonstration/observation areas, planting areas, tree stumps/logs, and the list goes on....

Which cost share goals does the project support? (check all that apply)

- ☑ improve watershed resources
- ☑ foster water resource stewardship
- ☑ increase awareness of the vulnerability of watershed resources
- ☑ increase familiarity with and acceptance of solutions to improve waters

How does the project support the goals you checked?

Bloomington Neighbors Nurturing Nature board members are leading a number of natural resources restoration projects in Bloomington. Water resources are a key element in all of these projects.

Each of these efforts (as this current proposed project will also) focus on engaging and educating residents (adults and youth) in the awareness, understanding, and creation of healthy ecosystems that include water resources. Through visuals and hands on restoration, we grow residents awareness of what makes healthy ecosystems - emphasizing the importance of how properly (non-chemical) maintained native vegetation supports soil health and water quality. We raise residents awareness of the impacts of their landscaping practices - from chemical use and types of vegetation to vegetation debris and run off. We use the health issues of water resources in Bloomington to help residents visually see the impact of their own as well as our collective actions on water quality. Finally, we use regular newsletters and social media to educate and celebrate success. Our Winchester Pond restoration project is one of our greatest successes thus far. We have involved more than 50 residents over 5 years to improve water quality, through collective efforts of 1) installation of floating islands, 2) reduction of lawn chemicals, 3) restoration of shoreline buffers, 4) creation of 3 rain gardens, and 5) removal of invasive plants and overpopulated trees and the planting of native plants. Our success has included drawing upon the expertise of many natural resources experts.

Project Details (continued)

Project benefits Estimate the project benefits in terms of restoration and/or annual pollution reduction. If you are working with a designer or contractor, they can provide these numbers. If you need help contact the district administrator. Computations should be attached.

Benefit	Amount	
Water captures		gal/year
Water infiltrated		gal/year
Phosphorus removed		lbs/year
Sediment removed		lbs/year
Land restored	130,680	sq. ft.

How will you share the project results with your community and work to inform others about your projects environmental benefit?

We will:

- Offer and provide presentations to the Bloomington School Board as well as the City of Bloomington's Sustainability Commission.
- Generate informational pieces for District and Sustainability Commission Newsletters
- Generate social media posts throughout the project. This includes regular posts on our website and FaceBook pages.
- Utilize the project events, updates and results to engage more residents in this and other restoration projects

Please note that by obtaining cost share funding from the Lower Minnesota River Watershed District, your project may be shared with the community through our website, social media, or other media. Your project may also be highlighted on a tour or training event, with prior notice and agreement.

Maintenance Describe the anticipated maintenance and maintenance schedule for your project.

Once the restoration is implemented, the following will be performed for a minimum of 5 years by BNNN:

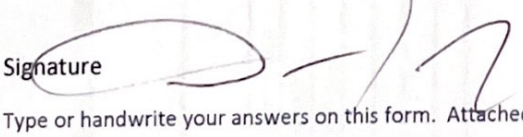
Annually
- Walk the site and pull invasive plants
- Seed to repair negatively impacted areas

Every 3 years
- Biomass harvesting (via mowing, fire, grazing, and/or cutting and hauling away)

I acknowledge that receipt of a grant is contingent upon agreeing to maintain the project for the number of years outlined in the cost share guidelines. ☑ Yes

Authorization

Name of landowner or responsible party Dan Niziolek - BNNN President

Signature  Date 3/28/23

Type or handwrite your answers on this form. Attached additional pages as needed.

For questions, contact Linda Loomis at Naiad Consulting@gmail.com or call 763-545-4659.

Mail the completed application to

Lower Minnesota River Watershed District
c/o Linda Loomis, Administrator
112 E. Fifth St., Suite 102
Chaska, MN 55318

or email to:

Linda Loomis, Administrator
naiadconsulting@gmail.com

2023 Cost Share Worksheet

Labor Costs (contractors, consultants, in-kind labor)

Service Provider	Task	# Hours	Rate/Hour	Requested Funds from LMRWD	Matching/In-Kind Funds	Total Cost
Bloomington Public Schools	Vegetation hauling	7	$35/hour		$245	$245
City of Bloomington	Vegetation Disposal		7 loads @ $100/load		$700	$700
Community Volunteers	Invasive plant removal	310	$20		$6,200	$6,200
"	Native seeding, planting, watering	50	$20		$1,000	$1,000
"	Weeding	40	$20		$800	$800
"	Overpopulated tree removal	20	$20		$400	$400
			Total:	$	$ 9,345	$ 9,345

Project Materials

Material Description	Unit Cost	Total # of Units	Requested Funds from LMRWD	Matching/In-Kind Funds	Total Cost
Landscape materials (Erosion control, black plastic)	$150	3	$450		$450
Nature Shores - native plants/plugs	$2.50	400	$1,000		$1,000
Natural Shores - native plants/plugs	$4.00	750	$3,000		$3,000
MN Native Landscapes - native seeds	$520	4	$2,080		$2,000
Outback Nursery - Trees	$150	5	$750		$750
Mycorrhiza	$122	2	$244		$244
		Total:	$ 7,444	$	$ 7,444

Total Requested Funds from LMRWD*:	$ 7,444	(A)
Total Matchin/In-Kind Funds:	$ 9,345	(B)
Project Total:	$ 16,789	(C)

*Please note: total requested funds (A) cannot be more than 50% of the Project Total (C)

Hennepin County Property Map

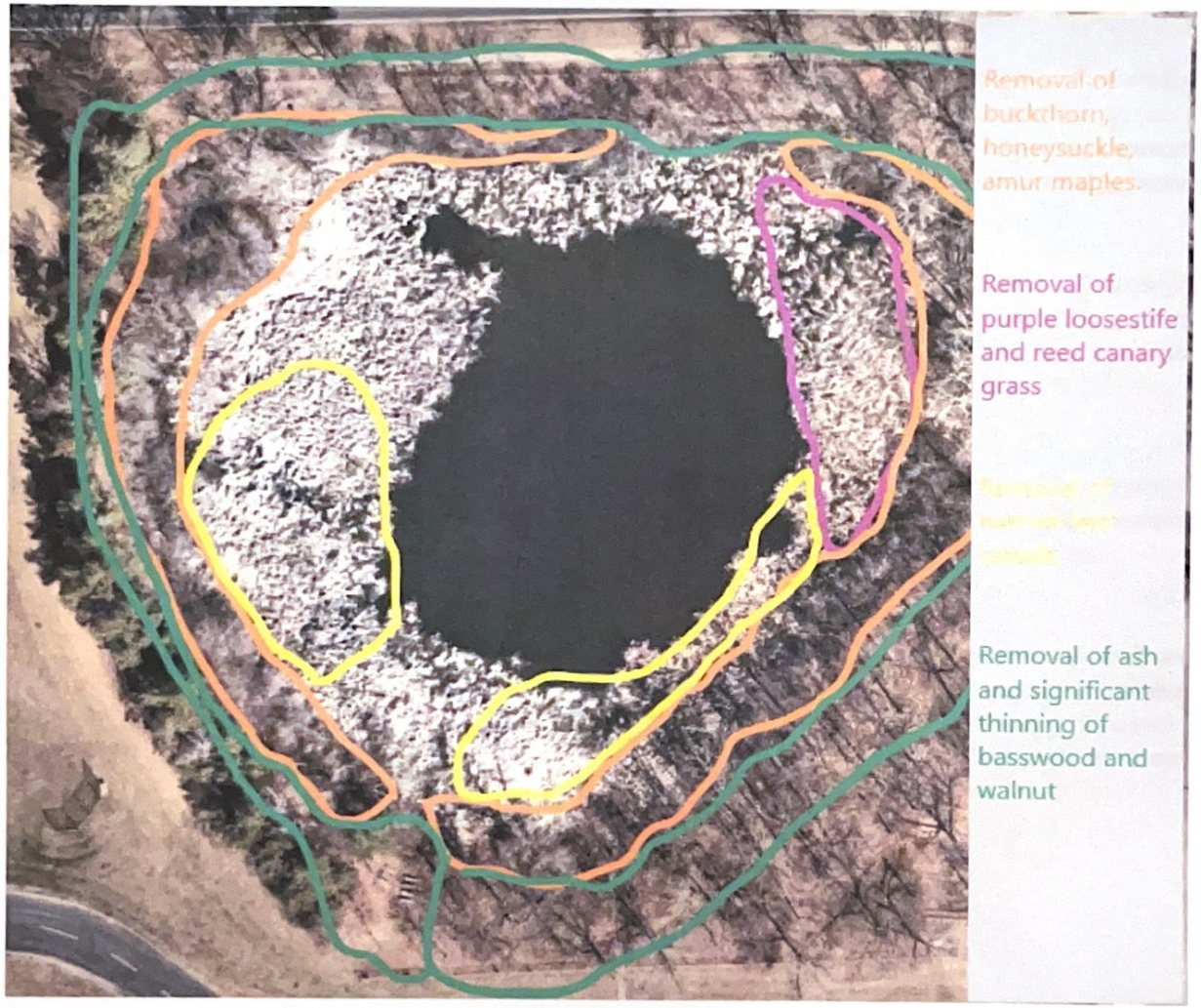
Date: 3/28/2023

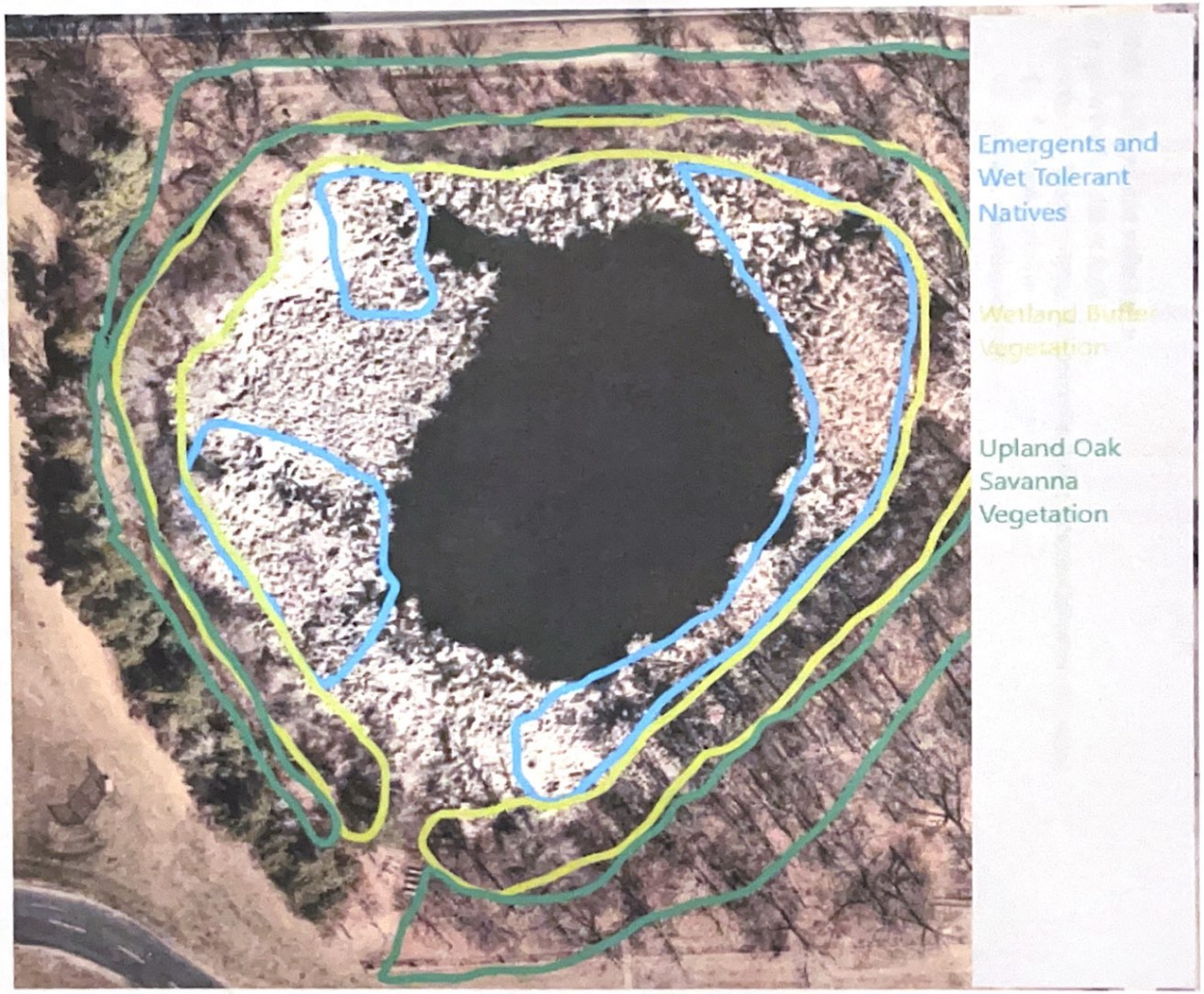
Division in Process

The displayed parcel boundary may not be the actual boundary because this property is in the process of being divided or replatted.

PID: 1902724120004
ADDRESS: 4501 102nd St W,Bloomington MN 00000

Comments:


Removal of buckthorn, honeysuckle, amur maples.
Removal of purple loosestife and reed canary grass
Removal of ash and significant thinning of basswood and walnut


Emergents and
Wet Tolerant
Natives
Upland Oak
Savanna
Vegetation

Project Major Tasks and Timeline

- Spring 2023 – Finalize Restoration and Environmental Education Implementation Plan.
- Spring-Fall 2023 – Buckthorn/invasive plants and overpopulated trees removal (begin in southwest corner of the site and move to the Northeast). Utilize erosion mats and occultation fabric in specific locations. Implement initial education design features. Initial spot seeding and planting.
- Fall 2023 – Prep areas for winter seed sowing. Harvest native grass/flower seeds off-site.
- Winter 2023/24 – Finish overpopulated tree and buckthorn removal. Winter seed sowing.
- Spring-Summer 2024 – Prep and native plantings.
- Summer 2024 – Weeding and education features implementation.
- Winter 2024/25 – Winter seed sowing.
- Spring-Summer 2025 – In fill plantings and seeding, and of course weeding
- Summer 2025 – Assessment.

Project staff, partners, and volunteers:

☐ Bloomington Public Schools Staff
- Operations – Timothy Rybak (Bloomington Public Schools Operation Manager)
  - ☐ Technical expertise
  - ☐ Oversee maintenance staff
  - ☐ Vegetation debris transportation
- Education
  - ☐ Principal Tim Ciavarri (Olson Middle School)
    - Technical expertise
    - Manager of teachers and school programing
    - Environmental Education
  - ☐ Science Teachers (Bloomington Public Schools)
    - Environmental Education expertise
    - Perform environmental education on the site

☐ Bloomington City Staff – Dave Hansen (Forester, 30 years with City of Bloomington, numerous years as Parks Maintenance Manager and recently hired as Natural Resources Manager).
- Technical expertise
- Vegetation disposal site

☐ Community Volunteers. (BNNN annually engages more than 50 volunteers in restoration efforts.)
- Community organizer – 25+ years leading community improvement projects
- Landscaping equipment company owner
- Numerous gardeners – talents and plants to share
- Fund raiser – years of successful fundraising
- Physical labor, tools, refreshments, and plants
- Social media development and maintenance
- Master Naturalist

- **Match funding:** Is a monetary or in-kind match provided or being sought. If your project includes match dollars, please describe the entity providing those dollars, what is being provided, whether it is monetary or in-kind, and in what amounts. Describe the status of the matching fund (e.g., if additional grant funds are being sought or are already secured). Attach supporting documents where necessary.

- Total project cost: $28,545
  - Vegetation debris pickup and transport $245
  - Vegetation disposal $700

Additional Information

Our Non-Chemical, People-Based Buckthorn Removal Approach:

Step 1: Winter-Spring: Cut off all the large (>1" diameter) buckthorn at 4 feet.
Three reasons:
- Immediately allows sunlight to reach the ground (supporting existing native plant growth)
- Forces the buckthorn to expend energy resprouting on the remaining stump.
- Minimizes suckering, which is common for buckthorn cut off at the ground.

Step 2: Spring-Summer: Pull small (<1" diameter) buckthorn. Install erosion fabric where necessary.

Step 3: Early Summer: Plant native plugs in areas of buckthorn pulling with limited native vegetation.

Step 4: Late summer: Either 1) pull out previously cut large buckthorn that has died or 2) cut living previously cut large buckthorn at 6" and apply buckthorn baggie. Leave on 1 year.

Step 5: Following season, pull new growth buckthorn (as well as garlic mustard which will likely appear).

Step 6: Plant plugs and seed throughout entire area of buckthorn pulling and cutting.

Step 7: Monitor baggied buckthorn for pioneers and remove.

Step 8: 1 year after installing, remove buckthorn baggies and remove any medium size root balls.

Step 9: Following season, pull new growth buckthorn and conduct in fill seeding.

Step 10: Regular maintenance.

Removal Acreage:

- Removal of buckthorn/honeysuckle/amur maples/other invasive plants followed by planting/seeding native wetland buffer. **(Approximately 1 acre)**
- Removal of purple loosestrife/narrow-leaf cattails followed by planting of emergents/wet tolerant natives. **(Approximately ½ acre)**
- Removal of ash/overpopulated basswood trees/invasive plants followed by planting upland oak savanna native grasses/sedges/ flowers/oaks. **(Approximately 1 acre)**

MNL

MNL Stormwater Basin Mix

Native mix for stormwater & retention basin pond edges. Height 3-6'

	Scientific Name	Common Name	% of Mix	Seeds/ Sq Ft	PLS lbs/ac	Bloom Season
Grasses:	Andropogon gerardii	Big Bluestem	8.00	2.64	0.72	
	Calamagrostis canadensis	Blue-joint Grass	0.35	3.24	0.03	
	Bromus ciliatus	Fringed Brome	3.10	1.13	0.28	
	Elymus virginicus	Virginia Wild Rye	16.50	2.29	1.49	
	Glyceria grandis	Reed Manna Grass	3.50	9.23	0.32	
	Leersia oryzoides	Rice Cutgrass	10.00	11.24	0.90	
	Panicum virgatum	Switchgrass	5.00	2.31	0.45	
	Sorghastrum nutans	Indian Grass	16.00	6.35	1.44	
	Spartina pectinata	Prairie Cordgrass	7.00	1.53	0.63	
Sedges/Rushes:	Carex hystericina	Porcupine Sedge	0.60	0.60	0.05	
	Carex stipata	Awl-fruited Sedge	0.75	0.84	0.07	
	Carex vulpinoidea	Fox Sedge	1.00	2.68	0.09	
	Scirpus atrovirens	Green Bulrush	0.50	7.60	0.05	
	Scirpus cyperinus	Woolgrass	0.25	14.05	0.02	
Forbs:	Anemone canadensis	Canada Anemone	0.20	0.05	0.02	Spring
	Asclepias incarnata	Swamp Milkweed	4.00	0.63	0.36	Summer
	Bidens cernua	Nodding Beggarstick	2.00	1.39	0.18	Summer
	Desmodium canadense	Showy Tick-trefoil	3.00	0.55	0.27	Summer
	Eutrochium maculatum	Joe-pye Weed	0.55	2.19	0.05	Summer
	Eupatorium perfoliatum	Boneset	0.20	1.06	0.02	Fall
	Helenium autumnale	Sneezeweed	0.80	3.44	0.07	Fall
	Hypericum pyramidatum	Great St. Johnswort	0.40	2.51	0.04	Summer
	Liatris pycnostachya	Prairie Blazing Star	1.25	0.45	0.11	Summer
	Mimulus ringens	Monkey Flower	0.10	7.60	0.01	Summer
	Monarda fistulosa	Wild Bergamot	0.75	1.74	0.07	Summer
	Ratibida pinnata	Yellow Coneflower	1.45	1.44	0.13	Summer
	Silphium perfoliatum	Cup Plant	2.50	0.12	0.23	Summer
	Solidago rigida	Stiff Goldenrod	1.50	2.03	0.14	Fall
	Sparganium eurycarpum	Giant Burreed	2.00	0.03	0.18	Summer
	Symphyotrichum novae-angliae	New England Aster	0.75	1.64	0.07	Fall
	Thalictrum dasycarpum	Purple Meadow Rue	0.60	0.40	0.05	Summer
	Verbena hastata	Blue Vervain	1.00	3.07	0.09	Summer
	Vernonia fasciculata	Ironweed	3.00	2.38	0.27	Summer
	Veronicastrum virginicum	Culver's Root	0.20	5.29	0.02	Summer
	Zizia aurea	Golden Alexanders	1.20	0.44	0.11	Spring
			100.00	104.18	9.00	

Seeds/sq ft:	104.00
Grass Species:	9
Sedges/Rushes:	5
Forb Species:	21

Seed mixes are subject to change based on availability

MNL

MNL Savanna Mix
Shortgrass

Great mix for part-sun oak savanna and woodland edge sites with 25-50% tree cover. Grass height 2-3'

	Scientific Name	Common Name	% of Mix	Seeds/ Sq Ft	PLS lbs/ac	Bloom Season
Grasses:	Bouteloua curtipendula	Side-oats Grama	19.75	8.66	2.37	
	Bromus kalmii	Prairie Brome	1.25	0.44	0.15	
	Elymus trachycaulus	Slender Wheat Grass	10.00	3.04	1.20	
	Elymus villosus	Silky Wild Rye	12.00	2.91	1.44	
	Elymus virginicus	Virginia Wild Rye	11.00	2.04	1.32	
	Schizachyrium scoparium	Little Bluestem	18.00	11.90	2.16	
Sedges/Rushes:	Carex brevior	Plains Oval Sedge	4.00	5.11	0.48	
	Carex molesta	Troublesome Sedge	2.00	2.20	0.24	
	Carex sprengelii	Long-beaked Sedge	2.00	0.88	0.24	
Forbs:	Achillea millefolium	Yarrow	0.15	1.16	0.02	Summer
	Agastache foeniculum	Fragrant Giant Hyssop	0.40	1.59	0.05	Summer
	Amorpha canescens	Leadplant	0.50	0.35	0.06	Summer
	Anemone canadensis	Canada Anemone	0.15	0.05	0.02	Spring
	Anemone virginiana	Tall Thimbleweed	0.25	0.31	0.03	Summer
	Aquilegia canadensis	Columbine	0.20	0.33	0.02	Spring
	Asclepias syriaca	Common Milkweed	1.30	0.23	0.16	Summer
	Ceanothus americanus	New Jersey Tea	0.40	0.13	0.05	Summer
	Dalea purpurea	Purple Prairie Clover	4.00	2.64	0.48	Summer
	Dalea candida	White Prairie Clover	1.50	1.26	0.18	Summer
	Desmodium canadense	Showy Tick-trefoil	2.50	0.61	0.30	Summer
	Drymocallis arguta	Prairie Cinquefoil	0.30	3.04	0.04	Summer
	Lespedeza capitata	Round-headed Bushclover	1.00	0.35	0.12	Summer
	Liatris aspera	Rough Blazing Star	0.20	0.14	0.02	Summer
	Lupinus perennis	Wild Lupine	0.50	0.02	0.06	Spring
	Monarda fistulosa	Wild Bergamot	0.35	1.08	0.04	Summer
	Oenothera biennis	Common Evening Primrose	0.60	2.38	0.07	Fall
	Rosa arkansana	Prairie Rose	0.50	0.02	0.06	Summer
	Rudbeckia hirta	Black-eyed Susan	1.25	5.07	0.15	Summer
	Rudbeckia triloba	Brown-eyed Susan	0.85	1.27	0.10	Summer
	Solidago nemoralis	Gray Goldenrod	0.10	1.32	0.01	Fall
	Solidago rigida	Stiff Goldenrod	0.75	1.36	0.09	Fall
	Solidago speciosa	Showy Goldenrod	0.30	1.26	0.04	Fall
	Symphyotrichum laeve	Smooth Blue Aster	0.10	0.24	0.01	Fall
	Symphyotrichum oolentangiense	Sky-blue Aster	0.50	1.76	0.06	Fall
	Verbena stricta	Hoary Vervain	0.80	0.99	0.10	Summer
	Veronicastrum virginicum	Culver's Root	0.05	1.76	0.01	Summer
	Zizia aurea	Golden Alexanders	0.50	0.24	0.06	Spring
			100.00	68.17	12.00	

Seeds/sq ft:	68.00
Grass Species:	6
Sedge/Rush Species:	3
Forb Species:	28

Seed mixes are subject to change based on availability

NATURAL SHORE

Plug and Plant List

- Butterfly Weed (Asclepias tuberosa)
- Sideoats Grama (Bouteloua curtipendula)
- Lance Leaved Tickseed (Coreopsis lanceolata)
- White Prairie Clover (Dalea candida)
- Purple Prairie Clover (Dalea purpurea)
- Dotted Blazing Star (Liatris pycnostachya)
- Little Bluestem (Schizachyrium scoparium)
- Aromatic Aster (Symphyotrichum oblongifolium)
- Swamp Milkweed (Asclepias incarnate)
- Lake Sedge (Carex lacustris)
- Joe Pye Weed (Eutrochium maculatum)
- Sneezeweed (Helenium autumnale)
- Blue Flag Iris (Iris versicolor)
- Blue Lobelia (Lobelia siphilitica)
- Obedient Plant (Physostegia virginiana)
- New England Aster (Symphyotrichum novae-angliae)
- Blue Vervain (Verbena hastata)
- Bebb's Sedge (Carex bebbi)
- Fox Sedge (Carex vulpinoidea)
- Boneset (Eupatorium perfoliatum)
- Prairie Blazing Star (Liatris pycnostachya)
- Cardinal Flower (Lobelia cardinalis)
- Bur-reed (Sparganium eurycarpum)
- Arrowhead (Sagittaria latifolia)
- Ironweed (Vernonia fasciculata)
- Culver's Root (Veronicastrum virginicum)
- Common Three-square (Schoenoplectus pungens)
- Hardstem Bulrush (Schoenoplectus acutus)
- Softstem Bulrush (Schoenoplectus tabernaemontani)
- Tussock Sedge (Carex stricta)
- Green Bulrush (Scirpus atrovirens)
- Woolgrass (Scirpus cyperinus)
- Bottlebrush Grass (Elymus hystrix)
- Black-eyed Susan (Rudbeckia hirta)
- Gray-headed Coneflower (Ratibida pinnata)
- Zig Zag Goldenrod (Solidago flexicaulis)

LOWER MINNESOTA RIVER WATERSHED DISTRICT

2023 COST SHARE INCENTIVE AND WATER QUALITY RESTORATION PROGRAM

Cost Share Grant Agreement

The parties to this Agreement, made this _____ day of _____ 2023, are the Lower Minnesota River Watershed District, a Minnesota Watershed District ("LMRWD") a public body with purposes and powers set forth in Minnesota Statutes Chapters 103B and 103D and Neighbors Nurturing Nature ("APPLICANT"). The purpose of this Agreement is to provide for the installation and maintenance of a project designed to protect and improve natural resources within the District, by managing storm water and said project to be located at: Olson Middle School, 4501 West 102nd Street, Bloomington, MN 55437.

1. Scope of Work. APPLICANT will install the Project in accordance with the Application submitted to the LMRWD, attached as Exhibit A. A final report must be presented to the LMRWD at the time a request is made for reimbursement of expenses as specified in Section 2 of this Agreement.

2. Reimbursement. When the installation of the project is complete in accordance with Exhibit A, the LMRWD, on receipt of adequate documentation, will reimburse the APPLICANT up to 50% of the APPLICANT's cost to install the Project, including materials, equipment rental, delivery of materials and labor, in an amount not to exceed $7,444. APPLICANT will document with receipts all direct expenditures. At the time reimbursement is requested, APPLICANT will provide the LMRWD with copies of all documents concerning the work.

3. Public Access. LMRWD may enter APPLICANT's property at reasonable times to inspect the work to ensure compliance with this Agreement and monitor or take samples for the purpose of assessing the performance of the Project. APPLICANT will permit the LMRWD, at its cost and discretion, to place reasonable signage on APPLICANTs property informing the general public about the Project and the LMRWD's Cost Share Incentive and Water Quality Restoration Program. The LMRWD may request APPLICANT’s permission to allow members of the public periodically to enter APPLICANT's property to view the Project in the company of a LMRWD representative. This paragraph does not create any right of public entry onto APPLICANT's property except as coordinated with APPLICANT and accompanied by a LMRWD representative.

4. Maintenance. APPLICANT will maintain the Project for at least five (5) years from the date installation is complete. If APPLICANT does not do so, the LMRWD will have a right to reimbursement of all amounts paid to APPLICANT, unless:

    a. The LMRWD determines that the failure to maintain the Project was caused by reasons beyond the APPLICANT's control; or

    b. APPLICANT has conveyed the underlying property, provided APPLICANT notifies the LMRWD at least 30 days before the property is conveyed and facilitates communication between the LMRWD and the prospective owner regarding continued maintenance of the project.

5. Agreement Void. This Agreement is void if the project installation in not complete by November 30, 2023. This Agreement may not be modified in any way except in writing and signed by both parties.

6. Indemnification. The LMRWD will be held harmless against all liability and loss in connection with the installation of the Project.

7. Compliance with Laws. APPLICANT is responsible to comply with any permits or other legal requirements applicable to the work.

8. Notices. Any notice or demand, authorized or required under this Agreement shall be in writing and shall be addressed to the other party as follows:

To LMRWD:

Administrator
Lower Minnesota River Watershed District
112 East Fifth Street, Suite 102 Chaska, MN 55318

To APPLICANT:

Dan Niziolek, Primary Contact
Bloomington Neighbors Nurturing Nature
10125 Drew Avenue South
Bloomington, MN 55431

The parties being in agreement to be signed as follows:

APPLICANT:	LOWER MINNESOTA RIVER WATERSHED DISTRICT:
By:_____	By:_____
Its:_____	Its:_____President_____
Date:_____	Date:_____

LOWER MINNESOTA RIVER
WATERSHED DISTRICT

Cost Share Grant Application 2023

Application type (check one) ☐ Homeowner ☑ Non-profit - 501(c)(3) ☐ School
☐ Business or corporation ☐ Public agency or local government unit

Project type (check all that apply) ☐ Raingarden ☑ Vegetated Swale ☑ Infiltration Basin
☐ Wetland restoration ☑ Buffer/shoreline restoration ☐ Conservation practice ☑ Habitat restoration
☐ Pervious hard surface ☑ Other_____

Applicant Information

Name of organization or individual applying for grant (to be named as grantee):
Appletree Condominium Association
Address (street, city and ZIP code):
8121 34th Ave. S., Bloomington MN 55425
Phone: Email address:

Primary Contact (if different from above)

Name of organization or individual applying for grant (to be named as grantee):
Tom Fahey, primary contact.
Address (street, city and ZIP code):
8121 34th Ave. S., Unit 201, Bloomington MN 55425
Phone:
651-503-8903
Email address:
thfahey@comcast.net

Project location

Address (street, city and ZIP code):
8121 34th Ave. S., Bloomington MN 55425
Property Identification Number (PID)
There are 45 separate condominium units, each owned separately.
Property owners:
See Exhibit #6 for list of all 45 Property Owners and associated PID.

Project Summary

Title Erosion Control & Maintenance Project - Phase 2

Total project cost $20,081 Grant amount requested $7500

Estimated start date May 2023 Estimated completion date September 2023

Is project tributary to a water body? ☐ No, water remains on site ☑ Yes, indirectly ☑ Yes, directly adjacent

Is this work required as part of a permit? ☑ No ☐ Yes
(If yes; describe how the project provides water quality treatment beyond permit requirement on a separate page.)

Project Details

Checklist To be considered complete the following must be included with the application.

- ☑ location map
- ☑ site plan & design schematic
- ☑ contracted items
- ☑ project timeline
- ☑ proof of property ownership
- ☑ plant list &planting plan (if project includes plants)

Project description Describe the project, current site conditions, as well as site history, and past management. Note any potential impacts to neighboring properties.

See Exhibit #1 - Location Maps

Project Description, Site History & Past Management - See page 1 of file named "TEXT for APPLICATION ..."

Past Management, Current Site Conditions & Impacts to Neighboring Properties - See pages 2 - 4 of file named "TEXT for APPLICATION ..."

What are the project objectives and expected outcomes? Give any additional project details.

See Exhibit #2 - Site Plan & Design Schematic

See Exhibit #3 - Plant List & Planting Plan

See Exhibit #4 - Contracted Items

See Exhibit #5 - Project Timeline and Detailed Schedule

Project Objectives and Expected Outcomes - See page 5 of file named "TEXT for APPLICATION ..."

Which cost share goals does the project support? (check all that apply)

- ☑ improve watershed resources
- ☑ foster water resource stewardship
- ☑ increase awareness of the vulnerability of watershed resources
- ☑ increase familiarity with and acceptance of solutions to improve waters

How does the project support the goals you checked?

How Project Supports Goals - See page 6 of file named "TEXT for APPLICATION ..."

Project Details (continued)

Project benefits Estimate the project benefits in terms of restoration and/or annual pollution reduction. If you are working with a designer or contractor, they can provide these numbers. If you need help contact the district administrator. Computations should be attached.

Benefit	Amount	
Water captures	*All captured uphill of Vegetative Swale.	gal/year
Water infiltrated	**Prairie plants & Veg.Swale allows infiltration	gal/year
Phosphorus removed		lbs/year
Sediment removed	^^Sediment runoff on steep&gradual areas reduced	lbs/year
Land restored	approx. 23,000	sq. ft.

How will you share the project results with your community and work to inform others about your projects environmental benefit?

Share Project Results & Environmental Benefits - See page 6 of file named "TEXT for APPLICATION ..."

Please note that by obtaining cost share funding from the Lower Minnesota River Watershed District, your project may be shared with the community through our website, social media, or other media. Your project may also be highlighted on a tour or training event, with prior notice and agreement.

Maintenance Describe the anticipated maintenance and maintenance schedule for your project.

Anticipated Maintenance and Maintenance Schedule - See page 7 of file named "TEXT for APPLICATION ..."

I acknowledge that receipt of a grant is contingent upon agreeing to maintain the project for the number of years outlined in the cost share guidelines. ☑ Yes

Authorization

Name of landowner or responsible party Maureen Olstad,Pres.&Tom Fahey,VP Appletree Condo Assoc.

Signature Date

Type or handwrite your answers on this form. Attached additional pages as needed.

For questions, contact Linda Loomis at Naiad Consulting@gmail.com or call 763-545-4659.

Mail the completed application to

Lower Minnesota River Watershed District
c/o Linda Loomis, Administrator
112 E. Fifth St., Suite 102
Chaska, MN 55318

or email to:

Linda Loomis, Administrator
naiadconsulting@gmail.com

2023 Cost Share Worksheet

Labor Costs (contractors, consultants, in-kind labor)

Service Provider	Task	# Hours	Rate/Hour	Requested Funds from LMRWD	Matching/In-Kind Funds	Total Cost
Volunteers	PREPARATION OF seeding & plug areas	235	$20	0	$4700	$4700
Volunteers	SEEDING & PLANTING	260	$20	0	$5200	$5200
Volunteers	1st YEAR MAINTENANCE	81	$20	0	$1620	$1620
Tools for Volunteers - Maintenance efforts	Gardening Tools, Weed Whip, etc.			0	est. $600	est. $600
MNL (Minnesota Native Landscapes)	provider of seed (see Materials below)					
Natural Shore Technologies	provider of flats of plugs (see Materials below)					
Gerten's Green Houses	erosion blankets & straw bails (see Materials below)					
			Total:	$ 0	$ $12,120	$ 12,120

Project Materials

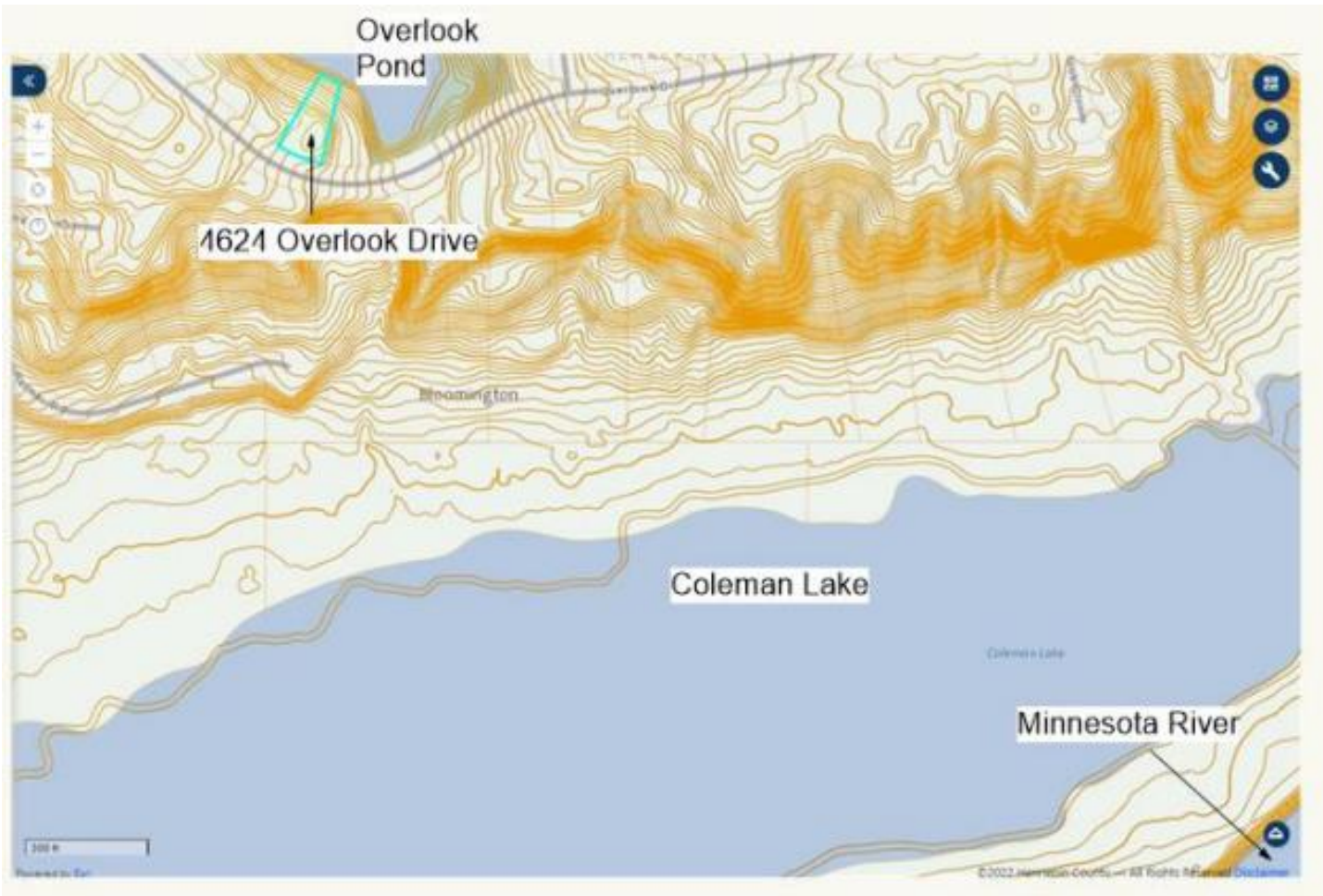
Material Description	Unit Cost	Total # of Units	Requested Funds from LMRWD	Matching/In-Kind Funds	Total Cost
Mesic Prairie (1), Buckthorn Replacement (1), Upland Dry Prairie(1), MN Woodland (1) seed	5000sq ft=varies	4	$459.12	$461.22	$920.34
Unit Prices: Mesic $125, Buckthorn R. $130, Upland Dry $135, Woodand $465, Tax $65.34	see description				
Rain Garden Bundle -- 50 Plants, 11 species	$176.88	1	$176.88	0	$176.88
Monarch Mania Bundle Flats of plugs (32 plugs/per flat in 3" containers)	1 Flat = $68.80	30	$2064.00	0	$2064.00
Side Oats Grama (10 flats), Blue Grama (10 flats), Prairie Dropseed (20 flats)	1 Flat = $68.80	40	$2752.00	0	$2752.00
Short Prairie Bundle (10 flats)	1 Flat = $68.80	10	$688.00	0	$688.00
50 Erosion blankets (4' X 50') @ $25/ea =$1250 & 10 bales of straw @ $11/bale = $110	see description	see description	$1360.00	0	$1360.00
		Total:	$ 7500.00	$ 461.22	$ 7961.22

Total Requested Funds from LMRWD*:	$ $7500.00	(A)
Total Matchin/In-Kind Funds:	$ $12,581.22	(B)
Project Total:	$ $20,081.22	(C)

*Please note: total requested funds (A) cannot be more than 50% of the Project Total (C)

Project Details - Checklist

Location Map on Hennepin County Natural Resources



Blue house icon: 4624 Overlook Drive. Sits on a hill.

- Front yard flows downhill to Overlook Drive, which flows steeply downhill (small blue southeast arrow) to road storm drain. The storm drain flows directly down the ravine across from our house, to Coleman Lake. A second overflow storm drain further east flows into Overlook Pond.
- Backyard is on Overlook Pond, and is a steep downhill to the pond (small blue northeast arrow) , which empties via large pipe under Overlook Drive down a steep ravine to Coleman Lake (large blue south arrow). <u>During high water, the Minnesota River and Coleman Lake become one body of water.</u>

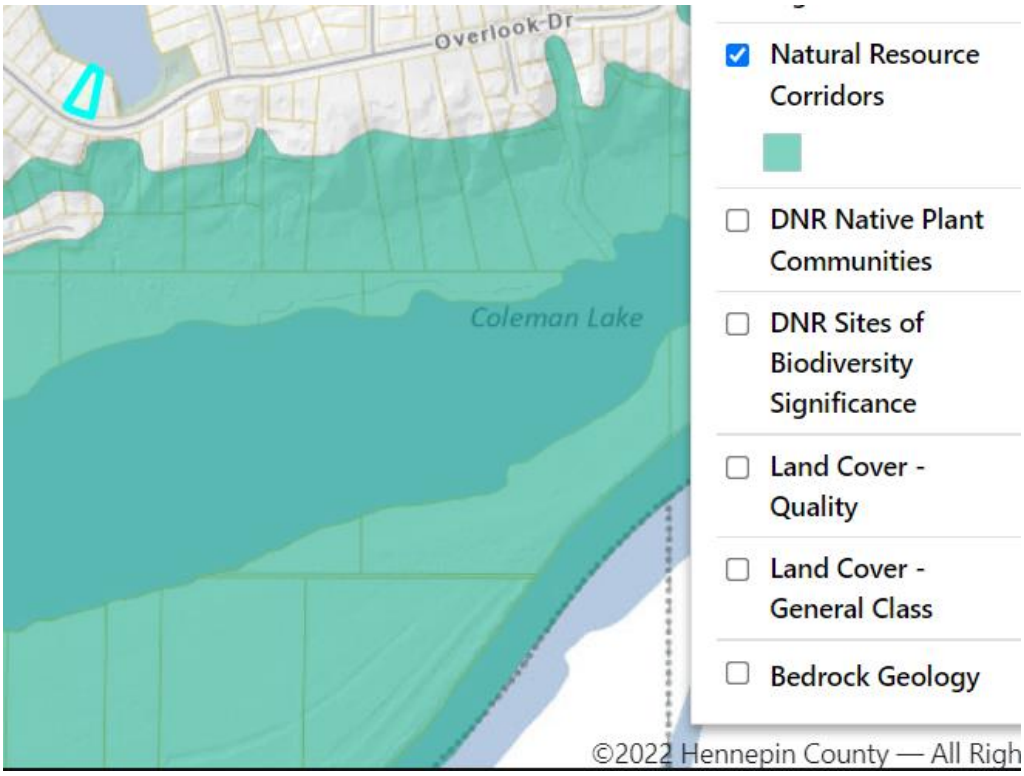
Ravine across from our house and Coleman Lake:

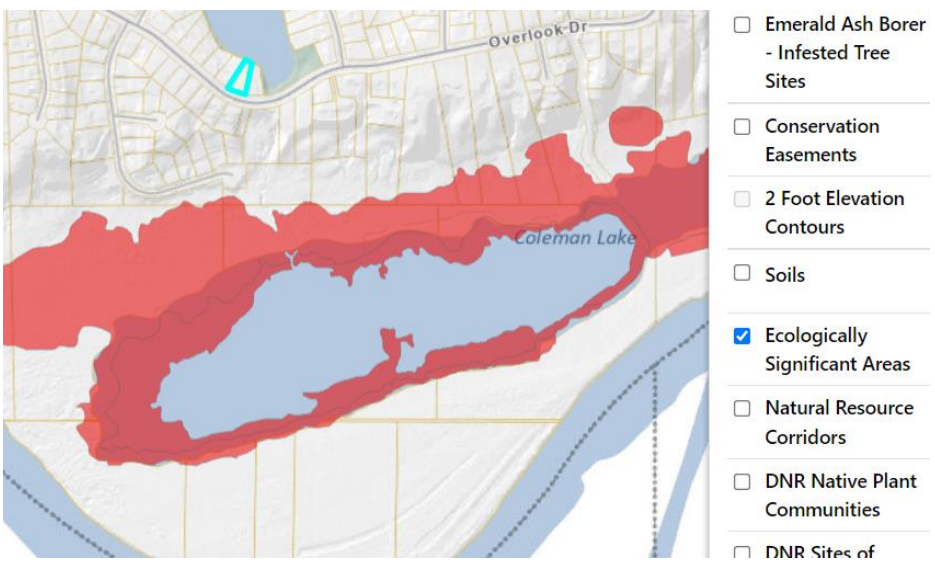
Natural Resource Corridor

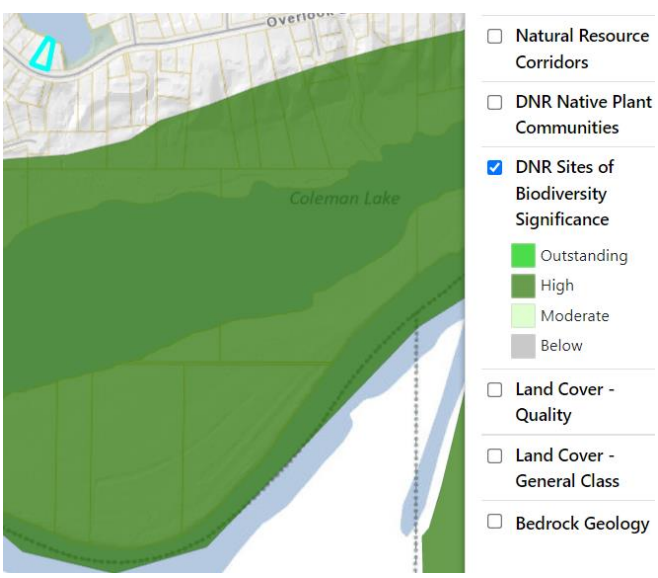
Ecologically Significant

DNR Site of Biodiversity Significance: High

https://gis.hennepin.us/naturalresources/







Site Plan & Design Schematic

Plant List is shown in photo below.

Planting Plan will be developed while we are preparing the ground for planting.

Contracted Items Timeline

Contracted Items – We do not have a contract with anyone. Pasque Ecological Design agreed to do the design but we didn't create a contract for this work.

Timeline: As soon as we have a signed grant agreement, we will begin the work, in the following order:

1. Develop detailed plan and planting plan for the raingarden and native plantings.
2. Prep ground for planting. Decompact soil if necessary.
3. Dig raingarden and permeable paver area.
4. Install 1" compost and 2" double shredded hardwood mulch in applicable areas. Install erosion control blanket if needed on western driveway slope.
5. Install native plants.
6. Install brochure post and lantern, and plant signs. Create brochure and print.
7. Water and weed as needed.

Expected completion: 9/15/23.

Proof of property ownership 2023

Hennepin County > Property > Property information search > PINS home > Address search results

Address search results

Parcel Data for Taxes Payable 2023

Tax Year: 2023

Current year taxes due

2023 state copy (used when filing 2022 M-1PR state refund)

View map of property

Recent recording history

Current year values

Print details

This database is updated daily (Monday - Friday) at approximately 9:15 p.m. (CST)

Property ID number:	30-027-24-42-0022
Address:	4624 OVERLOOK DR
Municipality:	BLOOMINGTON
School district:	271
Watershed:	2
Sewer district:	
Construction year:	1960
Owner name:	GIANNA W DAGIAU
Taxpayer name and address:	GIANNA W DAGIAU 4624 OVERLOOK DR BLOOMINGTON MN 55437

Property tax information

taxinfo@hennepin.us
Phone: 612-348-3011
A-600 Government Center
300 South 6th Street
Minneapolis, MN 55487
M-F, 8 a.m. to 4:30 p.m.
Map

Useful links

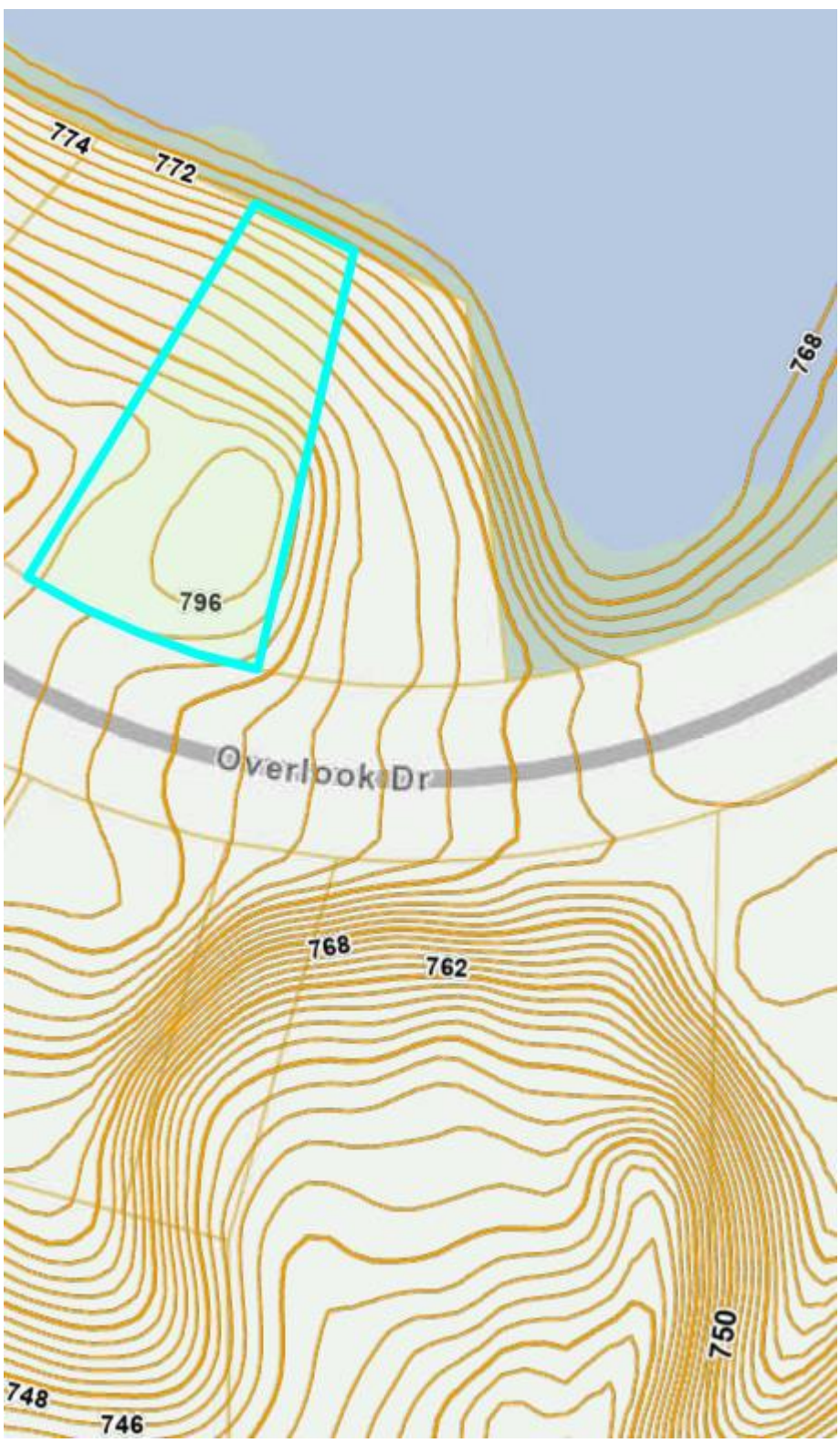
Change taxpayer information

Homestead information

Pay property taxes

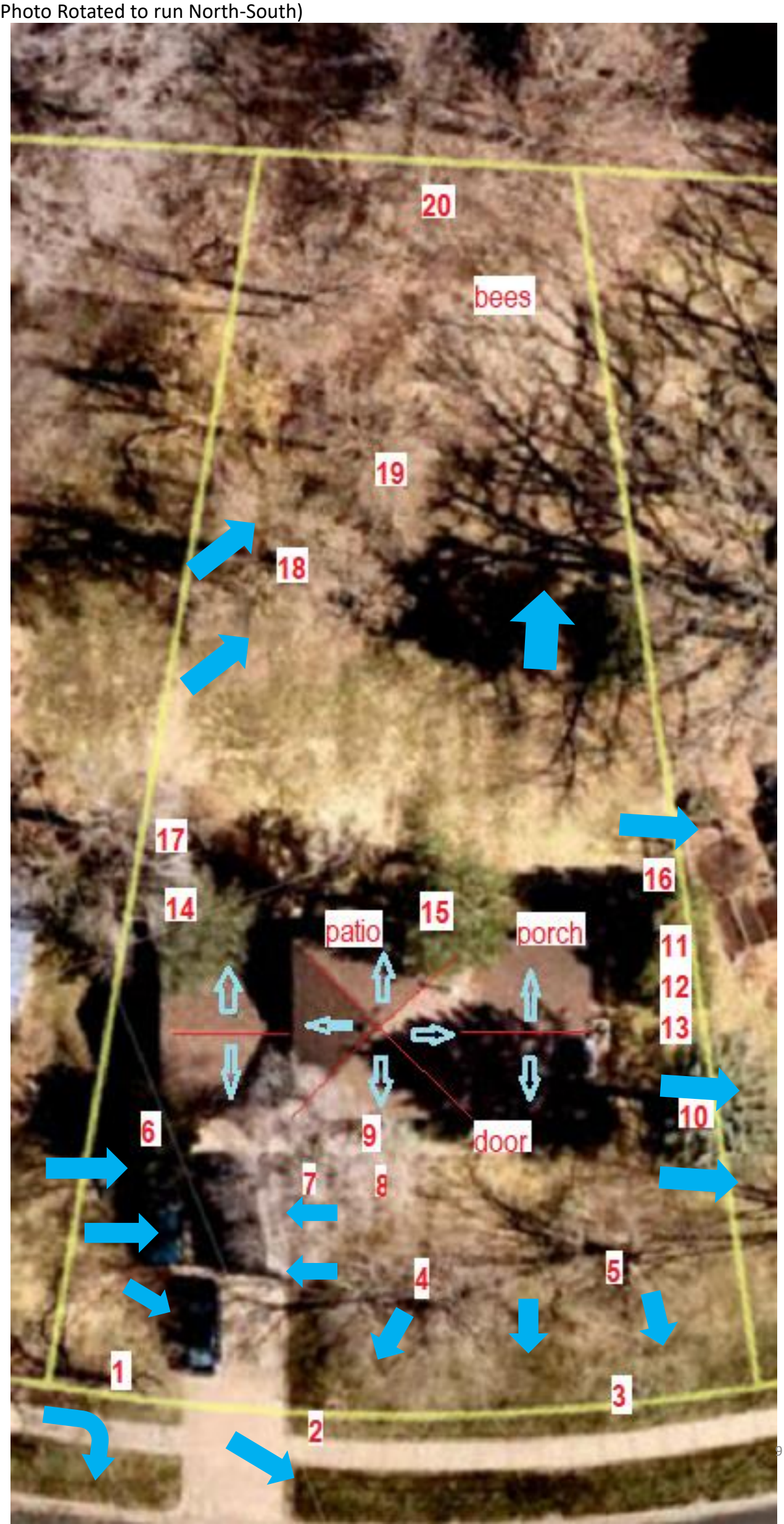
Project Benefits
Runoff calculations

- 2 foot elevation contours
  https://gis.hennepin.us/naturalresources/



Base map Water flow (https://gis.hennepin.us/property/map/default.aspx

Photo Rotated to run North-South)



Runoff – 2022 Original calculations by homeowner

Whole Property current annual runoff and eventual runoff reduction:

- 200’ x 100’ (average of front and back property lines) = 20,000 sq feet
  - Impervious surfaces = 4000 square feet
    - House roof (23.5’ garage + 23.5 bedroom level +21 living room) x 28.5 depth = 1938 sq feet
    - House sidewalk = 3’ x (23.5+21) + 2 x 28.5 = 190
    - Driveway 67’ x17 = 1139
    - Boulevard sidewalk = 4.5’ x 150 = 675
    - Back porch and patio = about 100
  - Compacted lawn: 20,000 – 4000 = 16,000 sq feet
- Runoff, today’s annual estimate = 296,208 gallons. This uses Dakota County’s Landscaping for Clean Water Intro course assumptions: 30” annual precip; Runoff rates of 100% for impervious (course example: 1000 sq ft driveway and 1 inch rain yielded 617 gallons runoff) and 74% for compacted lawn (the lawn portion example: 8390 sq ft and 1 inch rain yielded 3880 gallons runoff).
  - Impervious surfaces
    - 4000 sq ft x 30/12 annual precipitation in feet x 7.48 gallons/cubic feet = 74,800 gallons
    - Runoff at 100% = 74,800 gallons
  - Compacted lawn
    - 16,000 sq ft x 30/12 annual precipitation in feet x 7.48 gallons/cubic feet = 299,200 gallons
    - Runoff at 74% = 221,408 gallons. Note: We have the advantage of sandy soil, but we have the disadvantage that just about all of the yard is slope, much of it steep. Much of the runoff into the driveway is coming from the west neighbor’s high maintenance lawn which is not included in this portion of the calculation.
- Runoff reduction: Our goal with the whole yard master plan over the next few years is to reduce it as much as possible. Per the Dakota County course, in the case of 100% natural cover runoff is 10% of total precipitation, which I suspect is a lower bound.
  - 20,000 sq ft * 30/12 annual precipitation in feet x 7.48 gallons/cubic feet = 374,000
  - 10% total runoff = 37,400 gallons
  - Runoff max reduction = today’s 296,208 gallons – future’s 37,400 gallons = **258,808 gallons**

The grant for **this year’s work** targets the runoff from the boulevard sidewalk and driveway. (It also plants oak trees to get an advance start on their growth, but I am not considering them here).

- Runoff from roof to driveway
  - Bedrooms’ Hip roof (23.5 x 28.5) run off onto front half of garage roof = 0.5 (southern half) * 0.25 (west facing quarter) * (23.5 x 28.5) = 84 square feet
  - Garage roof front half = 0.5 * (23.5 x 28.5) = 335 sq ft
  - Total = 84 + 335 = 419 sq ft
- Rainfall directly onto driveway = 67 x17 = 1139 sq ft
- Sidewalk sloping down to our property from the west 200x4.5 feet = 900 sq ft. This portion of the sidewalk is not on our property but contributes significantly to the runoff off out our driveway and into the street, so if it is stopped it will be by the boulevard plantings.
- Total impervious surface runoff = 2458 sq ft * 30/12 * 7.48 gallons = 46,000 gallons. We expect the boulevard native plantings and raingarden to absorb a good portion of this, depending on precipitation rate at any one time.
- Compacted lawn runoff: Approximately 1/3 of front lawn between driveway and east property line slopes down to the boulevard sidewalk 57 ft x 100ft *1/3 = 1881 sq ft. x 30/12 annual precipitation in feet x 7.48 gallons/cubic feet x 74% = 26,000 gallons. A portion of this runoff, plus roof runoff, will cross the sidewalk into the boulevard native plantings (as opposed to running down the sidewalk to the east neighbors).
- Additional front yard runoff to be targeted in another year (2023) with front yard native plantings not included here:
  - Runoff from the western front yard, starting from middle of west neighbor’s yard slopes to our driveway, and runoff from our central front yard which slopes into driveway.
  - Front yard and roof runoff that runs down the boulevard sidewalk and down the east property edge hill to the east neighbors instead to our boulevard plantings**… See Next Slide**

Runoff – Calculations by Homeowner for 2023 Project

	Impervious Surfaces	**Compacted Lawn**	**Whole property** (does not include west neighbor's runoff onto my property that then runs off my property)
Square feet	4,000	16,000	20,000
Annual precip 30" in feet	2.5	2.5	2.5
Annual cubic feet of rain landing on surface	10,000	40,000	50,000
Gallons in 1 cubic foot	7.48	7.48	7.48
Annual gallons landing on surface	74,800	299,200	374,000
Runoff percent	100%	74%	
Annual runoff in gallons	74,800	221,408	296,208

	Impervious Surface into Raingardens	**Compacted Lawn runoff into Raingardens**	**Compacted Lawn to be converted to Natural Cover**	**Total Runoff Reduction**
Bedroom Hip roof SE corner onto living room roof + front lawn; South living room roof	3,077			
Western front yard, including from west neighbor's east half of yard (which includes their roof runoff), and our central front yard that slopes into our driveway (estimate)		4,000		
Square feet	3,077	4,000	450	
Annual precip 30" in feet	2.50	2.50	2.50	
Annual cubic feet of rain landing on surface	7,691	10,000	1,125	
Gallons in 1 cubic foot	7.48	7.48	7.48	
Annual gallons landing on surface	57,531	74,800	8,415	
Runoff percent	100%	74%	74%	
Annual runoff in gallons	57,531	55,352	6,227	
After Project Completed				
Runoff percent	20%	20%	10%	
Annual runoff in gallons	11,506	14,960	842	
Runoff reduction in gallons	46,024	40,392	5,386	91,802

LOWER MINNESOTA RIVER WATERSHED DISTRICT

2023 COST SHARE INCENTIVE AND WATER QUALITY RESTORATION PROGRAM

Cost Share Grant Agreement

The parties to this Agreement, made this _____ day of _____ 2023, are the Lower Minnesota River Watershed District, a Minnesota Watershed District ("LMRWD") a public body with purposes and powers set forth in Minnesota Statutes Chapters 103B and 103D and Giana DaGiau ("APPLICANT"). The purpose of this Agreement is to provide for the installation and maintenance of a project designed to protect and improve natural resources within the District, by managing storm water and said project to be located at: 4624 Overlook Drive, Bloomington, MN 55437.

1. Scope of Work. APPLICANT will install the Project in accordance with the Application submitted to the LMRWD, attached as Exhibit A. A final report must be presented to the LMRWD at the time a request is made for reimbursement of expenses as specified in Section 2 of this Agreement.

2. Reimbursement. When the installation of the project is complete in accordance with Exhibit A, the LMRWD, on receipt of adequate documentation, will reimburse the APPLICANT up to 50% of the APPLICANT's cost to install the Project, including materials, equipment rental, delivery of materials and labor, in an amount not to exceed $2,500. APPLICANT will document with receipts all direct expenditures. At the time reimbursement is requested, APPLICANT will provide the LMRWD with copies of all documents concerning the work. Volunteer time and labor will be considered an in-kind contribution and may be used as a match, but APPLICANT will not receive reimbursement for in-kind contributions. Labor may be credited at $20.00 per hour.

3. Public Access. LMRWD may enter APPLICANT's property at reasonable times to inspect the work to ensure compliance with this Agreement and monitor or take samples for the purpose of assessing the performance of the Project. APPLICANT will permit the LMRWD, at its cost and discretion, to place reasonable signage on APPLICANTs property informing the general public about the Project and the LMRWD's Cost Share Incentive and Water Quality Restoration Program. The LMRWD may request APPLICANT’s permission to allow members of the public periodically to enter APPLICANT's property to view the Project in the company of a LMRWD representative. This paragraph does not create any right of public entry onto APPLICANT's property except as coordinated with APPLICANT and accompanied by a LMRWD representative.

4. Maintenance. APPLICANT will maintain the Project for at least five (5) years from the date installation is complete. If APPLICANT does not do so, the LMRWD will have a right to reimbursement of all amounts paid to APPLICANT, unless:

    a. The LMRWD determines that the failure to maintain the Project was caused by reasons beyond the APPLICANT's control; or

    b. APPLICANT has conveyed the underlying property, provided APPLICANT notifies the LMRWD at least 30 days before the property is conveyed and facilitates communication between the LMRWD and the prospective owner regarding continued maintenance of the project.

5. Agreement Void. This Agreement is void if the project installation in not complete by November 30, 2023. This Agreement may not be modified in any way except in writing and signed by both parties.

6. Indemnification. The LMRWD will be held harmless against all liability and loss in connection with the installation of the Project.

7. Compliance with Laws. APPLICANT is responsible to comply with any permits or other legal requirements applicable to the work.

8. Notices. Any notice or demand, authorized or required under this Agreement shall be in writing and shall be addressed to the other party as follows:

    To LMRWD:
    Administrator
    Lower Minnesota River Watershed District
    112 East Fifth Street, Suite 102 Chaska, MN 55318

    To APPLICANT:
    Gianna DaGiau
    4624 Overlook Drive
    Bloomington, MN 55437

The parties being in agreement to be signed as follows:

APPLICANT:	LOWER MINNESOTA RIVER WATERSHED DISTRICT:
By:_____	By:_____
Its:_____	Its:_____President_____
Date:_____	Date:_____

LOWER MINNESOTA RIVER
WATERSHED DISTRICT

Cost Share Grant Application 2023

Application type (check one) ☐ Homeowner ☑ Non-profit - 501(c)(3) ☐ School

☐ Business or corporation ☐ Public agency or local government unit

Project type (check all that apply) ☐ Raingarden ☑ Vegetated Swale ☑ Infiltration Basin

☐ Wetland restoration ☑ Buffer/shoreline restoration ☐ Conservation practice ☑ Habitat restoration

☐ Pervious hard surface ☑ Other_____

Applicant Information

Name of organization or individual applying for grant (to be named as grantee):

Appletree Condominium Association

Address (street, city and ZIP code):

8121 34th Ave. S., Bloomington MN 55425

Phone: Email address:

Primary Contact (if different from above)

Name of organization or individual applying for grant (to be named as grantee):

Tom Fahey, primary contact.

Address (street, city and ZIP code):

8121 34th Ave. S., Unit 201, Bloomington MN 55425

Phone: 651-503-8903

Email address: thfahey@comcast.net

Project location

Address (street, city and ZIP code):

8121 34th Ave. S., Bloomington MN 55425

Property Identification Number (PID)

There are 45 separate condominium units, each owned separately.

Property owners:

See Exhibit #6 for list of all 45 Property Owners and associated PID.

Project Summary

Title Erosion Control & Maintenance Project - Phase 2

Total project cost $20,081 Grant amount requested $7500

Estimated start date May 2023 Estimated completion date September 2023

Is project tributary to a water body? ☐ No, water remains on site ☑ Yes, indirectly ☑ Yes, directly adjacent

Is this work required as part of a permit? ☑ No ☐ Yes
(If yes; describe how the project provides water quality treatment beyond permit requirement on a separate page.)

Project Details

Checklist To be considered complete the following must be included with the application.

- ☑ location map
- ☑ site plan & design schematic
- ☑ contracted items
- ☑ project timeline
- ☑ proof of property ownership
- ☑ plant list &planting plan (if project includes plants)

Project description Describe the project, current site conditions, as well as site history, and past management. Note any potential impacts to neighboring properties.

See Exhibit #1 - Location Maps

Project Description, Site History & Past Management - See page 1 of file named "TEXT for APPLICATION ..."

Past Management, Current Site Conditions & Impacts to Neighboring Properties - See pages 2 - 4 of file named "TEXT for APPLICATION ..."

What are the project objectives and expected outcomes? Give any additional project details.

See Exhibit #2 - Site Plan & Design Schematic

See Exhibit #3 - Plant List & Planting Plan

See Exhibit #4 - Contracted Items

See Exhibit #5 - Project Timeline and Detailed Schedule

Project Objectives and Expected Outcomes - See page 5 of file named "TEXT for APPLICATION ..."

Which cost share goals does the project support? (check all that apply)

- ☑ improve watershed resources
- ☑ foster water resource stewardship
- ☑ increase awareness of the vulnerability of watershed resources
- ☑ increase familiarity with and acceptance of solutions to improve waters

How does the project support the goals you checked?

How Project Supports Goals - See page 6 of file named "TEXT for APPLICATION ..."

Project Details (continued)

Project benefits Estimate the project benefits in terms of restoration and/or annual pollution reduction. If you are working with a designer or contractor, they can provide these numbers. If you need help contact the district administrator. Computations should be attached.

Benefit	Amount	
Water captures	*All captured uphill of Vegetative Swale.	gal/year
Water infiltrated	**Prairie plants & Veg.Swale allows infiltration	gal/year
Phosphorus removed		lbs/year
Sediment removed	^^Sediment runoff on steep&gradual areas reduced	lbs/year
Land restored	approx. 23,000	sq. ft.

How will you share the project results with your community and work to inform others about your projects environmental benefit?

Share Project Results & Environmental Benefits - See page 6 of file named "TEXT for APPLICATION ..."

Please note that by obtaining cost share funding from the Lower Minnesota River Watershed District, your project may be shared with the community through our website, social media, or other media. Your project may also be highlighted on a tour or training event, with prior notice and agreement.

Maintenance Describe the anticipated maintenance and maintenance schedule for your project.

Anticipated Maintenance and Maintenance Schedule - See page 7 of file named "TEXT for APPLICATION ..."

I acknowledge that receipt of a grant is contingent upon agreeing to maintain the project for the number of years outlined in the cost share guidelines. ☑ Yes

Authorization

Name of landowner or responsible party Maureen Olstad,Pres.&Tom Fahey,VP Appletree Condo Assoc.

Signature Date

Type or handwrite your answers on this form. Attached additional pages as needed.

For questions, contact Linda Loomis at Naiad Consulting@gmail.com or call 763-545-4659.

Mail the completed application to

Lower Minnesota River Watershed District
c/o Linda Loomis, Administrator
112 E. Fifth St., Suite 102
Chaska, MN 55318

or email to:

Linda Loomis, Administrator
naiadconsulting@gmail.com

2023 Cost Share Worksheet

Labor Costs (contractors, consultants, in-kind labor)

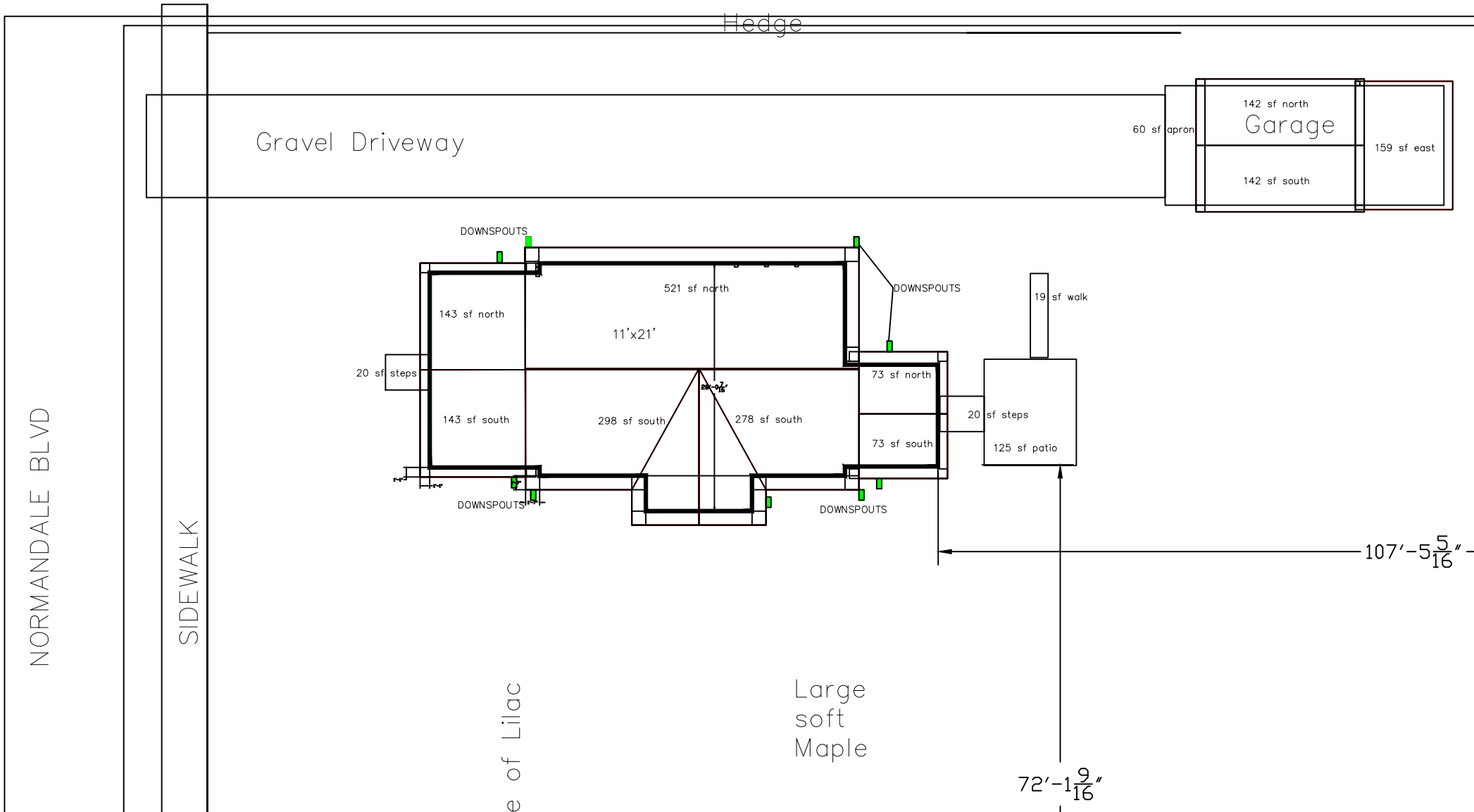
Service Provider	Task	# Hours	Rate/Hour	Requested Funds from LMRWD	Matching/In-Kind Funds	Total Cost
Volunteers	PREPARATION OF seeding & plug areas	235	$20	0	$4700	$4700
Volunteers	SEEDING & PLANTING	260	$20	0	$5200	$5200
Volunteers	1st YEAR MAINTENANCE	81	$20	0	$1620	$1620
Tools for Volunteers - Maintenance efforts	Gardening Tools, Weed Whip, etc.			0	est. $600	est. $600
MNL (Minnesota Native Landscapes)	provider of seed (see Materials below)					
Natural Shore Technologies	provider of flats of plugs (see Materials below)					
Gerten's Green Houses	erosion blankets & straw bails (see Materials below)					
			Total:	$ 0	$ $12,120	$ 12,120

Project Materials

Material Description	Unit Cost	Total # of Units	Requested Funds from LMRWD	Matching/In-Kind Funds	Total Cost
Mesic Prairie (1), Buckthorn Replacement (1), Upland Dry Prairie(1), MN Woodland (1) seed	5000sq ft=varies	4	$459.12	$461.22	$920.34
Unit Prices: Mesic $125, Buckthorn R. $130, Upland Dry $135, Woodand $465, Tax $65.34	see description				
Rain Garden Bundle -- 50 Plants, 11 species	$176.88	1	$176.88	0	$176.88
Monarch Mania Bundle Flats of plugs (32 plugs/per flat in 3" containers)	1 Flat = $68.80	30	$2064.00	0	$2064.00
Side Oats Grama (10 flats), Blue Grama (10 flats), Prairie Dropseed (20 flats)	1 Flat = $68.80	40	$2752.00	0	$2752.00
Short Prairie Bundle (10 flats)	1 Flat = $68.80	10	$688.00	0	$688.00
50 Erosion blankets (4' X 50') @ $25/ea =$1250 & 10 bales of straw @ $11/bale = $110	see description	see description	$1360.00	0	$1360.00
		Total:	$ 7500.00	$ 461.22	$ 7961.22

Total Requested Funds from LMRWD*:	$ $7500.00	(A)
Total Matchin/In-Kind Funds:	$ $12,581.22	(B)
Project Total:	$ $20,081.22	(C)

*Please note: total requested funds (A) cannot be more than 50% of the Project Total (C)


Hedge
Gravel Driveway
60 sf apron
142 sf north
Garage
142 sf south
159 sf east
DOWNSPOUTS
521 sf north
11'x21'
143 sf north
20 sf steps
143 sf south
298 sf south
278 sf south
73 sf north
73 sf south
20 sf steps
125 sf patio
19 sf walk
DOWNSPOUTS
DOWNSPOUTS
DOWNSPOUTS
107'-5 5/16"
NORMANDALE BLVD
SIDEWALK
Large
soft
Maple
72'-1 9/16"

Plant List Preliminary

Availability of plants will determine the final plant choices for this project. I will verify that all purchased plants are native to Minnesota. Final plantings will be dependent on availability. These plants, or substitutions:
*Full Sun Plantings with some part sun for raingarden closer to garage: Riddell's Goldenrod, Cardinal Flower, Rose Milkweed, Buttonbush, Southern Blue Flag, Trout Lily, Blue Vervain, Mountain Mint, Joe Pye Weed, Rose Milkweed, Sneezeweed, Meadow Blazing Star, Great Blue Lobelia Obedient Plant, Southern Blue Flag, Prairie dropseed, Palm Sedge, Orange Coneflower, Wild Bergamot, Cardinal Flower, Early Sunflower, Purple Coneflower, Blue Wild Indigo, Columbine.

Timeline
Submit proposal by 4/15.

Place plant order 4/16-4/19.

As weather allows, clear stored mulch, chipped wood, leaf debris etc in project area.

As plant scome up alongside house these will be transplanted.

Rental reservation for bobcat.

Regrading of driveway.

Digging out raingardens, putting in piping.

Forming raingardens and ready for plantings.

Mulch delivery. Rock delivery.

Downspouts and filters in place, ready to hook up to gardens.

Finalize garden beds for planting.

Planting.


832
830
1
2
832
830
828

LOWER MINNESOTA RIVER WATERSHED DISTRICT

2023 COST SHARE INCENTIVE AND WATER QUALITY RESTORATION PROGRAM

Cost Share Grant Agreement

The parties to this Agreement, made this _____ day of _____ 2023, are the Lower Minnesota River Watershed District, a Minnesota Watershed District ("LMRWD") a public body with purposes and powers set forth in Minnesota Statutes Chapters 103B and 103D and Marianne Cartwright ("APPLICANT"). The purpose of this Agreement is to provide for the installation and maintenance of a project designed to protect and improve natural resources within the District, by managing storm water and said project to be located at: 11115 Normandale Boulevard, Bloomington, MN 55437.

1. Scope of Work. APPLICANT will install the Project in accordance with the Application submitted to the LMRWD, attached as Exhibit A. A final report must be presented to the LMRWD at the time a request is made for reimbursement of expenses as specified in Section 2 of this Agreement.

2. Reimbursement. When the installation of the project is complete in accordance with Exhibit A, the LMRWD, on receipt of adequate documentation, will reimburse the APPLICANT up to 50% of the APPLICANT's cost to install the Project, including materials, equipment rental, delivery of materials and labor, in an amount not to exceed $1,316. APPLICANT will document with receipts all direct expenditures. At the time reimbursement is requested, APPLICANT will provide the LMRWD with copies of all documents concerning the work. Volunteer time and labor will be considered an in-kind contribution and may be used as a match, but APPLICANT will not receive reimbursement for in-kind contributions. Labor may be credited at $20.00 per hour.

3. Public Access. LMRWD may enter APPLICANT's property at reasonable times to inspect the work to ensure compliance with this Agreement and monitor or take samples for the purpose of assessing the performance of the Project. APPLICANT will permit the LMRWD, at its cost and discretion, to place reasonable signage on APPLICANTs property informing the general public about the Project and the LMRWD's Cost Share Incentive and Water Quality Restoration Program. The LMRWD may request APPLICANT’s permission to allow members of the public periodically to enter APPLICANT's property to view the Project in the company of a LMRWD representative. This paragraph does not create any right of public entry onto APPLICANT's property except as coordinated with APPLICANT and accompanied by a LMRWD representative.

4. Maintenance. APPLICANT will maintain the Project for at least five (5) years from the date installation is complete. If APPLICANT does not do so, the LMRWD will have a right to reimbursement of all amounts paid to APPLICANT, unless:

    a. The LMRWD determines that the failure to maintain the Project was caused by reasons beyond the APPLICANT's control; or

    b. APPLICANT has conveyed the underlying property, provided APPLICANT notifies the LMRWD at least 30 days before the property is conveyed and facilitates communication between the LMRWD and the prospective owner regarding continued maintenance of the project.

5. Agreement Void. This Agreement is void if the project installation in not complete by November 30, 2023. This Agreement may not be modified in any way except in writing and signed by both parties.

6. Indemnification. The LMRWD will be held harmless against all liability and loss in connection with the installation of the Project.

7. Compliance with Laws. APPLICANT is responsible to comply with any permits or other legal requirements applicable to the work.

8. Notices. Any notice or demand, authorized or required under this Agreement shall be in writing and shall be addressed to the other party as follows:

    To LMRWD:
    Administrator
    Lower Minnesota River Watershed District
    112 East Fifth Street, Suite 102 Chaska, MN 55318

    To APPLICANT:
    Marianne Cartwright
    11115 Normandale Boulevard
    Bloomington, MN 55437

The parties being in agreement to be signed as follows:

APPLICANT:	LOWER MINNESOTA RIVER WATERSHED DISTRICT:
By:_____	By:_____
Its:_____	Its:_____President_____
Date:_____	Date:_____

LOWER MINNESOTA RIVER
WATERSHED DISTRICT

Cost Share Grant Application 2023

Application type (check one) ☐ Homeowner ☐ Non-profit - 501(c)(3) ☐ School

☒ Business or corporation ☐ Public agency or local government unit

Project type (check all that apply) ☐ Raingarden ☐ Vegetated Swale ☒ Infiltration Basin

☒ Wetland restoration ☒ Buffer/shoreline restoration ☐ Conservation practice ☒ Habitat restoration

☐ Pervious hard surface ☐ Other_____

Applicant Information

Name of organization or individual applying for grant (to be named as grantee):
Scarborough Townhouses Association

Address (street, city and ZIP code):
Scarborough Road, Rich Road, Bloomington, MN 55437

Phone:_____ Email address:_____

Primary Contact (if different from above)

Name of organization or individual applying for grant (to be named as grantee):
Lawrence Polyner, Board Secretary

Address (street, city and ZIP code):
10337 Scarborough Road, Bloomington, MN 55437

Phone: (616) 536-0727 Email address: lawrencepolyner@gmail.com

Project location

Address (street, city and ZIP code):
Scarborough Road & Rich Road, Bloomington, MN 55437

Property Identification Number (PID)
1902724220051, 1902724220113, & 1902724220078

Property owners:
Scarborough Townhouses Association

Project Summary

Title North & South Pond restoration and rehabilitation for Scarborough Townhouses Property

Total project cost $28,646.54 Grant amount requested $7,500.00

Estimated start date Summer 2023 Estimated completion date Fall 2024

Is project tributary to a water body? ☐ No, water remains on site ☒ Yes, indirectly ☐ Yes, directly adjacent

Is this work required as part of a permit? [X] No [ ] Yes
(If yes; describe how the project provides water quality treatment beyond permit requirement on a separate page.)

Project Details

Checklist To be considered complete the following must be included with the application.

- [ ] location map
- [ ] project timeline
- [ ] site plan & design schematic
- [ ] proof of property ownership
- [ ] contracted items
- [ ] plant list &planting plan (if project includes plants)

Project description Describe the project, current site conditions, as well as site history, and past management. Note any potential impacts to neighboring properties.

Both ponds will be excavated and re-lined as well as inlets/outlets cleaned and restored of any blockage to ensure proper flow and maintenance in the future. Shorelines will be restored and re-built as needed to prevent future erosion or premature collapse and refill of the restored ponds. Surrounding landscape will be revised and improved to remove overgrowth and replace with native vegetation that will inhibit regrowth of brush and invasive vegetation.

What are the project objectives and expected outcomes? Give any additional project details.

Clean and healthy restoration of the aquatic refuge on the property as well as restoring the perimeter vegetation and plantings to a natural, native, non-invasive species that will result in lower perpetual maintenance.

Which cost share goals does the project support? (check all that apply)

- [X] improve watershed resources
- [ ] foster water resource stewardship
- [X] increase awareness of the vulnerability of watershed resources
- [X] increase familiarity with and acceptance of solutions to improve waters

How does the project support the goals you checked?

Excavating and restoring the pond walls and depth to what they were previously will result in a cleaner, more stable and tempermental environment as the repository for the ambient flow, ground water and adjacent run-off in these areas. Revitalizing and restoring the shorelines as well as the adjacent landscaping will also help better control the amount of run-off as well as the residual material that might run into these two ponds. One primary objective is to obtain a short term and long term mainteance schedule for these two ponds to ensure that regular maintenance prevents ftuture deterioration of the ponds and their surrounding landscaping.

Project Details (continued)

Project benefits Estimate the project benefits in terms of restoration and/or annual pollution reduction. If you are working with a designer or contractor, they can provide these numbers. If you need help contact the district administrator. Computations should be attached.

Benefit	Amount	
Water captures	1,498,543	gal/year
Water infiltrated		gal/year
Phosphorus removed		lbs/year
Sediment removed		lbs/year
Land restored	36,050	sq. ft.

How will you share the project results with your community and work to inform others about your projects environmental benefit?

A Pond Rehabilitation and Restoration Committee has been formed within our Association. The primary goal for this committee after the ponds have been restored would be to focus on perpetual maintenance as well as regular meetings to establish any necessary focus for the ponds or adjacent work with the Grounds Improvement Committee.

Please note that by obtaining cost share funding from the Lower Minnesota River Watershed District, your project may be shared with the community through our website, social media, or other media. Your project may also be highlighted on a tour or training event, with prior notice and agreement.

Maintenance Describe the anticipated maintenance and maintenance schedule for your project.

Specifics will be determined after project completion for both ponds to layout a plan for each based on what each specific needs will be. Generally speaking at this stage, the following items will be addressed:
1. Monitoring of water height to ensure that erosion or collapsing of pond walls is not occuring.
2. Establish water flow to determine what type of algae mitigation is required to maintain a natural, healthy repository of water in each location.
3. Plant and maintain surrounding vegetation to minimize any invasive growth and enable success of plantings.

I acknowledge that receipt of a grant is contingent upon agreeing to maintain the project for the number of years outlined in the cost share guidelines. [X] Yes

Authorization

Name of landowner or responsible party
Scarborough Townhouses Association

Signature DocuSigned by: Cynthia Gebhard 14AB9984C3DA4FF... Date 4/21/2023 | 8:13 AM CDT

Type or handwrite your answers on this form. Attached additional pages as needed.

For questions, contact Linda Loomis at Naiad Consulting@gmail.com or call 763-545-4659.

Mail the completed application to

Lower Minnesota River Watershed District
c/o Linda Loomis, Administrator
112 E. Fifth St., Suite 102
Chaska, MN 55318

or email to:

Linda Loomis, Administrator
naiadconsulting@gmail.com

2023 Cost Share Worksheet

Labor Costs (contractors, consultants, in-kind labor)

Service Provider	Task	# Hours	Rate/Hour	Requested Funds from LMRWD	Matching/In-Kind Funds	Total Cost
Southview Design						
			Total:	$	$	$

Project Materials

Material Description	Unit Cost	Total # of Units	Requested Funds from LMRWD	Matching/In-Kind Funds	Total Cost
Inlet/Outlet, North Pond	$13.94	339	$4,723.34		$4,723.34
Inlet/Outlet, South Pond	$13.66	308	$2776.66	$1,428.45	$4,205.11
Shoreline Clean-up, North Pond	$1,926.55	2		$3,853.09	$3,853.09
Shoreline Clean-up, South Pond	$2,850.23	2		$5,700.46	$5,700.46
Planting and Seeding for Shoreline Stabilization, North Pond	$1.16	5826		$6,743.63	$6.743.63
Planting and Stabilization for Shoreline Stabilization, South Pond	$1.26	2713		$3,420.91	$3,420.91
		Total:	$ 7,500.00	$ 21,146.54	$ 28,646.54

Total Requested Funds from LMRWD*:	$ 7,500.00	(A)
Total Matching/In-Kind Funds:	$ 21,146.54	(B)
Project Total:	$ 28,646.54	(C)

*Please note: total requested funds (A) cannot be more than 50% of the Project Total (C)

OVERALL SITE PLAN

Red Circles – Pond Locations – perimeter to be cleared out selectively

Blue Circles – Inlet/Outlet – to be cleaned and cleared of debris to allow for proper flow. Sides next to existing concrete culvert pipes to receive approximately 6' wide boulder rip rap to help stabilize areas and protect culverts.

Green – locations of plantings. Shrubs to be field located to help stabilize shoreline where best needed. All areas to be seeded with native shoreline mix.

Plant List –

North Pond	**South Pond**
(14) #5 Red Sprite Winterberry	(7) #5 Red Sprite Winterberry
(5) #5 Jim Dandy Winterberry	(2) #5 Jim Dandy Winterberry
(6) #5 Gray Dogwood	(3) #5 Gray Dogwood

Seed Mix

Native Shoreline and Wildflower Mix
Purple Prairie Clover – 30%
Black Eyed Susan – 20%
Yellow Coneflower – 16%
Golden Alexanders – 8%
Swamp Milkweed – 5%
New England Aster – 4%
Prairie Blazing Star – 4%
Showy Tick Trefoil – 4%
Blue Vervain – 3%
Common Ironweed – 2%
Great St. John's Wart – 1%

Project Timeline

Shoreline Clean up – North Pond – 1.5 days

Shoreline Clean up – South Pond – 1.5 days

Inlet/Outlet work – North Pond – 1 day

Inlet/Outlet work – South Pond – 1 day

Planting and seeding – North Pond – 1 day

Planting and seeding – North Pond – 1 day

TOTAL PROJECT - 7 days

LOWER MINNESOTA RIVER WATERSHED DISTRICT

2023 COST SHARE INCENTIVE AND WATER QUALITY RESTORATION PROGRAM

Cost Share Grant Agreement

The parties to this Agreement, made this _____ day of _____ 2023, are the Lower Minnesota River Watershed District, a Minnesota Watershed District ("LMRWD") a public body with purposes and powers set forth in Minnesota Statutes Chapters 103B and 103D and Scarborough Townhouses Association ("APPLICANT"). The purpose of this Agreement is to provide for the installation and maintenance of a project designed to protect and improve natural resources within the District, by managing storm water and said project to be located at: Scarborough Road, Bloomington, MN 55437 (PID 1902724220051, 1902724220113 & 1902724220078).

1. Scope of Work. APPLICANT will install the Project in accordance with the Application submitted to the LMRWD, attached as Exhibit A. A final report must be presented to the LMRWD at the time a request is made for reimbursement of expenses as specified in Section 2 of this Agreement.

2. Reimbursement. When the installation of the project is complete in accordance with Exhibit A, the LMRWD, on receipt of adequate documentation, will reimburse the APPLICANT up to 50% of the APPLICANT's cost to install the Project, including materials, equipment rental, delivery of materials and labor, in an amount not to exceed $7,500. APPLICANT will document with receipts all direct expenditures. At the time reimbursement is requested, APPLICANT will provide the LMRWD with copies of all documents concerning the work. Volunteer time and labor will be considered an in-kind contribution and may be used as a match, but APPLICANT will not receive reimbursement for in-kind contributions. Labor may be credited at $20.00 per hour.

3. Public Access. LMRWD may enter APPLICANT's property at reasonable times to inspect the work to ensure compliance with this Agreement and monitor or take samples for the purpose of assessing the performance of the Project. APPLICANT will permit the LMRWD, at its cost and discretion, to place reasonable signage on APPLICANTs property informing the general public about the Project and the LMRWD's Cost Share Incentive and Water Quality Restoration Program. The LMRWD may request APPLICANT’s permission to allow members of the public periodically to enter APPLICANT's property to view the Project in the company of a LMRWD representative. This paragraph does not create any right of public entry onto APPLICANT's property except as coordinated with APPLICANT and accompanied by a LMRWD representative.

4. Maintenance. APPLICANT will maintain the Project for at least five (5) years from the date installation is complete. If APPLICANT does not do so, the LMRWD will have a right to reimbursement of all amounts paid to APPLICANT, unless:

    a. The LMRWD determines that the failure to maintain the Project was caused by reasons beyond the APPLICANT's control; or

    b. APPLICANT has conveyed the underlying property, provided APPLICANT notifies the LMRWD at least 30 days before the property is conveyed and facilitates communication between the LMRWD and the prospective owner regarding continued maintenance of the project.

5. Agreement Void. This Agreement is void if the project installation in not complete by November 30, 2023. This Agreement may not be modified in any way except in writing and signed by both parties.

6. Indemnification. The LMRWD will be held harmless against all liability and loss in connection with the installation of the Project.

7. Compliance with Laws. APPLICANT is responsible to comply with any permits or other legal requirements applicable to the work.

8. Notices. Any notice or demand, authorized or required under this Agreement shall be in writing and shall be addressed to the other party as follows:

    To LMRWD:
        Administrator
        Lower Minnesota River Watershed District
        112 East Fifth Street, Suite 102 Chaska, MN 55318

    To APPLICANT:
        Lawrence Polyner, Board Secretary; Primary Contact
        Scarborough Townhouses Association
        10337 Scarborough Road
        Bloomington, MN 55437

The parties being in agreement to be signed as follows:

APPLICANT:	LOWER MINNESOTA RIVER WATERSHED DISTRICT:
By:_____	By:_____
Its:_____	Its:_____President_____
Date:_____	Date:_____

LOWER MINNESOTA RIVER
WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, June 21, 2023

Agenda Item
Item 6. E. – Dredge Management

Prepared By
Linda Loomis, Administrator

Summary
The LMRWD has received notice that the MN MPCA has approved permits for Cargill, Savage Riverport and CHS to dredge and place material on the LMRWD Vernon Avenue Dredge Material Placement site.

Work is continuing on Vernon Avenue in preparation for permit applications. The wetland delineation has been completed and is attached for the Board's information.

Attachments
Level 2 Wetland Delineation

Recommended Action
No action recommended

Level 2 Wetland Delineation

Vernon Avenue Reconstruction
Savage, Minnesota

June 5, 2023

Project No. 23-28902

ISG
Architecture
Engineering
Environmental
Planning
ISGInc.com

REPORT FOR:
Lower Minnesota River Watershed District
Linda Loomis
District Administrator
112 East 5th Street, Suite 102
Chaska, MN 55318
763.545.4659
admin@lowermnriverwd.org

FROM:
ISG
Nick McCabe
Senior Environmental Scientist
115 East Hickory Street + Suite 300
Mankato, MN 56001
507.387.6651
Nick.McCabe@ISGInc.com

CERTIFICATION + SIGNATURES

Vernon Avenue Reconstruction – Savage, Minnesota
Level 2 Wetland Delineation
ISG Project Number: 23-28902

I hereby certify the above-described routine on-site Level 2 wetland delineation was performed on May 10, 2023. The wetland delineation meets standards and criteria specified in the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region, and that I am a Certified Minnesota Wetland Professional.

Jeremy Groskreutz, **CMWP (#1400)**
Environmental Scientist

I hereby certify the quality assurance review of this wetland delineation report was completed by me or under my direct supervision, and that I am a Certified Minnesota Wetland Professional.

Nick McCabe, **CMWP (#1218)**
Senior Environmental Scientist

ISG
115 East Hickory Street + Suite 300
Mankato, MN 56001
507.387.6651

Dated this 5th day of June 2023

TABLE OF CONTENTS

LIST OF TABLES

APPENDICES + FIGURES

EXECUTIVE SUMMARY

ISG completed a wetland investigation within a 17.0-acre investigation area in Savage, Minnesota on May 10, 2023 (as shown on the attached Figures).

This wetland investigation was performed in accordance with the 1987 US Army Corps of Engineers Wetland Delineation Manual and the 2010 Midwest Regional Supplement, and all applicable supporting documents for areas meeting wetland criteria for a routine wetland delineation in accordance to the MN Wetland Conservation Act and the US Army Corps of Engineers Section 404 Program.

Vegetation, soil and hydrology sampling have been completed on all potential wetland areas within the investigation area. Wetland determinations were based on the three required technical criteria: occurrence of hydric soil, predominance of hydrophytic vegetation, and the presence of one primary and/or two secondary indicators of wetland hydrology. Potential wetland areas (mapped hydric soils, NWI signatures, and low depressional areas) were investigated on-site.

Table 1. Delineated Wetland Summary

Wetland No.	Dominant Wetland Type(s)		Dominant Plant Community	Delineated Wetland Area	Soil Classification (Hydric Rating)	Mapped NWI	DNR Protected Waters Inventory
	Circ. 39	Cowardin Classification	Eggers & Reed				
A1	Type 1	PFO1A	Floodplain Forest	0.04 Acres (1,649 SF)	Dd (Predominantly Non-Hydric)	PFO1A	No
	Type 5	PUBH	Shallow Open Water	0.01 Acres (352 SF)			
A2	Type 2	PEMB	Fresh (wet) Meadow	0.08 Acres (3,656 SF)	Fa (Hydric), Dd (Predominantly Non-Hydric)	PFO1A PUBHx	No
	Type 5	PUBH	Shallow Open Water	2.68 Acres (116,779 SF)			
A3	Type 5	PUBH	Shallow Open Water	3.02 Acres (131,346 SF)	Fa (Hydric), Dd (Predominantly Non-Hydric)	PEM1A PFO1A	No
A4	Type 1	PFO1A	Floodplain Forest	0.12 Acres (5,180 SF)	Cc/Fa (Hydric)	PSS1/ EM1C	No
	Type 2	PEMB	Fresh (wet) Meadow	0.35 Acres (15,201 SF)			
	Type 3	PEMC	Shallow Marsh	0.90 Acres (39,260 SF)			
	Type 5	PUBH	Shallow Open Water	1.52 Acres (66,044 SF)			
A5	Type 3	PEMC	Shallow Marsh	0.51 Acres (21,998 SF)	Cc/Fa (Hydric)	PSS1/ EM1C	No
	Type 5	PUBH	Shallow Open Water	0.22 Acres (9,734 SF)			
A6	Type 1	PFO1A	Floodplain Forest	0.12 Acres (5,166 SF)	Fa (Hydric)	No	No

Table 2. Wetland Type Summary

Dominant Wetland Type(s)		Dominant Plant Community	Delineated Wetland Area
Circ. 39	Cowardin Classification	Eggers & Reed	
Type 1	PFO1A	Floodplain Forest	0.28 Acres (11,995 SF)
Type 2	PEMB	Fresh (wet) Meadow	0.43 Acres (18,857 SF)
Type 3	PEMC	Shallow Marsh	1.41 Acres (61,258 SF)
Type 5	PUBH	Shallow Open Water	7.45 Acres (324,255 SF)
Total Area:		**9.57 Acres (416,365 SF)**	

PROJECT DESCRIPTION

Project Purpose

ISG was retained to identify and delineate all wetland areas that exist within the investigation area. The wetland investigation boundary (or investigation area) encompassed approximately 17.0 acres north of the intersection of Vernon Avenue and County State Aide Highway 13 (CSAH 13) in Savage, Minnesota.

The purpose of the wetland investigation is to accurately identify wetland areas onsite so that they can be incorporated into plans for rehabilitation/reconstruction of the existing roadway.

This report is intended to facilitate any regulatory discussions of Wetland Conservation Act and Clean Water Act Section 10/404 permitting for this project.

Project Location

The investigation area was located north of the intersection of Vernon Avenue and CSAH 13 in Section 31 of T27N, R24W, in the city of Savage, Minnesota (See Figure 1, Appendix A for a location map). The site was located within the Lower Minnesota River major watershed (33, DNR) and an unnamed minor watershed (33146, DNR). The topography of the site sloped outward from Vernon Avenue which ran along the center of the investigation area. Site elevation ranged from approximately 698' to 720' above msl. At the time of this delineation, the investigation area consisted of Vernon Avenue, a portion of a railroad spur, and adjacent wetland area.

Surrounding Properties

The project site is located in the outskirts of Savage near the Minnesota River and within the "Ports of Savage Industrial District". There are large wetland complexes and industrial facilities surrounding the investigation area.

DEFINITIONS + METHODOLOGY

This investigation was performed in accordance with the US Army Corps of Engineers 1987 Wetland Delineation Manual and the 2010 Midwest Regional Supplement, and all applicable supporting documents for areas meeting wetland criteria for a routine wetland delineation in accordance to the Minnesota Wetland Conservation Act and the US Army Corps of Engineers Section 404

Program. The following definitions, diagnostic environmental characteristics, and the methodology used is based on the mandatory technical criteria for the identification and delineation of wetlands.

Wetlands Definition

As defined in 33 CFR Part 328, Section 3, the term wetlands is defined as: Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. The frequency and duration of saturation may vary by geographical region, and is largely dependent upon climatic conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

Wetlands have the following general diagnostic environmental characteristics:

HYDROPHYTIC VEGETATION

The wetland vegetation criterion is satisfied when the prevalent vegetation consists of plant species adapted to inundation or substrates periodically deficient in oxygen as a result of prolonged saturation. Specifically, this includes plant communities that under normal circumstances have more than 50% of the composition of the dominant species from all strata ranked with an indicator status as obligate wetland (OBL), facultative wetland (FACW), and/or facultative (FAC) species.

The indicator status for individual plants as defined by the updated 2018 Minnesota National Wetland Plant List are Identified and described in the following table:

Table 3. Vegetation Indicator Categories

Indicator Category	Occurrence in Wetlands
Obligate (OBL)	Almost always
Facultative Wetland (FACW)	Usually
Facultative (FAC)	Equally likely to occur in uplands
Facultative Upland (FACU)	Rarely
Upland (UPL)	Almost never

HYDRIC SOIL

A hydric soil is a soil formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part. Examples of hydric soil indicators include: the accumulation of organic matter, low-chroma soil matrices, gleying, redox concentrations, redox depletions, and hydrogen sulfide odor.

WETLAND HYDROLOGY

According to the 1987 manual, wetland hydrology is present when the area is inundated either permanently or periodically at mean water depths less than or equal to 6.6 feet, or the soil is saturated to the surface at some time during the growing season. The Midwest Regional Supplement requires fourteen (14) or more consecutive days of flooding or ponding, or a water table of twelve (12) inches (30 cm) or less below the soil surface, during the growing season at a minimum frequency of five (5) years in ten (10) (50% or higher probability) to satisfy wetland hydrology.

The wetland hydrology criterion can be satisfied with observation of one (1) primary hydrology indicator or two (2) secondary hydrology indicators. Potential primary indicators of wetland hydrology may include, but are not limited to: inundation, saturation, water marks, drift lines, sediment deposits, and a thin muck surface. Potential secondary indicators of wetland hydrology may

include, but are not limited to: surface soil cracks, drainage patterns, saturation visible on aerial imagery, and the FAC-neutral test.

Off-Site Methodology

MAP REVIEW

Prior to fieldwork, several mapping sources were consulted to identify potential wetland habitats. The sources consulted include the United States Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI), United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), formerly Soil Conservation Service (SCS) Soil Survey, Minnesota Department of Natural Resources (DNR) Public Waters Inventory (PWI), and United States Geological Survey (USGS) Topographic maps. Areas indicating evidence of potential wetland conditions were evaluated in greater detail through fieldwork.

PRECIPITATION DATA ANALYSIS

Precipitation data from the Minnesota Climatology Working Group and Natural Resources Conservation Service WETS Tables were used in conjunction with the NRCS Method for Evaluating Antecedent Moisture Conditions to determine precipitation conditions under which the investigation was conducted.

On-Site Methodology

FIELD SAMPLING PROCEDURES

Sample transects were established in representative transition zones between wetland and upland for each observed plant community. For potential wetland areas greater than five acres in size, a minimum of three transects were established along the baseline wetland boundary for lengths of up to one mile, three to five transects for one to two miles, five to eight transects for two to four miles, and eight or more transects for wetland baseline boundaries that exceed four miles in length. Transect intervals do not exceed 0.5 mile apart from each other.

Transects are comprised of two sample points, one sample in upland and one sample point in wetland. A field data sheet was completed describing the dominant soil characteristics (to a minimum of 24 inches below the soil surface), plant communities, and hydrology indicators at the sample point. The presence of water was observed after time (depending on soil characteristics) was allowed for movement of water through the soil substrate. Absolute percent areal cover was recorded for the species that were observed (which may exceed 100% total area due to overlap) and dominance was determined by using the 50/20 rule. Vegetation was sampled within each stratum present at a sample point using the following circular plot sizes:

- Trees – 30 ft radius
- Saplings and Shrubs – 15 ft radius
- Herbaceous – 5 ft radius
- Woody Vines – 30 ft radius

The sample points were marked with blue pin flags (if not within an agricultural land use) and photographed. Other samples were taken at unmarked locations to provide verification of the wetland edge, as needed.

WETLAND BOUNDARY DELINEATION

The wetland boundaries were determined using changes in topography, dominance of hydrophytic/non-hydrophytic vegetation, hydric soil indicators, and/or hydrology characteristics. Wetland edges were marked with pink “wetland delineation” flags (if not

within an agricultural land use). The wetland edge is considered to be the highest extent of the wetland basin. Areas below the flagged edge satisfy the three required wetland criteria while areas above were lacking in one or more of these criteria.

US Army Corps of Engineers Regulatory Guidance Letter 90-6 requires documentation sufficient to allow a reasonably accurate replication of the delineation at a future date. Reasonably accurate is defined as within 0-2 meters accuracy. Precise positions of sample points and the wetland edge have been located by a sub-meter GPS unit and have been included in the wetland delineation drawing or map for this property.

WETLAND TYPE CLASSIFICATION

Wetlands were classified using Wetland Plants and Plant Communities of Minnesota and Wisconsin (Eggers & Reed 2007), Classification of Wetlands and Deepwater Habitats of the United States (Cowardin, et al, 1979) and Wetlands of the United States (Fish and Wildlife Service Circular 39, Shaw and Fredine 1971).

FINDINGS

Map Review

The NWI map listed eight NWI wetland signatures located throughout the investigation area. The NWI wetlands were all part of the same wetland complex. Mapped signatures included Emergent (PEM), Forested (PFO), Scrub/Shrub (PSS), and Unconsolidated Bottom (PUB) wetlands. The NWI wetlands are shown in Figure 2, Appendix A.

The Minnesota River was a mapped DNR Public Waters located immediately adjacent to the north of the investigation area (Figure 2, Appendix A).

Soils within the investigation area have been mapped by the NRCS along with their hydric classification. The location of each soil unit occurring within the investigation area are shown on the Scott County Soil Survey map (Figure 3, Appendix A).

The LiDAR map (Figure 4, Appendix B) illustrates the highest elevations along the centerline of Vernon Avenue, particularly at the intersection of CSAH 13. Elevations varied within the investigation area, ranging from 698' to 720' above msl.

Antecedent Precipitation Data Analysis

The precipitation received in the investigation area during the previous three months was within the normal range (30-70th percentile) for this area. Prior to the sample date of May 10, 2023, there was below normal precipitation in April, normal precipitation in March, and above normal precipitation in February. Therefore, the field work was completed under normal conditions according to the precipitation worksheet for wetland delineations (Appendix C).

Field Delineation Results

Based on the data reviewed and fieldwork conducted, one (1) area was examined for wetland characteristics within the investigation area. One (1) wetland complex was ultimately delineated and is further described within this report. The delineated wetland complex was identified as Wetland A (broken up as Wetlands A1 through A6), which included sample points 1 through 4.

The investigation area was bounded by built up railroad tracks, continuous wetland, or gravel storage areas. Additionally, much of the wetland areas consisted of open water of unknown depth located at the toes of the Vernon Ave slopes, which were steep. It was impracticable and unsafe to collect sample points from these areas. This left very little suitable land to conduct proper sampling transects that would provide representative data across much of the investigation area. Due to the nature of the

investigation area suitable locations for upland sample points were limited. One transect was ultimately taken along Wetland A's boundaries.

Field data forms for each sample point are located in Appendix B. Refer to Figure 6 (Appendix B) for a map of the investigation area, wetland basins, sampling transect, and photo point locations. Photos of the wetland basins within the investigation area are included in Appendix C.

Other Aquatic Resources

There were no other prominent aquatic resources (ditches, streams, rivers, lakes, etc.) located within or immediately adjacent to the investigation area. The Minnesota River (M-055) was located approximately 450' from the northern extent of the investigation area.

Wetland Summary

WETLAND A

Wetland A was a wetland complex that comprised a majority of the investigation area. Wetland A is part of the Minnesota River floodplain and extended outside of the investigation area to the west, north, and east. Within the investigation area, Wetland A was divided into six areas by Vernon Avenue, a railroad spur, and an earthen embankment. These areas were broken down as areas A1 through A6. These areas were all connected via groundwater connection as well as by four culverts within the investigation area. There were culverts that connected wetland areas A1 to A3, A2 to A3, A2 to A4, and A3 to A5 as depicted in Figure 6.

The different areas of Wetland A each had differing wetland characteristics. Area A1 consisted primarily of a Type 1 – Floodplain Forest wetland with a channelized area of Type 5 – Shallow Open Water. Vegetation within Area A1 consisted of mature trees such as cottonwoods with an understory that consisted of a sparsely vegetated concave surface. Areas A2 and A3 consisted almost entirely of Type 5 – Shallow Open Water wetland with Area A2 having a small bench of Type 2 – Fresh (wet) Meadow that was dominated by Reed Canary Grass. Area A4 consisted of four wetland communities with different hydrologic regimes that appeared to correlate with increases in elevation. Proceeding from south to north, Area A4 consisted of an area of Type 5 – Shallow Open Water, Type 3 – Shallow Marsh dominated by cattails, Type 2 – Fresh (wet) Meadow dominated by Reed Canary Grass, and Type 1 – Floodplain Forest dominated by Buckthorn with a sparsely vegetated understory. Similarly, Area A5 consisted primarily of Type 3 – Shallow Marsh dominated by cattails with a deeper pocket of Type 5 – Shallow Open Water near its northern extent. Area A6 consisted of a Type 1 – Floodplain Forest wetland with some standing water and a sparsely vegetated concave surface with water-stained leaves around its periphery.

Wetland types were determined based on what was observed in the field with consideration given to recent and historic aerial imagery taken into account. The areas of open water that were called out as Type 5 were apparent consistently in historic imagery, which was part of the basis for our wetland type classification. Additionally, these areas appeared to lack emergent vegetation communities consistent with Type 3/4 wetland types.

The boundaries of Wetland A were determined based primarily on topography. The constructed toes of Vernon Avenue, access drives, railroad beds, and an earthen embankment were all used to delineate the wetland boundaries. Flags were placed along the toes of these obvious upland features.

RECOMMENDATIONS

Activities impacting or potentially impacting the wetlands identified are regulated through several levels of government in Minnesota:

- **Federal:** US Army Corps of Engineers: Permit Programs under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act
- **State of Minnesota:** Minnesota Department of Natural Resources: Public Waters Work Permit Program
- **Local:** Local Units of Government (LGU) administer the Minnesota Wetland Conservation Act (WCA) of 1991.

Please note that grading, excavating, or filling is not allowed until all necessary permits have been obtained. If wetland impacts are proposed, ISG can assist in the proper steps to acquire the appropriate permit or exemption. By initiating the permit process as soon as possible, potential costly delays to the project may be avoided.

DATA SOURCES + LITERATURE CITED

Cowardin, L.M., V. Carter, F.C. Golet, and R.T. LA Roe. 1979. Classification of wetlands and deep water habitats of the United States. U.S. Fish and Wildlife Service, FWS/OBS-79/31.

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Minnesota Department of Natural Resources Protected Waters Inventory Map, Scott County.

Shaw, S.P., and C.G. Fredine. 1956. Wetlands of the United States. U.S. Fish and Wildlife Service, Circular 39. 67pp.
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United States Army Corps of Engineers- St. Paul District and Minnesota Board of Water & Soil Resources. March 4, 2015. Guidance for Submittal of Delineation Reports to the St. Paul District Army Corps of Engineers and Wetland Conservation Act Local Governmental Units in Minnesota.

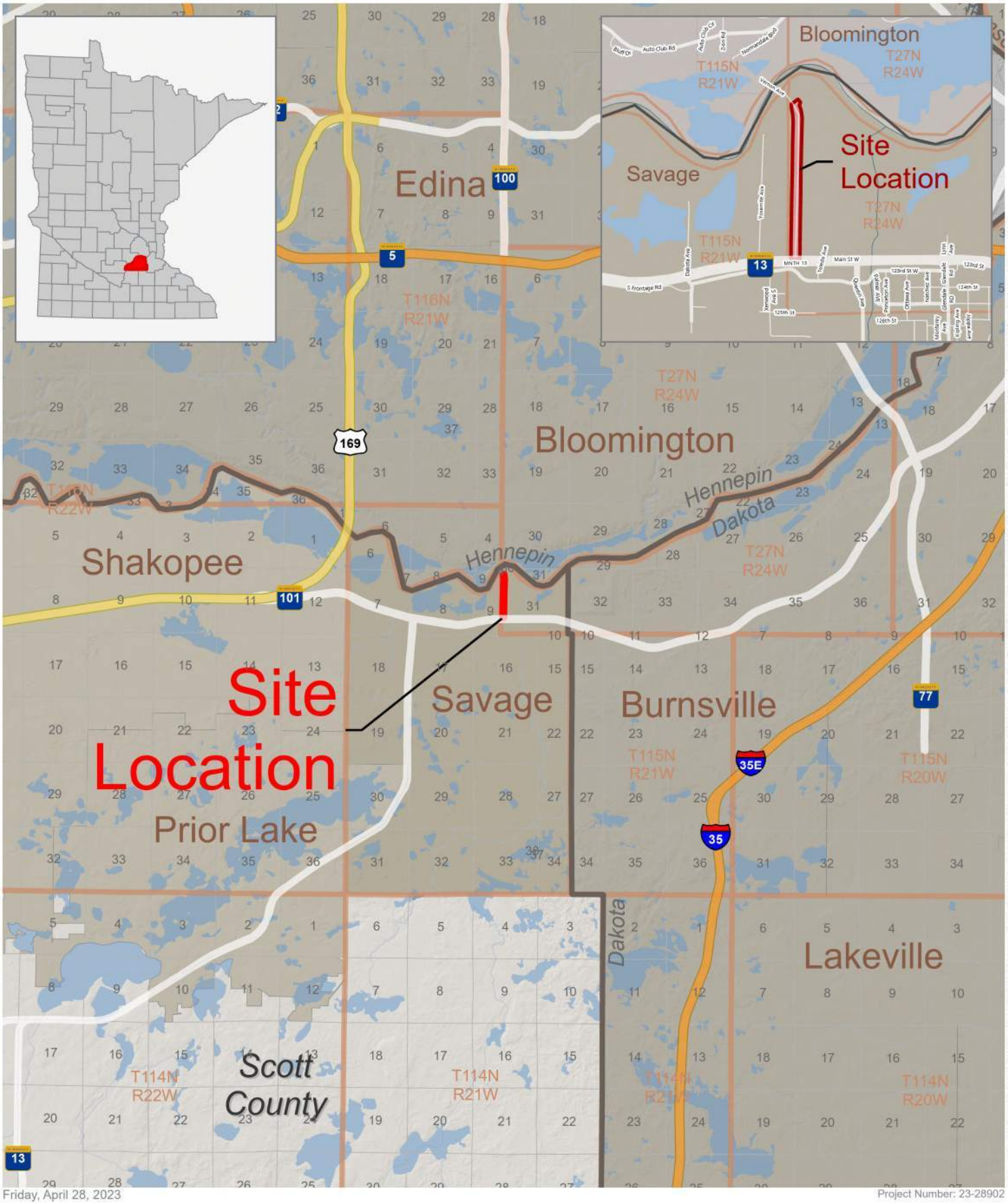
United States Department of Agriculture. Natural Resources Conservation Service. Climate Analysis for Wetlands. http://www.wcc.nrcs.usda.gov/ftpref/support/climate/wetlands/

United States Department of Agriculture. Natural Resources Conservation Service. Web Soil Survey. http://websoilsurvey.nrcs.usda.gov/app/

United States Fish and Wildlife Service National Wetland Inventory Map. May 2015 Update (April 30, 2015 metadata), Minnesota Department of Natural Resources

United States Geological Survey. 7.5 minute, 1:24,000 scale Topographic Quadrangle Map.

Appendix A: Project Site Information



0 1 2 Miles

1 inch = 2 miles

N

Figure 1

Project Location Map

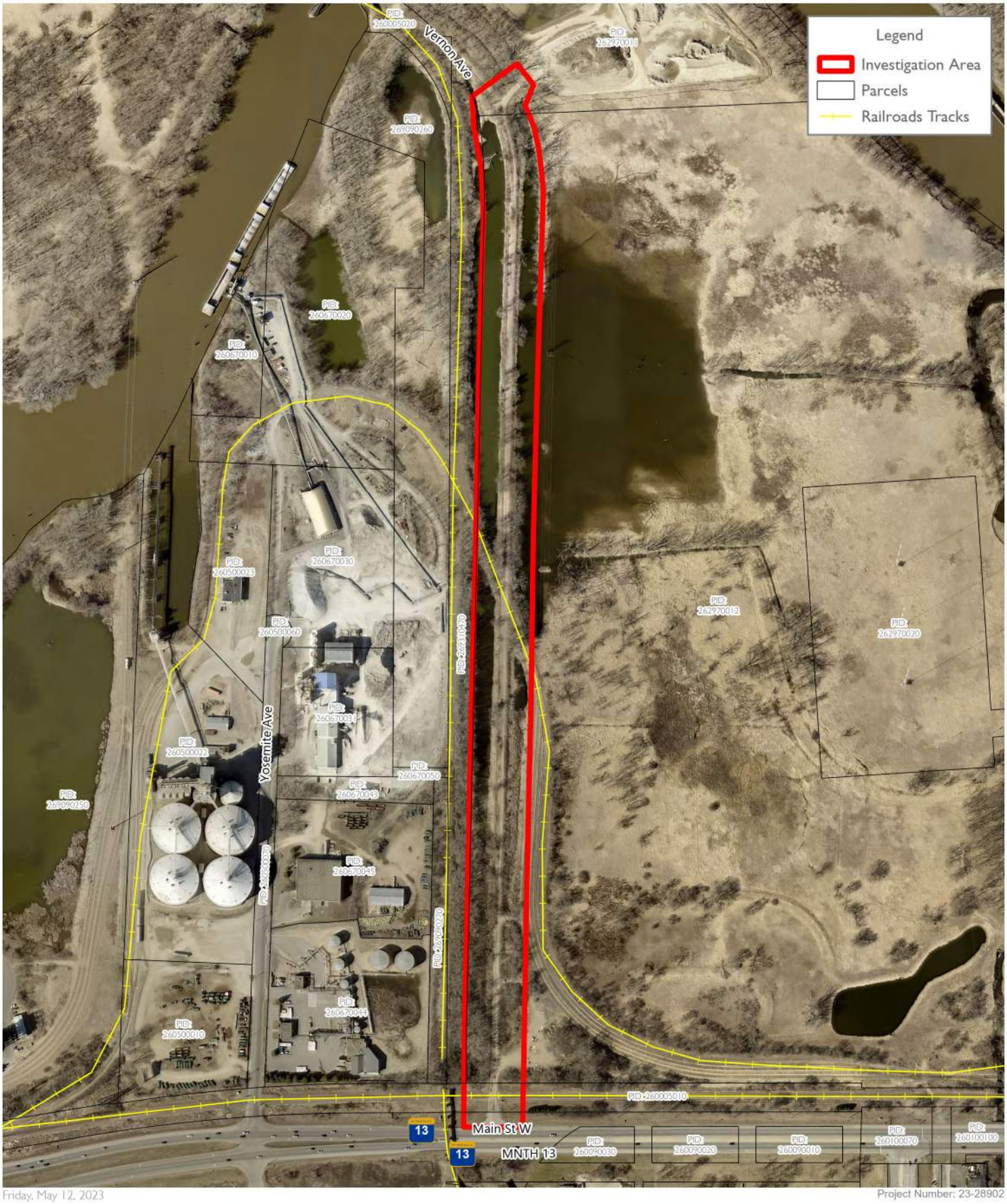
Vernon Avenue Reconstruction

Savage, Scott County, Minnesota

Source(s):

Municipalities (MnDOT, 2016)
Roads (MnDOT, 2020)
Lakes (MN DNR, 2020)
Counties (MN DNR, 2013)
PLSS (USGS)

ISG



Friday, May 12, 2023

Project Number: 23-28902

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0 230 450 ft

1 inch = 450 feet

N

Figure 2

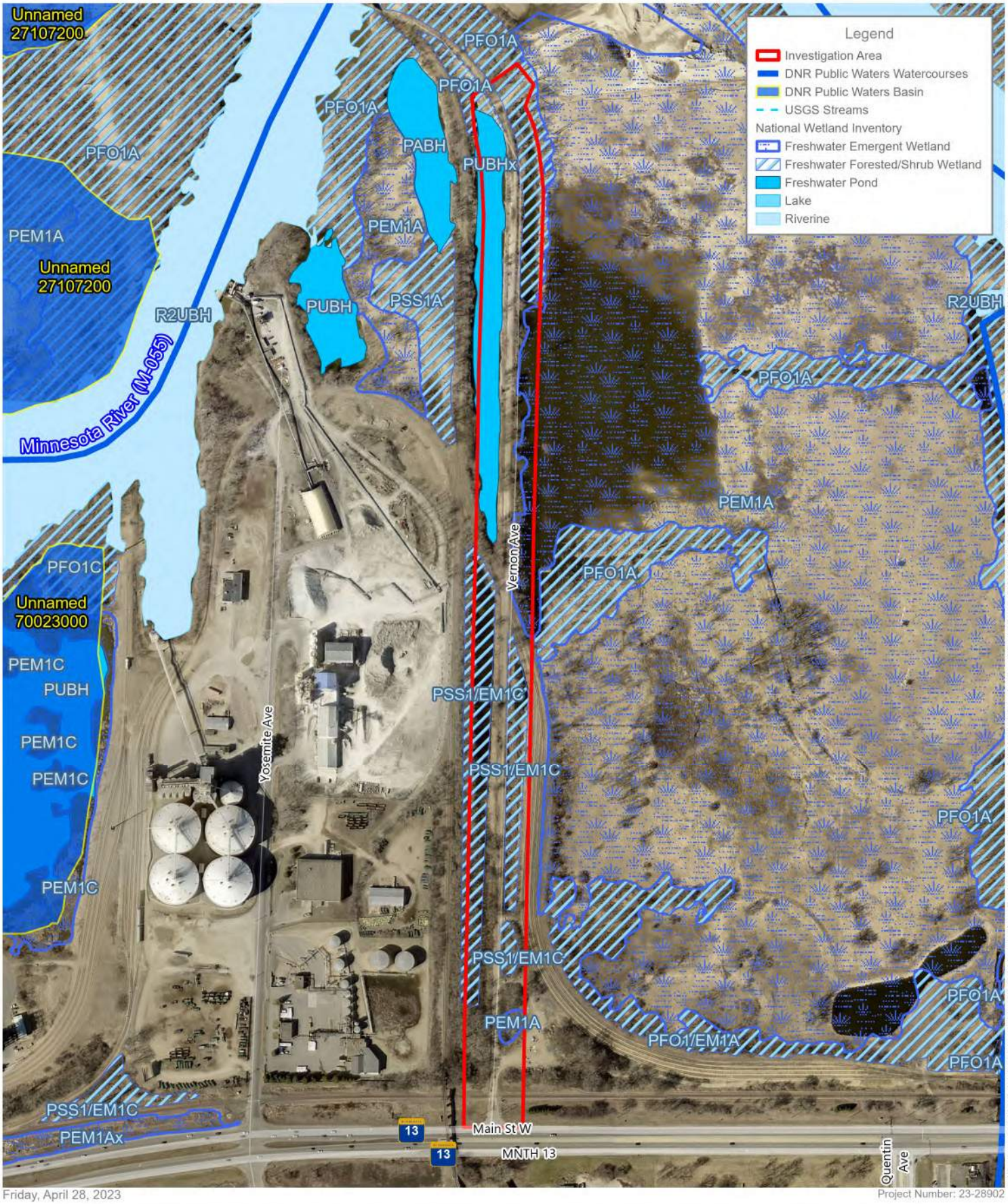
Aerial Photograph and Parcel Map

Vernon Avenue Reconstruction

Savage, Scott County, Minnesota

Source(s):
Orthophoto (Scott Co, 2022)
Parcels (Scott Co, 2022)

ISG



Friday, April 28, 2023

Project Number: 23-28902

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Figure 3

DNR Public Waters Inventory and National Wetlands Inventory Map

Vernon Avenue Reconstruction

Savage, Scott County, Minnesota

0 230 450 ft

1 inch = 450 feet

N

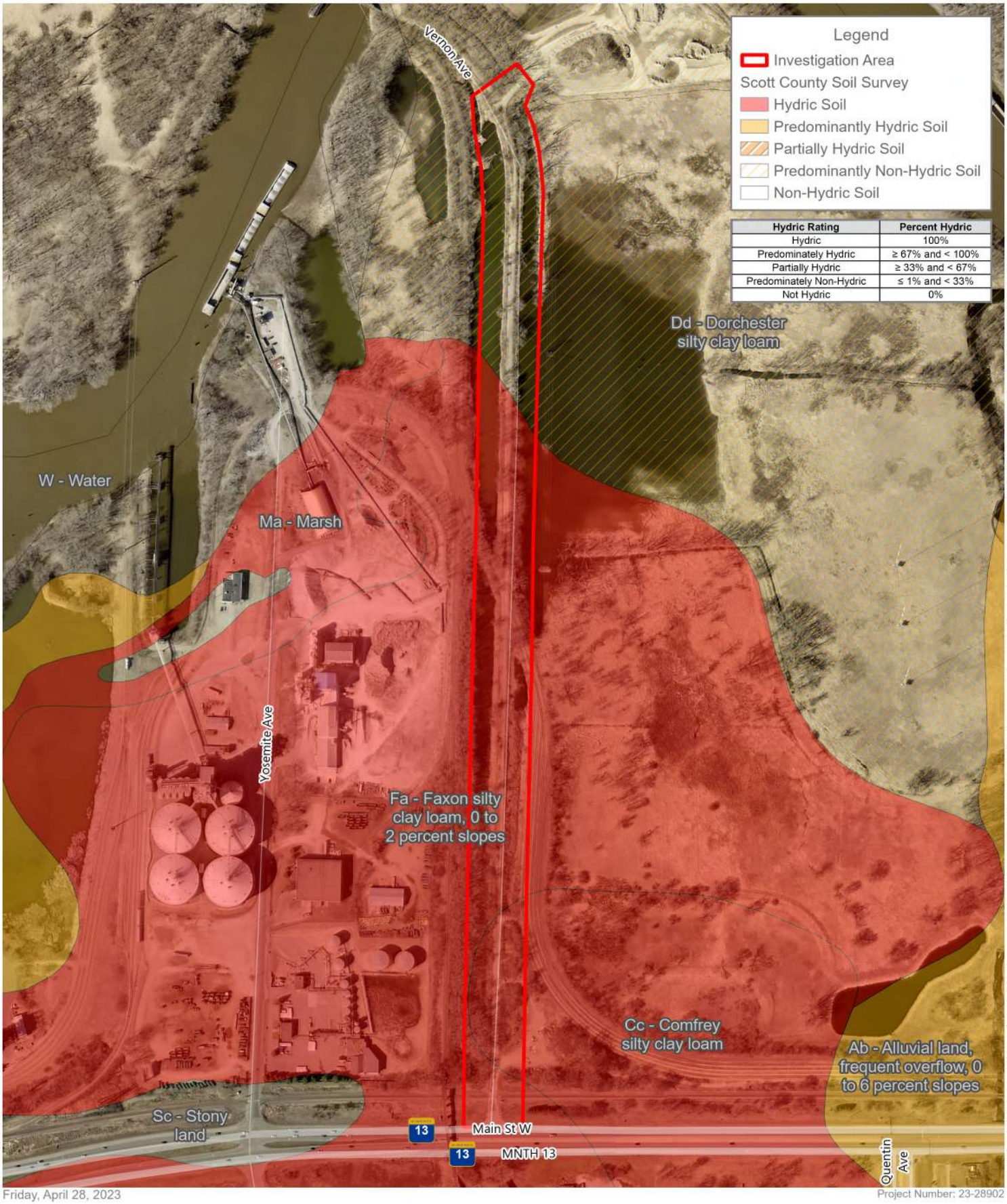
Source(s):

Orthophoto (Scott Co, 2022)

NWI (MN DNR, 2019)

PWI (MN DNR, 2020)

ISG



Friday, April 28, 2023

Project Number: 23-28902

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0 230 450 ft

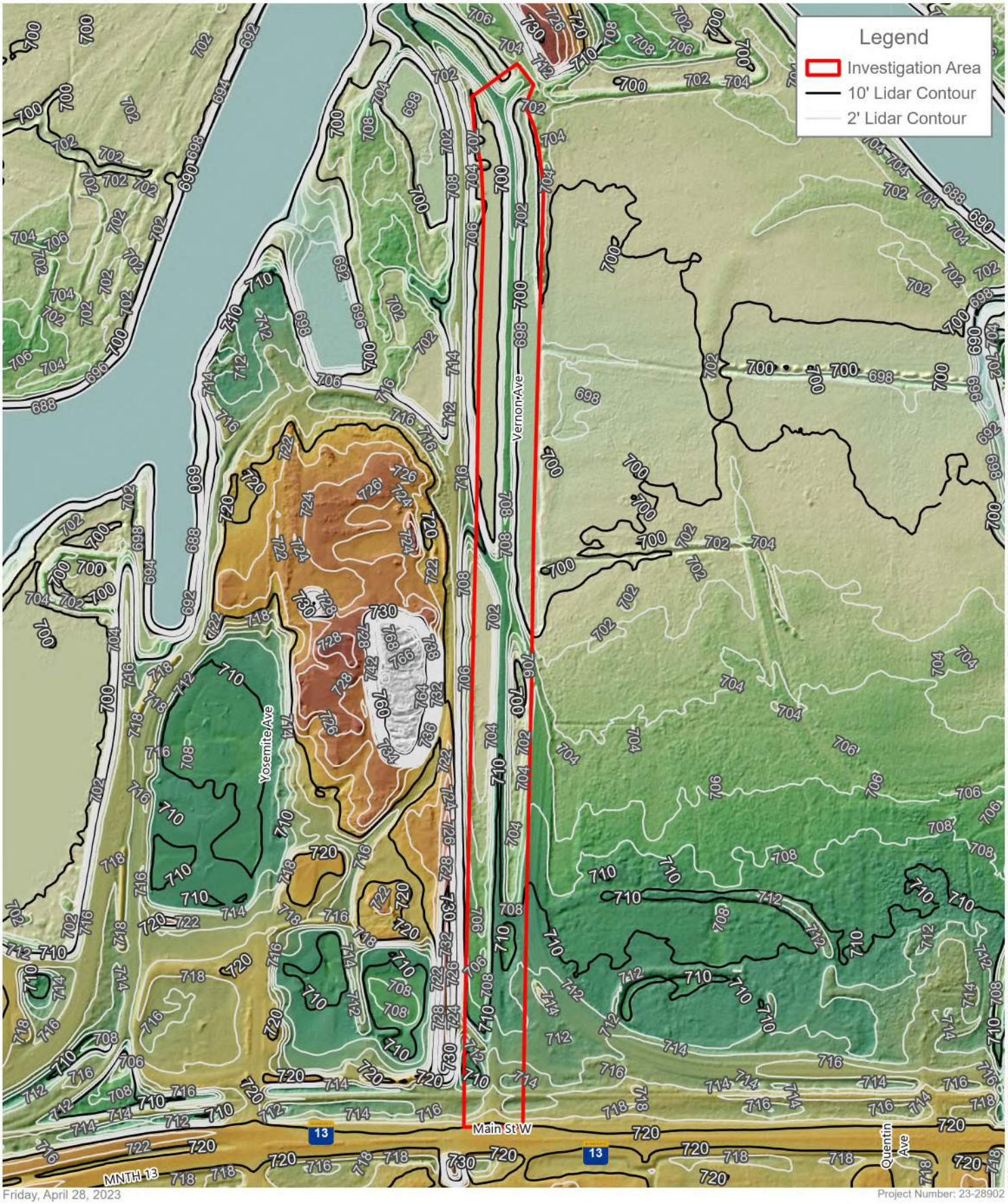
1 inch = 450 feet

N

Figure 4
Scott County Soil Survey Map
Vernon Avenue Reconstruction
Savage, Scott County, Minnesota

Source(s):
Orthophoto (Scott Co, 2022)
Soil Survey (USDA NRCS, 2016)

ISG



Friday, April 28, 2023

Project Number: 23-28902

S:\Projects\28000 PROJ\28900-28999\28902 Vernon Ave Environmental Permi-Savage MN\28902 Production Files\28902 GIS\28902 MapDocs\- 28902 Pro Editing Map -\- 28902 Pro Editing Map - .aprx

0 230 450 ft

1 inch = 450 feet

N

Figure 5

LiDAR Elevations and Hillshade Map

Vernon Avenue Reconstruction

Savage, Scott County, Minnesota

Source(s):

Contours (MnTopo, 2011)

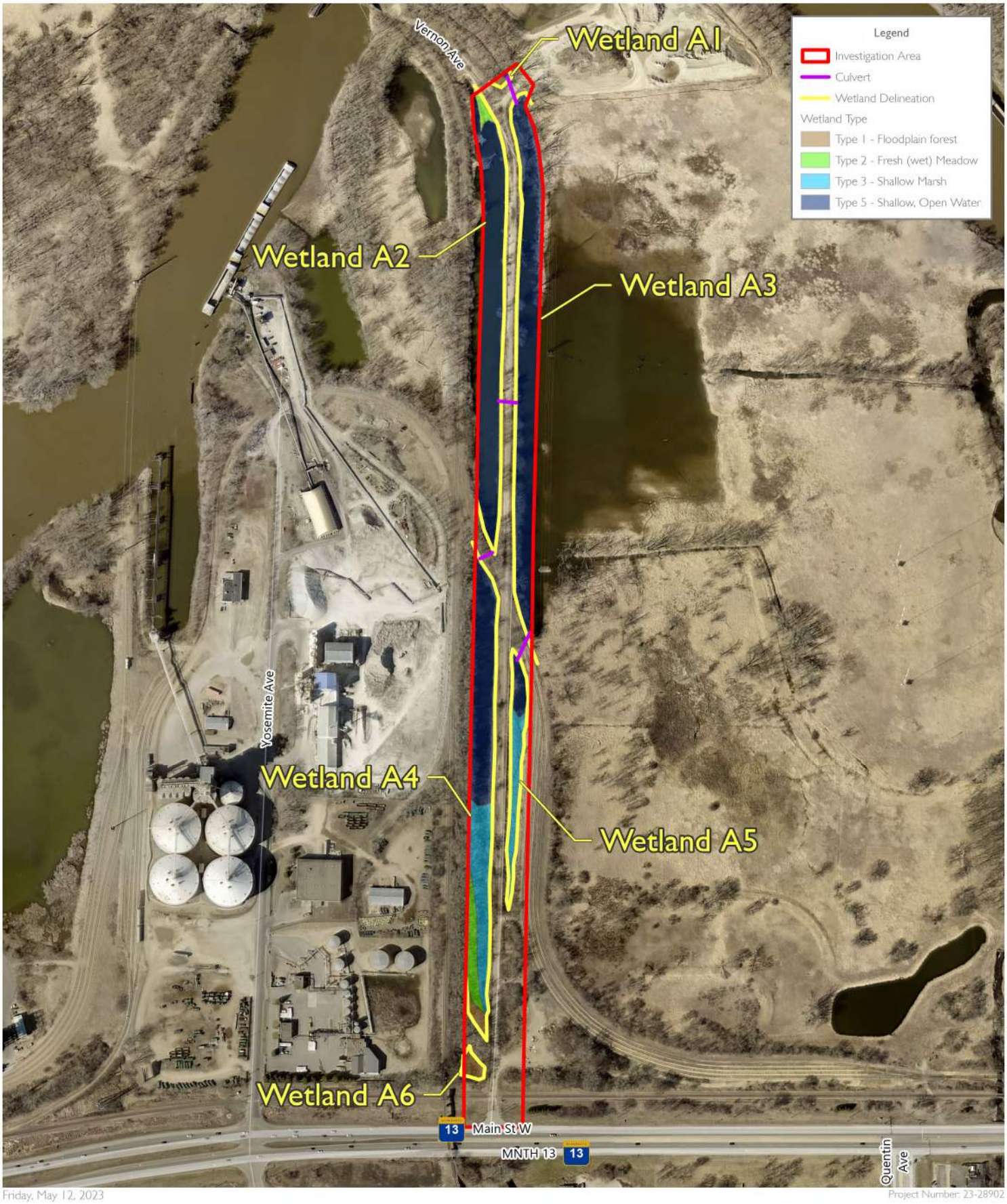
Hillshade (MnTopo, 2011)

ISG

Appendix B: Wetland Delineation Information

Figure 6. Wetland Delineation Map

Wetland Determination Data Forms



0 230 450 ft

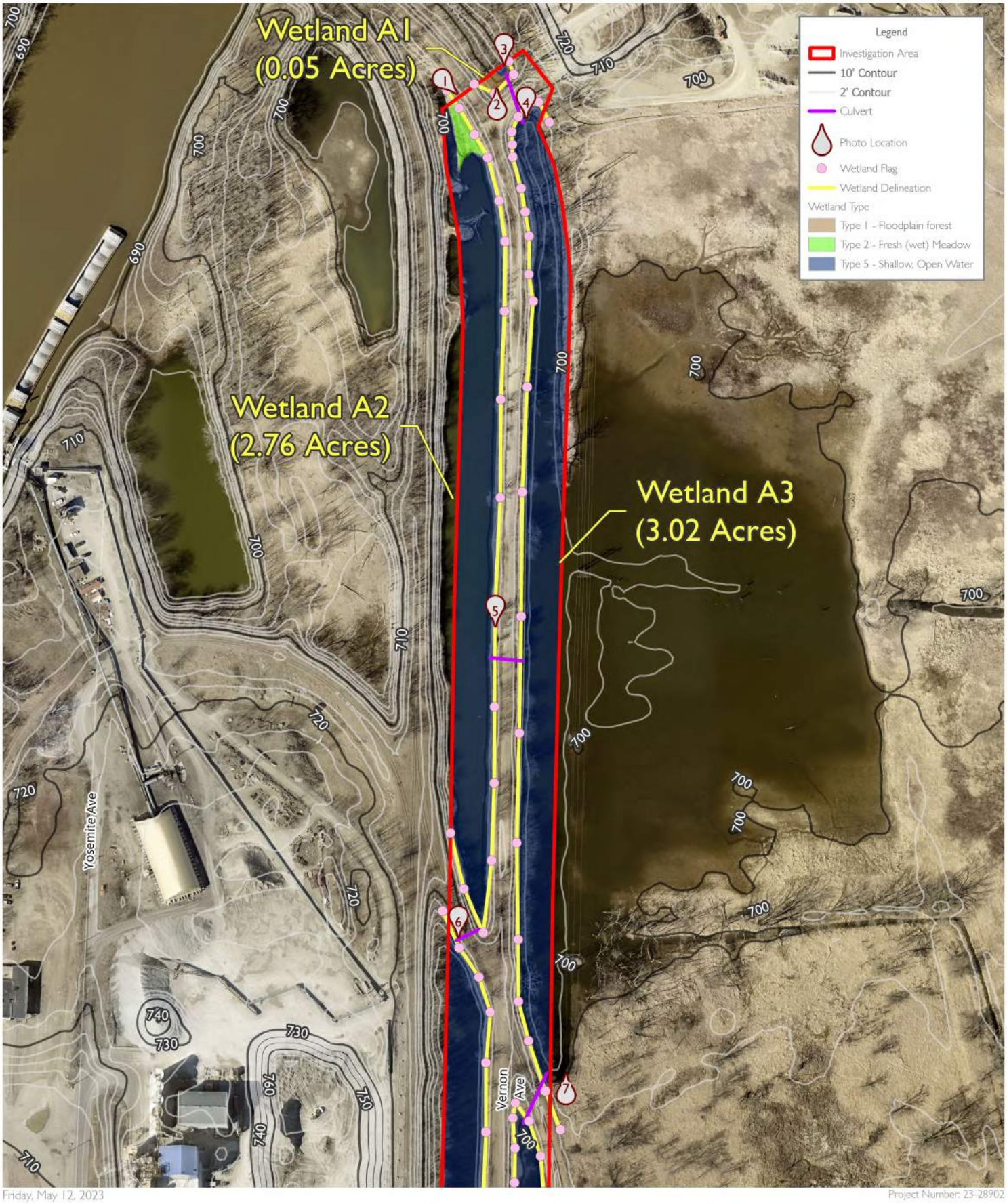
1 inch = 450 feet

N

Figure 6
Wetland Delineation Map
Vernon Avenue Reconstruction
Savage, Scott County, Minnesota

Source(s):
Orthophoto (Scott Co, 2022)
Wetland Delineation (ISG, 2023)

ISG



Friday, May 12, 2023

Project Number: 23-28902

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0 130 250 ft

1 inch = 250 feet

N

Figure 6a

Wetland Delineation Map

Vernon Avenue Reconstruction

Savage, Scott County, Minnesota

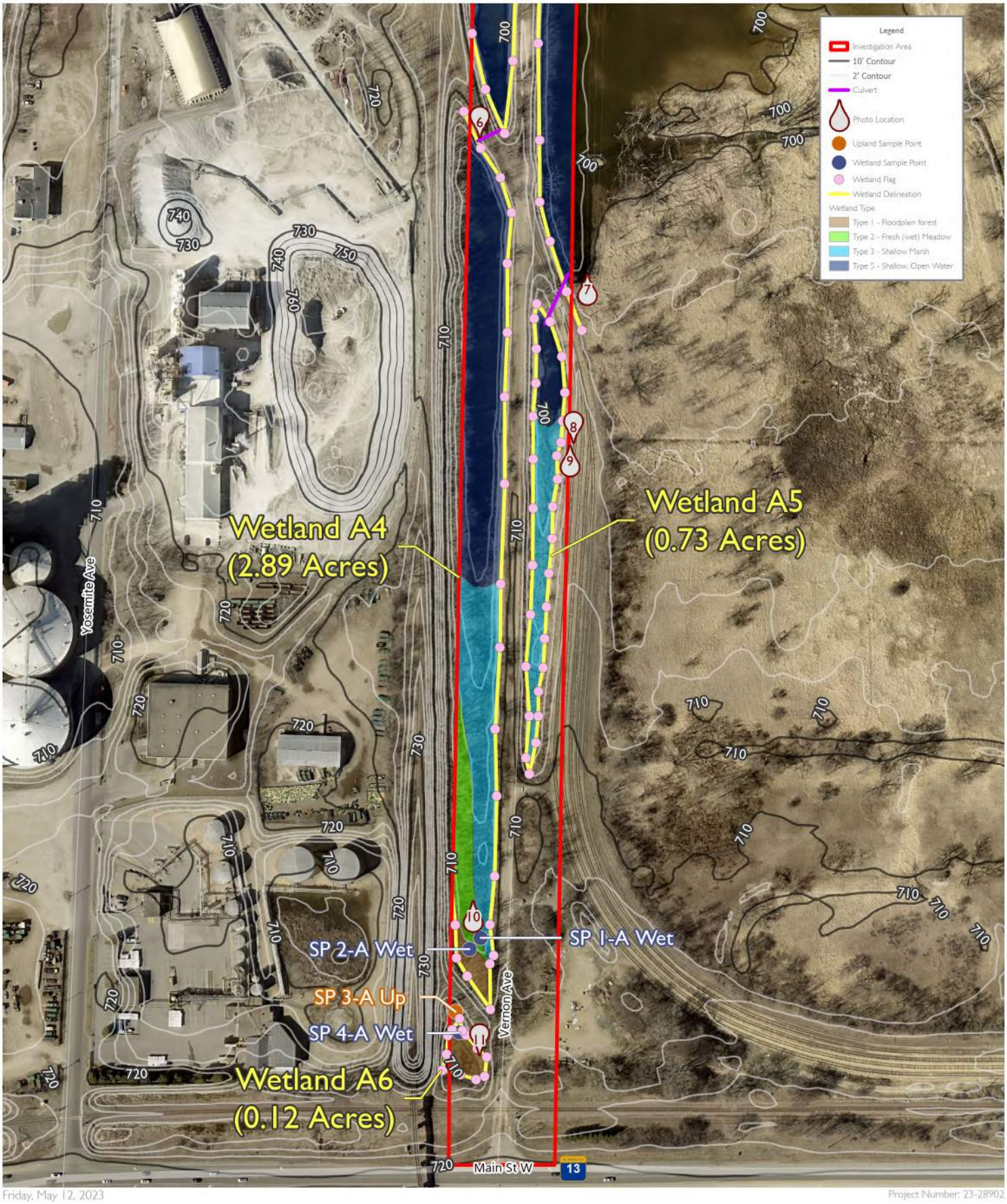
Source(s):

Orthophoto (Scott Co, 2022)

Wetland Delineation (ISG, 2023)

Contours (MnTopo, 2011)

ISG



Friday, May 12, 2023

Project Number: 23-28902

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0 130 250 ft

1 inch = 250 feet

N

Figure 6b

Wetland Delineation Map

Vernon Avenue Reconstruction

Savage, Scott County, Minnesota

Source(s):

Orthophoto (Scott Co, 2022)

Wetland Delineation (ISG, 2023)

Contours (MnTopo, 2011)

ISG

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Vernon Avenue Reconstruction City/County: Savage, Scott County Sampling Date: 5/10/23

Applicant/Owner: Lower Minnesota River Watershed District State: MN Sampling Point: 1-A Wet

Investigator(s): Jeremy Groskreutz Section, Township, Range: Sec 31, T27N, R24W

Landform (hillside, terrace, etc.): Toeslope Local relief (concave, convex, none): Concave

Slope (%): 0-1 Lat: 44.780337 Long: -93.350064 Datum: NAD 1983

Soil Map Unit Name: Cc - Comfrey silty clay loam NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation____, Soil____, or Hydrology____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation____, Soil____, or Hydrology____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' Radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15' Radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5' Radius)			
1. *Phalaris arundinacea*	85	Yes	FACW
2. *Lilium michiganense*	5	No	FACW
3. *Solidago gigantea*	5	No	FACW
4. *Rhamnus cathartica*	5	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30' Radius)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	95	x 2 =	190
FAC species	5	x 3 =	15
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		205 (B)
Prevalence Index = B/A =			2.05

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 1-A Wet

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 2/1	100					Mucky Loam/Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- X Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes X	No ___	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Hydrology sampled to 6". Surface water present approximately 2' from point.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Vernon Avenue Reconstruction City/County: Savage, Scott County Sampling Date: 5/10/23

Applicant/Owner: Lower Minnesota River Watershed District State: MN Sampling Point: 2-A Wet

Investigator(s): Jeremy Groskreutz Section, Township, Range: Sec 31, T27N, R24W

Landform (hillside, terrace, etc.): Backslope Local relief (concave, convex, none): Concave

Slope (%): 2 Lat: 44.780297 Long: -93.350112 Datum: NAD 1983

Soil Map Unit Name: Cc - Comfrey silty clay loam NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation____, Soil____, or Hydrology____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation____, Soil____, or Hydrology____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' Radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Rhamnus cathartica*	80	Yes	FAC
2.			
3.			
4.			
5.			
	80	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15' Radius)			
1.			
2.			
3.			
4.			
5.			
		=Total Cover	
Herb Stratum (Plot size: 5' Radius)			
1. *Rhamnus cathartica*	20	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	20	=Total Cover	
Woody Vine Stratum (Plot size: 30' Radius)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	100	x 3 =	300
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		300 (B)

Prevalence Index = B/A = 3.00

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 2-A Wet

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 2/1	100					Mucky Loam/Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- X Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes X	No ___	Depth (inches): 4
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Hydrology sampled to 6".

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Vernon Avenue Reconstruction City/County: Savage, Scott County Sampling Date: 5/10/23

Applicant/Owner: Lower Minnesota River Watershed District State: MN Sampling Point: 3-A Up

Investigator(s): Jeremy Groskreutz Section, Township, Range: Sec 31, T27N, R24W

Landform (hillside, terrace, etc.): Backslope Local relief (concave, convex, none): Concave

Slope (%): 0-1 Lat: 44.779938 Long: -93.350237 Datum: NAD 1983

Soil Map Unit Name: Fa - Faxon silty clay loam, 0 to 2 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation____, Soil____, or Hydrology____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation____, Soil____, or Hydrology____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Taken on the Bench of an earthen embankment.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' Radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus deltoides*	70	Yes	FAC
2.			
3.			
4.			
5.			
	70 =Total Cover		
Sapling/Shrub Stratum (Plot size: 15' Radius)			
1. *Rhamnus cathartica*	60	Yes	FAC
2.			
3.			
4.			
5.			
	60 =Total Cover		
Herb Stratum (Plot size: 5' Radius)			
1. *Polygonatum biflorum*	5	Yes	FACU
2. *Rhamnus cathartica*	5	Yes	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	10 =Total Cover		
Woody Vine Stratum (Plot size: 30' Radius)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	135	x 3 =	405
FACU species	5	x 4 =	20
UPL species	0	x 5 =	0
Column Totals:	140 (A)		425 (B)

Prevalence Index = B/A = 3.04

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
____ 3 - Prevalence Index is ≤3.0[1]
____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 3-A Up

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-24	10YR 2/1	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Hydrology sampled to 24".

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Vernon Avenue Reconstruction City/County: Savage, Scott County Sampling Date: 5/10/23

Applicant/Owner: Lower Minnesota River Watershed District State: MN Sampling Point: 4-A Wet

Investigator(s): Jeremy Groskreutz Section, Township, Range: Sec 31, T27N, R24W

Landform (hillside, terrace, etc.): Toeslope Local relief (concave, convex, none): Concave

Slope (%): 0-1 Lat: 44.779866 Long: -93.350233 Datum: NAD 1983

Soil Map Unit Name: Fa - Faxon silty clay loam, 0 to 2 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation____, Soil____, or Hydrology____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation____, Soil____, or Hydrology____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' Radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Fraxinus pennsylvanica*	15	Yes	FACW
2. *Rhamnus cathartica*	5	Yes	FAC
3.			
4.			
5.			
	20	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15' Radius)			
1.			
2.			
3.			
4.			
5.			
		=Total Cover	
Herb Stratum (Plot size: 5' Radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
		=Total Cover	
Woody Vine Stratum (Plot size: 30' Radius)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	5	x 3 =	15
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	20 (A)		45 (B)

Prevalence Index = B/A = 2.25

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)
Sparsely Vegetated Concave Surface.

SOIL

Sampling Point: 4-A Wet

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 2/1	100					Mucky Loam/Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- X Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- X Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes X	No ___	Depth (inches): 4
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Hydrology sampled to 6".

Appendix C: Supporting Documentation

Antecedent Precipitation Data

Photo Log

Vernon Avenue Reconstruction
Wetland Delineation
Antecedent Precipitation Data Worksheet

Date: 5/10/2023
Location: Savage, Scott County

	LONG TERM PRECIP CONDITIONS							
	MONTH	LOW 30TH PERCENTILE	AVERAGE	HIGH 70TH PERCENTILE	PRECIP	CONDITION: DRY, WET, NORMAL	CONDITION VALUE	MONTH WEIGHT VALUE	WEIGHTED CONDITION VALUE
1st Month Prior	April	2.19	2.95	3.40	1.63	**Dry**	1	3	3
2nd Month Prior	March	1.28	1.77	2.16	1.39	**Normal**	2	2	4
3rd Month Prior	February	0.59	0.93	1.18	2.48	**Wet**	3	1	3

Precipitation Data Source: http://climateapps.dnr.state.mn.us/
Weather Station Location: Sec. 31, T27N, R24W
Precipitation normals based on the peroid of 1991-2020

SUM = 10

Condition Value Dry = 1
Normal = 2
Wet = 3

Note - If sum is 6 - 9 = Dry
10 - 14 = Normal
15 - 18 = Wet

Photo Log

May 10, 2023

Photo 1 – View across Wetland A2, facing southeast.

Photo 2 – View across Wetland A1, facing north.

Photo 3 – View of a culvert connecting Wetlands A1 & A3, facing south.

Photo 4 – View across Wetland A3, facing south.

Photo 5 – View of Wetland A2, including a culvert connecting it to Wetland A3, facing south.

Photo 6 – View of Wetland A4, including a culvert connecting it to Wetland A2, facing south.

Photo 7 – View across Wetland A3, facing north.

Photo 8 – View across Wetland A5, facing south.

Photo 9 – View across Wetland A5, facing north.

Photo 10 – View across Wetland A4, facing north.

Photo Log
May 10, 2023

Photo 11 – View of Wetland A6, facing south.

Appendix D: Regulatory Review

Joint Application Form for Activities Affecting Water Resources in Minnesota

Project Name and/or Number: *Vernon Avenue Reconstruction, ISG # 23-28902*

PART ONE: Applicant Information

If applicant is an entity (company, government entity, partnership, etc.), an authorized contact person must be identified. If the applicant is using an agent (consultant, lawyer, or other third party) and has authorized them to act on their behalf, the agent's contact information must also be provided.

Applicant/Landowner Name: *Linda Loomis – Lower Minnesota River Watershed District*
Mailing Address: *112 East 5th Street, Suite 102, Chaska, MN 55318*
Phone: *763.545.4659*
E-mail Address: *admin@lowermnriverwd.org*

Authorized Contact (do not complete if same as above):
Mailing Address:
Phone:
E-mail Address:

Agent Name: *Nick McCabe – ISG*
Mailing Address: *115 East Hickory Street, Suite 300, Mankato, MN 56001*
Phone: *507.387.6651*
E-mail Address: *Nick.McCabe@ISGInc.com*

PART TWO: Site Location Information

County: *Scott* **City/Township:** *Savage*
Parcel ID and/or Address: *PID: 262970012*
Legal Description (Section, Township, Range): *Sec 31, T27N, R24W*
Lat/Long (decimal degrees): *44.784099, -93.349795*
Attach a map showing the location of the site in relation to local streets, roads, highways. *See Figure 1 (Appendix A)*
Approximate size of site (acres) or if a linear project, length (feet): *17.0 Acres*

If you know that your proposal will require an individual Permit from the U.S. Army Corps of Engineers, you must provide the names and addresses of all property owners adjacent to the project site. This information may be provided by attaching a list to your application or by using block 25 of the Application for Department of the Army permit which can be obtained at:

http://www.mvp.usace.army.mil/Portals/57/docs/regulatory/RegulatoryDocs/engform_4345_2012oct.pdf

PART THREE: General Project/Site Information

If this application is related to a delineation approval, exemption determination, jurisdictional determination, or other correspondence submitted ***prior to*** this application then describe that here and provide the Corps of Engineers project number.

Describe the project that is being proposed, the project purpose and need, and schedule for implementation and completion. The project description must fully describe the nature and scope of the proposed activity including a description of all project elements that effect aquatic resources (wetland, lake, tributary, etc.) and must also include plans and cross section or profile drawings showing the location, character, and dimensions of all proposed activities and aquatic resource impacts.

A wetland delineation was performed by ISG on May 10, 2023 to determine the location of any possible wetlands within the investigation area for use in planning and/or permitting of a future Vernon Avenue reconstruction project.

Project Name and/or Number: *Vernon Avenue Reconstruction, ISG # 23-28902*

PART FOUR: Aquatic Resource Impact[1] Summary

If your proposed project involves a direct or indirect impact to an aquatic resource (wetland, lake, tributary, etc.) identify each impact in the table below. Include all anticipated impacts, including those expected to be temporary. Attach an overhead view map, aerial photo, and/or drawing showing all of the aquatic resources in the project area and the location(s) of the proposed impacts. Label each aquatic resource on the map with a reference number or letter and identify the impacts in the following table.

Aquatic Resource ID (as noted on overhead view)	**Aquatic Resource Type** (wetland, lake, tributary etc.)	**Type of Impact** (fill, excavate, drain, or remove vegetation)	**Duration of Impact** Permanent (P) or Temporary (T)[1]	**Size of Impact**[2]	**Overall Size of Aquatic Resource** [3]	**Existing Plant Community Type(s)** in Impact Area[4]	**County, Major Watershed #, and Bank Service Area #** of Impact Area[5]

[1]If impacts are temporary; enter the duration of the impacts in days next to the "T". For example, a project with a temporary access fill that would be removed after 220 days would be entered "T (220)".
[2]Impacts less than 0.01 acre should be reported in square feet. Impacts 0.01 acre or greater should be reported as acres and rounded to the nearest 0.01 acre. Tributary impacts must be reported in linear feet of impact and an area of impact by indicating first the linear feet of impact along the flowline of the stream followed by the area impact in parentheses). For example, a project that impacts 50 feet of a stream that is 6 feet wide would be reported as 50 ft (300 square feet).
[3]This is generally only applicable if you are applying for a de minimis exemption under MN Rules 8420.0420 Subp. 8, otherwise enter "N/A".
[4]Use *Wetland Plants and Plant Community Types of Minnesota and Wisconsin* 3rd Ed. as modified in MN Rules 8420.0405 Subp. 2.
[5]Refer to Major Watershed and Bank Service Area maps in MN Rules 8420.0522 Subp. 7.

If any of the above identified impacts have already occurred, identify which impacts they are and the circumstances associated with each:

No impacts have occurred to date.

PART FIVE: Applicant Signature

☐ Check here if you are requesting a pre-application consultation with the Corps and LGU based on the information you have provided. Regulatory entities will not initiate a formal application review if this box is checked.

By signature below, I attest that the information in this application is complete and accurate. I further attest that I possess the authority to undertake the work described herein.

Signature: _____ Date: _____

I hereby authorize *ISG* to act on my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this application.

[1] The term "impact" as used in this joint application form is a generic term used for disclosure purposes to identify activities that may require approval from one or more regulatory agencies. For purposes of this form it is not meant to indicate whether or not those activities may require mitigation/replacement.

Project Name and/or Number: *Vernon Avenue Reconstruction, ISG # 23-28902*

Attachment A
Request for Delineation Review, Wetland Type Determination, or Jurisdictional Determination

By submission of the enclosed wetland delineation report, I am requesting that the U.S. Army Corps of Engineers, St. Paul District (Corps) and/or the Wetland Conservation Act Local Government Unit (LGU) provide me with the following (check all that apply):

☒ **Wetland Type Confirmation**

☒ **Delineation Concurrence**. Concurrence with a delineation is a written notification from the Corps and a decision from the LGU concurring, not concurring, or commenting on the boundaries of the aquatic resources delineated on the property. Delineation concurrences are generally valid for five years unless site conditions change. Under this request alone, the Corps will not address the jurisdictional status of the aquatic resources on the property, only the boundaries of the resources within the review area (including wetlands, tributaries, lakes, etc.).

☐ **Preliminary Jurisdictional Determination**. A preliminary jurisdictional determination (PJD) is a non-binding written indication from the Corps that waters, including wetlands, identified on a parcel may be waters of the United States. For purposes of computation of impacts and compensatory mitigation requirements, a permit decision made on the basis of a PJD will treat all waters and wetlands in the review area as if they are jurisdictional waters of the U.S. PJDs are advisory in nature and may not be appealed.

☐ **Approved Jurisdictional Determination**. An approved jurisdictional determination (AJD) is an official Corps determination that jurisdictional waters of the United States are either present or absent on the property. AJDs can generally be relied upon by the affected party for five years. An AJD may be appealed through the Corps administrative appeal process.

In order for the Corps and LGU to process your request, the wetland delineation must be prepared in accordance with the 1987 Corps of Engineers Wetland Delineation Manual, any approved Regional Supplements to the 1987 Manual, and the *Guidelines for Submitting Wetland Delineations in Minnesota* (2013).
http://www.mvp.usace.army.mil/Missions/Regulatory/DelineationJDGuidance.aspx

LOWER MINNESOTA RIVER
WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, June 21, 2023

Agenda Item
Item 6. G. – 2023 Legislative Action

Prepared By
Linda Loomis, Administrator

Summary
The LMRWD was awarded $2,750,000 to complete the project at Area #3.

In addition, $480,000 per biennium for dredge management was authorized again.

In addition to the LMRWD funding, other issues that the LMRWD was following had the following outcomes:

Water Storage received $17 million in funding.

A bill for an act relating to capital investment; appropriating money for restoration of the Minnesota River riverbank in the Shakopee area; authorizing the sale and issuance of state bonds. – The City of Shakopee received $8.6 million for this project

A bill for an act relating to environment; establishing certified salt applicator program; limiting liability; requiring a report; proposing coding for new law in Minnesota Statutes, chapter 116. This bill has stalled again this session because of the liability language.

A bill for an act relating to capital investment; appropriating money for riverbank stabilization in Scott County; authorizing the sale and issuance of state bonds. This bill will fund the Merriam Junction Trail and Riverbank Stabilization. – This project received $4 million in funding

A bill for an act relating to natural resources; appropriating money to address invasive carp. This bill did not make the final cut.

A bill relating to drainage; establishing drainage registry information portal; appropriating money; proposing coding for new law in Minnesota Statues chapter 103E. – BWSR and the Drainage Work Group have been tasked with evaluate this and make recommendations with a report due to the Legislature February 1, 2024.

The City of Carver received $6 million in funding for its levee improvement plans.

Attachments
No attachments

Recommended Action
No action recommended

LOWER MINNESOTA RIVER
WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, June 21, 2023

Agenda Item
Item 6. I. – LMRWD Projects

Prepared By
Linda Loomis, Administrator

Summary

i. Area #3

The request for the State of Minnesota to provide funding for this project was approved by the Legislature. The funding will come through the DNR.

The LMRWD has met with the property owners, who signed the application for soil borings, required by the MN Department of Health. The property owners are considering selling the property to the LMRWD or granting an easement to the LMRWD. Funding from the State can be used to acquire property.

Wetland delineation has been completed. Threatened and Endangered Species Assessments is underway. Cultural Resources Assessment is underway.

The LMRWD plans to retain a consultant to advise the Board on different mechanisms to raise the matching funds required by the State.

Attachments
No attachments

Recommended Action
No action recommended

ii. Spring Creek

The LMRWD requested proposals from firms in the Engineering Pool to address the erosion issues found along Spring Creek in the City of Carver. Only sites 1 and 2 are being considered as there has been no response from the property owners at site 3. The LMRWD 2023 budget includes $90,000 for this project.

A report on the process and evaluation of the proposals is attached for the Board's Review.

Attachments
Technical Memorandum – Spring Creek Sites 1 and 2 Design and Construction Stabilization Project Recommendation
Design and Construction Stabilization of LMRWD Spring Creek Sites 1 and 2 submitted by ISG

Recommended Action
Motion to approve ISG as the firm to design the Spring Creek Sites 1 and 2 for a total fee of 79,930 with an additional $10,000 to allow for geotechnical soil borings, as needed for a total cost of $89,930.

iii. Gully Assessments

The LMRWD has begun 2023 work on Gully Assessments. A report from Young Environmental Consulting Group is attached introducing the assessment team and that details the work being done.

Attachments

Technical Memorandum – Lower Minnesota River Watershed District 2023 Gully Assessment dated June 14, 2023

Recommended Action

No action recommended

Young Environmental Consulting Group, LLC

Technical Memorandum

To: Linda Loomis, Administrator
Lower Minnesota River Watershed District

From: Meghan Litsey, CPESC
Della Schall Young, CPESC, PMP

Date: June 15, 2023

Re: Spring Creek Sites 1 and 2 Design and Construction Stabilization Project Recommendation

---

On May 24, 2023, Young Environmental Consulting Group, LLC (Young Environmental) released a request for information (RFI) on behalf of the Lower Minnesota River Watershed District (LMRWD) for the Spring Creek Sites 1 and 2 Design and Construction Stabilization Project. Young Environmental emailed the RFI directly to four consulting firms in the LMRWD engineering pool: Barr Engineering (Barr), Emmons & Olivier Resources, Inc. (EOR), ISG, and WSB. The RFI contained detailed project background information, including the *2019 Spring Creek Assessment Summary* and the *2022 Spring Creek Hydrology Review* that Barr and Young Environmental completed.

The LMRWD received one proposal from ISG by the June 7, 2023, deadline. Follow-up correspondence with Barr, EOR, and WSB indicated that they did not provide a response to the RFI because there were conflicts with their availability and schedules.

Review Process

Young Environmental reviewed the submittal based on demonstrated project understanding, thoughtfulness of approach, technical qualifications, and the overall proposed cost to determine the responsiveness of the bidder. To evaluate the submittal objectively, Young Environmental staff reviewed it individually and met to discuss key points.

Young Environmental Consulting Group, LLC

ISG Submittal

The ISG submittal included key information on situational awareness associated with the dynamics of Spring Creek Sites 1 and 2 and included the necessary steps to validate the existing conditions and proposed designs using standard industry procedures and practices.

ISG's approach includes using existing data from the original study and concept plan from the Carver Soil and Water Conservation District to (1) complete updates where needed, (2) prepare final designs that address current site conditions and achieve long-term stability, and (3) provide construction administration. ISG's proposal noted that geotechnical analysis may be needed after visual observation of the soil conditions, and they could assist with hiring a subcontractor to perform such analysis. The original LMRWD Spring Creek Sites 1 and 2 Design and Construction Stabilization Project workplan did not include a line item for geotechnical analysis because of the robust nature of previous assessments and concept designs that have been prepared for Spring Creek. However, geotechnical analysis may be warranted to account for more complex issues that cannot be solved by the bioengineering techniques included in the original concept designs.

Recommendations

Based on our review of the submittal, ISG provided a qualified bid that demonstrates an understanding of the urgency to complete stabilization measures and appropriate solutions to achieve long-term stability at Spring Creek Sites 1 and 2. The total fee associated with ISG's submittal is $79,930.

We recommend board approval of ISG as the firm to design the Spring Creek Sites 1 and 2 Design and Construction Stabilization Project, with an additional $10,000 to allow for geotechnical soil borings, as needed, for a total cost of $89,930.

Attachments

- Attachment 1—ISG Proposal for Design and Construction Stabilization of LMRWD Spring Creek Sites 1 and 2

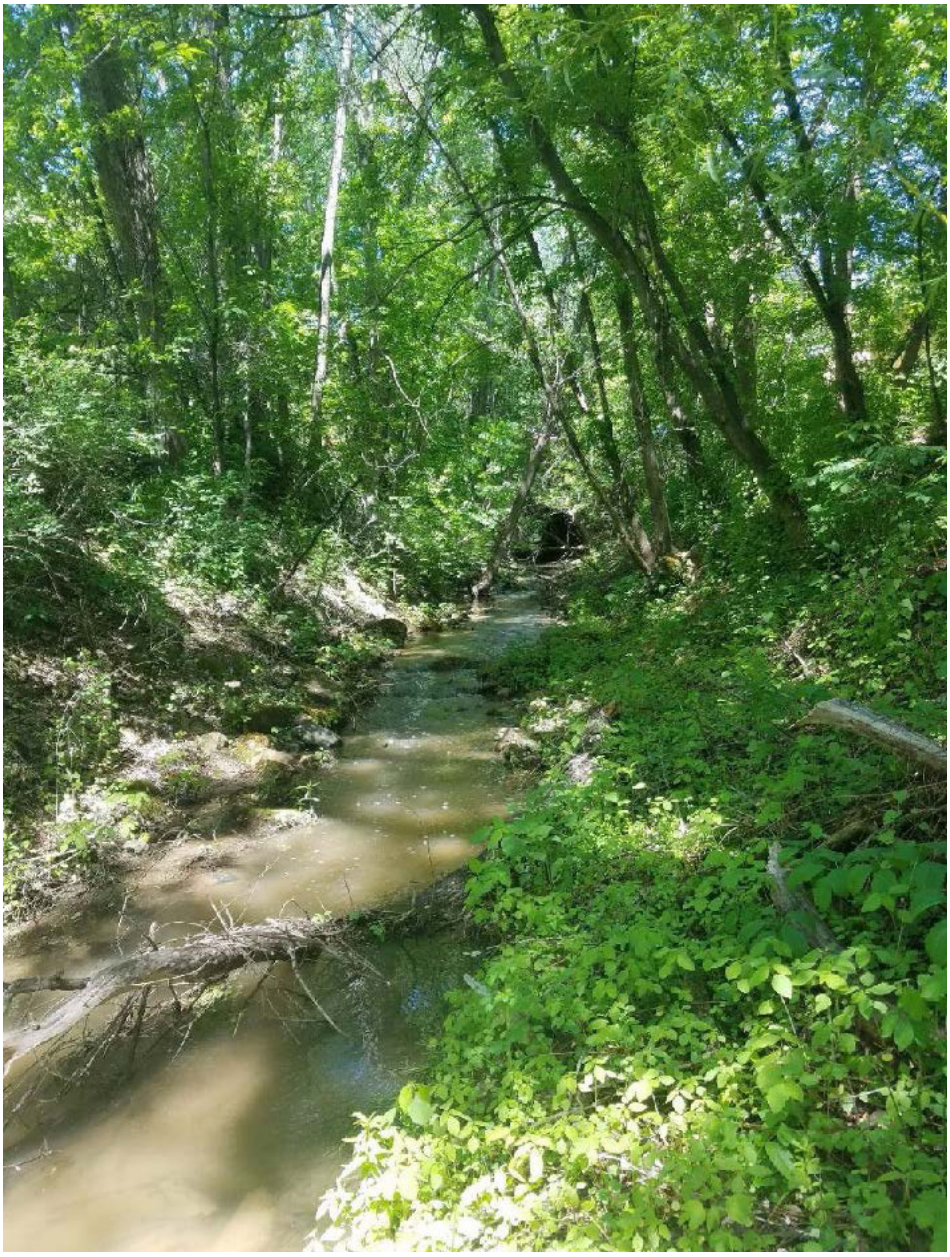
ISG

Architecture
Engineering
Environmental
Planning

ISGInc.com

Design and Construction Stabilization of LMRWD Spring Creek Sites 1 and 2

Carver, Minnesota



FOR:

Linda Loomis
District Administrator

Lower Minnesota River
Watershed District
112 East 5th Street + Suite 102
Chaska, MN 55318

763.545.4659

admin@lowermnriverwd.org

FROM:

Bailey Griffin, PE
Water Resources Engineer

ISG
6465 Wayzata Blvd + Suite 970
St. Louis Park, MN 55426

952.426.0699

Bailey.Griffin@ISGInc.com

Jacob Rischmiller, PE
Civil Engineer

ISG
6465 Wayzata Blvd + Suite 970
St. Louis Park, MN 55426

952.426.0699

Jacob.Rischmiller@ISGInc.com

JUNE 7, 2023

Linda Loomis
District Administrator

Lower Minnesota River
Watershed District
112 East 5th Street, Suite 102
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45
STATES LICENSED

Zweig Group
HOT FIRM LIST FOR 2022

Top 500
2023 ENR FIRM

SERVICES PROVIDED

Hydrologic, Hydraulic, and Water Quality Modeling Analysis

Plant Ecology and Natural Resource Management

Land Surveying

Stream Restoration and Stabilization Using Natural Channel Design and Rosgen Restoration Strategies

Water Resources Permitting

Construction Management

RE: Professional Services Proposal for the Design and Construction Stabilization of LMRWD Spring Creek Sites 1 and 2 Carver, Minnesota

ISG

Linda,

The Lower Minnesota River Watershed District (LMRWD) has been aware of changing conditions along specific areas of Spring Creek that need to be addressed to prevent greater damage. Working with the District Engineer and property owners, the LMRWD has invested resources into understanding and assessing demonstrated threats to personal property and ecological functions. Due to the changing nature of the existing conditions, the time to design and implement is now.

ISG's multi-disciplinary team of engineers and environmental scientists partner with urban and rural communities to implement a variety of stream stabilization strategies that provide multiple benefits for improving water quality, increasing storage capacity, protecting infrastructure, and enhancing habitat. ISG does this by working with clients and property owners throughout the process, from inventory and analysis of existing conditions to hydrologic and hydraulic modeling, GIS, concept design, public engagement, and implementation. From vegetation-based installations that stabilize erosion to highly engineered channel shape design, we consider your site, provide tailored designs, and apply right-sized solutions to achieve long-term stability.

PROJECT UNDERSTANDING

ISG has evaluated each of the sites to gain an understanding of the effort required. From our initial review, each site has a different indicator on the cause of slope failure. Site 1 (5th Street) appears to be caused by head cutting of the channel bed, which is causing steeper side banks with little to no vegetation. Site 2 (404 Broadway) appears to be caused by channel morphology and the channel wanting to meander to its natural state. According to the Barr memo, the stretch of channel appears to have been straightened at some point in time. Our review indicates that each site will have a unique design to address its root cause to ensure success for current and future development conditions.

ISG will evaluate the Carver Soil and Water Conservation District (SWCD) concept plans, with the modeling and survey of the sites provided, and make modifications as needed to enhance project success. If the concept plans require refinements based on new information on the site conditions, ISG will inform the LMRWD and develop plans during the engineering design phase of the project.

The pages that follow outline our proposed work plan, schedule, costs, and qualifications to complete the services required. We appreciate the opportunity to provide a solution tailored to the needs of the LMRWD and effected landowners and look forward to providing you with responsive service and a collaborative approach.

Sincerely,

Bailey Griffin, PE
Water Resources Engineer

Jacob Rischmiller, PE
Civil Engineer

Project Work Plan

ISG proposes to provide the following scope of services to meet the needs of your project.

Task 1: Project Kickoff + Data Collection

ISG will review background and modeling information, including but not limited to Spring Creek Hydrology Review (January 2022) and Spring Creek Assessment Summary (September 2019). After reviewing the information provided, ISG will set up an initial project kickoff meeting with LMRWD / Young Environmental to review the draft project management plan, timeline, data availability, and communication plan. The initial project kickoff meeting will inform ISG on project team meeting cadence, property owner dynamics, and the short- and long-term goals are of the project area.

The project team will complete one (1) site visit to establish an understanding of existing conditions and identify any changes in the site since the latest assessments were completed. A compilation of any changes to models or updates to site conditions will be summarized in a technical memo upon completion of Task 4 : Engineering Design.

ISG will provide a visual observation of soil conditions to determine if additional geotechnical study should be performed. If it is determined a study should be performed, ISG can assist in hiring a subcontractor to perform such analysis.

ASSUMPTIONS + EXPECTATIONS

- LMRWD/Young Environmental will provide transfer of HEC-RAS and HydroCAD models with any supplemental data used to build model, such as existing survey points
- The coordination of landowner agreements for rights to access private property will be obtained by the LMRWD

DELIVERABLES

- Attend one (1) site visit
- Review of existing data
- Provide project management plan and meeting summary

Task 2: Vegetation Assessment

ISG will complete an inventory of existing vegetation and trees within the project location using a timed meander survey to identify both desirable and invasive species on site and estimate aerial coverage. The vegetation inventory will be used as the basis for developing recommendations regarding vegetation and trees that will be protected or removed as part of the design. Species and estimated aerial coverage will be presented in tabular format.

ISG will complete a vegetation management plan, which will include a GIS map illustrating the location(s) of invasive species on site, fact sheets describing the invasive species that are present, recommended methodologies for removing invasive species, and best management practices for long-term native vegetation management in riparian areas.

ASSUMPTIONS + EXPECTATIONS

- The coordination of landowner agreements for rights to access private property will be obtained by the LMRWD
- Vegetation survey will take place within Site 1 and Site 2 boundaries

DELIVERABLES

- Develop a vegetation inventory and management plan

Task 3: Topographic Survey

ISG will provide a topographic survey of Spring Creek within the two identified sites. The survey team is trained in natural channel design and restoration, ensuring survey data is collected accurately to assess the stream reach. This will include detailed cross-sections of pool and riffle formations and profiles of the thalweg of the stream in addition to hydraulic structures such as culverts, bridges, or other structures.

Utilities will be surveyed with Quality Level C survey including request of a utility locate. The approximate location of underground utilities will be collected based on markings provided by the appropriate authority or locating service, and/or record drawings made available to us. ISG will utilize Trimble R10/R12 equipment to perform the survey.

ISG will capture current conditions of the site using a 360° camera to inform design, landowner coordination, permitting, and construction bidding. Existing hydrologic and hydraulic will be updated based on the topographic survey information collected.

ASSUMPTIONS + EXPECTATIONS

- The coordination of landowner agreements for rights to access private property will be obtained by the LMRWD

DELIVERABLES

- Complete a topographic survey

Task 4: Engineering Design

ISG will utilize the topographic survey, modeling data, and preliminary concept design to develop final design plans for stabilization to Site 1 and Site 2 of Spring Creek. The refined designs will be based off existing concepts developed by Young Environmental, Barr Engineering, and Carver SWCD. Natural channel design and Rosgen stream restoration strategies will be used to establish long-term stabilization to stream sites that minimize impacts to surrounding ecological resources. Topographic survey, site conditions, and modeling results will be reviewed to ensure designs meet applicable standards making adjustments where necessary.

Plans will include but are not limited to plan views, profiles, cross-sections, grading sheets, erosion control plans, planting plans, and details. Concurrently, to plan development, specifications will be developed based on the approved final plan.

Engineer's cost estimates will be developed with the proposed design. ISG will consult with contractors and/or manufacturers for product availability and pricing and use historical data on projects of similar scope in the area.

ISG will facilitate plan review meetings with the LMRWD and other relevant partners at 60%, 90%, and final design phases. Property owners will be engaged at the 60% design plan to obtain their feedback as they will be most impacted by the final project. Comments provided will be discussed with the LMRWD to determine a resolution and incorporation into the plan.

Permitting will be completed by the LMRWD with ISG assistance. ISG will review permit submissions to ensure due diligence and ensure project information is accurately reflected. ISG will be available to provide information and answer questions as necessary to complete permitting.

Final plans will be presented to the LMRWD board during a regularly scheduled board meeting. As this is a public meeting, citizens will have the opportunity to review and comment on the final design plans.

ASSUMPTIONS + EXPECTATIONS

- Structural engineering services will not be provided within this scope of services to assess structural stability of at-risk structures (i.e., garages, driveways, etc.). *ISG can provide a subsequent proposal for this service at an additional cost upon request.*
- ISG will assist with permitting submittals (due diligence). All fees and permit submissions will be completed by LMRWD. ISG will provide information necessary for submission.
- Reviews and comments from LMRWD and other agencies will be obtained at 60%, 90%, and final plans.

DELIVERABLES

- Develop 60%, 90%, and final signed plans with review meetings and comments incorporated at each stage
- Develop final specifications
- Provide one (1) technical design memorandum
- Develop engineer's cost estimate at each submittal
- Assist with applicable permitting
- Attend one (1) LMRWD board meeting to present final plans and address public comments

Task 5: Hydraulic Analysis

ISG will utilize the existing model of Spring Creek and the Minnesota River to assess the proposed stabilization designs to determine the shear stress, velocities, and peak water elevations within the creek. ISG will employ an iterative process to assess and refine project design to ensure final design provides resiliency into the future. The final model will incorporate the updated site conditions, topographic survey, and final design and be summarized in the technical memo upon completion of Task 4.

ASSUMPTIONS + EXPECTATIONS

- ISG assumes that the models have been calibrated and will not be adjusting base conditions unless it is known during the initial project kickoff that minor adjustments are necessary

DELIVERABLES

- Submit technical memo and updated Hydro-CAD/HEC-RAS model files to LMRWD

Task 6: Construction Administration

Approval from the LMRWD is the last step in ISG's process prior to bidding the project in conformance with applicable Minnesota Statutes. A pre-bid meeting will occur on site to answer any contractor questions about the project's scope prior to bid submissions. The bidding will occur electronically via QuestCDN with bid procurement meeting set with staff.

Once a contractor is awarded the construction contract, ISG will facilitate an on-site pre-construction meeting with the contractor, subcontractors, landowners, LMRWD staff, city staff, and any other project personnel. The pre-construction meeting is a critical communication tool to ensure all stakeholders have a full understanding of the construction timeline and communication lines are established with the contractor and the public. As construction will occur in a residential community with limited site access, the meeting will provide the contractor with an understanding of access, stockpiling, and staging location restrictions/limitations. Landowners will have a full understanding of the construction work that is planned within their property boundaries.

ISG will provide construction administration services to manage construction scheduling, coordination, and daily on-site construction oversight. ISG uses the construction management software Fieldwire to provide responsive and streamlined project management. Construction will be monitored daily during active work days to log progress through photos, track quantities completed for payment, and note punch list items remaining for contractor to complete.

Upon completion of the construction, ISG will create an as-built plan set which includes the work completed through the project. A memo will be provided with the contract summary and as-built documentation for the LMRWD to review and accept prior to close out of the construction contract.

ASSUMPTIONS + EXPECTATIONS

- ISG assumes that once construction has started the selected contractor will take 20 days to finish the project. If the contractor indicates that a longer timeline is needed, ISG will notify LMRWD about the change.

DELIVERABLES

- Bidding
  - Facilitate one (1) pre-bid meeting on-site
  - Provide one (1) bidding package with plans, specification, and engineer's estimate
  - Provide one (1) advertisement for bid
  - Respond to contractor questions
  - Issue addenda and/or clarifications to bidders as needed
  - Facilitate one (1) bid opening
  - Provide bid result summary and recommendation of award to LMRWD board
- Construction Administration and Staking
  - Facilitate one (1) pre-construction meeting on-site
  - Complete construction staking
  - Issue change orders, field changes, or approved equals from engineer
  - Review and approve shop drawing and submittals, as needed
  - Submit pay applications to LMRWD
  - Provide on-site construction oversight, daily logs, photos, and quantity tracking during construction
- Project Closeout and As-Built
  - Provide one (1) as-built plan set
  - Provide one (1) memo summarizing contracted work and recommendation for close out

Cost Proposal

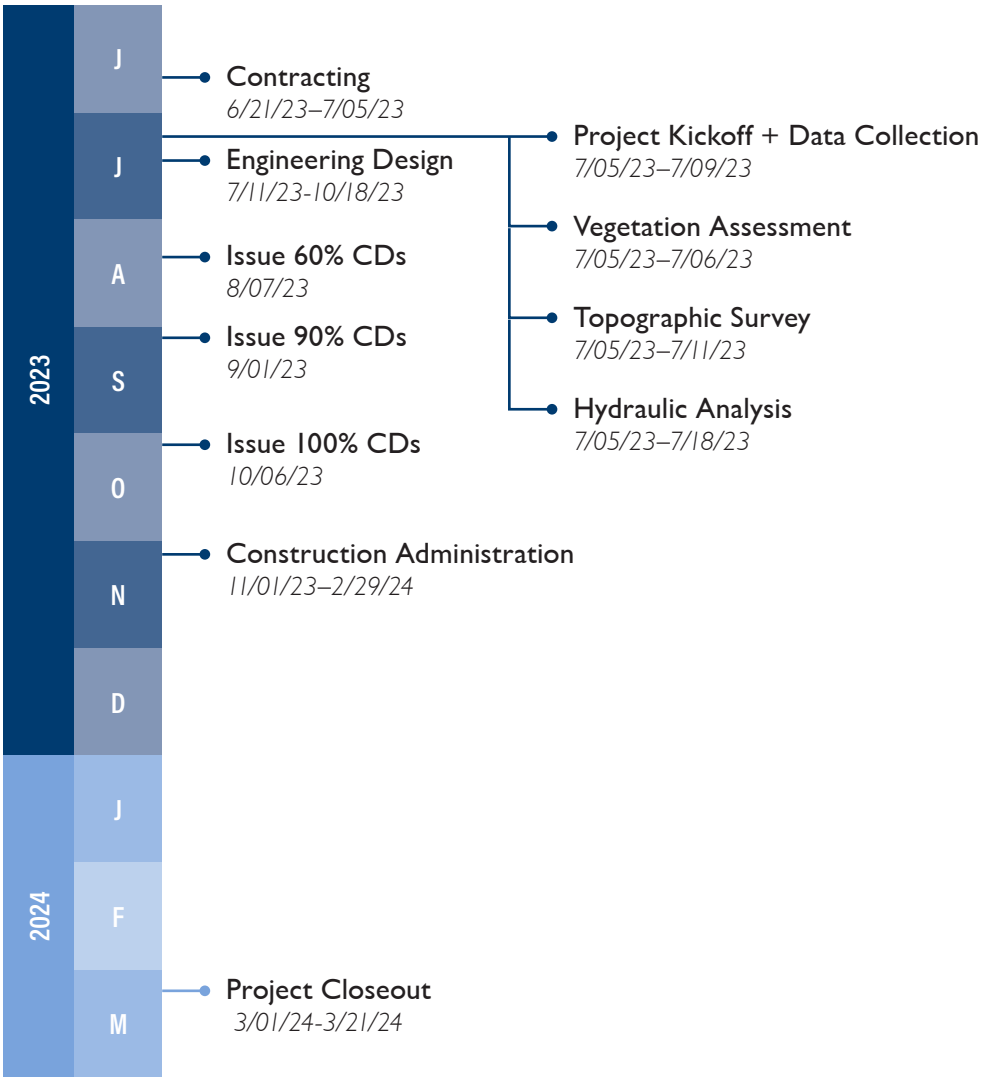
Task	Fee
Task 1: Project Kickoff + Data Collection	$6,495
Task 2: Vegetation Assessment	$3,460
Task 3: Topographic Survey	$6,860
Task 4: Engineering Design	$27,430
Task 5: Hydraulic Analysis	$5,015
Task 6: Construction Administration	$30,670
Total Estimated Fee	**$79,930**

Reimbursable Expenses

Anticipated reimbursable expenses such as travel, mileage, and printing are included within the compensation listed above.

Project Team	Hourly Rate
Project Advisor: Julie Blackburn, CFM	$190
Principle in Charge: Jacob Rischmiller, PE	$165
Project Manager/Engineer: Bailey Griffin, PE	$165
Designer: Logan Harms	$125
Environmental: Paul Marston, CFM	$140
Survey + Construction Staking: Mark Schwanz, PLS	$180
Construction Administrator: Darin Howell	$140
Plant Ecologist: Kaitlyn O'Conner, CERP	$140

Proposed Schedule



Project Team

Bailey Griffin, PE
Water Resources Engineer

Role: Project Manager

Project Manager

With a degree in biological systems engineering, Bailey's focus area includes water quality, environmental conservation, hydrology and hydraulics, and watershed restoration. Her systems approach to projects brings multi-faceted solutions with multiple benefits. She uses goals that include minimizing flooding, improving water quality, and enhancing habitat.

Bailey has led multiple wide-ranging water resources projects, including hydrology and hydraulic analysis, bank stabilization, watershed planning varying in scale from field to watershed scale, BMP design, and bridge and culvert analysis. She applies an analytical approach rooted in science to every project with extensive software and modeling knowledge, including HSPF-SAM, PTMApp, XPWMM, GIS, Civil 3D, HEC-RAS, and HydroCAD, to facilitate cost-effective and feasible projects. As a proven leader, Bailey regularly presents at water quality workshops on the implementation of rural water quality BMPs, most recently at the Minnesota Association of Watershed Districts Conference.

Bailey is formally trained by the Minnesota Department of Natural Resource - River Ecology Unit in natural channel design. Utilizing Rosgen stream restoration strategies, the systems approach to design includes hydrology, geomorphology, biology, water quality, and connectivity to determine the overall health of the stream and best practices for stabilization and restoration. Her experience with planning and on-the-ground construction implementation prepares her to guide the stakeholders seamlessly through the project.

PROJECT EXPERIENCE

Lower Minnesota River-East One Watershed, One Plan
Jordan, MN

Rapids Lake Ravine Stabilization + Infiltration Project
Carver, MN

Stream Restoration and Remeander Permitting and Design
Summit, SD

Lake Henry Outlet Structure Improvements - Water Level Management
Cleveland, MN

Rice - Steele JD 6 Two-Stage Ditch
Medford, MN

Le Sueur - Rice JCD 38 Channel Remeander
Kikenny, MN

EDUCATION + LICENSURE

Bachelor of Science in Biological Systems Engineering, Iowa State University
Ames, IA

MN Registration #59968

Julie Blackburn, CFM

Environmental Practice Group Leader

Role: Project Advisor + Quality Control

Leading ISG's Environmental Group, Julie has dedicated her 25-year career to facilitating ecological conservation, low-impact design, and water resource management, including policy, planning, restoration, protection, and implementation programs. She has vast knowledge of federal and state environmental policies and has led the development of rules and permitting programs at state and local government levels. Managing complex environmental projects, Julie applies her training in natural channel design with extensive experience in ecological restoration to guide the team in ensuring the long-lasting integrity of implemented projects.

EDUCATION

Master of Science in Environmental and Forest Biology, and Applied Anthropology, State University of New York College of Environmental Science and Forestry Syracuse University Maxwell School of Citizenship and Public Affairs
Syracuse, NY

PROJECT EXPERIENCE

Rum River One Watershed, One Plan
Mille Lacs, MN

USACE 404 Alternatives Analysis + Permit
Private Mining Client, SD

North Browns Lake Ravine Stabilization*
Stearns County, MN

Red River of the North Stressor Response Model*
International Joint Commission, Washington DC

**Completed at a previous firm*

Jacob Rischmiller, PE

Civil Engineer

Role: Principal in Charge

Jacob specializes in water resources design to maximize water quality and ecological benefits while limiting the impact to natural resources. From ditch bank stabilization to watershed planning, he applies his knowledge of hydraulic and hydrology modeling to examine not only what the client wants but alternative ideas that may be more cost effective long-term.

Managing costs is a large component of Jacob's commitment to innovative water resources design as he understands that most projects are working within a constrained budget. Cost effective design solutions lead to less stress on city governments, already operating on a tight budget. From project kickoff, Jacob reviews each project from different viewpoints to identify potential issues or risks to the client. He emphasizes an open line of communication about each item that is discovered and its impact on overall project goals.

EDUCATION

Bachelor of Science in Civil Engineering
Minnesota State University, Mankato
Mankato, MN

MN Registration #58670

PROJECT EXPERIENCE

Bassett Creek Streambank Stabilization
Golden Valley, MN

Jackson County JD 13 Ditch Bank Stabilization
Worthington, MN

Jackson County JD 3 Ditch Bank Stabilzation
Lakefield, MN

Stevens County CD 18 Ditch Bank Stabilization
Alberta, MN

Paul Marston, CFM

Environmental Scientist

Role: Environmental Analysis + Design

Paul combines his background in stream biologic assessment and natural channel design to deliver resilient stream stabilization and restoration designs that restore a functioning stream system. Paul honed his understanding of stream habitat and its vital role in a functioning system through surveying macroinvertebrates with the Minnesota Pollution Control Agency (MPCA) and developing Stressor Identification Reports. Paul has been trained by the Minnesota Department of Natural Resources (DNR) and Iowa DNR in natural channel design and applies his comprehensive understanding of stream function to restoration designs. This experience guides Paul from survey to design to deliver nature-based solutions that work for nature and the built environment.

EDUCATION

Bachelor of Science in Environmental Science
University of Iowa
Iowa City, IA

PROJECT EXPERIENCE

Lower Minnesota River-East One Watershed, One Plan
Jordan, MN

USACE 404 Alternatives Analysis + Permit
Private Mining Client, SD

Stream Restoration and Remeander Permitting and Design
Summit, SD

Kaitlyn O'Conner, CERP

Plant Ecologist

Role: Plant Ecology + Species Design

As a Certified Ecological Restoration Practitioner, Kaitlyn brings over eight years of experience restoring wetlands, prairies, woodlands, and streambanks in the Upper Midwest. Part of ISG's environmental team, she integrates native biodiversity into built environments through ecological design solutions that capture co-benefits like absorbing stormwater runoff, improving water quality, stabilizing soil, sequestering carbon, and creating wildlife habitat. From invasive species control to native plant community management, Kaitlyn ensures proper restoration considerations are incorporated into projects, leading to successful vegetation establishment and resilient landscapes. With a passion for land stewardship and sustainability, she will help to maximize the ecological function of Spring Creek.

EDUCATION

Bachelor of Science in Environmental Sciences
Winona State University
Winona, MN

PROJECT EXPERIENCE

Benz Wetland Bank
Pilot Grove Township, MN

Moore Memorial West Land Retirement
Ames, IA

Hot Springs Riverfront Walkway - Urban Riparian Vegetation Management and Restoration
Hot Springs, SD

Mason City Bike Trails - Invasive Species Control and Site Restoration
Mason City, IA

Mark Schwanz, PLS

Land Surveyor

Role: Survey Lead

Mark has been responsible for hundreds of surveys, including boundary surveys, ALTA ACSM Land Title Surveys, preliminary surveys for infrastructure improvements, photo control, construction staking, and site layout. Mark works closely with drone pilots and GIS project managers to lead site surveying efforts through the implementation of innovative technologies.

Mark brings a unique perspective to land surveying projects that allows him to consider how a project fits into the larger landscape. His topographic survey work identifies man-made and natural features that impact the site. This includes elevations of road crossings, tile inlets/outlets, and bridges, as well as natural features, including rivers, streams, lakes, creeks, and wetlands. Mark's topographic surveys also typically include centerline, toes of open channels, water level elevations, roadway cross sections, culvert inlets and dimensions, open water ponds, and miscellaneous points of interest.

EDUCATION

Bachelor of Science in Political Science
Gustavus Adolphus College
St. Peter, MN

Surveying and Civil Engineering Technology Courses,
Dunwoody College of Technology
Minneapolis, MN

MN Registration #45817

PROJECT EXPERIENCE

Stevens County Ditch No. 25
Stevens County, MN

East Medicine Lake Park
Plymouth, MN

Glen Park Pavilion
River Falls, WI

Darin Howell

Construction Administrator

Role: Construction Oversight

Darin brings a strong combination of environmental industry understanding, along with over 10 years of experience in construction. Serving as construction administrator for the water resources team, he is a connector between ISG and the client to ensure requirements are met in complex stream stabilization and restoration projects. In addition to field work, Darin is proficient in Civil 3D and ArcMap GIS software to connect site conditions with designs.

EDUCATION

Bachelor of Science in Environmental Science
Minnesota State University, Mankato
Mankato, MN

Geographic Information Science Certificate

Construction Site Management and
Construction Installer Certificates

PROJECT EXPERIENCE

Guentzel Wetland Bank
McPherson Township, MN

Lake Washington Hydrology Analysis
Madison Lake, MN

IC&E Wetland Restorations
Albert Lea, MN

Logan Harms
Designer

Role: Civil Designer

With over five years of experience, Logan provides design services for a diverse range of projects. He works closely with the environmental team to understand the full project scope, assessing existing conditions before developing thoughtful designs and deliverables. Logan has provided designs for numerous stormwater pollution prevention plans, erosion control plans, and streambank stabilization projects throughout the Midwest that have been successfully constructed. He understands how detailed and accurate designs impact a smooth installation experience in the field.

EDUCATION

Associate of Applied Science in Civil Engineering Technology
South Central College
North Mankato, MN

Geographic Information Systems Certificate

PROJECT EXPERIENCE

Brookview Bassett Creek Streambank Stabilization
Golden Valley, MN

Drummer Wetland Bank
Danville Township, MN

Murphy Wildlife Habitat Enhancements
Lohrville, IA

EXPERTISE

Architecture
Engineering
Environmental
Planning

WORK

Commercial
Education
Food + Industrial
Government + Cultural
Healthcare
Housing
Mining
Public Works
Sports + Recreation
Telecommunications + Energy
Transportation
Water

ISG

Des Moines, IA
Storm Lake, IA
Waterloo, IA
Mankato, MN
Minneapolis/St. Paul, MN
Rochester, MN
Sioux Falls, SD
Green Bay, WI
La Crosse, WI
Milwaukee, WI

ISGInc.com

On January 12, 2017, ISG formally announced its transition of firm ownership to a 100% employee stock ownership plan (ESOP). As a multi-disciplinary firm that started 50+ years ago, ISG has since grown to be a Top 500 Design Firm as recognized by Engineering News-Record (ENR), a Zweig Group Hot Firm, and PSMJ Circle of Excellence recipient, illustrating the progressive increase in talent, expertise, and market share.

Technical Memorandum

Young Environmental Consulting Group, LLC

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

From: Faith Breeden, Stefanie Gronlund, and Leila Khalid, 2023 Interns
Hannah LeClaire, PE, Project Manager

Date: June 14, 2023

Re: Lower Minnesota River Watershed District 2023 Gully Assessments

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Introduction

In 2020, Young Environmental Consulting Group, LLC, (Young Environmental) began work on updating the LMRWD Gully Inventory that had originally been completed in 2008. In the summers of 2020 and 2021, Young Environmental built an updated inventory of all the gullies in the watershed and developed a survey method for ranking their erosion potential. The erosion potential (low, moderate, or high) was determined using objective information about the gully including the size, shape, and material. After the 2021 gully inventory was complete, Young Environmental advanced the gully ranking assessment by evaluating the potential risk to LMRWD natural resources posed by the gullies. By incorporating the erosion potential and the risk to LMRWD natural resources, the gullies were sorted into five risk categories: Very Low, Low, Medium, High, or Very High.

As discussed in the 2023 Gully Assessment Program Workplan, the goal of the 2023 project is to revisit the gully sites identified as high or very high risk in the previous studies to determine if these sites are 1) continuing to pose a high risk and 2) if any are appropriate candidates for restoration. After all sites are evaluated, a comprehensive report of recommended sites will be developed to help prioritize gullies for restoration projects.

Table 1: Workplan summary of the three main tasks for the 2023 gully assessment

Task	Description
Office Work	• Review gully literature • Make improvements and edits to Survey123 data • Review previous gully reports from Young Environmental • Review GIS map of project locations • Create preliminary fieldwork schedule • Develop gully restoration priority factors

Fieldwork	• Complete Survey123 questionnaire for each site visited • Summarize information from each site to use for ranking • Collect photos and videos of field inspections • Update erosion potential score for visited gullies
Gully Ranking	• Summarize information from Survey123 • Develop ranking system for gully prioritization • Summarize findings in final report • Develop list of gullies to prioritize for restoration projects

Young Environmental hired three interns (Faith Breeden, Stefanie Gronlund, and Leila Khalid) to help complete the 2023 gully assessment and prioritization. An introduction to each of the interns can be found in Attachment 1. The interns began work on May 22, 2023. The purpose of this memorandum is to summarize the work that has been completed between May 22, 2023, and June 12, 2023.

Summary

Safety Training

Prior to their work in the field, the interns completed the 10-hour Occupational Safety and Health Administration (OSHA) General Industry Outreach training. This OSHA training prepared interns to safely conduct fieldwork and provided additional information for best field safety practices in a variety of environments. In addition, interns watched a field safety training video provided by the Riley Purgatory Bluff Creek Watershed District that discussed project specific safety considerations. After the training was complete, interns prepared a field safety plan (Attachment 2) that included the necessary safety measures and equipment needed before going out in the field, as well as a list of nearby medical centers in case of emergencies.

Literature Review

The interns reviewed the LMRWD Watershed Management Plan 2018-2027 to gain an understanding of the LMRWD's background, jurisdiction, issues, goals, and implementation strategies. This review provided essential context and purpose for the projects that the interns would be working on this summer. The interns also read the 2020 and 2021 Gully Inventory and Assessment reports to inform them on the existing work on gully assessment that has been conducted by the LMRWD and Young Environmental. These reports detailed the methods used to identify and classify gullies and their erosion potential. These methods, as well as the results for each City, are critical information for the interns to use when reassessing the high and very high potential erosion gullies.

Young Environmental interns then reviewed several literature sources about gullies. This review provided information about what gullies are, why they occur, and best

management practices to stabilize or treat them. Additionally, the interns read case studies about local gully inspections and restoration efforts. Below is a table summarizing the additional sources that were examined and their purpose for this project.

Table 2: Summary of literature used in gully inventory and assessment.

Literature (Author)	Purpose
Burnsville 2018 Memorandum (Jen Holmstadt and Nick Bradley)	Provided a local case study for developing a risk analysis method for determining unstable slopes. This process was useful for creating a similar method for gully erosion.
• National Engineering Handbook: Chapter 10 – Gully Treatment (USDA) • Gully Erosion Assessment and Control Guide (HDR Engineering Inc.) • South East Local Land Services Gully Erosion Assessment and Control Guide (South East LLS) • Technical Supplement 14P – Gullies and Their Control (USDA) • Gully Control in SAT Watersheds (Pathak et al.)	Identified the main characteristics of gullies, and the most common treatment measures used to stabilize gullies.
Seminary Fen/Chaska Ravine Restoration Project	An informative local case study that documented the reasons for this specific ravine restoration, the project description, funding details, and future maintenance plans. This case study presented the entire process of a ravine stabilization project.
Strategic Resources Evaluation of the LMRWD (HDR Engineering Inc.)	Described the method used to differentiate Strategic Resources into either Category 1 or Category 2. This helped inform the impact tiers for the gully ranking system that was developed.

Fieldwork Preparation

To reevaluate the erosion potential of gullies that were previously ranked as high or very high priority from the 2020 and 2021 report, Young Environmental interns used the Survey123 program, which allows for quantitative measurements of the gullies. Interns

answer multiple-choice questions about various aspects that influence erosion probability such as vegetation cover, gully size, shape and material, and additional information regarding the surrounding infrastructure present and ease of access. The gully information is entered into Survey123 using iPads in the field. Each question has an associated point value that adds up to the erosion potential score. The greater the point value the more potential the gully has for further erosion. This survey also allows interns to document photos of the gully for reference while in the office. The erosion potential survey is identical to the survey used in 2021 to create consistency between the inventories.

Prior to fieldwork, interns compiled a fieldwork plan spreadsheet which includes site information, site access points, and planned visit dates to ensure all sites will be evaluated within the project timeline. The interns plan to visit a total of 315 gully sites over the course of 5 weeks. Interns also gathered information from previous reports describing the gully sites for additional information that may be useful in the field. Lastly, interns created a letter signed by the LMRWD administrator for homeowners' information if interns are asked about the project. The interns have permission to access gullies located on private property under the Minnesota State Statute 103D.355 Subd. 13. The letter will only be distributed to landowners that have questions about the project.

First Field Day

On June 5, 2023, the interns examined 12 high and very high potential erosion gullies around the Richard T. Anderson Conservation Area, located in Eden Prairie by the Chanhassen border. The interns were accompanied by Young Environmental Senior GIS Analyst, Chris Ross, and Water Resources Scientist, Erica Bock. Using the GPS feature on the iPads, the team was able to locate the gullies previously documented in 2020 on the GIS map. The team then worked together to identify each gully and complete the associated Survey123.

At each site, there was significant discussion regarding the answers to the survey, as well as any possible improvements or changes that should be made to the survey questions. The interns also experienced accessing gullies that were behind private homes neighboring the conservation area. One previously undocumented gully was discovered and was subsequently added to the gully inventory along with a completed Survey123. A variety of gully features were observed including undercut banks, steep slopes, fallen trees, poor vegetation, seepage, and slumping. The interns then attempted to assess three other gullies on their own, but two were not accessible due to trees being cut down in the area.

Improvement of Field Methods/Survey123

After the first field day, the team worked together to make updates to the fieldwork methods and the Survey123 questions. The values for the point system remained unchanged to maintain consistency with the previous years' scores; however, additional

questions were added that would be helpful in prioritizing gullies for proposing restoration projects in the comprehensive report.

Table 3: Summary of improvements and changes made to the Survey123 questionnaire used for the 2023 gully assessments

Additional Survey123 Questions	Rationale
Is there existing infrastructure near the gully?	If there are homes or buildings near the gully there may be greater risk of property damage or potential injury.
Is there existing erosion control?	Existing erosion control may help the gully to stabilize, and another project may not need to be done on the site. Erosion control also shows that previous actions have been taken to attempt to remediate the site.
Does the gully appear stable?	While Survey123 is used to determine the erosion score, an additional question to note the observed stability allows the team ease in reviewing gullies that were perceived to be unstable.
Is the material in the gully compact?	The level of compaction of the material in the gully relates to how easily the surface will erode. The more compact the material, the more stable the gully. This also differentiates soils of the same general type.
Where is the location of groundwater seepage?	Water seepage from groundwater on the banks of the gullies can cause different impacts than seepage from the bottom of the gullies, therefore it is important to note the source of the water.
Accessibility information	Construction equipment must be able to reach the gully without causing further damage to the environment.

The team also created a 'photo caption' template that includes the orientation of the picture taken in relation to cardinal direction and the layout of the gully. This new format will create consistency and ease in understanding the pictures taken in the field.

Developing Gully Prioritization Process

To prepare for post-processing of Survey123 gully data, interns started a document to guide gully prioritization for restoration. Gullies that were rated as high or very high in 2021 were prioritized based on their erosion potential and impact to LMRWD natural resources. However, other factors may influence how the LMRWD should prioritize gullies for restoration. The 2023 gully assessment includes establishing a system to quantify a gully's need for restoration, which will support project location recommendations made by Young Environmental to the LMRWD and municipalities.

The interns brainstormed several factors that may influence the prioritization of gullies including:

- Changes in erosion potential scores since the 2021 survey
- Proximity of the gully to infrastructure
- Downstream effects of gully erosion
- Safety
- Ease of access
- Possible mitigation strategies for gully stabilization

This is a working list that is subject to change as the project progresses. Interns will continue to finalize the gully ranking process and establish a quantifiable method for recommending restoration for specific gullies.

Additional Fieldwork

Each week, the interns will develop an action plan to guide their fieldwork and in-office work for the week. The action plan for the week of June 5, 2023, is shown in Attachment 3. From June 7, 2023, to June 9, 2023, the interns were able to assess 58 gullies in total. 48 gullies were assessed in Bloomington, 10 in Shakopee, 3 in Jackson Township, and 2 in Chanhassen. In Shakopee, a homeowner expressed concern about erosion occurring near his property and an additional gully was added to our list of high priority sites. In Bloomington, 4 sites were inaccessible and were unable to be assessed. At each site, the Survey123 was completed and data from the survey was uploaded to the gully geodatabase once the interns returned to the office.

Next Steps

After all the high priority gullies are surveyed, the team will review the gully scores and surveys as well as complete further desktop analysis as needed to aid with prioritization. The team will then curate a list of the top gullies in each city that are recommended for restoration. The severity of the gullies across the cities may differ, but the highest priority gullies for each city will be determined. The team will write a report and prepare a presentation summarizing and defending the findings from the project for the July LMRWD Board meeting.

Attachments

Attachment 1—Intern Introductions

Attachment 2—Safety Plan

Attachment 3—Action Plan

Faith Breeden, 2023 Intern

Faith Breeden is a second-year master's student in the Natural Resources Science and Management program at the University of Minnesota-Twin Cities. Her research focuses on hydrology, specifically the interactions between precipitation and urban canopies through analysis of the chemical contents. She plans to put her degree into action by managing stormwater and water quality. Faith earned her Bachelor of Science in Environmental Studies from the University of Minnesota-Duluth.

Getting to know Faith:

- **Strength Finders Top 5:** Context, Individualization, Relator, Analytical, Restorative
- **Hometown:** Coon Rapids, MN, but just moved to northeast Minneapolis
- **Favorite Past Job:** Vitta Pizza in Duluth – "I loved doing tricks while throwing dough!"
- **Pets:** A gray tabby cat named Fiona (named for Fiona Gallagher from Shameless)
- **Travel Memories:** Faith traveled to China with her family in 2019, where she got to practice her Mandarin
- **Favorite Outdoor Activity:** You will likely find Faith hiking or laying in the sun with a good book

Stefanie Gronlund, 2023 Intern

Stefanie is earning her Bachelor of Science in Environmental Engineering from Ohio State University - College of Engineering. She has already put her learning into action by designing storm and wastewater sewers for project sites and completing National Pollutant Discharge Elimination System (NPDES) wastewater permit applications. She has also served as a Peer Academic Leader with the College's Diversity and Inclusion Office.

Getting to know Stefanie:

- **Strength Finders Top 5:** Achiever, Context, Restorative, Individualization, Ideation
- **Hometown:** Ellicott City, Maryland—the center of Maryland!
- **Family:** Stefanie's parents still live in Ellicott City, MD, and she has one older brother who lives in Madison, WI
- **Favorite Past Job:** Working at an Adventure Park with a gigantic tree zipline/obstacle course. With her adventurous spirit, Stefanie worked as a monitor and climbed up on the courses when people got stuck!
- **Dream Vacation:** New Zealand/Australia: "My family is planning to go next winter break!"
- **Favorite Quote:** "Tough times don't last, tough people do!"

Leila Khalid, 2023 Intern

Leila is working on her Bachelor of Arts in Ecological Determinants of Health in Society at McGill University – Bieler School of Environment Faculty Program in Montreal, Quebec. This major analyzes the essential aspects of both natural and social sciences to understand the interactions between people and their environment. Leila also spends her time as a research assistant for a McGill Sociology Professor and as a senior division writer for the *McGill Energy Journal*. She plans to graduate in May 2024 and is excited to gain hands-on experience and perform field research during her summer home in Minnesota.

Getting to know Leila:

- **Strength Finders Top 5:** Achiever, Learner, Harmony, Relator, and Responsibility
- **Hometown:** Born and raised in St. Paul, MN, where she attended Central High School
- **Family:** Both of Leila's parents are teachers and her brother is currently working for the European Commission in Brussels
- **Favorite Season:** Autumn with the changing colors
- **Best Vacation Ever:** Leila recently went on a trip to Vancouver and enjoyed its natural beauty
- **Currently Reading:** *The Soul of an Octopus* by Sy Montgomery

General Safety Plan

1. Be mindful of your environment
2. Do not go into moving water
3. Checking the weather (heat and rain)
    a. In extreme heat, take breaks as needed
    b. Bring water
    c. No going out in rain
4. Wearing hi-vis vest
5. Wear appropriate shoes and clothes (sunglasses, closed toed shoes)
6. Avoid poison ivy, stinging nettle, wild parsnip
7. Tick (spray), be aware of beese, wasps, mosquitos, etc.
8. Always travel in pairs
9. Respect landowners
10. Have a Charged phone/ipad for contact
11. Communication if plans change (won't be mad with over communication) check-ins are appreciated

Contact Information

Erica: 507-430-4603
Hannah: 763-568-0726
Della: 651-249-6974
Karina: 507-329-6367
Chris: 651-357-2329
Stefanie: 410-206-6149
Leila: 651-252-7200
Faith: 612-910-6869

Hospital Locations

St Francis Regional Medical Center ER: 1455 St Francis Ave, Shakopee, MN 55379
South Bridge Urgent Care: 8170 Old Carriage Ct #100, Shakopee, MN 55379
Allina Health EMS: 8035 124th St W, Savage, MN 55378
Two Twelve Medical Center: ER: 111 Hundertmark Rd, Chaska, MN 55318
MedExpress Urgent Care: 16490 W 78th St, Eden Prairie, MN 55346
UMN Health Fairview Ridges Hospital ER: 201 E Nicollet Blvd, Burnsville, MN 55337
Minneapolis VA Medical Center ER: 2 Veterans Dr, Minneapolis, MN 55417
United Hospital ER: 333 Smith Ave N, St Paul, MN 55102

Supplies

☐ First aid kit
☐Eye wash
Toilet paper
☐Tape measures
☐Safety vests
☐Safety hats
Tick spray
☐ Sun screen

☐Bug spray

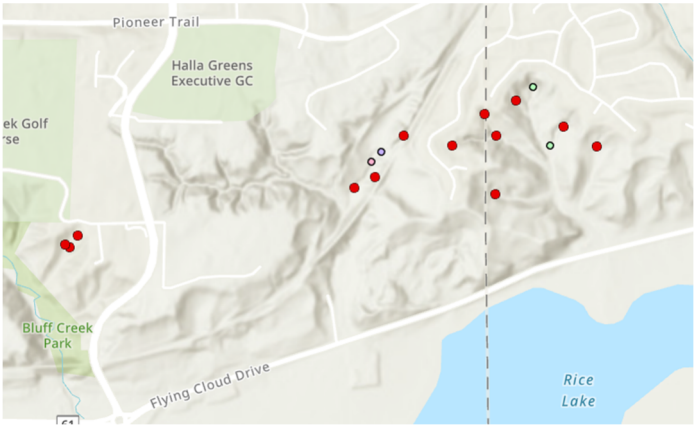
Attachment 3

Action Plan – Week of 06/05/2023

For more detailed information, please see Gully_Field_Plan excel sheet.

Monday:

- Visiting around 10 sites in the Richard T. Anderson Conservation Area and possibly 3 nearby sites in Chanhassen depending on time



- Arrival: 8:15 am
  - Parking: 18700 Flying Cloud Dr, Eden Prairie, MN 55347
- Departure: 12 pm
- Access/safety concerns:
  - Richard T. Anderson: public area so should not be difficult to access
  - Gully CHH2 access: Tail End Rd – cuts through private yard over the railroad tracks

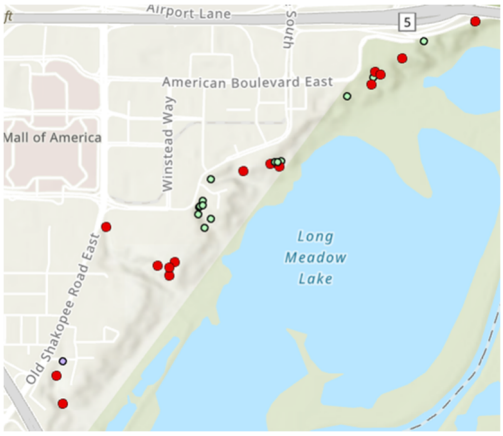
Tuesday:

- Office day

Wednesday:

- Visiting around 16 sites in the east Bloomington region near the Mall of America, we are meeting at **Minnesota Valley National Wildlife Building: 3815 American Blvd E Bloomington, MN 55425-1600**

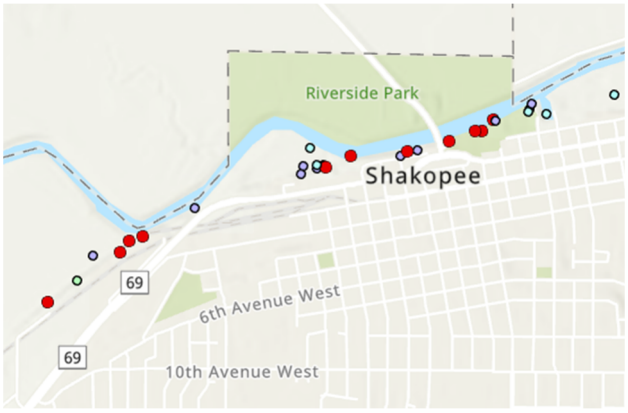
Attachment 3



- Arrival: 8:00 am
- Departure: ~1 pm
- Access/safety concerns:

Thursday:

- Visiting around 14 sites in Shakopee region, planning to meet at **Minnesota Vally National Wildlife Building: 3815 American Blvd E Bloomington, MN 55425-1600**

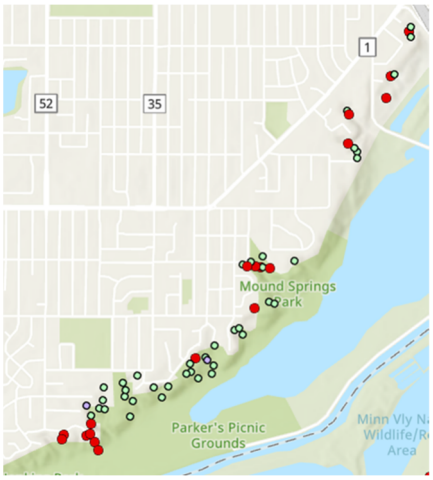


- Arrival: 8:00 am
- Departure: 1 pm
- Access/safety concerns:
    - Most sites are located around private property

Friday:

- Visiting around 19 sites in Bloomington area, planning to meet at **Minnesota Vally National Wildlife Building: 3815 American Blvd E Bloomington, MN 55425-1600**

Attachment 3



- Arrival: 8:00 am
- Departure: 4:30 pm
- Access/safety concerns:
    - Most sites are located around private property

LOWER MINNESOTA RIVER
WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, April 19, 2023

Agenda Item
Item 6. J. – Permits & Project Reviews

Prepared By
Linda Loomis, Administrator

Summary

i. **Shakopee Mdewakanton Sioux Community Organic Recycling Facility Relocation (LMRWD No. 2022-016)**
This project will construct a new facility for the Shakopee Mdewakanton Sioux Community's (SMSC's) Organics Recycling Program. Young Environmental Consulting Group has reviewed the project on behalf of the LMRWD and recommends conditional approval. The Technical Memorandum recommends approval for Rule B (initial site preparation activities and mass grading), however there may be an update at the meeting.

Attachments
Technical Memorandum – Shakopee Mdewakanton Sioux Community Organic Recycling Facility Relocation (LMRWD No. 2022-016) dated June 14, 2023

Recommended Action
Motion to conditionally approve a permit for LMRWD Rule B for Shakopee Mdewakanton Sioux Community Organic Recycling Facility Relocation (LMRWD No. 2022-016) contingent upon receipt of a copy of the NPDES permit

ii. **AT & T Bloomington to Eureka Fiber (LMRWD No. 2023-009**
This project proposes to place an underground fiber optic cable within the floodplain of the Minnesota River. The project will use directional drilling and temporary bore pits. Young Environmental Consulting Group reviewed the project on behalf of the LMRWD. Approval of the permit for this project is recommended with a stipulation that the LMRWD be notified upon the discovery of disturbed groundwater or any release of lubricant fluid.

Attachments
Technical Memorandum – AT & T Bloomington to Eureka Fiber (LMRWD No. 2023-009) dated June 14, 2023

Recommended Action
Motion to approve A permit for AT & T Bloomington to Eureka Fiber (LMRWD No. 2023-009) with the stipulation that the LMRWD be notified immediately upon the discovery of disturbed groundwater or any release of lubricant fluid

iii. **Lilydale LGU Permit and Local Surface Water Management Plan**
The City of Lilydale has updated its Local Surface Water Management Plan (LSWMP) and official controls. Young Environmental Consulting Group (YECG) reviewed the Plan and official controls for conformance to the LMRWD Comprehensive Watershed Management Plan and Rules. The City applied for a general municipal local government unit (LGU) permit. Technical Memorandum – Lower Minnesota River Watershed District – City of Lilydale Municipal J

Permit (Surface Water Management Plan and Ordinance Controls Review) dated June 14, 2023, summarizes YECG's review of the information provided and its recommendations. In addition to approval of the permit, the LMRWD should approve the LSWMP for the City. A Resolution approving the Lilydale Plan is attached.

Attachments
Technical Memorandum – Lower Minnesota River Watershed District – City of Lilydale Municipal Permit (Surface Water Management Plan and Ordinance Controls Review) dated June 14, 2023
Resolution 23-06 – Approving the Surface Water Management Plan for the City of Lilydale

Recommended Action
Motion to conditionally approve an LGU Permit for the City of Lilydale contingent upon the City's adoption of the draft SWMP and official controls presented in the City's application
Motion to adopt Resolution 23-06 - Approving the Surface Water Management Plan for the City of Lilydale

iv. 535 Lakota Lane

The LMRWD received a survey of the property at 535 Lakota Lane. The survey received did not provide all the details asked for by the LMRWD. Young Environmental Consulting Group reviewed the survey and notified the property owner of the deficiencies. The City did the same. Legal Counsel for the LMRWD communicated with Legal Counsel for the property owner, but no one has heard from the property owner since notification of the survey deficiencies was sent – even though the property owner indicated that he would be in town in May. I was in the area visiting another property and drove by 535 Lakota. It appeared that someone was staying at the property. The City was notified.

Also, there is a for sale sign in front of the home.

Attachments
No attachments

Recommended Action
No action recommended

Young Environmental Consulting Group, LLC

Technical Memorandum

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

From: Erica Bock, Water Resources Scientist
Hannah LeClaire, PE, Project Manager

Date: June 14, 2023

Re: Shakopee Mdewakanton Sioux Community Organic Recycling Facility Relocation (LMRWD No. 2022-016)

The Shakopee Mdewakanton Sioux Community (SMSC) has applied for an individual project permit from the LMRWD to relocate and construct their Organic Recycling Facility (ORF). The proposed location for the ORF is 12362 Chestnut Boulevard, Shakopee, Minnesota (Figure 1). The applicant's engineer, Bolton & Menk, submitted the permit application, associated applicant exhibits, and site plans for the SMSC ORF Relocation Project (Project).

The existing conditions of the site consist of primarily agricultural land. The eastern border is the Union Pacific Railroad and Barton Sand & Gravel Quarry. The western edge of the property is a steep bluff down to Lake Gifford. The proposed conditions of the site consist of an open air ORF that will process organic materials such as wood, food, and yard waste to convert it to a nutrient rich compost material. The Project proposes to construct 30.5 acres of new impervious surfaces.

The proposed impervious areas will be treated on site by three contact water basins, a reuse basin, and an infiltration/filtration basin. Contact water is from the covered aerated static pile (CASP) composting areas and is defined as water that is in contact with waste, immature compost, and residuals and must be diverted to a leachate collection and treatment system. Contact water is subject to the Minnesota Pollution Control Agency (MPCA) Industrial Wastewater permitting standards and will be contained on site and reused, with no planned discharge to a public receiving water. The reuse basin will be used to irrigate the feedstock arriving to the site. During large storm events, the reuse basin will act as a wet sedimentation pond and discharge to the Minnesota River. The infiltration/filtration basin will treat stormwater runoff. As with all infiltration basins,

there is the long-term potential for the system to become plugged or for infiltration to become less efficient. Because of the proximity of the basin to the Minnesota River, the designers proposed to include a capped filtration system as a backup to infiltration. Drain tile will be installed within the basin; however, it will initially be capped to promote infiltration. In the event that the basin is not performing as designed, the system can be uncapped.

The project is not located within the High Value Resource Area or Steep Slopes Overlay District, but it is located within the Minnesota River floodplain. The applicant proposes to begin initial site preparation activities and mass grading in June 2023 and construction of impervious surfaces in the fall of 2023 with site completion expected at the end of 2024. The project triggers LMRWD Rule B – Erosion and Sediment Control, Rule C – Floodplain and Drainage Alteration, and Rule D – Stormwater Management. Although the project address is Shakopee, the project is officially located within Louisville Township, and therefore requires a LMRWD individual permit.

After meeting with the applicant on June 1, 2023, to discuss the project design, project time constraints became apparent. In previous permit applications with similar time constraints, permits have been issued in phases, allowing the applicant to begin initial site preparation activities and mass grading ahead of the stormwater approvals under Rule D. Because of the construction schedule concerns of the applicant, we have segregated our permit review to just the initial site preparation activities and mass grading activities (Rule B). The applicant will be required to provide updated stormwater treatment calculations and floodplain fill calculations to obtain a permit amendment that includes the construction of impervious surfaces planned for the fall of 2023.

Summary

Project Name: Shakopee Mdewakanton Sioux Community Organic Recycling Facility Relocation

Purpose: Construct an organic recycling facility

Project Size:

Area Disturbed	Existing Impervious Area	Proposed Impervious Area	Net Increase Impervious Area
58.7 acres	9 acres	39.5 acres	30.5 acres

Location: 12362 Chestnut Boulevard
Shakopee, MN 55379

LMRWD Rules: Rule B – Erosion and Sediment Control
Rule C – Floodplain and Drainage Alteration
Rule D – Stormwater Management

Recommended Board Action:	Conditional Approval of Rule B (initial site preparation activities and mass grading only)

Discussion

The LMRWD received the following documents for review:

- LMRWD Permit Application; received April 20, 2022
- LMRWD resubmittal memo by Bolton & Menk; dated May 16, 2023; received May 16, 2023
- Drainage Report for Organic Recycling Facility, by Bolton & Menk; dated April 20, 2022; revised October 28, 2022; received May 16, 2023
- Organic Recycling Facility Plan Set, by Bolton & Menk; dated February 17, 2023; received May 17, 2023
- No-Rise Memo by Bolton & Menk; dated April 20, 2022; revised May 12, 2022; received May 16, 2023
- HEC-RAS Model showing existing and proposed conditions; received May 16, 2023
- Signed maintenance agreement by Shakopee Mdewakanton Sioux Community; dated May 17, 2023; received May 17, 2023
- Erosion and sediment control inspector contact information; received June 7, 2023
- Contractor contact information; received June 7, 2023
- Stormwater Pollution Prevention Plan, by Bolton & Menk; dated June 5, 2023; received June 7, 2023.

The application was deemed complete on June 7, 2023, and the documents received provide the minimum information necessary for permit review for Rule B – Erosion and Sediment Control.

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 **58.7 acres** within the LMRWD boundary. The applicant has provided an erosion and sediment control plan, a Stormwater Pollution Prevention Plan, and contact information for the contractor and person(s) responsible for erosion and sediment control features. The project generally complies with Rule B, but a copy of the National Pollutant Discharge Elimination System (NPDES) construction stormwater permit is needed before the LMRWD can issue a permit.

Contractor:
Fehn Companies
Joel Landkammer
jlandkammer@fehncompanies.com
612-282-0675

Site Inspector:
Bolton & Menk
Chance McDonald
Chancellor.McDonald@bolton-menk.com
612-477-0800

Recommendations

The applicant has made it clear that time is of the essence for the Project. Therefore, staff recommend conditional approval of the Project for initial site preparation activities and mass grading only.

As discussed, this permit allows the applicant to begin work on the initial site preparation activities and mass grading but does not allow for the construction of any new impervious surface. Staff recommends the applicant and the LMRWD continue to work together to ensure the stormwater management system and floodplain fill comply with the LMRWD rules. A permit amendment will be required to construct impervious surfaces and stormwater best management practices (BMPs).

Based on our review of the project, we recommend conditional approval for Rule B (initial site preparation activities and mass grading) contingent on receipt of the following:

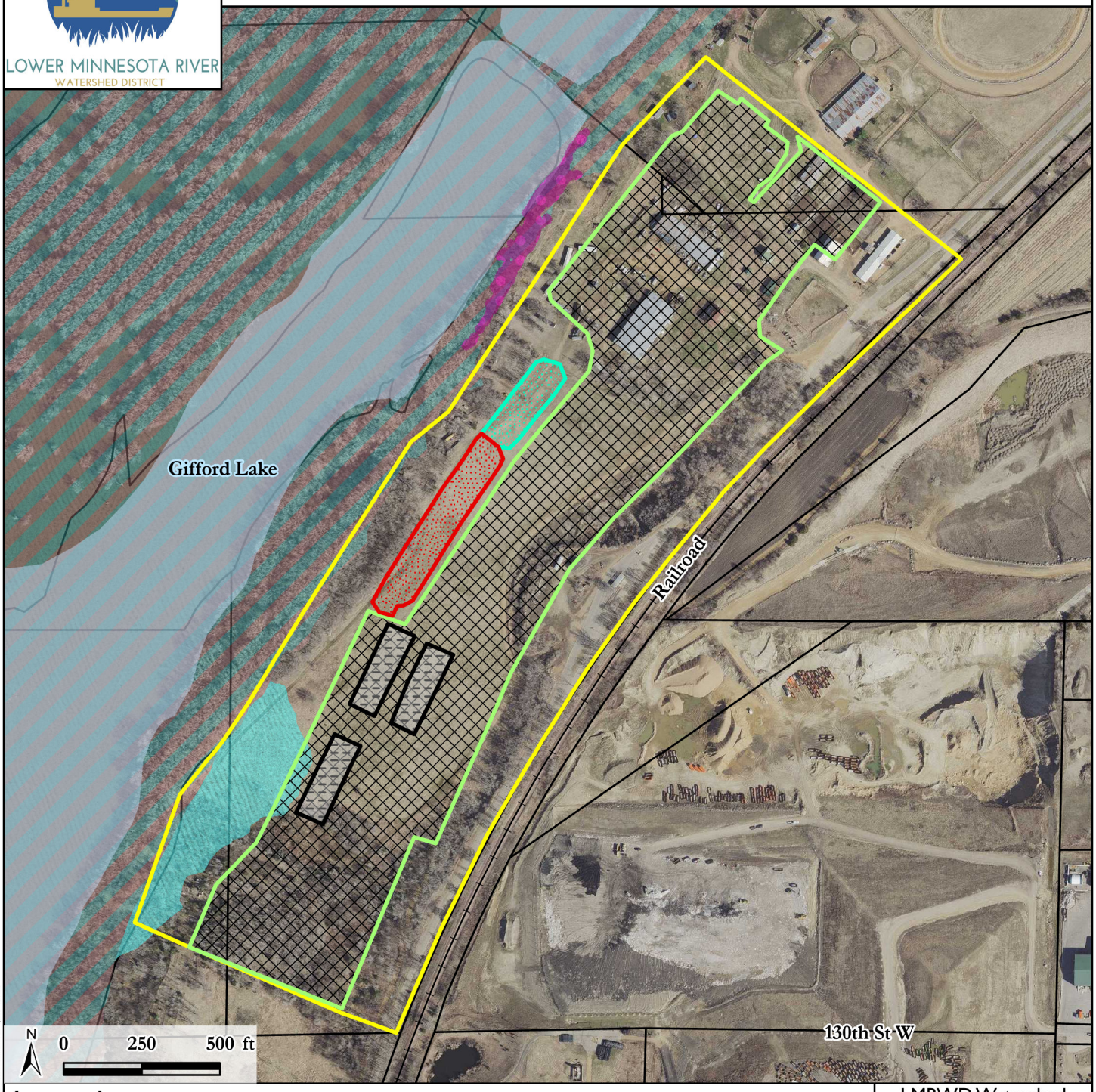
- Copy of NPDES Construction Stormwater permit

Attachments

- Figure 1—SMSC ORF Project Location Map

Figure 1: ORF Relocation Project Location
LMRWD No. 2022-016

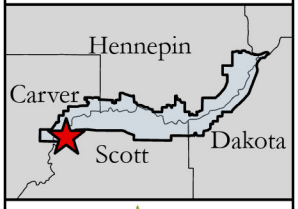
LOWER MINNESOTA RIVER
WATERSHED DISTRICT



Legend

- Project Location
- Public Waters
- Public Waterbodies
- Proposed Contact Water Basin
- Proposed Impervious
- Proposed Infiltration Basin
- Proposed Reuse Basin
- Steep Slope Overlay District
- 100-yr Floodplain
- Floodway
- Parcels
- Railroads

LMRWD Watershed Location Map



Young Environmental Consulting Group, LLC

Projects\LMRWD\Project Reviews\02 In Process\2022-016 SMSC ORF\04 GIS

Young Environmental Consulting Group, LLC

Technical Memorandum

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

From: Karina Weelborg, Water Resources Scientist
Hannah LeClaire, PE, Project Manager

Date: June 14, 2023

Re: AT&T Bloomington to Eureka Fiber (LMRWD No. 2023-009)

AT&T Corporation (the applicant) has applied for an individual project permit from the Lower Minnesota River Watershed District (LMRWD) to place fiber optic cable and conduit in the cities of Bloomington and Savage as shown in Figure 1. The applicant's authorized agent, Apex Companies, LLC, has provided site plans for the AT&T Bloomington to Eureka Fiber Project (Project) along with the permit application.

The proposed project consists of placing 5.26 miles of underground fiber optic cables within the LMRWD boundary, with 1.5 miles in the 100-year floodplain of the Minnesota and Credit rivers. Directional drilling through temporary bore pits will be used to install the fiber optic cable. Additional handholes and manholes will also be installed. The total disturbed area within the LMRWD is 1,120 square feet (0.026 acres) including 427 square feet (0.01 acres) in the floodplain. The project is not located within the High Value Resource Area. Although there are two portions of the fiber optic cable that appear to run under the Steep Slopes Overlay District (SSOD), this project is exempt from Rule F because it is considered maintenance or in-kind replacement of existing utilities. The applicant proposes to commence construction within the LMRWD in 2024.

Although all disturbed areas within the floodplain will be returned to existing ground, because the conduit will be directionally bored under the Minnesota River and Credit River with the potential for encountering groundwater, this project requires an LMRWD individual permit for Rule C. Because the City of Savage and City of Bloomington do not have their Rule C LMRWD Municipal Permits, this project requires an LMRWD individual permit.

Summary

Project Name: AT&T Bloomington to Eureka Fiber

Purpose: Installation of fiber optic cable within the floodplain in Savage, MN.

Project Size:

Area Disturbed	Existing Impervious Area	Proposed Impervious Area	Net Increase Impervious Area
0.026 acres	0 acres	0 acres	0 acres

Location: Bloomington to Eureka, MN

LMRWD Rules: Rule C – Floodplain and Drainage Alteration

Recommended Board Action: Approval

Discussion

The LMRWD received the following documents for review:

- LMRWD permit application; dated March 24, 2023; received April 4, 2023
- LMRWD Rule C: Floodplain and Drainage Alteration Rule Required Information and Exhibits: AT&T Corp. Bloomington to Eureka Fiber Project by Apex Companies, LLC, and AT&T Corp.; dated March 27, 2023; received March 31, 2023
- Best Management Practices Storm Water Pollution Prevention Plan Linear-Cable Placement Eureka to Bloomington, Minnesota; received May 17, 2023
- Horizontal Directional Drilling Contingency Plan (Frac-Out Plan); dated May 2023; received May 17, 2023

The application was deemed complete on May 19, 2023, and the documents received provide the minimum information necessary for permit review.

Rule C – Floodplain and Drainage Alteration

The project is located in the Minnesota River floodplain (see Figure 2), shown on the Hennepin County Flood Insurance Rate Map (FIRM) Panel 27053C0461F (effective 11/4/2016) and the Scott County FIRM Panels 27139C0061E (effective 2/12/2021) and 27139C0063E (effective 2/23/2021). The effective FIRM shows the project in FEMA Zone AE (or the 100-year floodplain), with a 100-year elevation of 718.0 NAVD88

between cross sections AK and AL. The project is also located in the Credit River floodplain (see Figure 3), shown on the Scott County FIRM Panels 27139C0063E and 27139C0064E (effective 2/12/2021). The effective FIRM shows the project in FEMA Zone AE (or the 100-year floodplain), with a 100-year elevation of 741.4 NAVD88 between cross sections J and K. The project proposes 16 temporary bore pits in the floodplain, adding up to approximately 37.9 cubic yards of excavation and 320 square feet of temporary soil disturbance. All temporary bore pits will be restored to existing conditions, including revegetation. The permanent disturbance in the floodplain includes two new manholes and five new handholds for approximately 13.1 cubic yards and 107 square feet of soil disturbance. All disturbed areas will be restored to existing grade and no fill or compensatory storage is proposed within the floodplain. Because no permanent alterations will be made to ground elevations in the floodplain, modeling and a no-rise certificate were not required.

The applicant submitted a Best Management Practice (BMP) Plan for sediment and erosion control. The contractor and person responsible for inspection and maintenance of erosion and sediment control features is:

James Parcells
SDT Solutions, LLC
8400 Normandale Lake Blvd, Suite 920
Bloomington, MN 55476
678-283-3585
Jparcells@sdt-1.com

The project meets the minimum requirements of Rule C.

Additional Considerations

Due to issues encountered on past projects, the LMRWD is increasingly concerned about the potential negative impacts of deep excavations on groundwater. The installation of fiber optic cable will be done via directional boring at a depth of 42 inches below grade, 20 feet below the Minnesota River, and 10 feet below the Credit River. While the Project is not anticipated to disturb groundwater patterns, for the conditions of this permit, the applicant will notify the LMRWD, local city jurisdiction, and any relevant state agencies immediately upon the discovery of any amount of groundwater.

Additionally, the applicant has prepared and submitted a Horizontal Directional Drilling Contingency and Resource Protection Plan or Frac-Out Plan (Attachment 1) for releases of lubricant fluid, a bentonite slurry mix. The plan states that minor lubricant fluid releases, up to 250 gallons in a given location, will be addressed through local containment. Anything larger is considered bore integrity failure. In the event of larger fluid releases on land, mitigation actions will be taken, and the appropriate agencies and organizations will be notified. Should a larger fluid release occur within a waterway, all

work will stop, mitigation actions will be taken, and the appropriate agencies and organizations will be notified.

Recommendations

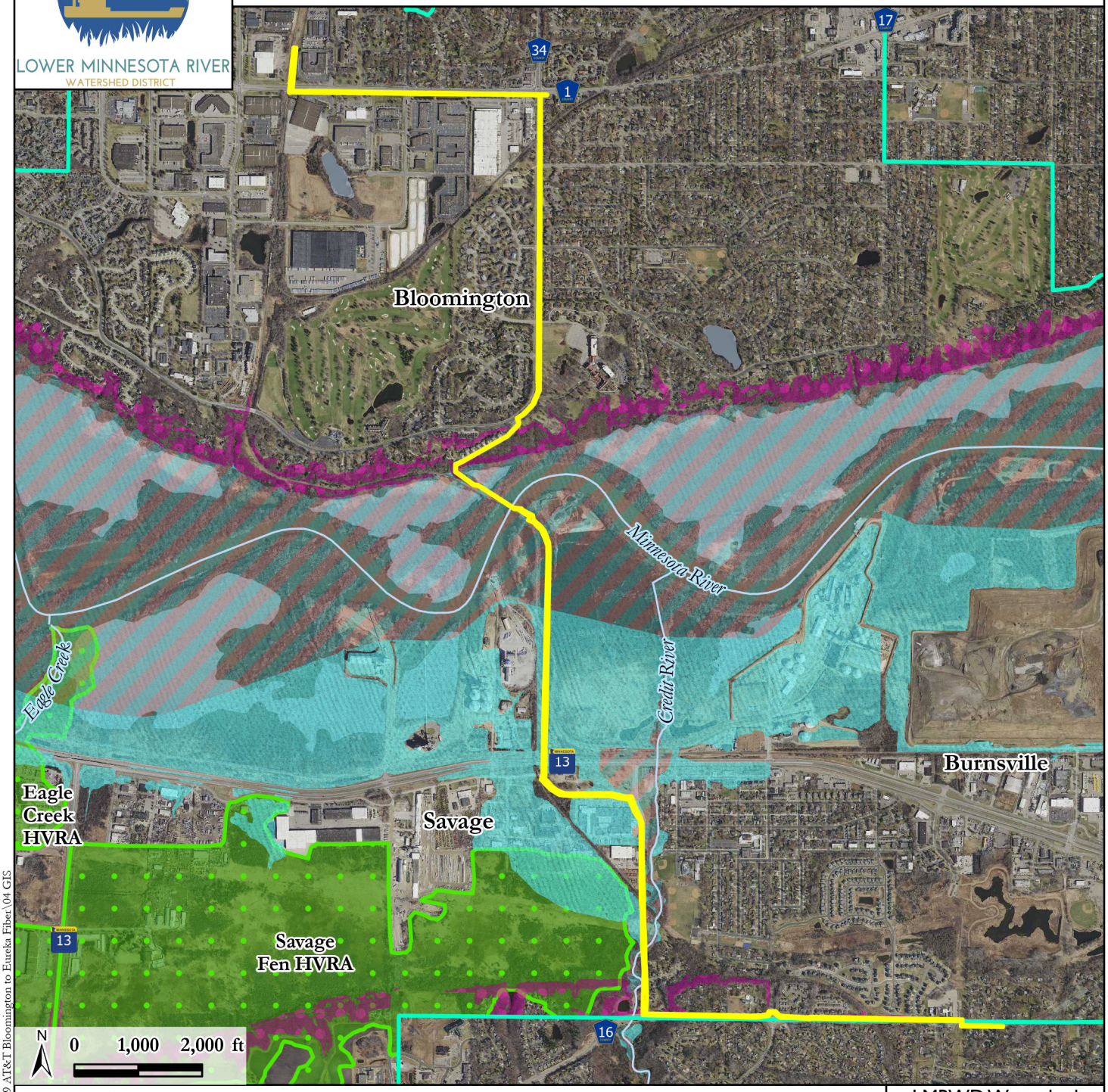
Based on our review of the project, we recommend approval with the following special stipulation:

- The applicant is required to contact the LMRWD immediately upon the discovery of disturbed groundwater or any release of lubricant fluid.

Attachments

- Figure 1 – AT&T Bloomington to Eureka Fiber Project Location Map
- Figure 2 – AT&T Bloomington to Eureka Fiber MN River Crossing Map
- Figure 3 – AT&T Bloomington to Eureka Fiber Credit River Crossing Map
- Attachment 1 – Horizontal Directional Drilling Contingency and Resource Protection Plan

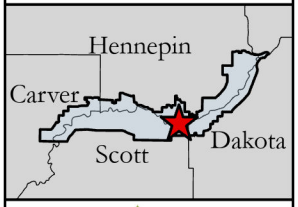
Figure 1: AT&T Bloomington to Eureka Fiber Project Location
LMRWD No. 2023-009



Legend

- Project Location
- LMRWD Boundary
- Public Waters
- Public Waterbodies
- Steep Slope Overlay District
- High Value Resource Area
- 100-yr Floodplain
- Floodway

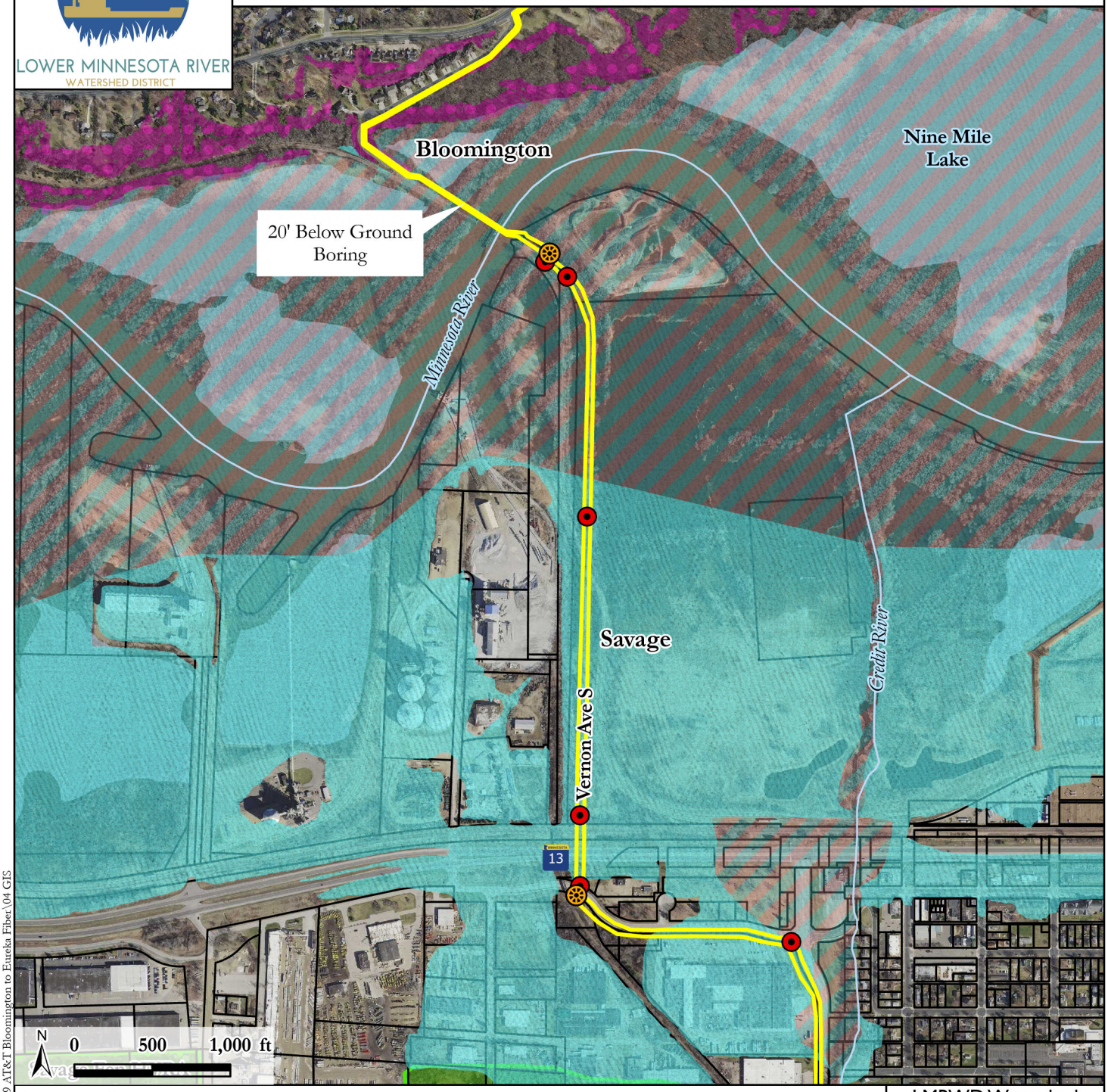
LMRWD Watershed Location Map



Young Environmental Consulting Group, LLC

Projects\LMRWD\Project Reviews\02 In Process\2023-009 AT&T Bloomington to Eureka Fiber\04 GIS

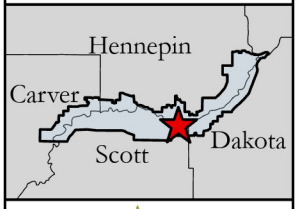
Figure 2: AT&T Bloomington to Eureka Fiber MN River Crossing
LMRWD No. 2023-009



Legend

- Project Location
- Public Waters
- Public Waterbodies
- 100-yr Floodplain
- Floodway
- Parcels
- Steep Slope Overlay District
- High Value Resource Area
- Hand Holes
- Manholes

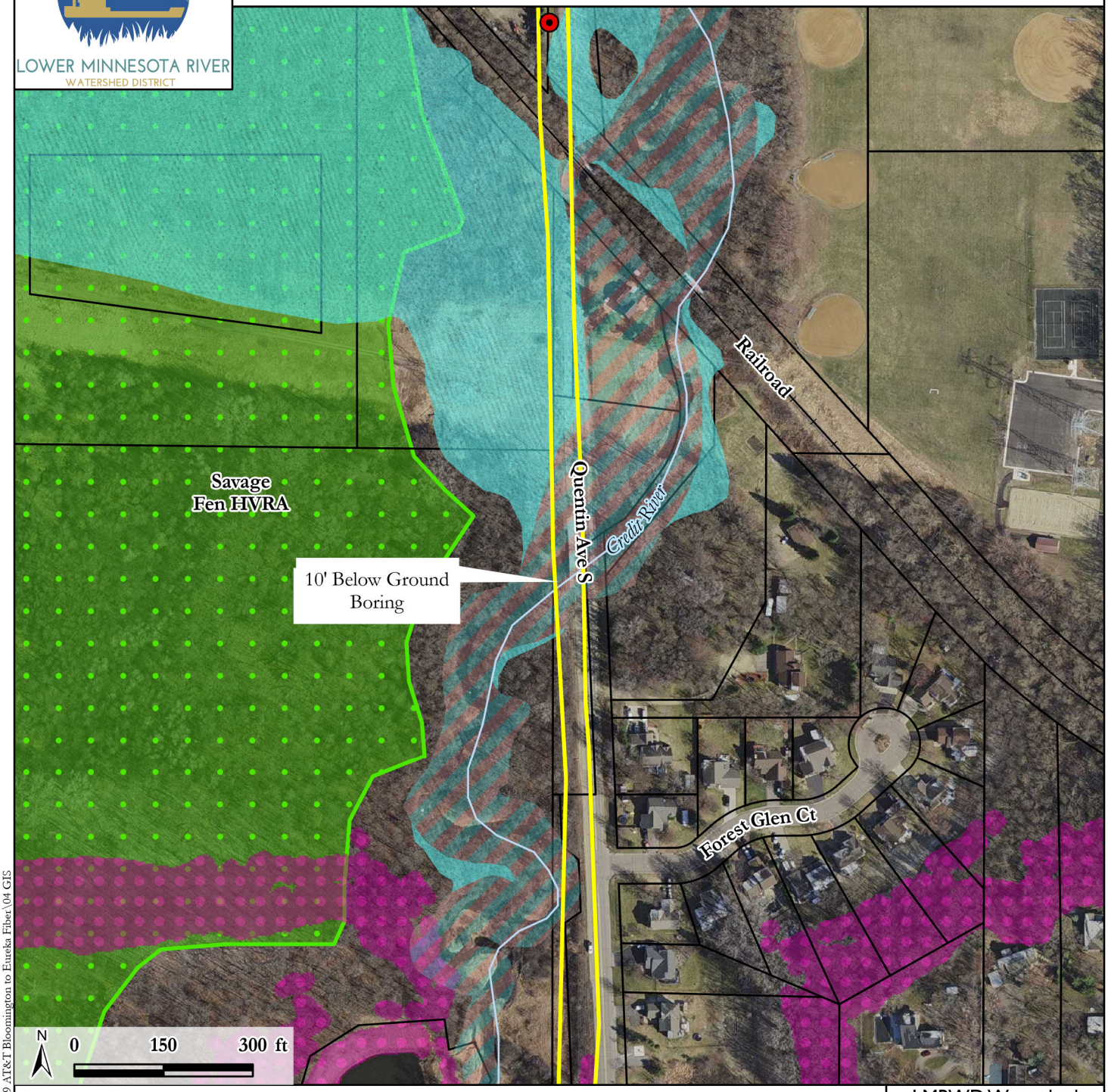
LMRWD Watershed Location Map



Young Environmental Consulting Group, LLC

Projects\LMRWD\Project Reviews\02 In Process\2023-009 AT&T Bloomington to Eureka Fiber\04 GIS

Figure 3: AT&T Bloomington to Eureka Fiber Credit River Crossing
LMRWD No. 2023-009



Legend

- Project Location
- Public Waters
- Railroads
- Parcels
- Steep Slope Overlay District
- High Value Resource Area
- 100-yr Floodplain
- Floodway
- Hand Holes

LMRWD Watershed Location Map

Young Environmental Consulting Group, LLC

Projects\LMRWD\Project Reviews\02 In Process\2023-009 AT&T Bloomington to Eureka Fiber\04 GIS

Horizontal Directional Drilling

Contingency and Resource Protection Plan

(Frac-Out Plan)

Linear – Cable Placement
Eureka to Bloomington, Minnesota

May 2023

Horizontal Directional Drilling (HDD) is a method of installation that is less intrusive than traditional cable installation methods which include plowing or trenching. HDD creates less direct soil disturbance and is therefore a preferred method for construction near sensitive habitats, waterways, areas of concern for cultural resources, and also for many roadway crossings.

A “Frac-out” is the inadvertent return ground surface or aquatic environment of drilling lubricant during HDD, and is of potential concern to sensitive habitats, waterways, and cultural resources located within the immediate vicinity of HDD activities. The HDD method typically uses Bentonite slurry, a fine clay material, as a drilling lubricant. Although Bentonite is non-toxic, it can be potentially harmful to aquatic plants and fish if it is discharged into a waterway.

The Frac-Out Contingency Plan has been created to:

- Minimize the chance of a frac-out during HDD;
- Provide frac-out detection methods;
- Increase the protection of sensitive areas to include wetlands, waterways, biological and cultural resources;
- Create a timely response in case of a frac-out to “minimize impact” to the surrounding environment; and,
- In the event of a frac-out, ensure all required notifications are made to the appropriate regulatory agencies within 24 hours and that documentation is created for the incident.

General standards that will be enforced project wide in an effort to prevent a frac-out include:

- HDD operations should be limited to daytime hours;
- Bore depths will be below the required Fish and Wildlife Service or State agency depth of the creek bank and channel;
- Bentonite or other drilling fluid materials will have Material Safety Data Sheets (MSDS or SDS) on-site at the time of a bore; and,
- Fluids will be monitored to assure that the pH values remain neutral (between 6.5 and 8.0).

The specific bore site will be observed closely in order to prevent any inadvertent return of drilling lubricant during the HDD process. The HDD operator will provide necessary measures to ensure an incident free bore operation. The following types of information are useful and, in some cases,

required aspects of HDD activities that should be evaluated at each bore site to determine existing conditions:

- Evaluation of general geology and soils,
- Review of sensitive resources present,
- A person serving as a biological monitor during HDD preparation and drilling operations,
- The contractor should monitor the returns of drilling fluid. A significant lack of return indicates a failure of the bore integrity and the boring advancement should cease and alternative crossing methods utilized.
- Entry and exit pits will have Erosion Control Devices in place before the start of the HDD process to ensure that Bentonite does not flow into waterway

The likelihood of frac-out decreases as the depth of the drilling increases. However, because greater depth is not always possible, having a biological monitor on site to help with early frac-out detection will significantly minimize the area of potential impact. Biological monitors should be placed 50 feet upstream and downstream of the HDD site to visually inspect and detect any frac-out material. On-site training should be provided for all biological monitors, and the names and phone numbers of the biological monitors provided to on-site agency representatives. A complete and sudden loss of Bentonite returns signals that something significant may be occurring, requiring that the biological monitor and HDD operator immediately watch for a possible surface release.

Potential Impacts to Biological Resources

The release of drilling fluid from fractures in the earth's surface may be terrestrial or aquatic in nature and vary in quantity. Terrestrial frac-outs occurring in upland areas are typically easy to contain and therefore result in relatively minor effects to the surrounding environment. Frac-outs occurring in aquatic environments are more difficult to contain primarily because Bentonite disperses quickly in flowing water and quickly settles in standing water. Bentonite is non-toxic, but there are two specific indirect effects of Bentonite on aquatic life. Initially, the suspended Bentonite may inhibit respiration of fish, although this is typically short-lived. After the Bentonite settles, secondary long-term effects can result. For example, settling Bentonite can cover and inhibiting the flow of dissolved oxygen to fish eggs which have been deposited on the lake or stream bottom. Secondly, benthonic invertebrates and/or the larval stages of pelagic organisms may be covered and suffocated due to fouled gills and/or lack of oxygen.

Contingency Response

Minor releases (up to 250-gallons of fluid in a given location) may occur and be addressed through local containment. Anything more than a minor release shall be considered a failure of the bore integrity and result in abandonment of the boring attempt.

If a frac-out is identified on the land surface:

- Determine the location and extent of the frac-out. Do not allow surface releases to migrate to existing waterways.
- Contain releases through either creation of a temporary impoundment or filter fencing.
- A standing pipe created from a 55-gallon drum (ends removed) or heavy PVC, CMP or culvert material may also be placed around the frac-out to help contain the drilling mud/Bentonite.
- Access to the frac-out area should be by existing roads and temporary work easements. Additional access needed to perform cleanup activities should be coordinated with, and require the approval of, all appropriate regulating agencies and landowners.
- No refueling of equipment will occur within 100' of the stream, wetland, or other sensitive habitat. The regulatory agencies identified under the Proper Notification and Documentation section should be notified within 24 hours of the frac-out.
- Residual material from minor releases should be promptly containerized, removed from the site and properly disposed.
- Additional storm water best management practices may be warranted down gradient of release locations.

If a frac-out is identified within a waterway **(*Minnesota River, Credit River, Vermillion River and Unnamed Streams*):**

- All work will stop at the HDD work site, including the recycling of drilling mud. The pressure of the water above the HDD keeps excess mud from escaping through the fracture.
- Determine the location and extent of the frac-out.
- Immediately deploy turbidity barrier downstream of the frac point.
- Contain release as much as possible through either creation of a temporary impoundment through turbidity barrier or floating filter fence.
- Deploy a vacuum to remove the bentonite and turbidly impacted water as much as feasible.

- Access to the frac-out area should be by existing roads and temporary work easements. Additional access needed to perform cleanup activities should be coordinated with, and require the approval of, all appropriate regulating agencies and land owners.
- Residual material from minor releases should be promptly containerized, removed from the site and properly disposed.
- Additional storm water best management practices may be warranted down gradient of release locations to control turbidity as much as possible.

Equipment to contain any frac-out release will be available on site or within a reasonable distance of the bore site. The equipment should include:

- Heavy weight plastic clean gravel filled sandbags (20 count)
- Filter bags (10'x12' recommended)
- Plastic 5-gallon buckets
- Heavy-duty push broom
- Shovels
- Silt Fence
- Floating turbidity curtain or floating filter fence and a reasonable method of deployment
- Hay bales
- Two bundles of absorbent pads
- Portable pumps
- A minimum of 100' of hose
- Vacuum truck
- Earth moving equipment as necessary

Proper Notification and Documentation

If anything other than a minor frac-out (i.e., greater than 250-gallons of fluid in a given location) occurs the entities listed below will be notified within 24 hours of the incident, and responses actions will be developed in coordination with agency representatives. Some or all of the following entities will be contacted by phone with a written report to follow:

- AT&T Corp - (**Lana Scarlett-Rowell 720-539-9714);**
- AT&T Environmental Manager at (800) KNOW EHS (800-566-9347) who will contact the National Response Center as appropriate;

- United States Corps of Engineers **(DISTRICT OFFICE)** – will be contacted in the event of any release where standing or flowing water are present, or if the release has the potential to affect a stream channel.
- US Fish and Wildlife Service **(DISTRICT OFFICE)** - will be contacted in the event of any release where standing or flowing water are present, or if the release has the potential to affect a stream channel.

Training of Project Personnel

Prior to the start of construction, the Contractor's personnel should attend a training session on-site. The training will cover:

- The details found in this HDD Frac-out Contingency Plan
- Specific permitting conditions and requirements
- Requirements to retain copies of all required permits on-site during construction
- Sensitive resources located on or near the site
- Requirement to monitor during construction
- Situations that require operations to be halted
- Response protocols in the event of a land or water based frac out
- Proper lines of authority and responsibility
- Contact names and phone numbers of the individuals and agencies
- Types and events that the Contractor is required to report and to whom

The training will help personnel recognize the authority of on-site members to monitor and stop drilling in the case of an incident. The environmental orientation will also serve as a way to educate and motivate personnel to minimize the disturbance to the surrounding environment and that actions are being taken to protect sensitive resources. The environmental team will be available to answer questions and provide relevant insight and guidance, as needed.

Young Environmental Consulting Group, LLC

Technical Memorandum

To: Linda Loomis, Administrator
Lower Minnesota River Watershed District

From: Karina Weelborg, Water Resources Scientist
Hannah LeClaire, PE, Project Manager

Date: June 14, 2023

Re: Lower Minnesota River Watershed District (LMRWD) —City of Lilydale Municipal Permit (Surface Water Management Plan and Ordinance Controls Review)

On April 19, 2023, Mary Schultz, on behalf of the City of Lilydale (the City), applied for the LMRWD general municipal local government unit (LGU) permit. The documents provided include:

- April 2023 Revised Draft of the Surface Water Management Plan (SWMP)
- Revised City Ordinance Chapter 4: Water and Sewer
- Existing City Ordinance Chapter IX Building and Land Use Regulations Part 5: Floodplain Management
- Draft City Code Ordinance Chapter IX Land Use Regulations Part 2: Mississippi River Corridor Critical Area.

The documents present City evidence of compliance with policy, regulation, exceptions, and criteria associated with Rules B—Erosion and Sediment Control, C—Floodplain and Drainage Alteration, D—Stormwater Management, and F—Steep Slopes.

Below is a summary of Young Environmental Consulting Group's (Young Environmental) review of the information provided and our recommendation.

Erosion and Sediment Control

The City's SWMP Section 5.1 – Lake and Stream Water Quality, WQ Policy 12 adopts LMRWD Rule B – Erosion and Sediment Control by reference. The policy states that the City will manage land alteration in accordance with standards from multiple sources, including the LMRWD, and states that "when multiple standards apply to a given project, the most stringent of rules will apply." Specific requirements for LMRWD Rule B

are found in the City's SWMP sections 5.2 – Stormwater Pollution Prevention Program and 5.5 – Erosion and Sediment Control. The City has no high value resource areas (HVRAs) within the City limits. As presented, the City's general regulatory standards and requirements for erosion and sediment control match or exceed the LMRWD's requirements. Therefore, the City complies with Rule B, and no additional information is required.

Floodplain Management

Compliance with LMRWD Rule C—Floodplain and Drainage Alteration is captured in the City's SWMP Section 5.1—Lake and Stream Water Quality, WQ Policy 11. The policy states that the City will manage floodplains in accordance with standards established by the State, Lower Mississippi River Water Management Organization (LMRWMO), and LMRWD. Since Young Environmental's review of the SWMP in December 2022, the City added that the strictest standard will be applied. As presented, the City's general regulatory standards and requirements for floodplain management match or exceed the LMRWD's requirements. Therefore, the City complies with Rule C, and no additional information is required.

Stormwater Management

The City adopts LMRWD Rule D – Stormwater Management by reference in SWMP Section 5.1 - Lake and Stream Water Quality, WQ Policy 12 and City Ordinance Chapter 4 section 408.6. Both policies state that the City will conduct stormwater management in accordance with standards from multiple sources, including the LMRWD, and state that "when multiple standards apply to a given project, the most stringent of rules will apply." Specific requirements for LMRWD Rule D are found in the City's SWMP sections 5.3 – Stormwater Quality and 5.4 Stormwater Rates and Volumes; and City Ordinance Chapter 4 section 408. The City has no high value resource areas (HVRAs) within the City limits. As presented, the City's general regulatory standards and requirements for stormwater management match or exceed the LMRWD's requirements. Therefore, the City Complies with Rule D, and no additional information is required.

Steep Slopes

Compliance with LMRWD Rule F—Steep Slopes is captured in the City's SWMP Section 5.5—Erosion and Sediment Control and City Code Ordinance Chapter IX Land Use Regulations Part 2: Mississippi River Corridor Critical Area (MRCCA). The definition of bluffs in these documents is equal to the definition of steep slopes in Rule F. As the MRCCA requirements are more stringent than LMRWD Rule F, the City's general regulatory standards and requirements for steep slopes exceed the LMRWD's

requirements. Therefore, the City complies with Rule F, and no additional information is required.

Recommendation

As presented, the City's draft SWMP and ordinances meet the requirements outlined within the LMRWD rules for an LGU Permit. We recommend conditional approval of an LGU permit conditioned on the adoption of the draft SWMP and ordinances presented in the City's application.

RESOLUTION 23-06

RESOLUTION OF THE LOWER MINNESOTA RIVER WATERSHED DISTRICT BOARD OF MANAGERS

APPROVING THE SURFACE WATER MANAGEMENT PLAN FOR THE CITY OF LILYDALE

Manager _____ introduced the following resolution and moved its adoption:
seconded by Manager _____:

WHEREAS, the Lower Minnesota River Watershed District ("LMRWD") is a special purpose unit of government, established in accordance with Minnesota Statute 1013D; and

WHEREAS, On October 24, 2018, the LMRWD adopted a Watershed Management Plan (LMRWD Plan) under Minnesota Statutes 103B.231 subdivision 10, which as amended, details the existing physical environment, land use and development in the watershed and establishes as plan to manage water resources and regulate water resource use to improve water quality, prevent flooding and otherwise achieve goals of Minnesota Statutes Chapters 103B and 103D; and

WHEREAS, Minnesota Statute 103B.235 Local Surface Water Management Plans (LSWMPs) require that local government units having land use planning and regulatory responsibility for territory within the watershed shall prepare or cause to be prepared a local water management plan, capital improvement program and official controls as necessary to bring local water management into conformance with the LMRWD Plan. Local Plans must meet the requirements of the LMRWD Plan as well as the general requirement of Minnesota Statutes 103B.235 and Minnesota Rules Chapter 8410; and

WHEREAS, the City of Lilydale ("City") lies partially within the LMRWD and therefore must meet the requirements of the LMRWD Plan; and

WHEREAS, the City prepared and submitted its LSWMP to the LMRWD on ; and

WHEREAS; the LMRWD has reviewed the plan and hereby determines that the plan has been prepared in accordance with the requirements of Minnesota Statutes, Section 103B.235 and Minnesota Rules 840.0160 and 8410.0170, and contains the requirements for local plans; and

WHEREAS, Minnesota Statutes, Section 103B.235, Subd, 3 authorizes the watershed district to review and approve local water management plans and to take other actions necessary to assure that the local plan is in conformance with the LMRWD's plan and standards set forth therein.

NOW, THEREFORE, BE IT RESOLVED by the Board of Managers of the LMRWD hereby approves the LSWMP for the City of Lilydale, dated December 2018 with the conditional understanding that:

1) In accordance with Minnesota Statutes, Section 103B.235, Subd. 4, the Lilydale draft LSWMP shall be adopted and implemented by the City within 120 days of this action, and the City shall amend its official controls accordingly within 180 days.

2) Pursuant to Minnesota Statutes, Section 103B.235, Subd. 5 and consistent with the Lower Minnesota River Watershed Management Plan, the City shall submit amendments to the local water management plan and official controls to the LMRWD for review and approval in accordance with State Statutes and Minnesota Rules.
3) For properties that are split between the LMRWD and any other watershed management organization, the most restrictive water management policies, standards and criteria will be implemented.

The question was on the adoption of the Resolution and there were __ yeas and __ nays as follows:

	Yea	Nay	Absent	Abstain
AMUNDSON	☐	☐	☐	☐
BARISONZI	☐	☐	☐	☐
HARTMANN	☐	☐	☐	☐
KUPLIC	☐	☐	☐	☐
SALVATO	☐	☐	☐	☐

Upon a vote, the Resolution was adopted by the Board of Managers of the Lower Minnesota River Watershed District this 21st day of June 2023.

_____
Jesse Hartmann, President

ATTEST:

I, Lauren Salvato, Secretary of the Lower Minnesota River Watershed District, do hereby certify that I have compared the above Resolution with the original thereof as the same appears of record and on file with the District and find the same to be a true and correct transcript thereof.

IN TESTIMONY WHEREOF, I hereunto set my hand this 21st day of June 2023.

_____
Lauren Salvato, Secretary