

elm creek Watershed Management Commission

ADMINISTRATIVE OFFICE
3235 Fernbrook Lane • Plymouth, MN 55447
PH: 763.553.1144 • email: judie@jass.biz
www.elmcreekwatershed.org

December 7, 2022

Representatives

and

Technical Advisory Committee Members
Elm Creek Watershed Management Commission
Hennepin County, Minnesota

*The meeting packet for this meeting may be
found on the Commission's website:*

[http://www.elmcreekwatershed.org/minutes-
-meeting-packets.html](http://www.elmcreekwatershed.org/minutes-meeting-packets.html)


Dear Representatives and Members:

A regular meeting of the Elm Creek Watershed Management Commission will be held on **Wednesday, December 14, 2022, at 11:30 a.m.** in the Aspen Room at Plymouth Community Center, 14800 34th Avenue North, Plymouth, MN.

The Technical Advisory Committee (TAC) will meet on Tuesday, December 13, 2022, at 3:00 p.m., via zoom. To join the TAC meeting, click <https://zoom.us/j/990970201> or go to www.zoom.us and click Join A Meeting. The meeting ID is **990-970-201**. The password is **water**.

Please email me at judie@jass.biz to confirm whether you or your Alternate will be attending the regular meeting.

Thank you.



Judie A. Anderson

Administrator

JAA:tim

Encls: Meeting Packet

cc:	Alternates	Erik Megow	James Kujawa	Rebecca Carlson	Ed Matthiesen
	TAC Members	Karen Galles	Kris Guentzel	Kevin Ellis	Diane Spector
	City Clerks	Brian Vlach	BWSR	Met Council	MPCA
	Official Newspaper		DNR		

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AGENDA

Regular Meeting | December 14, 2022

The meeting packet may be found on the Commission's website: <http://elm creek watershed.org/minutes--meeting-packets.html>

Aspen Room, Plymouth Community Center, 14800 34th Avenue North, Plymouth, MN.

1. Call Regular Meeting to Order.
 - a. Approve Agenda.*
2. Consent Agenda.
 - a. Minutes last Meeting.*
 - b. Treasurer's Report and Claims.*
3. Open Forum.
4. Action Items.
 - a. Project Reviews.*
5. Old Business.
6. New Business.
7. Communications.
 - a. Staff Report.*
 - b. Hennepin County Staff Report.*
8. Education.
 - a. WMWA – next meetings January 13 and February 14, 2023, at 8:30 a.m., via Zoom.
9. Grant Opportunities and Updates.*
 - a. Dayton River Road Project.
 - 1) Good Stewart Grants.
 - 2) Commission Cost Share.
 - b. WBIF Work Plan.
10. Project Reviews.

Item No.	E	A	I RPF	AR	Project No.	Project Name
			RP DD			
					W=wetland project	
ca.				AR	2014-015	Rogers Drive Extension, Rogers.
cb.				AR	2015-030	Kiddiegarten Child Care Center, Maple Grove.
cc.				AR	2016-005W	Ravinia Wetland Bank Plan, Corcoran.
cd.				AR	2017-014	Laurel Creek, Rogers.
a.					2017-050W	Ernie Mayers Wetland/floodplain violation, Corcoran.
ce.				AR	2018-046	Graco, Rogers.
cf..				AR	2019-021	Brenly Meadows, Rogers.
cg.				AR	2019-026	Interstate Power Systems, Rogers.
ch.				AR	2020-009	Stetler Barn, Medina.

*in meeting packet

**available at meeting or on website

ci.				AR	2020-017	Meadow View Townhomes, Medina.
cj.				AR	2020-032	Enclave Rogers - Commerce Boulevard, Rogers.
ck.				AR	2020-033	Weston Woods, Medina.
cl.				AR	2020-036	Balsam Pointe, Dayton.
cm.				AR	2021-007	Birchwood 2nd Addition, Rogers
cn.				AR	2021-016	Territorial Lofts, Rogers.
co.				AR	2021-020	Crew Carwash, Maple Grove.
cp.				AR	2021-021	Territorial Triangle, Dayton.
cq.				AR	2021-023	Maple Grove Medial Office Building (MOB).
cr.				AR	2021-024	Riverwalk, Dayton
b.	A	E			2021-025	Hackamore Road Reconstruction, Medina/Corcoran.
cs.					2021-027	Xcel Energy Elm Creek Substation, Maple Grove
c.					2021-029	Tri-Care Grocery / Retail, Maple Grove
d.					2021-031	Cook Lake Edgewater, Maple Grove
e.					2021-034	BAPS Hindu Temple, Medina.
ct.					2021-035	Mister Car Wash - Rogers
cu.					2021-036	D & D Service, Corcoran.
f.					2021-037	Marsh Pointe, Medina.
g.					2021-039	1-94 Logistics Center, Rogers.
cv.					2021-040	Napa Auto, Corcoran.
cw.					2021-041	Carlson Ridge, Plymouth.
h.					2021-043	Northwood Community Church Maple Grove.
i.					2021-044	Balsam II Apartments, Dayton.
j.					2021-047	CR 10 Box Culvert Replacement, Corcoran
k.					2021-050	Evanswood, Maple Grove.
l.					2021-051	Fields of Nanterre Drainage Improvements, Plymouth.
m.					2021-052	Norbella Senior Living, Rogers.
n.					2021-053	Towns at Fox Creek, Rogers.
o.					2021-055	Morningside Estates 6 th Addition, Champlin.
p.					2022-002	Summerwell, Maple Grove.
q.					2022-003	Fox Briar Ridge East, Maple Grove.
r.					2022-006	Hamel Townhomes, Medina.
s.					2022-008	Bechtold Farm, Corcoran.
t.					2022-009	Dunkirk Lane Development, Plymouth.
u.					2022-011	Arrowhead Drive turn Lane expansion,
v.					2022-012	Graco Building 2, Dayton.
w.					2022-013	Dayton 94 Industrial Site, Dayton.
x.					2022-014	Aster Mill, Rogers.
y.					2022-015	County Road 47 Phase I Reconstruction, Plymouth.
z.					2022-016	Rogers Activity Center, Rogers.
aa.					2022-017	City Center Drive, Corcoran.
ab.					2022-018	Big Woods, Rogers.
ac.					2022-019	Grass Lake Preserve, Dayton.
ad.					2022-020	Skye Meadows Extension, Rogers.
ae.					2022-022	Cook Lake Highlands, Corcoran.
af.					2022-023	Asguard, Rogers.
ag.					2022-024	Bridge No. 27J70, Maple Grove.
ah.					2022-025	Harvest View, Rogers.
ai.					2022-026	Archway Building, Rogers
aj.					2022-027	Edison at Maple Grove Apartments.
ak.					2022-028	Elsie Stephens Park, Dayton.
al.					2022-029	Hayden Hills Park, Dayton.
am.					2022-030	Garages Too, Corcoran.

*in meeting packet

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an.				2022-031	Corcoran II Substation.
ao.				2022-033	Pet Suites, Maple Grove.
ap.				2022-034	CSAH 101 Improvements, Maple Grove.
aq.				2022-035	Rush Hollow, Maple Grove.
ar.				2022-037	CSAH13 CR203 Culvert replacement, Dayton.
as.				2022-038	Tavera North Side, Corcoran.
at.				2022-039	Garland Commons, Maple Grove.
au.		E		2022-040	Karinieimi Meadows, Corcoran.
av.				2022-041	Elm Creek Swim Pond culvert, Maple Grove.
aw.				2022-042	Walcott Glen, Corcoran.
ax.				2022-043	Meander Park and Boardwalk, Medina.
ay.				2022-044	Trail Haven Road Bridge Replacement, Corcoran.
az.	A	E		2022-045	Corcoran Water Treatment Plant, Corcoran.
ba.				2022-046	CSAH12 Culvert and Guardrail Replacement, Dayton.
bb.				2022-047	Suite Living of Maple Grove.

A = Action item **AA** = Administrative Approval **AR** = awaiting recordation **D** = Project is denied **E** = Enclosure provided
I = Informational update will be provided at meeting **RPFI** = removed pending further information **R** = Will be removed
RP = Information will be provided in revised meeting packet

11. Other Business.

- a. Reminder – Commission and TAC member appointments.
- b. Solicitations of Interest Proposals were published in Nov. 28 edition of the *State Register*.

12. Adjournment.

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MINUTES Regular Meeting November 9, 2022

I. A meeting of the Elm Creek Watershed Management Commission was called to order at 11:37 a.m., Wednesday, November 9, 2022, in the Aspen Room, Plymouth Community Center, 14800 34th Avenue North, Plymouth, MN, by Chair Doug Baines.

Present were: Bill Walraven, Champlin; Ken Guenther, Corcoran; Doug Baines, Dayton; Dan Riggs, Maple Grove; Terry Sharp, Medina; and Catherine Cesnik, Plymouth. Not represented: Rogers.

Also present: Heather Nelson, Champlin; Derek Asche, Maple Grove; Matt Danzl, Hakanson-Anderson, Medina; Ben Scharenbroich, Plymouth; Andrew Simmons, Rogers; Diane Spector and Erik Megow, Stantec; James Kujawa, Surface Water Solutions; Kevin Ellis, Hennepin County Environmental Services (HCEE); and Judie Anderson, JASS.

A. Motion by Walraven, second by Cesnik to approve the **agenda**.* *Motion carried unanimously.*

B. Motion by Walraven, second by Sharp to approve the **Minutes*** of the October 12, 2022, regular meeting. *Motion carried unanimously.*

C. Motion by Guenther, second by Walraven to approve the November **Treasurer's Report** and **Claims*** totaling \$96,207.50. *Motion carried unanimously.*

II. Open Forum.

III. Project Reviews.

A. **Project 2021-025 Hackamore Road Reconstruction, Corcoran/Medina.*** The cities of Corcoran and Medina plan to reconstruct 1.3 miles of Hackamore Road from just west of CR 116 to CR 101. The project will add 4.4 acres of new impervious surface by widening the roadway and adding turn lanes, pedestrian facilities, and utility improvements. To meet the Commission's stormwater requirements, the project will largely rely on adjacent developments (existing and proposed) to incorporate BMPs (best management practices) to provide rate control, volume control, and water quality control. Staff reviewed the early application and provided comments to the applicant. Staff has reviewed various recent submittals for an interim reconstruction and stormwater plan and has worked with the applicant to determine interim impacts and how the impacts will be mitigated in the future. Findings dated November 2, 2022, stating how the applicant will meet the Commission's rules when future developments are constructed, are included in the meeting packet.

After much discussion, motion by Guenther, second by Walraven to table action on this project to the December meeting. *Motion carried unanimously.* It was agreed that the members should hear from the applicant cities as well as representatives from the contiguous cities regarding the BMPs proposed for this linear project.

[Riggs arrived 11:46 a.m.]

RULE D - STORMWATER MANAGEMENT
RULE E - EROSION AND SEDIMENT CONTROL
RULE F - FLOODPLAIN ALTERATION

RULE G - WETLAND ALTERATION
RULE H - BRIDGE AND CULVERT CROSSINGS
RULE I - BUFFERS

*indicates enclosure

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B. Project 2022-035 Rush Hollow, Maple Grove.* The project is located on 161.5 acres, resulting in 49.01 acres of impervious surface, and triggering Rules D, E and I. In their findings dated November 1, 2022, Staff recommends approval contingent upon 1) final application escrow fee reconciliation; 2) an operation and maintenance plan approved by the City.

Motion by Walraven, second by Sharp to approve Staff recommendations. *Motion carried unanimously.*

C. Project 2022-043 Meander Park and Boardwalk, Medina.* This project is a proposed commercial planned unit development located on the north side of Highway 55, 900 feet east of Arrowhead Drive on Lake Medina. Wetlands surround the 18-acre site on the west and south, leaving approximately 7 acres of developable land. The project will disturb 6.3 acres of the site and result in a 4.0 acre increase in impervious surface. The project triggers Rules D, E, F, G and I. In their findings dated November 2, 2022, Staff recommends approval contingent upon 1) final application escrow fee reconciliation; 2) an operation and maintenance plan approved by the City of Medina, 3) addition of Emergency Overflows (EOF's) to the grading plan for basins East Filtration and the North Retention Basin. The low floor elevations must be at least one foot above the EOF for the stormwater pond. Secondary outlet devices potentially modeled as EOFs are reported as 987.27 for the North Retention Basin and 993.0, the elevation of the roadway, for the East Filtration Basin, 4) Jurisdictional determination for LGU WCA replacement or exemption. LGU and WCA approval is required prior to any wetland impacts if required by LGU, and 5) addition of approved wetland monument signs to the plan set.

Motion by Guenther, second by Sharp to approve Staff recommendations. *Motion carried unanimously.*

D. Project 2022-046 CSAH 12 Culvert and Guardrail Replacement and Ravine Stabilization, Dayton.* This project area runs along the CSAH 12 ROW from 2500' northwest of Lawndale Lane and continues approximately 3.1 miles southwest to near Pioneer Parkway. The project will consist of mill and overlay work on an existing section of CR12. Construction plans show removal of 9-11" of bituminous pavement and 12" of aggregate base and replacing it with recycled or new materials. Additionally, six sections of this corridor have failing slopes that threaten the road embankment. Culverts will be replaced where needed and six (6) gully areas will be stabilized between the road and the Mississippi River. In their findings dated November 1, 2022, Staff recommends approval contingent upon 1) final application escrow fee reconciliation and 2) Jurisdictional determination for LGU WCA replacement or exemption. LGU and WCA approval is required prior to any wetland impacts if required by the LGU.

Motion by Sharp, second by Guenther to approve Staff recommendations. *Motion carried unanimously.*

IV. Old Business.

V. New Business.

VI. Chloride Management Requirements for Project Applicants.*

The Elm Creek Technical Advisory Committee (TAC) and Commission have a thorough understanding of how road salt (chloride) use for winter safety can negatively impact water bodies. Road salt can contaminate drinking water, have negative impacts on aquatic organisms, and corrode infrastructure, among other impacts. Both Elm Creek and South Fork Rush Creek are impaired for chloride.

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To help minimize sources of chloride in the watershed, the TAC and Commission have been more frequently recommending development projects to the cities pending submittal of a chloride management plan from developers. The purpose of a chloride management plan is to ensure that proper winter maintenance BMPs are used for developments in the watershed to minimize the amount of excess chloride applied to pavement and to reduce the amount of chloride that makes its way to water bodies in the watershed.

There are some difficulties with requiring chloride management plans from project applicants. The entity submitting project plans for permitting often doesn't have a strong relationship with the entity who will ultimately be doing winter maintenance, making it difficult to ensure management plans are upheld and implemented. Winter maintenance crews are often contracted out, especially in the case of large developments. Conversely, requiring chloride management plans may help increase awareness of chloride issues in the watershed and be an additional tool to educate people on the negative impacts of salt use.

Stantec researched chloride management plan requirements from various cities and watershed organizations in the Metro Area to understand what is currently being done, what is working well, and what options there are for the Commission to require a chloride management plan with project applications. Stantec reviewed chloride management requirements from Nine Mile Creek and Coon Creek Watershed Districts, Mississippi Watershed Management Organization, and the cities of Edina, Bloomington, and Plymouth. Stantec also reviewed the draft Winter Maintenance Management Plan templates created for the Hennepin County Chloride Initiative (HCCI) by Fortin Consulting.* Chloride management plans as a requirement for development is a relatively new idea and haven't been implemented in many places, so there was not much overall feedback from the watershed organizations and cities on how this requirement has been going.

Based on their review, Stantec proposes four potential options for the Commission to implement a chloride management requirement with project submittals ranging from 1 (easier to implement) to 3 (more difficult/resource intensive to implement):

1. Do not add a chloride management plan requirement; instead continue efforts on chloride education and outreach in the watershed.
2. Require project applicants to name an individual or multiple individuals responsible for winter chloride management onsite.
3. Require project applicants to submit a Chloride Management Plan using the templates provided in the Winter Maintenance Management Plan created by Fortin Consulting. Project applicants will use the calculator to choose which template to use: basic, intermediate, or detailed.
4. Add chloride management requirements to the Operations and Maintenance agreements between the site owner and the City.

Staff recommend Option 1, that the Commission refrain from adding any additional requirements to project review submittals and continue to focus on chloride education and outreach in the watershed. At their meeting earlier today, the TAC approved this option by consensus.

The Commission concurred. This topic will be addressed in the Fourth Generation Plan.

[Sharp departed 1:00 p.m.]

B. MPCA Climate Resilience Grants.*

The MPCA is currently taking applications for the Planning Grants for the Stormwater, Wastewater, and Community Resilience program. \$395,000 is available to support climate-planning projects in communities across Minnesota. This funding will help communities assess vulnerabilities and plan for the effects of Minnesota's changing climate in three areas:

1. Improving stormwater resilience and reducing localized flood risk
2. Improving the resilience of wastewater systems
3. Adapting community services, ordinances, and public spaces

This was a new grant program last year, and the TAC considered applying for a grant in 2021 to use the HUC8 model to estimate the potential impacts of future precipitation patterns. At that time the TAC believed the model was not yet ready to be used for that purpose. Given the updates made to the model earlier this year, Staff expect it to be now more useful for planning.

Last year the Shingle Creek WMO submitted a grant application, but was unsuccessful. It is expected they will reapply this year. Staff recommend that the Elm Creek Commission consider the same general work plan as Shingle Creek. Last year the grant program funded grants to a few other WMOs and cities to undertake essentially the same activities:

1. Model and map midcentury precipitation scenarios to create projected flood inundation areas for the 1%+ 24-hour rainfall event and the 1%+ 10 day event. A 'plus' is a rainfall depth taken from the 90th percentile estimate for the given rainfall frequency. FEMA often evaluates not only the 1% storm event but also the 1%+ storm event as a way to provide perspective on the range of values one COULD expect in the 1% event. The State Climatology Office also suggests using the 90th percentile as a proxy for midcentury precipitation.

2. Identify potential future flooding risks in the watershed by reviewing known flooding areas, infrastructure, structures, and emergency vehicle routes in or in close proximity to predicted future hazardous flood conditions.

3. Develop policy recommendations for using the scenario data. For example, this modeling could be used to help the cities and county better understand how to properly design new infrastructure such as culverts, bridges, etc., that would be expected to have a mid-century useful life.

The cost of undertaking the Shingle Creek workplan activities was estimated as just under \$25,000, with a grant request of ~\$22,000 and a 10% local match of ~\$2,500. Staff believe completing the same work for Elm Creek will likely be approximately the same but haven't yet updated that estimate.

Applications are due January 12, 2023. If the TAC recommends and the Commission approves pursuing this grant, Staff will bring a draft workplan and application to the Commission at the December 14, 2022, meeting. The level of effort to prepare the application and associated documents will be minimal since much of what was prepared for Shingle Creek last year can be reused.

Discussion at the TAC meeting regarding submitting an application in January was mixed; some suggesting waiting for the next round of funding, while others indicating an application could be prepared for consideration at the December meeting. Staff will prepare an application.

VI. Communications.

A. Staff Report.* Staff reports provide updates on the development projects currently under review by Staff. The projects listed in the table beginning on page 7 of these minutes are discussed in the November 3, 2022, report.

B. Hennepin County Staff Report.*

1. Program updates.

a. Lake Jubert Agricultural BMPs. Construction has begun on five grassed waterways. Grading has been completed and the contractor is currently identifying the locations of the tile. Construction should be completed within the next three weeks

b. 13861 129th Ave N., Dayton. Roof of manure bunker is currently being constructed by landowner. Full structure will be completed before the end of calendar year 2022.

c. 9945 Sundance Road. Construction has begun on livestock waterer and barn gutters. Hennepin County Staff are currently working to find an appropriate site for the manure bunker. Projects will be completed by the end of calendar year 2022.

d. Diamond Hill Stables. Hennepin County will assist landowners with installation of gutters on barn/stables that will help curb erosion in high traffic alleyways surrounding the building. Landowners are working with NRCS to apply for EQIP funding for pasture management and fencing upgrades.

e. 10000 Ebert Road. The landowner has signed a state cost-share contract to restore wetlands and prairie areas and the area has been fall-seeded with native species. Hennepin County staff are working on engineering and permit applications for potential project installs in 2023. Full plan sets will be finalized over winter 2022.

2. Hennepin County is recruiting residents to become [Minnesota Water Stewards](#) in 2023. The Water Stewards program certifies and supports community leaders to prevent water pollution and educate community members to protect our waterways. Learn what it takes to become a Water Steward by attending an information session. Sessions are virtual and run 45-60 minutes. [Register for an upcoming session](#). Sessions are scheduled for Tuesday, November 1, at 5 p.m., Tuesday, November 15, at noon, and Tuesday, November 29, at 5 p.m. You can submit an application after you attend an information session. Applications are due November 30. Contact Alex Van Loh at avanloh@freshwater.org for more information.

3. Hennepin County hosts the [Natural Resource Interactive Map](#) to make imagery, land cover information and classifications, and water resource data available to the public. The map allows users to review details related to specific parcels, print and share maps, and draw and measure.

The County is gathering feedback to inform map improvements. [Complete a survey](#) to provide input on the presentation of natural resource layers and suggest ways to improve user experience. The survey takes about three minutes to complete and will be open until November 30.

4. Applications for **Good Steward Grants** are being accepted through November 15, 2022. These grants typically support smaller, community-based or single applicant projects, such as constructing rain gardens, stabilizing stream banks, restoring native vegetation, installing vegetated filter strips, or implementing other best management projects. The typical funding amount is \$5,000-\$15,000.

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See the [Good Steward Grant Guidelines \(PDF\)](#) for more information. Application materials are posted on the [Hennepin County Supplier Portal](#), and all applications must be submitted through the Supplier Portal.

Two optional **online workshops** are being held for potential applicants to learn more about the program, application requirements, and how to submit their application using the Supplier Portal. [RSVP to get the meeting invite](#): Thursday, October 6 from 11 a.m. to 12:30 p.m. and Tuesday, October 11 from 4 to 5:30 p.m. For those unable to attend, a recording of these workshops will be posted to the [Natural Resource Grants website](#).

VII. Education and Public Outreach.

A. The **West Metro Water Alliance (WMWA)** will meet via Zoom at 8:30 a.m., December 13, 2022.

B. At the November meeting the members discussed the shared employment individual's duties. The County Board will consider this position at their meeting at the end of November, after which time a job description will be written.

C. It was reported that the WMWA educator, Jessica Sahu Teli, has been busy with classroom and community-based activities. She is a passionate individual and has been very enthusiastically accepted by her audiences.

VIII. Grant Opportunities and Project Updates.

A. **MPCA Climate Resilience Grants.** See Item V.B. on page 4 of these minutes.

B. **Dayton Cost Share Project.***

At the October meeting, the TAC and Commission discussed an issue with erosion in a channel between the homes at 16630/16750 Dayton River Road that is expected to be exacerbated when a culvert under CSAH 12 is replaced as part of an upcoming County project. Erosion is contributing excess sediment to the Mississippi River. At the October meeting the TAC and Commission discussed sharing the cost of stabilizing this channel.

1. **Good Steward Grants.** This is a Hennepin County grant program that County staff recommend as a good source for a County contribution to the cost of channel stabilization. The City of Dayton will prepare and submit a grant application. Grants are due November 15.

2. **Commission Cost Share.** The City of Dayton is in the process of completing an updated cost estimate and Cost Share Program application. A draft application* was included in the meeting packet. Staff recommends approval of the Cost Share application. The TAC members agreed by consensus to recommend approval of this application to the Commission.

C. **Watershed Based implementation Funding (WBIF)*** Hennepin County has submitted a workplan to the Board of Water and Soil Resources (BWSR) for the shared Education and Outreach coordinator. The Commission can now submit an application and work plan to BWSR for the balance of the grant. As previously discussed, that work plan will include \$175,000 for implementation of BMPs identified in the Rush Creek and Diamond Creek subwatershed assessments and \$92,774 for priority assessments. Staff will include, as example, assessments the proposed South Fork Rush Creek SWA, the Diamond Lake outlet channel, and the Rush Creek meandering near Stieg Woods as potential priorities. They are still developing options and cost estimates for each of those for further Commission consideration.

[Riggs departed 1:22 p.m.]

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IX. Other Business.

X. **Adjournment.** There being no further business, the meeting was adjourned at 1:23 p.m.

Respectfully submitted,



Judie A. Anderson
Recording Secretary
JAA:tim

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Project No.	Project Name
W=wetland	
2014-015	Rogers Drive Extension, Rogers.
2015-030	Kiddiegarten Child Care Center, Maple Grove.
2016-005W	Ravinia Wetland Bank Plan, Corcoran.
2017-014	Laurel Creek, Rogers.
2017-050W	Ernie Mayers Wetland/floodplain violation, Corcoran.
2018-046	Graco, Rogers.
2019-021	Brenly Meadows, Rogers.
2019-026	Interstate Power Systems, Rogers.
2020-009	Stetler Barn, Medina.
2020-017	Meadow View Townhomes, Medina.
2020-032	Enclave Rogers - Commerce Boulevard, Rogers.
2020-033	Weston Woods, Medina.
2020-036	Balsam Pointe, Dayton.
2021-007	Birchwood 2nd Addition, Rogers
2021-016	Territorial Lofts, Rogers.
2021-020	Crew Carwash, Maple Grove.
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2021-038	Bellwether 6th/Amberly, Corcoran.
2021-039	1-94 Logistics Center, Rogers.
2021-040	Napa Auto, Corcoran.
2021-041	Carlson Ridge, Plymouth.
2021-043	Northwood Community Church Maple Grove.
2021-044	Balsam II Apartments, Dayton.
2021-046	Len Busch Roses, Plymouth

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2021-047	CR 10 Box Culvert Replacement, Corcoran
2021-048	Bellwether - Newman West, Corcoran
2021-049	Dayton Interchange Business Center, Dayton.
2021-050	Evanswood, Maple Grove.
2021-051	Fields of Nanterre Drainage Improvements, Plymouth.
2021-052	Norbella Senior Living, Rogers.
2021-053	Towns at Fox Creek, Rogers.
2021-054	Stotts Family Farm Grassed Waterways, Corcoran.
2021-055	Morningside Estates 6th Addition, Champlin.
2022-001	Dayton Field 2nd Addition, Dayton.
2022-002	Summerwell, Maple Grove.
2022-003	Fox Briar Ridge East, Maple Grove.
2022-005	Bellwether 7th, Corcoran.
2022-006	Hamel Townhomes, Medina.
2022-007	Weston Commons 2nd, Maple Grove.
2022-008	Bechtold Farm, Corcoran.
2022-009	Dunkirk Lane Development, Plymouth.
2022-010	Unity Tool Building Addition, Dayton.
2022-011	Arrowhead Drive turn Lane expansion,
2022-012	Graco Building 2, Dayton.
2022-013	Dayton 94 Industrial Site, Dayton.
2022-014	Aster Mill, Rogers.
2022-015	County Road 47 Phase I Reconstruction, Plymouth.
2022-016	Rogers Activity Center, Rogers.
2022-017	City Center Drive, Corcoran.
2022-018	Big Woods, Rogers.
2022-019	Grass Lake Preserve, Dayton.
2022-020	Skye Meadows Extension, Rogers.
2022-022	Cook Lake Highlands, Corcoran.
2022-023	Asguard, Rogers.
2022-024	Bridge No. 27J70, Maple Grove.
2022-025	Harvest View, Rogers.
2022-026	Archway Building, Rogers
2022-027	Edison at Maple Grove Apartments.
2022-028	Elsie Stephens Park, Dayton.
2022-029	Hayden Hills Park, Dayton.
2022-030	Garages Too, Corcoran.
2022-031	Corcoran II Substation.
2022-032	EC Stream Restoration Phase 5, Champlin.
2022-033	Pet Suites, Maple Grove.
2022-034	CSAH 101 Improvements, Maple Grove.
2022-035	Rush Hollow, Maple Grove.
2022-036	West French Lake Road Improvements, Maple Grove.
2022-037	CSAH13 CR203 Culvert replacement, Dayton.
2022-038	Tavera North Side, Corcoran.
2022-039	Garland Commons, Maple Grove.
2022-040	Karinieimi Meadows,

RULE D - STORMWATER MANAGEMENT
RULE E - EROSION AND SEDIMENT CONTROL
RULE F - FLOODPLAIN ALTERATION

RULE G - WETLAND ALTERATION
RULE H - BRIDGE AND CULVERT CROSSINGS
RULE I - BUFFERS

*indicates enclosure

CHAMPLIN - CORCORAN - DAYTON - MAPLE GROVE - MEDINA - PLYMOUTH - ROGERS

elm creek Watershed Management Commission

Regular Meeting Minutes | November 9, 2022

Page 9

2022-041	Elm Creek Swim Pond Culvert, Maple Grove.
2022-042	Walcott Glen, Corcoran.
2022-043	Meander Park and Boardwalk, Medina.
2022-044	Trail Haven Road Bridge Replacement, Corcoran.

RULE D - STORMWATER MANAGEMENT
RULE E - EROSION AND SEDIMENT CONTROL
RULE F – FLOODPLAIN ALTERATION

RULE G - WETLAND ALTERATION
RULE H – BRIDGE AND CULVERT CROSSINGS
RULE I – BUFFERS

*indicates enclosure

CHAMPLIN - CORCORAN - DAYTON - MAPLE GROVE - MEDINA - PLYMOUTH - ROGERS

Elm Creek Watershed Management Commission Treasurer's Report

		2022 Budget	Nov 2022	Dec 2022	2022 Budget YTD
EXPENSES					
Administrative		95,000	9,155.24	9,543.97	106,407.41
Grant Writing		500			0.00
Website		3,000	29.40	94.91	706.41
Legal		2,000		31.00	713.00
Audit		6,000			6,700.00
Insurance		3,800			3,765.00
Meeting Expense					1,250.00
Miscellaneous/Contingency		1,000			0.00
Technical Support - HCEE		12,000		3,819.78	12,468.74
Floodplain Mapping		0		165.00	45,321.75
Project Review Technical		107,500	3,672.50	6,722.50	182,024.50
Other Technical		77,500	5,703.25	4,534.31	75,419.11
Project Reviews - Admin Support		15,000	1,722.14	1,698.23	21,787.31
WCA - Admin		0			1.22
Stream Monitoring USGS		24,000			12,500.00
Stream Monitoring TRPD		9,345		9,345.00	9,345.00
DO Longitudinal Survey		1,200			0.00
Rain Gauge		420	31.37	28.42	340.05
Lakes Monitoring - CAMP		840			0.00
Lakes Monitoring - TRPD					0.00
Sentinel Lakes		8,460		8,460.00	8,460.00
Additional Lake		1,352		1,352.00	1,352.00
Aquatic Vegetation Surveys		1,300		1,300.00	1,300.00
Wetland Monitoring (WHEP)		4,000			0.00
Education		2,500			1,191.19
WMWA General Activities		5,000	3,000.00		3,000.00
WMWA Implementation/Watershed Prep		4,500	2,000.00		2,000.00
Rain Garden Wkshops/Intensive BMPs/Special Proj		2,000	2,000.00		2,000.00
Macroinvertebrate Monitoring-River Watch		3,000			0.00
Studies / Project ID / SWA		0			0.00
CIPs General		3,000	67.41		1,182.24
Rush Creek SWA Implementation		106,050			
Plan Amendment		2,000			1,157.92
Contribution to 4th Gen Plan		12,500			0.00
Transfer to (from) Capital Projects (see CIP Tr		291,638	68,826.19		249,073.34
Transfer to (from) Cash Sureties (see below)			-	-	504.11
Transfer to (from) Grants (see below)		125,000	-	8,176.20	78,964.32
To Fund Balance					0.00
TOTAL - Month			96,207.50	55,271.32	828,934.62
TOTAL Paid in 2022, incl late 2021 Expenses		931,405.00	859,389.81	914,661.13	2022 Paid

Elm Creek Watershed Management Commission Treasurer's Report

		2022 Budget	Nov 2022	Dec 2022	2022 Budget YTD
INCOME					
Project Review Fee		107,500	5,570.70		154,432.00
Refund Project Fee			(12,766.95)		(13,233.00)
Nonrefundable Admin		15,000			12,550.00
Nonrefundable Technical		16,125			18,825.00
Water Monitoring - TRPD Co-op Agmt		6,000			0.00
Member Dues		237,300			237,300.00
Interest/Dividends Earned		5,250	3,849.06		16,952.83
Transfer to (from) Capital Projects (see CIP Tr		291,638	86.03		152,228.05
Transfer to (from) Grants (see below)		125,000	-	-	67,243.00
Rush Creek SWA Implementation		79,537			
Transfer from Assigned Fund Balance		26,513			
Misc Income / Contingency		10,750			0.00
From Unrestricted Cash Reserves		10,792			0.00
Total - Month			-3,261.16	0.00	646,297.88
TOTAL Rec'd 2022, incl late 2021 Income		931,405.00	655,748.87	655,748.87	2022 Received
CASH SUMMARY		Balance Fwd			
Checking		0.00			
4M Fund		1,503,168.70	1,299,527.76	1,244,256.44	
Cash on Hand			1,299,527.76	1,244,256.44	
Claims Presented		General Ledger Account No	November	December	TOTAL
Campbell Knutson - Legal		521000		31.00	31.00
Connexus - Rain Gauge		551100		28.42	28.42
Hennepin County Treasurer					11,995.98
HCEE Technical-Public Inquiries & Conservation		578200		3,819.78	
HCEE-Rush Creek Project (WBIF Grant)		584005		8,176.20	
State Register-Request for Interest Proposals		511000		69.00	69.00
Surface Water Solutions					1,962.50
Project Review Technical		578050		1,525.00	
Other Technical		578050		437.50	
Three Rivers Park District					20,457.00
TRPD - Lakes Monitoring		561000		11,112.00	
TRPD - Stream Monitoring		551000		9,345.00	
Stantec					9,459.31
Project Review Technical		578050		5,197.50	
Other Technical		578050		4,096.81	
HUC-8 Review -Floodplain Mapping		580440		165.00	
JASS					11,268.11
Administration		511000		8,659.06	
TAC Support		511000		815.91	
Website		581000		94.91	
Project Reviews		578100		1,457.43	
Project Reviews - Project Specific Admin		578100		240.80	
HUC-8 -Floodplain Mapping Admin		580430			
Education		590000			
CIPs General		563001			
TOTAL CLAIMS					55,271.32

CAMPBELL KNUTSON
Professional Association
Attorneys at Law
Federal Tax I.D. #41-1562130
Grand Oak Office Center I
860 Blue Gentian Road, Suite 290
Eagan, Minnesota 55121
(651) 452-5000

Elm Creek Watershed Management Commission
c/o Judie A. Anderson, Exec. Secty.
3235 Fernbrook Lane
Plymouth MN 55447

Page: 1
October 31, 2022
Account # 1448-0000G
241

RE: GENERAL MATTERS
SERVICES RENDERED TO DATE:

			HOURS	
10/06/2022	JJJ	Emails Judie re: meeting agenda; review agenda packet.	0.20	31.00
		AMOUNT DUE	0.20	31.00
		TOTAL CURRENT WORK		31.00
		PREVIOUS BALANCE		\$170.50
08/25/2022		Payment - thank you		-170.50
		TOTAL AMOUNT DUE		<u>\$31.00</u>

Amounts due over 30 days will be subject to a finance charge of
.5% per month (or an annual rate of 6%). Minimum charge - 50 cents.

CAMPBELL KNUTSON
Professional Association
Attorneys at Law
Federal Tax I.D. #41-1562130
Grand Oak Office Center I
860 Blue Gentian Road, Suite 290
Eagan, Minnesota 55121
(651) 452-5000

Elm Creek Watershed Management Commission
c/o Judie A. Anderson, Exec. Secty.
3235 Fernbrook Lane
Plymouth MN 55447

Page: 1
October 31, 2022
Account # 1448G

SUMMARY STATEMENT

PREVIOUS BALANCE	FEES	EXPENSES	CREDITS	PAYMENTS	BALANCE
1448-0000 RE: GENERAL MATTERS					
SERVICES RENDERED TO DATE:					
170.50	31.00	0.00	0.00	-170.50	<u>\$31.00</u>

Amounts due over 30 days will be subject to a finance charge of
.5% per month (or an annual rate of 6%). Minimum charge - 50 cents.

**Account Number:****481113-238425**

ELM CREEK WATERSHED MGMT ORG

Monthly Statement**Service Address**ELM CREEK RD
DAYTON MN**Billing Summary****Billing Date: Nov 17, 2022**

Previous Balance	\$31.37
Payments - Thank You!	\$31.37
Balance Forward	\$0.00
New Charges	\$28.42

Total Amount Due **\$28.42**

Payment must be received on or before December 13, 2022

Total Amount Due**\$28.42****Due Date****December 13, 2022****Message Center****Electrify your fleet**

Rebates are available for electric vehicles AND electric forklifts! Up to \$2,000 per rebate. Contact your business representative today.

Holiday Office Hours

Our office will be closed on November 24 & 25, December 23 & 26, 2022 and January 2, 2023. In the event of a power outage, please call 763.323.2660 or report your outage online at connexusenergy.com.

Energy Comparison

Previous Months' Usage

Current Month's Usage

**How to contact us**

Member Services / Moving - 763-323-2650
 Outages and Emergencies - 763-323-2660
 Hearing/Speech Impaired Call - 711 or 800-627-3529
 Email: info@connexusenergy.com
www.connexusenergy.com
 Gopher State One Call - 811
14601 Ramsey Boulevard, Ramsey, MN 55303

▼ Please detach at perforation and return this portion with a check or money order made payable to Connexus Energy ▼

TRA3-D-006932/006156 VG1UE9 S1-ET-M1-000002

**Account Number:****481113-238425****Total Amount Due****\$28.42****Payment Due By****December 13, 2022**

006932 1 AB 0.488 002930/006932/006156 023 02 VG1UE9
 ELM CREEK WATERSHED MGMT ORG
 3235 FERNBROOK LN N
 PLYMOUTH MN 55447-5325

**Connexus Energy**PO Box 1808
Minneapolis, MN 55480-1808

00002842 0004811130238425 000000 00000 000000000000 0000002



Hennepin County
Public Works

Department of Environment and Energy
701 Fourth Avenue South, Suite 700
Minneapolis, Minnesota 55415-1842

612-348-3777, Phone
612-348-8532, Fax
hennepin.us/environment

Bill To:

Elm Creek Watershed Management Commission
3235 Fernbrook Lane
Plymouth, MN 55447

Invoice

Date

11/9/22

Contract

A2211171

Description	Total Amount Due
2022 Invoice 2 (July 1 – September 30)	
Task 2: Public Inquiries and Conservation Promotion	
<ul style="list-style-type: none">Hours: 119.25Value: \$7,639.56Amount Due (50%): \$3,819.78Task 2 NTE: \$17,000Task 2 Remaining: \$4,531.26	\$3,819.78
Task 3: Rush Creek Project Implementation	
<ul style="list-style-type: none">Stotts WASCOB & Waterway: \$32,704.80ECWMC share of costs incurred (25%): \$8,176.20Task 3 NTE: 106,050Amount Remaining: \$94,328.68	\$8,176.20
	AMOUNT DUE \$11,995.98

Make check payable to: Hennepin County Treasurer

Invoice (please include as reference on payments): 1000193948

Remit to: Hennepin County Accounts Receivable
300 South 6th Street
Mail Code 129
Minneapolis, MN 55487

Direct questions to: Karen Galles 612-235-0712

G0203 001
DEPT OF ADMIN/PMD
MINNESOTA'S BOOKSTORE
50 SHERBURNE AVENUE, SUITE 309
ST. PAUL MN 55155



Customer No: 7002128
Payment Terms: Due in 30
Due Date: December 31, 2022
Invoice: 00000725542
Invoice Date: December 1, 2022
From Date: November 28, 2022 To Date: November 28, 2022
Purchase Order:
Page: 1 of 1

Bill To:

ELM CREEK WATERSHED MGMT
ACCOUNTS PAYABLE
3235 FERNBROOK LN
PLYMOUTH MN 55447

AMOUNT DUE: 69.00

For billing questions, please call 651-201-3204

Original

Line	Identifier	Description	Qty	UOM	Unit Amt	Net Amount
1		State Register Vol. 47 #22 Request for Interest Proposals - Professional Services for Administrative, Legal, and Technical Consulting	4.00	EA	13.50	54.00
2		Affidavit	1.00	EA	15.00	15.00
Subtotal:						69.00
Amount Due:						69.00

Bill To:
ELM CREEK WATERSHED MGMT
ACCOUNTS PAYABLE
3235 FERNBROOK LN
PLYMOUTH MN 55447

Customer No: 7002128
Payment Terms: Due in 30
Due Date: December 31, 2022

Address Change? If yes, Check box.
Write correct address on back. →

☐

Please Remit To:
DEPT OF ADMIN/PLANT MANAGEMENT
MINNESOTA'S BOOKSTORE
50 SHERBURNE AVENUE
SUITE 309
ST. PAUL MN 55155

Amount Due: 69.00

Amount Remitted

G0203 7002128ZZZZZZZZ 0 00000725542ZZZZZZZZZZZZ 0 0000006900



Remit To:
Three Rivers Park District
Revenue Department

3000 Xenium Lane North
Plymouth, MN 55441
763-559-6715

INVOICE

INVOICE #: 2200000332
INVOICE DATE: 12/06/2022
CUSTOMER # 00004
AMOUNT DUE: 9,345.00

AMOUNT PAID: \$ _____

ELM CREEK WATERSHED MGMT COMM

ATTN: JUDIE ANDERSON
3235 FERNBROOK LANE
PLYMOUTH, MN 55447

-PAYMENT IS DUE UPON RECEIPT-

Please detach this payment stub at the dotted line and remit it with your payment. Make checks payable to Three Rivers Park District and write your invoice number on your check.

DATE	DESCRIPTION	AMOUNT
12/06/2022	STREAM MONITORING	9,345.00

Notes:

2022 STREAM MONITORING SERVICES = \$9345
DO LONGITUDINAL SURVEY WAS NOT CONDUCTED IN 2022 DUE TO NO WATER IN CHANNEL

IF YOU HAVE ANY QUESTIONS REGARDING THIS INVOICE, PLEASE CONTACT BRIAN VLACH, THREE RIVERS PARK DISTRICT SENIOR WATER RESOURCES MANAGER, AT 763.694.7846 OR AT BRIAN.VLACH@THREERIVERSPARKS.ORG.

THANK YOU

INVOICE #: 2200000332
CUSTOMER # 00004

Total Invoice: 9,345.00
Credits Applied: 0.00
Payments Applied: 0.00
Invoice Balance: 9,345.00

Thank you for your prompt attention to this invoice. We appreciate your patronage.
-Three Rivers Park District-



Remit To:
Three Rivers Park District
Revenue Department
3000 Xenium Lane North
Plymouth, MN 55441
763-559-6715

INVOICE

INVOICE #: 2200000331
INVOICE DATE: 12/06/2022
CUSTOMER # 00004
AMOUNT DUE: 11,112.00

AMOUNT PAID: \$

ELM CREEK WATERSHED MGMT COMM

ATTN: JUDIE ANDERSON
3235 FERNBROOK LANE
PLYMOUTH, MN 55447

-PAYMENT IS DUE UPON RECEIPT-

Please detach this payment stub at the dotted line and remit it with your payment. Make checks payable to Three Rivers Park District and write your invoice number on your check.

DATE	DESCRIPTION	AMOUNT
12/06/2022	LAKE MONITORING	11,112.00

Notes:

2022 LAKE MONITORING SERVICES \$9,812 (SENTINEL LAKES \$8460 + ADDITIONAL LAKES \$1352)
2022 AQUATIC VEGETATION SURVEY \$1300

IF YOU HAVE ANY QUESTIONS REGARDING THIS INVOICE, PLEASE CONTACT BRIAN VLACH, THREE RIVERS PARK DISTRICT SENIOR WATER RESOURCES MANAGER, AT 763.694.7846 OR AT BRIAN.VLACH@THREERIVERSPARKS.ORG.

THANK YOU

INVOICE #:	2200000331	Total Invoice:	11,112.00
CUSTOMER #	00004	Credits Applied:	0.00
		Payments Applied:	0.00
		Invoice Balance:	11,112.00

Thank you for your prompt attention to this invoice. We appreciate your patronage.

-Three Rivers Park District-

Comments

Surface Water Solutions LLC
6533 Neddersen Circle
Brooklyn Park, MN 55445-3206
952-456-4091
surfacewatersolutions@outlook.

Invoice Date: November 11, 2022
Invoice Number: 2022-10

Type	Date	Hours	Job	Task	Memo	Amount	Paid	Column1
ECWMC	10/18/2022	1.00	Project Reviews	2022-044	project review updates/emails	125.00	-	\$ -
ECWMC	10/20/2022	2.25	Project Reviews	2022-045	project review	281.25	-	\$ 437.50
ECWMC	10/22/2022	2.20	Project Reviews	2022-045	project review/findings	275.00	-	\$ -
ECWMC	10/23/2022	1.50	Project Reviews	2022-045	project review/findings/email	187.50	-	\$ -
ECWMC	10/26/2022	1.00	Project Reviews	2022-046	Project review/finding	125.00	-	\$ 1,525.00
ECWMC	10/27/2022	1.25	Project Reviews	2022-046	Project review/findings	156.25	-	\$ 1,962.50
ECWMC	10/28/2022	1.25	Project Reviews	2022-046	Project review/findings	156.25	-	\$ 31.25
ECWMC	11/1/2022	0.25	Project Reviews	2022-030	Update project review/email	31.25	-	\$ 31.25
ECWMC	11/2/2022	1.00	Technical Services	Meetings	staff report updates	125.00	-	\$ 31.25
ECWMC	11/2/2022	0.25	Project Reviews	2022-035	QA/QC for E.M.	31.25	-	\$ 31.25
ECWMC	11/2/2022	0.25	Project Reviews	2021-025	QA/QC for E.M.	31.25	-	\$ 125.00
ECWMC	11/9/2022	2.50	Technical Services	Meetings	TAC and regular ECWMC meetings	312.50	-	\$ 868.75
ECWMC	11/10/2022	1.00	Project Reviews	2022-045	Revision review/updates to review and findings	125.00	-	\$ 437.50
ECWMC						0.00	-	\$ 1,525.00
ECWMC						0.00	-	\$ 1,525.00
ECWMC						0.00	-	\$ 1,525.00
ECWMC						0.00	-	\$ 1,525.00
total						1,962.50		



INVOICE

Page 1 of 1

Invoice Number	2014024
Invoice Date	December 7, 2022
Purchase Order	--
Customer Number	167501
Project Number	227704963

Bill To

Elm Creek Watershed Management Commission
Accounts Payable
3235 Fernbrook Lane
Plymouth MN 55447
United States

Please Remit To

Stantec Consulting Services Inc. (SCSI)
13980 Collections Center Drive
Chicago IL 60693
United States

Project	Revisions to HUC-8 Study Model				
	Project Manager	Megow, Erik Robert	Contract Upset		45,750.00
	Current Invoice Total (USD)	165.00	Amount Billed to Date		45,321.75
			For Period Ending	November 25, 2022	
Top Task	100	HUC-8 Study Model Revisions			
Low Task	100.003	Memorandum and Meetings			
<u>Professional Services</u>					
Category/Employee			Current Hours	Rate	Current Amount
		Megow, Erik Robert	1.00	165.00	165.00
		Subtotal Professional Services	1.00		165.00
Low Task Subtotal	Memorandum and Meetings				165.00
Top Task Subtotal	HUC-8 Study Model Revisions				165.00
		Total Fees & Disbursements			165.00
		INVOICE TOTAL (USD)			165.00

Due upon receipt or in accordance with terms of the contract



INVOICE

Page 1 of 3

Invoice Number 2014023
Invoice Date December 7, 2022
Purchase Order
Customer Number 167501
Project Number 227704774

Bill To

Elm Creek Watershed Management Commission
Accounts Payable
3235 Fernbrook Lane
Plymouth MN 55447
United States

Please Remit To

Stantec Consulting Services Inc. (SCSI)
13980 Collections Center Drive
Chicago IL 60693
United States

Project Elm Creek '22 Technical Services

Project Manager	Megow, Erik Robert	Contract Upset	234,000.00
Current Invoice Total (USD)	9,294.31	Amount Billed to Date	206,226.94
		For Period Ending	November 25, 2022

Accounting to email att: Judie Anderson at judie@jass.biz; Beverly@jass.biz

Top Task 100 2022 Prereviews and General Inquiries

Low Task 100 2022 Prereviews and General Inquiries

Professional Services

Category/Employee	Current Hours	Rate	Current Amount
Kemmitt, Kathrine Lee (Katie)	1.50	135.00	202.50
Megow, Erik Robert	2.00	165.00	330.00
Subtotal Professional Services	3.50		532.50

Disbursements

Direct - Printing	3.06
Subtotal Disbursements	3.06

Low Task Subtotal **2022 Prereviews and General Inquiries** 535.56

Top Task Subtotal 2022 Prereviews and General Inquiries 535.56

Top Task 200 2022 Project Reviews

Low Task 200.2021.025 Hackamore Road

Professional Services

Category/Employee	Current Hours	Rate	Current Amount
Megow, Erik Robert	12.00	165.00	1,980.00
Subtotal Professional Services	12.00		1,980.00

Low Task Subtotal **Hackamore Road** 1,980.00

Low Task 200.2022.035 Rush Hollow

Professional Services



INVOICE

Page 2 of 3

Invoice Number	2014023
Invoice Date	December 7, 2022
Purchase Order	
Customer Number	167501
Project Number	227704774

Category/Employee		Current Hours	Rate	Current Amount
	Krautmann, Kurt Thompson	9.50	120.00	1,140.00
	Megow, Erik Robert	2.00	165.00	330.00
Subtotal Professional Services		11.50		1,470.00

Low Task Subtotal	Rush Hollow	1,470.00
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Low Task	200.2022.043	Meander Park and Boardwalk
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Professional Services

Category/Employee		Current Hours	Rate	Current Amount
	Krautmann, Kurt Thompson	7.00	120.00	840.00
	Megow, Erik Robert	4.00	165.00	660.00
Subtotal Professional Services		11.00		1,500.00

Low Task Subtotal	Meander Park and Boardwalk	1,500.00
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Low Task	200.2022.045	Corcoran Water Treatment Plant
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Professional Services

Category/Employee		Current Hours	Rate	Current Amount
	Megow, Erik Robert	0.75	165.00	123.75
Subtotal Professional Services		0.75		123.75

Low Task Subtotal	Corcoran Water Treatment Plant	123.75
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Low Task	200.2022.046	CSAH 12 Culvert Guardrail Replace, Ravine Stabilization
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Professional Services

Category/Employee		Current Hours	Rate	Current Amount
	Megow, Erik Robert	0.75	165.00	123.75
Subtotal Professional Services		0.75		123.75

Low Task Subtotal	CSAH 12 Culvert Guardrail Replace, Ravine Stabilization	123.75
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Top Task Subtotal	2022 Project Reviews	5,197.50
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Top Task	300	Meetings
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Low Task	300	Meetings
----------	-----	----------

Professional Services

Category/Employee		Current Hours	Rate	Current Amount
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INVOICE

Page 3 of 3

Invoice Number	2014023
Invoice Date	December 7, 2022
Purchase Order	
Customer Number	167501
Project Number	227704774

Megow, Erik Robert	4.50	165.00	742.50
Spector, Diane F	4.00	187.00	748.00
Subtotal Professional Services	<u>8.50</u>		<u>1,490.50</u>

Low Task Subtotal	Meetings	1,490.50
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Top Task Subtotal	Meetings	1,490.50
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Top Task	400	Other Technical Services
-----------------	------------	---------------------------------

Low Task	400.4000.001	General
-----------------	---------------------	----------------

Professional Services

Category/Employee		Current Hours	Rate	Current Amount
	Megow, Erik Robert	1.50	165.00	247.50
	Spector, Diane F	9.75	187.00	1,823.25
	Subtotal Professional Services	<u>11.25</u>		<u>2,070.75</u>

Low Task Subtotal	General	2,070.75
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Top Task Subtotal	Other Technical Services	2,070.75
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Total Fees & Disbursements	9,294.31
INVOICE TOTAL (USD)	9,294.31

Due upon receipt or in accordance with terms of the contract



3235 Fernbrook Lane
Plymouth MN 55447

Elm Creek Watershed Management Commission
3235 Fernbrook Lane
Plymouth, MN 55447

7-Dec-22

Total by
Project Area

Administrative		65.00	0.00	
Administrative	54.080	70.00	3,785.60	
Admin - offsite	2.200	75.00	165.00	
Office Support	20.00	200.00	4,000.00	
Storage Unit - .47	1.00	169.67	169.67	
Data Processing/File Mgmt		65.00	0.00	
Drop Box Subscription			0.00	
Archiving			0.00	
Admin - Reimbursable Expense	538.79	1.00	538.79	8,659.060
Admin - TAC support	10.06	70.00	704.20	
Admin - TAC support	1.15	75.00	86.25	
TAC Support - Reimbursable Expense	25.46	1.00	25.46	815.910
Website			0.00	
Website	0.42	70.00	29.40	
Website - Zoom			0.00	
Website - Reimbursable Expense		1.00	0.00	
Web Domain, hosting	65.51	1.00	65.51	94.910
Project Reviews - Secre			0.00	
Project Reviews - Admin Specific	3.44	70.00	240.80	240.800 specific
Project Reviews - Admin	19.46	70.00	1,362.20	
Project Reviews - Admin offsite			0.00	
Project Reviews - Admin - File Mgmt			0.00	
Project Reviews - Reimbursable Expense	95.23	1.00	95.23	1,457.430 nonspecific
Invoice Total			11,268.110	



HACKAMORE ROAD RECONSTRUCTION PROJECT

INTERIM CONDITION STORMWATER
MANAGEMENT REPORT

HACKAMORE ROAD | MEDINA, MN
AND CORCORAN, MN

December 8, 2022

Prepared for:

City of Medina

City of Corcoran

WSB PROJECT NO. 020741-000

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Appendix A

Figure 1

Appendix B

Reserve of Medina Pond Memo



Certification Sheet

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.

Earth Evans, PE

Date: December 8, 2022 Lic. No. XXXXX

1. Executive Summary

The Hackamore Road Reconstruction Project will create 4.4 acres of net new impervious surface along the roadway corridor. To meet ECWMC and MS4 requirements, the net new impervious surface is proposed to be treated within adjacent developments. The project has three discharge points, north, south, and east, all of which eventually flow to Elm Creek. Runoff rates and water quality loads meet ECWMC requirements at each of the three ultimate discharge points.



2. Background

The Hackamore Road Reconstruction Project will create 4.4 acres of net new impervious surface along the roadway corridor. The net new impervious area within each discharge point tributary area is summarized in **Table 1**.

Table 1. Net New Impervious Per Discharge Point

Discharge Point	Net New Impervious (ac)
North	3.3
East	1.2
South	-0.1

2.1 Requirements

The project is subject to Elm Creek Watershed Management Commission (ECWMC) rules as well as the City of Medina and City of Corcoran MS4 obligations. The ECWMC rules are more restrictive.

ECWMC

- Peak runoff rates may not exceed existing conditions or the capacity of the downstream conveyance facilities or contribute to flooding or streambank erosion for the 2, 10, and 100 year events.
- There shall be no net increase in TP or TSS from pre-development land cover to post development land cover.
- Stormwater runoff volume must be infiltrated/abstracted onsite in the amount equivalent to 1.1" of runoff generated from the new impervious surface.

3. Rate Control

3.1 Overview

Ultimately, the Hackamore Road project runoff discharges in three directions towards Elm Creek: north, south, and east. ***At the north, south, and east ultimate discharge points, runoff rates are reduced from existing to interim conditions in the 2-year, 10-year, and 100-year event (Table 2), meeting ECWMC requirements.***

Table 2. Ultimate Discharge Point Runoff Rate Comparison

Ultimate Discharge Point	Existing Rate (cfs)			Interim Rate (cfs)			Interim – Existing Rate Difference (cfs)		
	2-year	10-year	100-year	2-year	10-year	100-year	2-year	10-year	100-year
North: Tavera Wetland L Outlet	60.1	78.6	99.5	23.1	35.4	96.8	-37.0	-43.2	-2.7
South	2.4	4.3	9.2	1.3	2.4	6.6	-1.1	-1.9	-2.6
East: Walcott Glen Wetland H2 Culvert under CR 101	32.0	55.9	69.4	24.5	49.0	65.7	-7.5	-6.9	-3.7

Inside of those three tributary areas, runoff rates are analyzed at discharge points along the project corridor to review discharge rates to the adjacent wetlands.

3.1.1 North Tributary Breakdown

Overall, there is a net reduction in runoff rates at the north discharge point, as quantified in the Tavera Development Stormwater Management Plan, dated May 27, 2021, at the Wetland L Outlet. There is an isolated rate increase at a discharge point within the north tributary area from the increased impervious area of Hackamore Road that must go without treatment in the interim condition, to be offset by a future development.

The discharge rates at the internal discharge points within the north tributary area are summarized in **Table 3**.

Table 3. Internal Discharge Point Runoff Rate Comparisons

Discharge Point	Existing Rate (cfs)			Interim Rate (cfs)			Interim – Existing Rate Difference (cfs)		
	2-year	10-year	100-year	2-year	10-year	100-year	2-year	10-year	100-year
N1. Reserve of Medina	94.8	230.3	379.2	33.2	142.3	264.4	-61.6	-88.0	-114.8
N2. Interim to Future Development 1	1.5	4.5	13.3	2.6	5.8	14.6	1.1	1.3	1.3
N3. Out of Wetland 1	5.4	12.6	22.0	5.5	12.7	22.2	0.1	0.1	0.2

3.1.1.1 Reserve of Medina (N1)

From the Reserve of Medina Stormwater Management Plan, approved by ECWMC and the City of Medina, the total runoff rates are shown in **Figure 1**.

	Southeast	Northwest	North	Southwest	Direct to Wetland	Total Existing
1-year	1.20	10.60	3.68	5.01	74.31	94.80
10-year	4.78	24.37	9.69	10.90	180.55	230.29
100-year	12.11	39.50	16.63	17.24	293.73	379.21

	Southeast	Northwest	North	Southwest	Direct to Wetland	Total Proposed
1-year	0.99	4.69	3.24	2.32	18.04	29.28
10-year	4.75	11.31	8.04	5.60	105.34	135.04
100-year	10.84	18.71	13.46	9.27	194.41	246.69

Figure 1. Reserve of Medina Runoff Rates

Runoff rates to the Reserve of Medina development from Hackamore Road will be increased by 3.9, 7.6, and 17.7 cfs, but will be offset by the Reserve of Medina BMP, specifically altered in Summer 2022 to treat Hackamore Road runoff, ultimately meeting rate control at the discharge point from the Reserve of Medina into Wetland 2 per **Table 3**.

3.1.1.2 Interim to Future Development 1 (N2)

Because of limited right of way, the Hackamore Road net new impervious area will be treated within adjacent developments. Future Development 1 is anticipated to be constructed within the next 5 years. Because the BMP has not yet been provided, there is a rate increase into Wetland 1. To construct a temporary BMP within the wetland to offset rate increases would result in permanent wetland impacts.

In existing conditions, 0.24 acres of impervious sheet flows to Wetland 1. In proposed conditions, 0.6 acres of impervious will be routed to Wetland 1 in the interim condition. The 0.36 acre impervious increase is not anticipated to cause adverse impacts, as summarized in section 3.1.1.3.



3.1.1.3 Out of Wetland 1 (N3)

Wetland 1 provides some level of rate control to the upstream tributary area. Bounce and inundation levels and periods were analyzed in HydroCAD. The permitted increases were determined based on a moderately susceptible wetland based on *Recommended Hydroperiod Standards for Wetlands* from *Stormwater and Wetlands: Planning and Evaluation Guidelines for Addressing Potential Impacts of Urban Stormwater and Snowmelt Runoff on Wetlands* (Minnesota Stormwater Advisory Group, June 1997). As shown in **Table 4**, all increases are within the permitted tolerance.

Table 4. Wetland 1 Bounce and Inundation

Bounce/Inundation	Existing	Interim	Permitted
2-year Bounce (ft)	982.03	982.03	982.53
2-year Inundation (days)	19.19	19.77	20.19
10-year Bounce	982.84	982.84	983.34
10-year Inundation	22.27	23.06	29.27
100-year Bounce	985.46	985.55	985.96
100-year Inundation	25.42	26.35	32.42

¹0.05 cfs used as zero flow due to minimal head.

3.1.1.4 Tavera (Ultimate)

The Tavera Development Stormwater Management Plan, dated May 27, 2021, included the proposed Hackamore Road impervious area in their calculations. As shown in Table 5.8, runoff rates are decreased at the Wetland L outlet. In this analysis, the Wetland L Outlet is labeled as *Tavera – Wetland L Outlet*.

Table 5.8 Summary of Site Peak Discharge Rates (cfs)

Location	XP Link	Condition	2-Year	10-Year	50-Year	100-Year
Wetland B Outlet ¹	48	Existing	8.3	9.2	9.1	9.6
		Proposed	TBD	TBD	TBD	TBD
		Difference				
Wetland E Outlet	37	Existing	5.9	6.3	7.1	7.6
		Proposed	5.4	6.5	6.3	6.3
		Difference	-0.4	0.2	-0.7	-1.2
Wetland L Outlet	28	Existing	60.1	78.6	93.3	99.5
		Proposed	23.1	35.4	76.6	96.8
		Difference	-37.0	-43.2	-16.7	-2.7
South Area	90	Existing	23.5	34.9	47.4	51.6
		Proposed	23.1	32.7	44.7	49.6
		Difference	-0.4	-2.2	-2.7	-2.0

¹ Future development area to the north, will be integrated into the plan as future phases are designed.

3.1.2 South Tributary Breakdown

As described in **Table 2**, discharge rate requirements are met to the south.

3.1.3 East Tributary Breakdown

As described in **Table 2**, discharge rate requirements are met to the east.

3.1.3.1 Walcott Glen Wetland H2 Culvert Under CR 101 (Ultimate)

From the Stormwater Management Plan dated October 14, 2022, the proposed Hackamore Road impervious expansion is included in the calculations (reference Table 4.3). As shown in Table 5.8, proposed discharge rates under CR 101 do not exceed existing discharge rates.

Table 5.8 *Wetland H2 Culvert under CR 101 (cfs)*

Condition	2-Year	10-Year	100-Year
Existing	32.0	55.9	69.4
Proposed	24.5	49.0	65.7
Difference	-7.5	-6.9	-3.7

3.1.3.2 Wild Meadows

Hackamore Road discharges into two Wild Meadows wetlands. In proposed conditions, ditch sections will be created, providing increased time of concentrations to the wetlands instead of sheet flowing directly to the wetlands as in existing conditions. Results show that proposed runoff rates to the wetlands do not exceed existing runoff rates (**Table 5**, **Table 6**).

Table 5. Into Wild Meadows Wetland WM1

Storm Event	Existing (cfs)	Proposed (cfs)	Proposed – Existing (cfs)
2-year	0.7	0.6	-0.1
10-year	1.2	0.9	-0.3
100-year	2.6	1.6	-1.0

Table 6. Into Wild Meadows Wetland WM2

Storm Event	Existing (cfs)	Proposed (cfs)	Proposed – Existing (cfs)
2-year	2.1	2.0	-0.1
10-year	3.9	3.0	-0.9
100-year	8.4	5.5	-2.9



4. Water Quality

4.1 Overview

Ultimately, total suspended solids and total phosphorus concentrations do not exceed pre-existing conditions at the north, south, and east discharge points. The project meets ECWMC Rule D, Section 3, e which states that there shall be no net increase in TSS or TP from pre-development land cover to post-development land cover at the ultimate discharge points, as shown in **Table 7**.

Table 7. Ultimate Discharge Point Water Quality Comparison

Discharge Point	Pre-Devel. TSS (lb/yr)	Pre-Devel. TP (lb/yr)	Interim TSS (lb/yr)	Interim TP (lb/yr)	Interim – Pre-Devel. TSS (lb/yr)	Interim – Pre-Devel. TP (lb/yr)
North: Tavera Wetland L Outlet	The Tavera Development provides 2.74 acre-feet of excess volume control. TP and TSS discharges were not specifically outlined in their Stormwater Management Plan, but due to the excess volume control provided, TP and TSS are reduced within the development.					
South	471.4	2.6	415.8	2.3	-55.6	-0.3
East: Walcott Glen	3462	11.9	2137	11.9	-1325	0.0

Inside of the three tributary areas, TSS and TP rates are analyzed at discharge points along the project corridor to review the pollutant loads into adjacent wetlands.

4.1.1 North Tributary Breakdown

There is an isolated TSS and TP increase at an internal discharge point within the north tributary area, as shown in **Table 8**. Future Development 1 will provide treatment in excess to make up for the water quality deficit caused in the interim condition.

Table 8. Internal Discharge Point Water Quality Comparison

Discharge Point	Pre-Devel. TSS (lb/yr)	Pre-Devel. TP (lb/yr)	Interim TSS (lb/yr)	Interim TP (lb/yr)	Interim – Pre-Devel. TSS (lb/yr)	Interim – Pre-Devel. TP (lb/yr)
N1. Reserve of Medina	5052.7	15.1	2022.3	15.0	-3030.4	-0.1
N2. Interim to Future Development 1	238.5	1.3	256.7	1.8	18.2	0.5
N3. Out of Wetland 1	238.5	1.3	256.7	1.8	18.2	0.5

4.1.1.1 Reserve of Medina (N1)

The existing Reserve of Medina BMP was enhanced with additional filtration capacity in Summer 2022 to provide treatment for the increased impervious of Hackamore Road. See the attached memo for the water quality analysis of the pond.

4.1.1.2 Interim to Future Development 1 (N2)

A MIDS model was created for the existing and interim conditions of Hackamore Road, to Wetland 1. Due to limited right of way and wetlands immediately adjacent to the road, installation of a BMP is infeasible. Proposed sump structures will remove 20% of the TSS load. The load increase is propagated to N3.

As stated previously, in existing conditions, 0.24 acres of impervious sheet flows to Wetland 1. In proposed conditions, 0.6 acres of impervious will be routed to Wetland 1 in the interim condition. The 0.36 acre impervious increase is not anticipated to cause adverse impacts.

4.1.1.3 Tavera Wetland L Outlet (Ultimate)

From the Tavera Development Stormwater Management Plan, dated May 27, 2021, the development provides 2.74 acre-feet of excess volume control via stormwater reuse and iron enhanced sand infiltration, removing TP and TSS in excess.

4.1.2 South Tributary Breakdown

As shown in **Table 7**, TSS and TP are reduced from existing to proposed conditions to the south.



4.1.3 East Tributary Breakdown

As shown in **Table 7**, TSS and TP are reduced from existing to proposed conditions to the east.

4.1.3.1 Walcott Glen (Ultimate)

The proposed Hackamore Road impervious surface was included in the calculations for the Walcott Glen development. Per their Stormwater Management Report, Table 5.14, TSS and TP loads meet requirements.

Table 5.14 *BMP Performance Summary (lbs/year)*

Variable	Existing Loading	Proposed Loading	Total Removed	Proposed Discharge	Pollutant Reduction (from Existing Conditions)
TSS	3462	7166	5019	2137	-1325
TP	11.9	23.6	11.7	11.9	-0.0



5. Volume Control

5.1 Overview

With a net new impervious increase of 4.4 acres, the required volume control for the project is 17,729 cubic feet.

In the interim condition, 13,501 cubic feet of volume control will be achieved via Walcott Glen, Tavera, and Reserve developments, as shown. Accordingly, the project will be short by 4,228 cubic feet in the interim condition.

Table 9. Volume Control

BMP	Hackamore Road Impervious to BMP (ac)	Volume Control Provided (cf)	Can Take Credit For (cf)
Tavera	1.81	7,347	7,227
Reserve at Medina	1.61	3,000	3,000
Walcott Glen	0.82	6,185	3,274
Future Development 1	1.63	0	0
Future Development 2	0.45	0	0
Total			13,501

Because the net increase in impervious to the pond in the Reserve of Medina is 1.19 acres, 4,766 cubic feet of volume control would be needed, which means that an excess 1,766 cubic feet must be provided by Future Development 2.

Future Development 1 shall provide 6,509 cubic feet of volume control, sized sufficiently to make up for any interim condition rate and water quality impacts.

Appendix A

Figure 1 – Interim Condition Tributary Map



Appendix B

Reserve of Medina Pond Memo

Memorandum

To: ECWMC

From: Earth Evans, PE
Laura Pietila, EIT

Date: September 21, 2022

Re: Hackamore Road Treatment via the Reserve of Medina Development
WSB Project No. 020741-000

A portion of Hackamore Road will receive treatment from Pond 2 within the Reserve of Medina development via storm sewer connections as shown on **Figure 1**. The attached sheet C4.04 shows Pond 2 as originally designed in Phase 1 of the development. The attached sheet C3.1 shows the additional filtration capacity added to the pond with Phase 3 of the development.

The total impervious area routed to the pond will increase by approximately 0.89 acres from existing to proposed conditions due to the expansion of Hackamore Road. **Figure 2** displays the tributary area to the basin.

Utilizing P8 to model the tributary area and pond treatment potential, the TSS and TP loads from pre-existing, existing, and proposed conditions are shown in **Table 1**. As shown, the pollutant loading to the downstream wetland in proposed conditions does not exceed pre-existing conditions, meeting ECWMC Rule D, Section 3, e stating that there shall be no net increase in total phosphorus or total suspended solids from pre-development land cover to post-development land cover.

Table 1. Pollutant Outflow

Pollutant	Pre-Existing [lb/yr]	Existing [lb/yr]	Proposed [lb/yr]	Pre-Existing to Proposed Difference [lb/yr]	Existing to Proposed Difference [lb/yr]
TSS	5052.7	1978.4	2022.3	-3030.4	43.9
TP	15.1	14.3	15.0	-0.1	0.7

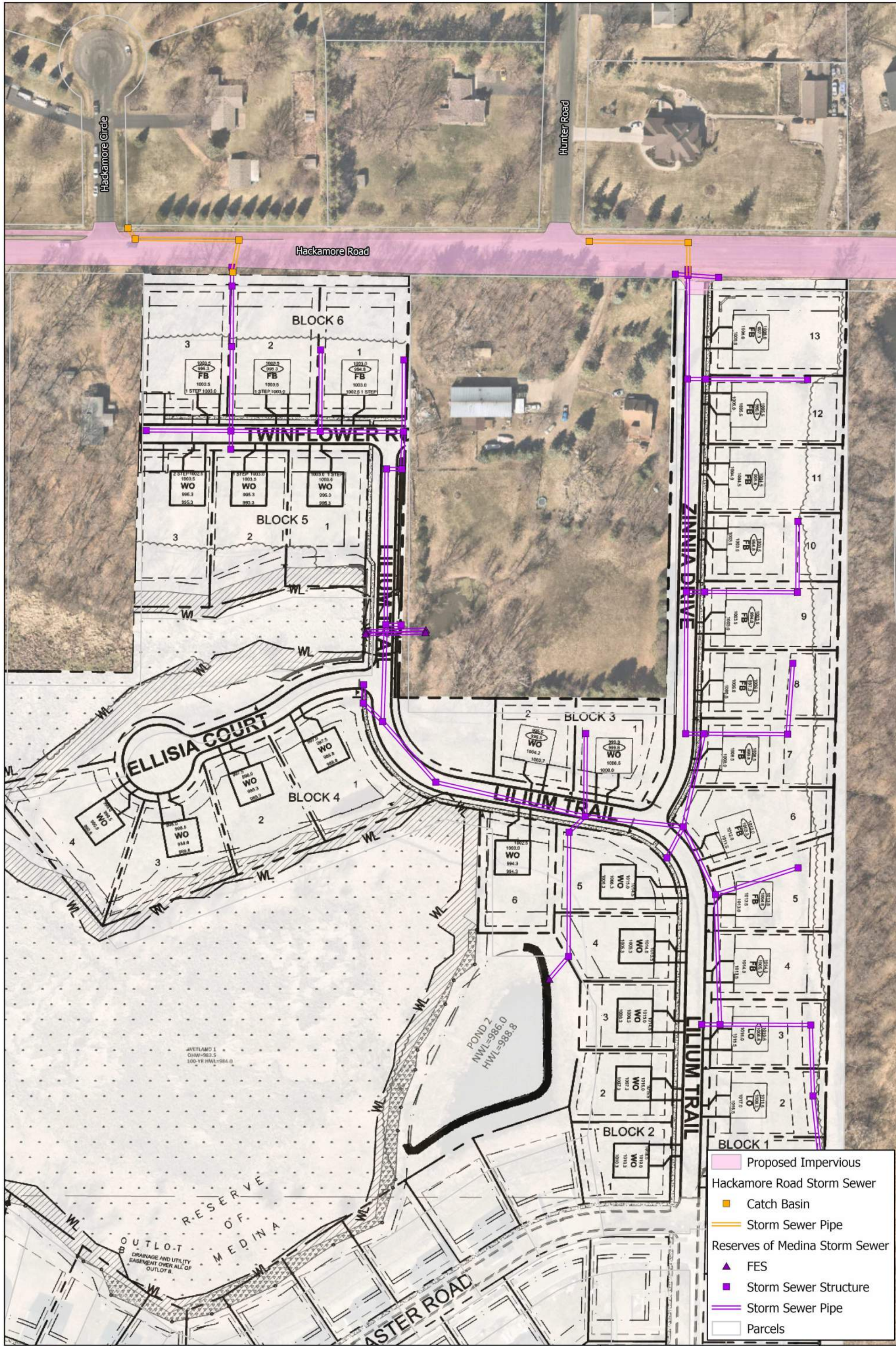
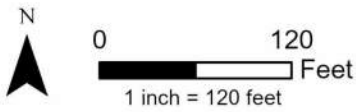


Figure 1 - Hackamore Road Drainage to Reserves of Medina

Hackamore Road Reconstruction
City of Medina, MN; City of Corcoran, MN



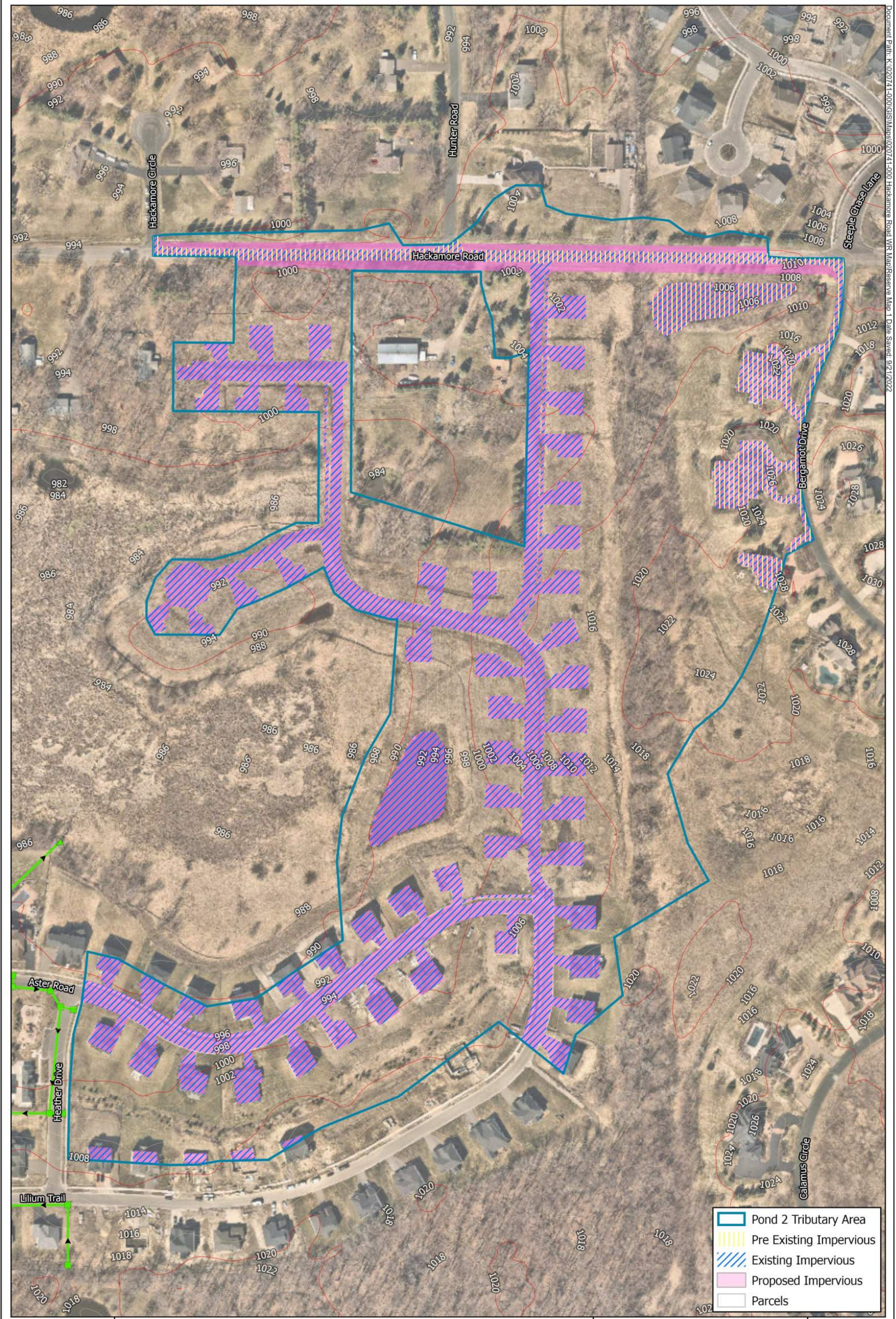
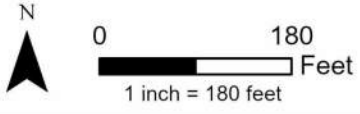
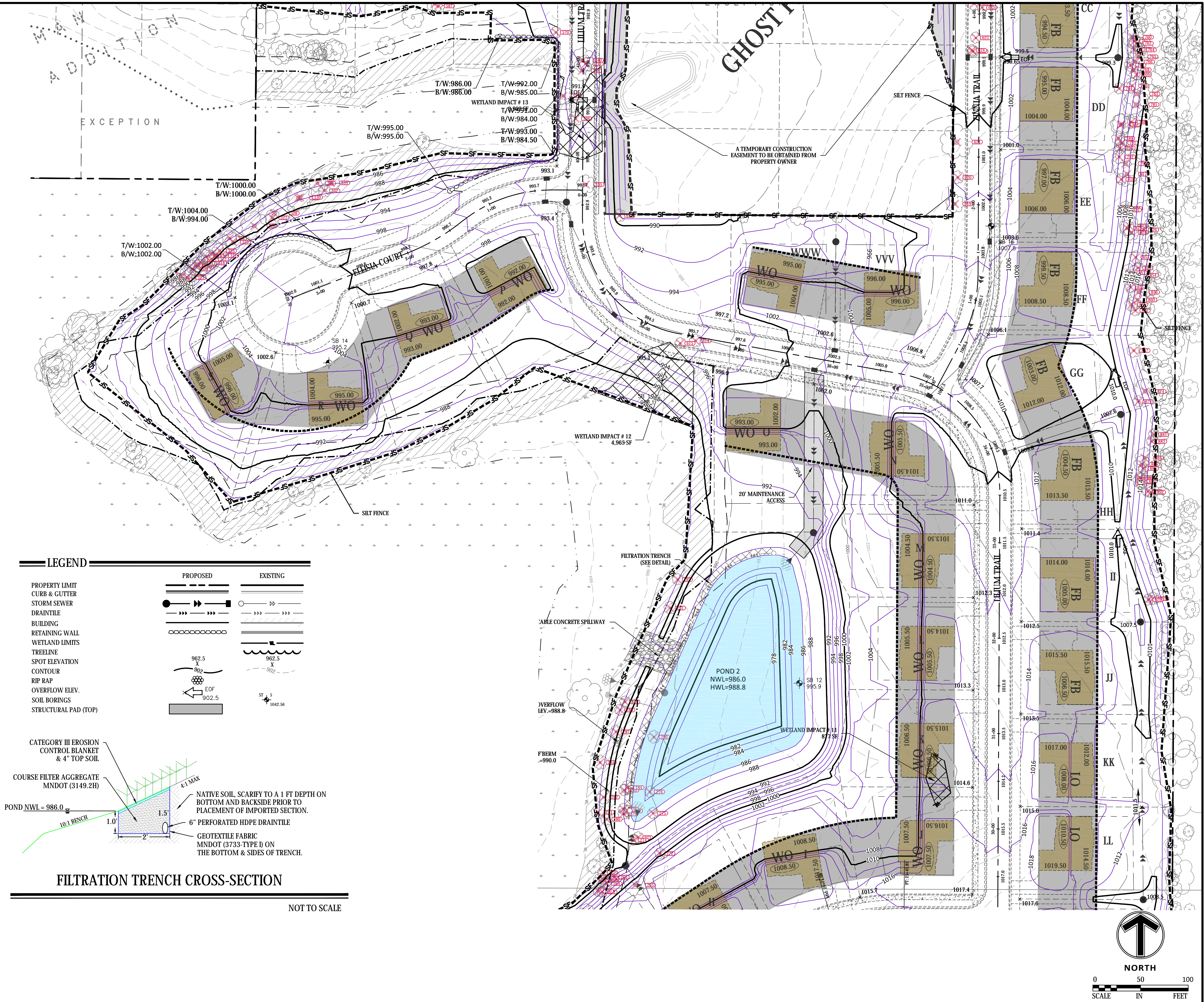


Figure 2 - Reserve of Medina Pond 2 Tributary Area

Hackamore Road Reconstruction
City of Medina, MN; City of Corcoran, MN





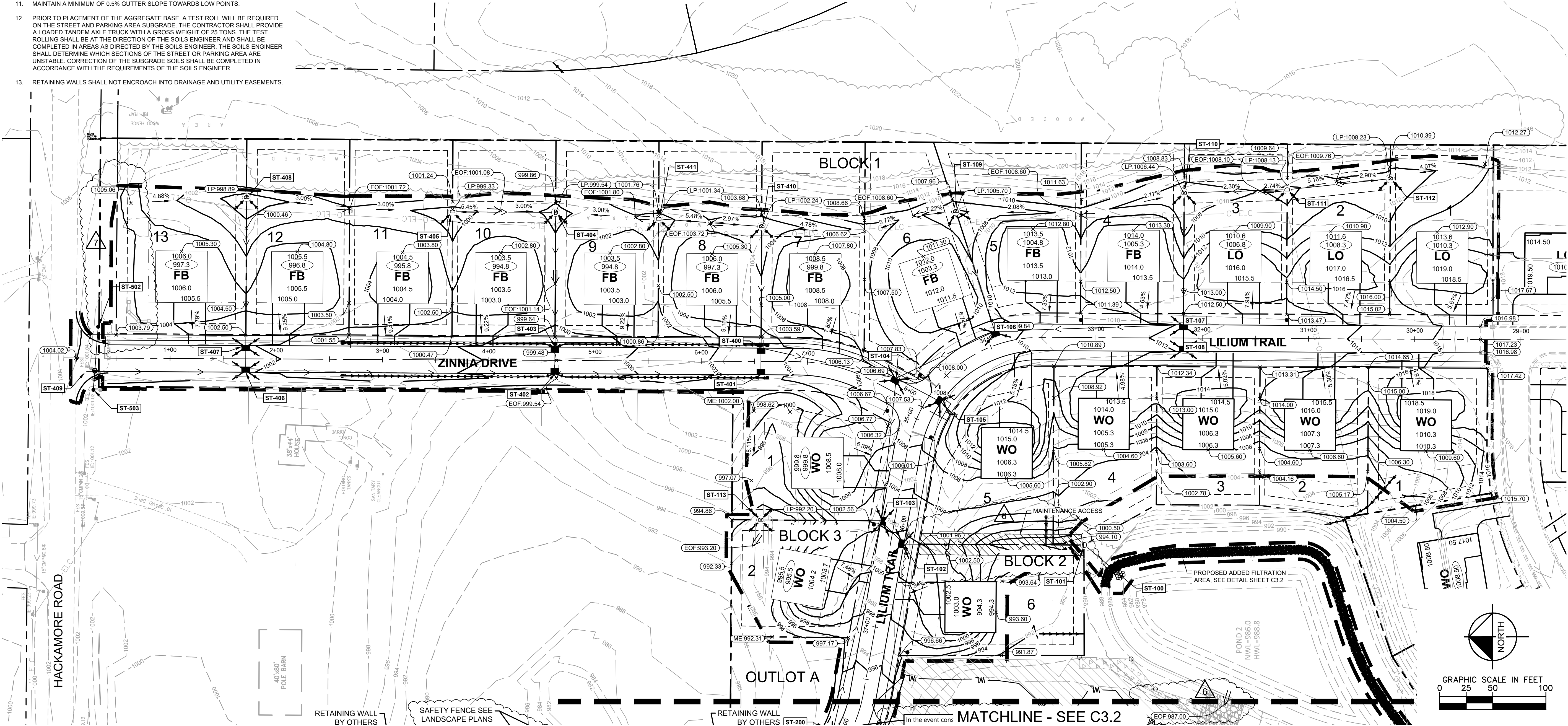
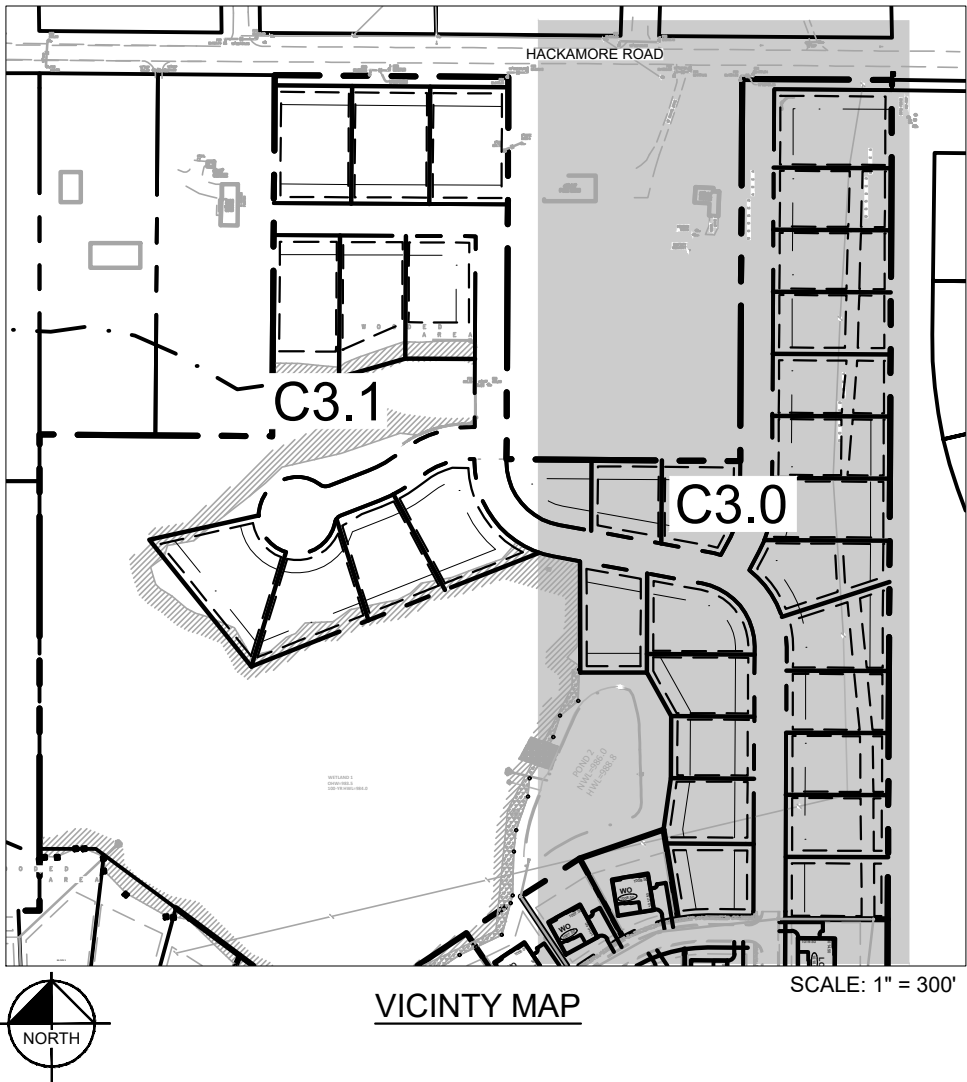
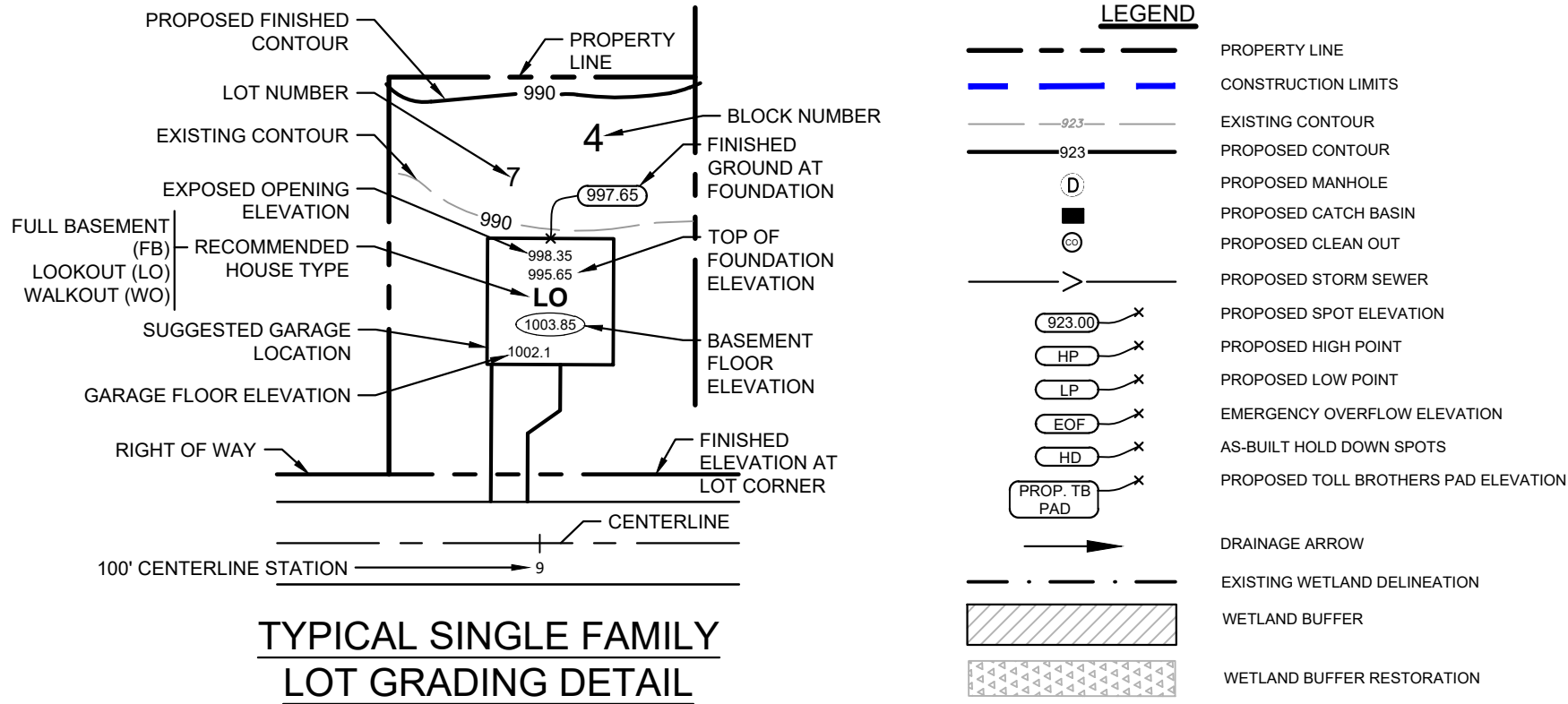
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GRADING PLAN NOTES

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF MEDINA, SPECIFICATIONS AND BUILDING PERMIT REQUIREMENTS.
- CONTRACTOR TO CALL GOPHER STATE CALL ONE @ 1-800-252-1166 AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATION/CONSTRUCTION FOR UTILITY LOCATIONS.
- CONTRACTOR TO FIELD VERIFY THE LOCATIONS AND ELEVATIONS OR EXISTING UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO THE START OF SITE GRADING. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT ENGINEER OF ANY DISCREPANCIES OR VARIATIONS.
- SUBGRADE EXCAVATION SHALL BE BACKFILLED IMMEDIATELY AFTER EXCAVATION TO HELP OFFSET ANY STABILITY PROBLEMS DUE TO WATER SEEPAGE OR STEEP SLOPES. WHEN PLACING NEW SURFACE MATERIAL ADJACENT TO EXISTING PAVEMENT, THE EXCAVATION SHALL BE BACKFILLED PROMPTLY TO AVOID UNDERMINING OF EXISTING PAVEMENT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL HORIZONTAL AND VERTICAL CONTROL.
- CONTRACTOR SHALL EXCAVATE DRAINAGE TRENCHES TO FOLLOW PROPOSED STORM SEWER ALIGNMENTS.
- GRADES SHOWN ARE FINISHED GRADES. CONTRACTOR SHALL ROUGH GRADE TO SUBGRADE ELEVATION AND LEAVE STREET READY FOR SUBBASE.
- ALL EXCESS MATERIAL, BITUMINOUS SURFACING, CONCRETE ITEMS, ANY ABANDONED UTILITY ITEMS, AND OTHER UNSTABLE MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OFF THE CONSTRUCTION SITE.
- UPON COMPLETION OF EXCAVATION AND FILLING, CONTRACTOR SHALL RESTORE ALL STREETS AND DISTURBED AREAS ON SITE. ALL DISTURBED AREAS SHALL BE RE-VEGETATED WITH A MINIMUM OF 4" OF TOPSOIL.
- GRADING FOR ALL SIDEWALKS AND ACCESSIBLE ROUTES INCLUDING CROSSING DRIVEWAYS SHALL CONFORM TO CURRENT ADA STATE/NATIONAL STANDARDS. IN NO CASE SHALL ACCESSIBLE RAMP SLOPES EXCEED 1 VERTICAL TO 12 HORIZONTAL. IN NO CASE SHALL SIDEWALK CROSS SLOPES EXCEED 2% . IN NO CASE SHALL LONGITUDINAL SIDEWALK SLOPES EXCEED 5% . IN NO CASE SHALL ACCESSIBLE PARKING STALLS OR AISLES EXCEED 2% (1.5% TARGET) IN ALL DIRECTIONS. SIDEWALK ACCESS TO EXTERNAL BUILDING DOORS AND GATES SHALL BE ADA COMPLIANT. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF ADA CRITERIA CANNOT BE MET IN ANY LOCATION PRIOR TO PAVING. NO CONTRACTOR CHANGE ORDERS WILL BE ACCEPTED FOR A.D.A COMPLIANCE ISSUES.
- MAINTAIN A MINIMUM OF 0.5% GUTTER SLOPE TOWARDS LOW POINTS.
- PRIOR TO PLACEMENT OF THE AGGREGATE BASE, A TEST ROLL WILL BE REQUIRED ON THE STREET AND PARKING AREA SUBGRADE. THE CONTRACTOR SHALL PROVIDE A LOADED TANDEN AXLE TRUCK WITH A GROSS WEIGHT OF 25 TONS. THE TEST ROLLING SHALL BE AT THE DIRECTION OF THE SOILS ENGINEER AND SHALL BE COMPLETED IN AREAS AS DIRECTED BY THE SOILS ENGINEER. THE SOILS ENGINEER SHALL DETERMINE WHICH SECTIONS OF THE STREET OR PARKING AREA ARE UNSTABLE. CORRECTION OF THE SUBGRADE SOILS SHALL BE COMPLETED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SOILS ENGINEER.
- RETAINING WALLS SHALL NOT ENCROACH INTO DRAINAGE AND UTILITY EASEMENTS.

RETAINING WALL COORDINATION NOTES:

- RETAINING WALL SHOWN IS SCHEMATIC. ACTUAL DETAILS SHALL BE DESIGNED BY RETAINING WALL MANUFACTURER. SUBMIT DRAWINGS FOR REVIEW BY ENGINEER.
- CONTRACTOR SHALL COORDINATE TIMING OF THE INSTALLATION OF THE RETAINING WALL WITH ALL UTILITIES, SPECIFICALLY THE STORM SEWER AND WATERMAIN ADJACENT TO THE PROPOSED WALLS.
- TAKE SPECIAL PRECAUTION ADJACENT TO WETLAND AS TO NOT DISTURB AREAS WITHIN DELINEATED WETLANDS.
- FINISHED ELEVATIONS ON THE GRADING PLAN ARE AS STATED ON THE PLAN WITH THE TOP OF WALL (TW) SPOTS AND BOTTOM OF WALL (BW) SPOTS DENOTING THE FINISHED GRADE ELEVATIONS. ACTUAL BOTTOM AND TOP OF RETAINING WALL ELEVATIONS MAY VARY DUE TO MANUFACTURER REQUIREMENTS AND RECOMMENDATIONS.
- THE CONTRACTOR SHALL COORDINATE ALL ACTIVITIES WITH THE WALL REINFORCING AND ROADWAY CONSTRUCTION, WETLAND LIMITS, AND RIGHT-OF-WAY LIMITS. CONTRACTOR SHALL PERFORM ALL NECESSARY COORDINATION, STAGING, TEMPORARY SHORING, AND SEQUENCING AT NO EXTRA COST.
- RETAINING WALLS SHALL BE DESIGNED BY A MINNESOTA REGISTERED PROFESSIONAL STRUCTURAL ENGINEER.
- ALL RETAINING WALLS SHALL BE MAINTAINED BY THE HOMEOWNERS ASSOCIATION. THE CONSTRUCTION OF ANY RETAINING WALLS WITHIN THE PUBLIC RIGHT-OF-WAY WILL NEED PRIOR APPROVAL BY THE CITY ENGINEER. ALL RETAINING WALLS TO BE CONSTRUCTED WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH MN/DOT ROAD DESIGN MANUAL, CHAPTER 9, SECTION 4. ALL RETAINING WALLS WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE DESIGNED FOR AN EQUIVALENT LIVE LOAD SURCHARGE OF 2 FEET. SOIL BORINGS AND A GEOTECHNICAL REPORT WILL BE REQUIRED FOR EACH WALL PRIOR TO CONSTRUCTION.
-



1 GRADING PLAN

PRELIMINARY - NOT FOR CONSTRUCTION

THE RESERVE OF MEDINA

THIRD ADDITION

PREPARED FOR

PUTLE HOMES

MEDINA

SHEET NUMBER

MINNESOTA

KHA PROJECT

160744004.1

DATE

05/26/2021

SCALE

AS SHOWN

DESIGNED BY

ERW

DRAWN BY

CPC

CHECKED BY

MCB

LIBRARY CATEGORY

PLAN

THIS 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.

MICHAEL C. BRANDT

DATE

03/18/2021

DATE

03/18/2021

LIC. NO.

4261

CITY COMMENTS

07/09/2021

CITY COMMENTS

07/01/2021

CITY COMMENTS

06/15/2021

CITY COMMENTS

06/11/2021

CITY COMMENTS

05/26/2021

CITY COMMENTS

05/17/2021

CITY COMMENTS

05/10/2021

REVISIONS

No.

DATE

BY

Kimley»Horn

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elm creek Watershed Management Commission

ADMINISTRATIVE OFFICE
3235 Fernbrook Lane
Plymouth, MN 55447
PH: 763.553.1144
email: judie@jass.biz
www.elmcreekwatershed.org

Karineimi Meadows Corcoran Project #2022-040

Project Overview:

Location: A large agriculture parcel (124.5 acres) in the southeast quadrant of the intersection of CR 10 and 19. Hennepin County PID 1811923110002

Purpose: Subdivide the parcel into 10 single family residential lots. Nine of the lots east of Rush Creek range from 2.5 to 14.5 acres in size and the 10th lot west of Rush Creek is 71.4 acres. The project will consist of constructing Chaparral Lane south of CR 10 into the site, its associated drainage and storm water basins. Lot grading improvements will be customized and occur at the time the home is built.

WMC Rules	X	Rule D	Stormwater Management
Triggered:	X	Rule E	Erosion and Sediment Control
	X	Rule F	Floodplain Alterations
	X	Rule G	Wetland Alteration
		Rule H	Bridge and Culvert Crossings
	X	Rule I	Buffer Strips

Applicant: Nathan Kariniemi

Address: 19927 Larkin Road
Hamel, MN 55340

Attention: N/A

Phone: 763-300-6618

Email: N/A

Agent: Otto Associates

Address: 9 West Division Street
Buffalo, MN 55313

Attention: Paul Otto

Phone: 763-682-4727

Email: paul@ottoassociates.com

Exhibits:	Description	Date Received
Application	<input checked="" type="checkbox"/> Complete ECWMC Application	August 5, 2022
	<input checked="" type="checkbox"/> ECWMC Request for Review and Approval	August 3, 2022
	<input checked="" type="checkbox"/> City authorization: Corcoran, MN	August 3, 2022
	<input checked="" type="checkbox"/> Review fee: \$4,725 & \$675	August 3 & 5, 2022
	<input checked="" type="checkbox"/> Project Documents (site plans, reports, models, etc.)	August 3, 2022

Submittals

1. Stormwater Report, Karineimi Meadows, dated January 15 and June 29, 2022, and September 7, 2022. prepared by Otto Associates.
 - a. Summary Narrative
 - b. NRCS Soil Survey Geographic Database (SSURGO) Information for Parcel.
 - c. Event Mean Concentration information for TP and TSS from National Stormwater Quality Database
 - d. Existing and Proposed HydroCAD models

- e. Ponds 1 through 4 Stage-Area-Storage HydroCAD tables and NURP volume calculation.
 - f. Pre and post development MIDS model analysis. (pdf summaries and electronic versions)
 - g. Storm sewer skimmer structure details on ponds 1,2 & 3.
 - h. Existing and proposed drainage maps.
2. Wetland Information
 - a. 23185 County Road 10 Wetland Delineation Report by Kjolhaug Environmental dated October 27, 2020.
 - b. Figure 2 (Existing Conditions map) dated October 27, 2021, and revised Figure 2, (Existing Conditions map) dated December 16, 2021.
 - c. MN WCA Notice of Decision, approved wetland boundary/type from City of Corcoran (LGU) dated December 16, 2021.
 - d. MN WCA Notice of Decision, approved wetland replacement plan from City of Corcoran (LGU) dated November 21, 2022.
3. Kariniemi Meadows Site Plans by Otto and Associates dated November 17, 2022.
 - a. Sheet 1 of 15, Cover Sheet
 - b. Sheets 2, & 3 of 15, Grading Plans
 - c. Sheets 4 to 7 of 15, Stormwater Pollution Prevention Plan
 - d. Sheets 8 & 9 of 15, Street and Storm Sewer Plan., Preliminary Street & Storm Sewer
 - e. Sheets 10 & 11 of 15, CR 10 Road Plans
 - f. Sheets 12 and 13 of 15, Wetland Buffer and Tree Preservation Plan
 - g. Sheets 14 & 15 of 15, Details.
4. Septic primary and alternate site soil logs Lots 1 to 5, Block 1 Kariniemi Meadows by Homestead Septic. No date or signature.

Findings

General

1. A complete application was received August 5, 2022. The initial 60-day decision period per MN Statute 15.99 expired October 4, 2022. The applicant has extended the deadline to February 8, 2022.
2. The existing 125 acres drains into Rush Creek that is located through the middle of this parcel.
 - a. Land use for the 71 acres west of Rush Creek will remain the same after development. No ECWMC review for this area is necessary currently.
 - b. The remaining 54 acres of the development east of Rush Creek will be reviewed in this report.
 - c. A future trail between CR 10 and CR 19 is proposed. It will run north and south from CR 10 and then east/west along the south property line between CR 19 and Rush Creek.
 - i. No trail construction or grading is proposed at this time.
 - ii. The trail easement is within the floodplain and floodway of Rush Creek. Any grading on this trail will have to be reviewed in the future as part of a separate project.
3. 5.16 acres of new impervious areas are being created from this development.
4. Four ponds are proposed for stormwater management. Two ponds will be designed with sand filter benches for abstraction volume controls.
5. The site areas east of Rush Creek flows in three directions,
 - a. Westerly Runoff (~37 acres) flows directly into Rush Creek
 - b. Northerly runoff (~6 acres) that flows under CR 10.
 - c. Runoff to the southeast (~3 acres).
6. The proposed development will limit the grading disturbance to four main areas.

- a. Chaparral Lane ROW and drainage ditches,
 - b. Stormwater management ponds and swales,
 - c. CR 10 road widening and drainage upgrade.
 - d. Rough grading on four of the home sites.
 - e. The rest of the home sites will be custom graded at the time of home construction.
7. The development of 9 large rural residential lots and Chaparral Lane will create 5.16 acres of new, net impervious areas. Stormwater management is designed to treat 3.6 acres of impervious areas including 95% of Chaparral Road.
8. Existing and proposed conditions HydroCAD models were created to model flow rates through this site for the 2-, 10-, and 100-year storm events.
9. There are 13 wetlands within the project extents.
 - a. One wetland basin, 2,477 sq. ft. in size is proposed to be filled.
 - b. Mitigation credits for 4,954 sq. ft. from BWSR wetland bank account 1697 is proposed.
10. Rush Creek jurisdictional floodplains runs through this parcel. Minimal floodplain impacts are proposed.
11. There are no bridge/culvert crossings across jurisdictional stream from this project.
12. Drainage and utility easements encompass all buffer, wetlands, floodplains and stormwater systems.

Rule D – Stormwater Management

General

1. The project will disturb approximately 17 acres and create 5.16 acres of new, net impervious areas.
2. NRCS soils information indicate the on-site soils are predominantly Hydrologic Soil Group Type C/D (low infiltration capacity) with low infiltration capabilities. Septic system soil borings determined on site soils have loam textures to approximately 15" and then clay loam soil textures below 16" Redox features indicating high water tables occur in all borings at 16'-18" and lower. Based on these indicators, infiltration is not a feasible option on this site.
3. Stormwater flow rates and quality will be managed on the site via four NURP ponds. Two of the ponds are proposed to have filter benches for abstraction volume credits.
4. Ponds 1, 2, and 3 will have outlet control structure pipes submerged to prevent migration of floatables and oil downstream. Pond 4 overflows via a culvert under Chaparral Road into pond 3.
5. Ponds 3 and 4 filter bench and drain tile details are necessary on the plan. Details must show bench locations, width, depth, and elevations. NWL of the ponds are determined by the low elevation on the bench media. Filter media specifications are required on the site plan. MNPCA stormwater manual recommends media mixes C or D unless iron-enhanced media mixes are proposed,
6. An operation and maintenance agreement implementing those conditions that bind current and future owners of the project shall be recorded on this property

Low Floor Elevations

1. Each home site will be custom built. Home elevations proposed on the site plans will meet the Commission's requirements for low floor and low openings. The low floor elevations as they relate to the adjacent water body are as follows.
 - a. L9/B1 is an existing farmstead with a first-floor elevation of 1005.65.
 - i. Adjacent Rush Creek BFE=992.0, CR 10 overflow is 994.3
 - ii. Pond 1 HWL = 998.5, NWL = 996. 2
 - iii. Culvert under CR 10 =997.8 after development. 999.9 before development. Better condition.
 - b. L8/B1 low floors= 996.7.

- i. Storm Basin #2 HWL =994.7, EOF=995.7.
- ii. Adjacent Rush Creek BFE=992.1, CR 10 overflow is 994.3
- c. L7/B1 low floor =997.8
 - i. Storm Basin #2 HWL =994.7, EOF=995.7.
 - ii. Adjacent Rush Creek BFE=992.2, CR 10 overflow is 994.3
- d. L6 & L5/B1 low floors = 995.3
 - i. Adjacent Rush Creek BFE=992.2, CR 10 overflow is 994.3
- e. L4/B1 low floor =998.8
 - i. Adjacent Rush Creek BFE=993.00, CR 10 overflow is 994.3
 - ii. Pond 3, HWL=996.8, EOF=997.8
- f. L3/B1 low floor=995.5
 - i. Adjacent Rush Creek BFE=993.5, CR 10 overflow is 994.3
- g. L2/B1 low floor =1000.0
 - i. Adjacent Rush Creek BFE=992.75, CR 10 overflow is 994.3
 - ii. Pond 4 HWL=998.95, EOF=999.0- pond 4 is greater than 200' from proposed home
- h. L1/B2 low floor = 1003.5
 - i. Pond 4 HWL=998.95, EOF=999.0.

Abstraction Controls

1. Abstraction controls will not **meet** Commission requirements.
2. Net, new impervious areas will be 5.16 acres. Abstraction requirement for filtration/biofiltration is 20,604 cubic feet.
3. Full infiltration of 1.1 inches of runoff from impervious areas is not feasible due to low infiltration capacity soils and high seasonal ground water conditions.
4. Abstraction credits from the filter benches on ponds 3 and 4 will provide 20,675 cubic feet of water volume filtered through the filter bench/drain tile between the filter bench elevations and the overflow weirs on each pond.
5. 48-hour drawdown of the filter media in ponds 3 and 4 do not meet the Commission standard. Maximum filter media infiltration rates should be 1.8'/hour per sq. ft. of filter media surface area.
 - a. Pond 3 filter media surface area = 833 sq. ft. $1.8'/12 \times 833\text{sq. ft.} = 69.4$ cubic feet per hour. $14,167/69.4=204$ hours
 - b. Pond 4 filter media surface area = 383 sq. ft. $1.8"/12 \times 383 = 57.45$ cubic feet per hour. $6,508/57.45 = 113.3$ hours.
6. Ponds 3 and 4 filter bench and drain tile details are necessary on the plan. Details must show bench locations, width, depth, and elevations. NWL of the ponds are determined by the low elevation on the bench media. Filter media specifications are required on the site plan. MNPCA stormwater manual recommends media mixes C or D unless iron-enhanced media mixes are proposed,

Water Quality

1. Water quality will **meet** Commission requirements.
2. Table 2 shows the applicants pre and post development water quality summary on this site. The applicant used the MPCA MIDS model to determine pre and post development TP and TSS loads.
 - a. Pre-development load concentrations were pro-rated for the existing land use for post development load concentrations MPCA default values were used.
 - i. Pro-rated pre-development TP concentration = 0.480 mg/l, TSS= 129.7 mg/l
 - ii. Post-development loads = 0.30 mg/l for TP and 54.5 mg/l for TSS
3. Table 2 shows the ECWMC analysis using MIDS with default concentrations with NURP and user defined BMP's for the sand filters on ponds 3 and 4 (~20% PP, 10% DP and 25% TSS reduction).

Table 1 Water Quality Summary¹

	Annual Runoff Vol. (ac-ft)	Abstraction Vol. (cubic feet)	TP (lbs/year)	TSS (lbs/year)
Pre-Project	21.1 (21.2)	N/A	27.5 (21.2)	7,435 (3,852)
Proposed (w/o BMP's) ¹	27.4 (32.6)	20,604 (required)	22.4 (26.6)	4,056 (4,836)
Proposed (w/ BMP's) ¹	27.4 (32.6)	20,675 (provided)	21.1 (21.2)	3,295 (3,150)
Change	+6.3 (+11.4)	+71.0	-6.4 (0.0)	-4,140 (-702)

Parenteses are Commission estimates using pre-development default concentrations and NURP pond with sand filters BMP's.

Rate Controls

1. Rate control **meets** Commission requirements.
2. Post development rate control for the site is provided by 4 stormwater basins and culvert drainage under Chaparral Lane.
 - a. The stormwater basins and road ditch construction are situated to accommodate runoff from 95% of the new impervious area from Chaparral Lane.
 - b. Culvert drainage under Chaparral Lane is designed to replicate or improve the natural drainage that runs from east to west under it.
3. The applicant provided a pre- and post-development HydroCAD model for the 2-year, 10-year, and 100-year storm events, Atlas 14, point precipitation and an MSE 24-hour type 3 rainfall distribution.
4. Table 1 compares before and after flow rates at three main discharge points from this property.
 - a. To the west draining directly into the Rush Creek and its floodplain/wetland areas.
 - b. To the northeast to the existing culvert draining north under CR 10.
 - c. To the southeast into existing wetland 2 which naturally flows south then west where it enters wetland 1 then flow via ditch to the northwest into Rush Creek on site.

Table 2 Rate of Discharge Leaving Site

Direction	Condition (Drainage area)	2-year (cfs)	10-year (cfs)	100-year (cfs)
West (Directly into Rush Creek wetlands/floodplain)	Pre-Project (37.3 ac.)	39.8	73.9	148.3
	Proposed ¹ (35.8 ac.)	33.6	69.0	146.5
	Change	-6.2	-4.9	-1.8
Northeast (Flows under CR 10)	Pre-Project (5.7 ac.)	9.0	12.7	14.9
	Proposed ¹ (7.2 ac.)	1.7	4.0	7.9
	Change	-7.3	-8.7	-7.0
Southeast (Flows into wetland 2)	Pre-Project (3.2 ac.)	3.8	8.0	17.6
	Proposed ¹ (3.2 ac.)	3.6	7.7	17.3
	Change	-0.2	-0.3	-0.3

Rule E – Erosion and Sediment Control (plans)

1. Plans do not **meet** the Commission requirements for erosion and sediment control.
2. Erosion control and SWPPP plans include.
 - a. Perimeter sediment protection measures including
 - i. Silt fence with double rows of silt fence adjacent to wetlands.
 - ii. Natural vegetative buffers strips
 - b. Temporary stabilization for disturbed soil areas.
 - c. Temporary and permanent sediment control sequencing construction, cleanout, and post construction protection.

Rule I– Buffer Strips

1. Plans **meet** Commission requirements for buffer strips.
2. The buffer vegetation narrative submitted as part of the plan, will meet the Commission requirements for native vegetation establishment and maintenance.
3. Wetland buffers widths adjacent to Rush Creek are 50' average/25' minimum.
4. All other buffer widths are 25' average
5. The wetland buffer monumentation meet the Commission's requirements.

Rule G– Wetland Alteration

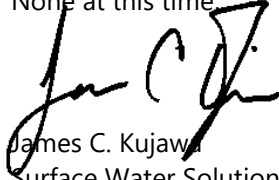
1. Wetland replacement plans will meet the Commission's wetland alteration requirements.
2. Wetland boundaries and types were approved and noticed per MN WCA requirements on December 16, 2021.
3. A wetland replacement plan has been submitted and approved by Corcoran (WCA LGU)
 - a. One wetland basin, 2,477 sq ft. in size is proposed to be filled.
 - b. Mitigation credits for 4,954 sq. ft. from BWSR wetland bank account 1697 is proposed.

Rule F– Floodplain Alteration

1. Floodplain alterations **meet** the Commission's requirements
2. Rush Creek and its jurisdictional floodplains runs from the south to the north through the middle of this property.
3. The base flood elevations along the creek corridor varies from 993.5 near the south property line (upstream portion of Rush Creek) to 991.75 on the north end of the property near CR 10 (downstream)
4. Floodplain fill will occur outside of the floodway corridor and only within the flood fringe area near Pond 2. The FEMA and ECWMC base flood elevation is 992.25 along this area.
 - a. Floodplain fill of 188 cubic yards will occur from the construction of the berm for pond 2.
 - b. Mitigation of 214 cubic yards will occur adjacent to pond 2 for mitigation of the fill for the berm construction.

Recommendation

None at this time.



James C. Kujawa
Surface Water Solutions
Advisor to the Commission

December 7, 2022

Date

Attachments

- | | |
|----------|--|
| Figure 1 | Project Location Street View |
| Figure 2 | Project Location Aerial View |
| Figure 3 | Grading Plan |
| Figure 4 | Pre- and Post-Development Drainage Maps. |

Figure 1 Project Location Street View

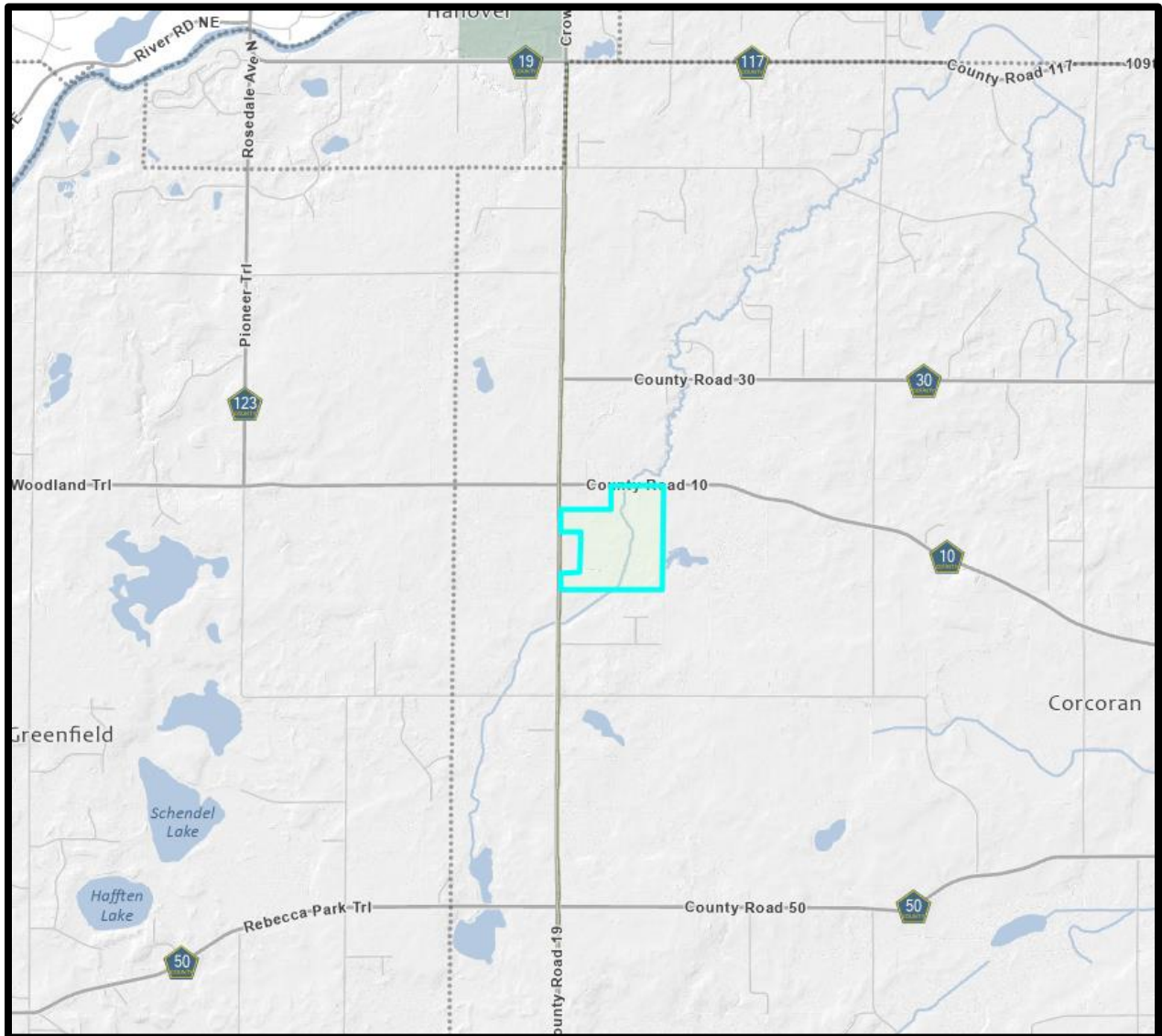


Figure 2 Project Location Aerial View

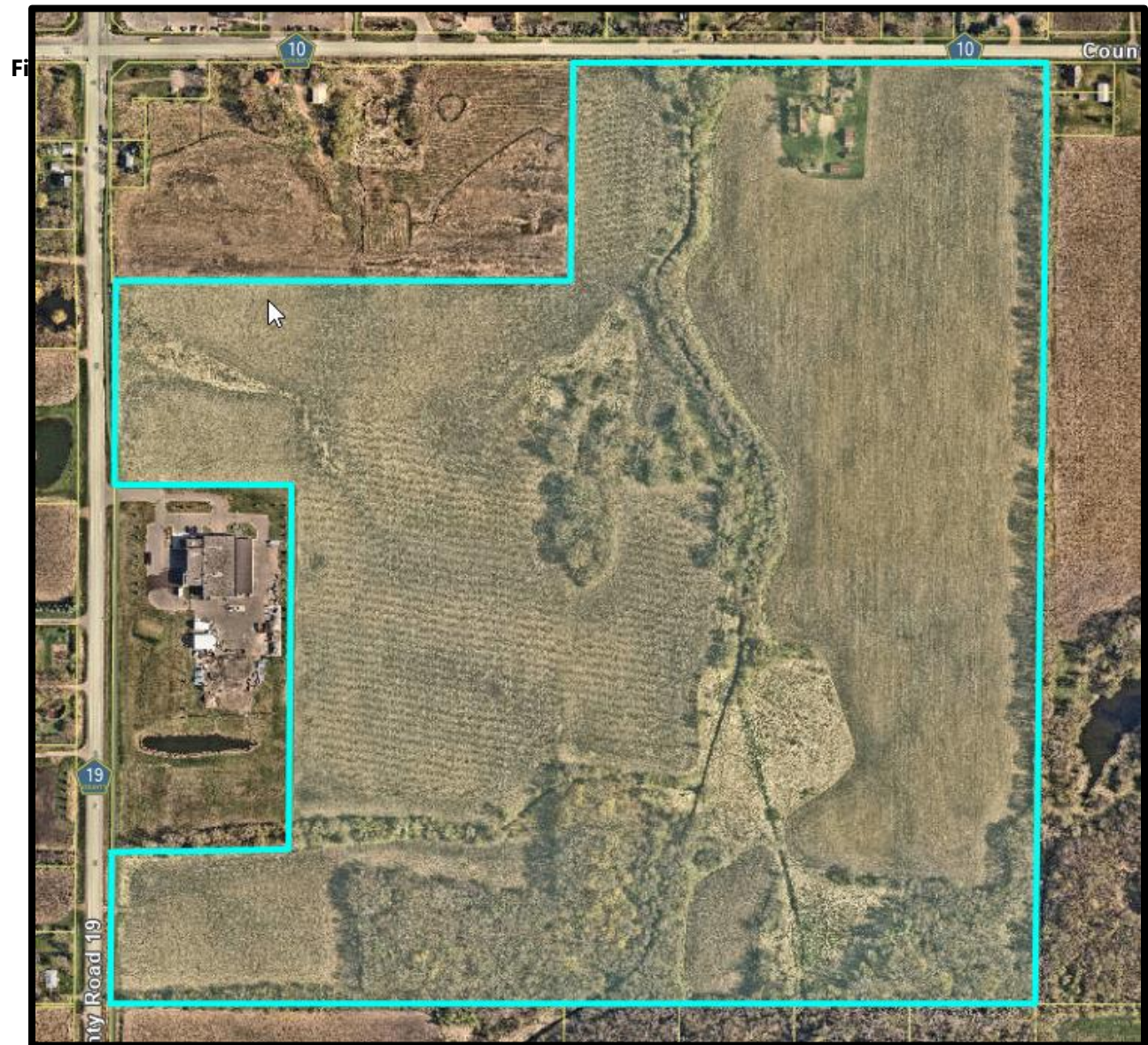


Figure 3 Grading Plan

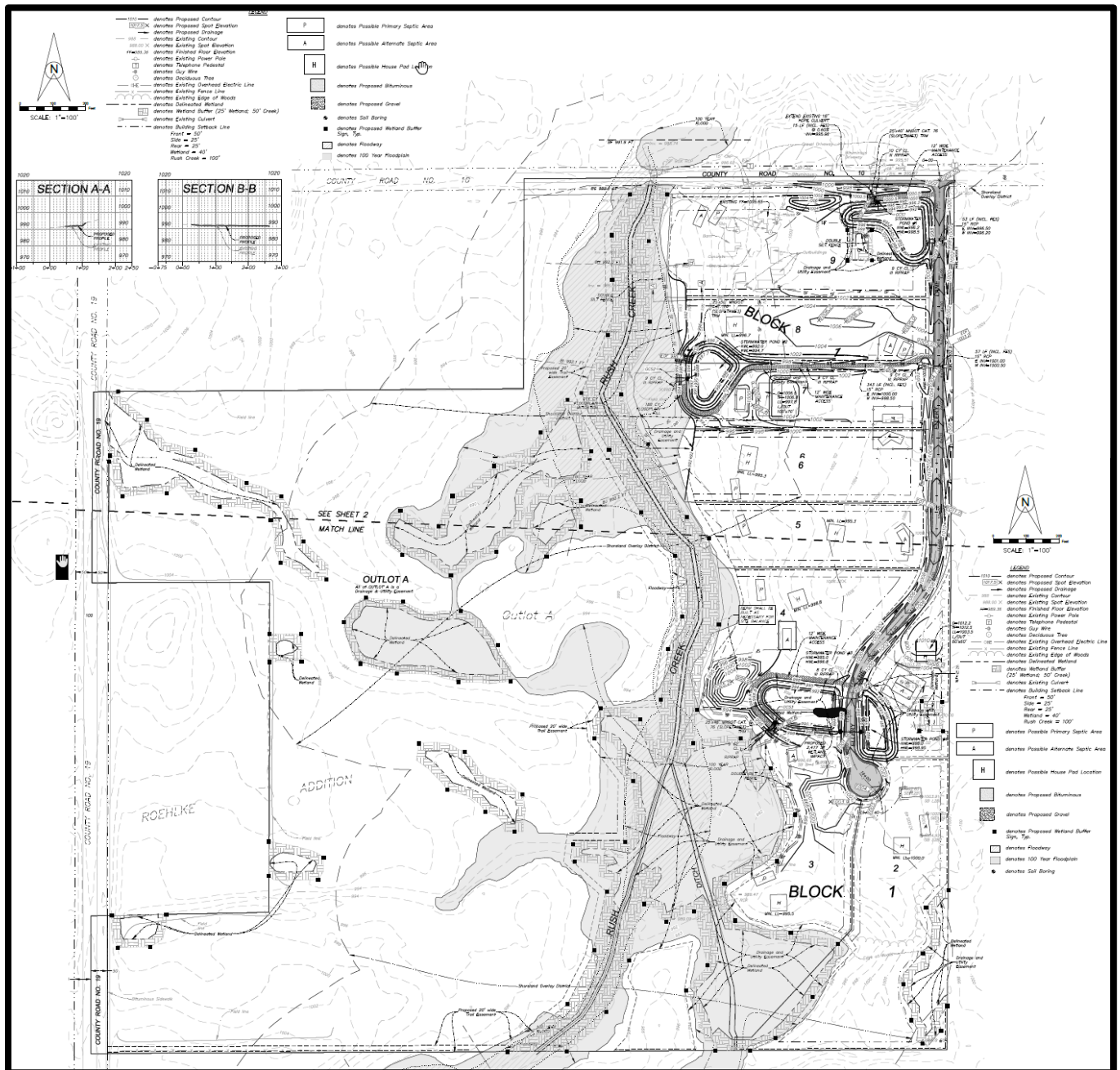
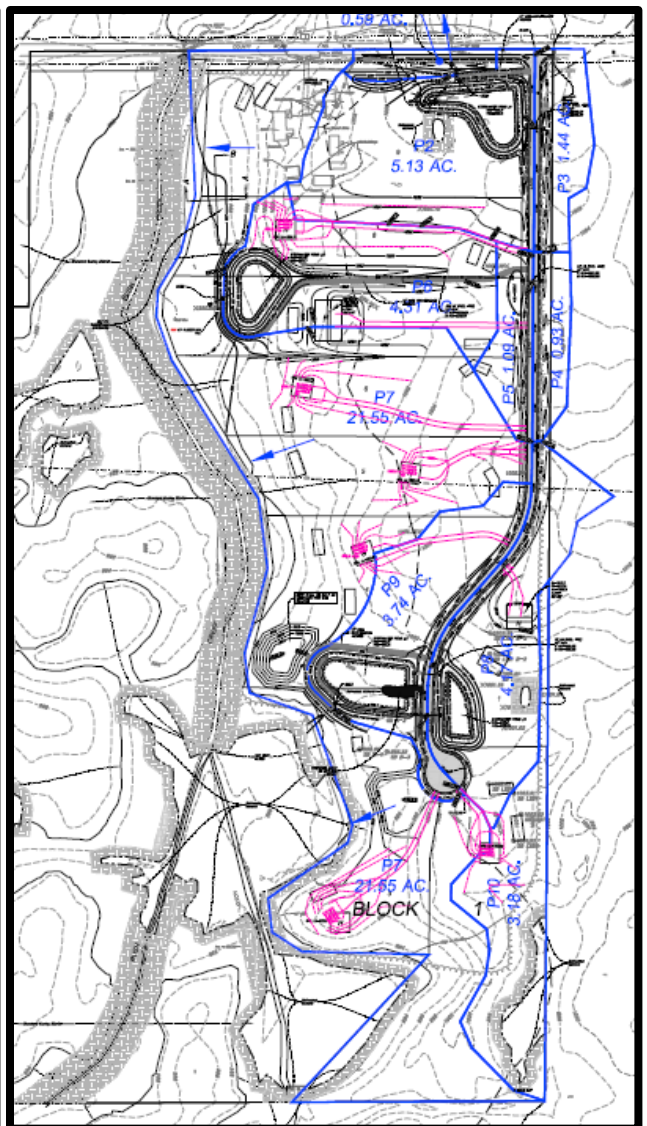


Figure 4 Pre- and post-development drainage maps



Pre-Development Drainage Map



Post-Development Drainage Map

elm creek Watershed Management Commission

ADMINISTRATIVE OFFICE
3235 Fernbrook Lane
Plymouth, MN 55447
PH: 763.553.1144
email: judie@jass.biz
www.elmcreekwatershed.org

City of Corcoran Water Treatment Plant Corcoran Project #2022-045

Project Overview:

Location: A 3.25-acre parcel on the east side of CR 116, ½ mile north of CR 30. Hennepin County PID 1211923220010.

Purpose: This project will consist of an access off County Road 116, the Water Treatment Plant, a municipal well, and a wet detention stormwater pond with a bioretention bench for stormwater management, rate control and water quality.

WMC Rules Triggered:

X	Rule D	Stormwater Management
X	Rule E	Erosion and Sediment Control
	Rule F	Floodplain Alterations
	Rule G	Wetland Alteration
	Rule H	Bridge and Culvert Crossings
	Rule I	Buffer Strips

Applicant:	City of Corcoran	Attention:	Kevin Mattson
Address:	8200 County Road 116 Corcoran, MN 55340	Phone:	763-420-2288
		Email:	kmattson@corcoranmn.gov
Agent:	City of Corcoran	Attention:	Kevin Mattson
Address:	8200 County Road 116 Corcoran, MN 55340	Phone:	763-420-2288
		Email:	kmattson@corcoranmn.gov

Exhibits:	Description	Date Received
Application	<input checked="" type="checkbox"/> Complete ECWMC Application	October 4, 2022
	<input checked="" type="checkbox"/> ECWMC Request for Review and Approval	October 4, 2022
	<input checked="" type="checkbox"/> City authorization: Corcoran	September 28, 2022
	<input checked="" type="checkbox"/> Review fee: \$3,375	October 4, 2022
	<input checked="" type="checkbox"/> Project Documents (site plans, reports, models, etc.)	October 4, 2022

Submittals

- Project Memo with combined stormwater management plans to Kevin Mattson, PW Director, from Kent Torve, City Engineer, Ben Otto, and Brendan Barth, Stantec EIT's, dated November 4, 2022.
 - Project Narrative
 - Location map with existing, and proposed condition figures
 - Existing and proposed P8 inputs/outputs
 - NRCS Web soil survey
 - Geotechnical Evaluation Report by Braun Intertec dated March 22, 2022

- f. Existing (10/4/22 print date) and Proposed (11/4/22 print date) HydroCAD Reports
 - g. Wetland Delineation Report by Wenck Associates, Matthew Summers, dated October 30, 2020.
 - h. Site and erosion control plans by Stantec dated September 30, 2022 with revision updates on November 4, 2022.
 - i. Sheet C001, Existing Conditions
 - ii. Sheet C002, Removals and Preconstruction Erosion Control Plan
 - iii. Sheet C101 & C101a, Two and Three Cell Option Site Plans
 - iv. Sheets C201 & C202, Post Erosion Control Plan and SWPPP Plan
 - v. Sheet C301, and C301a, Grading Plan
 - vi. Sheets C401 & C401a, Two and Three Cell Option Utility Plans
 - vii. Sheets C501 & C501a, Two and Three Cell Option Storm Sewer Plan
 - viii. Sheets C801 to C805, Details.
2. Stantec comments response email dated November 4, 2022.

Findings

General

1. A complete application was received October 4, 2022. The initial 60-day decision period per MN Statute 15.99 expires December 3, 2022.
2. The ultimate condition will include access off CR 116, the Water Treatment plant, a municipal well and a wet detention pond with a bioretention bench for stormwater management of rate, water quality and abstraction controls.
3. The proposed condition will disturb 3.25 acres and create 0.92 acres of new impervious area.
4. An onsite analysis along with a historic offsite aerial photo review of this site determined there were no wetlands on this parcel
5. There are no floodplains on-site. To the north of this project, there is a large FEMA Zone A wetland with a 100-year modeled elevation of 918.1 that does not encroach into this parcel.

Rule D – Stormwater Management

General

1. The project will disturb 3.25 acres and create 0.92 acres of new impervious areas.
2. Stormwater will be managed by one wet pond with a bioretention filter bench. Most of the farmstead to the south will be diverted around the project in a grass swale and then off site, thus, not affecting the water quality on this project.
3. Soil borings on this site are sandy lean clays to clayey sands (CL). These are not conducive for infiltration. An underdrain system with drain tile for abstraction volume controls is proposed on the safety bench around the wet pond.
4. To prevent sediment from clogging up the filter system in the NE basin, the water from the project will be directed into the wet pond before it will enter the filter bench. This provides adequate pre-treatment as is required.
5. The City of Corcoran will provide the operation and maintenance for these regional stormwater facilities.

Low Floor Elevations

1. The water treatment elevation for the low flow was noted at 930.0 in the stormwater management plan. Low floor of the new or adjacent structures will not be affected by this project and will meet

the Commission's requirements for a 2-foot separation to the adjacent HWL's and 1.0-foot freeboard for the emergency overflows.

- a. High water elevation of the new pond will be 924.0. HWL of the adjacent wetland will be approximately 923.5. The HWL of the adjacent floodplain is 918.2.

Rate Controls

1. Rate control will **meet** Commission requirements.
2. One wet detention pond with a biofiltration bench will be constructed to function as the stormwater facility to provide volume, water quality and rate controls for this project.
 - a. The pond will be designed as a wet detention area that will overflow into the perimeter filter bench. It will have 3.53 acres draining into it with 1.36 acres being impervious.
3. The applicant provided proposed HydroCAD model output for the existing and proposed 2-year, 10-year, and 100-year events at the main discharge points from this site.
 - a. The existing land use areas has 6.17 acres cropland, pasture, roads, and farmsteads draining to the north.
 - b. The proposed land use drainage areas will remain unchanged but will be split into two areas before leaving the project area.
 - i. New pond drainage. 3.5 acres of existing and proposed impervious areas along with new landscaped areas and existing farmstead and roadway areas will drain into the new pond.
 - ii. Drainage routed around this project. 2.65 acres from areas around this project will be diverted around the project. These areas will be untreated grass and existing impervious areas that will not affect water quality or flows from the site.

Table 1 Rate of Discharge Leaving Site

Direction	Condition	2-year (cfs)	10-year (cfs)	100-year (cfs)
North	Pre-Project (6.17 ac.)	6.45	18.41	41.35
	Proposed Condition (6.17 ac.)	6.15	15.83	28.28
	Change (0.00 ac.)	-0.30	-2.58	-13.07

Abstraction Controls

1. Abstraction controls **meet** Commission requirements.
2. Net, new impervious areas will be 0.92 acres requiring 3,662 cubic feet of abstraction.
 - a. Proposed abstraction volume in new pond with filter bench = 3,876 cubic feet.
3. The applicant proposes to use a filter bench with two tile underdrains to filter the water abstraction volume requirements.
4. Typical filtration bench details are consistent with MPCA and ECWMC requirements
 - a. Bench details include elevations and widths of the filter bench, soil material placement (clay soils vs filter materials) elevations and widths, and a filter media meeting MPCA filter mix C standards. Drain tile grades will be 0.3
5. Abstraction volumes draw down will occur in 37.5 hours based on a design rate of 1.0" per hour over the filter media footprint.

Water Quality

1. Water quality will meet Commission requirements.
2. The applicant used P8 model to simulate pollutant removal by the NURP pond and filtration bench.
3. NURP pond mean average depth is 3.6 feet.

Table 2 Water Quality Summary¹

	Annual Runoff Vol. (ac-ft)	Abstraction Vol. (cubic feet)	TP (lbs/year)	TSS (lbs/year)
Pre-Project	4.28	N/A	3.7	1,097
Proposed (w/o BMP's) ¹	5.85	3,674 (required)	5.2	1,589
Proposed (w/ BMP's) ¹	5.85	3,877 (provided)	3.0	542
Change¹	+1.57	+203 (excess)	-0.7	-555

Rule E – Erosion and Sediment Control

1. Plans **meet** Commission requirements for erosion and sediment control.
2. Erosion control measures provided on the plan set include.
 - a. temporary clean water diversion around the site
 - b. Temporary sediment pond
 - c. Temporary and permanent seeding and mulching specifications.
 - d. Rock construction entrance
 - e. Silt fence
 - f. Double silt fence adjacent to wetlands

Recommendation

Approval contingent upon.

- 1) Final escrow balance that is due or refunded is determined by the ECWMC administrator.



James C. Kujawa
Surface Water Solutions
Advisor to the Commission

November 10, 2022
Date

Attachments

- | | |
|----------|------------------------|
| Figure 1 | Project Location |
| Figure 2 | Existing Drainage Map |
| Figure 3 | Proposed Drainage Plan |
| Figure 4 | Grading Plan |

Figure 1 Project Location

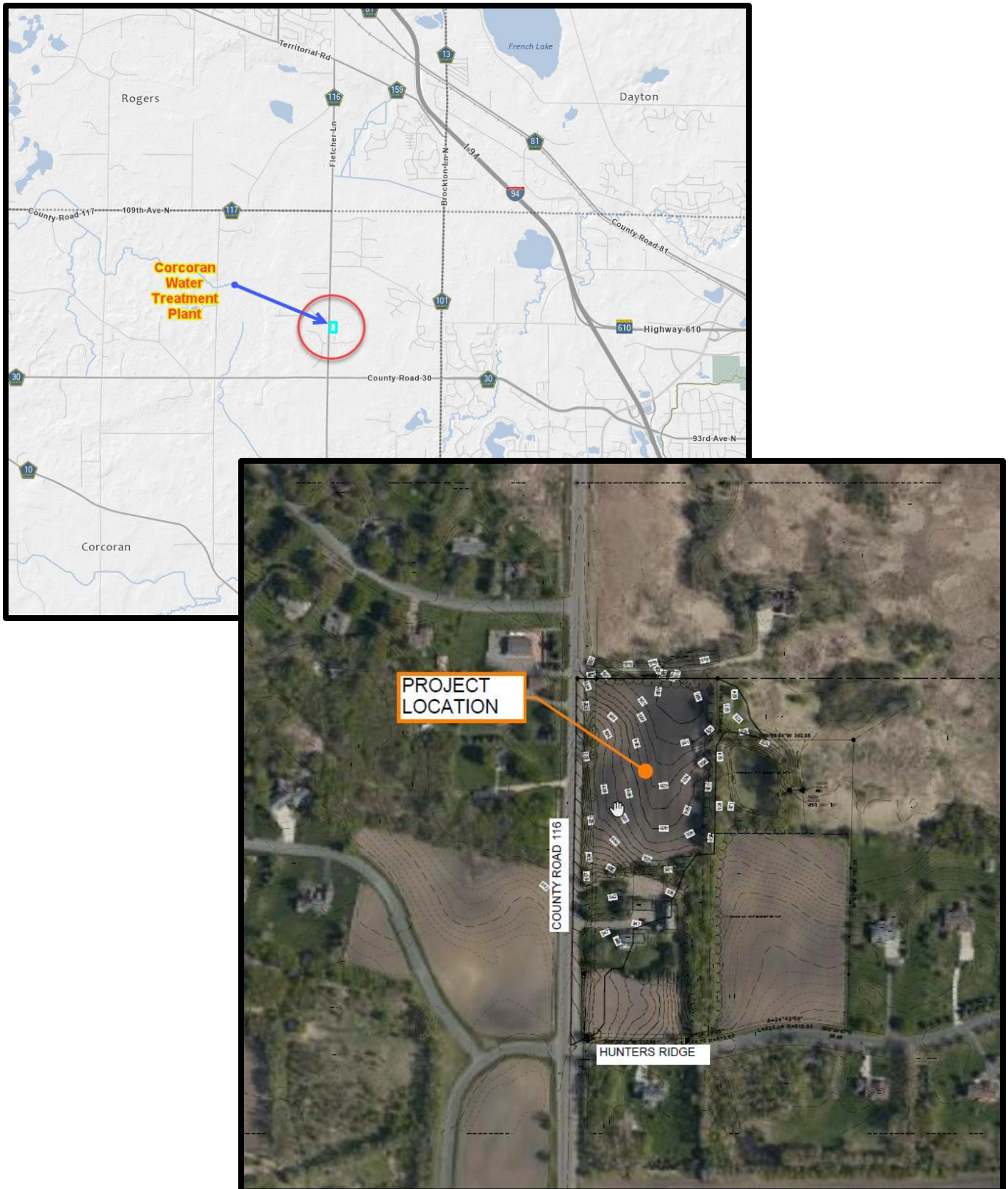


Figure 2 Existing Drainage Map

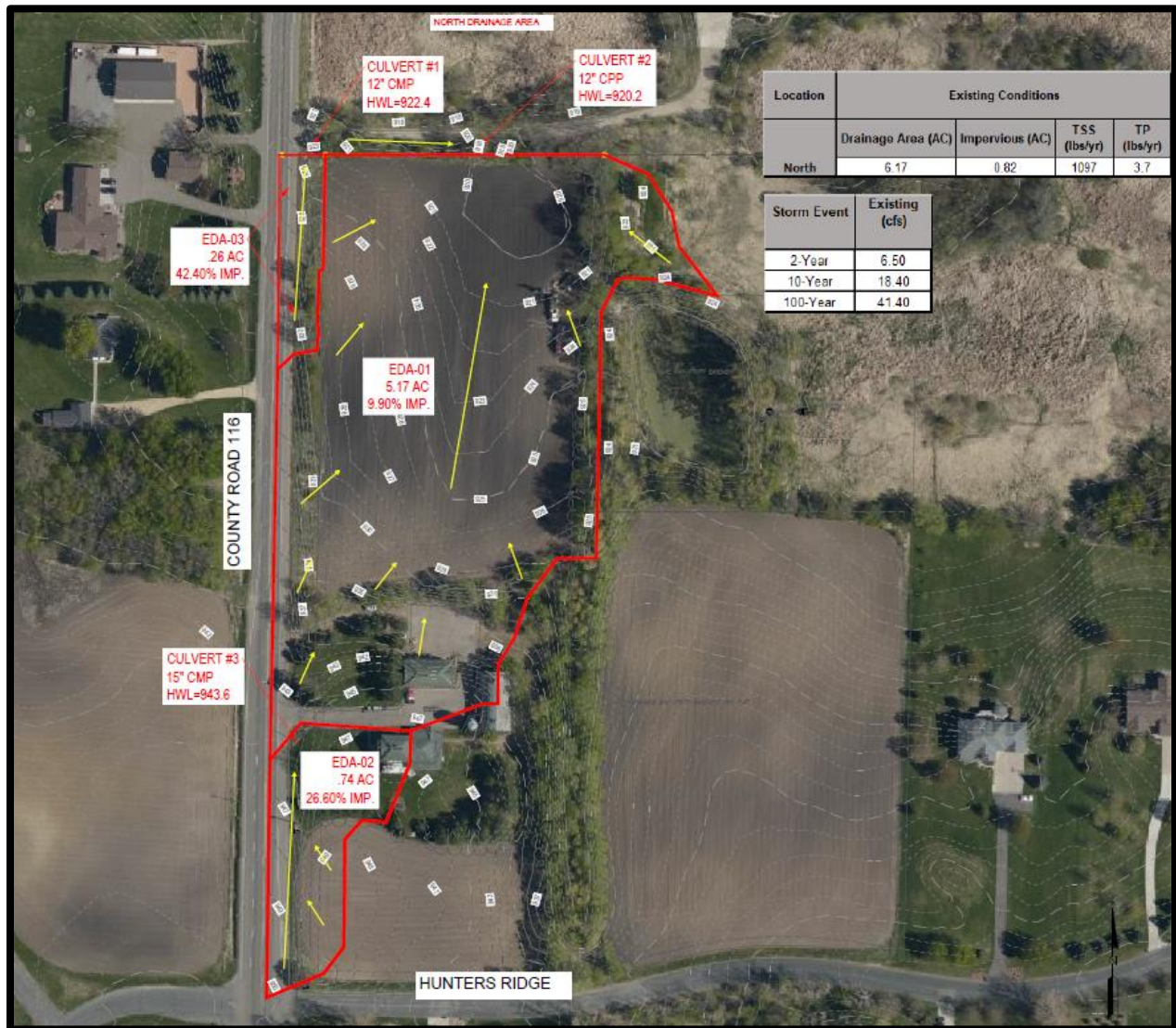


Figure 3 Proposed Drainage Plan

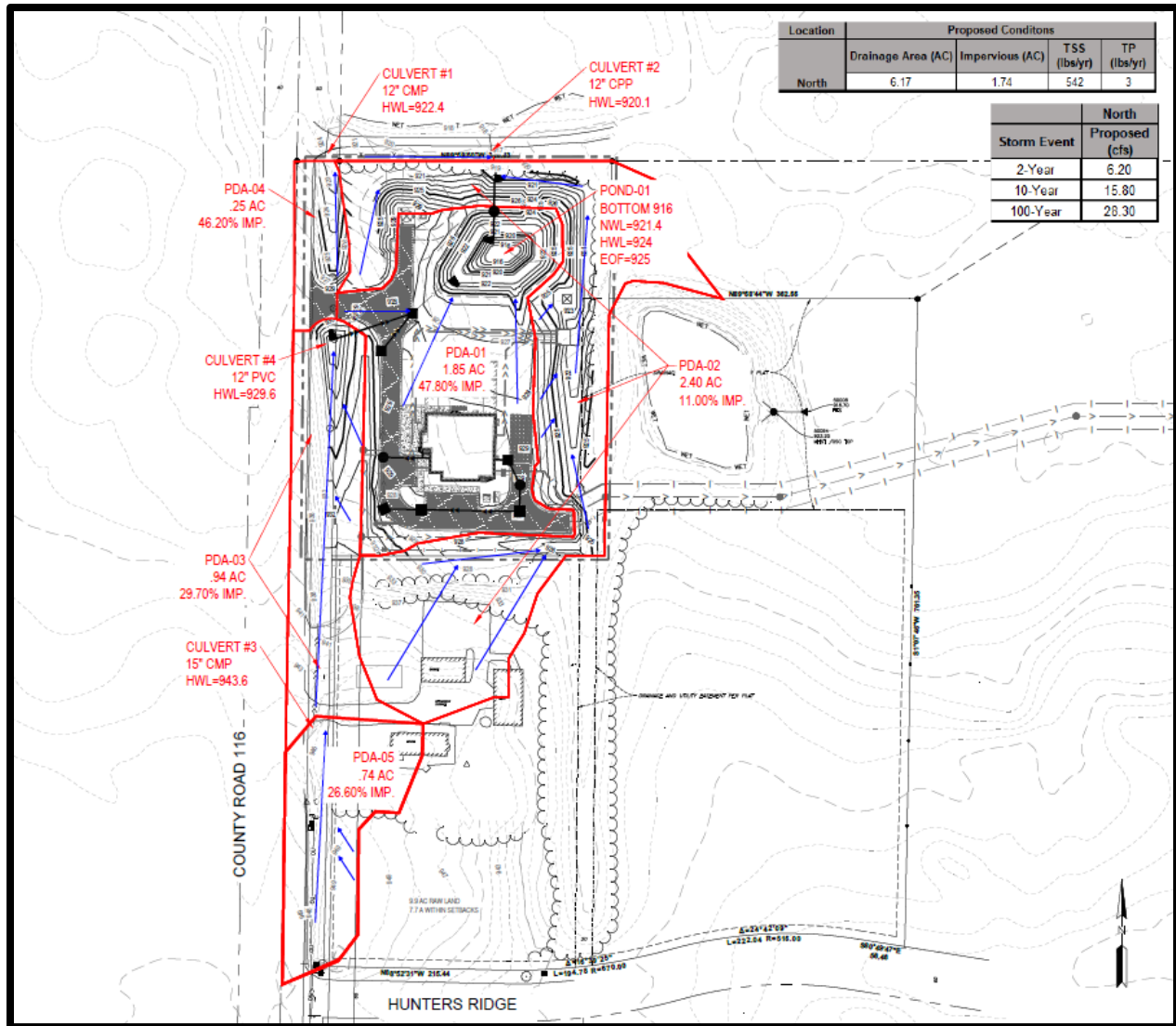
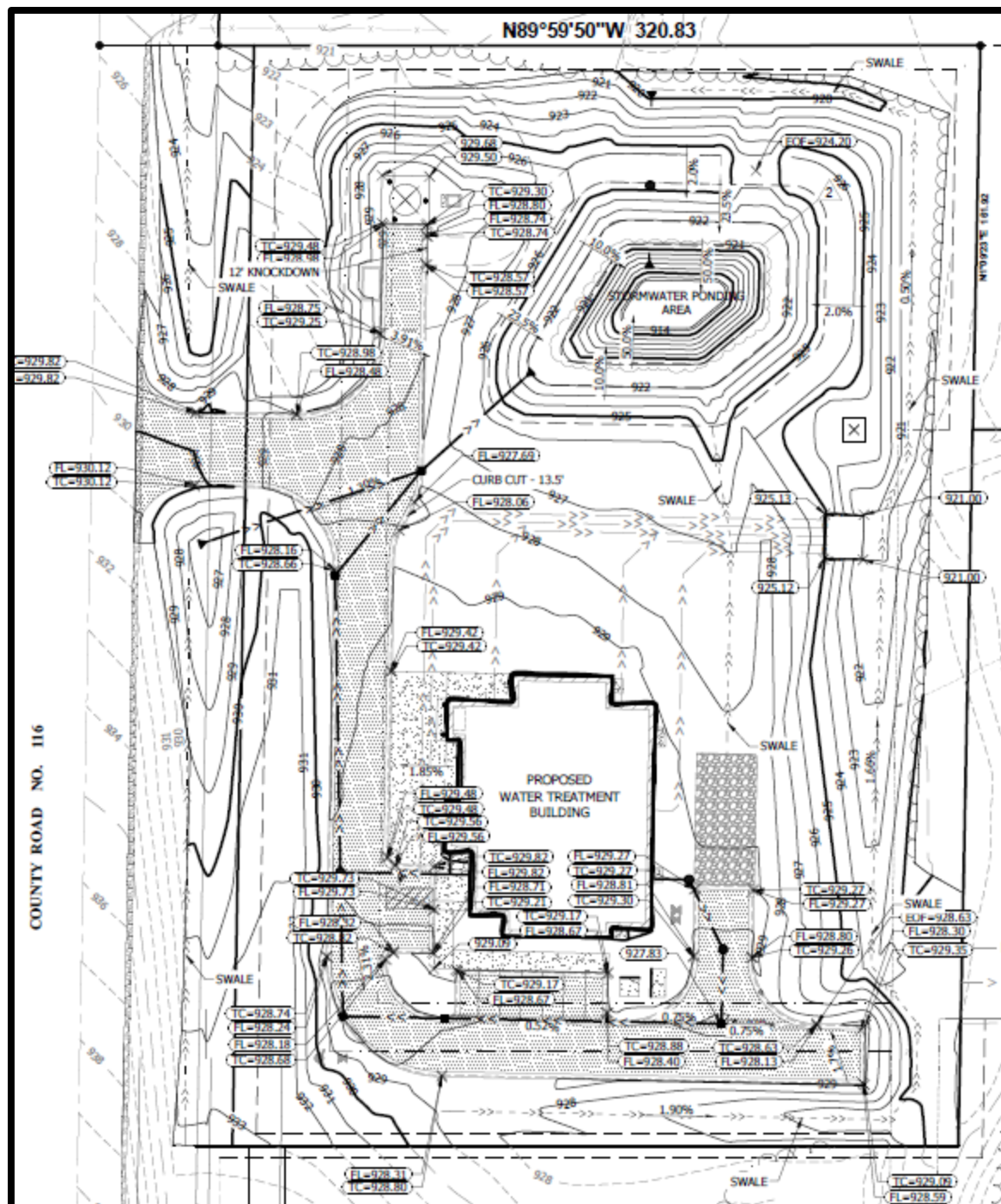


Figure 4 Grading Plan



elm creek Watershed Management Commission

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STAFF REPORT December 7, 2022

a. 2017-050W Ernie Mayers Wetland/floodplain violation, Corcoran. The City of Corcoran contacted the Commission in 2017 concerning drainage complaints on Mayers' property. Technical Evaluation Panels (TEPs) were held to assess the nature and extent of the violations and a restoration order was issued to Mayers. In 2018, an appeal of the restoration order was received by the Board of Water and Soil Resources. BWSR placed an order of abeyance (stay) on the appeal looking for a resolution between the LGU and Mayers. The parties came to an agreement to resolve the violation in 2021. The agreement was signed by BWSR, Corcoran and Mayers. Commission Staff have not been provided with a copy of the agreement to date and the agreement does not resolve the Commission's floodplain fill issue from the wetland work. Staff sent correspondence to that effect to Mayers on February 1, 2022, requesting an application and site plan. The email chain of correspondence to BWSR was discussed at the October Commission meeting. They requested additional follow-up information from Staff and Corcoran. Because of the change in wetland advisors and the busy WCA season that is occurring at present, Corcoran requested this item to continue later this fall, most likely the latter part of November or early December. *No new information has been provided in the past month. Staff will follow up with Corcoran to plan this meeting for later in December.*

b. 2021-025 Hackamore Road Reconstruction, Corcoran/Medina. The cities of Corcoran and Medina plan to reconstruct 1.3 miles of Hackamore Road from just west of CR 116 to CR 101. The project will add 4.4 acres of new impervious surface by widening the roadway and adding turn lanes, pedestrian facilities, and utility improvements. To meet the Commission's stormwater requirements, the project will largely rely on adjacent developments (existing and proposed) to incorporate BMPs to provide rate control, volume control, and water quality control. Staff reviewed the early application and provided comments to the applicant. Staff has reviewed various recent submittals for an interim reconstruction and stormwater plan and has worked with the applicant to determine interim impacts and how the impacts will be mitigated in the future. *A finding of fact memo dated November 2, 2022, describing the interim impacts and how the applicant will meet the Commission's rules when future developments are constructed, was provided at the Commission's November 2022 meeting where, the Commission decided to table the decision until the December meeting so additional background could be presented. WSB will present additional background information and amend certain aspects of the November 2 Findings.*

c. 2021-029 TriCare Grocery, Maple Grove. The project will construct a grocery store, retail, and associated parking on approximately 2.5 acres of the 62.7-acre TriCare parcel, located just north of County Road 30 and southwest of I-94. The project was reviewed for Rules D and E. Staff issued a denial in 2016 when the regional stormwater BMP project was constructed. On November 10, 2021, the Commission approved this project contingent upon receipt of the escrow balance and the City reconstructing the basin to meet Commission rules and standards per Staff findings dated November 1, 2021.

d. 2021-031 Cook Lake Edgewater, Corcoran/Maple Grove. The application is for a 28.4-acre development just north of Bass Lake Road, on both sides of the Corcoran-Maple Grove municipal boundary. The development includes 60 single-family homes in Maple Grove and 12 single family homes and senior

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care and memory centers in Corcoran. The project was reviewed for Rules D, E, G, and I and approved at the November 2021 meeting with four contingencies as outlined in Staff's November 10, 2021, findings. *This project will be removed from the report upon receipt of the escrow balance.*

e. 2021-034 BAPS Temple, Medina. This project includes construction of a Hindu Temple, dining hall, gymnasium, parking lot and a permanent residency for the temple's priest on a 19.7-acre parcel at 1400 Hamel Road. The parcel currently serves as a farmstead with a farmhouse and barns. The project was reviewed for Rules D, E, G, and I and approved at the October 2021 meeting contingent on three Conditions outlined in Staff's findings dated October 4, 2021: (1) receipt of the escrow balance, (2) an operation and maintenance agreement with the City, and (3) a geotechnical report provided to the Commission. An update from the applicant's engineer on July 21, 2022, stated, "The client is holding on[to] construction documents temporarily; once they give us the go-ahead we will work to finalize the items below, likely by this fall [2022]." On November 3, 2022, Dusty Finke informed the Commission that the applicant has amended the site layout a bit and anticipates construction in 2023.

f. 2021-037 Marsh Pointe, Medina. This project (also called the Arrowhead Drive project) includes construction of 38 single-family homes on the east side of Arrowhead Drive, west of Lake Medina. The development will replace four existing homes. The project was reviewed for Rules D, E, F, G, and I and approved at the December 2021 meeting conditioned on receipt of four items listed in Staff's revised December 8, 2021, findings. (1) the escrow balance, (2) a Stormwater Maintenance Agreement, including irrigation system, being entered into with the City, (3) a wetland replacement plan approved by the LGU and the TEP, and (4) the buffer plan contingent upon approval of the wetland replacement plan. The Stormwater Agreement was received on July 25, 2022. *This project will be removed from the report upon receipt of the escrow balance.*

g. 2021-039 I94 Logistics Center, Rogers. This is a 30.90-acre site located between I-94 and County Road 13 (Brockton Lane). A proposed warehouse, parking lot, and loading dock will create 12.5 acres of new impervious on the currently undeveloped site. Approximately 12.25 acres of the parcel is in a conservation easement to protect woodlands and wetlands and cannot be developed. The project was reviewed for Rules D, E, G, and I and approved at the October 2021 meeting with three conditions as outlined in Staff's October 6, 2021, findings. *This project will be removed from the report upon receipt of the escrow balance, the only remaining condition.*

h. 2021-043 Northwood Community Church, Maple Grove. The existing project site is owned by Northwoods Community Church and functions as church offices. The proposed project demolishes those office buildings and constructs a church on the 10.56-acre parcel. In Staff's findings dated January 19, 2022, the project was reviewed for Rules D, E, G, and I and approved at the February 2022 meeting contingent on receipt of the escrow fee balance and a Stormwater Maintenance Agreement between the applicant and the City. The applicant has submitted the signed Agreement. *This project will be removed from the report upon receipt of the escrow balance.*

i. 2021-044 Balsam II Apartments, Dayton. The Commission approved this project in January 2022. The final infiltration testing of the stormwater basin and receipt of the escrow balance are the only conditions outstanding from Staff's findings dated December 22, 2021. As of November 2, 2022, the City and the Commission are awaiting the test results so that the outstanding escrow balance can be invoiced and this project can be closed.

j. 2021-047 CR 10 Box Culvert Replacement, Corcoran. Hennepin County is replacing an existing 6'x10" box culvert with a 6'x6", 6'x4' and a 36" CMP pipe to replicate the existing flows of Hennepin County

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Ditch #16 under CR 10. The project was reviewed for Rules D, E, F, G, and H and approved at the February 2022 meeting contingent on receipt of the escrow fee balance and an approved wetland alterations plan as outlined in Staff's findings dated January 13, 2022. The applicant has provided an approved wetland alteration plan. *This project will be removed from the report upon receipt of the escrow balance.*

k. 2021-050 Evanswood, Maple Grove. This proposed development will construct 227 single-family and 138 townhomes in the northwest corner of the City, disturbing 108.5-acres, and creating 45.8-acres of impervious surfaces, 41.4-acres of which is net, new impervious surfaces. The project was reviewed for Rules D, E, F, G, and I. Staff findings dated March 2, 2022, were approved at the March meeting with five conditions. Two conditions remain outstanding: (1) receipt of the final escrow balance, and (2) receipt of a Stormwater Maintenance Agreement that is acceptable to the City and the Commission. The City is working on the agreement at this time.

l. 2021-051 Fields of Nanterre, Plymouth This project is the proposed maintenance of an existing drainage swale to remove accumulated sediment and cattails and does not create any new impervious surfaces. The project triggers Rules E and G. In findings dated November 22, 2021, Staff administratively approved the project contingent on (1) final escrow balance being reconciled and (2) an approved wetland no-loss or alternate approved wetland decision type being submitted to the Commission. Staff findings were approved by the Commission at their December 8, 2021, meeting. The WCA Notice of Decision-No Loss, was received in the Commission office on July 21, 2022. *This project will be removed from the report upon receipt of the escrow balance.*

m. 2021-052 Norbella Senior Living, Rogers. This project will construct a 40-unit senior living facility on South Diamond Lake Road. The proposed disturbance is 2.4-acres with net, new impervious surfaces of 1.4-acres. The project was reviewed for Rules D and E. Staff findings dated February 14, 2022, were approved by the Commission at their March 9, 2022, meeting with three conditions: (1) final escrow balance being reconciled, (2) a stormwater maintenance agreement being put in place between the owner and the city with terms acceptable to the Commission, and (3) a detail being added to the construction drawings showing the inspection ports being installed along the isolator row of the underground filtration system.

n. 2021-053 Towns at Fox Creek, Rogers. This proposed development will construct 150 multi-family townhomes between Industrial Boulevard and Hynes Road, disturbing 15.4-acres with 7.46-acres of impervious, 5.88-acres of which is net, new impervious surfaces. The project was reviewed for Rules D, E, and G and approved at the Commission's May meeting with three conditions: (1) final escrow determination, (2) a stormwater maintenance agreement acceptable to the City and the Commission within 90 days after the plat is recorded for all stormwater BMPs on the site that will not be operated and maintained by the City, and (3) WCA approval of the wetland fill and decision of outcome from the TEP, as outlined in Staff findings dated May 2, 2022. *This project will be removed from the report upon receipt of the escrow balance.*

o. 2021-055 Morningside Estates 6th Addition, Champlin. This proposed development will construct seven single-family homes adjacent to the recently reviewed Oaks at Bauer Farm (2021-012) on the north side of French Lake Road, disturbing 2.8-acres and creating 0.8-acres of net, new impervious surfaces. The project was reviewed for Rules D and E and received approval at the Commission's April meeting contingent on final escrow determination and O&M agreements with both the City and with the Oaks at Bauer Farms HOA with terms acceptable to the Commission being filed per Staff findings dated April 5, 2022. *Heather Nelson reported on November 2, 2022, that both ponds will be owned and maintained by the City of Champlin so no maintenance agreement is required. The escrow balance will be determined and refunded/invoiced accordingly, and this project removed from the report.*

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p. 2022-002 Summerwell Townhomes, Maple Grove. This project is for construction of a 26-acre site into a residential townhome community. It will create 13-acres of impervious, all of which is net, new impervious. The project triggers Rules D, E, G, and I and was approved at the Commission's June meeting with three conditions: (1) determination of escrow fee balance; (2) receipt of an Operations and Maintenance Plan approved by the City, and (3) provision of a wetland monitoring plan with four conditions. These conditions are found in Staff findings dated June 2, 2022. The monitoring plan was received in the Commission office on November 3, 2022. *The escrow balance will be determined and refunded/invoiced accordingly, and this project removed from the report.*

q. 2022-003 Fox Briar Ridge East, Maple Grove. The proposed project is for construction of eight townhomes and one single family home with associated sidewalks, roads, and stormwater infrastructure. The project will create 1.81-acres of impervious, 1.68-acres of which is net, new impervious. The project triggers Rules D and E. This project received approval at the Commission's April meeting with two conditions as cited in Staff findings dated April 4, 2022: final escrow determination and provision of a stormwater maintenance agreement acceptable to the City and the Commission within 90 days after the plat is recorded for all stormwater BMPs on the site that will not be operated and maintained by the City. *The escrow balance will be determined and refunded/invoiced accordingly, and this project removed from the report.*

r. 2022-006 Hamel Townhomes, Medina. The proposed project is for construction of 30 townhomes with associated sidewalks, roads, and stormwater infrastructure. The project will create 1.76-acres of impervious, 1.54-acres of which is net, new impervious. The project triggers Rules D and E. The applicant provided the latest resubmittals on July 11, 2022. In their findings dated August 2, 2022, Staff recommends approval with two conditions: receipt of an Operations and Maintenance Agreement acceptable to the City and final escrow determination. The project was approved at the Commission's August meeting. This project will be removed from the report upon receipt of the escrow balance.

s 2022-008 Bechtold Farms, Corcoran. This is two parcels that total 117.6 acres proposed to be subdivided into 12 large, single-family lots. The project will create 6.3-acres impervious areas, 4.5-acres which are net, new impervious. The project triggers Rules D, E, F, G, and I. The project was approved at the April 2022 Commission meeting contingent upon the following conditions: (1) Final escrow determination; (2) Preservation areas meeting the following criteria:(a) A long-term vegetation management plan describing methods of maintaining the conservation area in a natural vegetative condition must be submitted with the stormwater management plans. (i) An analysis of the conservation easement areas should be provided by an arborist or similar knowledgeable expert and include existing quality and quantity of native and non-native species. A plan to preserve, restore and protect native vegetation and control invasive species is needed and must be incorporated into the conservation easement. Newly restored preservation areas must have a minimum establishment of >70% native species and <5% invasive species; (b) A recordable conservation easement acceptable to the City and Commission for protecting the excess preservation areas must be provided and include the long-term management plan as part of the document. (c) Because the City will be the easement holder, it must agree with the preservation area and its management, restrictions, and preservation plan; (d) Conservation easement areas must have appropriate monumentation per wetland buffer spacing requirements; (3) An operation and maintenance agreement implementing those conditions that bind current and future owners of the project shall be recorded on the property; (4) Prior to any wetland impacts a wetland replacement plan must be approved by the City of Corcoran (LGU); (5) The buffer vegetation must meet Commission requirements for native vegetation establishment and maintenance. Additionally, the Commission added an advisory recommendation that the City/applicant follow the Commission's Model Livestock Policy.

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The vegetation management plan for the wetland buffers and preservation areas was approved by Commission staff on May 3, 2022. The City is working on the conservation easements and O & M agreements. Staff provided the Commission's livestock guidelines to the applicant and the City. Staff's April 13, 2022 (updated) recommendations were approved at the Commission's April 13, 2022, meeting.

t. 2022-009 Dunkirk Lane Development, Plymouth. This project is located in the southwest quadrant of the intersection of Dunkirk Lane and 59th Avenue N. The proposed development includes construction of 21 single-family home units and associated streets, utilities, and stormwater management basin. The Commission review covered Rules D and E and the project received approval at the April meeting per three contingencies outlined in Staff findings dated April 4, 2022: (a) final escrow determination; (b) an updated detail for OCS 105 (Sheet 8 of 21) showing the 2'-wide by 1'-deep notch in the weir modeled in HydroCAD; and (c) Elimination of the redundant 5-foot weir in the HydroCAD model for the pond outlet. It is understood that removal of this weir will not affect hydraulics or results for the 2-, 10- and 100-year storm HydroCAD modeling results but should be updated to be consistent with what is being constructed.

u. 2022-011 Arrowhead Drive Turn Lane Expansion, Medina. This project consists of a linear project for the City of Medina and a private site expansion for Open Systems International (OSI). The City will be constructing a stormwater BMP on the OSI site to accommodate for rates and water quality from two projects: (1) Arrowhead Drive Turn Lane Expansion and the future (2) Open Systems International, Inc. (OSI) Expansion. The projects are being reviewed as a planned development being treated by the proposed basin. Updated plans were received April 1, 2022, and supplemental updates were received on April 14, 2022. This project received approval at the Commission's May Meeting pending three conditions found in Staff findings dated May 2, 2022: (1) final escrow determination, (2) payment of the additional floodplain alteration review fee, and (3) plans for the OSI, Inc. parking expansion being developed. A Commission application for erosion control (Rule E) will be necessary, assuming the stormwater management is consistent with this approval. An erosion control and grading plan for the OSI, Inc. site should include no more than 1.56 acres of impervious surface and all impervious surfaces shall be directed to the proposed stormwater BMP.

v. 2022-012 Graco Building 2, Dayton. Graco purchased this property that was the Liberty Industrial Center, approved by the Commission under project 2015-011. Graco is proposing to replat this site and construct a 515,400 SF distribution center. Additionally, mass grading on the remaining portion of Outlot H, and Outlots A and B will occur to accommodate two future buildings, regional ponding, and the construction of French Lake Road West. In total, 74 acres will be graded. The Commission's review covers Rules D and E on the 74 acres being graded for this project. The site plan proposes to encroach into an existing conservation and preservation easement approved by the Commission for project 2015-011. At the July 2022 meeting the Commission reviewed this project and approved site plans for the area west of French Lake Road, contingent upon Staff recommendations found in their findings dated July 6, 2022: 1) final wetland buffer monumentation meeting the Commission's requirements, 2) an operation and maintenance agreement approved by the City that implement conditions that bind current and future owners of the project shall be recorded on this property and 3) the escrow balance must be reconciled. The areas east of French Lake Road were tabled subject to the applicant providing a 60-day extension to MN Statute 15.99 deadline to September 21, 2022. This extension was granted by the applicant. As of this update, no new information has been received for the areas east of French Lake Road. The applicant extended the decision deadline (per 15.99) to November 20, 2022.

Plans for the West French Lake Road project area were submitted on November 23, 2022. On December 1 Staff responded to the applicant requesting additional information. No new information has been received since that time. . The applicant extended the decision deadline (per 15.99) to January 19, 2023.

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w. 2022-013 Dayton Industrial Site, Dayton. This project is a 25.04 acre site located on the north side of CR 81 between Brockton Lane and Dayton Parkway. The applicant is proposing to construct a 334,750 SF industrial building with associated parking for passenger vehicles and tractor trailers. Construction of an extension of Troy Lane Extension from its current cul-de-sac terminus continuing eastward to a future intersection with West French Lake Road is also planned, but will be permitted separately by the City. The proposed project will create 17 acres of new impervious, disturbing 30 acres. The area of the two existing parcels is 25.04 with 0.44 acres of existing impervious. Staff received the signed application March 21, 2022. Staff completed an initial review and requested additional documents from the applicant. They were received March 29, 2022. At their May 11, 2022 meeting the Commission approved this project with eight conditions per Staff's findings dated May 2, 2022.

x. 2022-014 Aster Mill, Rogers. This project is a 79.4-acre development bound by 129th Avenue North to the north, single family homes to the east and west, and a mix of woods and farmland to the south. The applicant is proposing 169 single-family home lots, 77 townhome lots, and private and public roads. The Commission review covers Rules D, E, G and I. A complete plan was received March 25, 2022, and initial comments were sent to the applicant on April 14, 2022. Updated plans and resubmittals were received April 28, 2022. The project was approved per recommendations found in Staff findings dated May 27, 2022, at the Commission's June meeting: (1) determination of the escrow fee balance; and (2) receipt of an Operations and Maintenance Plan acceptable to the City and the Commission within 90 days of the plat being recorded for all stormwater BMPs on the site that will not be operated and maintained by the City. The applicant has provided an operation and maintenance plan. This project will be removed from the report upon receipt of the escrow balance.

y. 2022-015 County Road 47 Phase 1 Reconstruction., Plymouth. Hennepin County and the City of Plymouth are proposing to reconstruct approximately four miles of County Road 47 over the next few years. Phase 1 of the project extends from CSAH 101 to approximately 300 feet east of Lawndale Lane. Improvements include reconstruction of CR 47 into a two-lane urban roadway, new trails, utility updates, and stormwater management BMPs. Commission review covered Rules D, E, and H. This project was approved at the Commission's June meeting pending receipt of the escrow fee balance per findings dated June 1, 2022.

z. 2022-016 Rogers Activity Center. Redevelopment and additions to the Rogers Municipal Complex are proposed at 14160 James Road. The project includes site clearing, demolition of the existing asphalt pavement, and grading for a future turf and ice rink facility. The Commission review covered Rules D, E, G and I. At their May 11, 2022 meeting the Commission approved Staff's findings dated May 2, 2022, with five conditions.

aa. 2022-017 City Center Drive, Corcoran. This site is approximately 30-acres, adjacent to and east of CR 116. Corcoran is proposing to provide infrastructure and a regional stormwater system for the ultimate development of this area. This plan proposes to grade and construct City Center Drive, 79th Place, CR 116 turn Lanes, the proposed St. Therese Senior housing facility and a linear city park and trail along CR 116. At the June meeting the Commission approved this project with four conditions 1) Wetland impacts and replacement plans must be approved by the LGU. 2) Final erosion and sediment control plans must be submitted that meet the Commissions requirements. 3) Post construction drawdown rates of >3" per hour must be verified on the filter bench to the NE regional pond and 4) Final escrow balance determination, as cited in Staff findings dated May 31, 2022.

ab. 2022-018 Big Woods, Rogers. This site is approximately 72.1 acres, with 61.0 acres being disturbed. The project will create 207 residential lots and include 23.6 acres of impervious surface after development. The Commission review covers Rules D, E, and I. Per Staff findings dated June 1, 2022, the Commission ap-

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proved this project at the June meeting conditioned on: (1) reconciliation of the escrow fee balance; (2) receipt of a wetland alteration plan approved by the WCA LGU [the City]; and (3) approval of an operations and maintenance plan approved by the City.

ac. 2022-019 Grass Lake Preserve, Dayton. This is two parcels that are 38.45 acres in size, located east of Brockton Road (CR 13) approximately halfway between North and South Diamond Lake Roads. The applicant is proposing 120 twin homes and 6 single family detached homes with corresponding utilities, and streets. Based on Staff findings dated June 2, 2022, the Commission approved this project at their June 2022 meeting with the following conditions. (1) reconciliation of the escrow fee balance; (2) final SWPPP plan submittal prior to grading; (3) receipt of a wetland alteration plan approved by the WCA LGU [the City] and MNDNR {if applicable}; (4) additional sump manholes at CBMHs 205 and 210; and (5) City approval of a long-term operation and maintenance plan on the stormwater facilities. Items 2, 4 and 5 are adequate. *The WCA wetland replacement plan was approved in November by the LGU. The only item remaining is the escrow balance.*

ad. 2022-020 Skye Meadows Extension, Rogers. This is a development on a 45.3 acre parcel which will disturb 44.1 acres and result in 14.1 acres of impervious surface. The impervious surface includes 129 lots and associated streets. The Commission review covered Rules D, E, G, and I. The project was approved at the Commission's June meeting with the three conditions cited in Staff's findings dated June 1, 2022: (1) final escrow balance reconciliation; (2) approved wetland mitigation plan for the proposed disturbance of Wetlands A and B; and (3) an operation and maintenance plan approved by the City.

ae. 2022-022 Cook Lake Highlands, Corcoran/Maple Grove. This is a 53.58-acre development comprised of four existing parcels in both cities. The western parcel in Corcoran totaling 27.3 acres is under consideration for this project review. The adjacent Cook Lake Edgewater, 2021-031 was previously approved in October 2021. The site is located along the north side of CR 10 (Bass Lake Road) just west of the CR 101 crossing and southwest of Cook Lake. The applicant is proposing to create a detached residential rental community with 59 units creating 10.4 acres of new impervious areas in Maple Grove, and 8.1 acres of new impervious in Corcoran (a total of 18.5 acres). The applicant reports incorporation of some impervious that is planned for the future acres of new impervious areas in Maple Grove, 8.1 acres of new impervious in Corcoran (totaling 18.5 acres) as well as for the future expansion of CR 10. This phase of the project will disturb 18.6 acres. A stormwater pond with bio-filtration bench and a smaller filtration basin are proposed for the Corcoran portion of the site. At the June meeting Staff recommended approval of this project with six conditions. The Commission granted approval of the six conditions cited in Staff findings dated June 1, 2022.

af. 2022-023 Asguard, Rogers. The proposed redevelopment will consist of a new residential and commercial building containing 71 residential units, retail area with underground parking, a restaurant, and a fuel facility. The project will be located at the intersection of Rogers Drive and 144th Avenue North on a 16.2-acre parcel and will result in 5.52 acres of impervious surface. The Commission review covered Rules D and E. At the July, 2022 meeting the Commission approved Staff findings dated June 27, 2022, with three conditions: (1) fee escrow reconciliation, (2) receipt of an Operations and Maintenance Plan acceptable to the City and the Commission within 90 days of the plat being recorded for all stormwater BMPs on the site that will not be operated and maintained by the City; and (3) provision of a detail for the bio infiltration media and for the southeast bio infiltration basin to confirm 2-foot separation from groundwater table for SE bio infiltration basin or a detail showing an impermeable liner. The applicant has satisfied conditions 2 and 3. This project will be removed from the report upon receipt of the escrow balance.

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ag. 2022-024 Bridge No. 27J70 on 101st Avenue, Maple Grove. The City intends to replace the existing double timber box culvert on the South Fork of Rush Creek within the previously permitted Evanswood project (#2021-050). The applicant indicates the existing timber box culvert is not structurally sound. The proposed replacement is a single 9x16' reinforced concrete pipe (RCP) box culvert as the final condition with one foot of inside substrate to support habitat connectivity. Delays to sourcing the RCP Box culvert require an interim crossing to support construction in the area. This permit also covers the interim installation. The project disturbs 1.33 acres with no existing impervious and adds 0.014 acres of new impervious. The interim crossing will consist of three buried round 48" CMPs and a temporary roadway as overflow. The planned installation of the temporary crossing is scheduled for June 2022; the contractor estimates the final replacement should be installed in October 2022. Use of the interim crossing will be limited to contractors prior to the final install of the 16'x9' box culvert. At their June 2022 meeting the Commissioners approved Staff's recommendations of approval in their findings dated May 27, 2022, and revised May 31, 2022, (1) reconciliation of escrow fees; (2) applicant must meet all DNR Requirements for both interim and final proposed condition and share the selected measure for dewatering and diversion with Commission staff; (3) bring all culvert inverts and outlets and flow line elevations on drawings into alignment with ONE set of numbers which align with the model prior to construction, submit revised drawings to the DNR and the Commission prior to construction; and (4) the applicant must meet all City requirements.

ah. 2022-025 Harvest View, Rogers. A parcel that is 47.0-acres that is bounded to the north by existing single family development, to the east by the single family development Sky Meadows (Phase 2), to the south by Territorial Road (C.S.A.H. No. 116), and to the west by the single family development Big Woods in Rogers. Application was received on May 9, 2022, and the most recent resubmittals were received on June 30. Staff findings dated September 6, 2022, were presented at the Commission's September meeting with a recommendation of approval conditioned on receipt of the escrow fee balance.

ai. 2022-026 Rogers Archway Building, Rogers. The project site is located between 129th Avenue North and Territorial Road, west of Main Street and east of Elm Parkway. The applicant reconfigured their construction activities in order to maintain the volume of the existing pond, thereby not triggering the Commission's rules. Upon receipt of as-built plans confirming the reconfiguration, this project will be closed out pending reconciliation of the escrow fee.

aj. 2022-027 Edison at Maple Grove Apartments, Maple Grove. The project is located on Garland Avenue near the intersection of I-94 and Maple Grove Parkway. The project consists of development of a couple of multi-story apartment buildings along with amenities and associated streets and utility infrastructure. The application was received May 16, 2022, and the latest updates for the project were provided to Staff on July 6, 2022. At their July meeting the Commission approved Staff's findings dated July 6, 2022, with the following conditions: 1.) Escrow fee reconciliation, 2) The applicant shall provide a Stormwater Maintenance Agreement acceptable to the City and the Commission within 90 days after the plat is recorded for all stormwater BMP's on the site that will not be operated and maintained by the city, 3.) Add a phosphorous sorbing amendment to the biofiltration media to meet water quality standards and results. The applicant has satisfied conditions 2 and 3. This project will be removed from the report upon receipt of the escrow balance.

ak. 2022-028 Elsie Stephens Park, Dayton. This is existing park property (~20 acres) located about a mile north of the junction of County Roads 144 (N. Diamond Lake Road) and 12 (Dayton River Road). The project proposes to construct two entrance roads off CR 12, 1,300 feet of park roadways with a parking area and loop road, and a trail system to connect existing and future trails. Site revisions received July 5, 2022, were reviewed

by the Commission at their July 2022 meeting. Staff recommended approval in their findings dated July 6, 2022, contingent upon: 1) pre- and post-construction soil analysis on each infiltration basin to determine that infiltration rates meet or exceed design assumptions; 2) erosion and sediment control meeting the Commission's requirements and approved by Staff; and 3) escrow fee reconciliation.

al. 2022-029 Hayden Hills Park, Dayton. This is an existing 6.5-acre vacant park property located in the Hayden Hills Development about one-half mile south of Dayton City Hall near Deerwood Lane at 132nd Avenue. The City proposes to grade and construct a baseball field, open play areas, ice skating area, a basketball court, pickleball court, playground, putting green and connection trails into the existing trail system. This site's stormwater (Rule D) was designed into the Hayden Hills development approved by the Commission under project 2018-008. Staff reviewed this plan for Rule E only. Site plans conformed to Rule E and were administratively approved in Staff findings dated May 27, 2022. The surplus escrow fee will be refunded and this item removed from the report.

am. 2022-030 Garages Too Corcoran. The project proposes building and site improvements for a self-storage facility just north of Highway 55 near Rolling Hills Road. The site is within the physical boundary of the Pioneer-Sarah Creek watershed, but is in Corcoran, which is within the legal boundary of the Elm Creek watershed. At their August meeting the Commission approved Staff findings dated August 2, 2022, contingent upon (1) an operation and maintenance agreement, recorded on this property and approved by the City, that implement conditions that bind current and future owners of the project, (2) wetland impacts/exemption request must meet the LGU (Corcoran) requirements; and (3) the escrow balance being reconciled. In September, Staff requested updates from the applicant as they progress. This item received approval from Corcoran in October. The WCA and O & M information are still outstanding.

an. 2022-031 Corcoran II Substation. The project site is located on 2.87 acres at the northeast intersection of Larkin Road and CR 116. It is a 38.91-acre parcel that is proposed to be subdivided into one lot and two outlots. Block 1, Lot 1 will be the parcel where Wright Hennepin Cooperative Electric Association will place their substation. The remaining areas will be utilized for future development and for ROW along CR 116. At their July 2022 meeting the Commission approved Staff's July 5, 2022, recommendations with three conditions. 1) a stormwater operation and maintenance agreement acceptable to Corcoran and the Commission must be recorded by the landowner on this property; 2) the 48-hour drawdown (4,704 CF) on the stormwater basin must be verified post-construction; and 3) escrow fee reconciliation.

ao. 2022-033 Pet Suites, Maple Grove. The project site is located on a vacant lot just north of the CR 30 and Upland Lane N intersection. The proposed project will include the construction of a building and parking lot along with necessary utilities and stormwater management for a canine care facility. The project triggers Rules D and E. This project was approved at the Commission's September meeting with two conditions: 1) receipt of final application escrow fee balance and 2) an operation and maintenance plan approved by the City.

ap. 2022-034 CSAH 101 Improvements, Maple Grove. The project is located on CSAH 101 between Walnut Grove Way/73rd Avenue and approximately 83rd Avenue. The project consists of a reconstruction of CSAH 101 to include turn lanes, conversion of rural to urban section, intersection improvements, and addition of a multi-use trail. The project triggers Rules D and E. In their findings dated August 2, 2022, Staff recommended approval pending receipt of the escrow fee balance. The project was approved at the August meeting with that condition.

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aq. 2022-035 Rush Hollow, Maple Grove. The project is located on 161.5 acres and will result in 49.01 acres of impervious surface. The project triggers Rules D, E and I. *The Commission approved Staff findings dated November 1, 2022, at the November 2022 meeting with the following conditions: 1) final application escrow fee balance. Additional payment or refund of the fees will be determined when all conditions for approval are met, 2) an operation and maintenance plan that is approved by the City of Maple Grove.*

ar. 2022-037 CSAH 13 CR 203 Culvert Replacement, Rogers. This project replaces six culverts along CSAH 13 and CR 203. The project triggers Rule E. All culvert replacements are in-kind. No changes are proposed to inverts, pipe size, or material. In Staff findings dated August 2, 2022, this project was approved administratively, pending receipt of the outstanding escrow fee.

as. 2022-038 Tavera (North Phase), Corcoran. Lennar Homes is proposing to develop this site into a 244-unit housing development, with 110 single family detached lots and 134 attached townhouse units. It is the second phase of the overall larger 548-unit Tavera housing development. The total site area is 272 acres. Phase 2 will encompass approximately 175 acres, disturb 110 acres, and create 38.6 acres of new impervious area. The Commission approved the project at their August 2022 meeting contingent upon meeting the conditions cited in Staff's August 3, 2022, findings: (1) operation and maintenance plans and agreement being provided to the Commission for their review and approval. These plans must include the irrigation system. (2) irrigation system pump and augmentation information being provided and approved by Staff and (3) the escrow balance being reconciled.

at. 2022-039 Garland Commons, Maple Grove. This project consists of a multi-family building with associated parking, landscaping, utility and stormwater best management practices. It will disturb 4.8 acres of a 6.2 acre site and result in 1.8 acres of new impervious surface. The project triggers Rules D, E, and I. Staff's review and findings dated September 19, 2022, were approved at the Commission's October meeting conditioned on reconciliation of the escrow fee balance.

au. 2022-040 Karineimi Meadows, Corcoran. This is a 125-acre parcel in the southeast quadrant of the CR 10 and 19 intersections proposed to be subdivided into 10 large single family residential lots. The project will consist of constructing Chaparral Lane south of CR 10 with its associated drainage and storm water basins into the site. Lot grading improvements will be customized and occur at the time the homes are built. Staff provided preliminary comments to the applicant on August 17. Staff extended the 15.99 deadline to December 3, 2022. *Revised information was provided on December 1, 2022, and updated findings from the revisions dated December 7, 2022, are provided in this month's packet. Additional information on the filter bench and erosion controls are still needed prior to a recommendation for approval. If available, updated recommendation to the findings will be available at the meeting. The applicant has extended the 15.99 deadline to February 8, 2023.*

av. 2022-041 Elm Creek Swim Pond Culvert, Maple Grove. The project is located within the Elm Creek Park Reserve, to the east of Mud Lake, and just north of the Elm Creek Swim Pond. The project includes the replacement of an existing wooden bridge with a culvert crossing which will provide an improved crossing for Park District maintenance access. Staff findings dated September 6, 2022, were approved at the Commission's September meeting with a recommendation of approval pending receipt of the escrow fee balance.

aw. 2022-042 Walcott Glen, Corcoran. This is a 40-acre parcel located in the northwest quadrant of the intersection of Hackamore Road and CR 101 (Brockton Lane). The site will be developed into a residential area with 10.8 acres of new impervious area including homes, driveways, roads, and sidewalks,

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as well as a playground area. Staff's findings dated October 5, 2022, were reviewed and approved at the October meeting conditioned upon 1) The escrow balance being rectified to the satisfaction of the Commission Administrator. 2) Notice of wetland replacement plan approval being provided to the Commission. Prior to grading the wetland, a replacement plan must be approved by the LGU. 3) The applicant entering into a stormwater maintenance agreement with the City. The City's template stormwater maintenance agreement satisfies the requirements of the Commission, and 4) the City must approve the final emergency overflow design for wetland H4. Final design must be reviewed and approved by Commission staff. All contingency items have been met except the escrow balance.

ax. 2022-043 Meander Park and Boardwalk, Medina. This project is a proposed commercial planned unit development located on the north side of Highway 55, 900 feet east of Arrowhead drive on Lake Medina. Wetland surround the 18-acre site on the west and south, leaving approximately 7 acres of developable land. The project will disturb 6.3 acres of the site and result in a 4.0 acre increase in impervious surface. The project triggers Rules D, E, F, G and I. In their findings dated November 2, 2022, Staff recommended approval contingent upon 1) final application escrow fee balance; 2) an operation and maintenance plan that is approved by the City of Medina, 3) addition of EOF's to the grading plan for basins East Filtration and the North Retention Basin. The low floor elevations must be at least one foot above the EOF for the stormwater pond. Secondary outlet devices potentially modeled as EOFs are reported as 987.27 for the North Retention Basin and 993.0, the elevation of the roadway, for the East Filtration Basin, 4) Jurisdictional determination for LGU WCA replacement or exemption is necessary. LGU and WCA approval is required prior to any wetland impacts if required by LGU, and 5) addition of approved wetland monument signs to the plan set. *These conditions were approved at the November 9, 2022, meeting.*

ay. 2022-044 Trail Haven Road Bridge L9384 Replacement, Corcoran. This is on the North Fork of Rush Creek at Trail Haven Road approximately ½ mile south of CR 117. Corcoran is proposing to replace the existing 52' long 90" x 139" CMP arch culvert with 10' wide by 6' high concrete box culvert on Trail Haven Road. Last month, the Commission approved findings dated October 12, 2022, contingent upon, 1) The escrow balance must be rectified to the satisfaction of the Commission Administrator. 2) Provide the following for documentation, a) Current photographs of the existing channel to approximately 250 feet downstream of the proposed culvert invert, b) Detail of the proposed riprap design below the culvert, c) Provide MN DNR and WCA permits to Commission technical staff and d) General concurrence to assist private landowners downstream of this project if streambank erosion occurs as a result of this culvert replacement project. No new information has been received as of this update.

az. 2022-045 Corcoran Water Treatment Plant, Corcoran. This is a 3.25-acre parcel on the east side of CR 116, one-half mile north of CR 30. The project will consist of an access off CR 116, the Water Treatment Plant, a municipal well, and a wet detention stormwater pond with a bioretention bench for stormwater management, rate control and water quality. Initial review and comments were provided to the City and their consultant October 23. Revisions to the project were received November 4. *Updated findings and recommendation dated November 10, 2022, are provided in this month's packet. Staff recommends approval with only the escrow balance contingency.*

ba. 2022-046 CSAH 12 Culvert and Guardrail Replacement and Ravine Stabilization, Dayton. The project area runs along the CSAH 12 ROW from 2500' northwest of Lawndale Lane and continues approximately 3.1 miles southwest to near Pioneer Parkway. The project will consist of mill and overlay work on an existing section of CR12. Construction plans show the removal of 9-11" of bituminous pavement and 12" of aggregate base and replacing it with recycled or new materials. Additionally, six

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sections of this corridor have failing slopes that threaten the road embankment. Culverts will be replaced where needed and six (6) gully areas will be stabilized between the road and the Mississippi River. Project review and findings with two recommendations dated November 1, 2022, were approved at the November meeting: 1) final application escrow fee balance and 2) Jurisdictional determination for LGU WCA replacement or exemption is necessary. LGU and WCA approval is required prior to any wetland impacts if required by the LGU.

bb. 2022-047 Suite Living of Maple Grove. *This project is the development of a parcel within the Market of Rush Creek Development which was previously approved. The development includes a senior living facility including a new building and associated parking. Previous approvals covered wetland buffers and stormwater management. The current project will be reviewed for Rule E. The application was received December 6, 2022 and is still being reviewed by Staff. No recommendations for approval are available at this time.*

FINAL RECORDINGS OR OTHER DOCUMENTATION/FOLLOW-UP ARE DUE ON THE FOLLOWING PROJECTS:

ca. 2014-015 Rogers Drive Extension, Rogers. This project involves improvements along Rogers Drive from Vevea Lane to Brockton Lane. Site plans received July 1, 2014 met the requirements of the Commission with the exception of the nutrient control. The Commission approved the site plan contingent upon the City deferring 4.6 lbs. of phosphorus for treatment in future ponding opportunities as the easterly corridor of Rogers Drive develops. 2.3 lbs. will be accounted for in the Kinghorn Spec. Building site plan, with 2.3 lbs. still outstanding. This item will remain on the report until the total deferral is accounted for.

cb. 2015-030 Kiddiegarten Child Care Center, Maple Grove. Approved December 9, 2015. If the City does not take over the operation and maintenance of the underground system and the sump catch basins, an O&M agreement for the underground trench/pond system must be approved by the Commission and the City and recorded with the title. On February 5, 2019, Derek Asche contacted the owner requesting a copy of the recorded maintenance agreement. On October 21, 2022, Asche reported there is no update for this project.

cc. 2016-005W Ravinia Wetland Replacement Plan, Corcoran. In December 2016, the Commission approved Staff's recommendations on this wetland replacement plan. Barr Engineering is providing monitoring to ensure the replacement meets the performance standards of the approved plans. Annual reports were submitted to the US Army Corps of Engineers (USACE) in February 2019, February 2020, and March 2021. As of March 2021, wetlands and buffers are looking good but will need continued vegetation management in 2021 to get rid of invasive species (mostly cattail). Hydrology is good in both the restoration and creation areas. Cattail and Reed canary grass reemerged during the 2021 growing season and will likely need another year of aggressive maintenance in 2022. The 2021 monitoring report will be submitted to the USACE in March 2022 with recommendations for maintenance.

cd. 2017-014 Laurel Creek, Rogers. In June 2017, the Commission approved this project with four conditions. All contingency items have been provided with the exception of the O&M agreement which is being negotiated as to whether the City or the HOA will be responsible for the operation and maintenance of the stormwater management facility. On August 31, 2017, Andrew Simmons responded that the O&M agreement is still being negotiated.

ce. 2018-046 Graco Expansion, Rogers. This project is the expansion of an existing building. The site is located in an area that has regional ponding provided for rate control purposes, but needs to account for water quality and abstraction

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requirements on-site prior to discharging offsite as part of the improvements. The Commission granted conditional approval at their October 2018 meeting. Conditions of approval were to (1) submit a SWPPP plan meeting requirements, (2) clarify maintenance responsibilities for the iron enhanced sand filter, and (3) a letter from the City of Rogers stating their intentions to provide the water quality deficit in an upcoming project. Staff confirmed several minor plan revisions remain in conformance with the original approval. This item will remain on the Staff report until such time as the water quality deficit has been made up.

cf. 2019-021 Brenly Meadows, Rogers. This is a 38-unit townhome project proposed on 6.9 acres north of 129th Avenue about one-third mile west of Main Street. It triggered the Commission's review for Rules D, and E. This item was approved by the Commission at their August 2019 meeting, contingent upon O & M plan requirements for the stormwater pond and irrigation system.

cg. 2019-026 Interstate Power Systems, Rogers. This is a 10-acre site to construct a 1-acre building for a mechanical shop and 6 acres of parking and driveways along County Road 81. It triggered review of Rule D, E, G, and I. This item was approved by the Commission at their November 2019 meeting, contingent upon documentation of existing conditions pollutant loading and a recorded O&M plan for onsite BMPs. The applicant provided the pollutant loading data in November 2019. The Commission is still awaiting the O&M plan.

ch. 2020-009 Stetler Barn, Medina. This site disturbs approximately 3.5 acres and must meet Commission Rules D, E, and I. Because of the limited available space for pasture, paddocks and land application of manure, understanding how these components will be managed was also an important part of the review. A complete plan was received on April 22, 2020. At their May 13, 2020, meeting the Commission approved this project contingent upon: 1) the land-owner continuing to work with the U of M Extension Office and Hennepin County Rural Conservationist to finalize composting, pasture and paddock management plans and 2) a long-term pond/basin operation and maintenance plan and agreement with the City of Medina being approved by the City and the Commission. The agreement must be recorded on the land title with a copy of the recorded agreement provided to the Commission.

ci. 2020-017 Meadow View Townhomes, Medina. This is a 22-acre site located south of Meander Road and north of Highway 55. Lennar Homes is proposing to build 125 townhomes with their necessary infrastructure on this site. A complete application was received May 29, 2020. The plans call for 7.64 acres of new impervious areas. The Commission's review was for conformance to Rules D, E, F, G, and I. At their October meeting, the Commission approved Staff's finding dated September 30, 2020, contingent upon (1) The mean (average) depth on the west wet detention pond must be 4.0' or deeper; (2) Buffer strip monumentation and vegetation maintenance plans must conform to the Commission's requirements; (3) An operation and maintenance agreement of the stormwater ponds and irrigation system must be approved by the City and the Commission. The agreement must be recorded on the property title with a copy of the recorded document provided to the Commission; and (4) Erosion and sediment controls must conform to Commission requirements. Since the approval, the City of Medina has requested the applicant provide abstraction by irrigation only, thus eliminating one filter basin. Staff reviewed the changes and found the updates to be compliant with the Commission's original approvals for stormwater management and administratively approved the plans contingent upon item (3) above and added the condition that design information on the irrigation pump and augmentation water source must be provided within six months of this approval. On November 2, 2021, Dusty Finke provided the Commission with a copy of the recorded O&M agreement.

cj. 2020-032 Enclave Rogers – Commerce Boulevard., Rogers. This project would create an apartment complex on a 3.3-acre site. The existing condition is undeveloped. The project will disturb the entire site and create 2.15 acres of impervious surface. The applicant is proposing an iron enhanced sand filter to meet Total Phosphorus removal requirements. The site is within two of the three outlots created as part of the adjacent former Lowe's development. The application was reviewed for Rules D and E. Staff granted administrative approval for grading contingent on applicant accepting risk for changes required for final approval and on approval from the City for grading activities. In their findings dated December 2, 2020, Staff recommended approval with those conditions, as well as submission of an O&M agreement for stormwater features and with minor updates to the hydrology report and the SWPPP. The Commission approved Staff recommendations at their December 9, 2020, meeting.

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ck. 2020-033 Weston Woods, Medina. This project would create 150 residential units on a 135-acre undeveloped site. The project will disturb 49.2 acres and create 17.49 acres of impervious area. The Commission approved this project at their March 2021 meeting with four contingencies: a) Wetland replacement plans must be approved by the City of Medina (LGU), MN DNR and USACE prior to impacts, b) Provide quantification of the change in flood storage capacity for the one-percent annual chance flood event due to the proposed project, c) Provide documentation that changes in flood elevation and loss of floodplain storage have been avoided, minimized, and/or mitigated to the extent practicable. Demonstrate that changes in flood elevation will not cause high water or aggravate flooding on other land and, d) An O&M agreement for stormwater facilities, including irrigation pumping system components and augmentation wells system, must be approved by the City and the Commission and recorded within 90-days after final plat approval on the title to this property. A copy of the recorded agreements must be provided to the Commission.

cl. 2020-036 Balsam Pointe, Dayton. This project will create 98 residential units on a 10-acre site near the intersection of Diamond Lake Road South and Dayton Road. The existing condition is undeveloped. The project will disturb the entire site and create 5.3 acres of new impervious. The application was reviewed for Rules D and E. The Commission approved Staff's recommendations at their January 13, 2021, meeting contingent upon an O&M agreement meeting the Commission's standards being recorded on the land title.

On August 23, 2022, Jason Quisberg reported that everything on this project has been coordinated/resolved, including, he believes, securement of stormwater O&M agreement (he will verify, and coordinate as needed). Construction is significantly complete; buildout is underway. This item will be removed from the report.

cm. 2021-007 Birchwood 2nd Addition, Rogers. This project is east of CR13 (Brockton Lane) approximately 1/2 mile south of the intersection of CR 144 (141st Avenue North) and CR13. The applicant is proposing to develop the site into 30 single-family residential lots. The site drains south and east into Grass Lake. This work will disturb 10 acres and create 4.0 acres of new impervious area. At their April 2021 meeting the Commission approved this project contingent upon the final SWPPP being submitted prior to grading and receipt of any outstanding project review fees.

cn. 2021-016 Territorial Lofts, Rogers. This is a 5.39-acre site on Territorial Road, adjacent to the Laurel Creek development. The project would construct a 75-unit apartment building, underground parking, a detached garage, maintenance facilities, and access road, creating 2.397 acres of total impervious (1.86 acres net new impervious) and disturbing 5.2 acres. The existing site is two single-family residential homes. The site proposes to use stormwater reuse with an irrigation system to meet abstraction requirements due to low infiltration capacity soils. The project was reviewed for Rules D, E, G, and I. The project was approved by the Commission at its July 2021 meeting contingent upon receipt of outstanding project review fees and a stormwater maintenance agreement being put in place between the owner and the city with terms acceptable to the Commission. *The outstanding fees have been received.*

co. 2021-020 Crew Carwash, Maple Grove. This project would reconstruct an existing bank building and parking lot on a 1.80-acre parcel into a carwash. The site is located southwest of the intersection of Weaver Lake Road and Elm Creek Boulevard with access from Grove Drive. The disturbance is 1.52 acres, the existing impervious is 1.07 acres, and the proposed impervious is 1.17 acres. Runoff from this site flows into a regional pond on Arbor Lakes Parkway, which ultimately discharges to Rice Lake. The City has stated that the regional pond meets rate control and water quality treatment for the site. The applicant is proposing to use soil amendments to meet the Commission's volume rules. The Commission approved the project at its June meeting contingent on a maintenance agreement being filed with the City with terms agreeable to the Commission. The surplus escrow will be returned to the applicant. On October 21, 2022, Derek Asche reported there is no update for this project.

cp. 2021-021 Territorial Triangle, Dayton. This site is in the easterly triangle Territorial Road and CR 81 intersection near the border of Dayton and Maple Grove. The applicant is proposing to subdivide the 14+acre parcel into 30 rowhome units and 56 townhome units. Two ponding basins are proposed for stormwater management. This work will disturb approximately 10 acres and create 5.7 acres of new impervious areas. The Commission approved Staff's recommendations cited in their findings dated July 22, 2021, contingent upon (a) final application escrow fee balance determination and (b) provision of a Stormwater Maintenance Agreement for the irrigation system that is

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acceptable to the city and the Commission within 90 days after the plat is recorded. The surplus escrow will be returned to the applicant.

cq. 2021-023 Maple Grove MOB, Maple Grove. This project would construct a Medical Office Building and associated parking on an undeveloped parcel. The site is located on the southeastern corner of the intersection of 105th Avenue North and Niagara Lane, immediately north of the Highway 610 and Maple Grove Parkway interchange. The project was reviewed for Rules D and E. The Commission approved this project at its October 2021 meeting contingent on: receipt of deficit fee escrows and an operation and maintenance agreement with the City per Staff findings dated September 2, 2021. The O&M Agreement has been received.

cr. 2021-024 Riverwalk, Dayton. This site is south of CR 12 (Dayton River Road) and west of River Hills Parkway approximately 1/4 mile north of CR 144 (Diamond Lake Road). The applicant proposes to construct a new single family residential subdivision with 242 lots including one amenity lot and a city well site. Site development will include removal of an existing home site, grading 94 acres, and installation of municipal sewer and water, streets, and stormwater systems. The Commission approved Staff's recommendations in their findings dated August 11, 2021, at their August 2021 meeting contingent upon four conditions. The surplus escrow will be returned to the applicant.

On August 23, 2022, Jason Quisberg reported that everything on this project should be already coordinated/resolved regarding design; construction is underway. No stormwater O&M is needed – all public, city-maintained ponds. This item will be removed from the report.

cs. 2021-027 Xcel Energy Elm Creek Substation, Maple Grove. Xcel Energy is proposing to expand an existing electrical substation between Maple Grove Parkway and Fernbrook Lane near the Highway 610 expansion. The expansion will occur within the existing 17.09-acre parcel. The project was reviewed for Rules D and E. The Commission approved this project at its October 2021 meeting contingent on Staff findings dated September 24, 2021: receipt of deficit fee escrows and an O&M agreement with the City. The O&M agreement was received in the Commission office on July 28, 2022.

ct. 2021-035 Mister Carwash, Rogers. The project includes redevelopment of an existing, vacant Staff restaurant building, parking lot, and drive-through into a new carwash facility at 21421 South Diamond Lake Road. The redevelopment is anticipated to decrease the impervious area by approximately 0.3 acres at the project site and add an underground filtration basin with underdrain. The project was reviewed for Rules D and E. The Commission approved this project at its December 2021 meeting with four contingencies: 1) receipt of deficit escrows, 2) a Stormwater Maintenance Agreement, including irrigation system, being entered with the City, 3) A wetland replacement plan approved by the LGU and the TEP, and 4) the buffer plan contingent upon approval of the wetland replacement plan, per Staff findings dated August 31, 2021.

cu. 2021-036 D&D Service, Corcoran. The D&D Service development is proposed at the southeast corner of the intersection of County Roads 10 and 19 on a 16.54-acre parcel. The proposed project will include a large warehouse and office buildings along with parking and associated facilities. The existing site is a single farmhouse and surrounding agricultural land. The project was reviewed for Rules D, E, G, and I. Findings updated October 5, 2021, wherein Staff recommended contingent approval with five conditions were approved at the October meeting. *On July 26, 2022, Kevin Mattson confirmed that the O&M agreement has been received and recorded.*

cv. 2021-040 NAPA Auto Store, Corcoran. This project is located at the northwest intersection of CR 116 and 75th Avenue on the old Liquor Store parcel. The applicant proposes to demolish the current building and adjoining parking areas and construct a 12,800 SF NAPA Auto building, parking lot and associated utilities. An extra 3,600 feet of building area is proposed for future expansion and is included within the stormwater management design for this site. The Commission approved this project at their October 2021 meeting contingent upon return of surplus project escrows and a stormwater maintenance agreement being put in place between the owner and the City per Commission requirements. *On July 26, 2022, Kevin Mattson confirmed that the O&M agreement has been received and recorded.*

cw. 2021-041 Carlson Ridge, Plymouth. This is an existing 4.82-acre residential lot located between Vagabond and Troy Lanes just north of 56th Avenue North. The property will be subdivided into 13 single-family lots. The existing

residence will remain, but portions of the driveway and an outbuilding will be demolished. The Commission approved this project at their October 2021 meeting contingent upon three conditions outlined in Staff findings dated October 5, 2021: (1) final escrow balance determination when final unconditional approval is granted, (2) wetland impacts cannot occur until appropriate LGU and WCA approvals, and (3) long term operation and maintenance of the stormwater system is determined. The City of Plymouth has agreed to the long-term operation and maintenance of the filter basin. *The Commission received the Wetland Notice of Decision on October 25, 2022. The escrow reconciliation is the only outstanding condition.*

RULE D - STORMWATER MANAGEMENT
RULE E - EROSION AND SEDIMENT CONTROL
RULE F – FLOODPLAIN ALTERATION

RULE G - WETLAND ALTERATION
RULE H – BRIDGE AND CULVERT CROSSINGS
RULE I – BUFFERS

Italics indicates new information

indicates enclosure

HENNEPIN COUNTY

MINNESOTA

DATE: December 7, 2022

TO: Elm Creek Watershed Management Commission (ECWMC)

FROM: Kevin Ellis, and Kris Guentzel; Hennepin County Department of Environment and Energy

RE: December ECWMC Updates

Project / Program Updates

Lake Jubert Agricultural BMPs

Five grassed waterways have been graded and tile has been removed and replaced where specified by the plan set. Seeding was not completed before snowfall but will be done in Spring 2023. Installation has paused for the rest of the calendar year.

13861 129th Ave N., Dayton

Roof structure of manure bunker has been completed and inspected by county staff. Landowner provided feedback on plans and designs for future. Landowner has started to utilize the facility and will be installing a windscreen and some erosion control measures on the north side of the structure. Work will be completed no later than Spring, 2023.

9945 Sundance Road

Construction of barn gutters and livestock waterers is complete and has been inspected by county staff. BMPs are currently being utilized. Location of manure bunker has been finalized in the southeast corner of the paddock that is southwest of the barn. Site is ideal in that it is out of floodplain and will not be susceptible to inundation due to higher elevation than rest of the pastures.

Diamond Hill Stables

State cost-share and county contracts have been prepared for financial assistance for gutters. Landowners will resubmit a bid to include pipe and downspout and installation. County staff and NRCS staff met with landowner to review gutter plans as well as grazing plan and other potential BMPs. Landowners are interested in implementing further measures such as planting trees for shelter and windbreaks as well as other high traffic area control.

10000 Ebert Road

Hennepin County staff are working on engineering and permit applications for potential project installs in 2023. Staff are also waiting on full plan sets which will be finalized over winter 2022.

Hennepin County Environment and Energy Programming

Grants available to prevent the spread of aquatic invasive species

Local government agencies, nonprofit organizations, institutions, and businesses in Hennepin County can apply now for funding to implement projects that prevent the spread of aquatic invasive species.

Grant funding can be used to address pathways of aquatic invasive species introduction, provide education, promote behavior change, implement early detection and rapid response efforts, and pursue other ideas that prevent the spread of aquatic invasive species.

Review the [grant flyer \(PDF\)](#) for more details. Applications are due by Thursday, January 12, 2023. [Learn more and apply.](#)

For more information, contact Tony Brough at tony.brough@hennepin.us or 612-348-4378.



MNimize: Free new plastic reduction program for food businesses

Minnesota Waste Wise Foundation, in partnership with Hennepin County, has launched a new program called [MNimize](#) to help food businesses reduce single-use plastic waste and receive recognition for their efforts.

MNimize awards businesses at one of four achievement levels based on their efforts to reduce single-use plastic. The program also helps businesses identify opportunities to continue reducing single-use plastic and provides technical assistance so they can take further action.

Additionally, eligible participating businesses can get up to \$500 through the [MNimize Rebate](#) toward expenses to reduce single-use plastic. This rebate could be used to purchase durable reusable or certified compostable alternatives to replace single-use plastic items or for other creative plastic reduction strategies.



Reducing single-use plastic is an impactful opportunity to divert waste, keep plastic out of the environment, build brand loyalty with existing and new customers, and generate cost savings. MNimize welcomes any and all food businesses that are interested in tackling single-use plastic waste.

Businesses interested in getting started should [visit the website](#) and [submit an inquiry form](#). Download the [MNimize media kit \(PDF\)](#) for resources to spread the word and encourage businesses to join.

To: Elm Creek WMO Commissioners
Elm Creek TAC

From: Erik Megow, PE
Diane Spector

Date: December 7, 2022

Subject: Dayton Cost Share Request

**Recommended
Commission Action**

Approve the Dayton Cost Share request of up to \$50,000.

At previous meetings the TAC and Commission have reviewed the proposed project stabilized a channel between the residences at 16630 and 16750 Dayton River Road in Dayton. This channel conveys discharge from across the road to the Mississippi River via a culvert under CSAH 12. As you are aware, Hennepin County plans to replace this culvert as part of the imminent CSAH 12 project but does not intend to stabilize the channel. The Commission's Engineer and others from Hennepin County and the City of Dayton have reviewed this location with the affected property owners and agree there is the potential for this culvert replacement to exacerbate the already-occurring erosion.

On November 15, 2022 the city of Dayton submitted a Good Steward grant program application to Hennepin County (attached), requesting \$25,000 for the project, which is the grant maximum. Dayton staff have had the opportunity to survey the site and prepare a firmer cost estimate for the work, which with engineering and administration is estimated to total \$75,000. The City of Dayton submits this cost share application in the amount of \$50,000 to the Commission to help fund this stabilization, which is necessary to repair existing erosion into the River and to prevent future erosion.

Note that this cost estimate and preliminary design were prepared assuming the culvert replacement and associated work will be completed exactly as to plan. Following completion of the county's work, City staff will review the work as built, and make any modifications to the final plans and quantities, and refine the cost estimate.

Attachment 1 - 2023 Good Steward Grant Application

Submit your application via [Hennepin County's Supplier Portal](#) by Tuesday, November 15, 2022, 4:00 p.m.

Applications received after 4:00 p.m. on Tuesday, November 15, 2022, will be rejected. The county is not responsible for delays caused by electronic delivery services. Please review the *Solicitation for Grant Applications* for additional information on how to submit your Good Steward Grant application.

Percentages indicate the weight that will be given to the application sections during the review process. The Executive Summary is limited to 250 words, but there are no other response limitations to the remaining questions in this application.

Contact information

Applicant (landowner/organization/entity) name(s):	City of Dayton, MN Jason Quisberg, P.E.
Applicant phone number:	763 252-6873
Application email:	jason.quisberg@stantec.com
Application address:	12260 South Diamond Lake Road, Dayton, MN 55327
Project address, if different from applicant address:	16630/16750 Dayton River Road, Dayton
Project name:	Dayton River Road Ravine Stabilization

Project description

- Resource(s) impacted by proposed project (check all that apply):**

See the Hennepin County natural resources map at <https://gis.hennepin.us/naturalresources/map/default.aspx> for more information about the property

- ☐ Agricultural land
- ☒ Lake, stream, and/or river (provide name(s)): *Mississippi River*
- ☐ Moderate to high quality natural areas or unique and/or significant resource (as identified in the Hennepin County natural resources map)
- ☐ Sensitive groundwater areas
- ☒ Shoreland or streambank
- ☒ Waters identified on the [Minnesota Pollution Control Agency's list of impaired waters](#); provide name of impaired water and impairment(s): *Mississippi River (nutrients, TSS)*
- ☐ Wetland(s)
- ☐ Located in an area of concern for environmental justice and/or climate vulnerability. For example as mapped in the Minnesota Pollution Control Agency's [Understanding Environmental Justice in Minnesota mapping tool](#).

- Executive summary:** Provide a summary of the project, the associated water or habitat quality problems, and how the project will address or solve the problem(s) (250 words or less).

This project is the stabilization of an eroding channel conveying stormwater runoff discharging from a culvert under Dayton River Road (CSAH 12) in Dayton to the Mississippi River. This erosion is delivering excess sediment and nutrients to the River, which is Impaired for nutrients and TSS. Excess sediment also accumulates in the near-bank area, which impacts growth of beneficial aquatic and emergent vegetation and limits fish habitat. This erosion is expected to worsen as development occurs in the area and as precipitation frequency and intensity increases due to changing climate. The channel is located on private property between two homes on Dayton River Road. This City of Dayton project will repair and stabilize the slope, add grade control structures, and restore vegetation to prevent further erosion and damage to property and reduce excess sediment and nutrients to the River.

- **Project description:** Describe the project and intended results. Include the project location(s), start and end dates, major tasks, deliverables, and project goals. If the project includes any education and outreach components, please describe. Your answer should be specific, clear, and concise. Attach supporting materials and design reports if applicable.

The project is the stabilization of a channel that conveys stormwater runoff discharging from a culvert under Dayton River Road (CSAH 12) to the Mississippi River. This channel is on private property and runs between two homes at 16630/16750 Dayton River Road. This culvert will be replaced and lengthened by the County as part of a larger project on CSAH 12. The two property owners' concern is the existing channel degradation from the intermittently flowing pipe and the expectation that it may get worse as development across Dayton River Road from their properties increases runoff to the culvert.

The Elm Creek Watershed Commission's engineers, County and City staff visited the site and observed that the channel is worn and eroding, and with proposed development and changes in precipitation frequency and intensity concluded it will likely get worse. The culvert extension itself is not expected to increase flow but will direct it into the opposite bank and increase the efficiency of flow. There are several feet of fall to the River, so with future increased flow continued head cutting will occur, increasing erosion and sedimentation. It is estimated this channel erosion is currently contributing an excess of 2.6 tons sediment and 2.2 lbs TP to the river each year, and that amount will likely increase each year as conditions deteriorate.

Stabilization of this channel is not included in the CSAH 12 project. The City of Dayton has taken on responsibility for stabilizing this channel and has applied to the Elm Creek Watershed for Commission Cost Share funds. This Good Steward request is for County grant funds to supplement watershed funds. Survey work and 30% design on the channel have been completed this fall 2022. Final design and construction would be expected in fall-winter 2023 following completion of the County's CSAH 12 project. Prior to undertaking this project, the City will obtain agreements with each property owner authorizing completion of the project and specifying roles, responsibilities, and expectations for maintaining the improvements.

- **Severity of the problem:** Describe the severity of the problem to be addressed by the project. If available, show how the problem has been documented in a plan or assessment, such as a Total Maximum Daily Load (TMDL) study, implementation plan, or presence on the [state's list of impaired waters](#). Describe how the problem will be addressed by the project.

The South Metro Mississippi River TSS TMDL sets a goal of a 20% reduction in TSS from the Upper Mississippi River basin to improve water quality in the river and reduce sedimentation in Lake Pepin. The Lake Pepin Nutrient TMDL sets a goal of reducing non-permitted sources of nutrients to the estimated natural background rate. This project would provide a small part of the load reductions, which will be accomplished incrementally through numerous small projects such as this. Stabilizing this channel will help protect water quality in the river immediately downstream as well as help support nearshore habitat that is negatively impacted by accumulation of sediment in spawning and emergent vegetation areas.

- **Project Impact:** Describe how success will be measured and what benefits are anticipated after completing the project. These may include, but are not limited to, sediment captured (pounds/year), total phosphorus captured (pounds/year), stormwater runoff captured (gallons/year), and acres of habitat restored.

List and describe any other quantitative or qualitative impacts of the project such as community members educated and engaged, native plantings installed, potable water offset through stormwater reuse, or invasive species removed.

In what ways does your project help to [mitigate or adapt to climate change](#) and/or help to [reduce racial disparities](#) in Hennepin County. Climate change is likely to bring more abrupt and challenging situations, such as flash floods or extreme heat, that worsen existing disparities in health and the environment. Projects that hold and infiltrate stormwater, reduce impervious surfaces and/or add trees or native vegetation can increase the resilience

of the community to climate change and mitigate disproportionate impacts. If any of your project components address these, or if your project is being implemented in an [area of concern for environmental justice](#) or high climate vulnerability, please note how your project will address these concerns.

It is estimated this channel erosion is contributing an excess of 2.6 tons sediment and 2.2 lbs TP to the river each year, with those loads expected to increase each year as the channel continues to deteriorate. While the project itself does not build additional climate resilience, it is being designed and stabilized to convey future expected runoff flows and velocities and limit future nutrient and sediment transport. This project will not impact racial disparities in Hennepin County and is not located in an area of concern for environmental justice.

Project staff, partners and volunteers

- **Staff, partners, and volunteers:** List and provide contact information for any partners, staff, and volunteers who will be involved with project implementation. Include a brief description of their background, qualifications, and their expected contributions for the project.

Jason Quisberg, P.E., City of Dayton City Engineer, will be responsible for overall project oversight, management, and contracting. Jason is a Senior Civil Engineer at Stantec and has over 20 years of experience working as a Civil Engineer in several roles. He has extensive experience performing daily municipal engineering activities and delivering both small and large projects. Contact: 763 252-6873 jason.quisberg@stantec.com

Erik Megow, P.E., will be responsible for design and construction management. Erik is a Water Resources Engineer at Stantec with over twelve years of experience as a consulting engineer. His primary expertise is stormwater best management practice design, regulatory review, hydraulic and hydrology modeling, stream restoration and stabilization design, floodplain analysis, and stormwater management. Contact: 763 252-6857 erik.megow@stantec.com

Budget

- **Budget:** Provide a budget for the project including total costs broken down by tasks and the amount requested through this Good Steward grant application. Describe how the costs were estimated. In addition, provide the following breakdown:
 - Total project cost: \$75,000
 - Good Steward grant request: \$25,000
 - Other match funding sources: \$50,000
 - **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.

The City of Dayton City Engineer has prepared the attached 30% plans and draft Opinion of Probable Cost. Final design and cost estimate may vary from this draft plan based on site conditions following completion of the County culvert replacement.

At its November 10, 2022 meeting the Elm Creek Watershed Management Commission committed up to \$50,000 from its Cost Share grant program for this project. The final cost share application will be presented to the Commission for approval at its December 8, 2022 meeting.

- **Local commitment:** Describe the decision-making process used to select the project. That is, why was this project chosen over other solutions? List if and where the proposed project is identified as a priority by a local, state, and/or federal government agency that manages natural resources, such as in a state-approved watershed management plan or a local comprehensive plan.

This project was brought to the attention of Hennepin County during property owner outreach regarding the upcoming

CSAH 12 culvert replacement project. The County looped in the City of Dayton and the Elm Creek Watershed Management Commission to evaluate how to address issues that were outside the construction limits of the culvert project. The City and Commission determined that repairing and stabilizing this channel was consistent with the Elm Creek Commission's Third Generation Watershed Management Plan priorities for 2015-2024, the first of which is "Begin implementing priority projects and actions in 2015, providing cost-share ... to undertake projects to achieve WRAPS (Watershed Restoration and Protection Strategy study) lake and stream goals." The WRAPS includes a strategy to "Reduce bank/bluff/ravine erosion" to the Mississippi River. The City of Dayton is committed to doing its part to help reach the WRAPS goals. The project is also consistent Hennepin County's Natural Resources Strategic Plan goals to restore degraded waterbodies not meeting water quality standards and to work cooperatively with county partners to address soil erosion.

The Watershed Plan notes that the watershed and its member cities will be impacted by the South Metro Turbidity TMDL, which calls for addressing ravine erosion in the upstream basins and establishes a 20% reduction in TSS loading goal for the Upper Mississippi Basin. The Lake Pepin and Mississippi River Eutrophication TMDL was completed subsequent to adoption of the watershed management plan and calls for reducing nutrients from internal sources such as bank erosion to natural background rates.

Other information

Provide a short summary of any other information that may be pertinent to the project and the county evaluation process of your application. This information may serve as a tiebreaker during the evaluation process.

The City of Dayton is partnered with the Elm Creek Watershed Commission, Hennepin County, and Three Rivers Park District to repair and restore two deep and significantly eroding ravines about 2/3 mile down river along the CSAH 12 corridor. The Watershed Commission has applied for a Clean Water Grant to help fund those improvements. This project was identified after that project had already been designed.

Terms and conditions

As part of the application process, you will be asked to provide your tax identification number or social security number. These numbers will be made available to federal and state tax authorities and state personnel involved in the payment of county obligations, including delinquent tax liabilities. The purpose of this application is to authorize the collection of the information necessary to make a preliminary eligibility determination. This application is not a binding contract on either party. By signing this application, the landowner(s) agrees to grant Hennepin County representatives permission to visit the parcel and to provide other ownership and title documents requested by Hennepin County during this determination.

Jason Quisberg P.E., Dayton City Engineer

Insert e-signature or type name

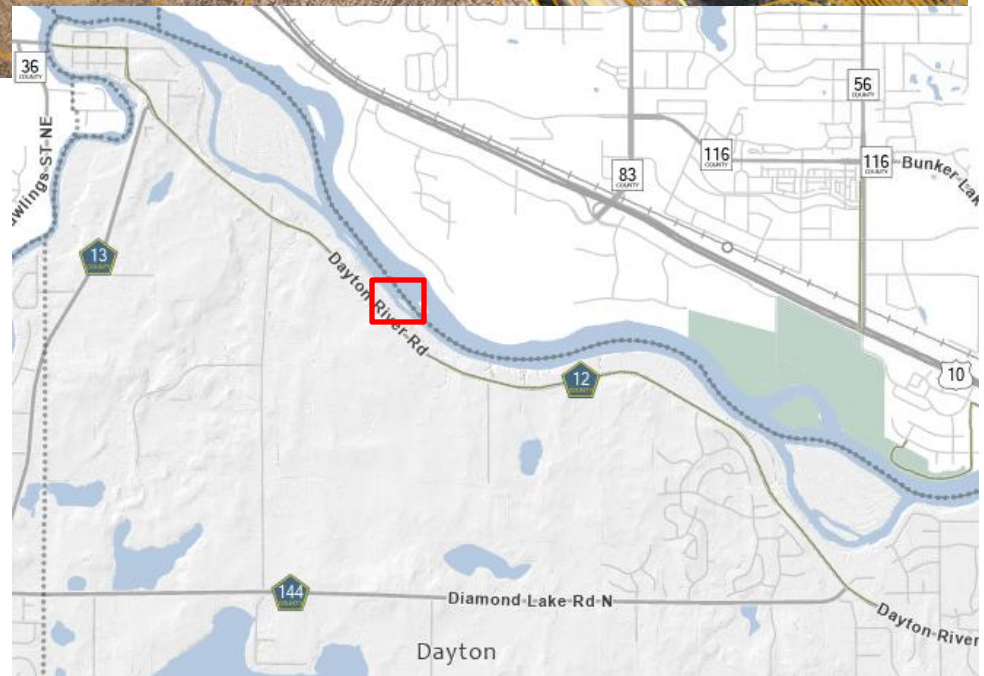
11/15/22

Date



(Above)
Culvert and
direction of flow

(Right)
Project location





30% design showing stabilized channel and rock grade control structures

Stantec Opinion of Probable Cost for 16630 Dayton River Road Ravine Stabilization					
Bid Components					
No	Item	Unit	Quantity	Unit Price	Cost
1	Mobilization & Demobilization	LS	1	\$5,000	\$5,000
2	Traffic Control	LS	1	\$5,000	\$5,000
3	Temporary Rock Construction Entrance - Maintained	EA	1	\$2,000	\$2,000
4	Clear Trees	EA	5	\$750	\$3,750
5	Silt fence, Type MS - Maintained	LF	125	\$3	\$313
6	Flotation Silt Curtain Type Still Water - Maintained	LF	40	\$50	\$2,000
7	Sediment Control Log Type Straw (or Bioroll) - Maintained	LF	200	\$5	\$1,000
8	Erosion Control Blanket Category 20	SY	325	\$3	\$975
9	Coir Erosion Control Mat	SY	325	\$6	\$1,950
10	Random Riprap Class II	TON	295	\$125	\$36,875
11	Geotextile Fabric, Type V Non-Woven	SY	615	\$5	\$3,075
12	Native Seeding	AC	0.3	\$2,500	\$750

Subtotal	\$62,688
10% Contingency	\$6,269
Construction Subtotal	\$68,956
Engineering & Admin	\$6,000
Total	\$74,956
Say	\$75,000

elm creek Watershed Management Commission

ADMINISTRATIVE OFFICE
3235 Fernbrook Lane
Plymouth, MN 55447
PH: 763.553.1144
email: judie@jass.biz
www.elmcreekwatershed.org

ELM CREEK WATERSHED MANAGEMENT COMMISSION Partnership Cost-Share Program Guidelines on Municipal Property

The Elm Creek Watershed Management Commission will from time to time make funds available to its member cities to help fund the cost of Best Management Practices (BMPs) projects that cost less than \$100,000. The following are the guidelines for the award of cost-share grants from this program:

1. Projects must be for water quality improvement and must be for improvement above and beyond what would be required to meet Commission rules. Only the cost of “upsizing” a BMP above and beyond is eligible.
2. Priority is given to projects identified in a subwatershed assessment or TMDL.
3. Projects should cost less than \$100,000; projects costing more than \$100,000 should be submitted to the CIP. Projects cannot receive funding from both the CIP and the Cost-Share Program.
4. Commission will share in funding projects on a 1:1 basis.
5. The cost of land acquisition may be included as City match.
6. The minimum cost-share per project is \$10,000 and the maximum is \$50,000.
7. Projects must be reviewed by the Technical Advisory Committee (TAC) and recommended to the Commissions for funding.
8. The Commissions will call for projects in December of each year, with potential projects reviewed by the TAC at its end of January meeting.
9. Cost-share is on a reimbursable basis following completion of project.
10. The TAC has discretion on a case-by-case basis to consider and recommend to the Commissions projects that do not meet the letter of these guidelines, including projects submitted mid-year.
11. Unallocated funds will carry over from year to year and be maintained in a designated fund account.
12. The standard Commission/Member Cooperative Agreement will be executed prior to project construction.

Adopted August 11, 2021)

**Elm Creek Watershed Management Commission
City Cost-Share Program Guidelines**

City:	Dayton
Contact Name:	Jason Quisberg
Contact Phone:	763 252-6873
Contact Email:	jason.quisberg@stantec.com
Project Name:	Dayton River Road Channel Stabilization
Year of Construction:	2023
Total Project Cost:	\$75,000
Amount Requested:	\$50,000
Project Location:	Between 16630 and 16750 Dayton River Road

1. Describe the BMP(s) proposed in your project. Describe the current condition and how the BMP(s) will reduce pollutant loading and/or runoff volume. Note the estimated annual load and volume reduction by parameter, if known, and how they were calculated. Attach figures showing project location and BMP details including drainage area to the BMP(s).

Runoff from an area south of Dayton River Road is conveyed to the north side by a culvert under the roadway, which is CSAH 12. The culvert discharges into a channel that flows north between two properties to the Mississippi River. Hennepin County plans a 2023 project to replace various culverts along CSAH 12. This project involves widening the road, removing the guard rails, and extending and adding pipe. The two property owners' concern is the existing channel degradation on the intermittently flowing pipe and the expectation that it may get worse as development across Dayton River Road from their properties increases runoff to the culvert. Hennepin County does not intend to include stabilization of this private channel in its CSAH 12 project.

The Commission's engineers and county staff visited the site and observed that the channel is worn and with proposed development will likely get worse. The culvert extension likely will not increase flow, but it will direct it into the opposite bank and increase the efficiency of flow. There are several feet of fall to the River, so with future increased flow continued head cutting will occur, increasing erosion and sedimentation to the River.

Removing trees to encourage bioremediation is unlikely to gain property owner approval, thus it is proposed to stabilize the channel with rock armoring. The estimated cost of this project is \$75,000. The channel erosion is contributing about 2.6 tons sediment and 2.2 lbs TP to the river each year.

2. If this request is for cost share in "upsizing" a BMP, explain how the upsize cost and benefit were computed.

N/A

3. Show total project cost, amount of cost share requested, and the amount and source of matching funds.

The City is applying for a Hennepin County Good Steward Grant to contribute \$25,000 of the cost of the project. See attached for Opinion of Probable Cost.

4. What is the project schedule, when will work on the BMP(s) commence and when will work be complete?

Site survey and design – late 2022; Obtain quotes – early 2023; Site work – winter 2023

Stantec Opinion of Probable Cost for 16630 Dayton River Road Ravine Stabilization					
Bid Components					
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Culvert and direction of flow



30% design showing stabilized channel and rock grade control structures