ADMINISTRATIVE OFFICE 3235 Fernbrook Lane Plymouth, MN 55447 PH: 763.553.1144 FAX: 763.553.9326 email: judie@jass.biz www.elmcreekwatershed.org TECHNICAL OFFICE
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September 5, 2018

Representatives Elm Creek Watershed Management Commission Hennepin County, MN The meeting packet for this meeting may be found on the Commission's website: http://elmcreekwatershed.org/pages/Meetings/

Dear Representatives:

A regular meeting of the Elm Creek Watershed Management Commission will be held on **Wednesday, September 12, 2018, at 11:30 a.m.** in the Mayor's Conference Room at Maple Grove City Hall, 12800 Arbor Lakes Parkway, Maple Grove, MN.

The Commission will suspend its regular meeting at 11:30 a.m. for the purpose of conducting a **public hearing** on four proposed capital improvements:

Project 2018-01: Rush Creek Main Stem Stream Stabilization Phase 3, Maple Grove;

Project 2018-02: Elm Creek Stream Restoration Reach D, Plymouth; **Project 2018-03:** Elm Creek Stream Restoration Phase III, Champlin; and

Project 2018-04: Downs Road Trail Rain Gardens, Champlin.

The regular meeting will resume immediately after the public hearing concludes.

Please email Tiffany at <u>tiffany@jass.biz</u> to confirm whether you or your Alternate will be attending the regular meeting.

Thank you.

Regards,

Judie A. Anderson Administrator

JAA:tim

Encls: Meeting Packet

cc: Alternates HCEE BWSR MPCA
Joel Jamnik Diane Spector Met Council DNR
TRRD

TRPD Clerks Official Newspaper

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AGENDA Regular Meeting and Public Hearing September 12, 2018

- **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.

Suspend meeting

4. Public Hearing for Capital Improvement Projects

Project 2018-01: Rush Creek Main Stem Stream Stabilization Phase 3, Maple Grove Project 2018-02: Elm Creek Stream Restoration Reach D, Plymouth Project 2018-03: Elm Creek Stream Restoration Phase III, Champlin Project 2018-04: Downs Road Trail Rain Gardens, Champlin

- a. Staff Report.*
- b. Feasibility Reports* attached to cooperative agreements.
- c. Commission discussion.
- d. Open Public Hearing.
 - 1) Receive comments from member cities.
 - 2) Receive comments from public.
- e. Close public hearing.
- f. Commission discussion.
- g. Consider Resolution 2018-03 Ordering 2018 Improvement Projects.*
- h. Approve Cooperative Agreements* with cities of Champlin (2), Maple Grove, and Plymouth.

Resume meeting.

- **5.** Action Items.
 - a. Project Reviews.*
 - b. Fish Lake SWA Funding Request.*
- **6.** Old Business.
 - a. Livestock Management Policy.**
- **7.** New Business.
- **8.** Local Plans.
 - a. Dayton.*
- **9.** Communications.
- **10.** Education.
 - a. WMWA Update.**

- **11.** Grant Opportunities and Updates.
 - a. Fish Lake Internal Phosphorus Loading Control.
 - b. FEMA Floodplain Mapping see Staff Report.
 - c. Diamond Lake SWA Grant Application see Staff Report.
 - d. North Fork Rush Creek SWA Implementation see Staff Report.
- **12.** Project Reviews also see Staff Report.*

12. I	Project	Review	s. (See	Staff F	Report.*)	
a.					2013-046	Woods of Medina, Medina.
b.					2014-015	Rogers Drive Extension, Rogers.
C.					2015-004	Kinghorn Outlet A, Rogers.
d.				AR	2015-030	Kiddiegarten Child Care Center, Maple Grove.
e.				AR	2016-002	The Markets at Rush Creek, Maple Grove.
f.					2016-005W	Ravinia Wetland Bank Plan, Corcoran.
g.					2016-040	Kinghorn 4th Addition, Rogers.
h.					2016-047	Hy-Vee Maple Grove #1 (Hy-Vee Maple Grove North).
i.				AR	2016-052	The Woods at Rush Creek, Maple Grove.
j.				AR	2017-014	Laurel Creek, Rogers.
k.				AR	2017-016	Territorial Woods, Maple Grove.
I.				AR	2017-017	Mary Queen of Peace Catholic Church, Rogers.
m.				AR	2017-019	Medina Senior Living Community, Medina.
n.				AR	2017-021	Hindu Society of MN Staff Housing, Maple Grove.
0.				AR	2017-029	Brayburn Trails, Dayton.
p.				AR	2017-034	Plymouth Memory Care, Plymouth.
q				AR	2017-037	Corcoran L-80 Lift Station MCES Project 808520, Corcoran.
r.				AR	2017-038	Bass Lake Estates, Corcoran.
s.					2017-039	Rush Creek Apartments, Maple Grove.
t.			R		2017-044	Reserve at Medina 2nd Addition, Medina.
u.					2017-050W	Ernie Mayer Wetland/floodplain violation, Corcoran.
٧.				AR	2018-001	Rush Creek Commons, Maple Grove.
w.					2018-004	Rush Creek Restoration, Maple Grove.
х.		E			2018-005	Sundance Greens, Dayton.
у.	Α				2018-007	Copper Creek of Nottingham, Maple Grove.
Z			R		2018-013	Wayzata Elementary School #9, Plymouth.
aa.		E			2018-014	Refuge at Rush Creek, Corcoran.
ab.				AR	2018-018	Summers Edge Phase II, Plymouth.
ac.					2018-020	North 101 Storage, Rogers.
ad.					2018-021	113th Lane Extension/Brockton/101, Rogers.
af.			R		2018-022	Fernbrook Fields, Maple Grove.
ag.			R		2018-023	King Solutions Distribution Center, Dayton
ah.					2018-025	Watten Wetland delineation/Replacement Plan, Corcoran.
ai.					2018-026	Windrose, Maple Grove.
aj.					2018-027	CR202 Bridge, Dayton.
ak.				AR	2018-028	Tricare Third Addition, Maple Grove.
al.			R		2018-029	McConn, Plymouth
am			R		2018-030	Pineview Meadows, Dayton.

an.	R	2018-031	North Dayton Development Draft AUAR, Dayton.
ao.		2018-032	Encore, Corcoran.
ар.		2018-033	Cloquet Island Estates, Dayton.
aq.		2018-034	Corcoran NE Trunk Sewer WCA No-Loss App, Corcoran.
ar.		2018-035	Edgewater East, Maple Grove.
as.		2018-036W	Dale Johnson Pond Excavation, Corcoran.
at.		2018-037	Elm Creek Stream Restoration Reach D, Plymouth.
au.		2018-038	Vincent Woods of Roger.
av.		2018-039	Greenway North, Plymouth.
aw.		2018-040	Rush Creek Commons Phase II, Maple Grove.
ax		2018-041W	21801 Homestead Trail Wetland Delineation, Corcoran.
ay		2018-042	Ostrom Hills Third Addition, Maple Grove.
az		2018-043	BeeHive Homes, Maple Grove.
ba.		2018-044	OSI Phase II, Medina.
bb.			
bc.			
bd.			
be.			
bf.			

A = Action item 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..... D = Project is denied AR awaiting recordation

- **13.** Other Business.
- **14.** Adjourn.

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Regular Meeting Minutes August 8, 2018

I. A regular meeting of the Elm Creek Watershed Management Commission was called to order at 11:32 a.m., Wednesday, August 8, 2018, in the Mayor's Conference Room, Maple Grove City Hall, 12800 Arbor Lakes Parkway, Maple Grove, MN, by Chairman Doug Baines.

Present were: Bill Walraven, Champlin; Sharon Meister, Corcoran; Doug Baines, Dayton; Joe Trainor, Maple Grove; Fred Moore, Plymouth; James Kujawa, Jason Swenson, and Kirsten Barta, Hennepin County Dept. of Environment and Energy (HCEE); Brian Vlach, Three Rivers Park District (TRPD); Jeff Weiss, Barr Engineering; and Judie Anderson, JASS.

Not represented: Medina and Rogers.

Also present: Todd Tuominen, Champlin; Brad Martens, Corcoran; Mark Lahtinen, Maple Grove; Ben Scharenbroich, Plymouth; Andrew Simmons, Rogers; Scott Dahlke, Civil Engineering Site Design, for project 2018-014; and Craig Allen, GWSA Land Development for project 2018-030.

- **A.** Motion by Walraven, second by Trainor to approve the **revised agenda**.* *Motion carried unanimously*.
- **B.** Motion by Walraven, second by Moore to approve the **minutes*** of the July 11, 2018, regular meeting. *Motion carried unanimously.*
- **C.** Motion by Moore, second by Walraven to approve the August **Treasurer's Report and Claims*** totaling \$42,252.65. *Motion carried unanimously.*
- II. Open Forum.
- III. Action Items.
- Project Review 2018-014 Refuge at Rush Creek (formerly Fehn Meadows 2nd Addition), Corcoran.* The site is currently a 63-acre agricultural property located west of Cain Road on CR 117. The applicant proposes to subdivide the site into 14-residential lots. Pubic road and trail access will impact one wetland basin in two locations, totaling 15,687 SF of type 1 wetland impacts. Replacement at a 2:1 ratio in Bank Service Area (BSA) 7, Major Watershed 18-N. Fork Crow River is proposed. The wetland replacement plan has been noticed per WCA requirements. Staff has completed the project review. The Technical Evaluation Panel (TEP) has discussed the wetland replacement plan and is in agreement that the sequencing analysis per WCA requirements is adequate and impacts are justified. They, as well as Commission Staff, have concerns about the location of the replacement wetlands. Commission guidelines are that 1:1 replacement be in the ElmCreek Watershed area or, if no credits are available, in Hennepin County. TEP concerns are that this site is in wetland BSA 20 and the replacement is proposed in BSA 18. Staff extended the review deadline to August 22, 2018. A revised plan was received July 20, 2018. In their updated findings dated August 7, 2018, Staff recommended approval contingent upon final Staff approval and (1) certification from MN BWSR that 0.7593 acres of wetland banking credits from account #1643 have been transferred for use on this site or an escrow of \$90,000 is received from the applicant; (2) preservation and buffer areas meet the Commission and City of Corcoran's requirements for buffer and preservation and \$4,000 per acre escrow is secured by the Commission for buffer/preservation compliance and 5 year monitoring plan; and (3) operation and maintenance plans for stormwater ponds are approved by the Commission and City and recorded on the property title.

Staff noted that current plans do not meet preservation requirements. However, the Commission was agreeable to accepting the areas for preservation based on conditions enumerated by Staff, i.e., (a.) a long-term

Regular Meeting Minutes – August 8, 2018 Page 2

maintenance plan must be included for Staff review and approval and must include performance standards for native vegetation establishment (75% minimum) and invasive, non-native vegetation (15% maximum) and a 5-year monitoring plan; (b) monitoring will be done by the Commission; (c) an escrow of \$4,000 per acre for establishment, maintenance and monitoring must be submitted; and (d) easement monument locations and signage must be provided for review and approval.

Motion by Moore, second by Walraven to approve Staff's recommendations and preservation conditions. *Motion carried unanimously.*

- **B. Project Review 2018-022 Fernbrook Fields, Maple Grove.*** The City of Maple Grove is planning to construct athletic fields in the southwest intersection of 99th Avenue North and Fernbrook Lane. The project site is 19 acres in size and will consist of constructing four full-size, multi-purpose athletic fields. Staff site review will be for compliance with the Commission's Rules D, E and I. Staff granted administrative approval to begin grading and erosion control on this site on July 20, 2018, along with a review that made no recommendation on the project. In their findings dated Auigust 7, 2018, Staff recommended approval of this project with no conditions. Motion by Trainor, second by Walraven to approve Staff's recommendation. *Motion carried unanimously.*
- C. Project Review 2018-025W Watten Wetland Delineation/Replacement Plan, Corcoran.* This is an application for a wetland boundary/type determination, wetland replacement plan and the sequencing analysis of said plan. This is a vacant 5-acre residential flag lot on CR 10. Kjolhaug Environmental Services performed the wetland delineation on December 12, 2017 with a follow-up visit on May 2, 2018. Anderson Engineering completed the wetland replacement plan for construction of a residential gravel driveway (12' wide) for access to the buildable area. 4,422 SF (0.1015 acres) of one wetland basin will be impacted. 0.2030 acres of wetland banking credits are proposed to be purchased from B. Engstrom bank account 1643 (major watershed #20, BSA 7) for replacement of the impacts. In their findings dated July 27, 2018, Staff recommends approval pending receipt of BWSR certification of 0.2030 acres of wetland credits transfer for 0.1015 ac. of impacts on this project. Motion by Trainor, second by Walraven to approve Staff's recommendations. *Motion carried unanimously*.
- **D. Project Review 2018-026 Windrose, Maple Grove.*** This proposed 8.5-acre townhome site is in the east quadrant of CR 101 and Bass Lake Road. The stormwater management plans for this area were approved by the Commission for their 2nd Generation Watershed Management Plan under project 2009-004 (Hustad Property/Markets at Rush Creek), but never completely constructed. Site plans are required to meet the abstraction and TSS standards of the Third GnerationPlan and the original stormwater management design previous approved. Staff's review dated July 20, 2018 recommends site plan approval contingent upon verification of the wetland approvals by the City of Maple Grove and the approval and recording of the operation and maintenance plan on the filter basins. Motion by Moore, second by Walraven to approve Staff's recommendations. *Motion carried unanimously.*
- **E. Project Review 2018-027 CR202 Bridge, Dayton.*** This project proposes a complete replacement of the existing bridge on Elm Road in the Elm Creek Park Reserve with a Timber Slab bridge. Staff has been working with the DNR and Hennepin County on the floodplain issues as they relate to the replacement. Staff review is for Rules E and F. In their findings dated July 24, 2018, Staff recommends approval of this project subject to changes or modifications to the SWPPP sheets, tabulation of the floodplain fill impacts proposed, and receipt of the project review fee. Motion by Meister, second by Walraven to approve Staff's recommendations. *Motion carried unanimously.*
- F. Project Review 2018-028 Tricare Third Addition, Maple Grove.* This is a 2.1-acre area that will be split out of an 85-acre parcel north of CR 30 at 96th Avenue and Dunkirk Lane. An 18,000 SF commercial retail building with its associated parking and utilites are proposed. The Commission's review will be for compliance to rules D, E and I. In their findings dated August 7, 2018, Staff recommends approval of this project subject to approval and recording of the operation and maintenance plan on the filter basins. Staff also expressed concerns regarding the siting of the easement on the adjoining parcel and release of fluids from the project site. Motion by Moore, second by Trainor to approve Staff's recommendations, including follow-up with the City about the fluids. *Motion carried unanimously*.

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

Regular Meeting Minutes – August 8, 2018 Page 3

- **G. Project Review 2018-029 McConn Parcel, Plymouth.*** This is a 6-acre parcel proposed to be developed into eight residential lots. It is located on the north side of CR 47 between Vagabond and Urbandale Lanes. The Commission's review will be for compliance with rules D, E and I. In their findings dated July 25, 2018, Staff recommends approval of this project subject to submittal of a SWPPP for a complete erosion control plan. Motion by Moore, second by Walraven to approve Staff's recommendations. *Motion carried unanimously.*
- **H. Project Review 2018-030 Pineview Meadows, Dayton.*** This is 38.25 acre, mutiple parcel subdivision proposed to be developed into 84 residential lots. It is located south of Dayton River Road, between Pineview and Vinewood Lanes. This item was discussed at the June and July 2018 Commission meetings in regards to a variance from Commission rules related to a landlocked drainage area. Staff is reviewing the plans and variance request based on plans submitted for review on July 11, 2018. Staff has also granted administrative approval for grading and erosion control to begin on the project site. Staff will undertake its review under rules D, E, G, I and K. In their findings dated August 7, 2018, Staff recommended approval of the project, including the three variances requested, subject to submittal of a SWPPP for a complete erosion control plan. The three variance are:
- **1.** A variance from the requirement to reduce discharge rates to at or below existing discharge rates is needed due to the outlet being provided
- **2.** A variance from the requirement to reduce TP and TSS to at or below existing discharge rates is needed due to the outlet being provided
- **3.** A variance from the requirement to place an outlet from a landlocked area at or above the back-to-back 100-year rainfall level is required as the site will discharge at some level below the 100-year rainfall event (not back-to-back)

Commissin Rule K states that that variances may be granted for items not in literal agreement with the Rules in cases where literal enforcement would cause practical difficulties or particular hardship and is consistent with the Commission's water resources plan and Minnesota Statutes under 103D.

Staff determined:

- **1.** The land in question cannot be put to reasonable use if used under the conditions allowed by the rules. A variance provides for beneficial use of the land in question.
- **2.** The plight of the applicant is due to circumstances unique to the applicant and not created by the applicant. *The situation was not created by the applicant.*
- **3.** The variance, if granted, will not adversely affect the essential character of the locality and other adjacent land. Development of the land does not differ from the character of the neighboring areas. The variance provides protection for adjacent property owners above and beyond what they have today.
- **4.** Economic considerations alone shall not constitute a hardship if the land may be put to reasonable use for the land exists under the terms of the rules. *The variance addresses the long term needs of the area as it develops.*

Motion by Moore, second by Walraven to approve the three variance as stated, with the recognition that nutrient loading will increase as a result of this project, but the discharge is to the Mississippi River and not to Elm Creek. The increase in nutrient loading offsite does not appear to impact adjacent properties. *Motion carried unanimously*.

Motion by Moore, second by Trainor to approve this project per Staff's recommendations as stated above. *Motion carried unanimously.*

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

Regular Meeting Minutes – August 8, 2018 Page 4

I. Motion by Moore, second by Trainor to contribute \$500 from the Education Budget for the **15th Annual Crow-River Clean-up Day,*** September 15, 2018. *Motion carried unanimously.* Donations are used to provide food, beverages and t-shirts with donor logos for every volunteer in the event. In the past 14 years nearly 3400 volunteers from 30 communities have donated their time to remove 67 tons of garbage and debris from 503 miles of shoreline of the Crow River and its tributaries.

IV. Old Business.

- **A.** At the last meeting, following a recap of the July 10 meeting of the Hennepin County Board Administrative Committee where the Commission's proposed **Minor Plan Amendment** was heard, Staff was directed to draft a letter of response to a number of questions brought forth by the Hennepin County Commissioners, including:
- **1.** How are the WMOs (and the County) taking climate change and changing precipitation patterns into account;
 - 2. Are the projects being undertaken making a difference; and
 - **3.** What is the Commission doing about flooding issues?

During a follow-up conversation, Karen Galles, Land and Water Unit Supervisor, indicated that a letter of response would not be necessary; however, the Commission should consider ways to better inform the County Commissioner about the things it is doing, including outcomes of projects and successes in reaching goals. Staff suggested that the *Annual Report* could provide more content on projects and that copies of the report be mailed directly to the County Commissioners.

- **B.** Livestock Management Policy. Following review and discussion of the draft policy and associated documents at the July meeting, Staff began reviewing individual city animal and manure ordinances at the request of member cities comments and feedback will be provided directly to those cities by the September meeting. Staff will continue the minor revision process to the draft policy with a goal to return to the September meeting with a final draft policy.
- V. New Business.
- VI. Watershed Management Plan.
- **A.** Included in the meeting packet was a copy of Metropolitan Council's comments on the **City of Corcoran's Comprehensive Surface Water Management Plan.** To be in full conformance with MN Rules Part 8410.0160 Met Council recommends two updates to the plan regarding stormwater runoff and the City's implementation plan. In addition to those requirements, the Council recommends prioritization of implementation projects, a summary of all impaired waters receiving runoff from the City, and clarification of stormwater management responsibilities within the City. Commission staff are still reviewing the Corcoran plan.
- **B.** Staff will remind cities that have not submitted their **local plans** that the deadline for Commission review and approval is December 31, 2018.
- VII. Water Quality.
- VIII. Grant Opportunities and Updates.
- **A.** Watershed-based Pilot Funding.* The next stakeholder input opportunity will be focus group meetings with each local government type (e.g., watershed districts, WMOs, SWCDs, counties, cities/townships). The first Watershed Management Organization (WMO) focus group meeting will be held on Thursday, September 13, 2018 from 9:00 am 12:00 pm at the Capitol Region Watershed District office, 1410 Energy Park Drive, Suite 4, St. Paul. RSVPs to Marcey Westrick at Marcey.westrick@state.mn.us are requested by August 31.

The objective of the focus group meetings is to receive additional input about watershed-based funding from each local government type and develop potential approaches to bring to a larger forum meeting. At the

Regular Meeting Minutes – August 8, 2018 Page 5

focus group meetings, participants from each local government type will be asked to select 2-3 people to participate in the forum meeting.

- B. Diamond Lake Subwatershed Assessment. At the July meeting the Commission approved a request from the City of Dayton to undertake a subwatershed assessment (SWA) of the Diamond Lake watershed. Barta volunteered to write the application, which is due August 31. As an update, Barta reported that the County is going tosubmit this SWA to the Metro Conservation District grant they are writing for SWA funding. Every county was asked to submit 1-2 applications. She also reported that every time MCD has applied for SWA monies they have been successful.
 - **C. FEMA Floodplain Mapping.** Swenson reported on the progress on this project. (See Staff Report.)
- **D. 319 Small Watersheds Focus Program.** The Minnesota Pollution Control Agency (MPCA) is looking for interested watershed organizations to partner with in developing a long-term roadmap to support comprehensive implementation on a small-scale watershed. Selected "Focus Watersheds" will be prioritized to receive four 4-year grant awards to implement a series of projects outlined in the Focus grant workplan, provide a steady source of funding, focus implementation efforts, and achieve measurable water quality improvements on a specific waterbody. No projects in the Elm Creek watershed have been identified for funding in this round.
- **F. Internal Phosphorus Loading Control in Fish Lake project.*** Vlach presented an update of monitoring results on Fish Lake through July 2018.
- G. The final report for the Rush Creek Headwaters Subwatershed Assessment has been be uploaded to: http://www.elmcreekwatershed.org/uploads/5/8/3/0/58303031/rush creek headwaters swa final july 2018 1 .pdf.
- H. The City of Corcoran has requested that grant finding be sought for a **South Fork Rush Creek Subwatershed Assessment.** It was decided not to include this project on the SWA request that Hennepin County sent in for the Metro Conservation District grant because nothing has been done to date on the North Fork SWA. It was agreed that it would be advantageous to work on that first and see what kind of results are obtained or what lessons could be applied to future documents. Additionally, the Rural Conservationist is taking on the majority of the North Fork SWA implementation and there is not Staff capacity to implement a second SWA at this time.

IX. Education.

West Metro Water Alliance (WMWA). The next WMWA meeting is scheduled for 8:30 a.m., Tuesday, August 14, 2018, at Plymouth City Hall.

X. Communications.

XI. Other Business.

- **A.** The following **projects** are discussed in the August Staff Report.* ("W" denotes wetland project.)
 - 1. 2013-046 Woods of Medina, Medina.
 - **2.** 2014-015 Rogers Drive Extension, Rogers.
 - **3.** 2015-004 Kinghorn Outlet A, Rogers.
 - **4.** 2015-030 Kiddiegarten Child Care Center, Maple Grove.
 - 5. 2016-002 The Markets at Rush Creek, Maple Grove.*
 - **6.** 2016-005W Ravinia Wetland Bank, Corcoran.
 - **7.** 2016-040 Kinghorn 4th Addition, Rogers.
 - **8.** 2016-047 Hy-Vee Maple Grove #1, Maple Grove.
 - 9. 2016-052 The Woods at Rush Creek, Maple Grove.
 - 10. 2017-014 Laurel Creek, Rogers.
 - **11.** 2017-016 Territorial Woods, Maple Grove.
 - **12.** 2017-017 Mary Queen of Peace Catholic Church, Rogers
 - **13.** 2017-019 Medina Senior Living Community, Medina.

Regular Meeting Minutes – August 8, 2018 Page 6

- **14.** 2017-021 Hindu Society of MN Staff Housing, Maple Grove.
- **15.** 2017-029 Brayburn Trails, Dayton.
- **16.** 2017-034 Plymouth Memory Care, Plymouth.
- **17.** 2017-037 L-80 Lift Station MCES, Corcoran.
- **18.** 2017-038 Bass Lake Estates, Corcoran.
- **19.** 2017-039 Rush Creek Apartments, Maple Grove.
- **20.** 2017-044 Reserve at Medina 2nd Addition, Medina.
- **21.** 2017-045 Fish Lake Estates, Maple Grove.
- **22.** 2017-046W Wessell Wetland Delineation, Corcoran.
- **23.** 2017-048W Ebert Parcel Wetland Delineation, Corcoran.
- 24. 2017-050W Ernie Mayer Wetland/floodplain violation, Corcoran.*
- **25.** 2018-001 Rush Creek Commons, Maple Grove.
- **26.** 2018-004 Rush Creek Restoration Project, Maple Grove.
- **27.** 2018-005 Sundance Greens, Dayton.
- **28.** 2018-007 Copper Creek of Nottingham, Maple Grove.
- **29.** 2018-008 Hayden Hills Golf Course Subdivision, Dayton.
- **30.** 2018-013 New Wayzata Elementary School, Plymouth.
- **31.** 2018-014 Refuge at Rush Creek (Fehn Meadows Second Addition), Corcoran.
- **32.** 2018-020 North 101 Storage, Rogers.
- **33.** 2018-021 113th Lane Extension & Brockton Lane/CSAH 101 Intersection, Rogers.
- **34.** 2018-022 Fernbrook Athletic Fields, Maple Grove.*
- 35. 2018-023 King Solutions Distribution Center Addition, Dayton.*
- **36.** 2018-024W Schober Parcel Wetland Delineation, Corcoran.*
- 37. 2018-025W Watten Wetland Delineation/Replacement Plan, Corcoran.*
- **38.** 2018-026 Windrose, Maple Grove.*
- 39. 2018-027 CR 202 Elm Creek Bridge Replacement, Dayton.*
- **40.** 2018-028 Tricare Third Addition, Maple Grove.*
- **41.** 2018-029 McConn, Plymouth.*
- 42. 2018-030 Pineview Meadows, Dayton.*
- **43.** 2018-031 North Dayton AUAR, Dayton.
- **44.** 2018-032 Encore Development, Corcoran.*
- **45.** 2018-033 Cloquet Island Estates, Dayton.
- **46.** 2018-034W NE Trunk Sanitary Sewer, Corcoran.
- **47.** 2018-035 Edgewater East, Maple Grove.
- **48.** 2018-036W D. Johnson Pond Excavation, Corcoran.*
- **49.** 2018-037 Elm Creek Restoration Reach D. Plymouth.
- **B.** Vlach reported that **Starry Stonewort** has been found in Medicine Lake, the first appearance in the metro area.
- C. Scharenbroich reminded the members that the City of Plymouth is hosting a **Winter Parking Lot & Sidewalk Maintenance Training** on August 23, 2018 from 8:00am 1:00pm at Plymouth City Hall. This event is designed for private contractors, city staff, property managers, and maintenance personnel and homeowners. Sign up at https://www.eventbrite.com/e/winter-parking-lot-sidewalk-maintenance-training-city-of-plymouth-tickets-48591948827
 - **D. Adjournment.** There being no further business, the meeting was adjourned at 1:32 p.m.

Respectfully submitted,

Lidi Adiduson

Judie A. Anderson, Recording Secretary JAA:tim

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3235 Fernbrook Lane Plymouth, MN 55447 (763) 553-1144 Fax: (763) 553-9326 judie@jass.biz

To: Elm Creek Commissioners

From: Judie Anderson

Date: September 6, 2018

Subject: Public Hearing 2018 Levy

On April 11, 2018, the Elm Creek Watershed Management Commission, upon recommendation of the Technical Advisory Committee, approved a motion to move forward with a Minor Plan Amendment (MPA) to its Third Generation Watershed Management Plan to revise the Capital Improvement Program (CIP). The MPA would revise Table 4.5 of the Commission's Third Generation Plan CIP in order to add eight projects and shift funding on two existing projects to future years. These new projects and project updates were submitted by the member cities. Following a public meeting conducted by the Commission on May 9, 2018, the Commission adopted Resolution 2018-01 Adopting a Minor Plan Amendment.

Doug Baines, representative from Dayton and Commission chair, was present at a meeting of a Committee of the Hennepin County Board on July 10, 2018, to answer questions regarding the amendment. The County Board approved the Minor Plan Amendment and adopted a 2018 maximum levy of \$462,500 for the Elm Creek Commission on July 24, 2018.

The projects for which the levy will be certified are:

Project 2018-01	Rush Creek Main Stem Stream Stabilization Project Phase 3, Maple Grove	\$ 75,000
Project 2018-02	Elm Creek Stream Restoration Reach D	\$212,500
Project 2018-03	Elm Creek Stream Restoration Phase III, Champlin	\$100,000
Project 2018-04	Downs Road Trail Rain Gardens	\$ 75,000

The Commission called for a public hearing on September 12, 2018, to consider these projects. Member cities and the County have been notified and notice has been duly published.

COMMISSION ACTION

The purpose of the public hearing is to present the proposed projects and proposed financing and to take comment from the member cities and the public. The recommended order of business is as follows:

- 1. Suspend regular meeting
- 2. Staff report on projects and proposed financing
- 3. Commission discussion
- 4. Open public hearing
- 5. Take comments from member cities
- 6. Take comments from public
- 7. Close public hearing
- 8. Commission discussion
- 9. Consider approving Resolution 2018-03 and Cooperative Agreements with the cities of Champlin (2), Maple Grove, and Plymouth.
- 10. Resume regular meeting

Elm Creek Watershed Management Commission Public Hearing 2018 Levy September 6, 2018 Page 2

Revisions to CIP

Description	New Revised	Est Project	2016	2017	2018	2019	2020-2024
Fox Creek Creekview Restora Project, Rogers	Existing R	Cost 321,250	80,312				
Miss Point Park Riverbank Repair, Champlin	E	300,000	75,000				
EC Dam Miss River Shoreline Restora, Champlin	E	7,001,220	187,500				
Fish Lake Alum Treatment Ph 1, MG	N	300,000	75,000				
Rush Creek Main Stem Restora, MG	N	1,650,000	75,000	75,000	75,000*	25,000	<u>75,000</u>
Fox Creek Hyacinth Restora, Rogers	E	360,000 <u>450,000</u>		90,000 <u>112,500</u>			
Fox Creek South Pointe Restora, Rogers	E	90,000		22,500		22,500	
Mill Pond Fishery & Habitat Restora, Champlin	E	5,000,000		250,000			
Tree Thinning Bank Stabiliza Project	R	50,000 annually	50,000	50,000	50,000	50,000	250,000 <u>300,000</u>
Ranchview Wetland Restoration, MG	N	2,000,000		<u>250,000</u>	250,000	250,000	
Stonebridge Storm Sewer Retrofit, MG	R	200,000	50,000	<u>50,000</u>			
Rain Garden Independence Ave, Champlin	R	300,000	75,000	<u>75,000</u>			
Mill Pond Raingardens, Champlin	R	400,000		100,000	100,000		
Agricultural BMPs Cost Share	R	50,000 annually	50,000	50,000	50,000	50,000	100,000 150,000
Stone's Throw Wetland	R	450,000		112,500	112,500	112,500	
Rush Creek South Stem Restora, MG	N	675,000			168,750		
Downtown Pond Expansion & Reuse, Rogers	N	406,000			101,500		
Elm Creek Stream Restora Reach D, Plymouth	N	850,000			212,500*		
Cowley-Sylvan Connection BMPs, Rogers	R	300,000			75,000		
Hickory Dr Stormwater Improve, Medina	N					<u>56,250</u>	
SW Corcoran Wetland Restoration	N					100,000	
Downtown Regional SW Improve, Corcoran	N					10,000	
EC Stream Restora Phase III, Champlin	N				100,000*		
Downs Road Trail Raingardens, Champlin	N				<u>75,000</u> *		
EC Stream Restora Phase IV, Champlin	N					150,000	
Lowell Pond Raingarden, Champlin	N					100,000	
Rush Creek Headwaters SWA BMP Implenta, Corcoran/Rogers	N						50,000
TOTAL			<u>492,812</u>	<u>437,500</u>	<u>462,500</u>		

^{*}Feasibility Report is included in meeting packet

Projects certified for 2016 ad valorem tax levy
Projects certified for 2017 ad valorem tax levy
Projects proposed to be certified for 2018 ad valorem tax levy

Elm Creek Watershed Management Commission Public Hearing 2018 Levy September 6, 2018 Page 3

PROJECT DESCRIPTIONS.

Project 2018-01 Rush Creek Main Stem Stream Stabilization Project, Phase 3, Maple Grove, will stabilize approximately 11,000 linear feet of Rush Creek east of I-94 and west of Fernbrook Lane, decrease potential for further bank instability that likely would occur subsequent to development of the watershed and restore the channel with native vegetation for additional stability and habitat purposes. The project will reduce sediment and nutrient loading and increase oxygenation of the water discharged to Elm Creek. The total estimated cost is \$1,650,000. The 2018 levy funding requested by the Commission for the project is \$75,000, with the remaining amount covered by future Commission levies (up to \$250,000) and the City of Maple Grove.

Project 2018-02 Elm Creek Stream Restoration Reach D, Plymouth, will restore approximately 3,850 linear feet of Elm Creek between Peony Lane and Highway 55 and will blend into the Elm Creek Reach D Restoration Project (2015-2016). The restored creek will have a slightly wider meander pattern resulting in a stream corridor width of 60-70 feet. Installation of root wads, rock veins and native vegetative buffer will help improve water quality in Elm Creek and downstream in Rice Lake. The total estimated cost is \$850,000. The 2018 levy funding requested by the Commission for the project is \$212,500, with the remaining amount covered by the City of Plymouth.

Project 2018-03 Elm Creek Stream Restoration Project Phase III, Champlin, is located directly upstream of the Mill Pond and includes 2,287 linear feet of stream bank restoration, aquatic habitat installation, restoration of streambank habitat, and removal of excess nutrient-laden sediments. The total estimated cost is \$400,000, with the Commission's share being \$100,000. The 2018 levy funding requested by the Commission is \$100,000, with the remaining amount covered by a DNR CPL Grant and the City of Champlin.

Project 2018-04. Downs Road Trail Rain Garden Improvement Project, Champlin, will reduce sedimentation and total phosphorus going into the Mill Pond, improving conditions for aquatic species habitat including sensitive species such as Blandings turtle. The total estimated cost is \$300,000, with the Commission's share being \$75,000. The 2018 levy funding requested by the Commission is \$75,000, with the remaining amount covered by the City of Champlin.

STAFF RECOMMENDATION

The Technical Advisory Committee has reviewed the feasibility reports for these projects and found them to be consistent with the Commission's requirements. Staff recommends that the Commission

- 1. Approve the resolution that accepts the reports,
- 2. Order the projects,
- 3. Certify the Commission's share of the costs of the projects to the county levy, and
- 4. Approve the cooperative agreements with the cities of Champlin, Maple Grove, and Plymouth.

ELM CREEK WATERSHED MANAGEMENT COMMISSION

RESOLUTION NO. 2018-03 ORDERING 2018 IMPROVEMENT PROJECTS, DESIGNATING MEMBERS RESPONSIBLE FOR CONSTRUCTION, AND MAKING FINDINGS AND DESIGNATING COMMISSION COST-SHARE FUNDING

WHEREAS, on October 14, 2015, the Elm Creek Watershed Management Commission (Commission) adopted the *Elm Creek Watershed Management Commission Third Generation Watershed Management Plan*, (hereinafter, "Plan"); and

WHEREAS, the Plan includes a Capital Improvement Program (CIP); and

WHEREAS, on May 10, 2017, the Commission adopted a Minor Plan amendment that added two projects to the CIP, removed one project from the CIP, and shifted the timing of funding of four projects currently listed on the CIP; and

WHEREAS, on May 9, 2018, the Commission adopted a Minor Plan amendment that added eight projects to the CIP and shifted the timing of funding of one project currently listed on the CIP; and

WHEREAS, the Commission's Cost Share Policy, adopted April 11, 2012, specifies a county tax levy under Minn. Stat. § 103B.251 as a source of the Commission's share of funding for projects proposed in the Commission's CIP; and

WHEREAS, on April 11, 2018, the Commission received Feasibility Studies on Project 2018-01: Rush Creek Main Stem Stream Stabilization Phase 3, Maple Grove; Project 2018-02: Elm Creek Stream Restoration Reach D, Plymouth; Project 2018-03: Elm Creek Stream Restoration Phase III, Champlin; and Project 2018-04: Downs Road Trail Rain Gardens, Champlin, (the "Projects"); and

WHEREAS, on September 12, 2018, following published and mailed notice in accordance with the Commission's Joint Powers Agreement and Minnesota Statutes Section 103B.251, the Commission conducted a public hearing on the Projects.

NOW, THEREFORE, BE IT RESOLVED by the Board of Commissioners of the Elm Creek Watershed Management Commission as follows:

- 1. The Projects will be conducive to the public health and promote the general welfare and is in compliance with Minnesota Statutes Sections 103B.205 to 103B.255 (the "Act") and with the Commission's surface water management plan as adopted and amended in accordance with the Act.
 - 2. The cost of the Projects is estimated to be \$3,200,000.
- 3. The Commission receives, accepts and approves the feasibility reports for the Projects, which Projects are hereby ordered.

- Twenty-five percent of the final cost of the Projects, but not more than \$462,500, will be paid by the Commission from proceeds received from Hennepin County pursuant to Minnesota Statutes, Section 103B.251, Subd. 6, and the Commission's Joint Powers Agreement. Additional costs will be paid by the respective cities wherein the projects reside, but no costs will be charged to other members of the Commission. The Commission understands that the County may pay such costs with taxes levied in 2018 and paid in 2019. The Administrator is directed to transmit a certified copy of this resolution to Hennepin County prior to October 1, 2018.
- 5. The cities wherein the projects reside are designated as the members responsible for contracting for the construction of Projects. Contracts for construction shall be let in accordance with the requirements of law applicable to said cities. The Cooperative Agreements for the Projects between the Commission and the cities of Champlin and Rogers are approved and the Chair and Administrator are authorized and directed to execute the agreements.

e

Adopted by the Commissione twelfth day of September, 2018.	ers of the Elm Creek Watershed Management Commission the
ATTEST:	Doug Baines, Chair
Judie A. Anderson, Administrator	(NO SEAL)
STATE OF MINNESOTA COUNTY OF HENNEPIN	
proceedings had and held by the Boa have compared the above resolutio Commission at a regular meeting the	ereby certify that I am the custodian of the minutes of all and of the Elm Creek Watershed Management Commission, that I on with the original passed and adopted by the Board of said creof held on the twelfth day of September, 2018, at 11:30 a.m., d correct copy thereof, that the same has not been amended or ct.
IN WITNESS WHEREOF, I have September, 2018.	ve hereunto placed my hand and signature this twelfth day of
Judie A. Anderson Recording Secretary	(NO SEAL)
necoluling secretary	

COOPERATIVE AGREEMENT FOR

2018-01 RUSH CREEK MAIN STEM STREAM STABILIZATION PROJECT PHASE 3

This Agreement is made as of this	_ day of	, 2018, by and bet	ween the Elm
Creek Watershed Management Commission,	, a joint powers	watershed management	organization
(hereinafter the "Commission"), and the City	y of Maple Grove	e, a Minnesota municipa	l corporation
(hereinafter the "City").			

WITNESSETH:

WHEREAS, the Commission has adopted the Elm Creek Watershed Management Plan as amended on May 9, 2018 (the "Plan"), a watershed management plan within the meaning of Minn. Stat., § 103B.231; and

WHEREAS, the Plan includes a capital improvement program ("CIP") that lists a number of water quality project capital improvements; and

WHEREAS, the water quality projects identified in the CIP include the **Rush Creek Main Stem Stream Stabilization Project Phase 3,** more fully described in Attachment One to this Agreement, which is hereby made a part hereof (the "Project"); and

WHEREAS, the Plan specifies that projects in the CIP will be partially funded by a County tax levy under Minn. Stat., § 103B.251; and

WHEREAS, on September 12, 2018, the Commission adopted a resolution ordering the Project, directing that it be constructed by the City and that the Commission's share of the Project costs be certified to Hennepin County for payment in accordance with Minn. Stat., § 103B.251; and

WHEREAS, it is expected that Hennepin County will levy taxes throughout the watershed for the Project, for collection and settlement in 2019; and

WHEREAS, the City is willing to construct the Project on the terms and conditions hereinafter set forth.

NOW, THEREFORE, ON THE BASIS OF THE PREMISES AND MUTUAL COVENANTS AND AGREEMENTS HEREINAFTER SET FORTH, THE PARTIES AGREE AS FOLLOWS:

- 1. The Project will consist of improvements in the City as more fully described in Attachment One.
- 2. The City will design the Project and prepare plans and specifications for construction of the Project. Plans and specifications are subject to approval by the Commission's consulting engineer and the City of Maple Grove City Engineer.
- 3. The City will advertise for bids and award contracts in accordance with the requirements of law. The City will award the contract and supervise and administer the construction of the Project to assure that it is completed in accordance with plans and specifications. The City will

require the contractor to provide all payment and performance bonds required by law. The City will require that the Commission be named as additional insured on all liability policies required by the City of the contractor. The City will require that the contractor defend, indemnify, protect and hold harmless the Commission and the City, their agents, officers, and employees, from all claims or actions arising from performance of the work of the Project conducted by the contractor. The City will supervise the work of the contractor. However, the Commission may observe and review the work of the Project until it is completed.

- 4. The City will pay the contractor and all other expenses related to the construction of the Project and keep and maintain complete records of such costs incurred.
- 5. The Commission will secure payment from the County in accordance with Minn. Stat., § 103B.251 in the amount of seventy-five thousand dollars (\$75,000). It is understood that tax settlement from the County is not expected to occur until 2019.

Out-of-pocket costs related to the Project, incurred and paid by the Commission for publication of notices, securing County tax levy, preparation of contracts, review of proposed contract documents and administration of this contract shall be repaid from funds received in the tax settlement from Hennepin County. Amounts received from the County, up to \$75,000, less reimbursement to the Commission of such expenses are available for reimbursement to the City for costs incurred by the City in the design and construction of the Project. Reimbursement to the City will be made on completion of the project and submittal of asbuilts. Reimbursement to the City will be made as soon as funds are available provided a request for payment has been received from the City providing such detailed information as may be requested by the Commission to substantiate costs and expenses.

- 6. Reimbursement to the City will not exceed the amount received from the County, up to \$75,000, for the Project less any amounts retained by the Commission for Commission expenses. All costs of the Project incurred by the City in excess of such reimbursement, including all costs incurred in excess of estimated project costs due to unforeseen conditions or any other cause, shall be borne by the City or secured by the City from other sources.
- 7. All City books, records, documents, and accounting procedures related to the Project are subject to examination by the Commission.
- 8. The City will secure all necessary local, state, or federal permits required for the construction of the Project.
- 9. The project will be constructed on land owned or easements held by the City.
- 10. The City will have ownership of the associated improvements, and will maintain them in good operating condition in perpetuity or until such time as they are replaced with like improvements.
- 11. The City will defend, indemnify, protect and hold harmless the Commission and its agents, officers, and employees, from any claims arising out of the design, construction, or maintenance of the Project, including environmental claims. Nothing herein shall be deemed a waiver of the limitations of liability in Minnesota Statutes, Chapter 466.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized officers on behalf of the parties as of the day and date first above written.

	ELM CREEK WATERSHED MANAGEMENT COMMISSION					
1717 (177 (0	ENIENT COMMISSION					
By:						
	Its Chair					
And by:						
	Its Administrator					
CITY OF	MAPLE GROVE					
By:						
	Its Mayor					
And by:						
And by:						
	Its Manager					

ATTACHMENT ONE

CIP-2016-MG-02

Ехнівіт А

Elm Creek Watershed Management Commission Capital Improvement Project Submittal

(This submittal will be rated on its completeness and adherence to the goals of the Commission.

A second page may be used to provide complete responses.)

			A second page may be used to provide complete responses.)						
City			Maple Grove						
Contac	t Name		Rick Lestina						
Teleph	one		763-494-6354						
Email			rlestina@ci.maple-grove.mn.us						
Addres	ss		12800 Arbor Lakes Parkway	, Maple Gro	ove, MN 55398				
Project	t Name		Rush Creek, Main - Stream	Restoration					
	1. Is proje	ect in Mer	nber's CIP? (X) yes ()	no	Proposed CIP Year = 2016				
						Amount			
	Total Estin	\$1,650,000							
	Estin	nated Cor	nmission Share (not to exceed	\$250,000)		\$250,000			
	Othe	r Funding	Sources (name them)			\$			
	City	of Maple	Grove			\$1,400,000			
						\$			
			ope of the project? The City 1,000 feet of Rush Creek east of		Grove is proposing a project to est of Fernbrook.	stabilize and restore			
	the po	tential for		ely would oc	ce(s) will be impacted by the cur subsequent to the developm stability and habitat purposes.				
	likely signifi vegeta	that storm cantly redution will p	water discharge from the adjance the potential for bank erosion rovide a habitat for wildlife and	acent and up on and seding a natural are	from the project? Subsequent pstream watershed will increase nent transport downstream. The ea for aesthetic value and study.	e. This project will restoration of native			
	improv	ves the wa		and reduces	and programs of the Commi the amount of sediment and nu ischarged to Elm Creek.				
0/10		ty to under	ct result from a regulatory ma take this project. However, th) yes (X) no How? The ill assist with for meeting the wa	ere is no mandate for ater quality goals for			
0/10/20	formal	impleme	et address one or more TMD ntation plan has been approved r quality goals for Elm Creek.		ents? (X) yes () no V hat address stream bank stabili	Vhich? Although no ty will be critical in			
0/10/20	8. Does the project have an educational component? (X) yes () no Describe. The project will involve the establishment of a native grass channel and retention of the some quality forest buffer. The area will serve as a City demonstration in regards to the value of a buffer for water quality and wildlife purposes.								
0/10	9. Do all	Oo all the LGUs responsible for sharing in the cost of the project agree to go forward with this project?							
	20.000000000000000000000000000000000000	(X) yes () no Identify the LGUs. Maple Grove							
10/20	10. Is the	0. Is the project in all the LGUs' CIPs? (X) yes () no							
1-34	(For TAC use)								
	11. Does	11. Does project improve water quality? (0-10) 14. Promote groundwater recharge? (0-3)							
	12. Prevent or correct erosion? (0-10) 15. Protect and enhance fish and wildlife habitat? (0-3)								
	AVERAGE PROPERTY	nt flooding			ove or create water recreation fac				
TOTAL	303000	in hooding	. (0-0)	To. Impro	ve of create water recreation lac	AIII. (0-3)			
TOTAL	(poss 114)				7.1Elm Crook/CIDe\2016 ouhmittele\40.00	sh Creek Main Destaration des			

Rush Creek Restoration

This project involves the stabilization of the erosional sites in a 2900 linear foot portion of Rush Creek within the proposed The Enclave on Rush Creek project. The initial erosion was likely due to increase flows from the developing watershed. Erosion has caused encroachment into the adjacent woods and trees and other debris to fall into the creek. The debris in the creek has resulted in diversion of flows to the toe of slopes causing accelerated erosion in most outside bend locations. The erosion has created vertical slopes that range in height from 4 to 10 plus feet.



Slope loss can be as high as 10 feet in some areas along Rush Creek.

Based on the preliminary estimates there are 1,584 linear feet of creek channel that require improvements and stabilization. Control of the erosion at these sites will help minimize loss and encroachment into the woods and future adjacent lots and the planned regional trail. The approach for the channel improvements include:

- Removal of fallen trees and debris from channel to eliminate diversion of flows to toe of slope.
- Removal of select trees along the banks of the creek that appear to be a hazard and close to falling into the channel and causing additional accelerated erosion.
- Installation of Stream Barbs along many of the outside bends with erosion. Stream Barbs
 protect the bank by shifting the stream flows away from the stream bank experiencing
 erosion. The stream barbs are a stream restoration design that will allow sediment to
 naturally deposit upstream of the barbs, push the flows back to the center of the channel
 and create a hydraulic jump in the stream that will help dissipate energy and create some
 pool habitat for fish.

- Native seeding and shrub planting along the erosion sites will also be done to provide deep root structures and protect the slopes from erosion.
- Vertical slopes will be re-graded to less severe slopes (2:1) to allow for stabilization.

The above discussed approach was used successfully in the Rush Creek Improvement project completed in 2006 under the City Project Number 06-16 within the Dunlavin Woods development.



Stream Barbs and Shrubs from 2006 project still functioning to protect slopes along Rush Creek (photo December 2015).

Table 2 Proposed Improvement Cost Summary

The Enclave on Rush Creek Improvements	Fernbrook WM	Territorial WM
Sanitary Sewer	\$330,600	\$330,600
Water Main	\$262,300	\$262,300
Services	\$218,000	\$218,000
Storm Sewer	\$402,800	\$402,800
Streets	\$963,400	\$963,400
Erosion Control	\$46,300	\$46,300
Total Improvements Segal	\$2,223,400	\$2,223,400
City of Maple Grove	Fernbrook WM	Territorial WM
Lift Station and Forcemain	\$464,500	\$464,500
Trunk Watermain	\$873,600	\$662,400
Trunk Watermain Upsize through Development	\$0	\$82,500
Territorial Road Repair - Trunk Water Cost	\$0	\$530,800
Territorial Road Repair City Portion (50% of West Rd Project)	\$0	\$116,000
Rush Creek Restoration	\$442,300	\$442,300
Total Improvements City of Maple Grove	\$1,780,400	\$2,298,500
Territorial Road Assessment Properties	Fernbrook WM	Territorial WM
Territorial Road (50% of West Rd Project)	\$0	\$116,000
Total Improvements Assessed Properties	\$0	\$116,000
Total Project	\$4,003,800	\$4,637,900

The proposed area charges are assigned to the net assessable acres. Table 3 presents a summary of the area charges.

COOPERATIVE AGREEMENT FOR 2018-02 ELM CREEK STREAM RESTORATION PROJECT REACH D

	This Agree	ment is made	as of this	da	y of _		, 201	8, by and betw	veen the Elm
Creek	Watershed	Management	Commission,	а	joint	powers	watershed	management	organization
(herein	after the "Co	ommission"), ai	nd the City of	Ply	mouth	, a Minne	esota munic	ipal corporation	n (hereinafter
the "Ci	ty").								

WITNESSETH:

WHEREAS, the Commission has adopted the Elm Creek Watershed Management Plan as amended on May 9, 2018 (the "Plan"), a watershed management plan within the meaning of Minn. Stat., § 103B.231; and

WHEREAS, the Plan includes a capital improvement program ("CIP") that lists a number of water quality project capital improvements; and

WHEREAS, the water quality projects identified in the CIP include the **Elm Creek Stream Restoration Project Reach D,** more fully described in Attachment One to this Agreement, which is hereby made a part hereof (the "Project"); and

WHEREAS, the Plan specifies that projects in the CIP will be partially funded by a County tax levy under Minn. Stat., § 103B.251; and

WHEREAS, on September 12, 2018, the Commission adopted a resolution ordering the Project, directing that it be constructed by the City and that the Commission's share of the Project costs be certified to Hennepin County for payment in accordance with Minn. Stat., § 103B.251; and

WHEREAS, it is expected that Hennepin County will levy taxes throughout the watershed for the Project, for collection and settlement in 2019; and

WHEREAS, the City is willing to construct the Project on the terms and conditions hereinafter set forth.

NOW, THEREFORE, ON THE BASIS OF THE PREMISES AND MUTUAL COVENANTS AND AGREEMENTS HEREINAFTER SET FORTH, THE PARTIES AGREE AS FOLLOWS:

- 1. The Project will consist of improvements in the City as more fully described in Attachment One.
- 2. The City will design the Project and prepare plans and specifications for construction of the Project. Plans and specifications are subject to approval by the Commission's consulting engineer and the City of Plymouth City Engineer.
- 3. The City will advertise for bids and award contracts in accordance with the requirements of law. The City will award the contract and supervise and administer the construction of the Project to assure that it is completed in accordance with plans and specifications. The City will

require the contractor to provide all payment and performance bonds required by law. The City will require that the Commission be named as additional insured on all liability policies required by the City of the contractor. The City will require that the contractor defend, indemnify, protect and hold harmless the Commission and the City, their agents, officers, and employees, from all claims or actions arising from performance of the work of the Project conducted by the contractor. The City will supervise the work of the contractor. However, the Commission may observe and review the work of the Project until it is completed.

- 4. The City will pay the contractor and all other expenses related to the construction of the Project and keep and maintain complete records of such costs incurred.
- 5. The Commission will secure payment from the County in accordance with Minn. Stat., § 103B.251 in the amount of two hundred twelve thousand five hundred dollars (\$212,500). It is understood that tax settlement from the County is not expected to occur until 2019.

Out-of-pocket costs related to the Project, incurred and paid by the Commission for publication of notices, securing County tax levy, preparation of contracts, review of proposed contract documents and administration of this contract shall be repaid from funds received in the tax settlement from Hennepin County. Amounts received from the County, up to \$212,500, less reimbursement to the Commission of such expenses are available for reimbursement to the City for costs incurred by the City in the design and construction of the Project. Reimbursement to the City will be made on completion of the project and submittal of as-builts. Reimbursement to the City will be made as soon as funds are available provided a request for payment has been received from the City providing such detailed information as may be requested by the Commission to substantiate costs and expenses.

- 6. Reimbursement to the City will not exceed the amount received from the County, up to \$212,500, for the Project less any amounts retained by the Commission for Commission expenses. All costs of the Project incurred by the City in excess of such reimbursement, including all costs incurred in excess of estimated project costs due to unforeseen conditions or any other cause, shall be borne by the City or secured by the City from other sources.
- 7. All City books, records, documents, and accounting procedures related to the Project are subject to examination by the Commission.
- 8. The City will secure all necessary local, state, or federal permits required for the construction of the Project.
- 9. The project will be constructed on land owned or easements held by the City.
- 10. The City will have ownership of the associated improvements, and will maintain them in good operating condition in perpetuity or until such time as they are replaced with like improvements.
- 11. The City will defend, indemnify, protect and hold harmless the Commission and its agents, officers, and employees, from any claims arising out of the design, construction, or maintenance of the Project, including environmental claims. Nothing herein shall be deemed a waiver of the limitations of liability in Minnesota Statutes, Chapter 466.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized officers on behalf of the parties as of the day and date first above written.

ELM CREEK WATERSHED					
MANAG	EMENT COMMISSION				
Ву:					
	Its Chair				
And by:					
,	Its Administrator				
CITY OF	PLYMOUTH				
_					
Ву:					
	Its Mayor				
And by:					
,	Its Manager				

ATTACHMENT ONE

EXHIBIT A

Elm Creek Watershed Management Commission Capital Improvement Project Submittal

(This submittal will be rated on its completeness and adherence to the goals of the Commission.

A second page may be used to provide complete responses.)

City	Plymouth						
Contact Name	Ben Scharenbroich						
Telephone	763-509-5527						
Email	bscharenbroich@plymouthmn.gov						
Address	3400 Plymouth F	Blvd, Plymouth MN 55447					
Project Name	Elm Creek Strea	m Restoration – Reach D					
	ember's CIP?(X)yes()no o Plymouth's next CIP Cycle (Early	Proposed CIP Year = 2018	ı				
2. Has a feasibil	ty study or an engineering report (circle o	one) been done for this projec	t?(X)yes()no				
0.1	2. 10. 10.00		Amount				
Total Estimated F	roject Cost		\$850,000				
Estimated C	ommission Share (up to 25%, not to exceed \$2	250,000)	\$212,500				
Other Fundi	ng Sources (name them) City CIP Fund	s, Hennepin County Grant	\$				
			\$				
2016) which red Commission. This project wor root wads, rock Channel Study through the gol resulting in a str	Lane and Highway 55 and would be blend into the Elm Creek Reach E Restoration Project 2016) which received funding from Hennepin County and the Elm Creek Watershed Mana Commission. This project would have similar components to the Reach E project and will most likely incomposed to wads, rock veins and native vegetative buffers. Reach D was identified in the Elm Channel Study (2007) as a creek section in need of restoration by increasing the chant through the golf course property. The restored creek will have a slightly wider meander resulting in a stream corridor width 60-70 feet. 4. What is the purpose of the project? What water resource(s) will be impacted by the project? The purpose of this project is to restore this degraded section of Elm Creek by wider						
	channel, installing root wads, rock veins and native vegetative buffers to help improve w quality in Elm Creek and downstream in Rice Lake. 5. What is the anticipated improvement that would result from the project? (Include size of area treated and projected nutrient reduction.) Modeled pollutant removal information would be provided to the Elm Creek Waters Management Commission as part of the design process for this project. Reach E, which is dired downstream of this project, was recently restored and was projected to remove 94 lbs/year TP 471,200 lbs/year TSS. The City of Plymouth is monitoring upstream and downstream of Reach and results will be available in early summer 2017.						
Modeled pollut Management Co downstream of 471,200 lbs/yea and results will							
Elm Creek is pa and total suspe requirements. A	project contribute to achieving the goals rt of the Rice Lake watershed and the nded soils levels in Elm Creek as pa A secondary goal of the project is to ents that will improve dissolved oxy	goal of the project is to re rt of the reductions neede o incorporate stream rest	educe phosphorus d to satisfy TMDL oration and water				
0/10 7. Does the proje	ect result from a regulatory mandate?()	X) yes () no How?					

0/10/20	8. Does the project address one or more TMDL requirements? (X) yes () no Which? Rice Lake – Nutrient/Eutrophication Elm Creek – Dissolved Oxygen				
0/10/20	9. Does the project have an educational component? (X) yes () no Describe. The City would provide education on the project to show how it is improving water quality. Additionally, the City could install educational signs on the Wayzata High School property explaining the project, if allowed by the school district.				
0/10	10. Do all the LGUs responsible for sharing in the cost of the project agree to go forward with this project? (X) yes () no Identify the LGUs. City of Plymouth				
10/20	11. Is the project in all the LGUs' CIPs? (X) yes () no Will be added to the City of Plymouth's CIP in 2017.				
1-34	(For TAC use) 12. Does project improve water quality? (0-10) 13. Prevent or correct erosion? (0-10) 14. Prevent flooding? (0-5)	15. Promote groundwater recharge? (0-3)16. Protect and enhance fish and wildlife habitat? (0-3)17. Improve or create water recreation facilities? (0-3)			
TOTAL (po	SS 114)	Adopted April 11, 2012			

Z:\ELM CREEK\MANAGEMENT PLAN\EXHIBIT A_APRIL 2012F.DOC

Judie Anderson

From:

Lucius N. Jonett [ljonett@wenck.com]

Sent:

Tuesday, April 03, 2018 3:40 PM

To:

Ben Scharenbroich

Subject:

RE: Elm Creek Stream Restoration Design Progress

Report 03-27-2018

Ben,

Ed did some hand calculations to estimate reductions as:

TSS: 82 Tons/Year TP: 32 lbs/Year

Lucius Jonett, PLA (MN, ND, IA)

Landscape Architect, Water Resources / Associate



ljonett@wenck.com | D 763.479.4254 | C 715.207.9850

1800 Pioneer Creek Center | Maple Plain, MN 55359

From: Lucius N. Jonett

Sent: Tuesday, April 3, 2018 3:36 PM

To: Ben Scharenbroich <bscharenbroich@plymouthmn.gov>

Subject: RE: Elm Creek Stream Restoration Design Progress Report 03-27-2018

Email 1 of 3

From: Ben Scharenbroich < bscharenbroich@plymouthmn.gov >

Sent: Tuesday, April 3, 2018 1:35 PM
To: Lucius N. Jonett < lionett@wenck.com>

Subject: RE: Elm Creek Stream Restoration Design Progress Report 03-27-2018

Excellent! Thanks for working on getting this completed so quickly

Ben Scharenbroich | Senior Engineering Technician

City of Plymouth Phone: 763.509.5527

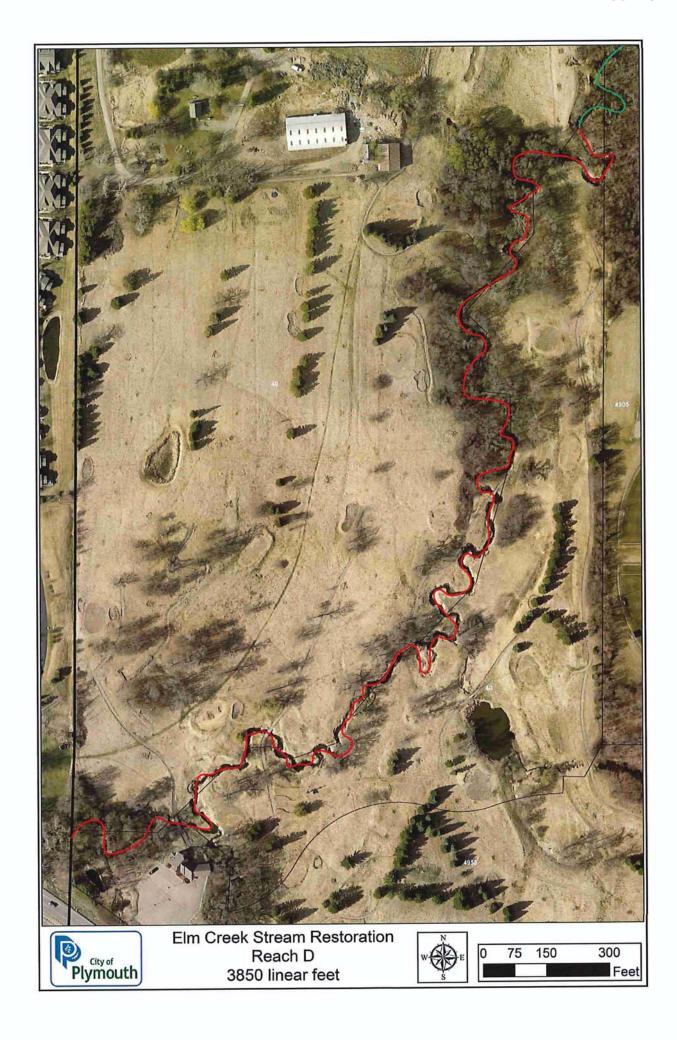
From: Lucius N. Jonett [mailto:ljonett@wenck.com]

Sent: Tuesday, April 03, 2018 1:31 PM

To: Ben Scharenbroich < bscharenbroich@plymouthmn.gov>

Subject: RE: Elm Creek Stream Restoration Design Progress Report 03-27-2018

Ben,



Technical Memo



To:

Ben Scharenbroich, City of Plymouth, MN

From:

Lucius Jonett, Wenck Associates, Inc. Ed Matthiesen, Wenck Associates, Inc.

Date:

April 2, 2018

Subject: Elm Creek Stream Restoration (City Project No. 18011) - Basis of Design

INTRODUCTION

Approximately 0.8 miles of Elm Creek between Highway 55 and Wayzata High School will be restored and stabilized. The work will address phosphorus and suspended solids load reductions through bank and channel stabilization measures. In addition, water quality improvements to address a likely biotic TMDL through improved dissolved oxygen and an improved index of biotic integrity score with in-channel and bank features will be incorporated.

The in-channel restoration methods will be targeted for the geomorphological channel forming flow of the 2-year, 24-hour storm event. The 100-year event will be used to design floodplain stabilization and improvements. However, since the hydrology of the watershed has changed and continues to become more efficient in removing water, the 10-year, 50-year, and 100-year events will also be used to ensure the habitat and channel stabilization methods are durable. The treatments will be strategically placed throughout the reach and will include such practices as the following:

- Grade Control Structures install cross vanes with boulders and locally available rock to stabilize the channel grade and provide in-stream habitat and re-aeration
- Vegetated Buffer Improvement implement selective tree thinning in areas to increase grass and forb cover on the streambanks to improve stability
- Toe Protection stabilize the outer banks of the naturally meandering stream with vegetative riprap, rootwads and log toes for resistive flow protection to redirect stream flow away from the toe.
- Native floodplain vegetation in disturbed areas within the 100-year floodplain to improve soil holding capability with deep rooted vegetation.

The methods described above will reduce downstream effects of sediment resulting from stream bank erosion and will improve the stream corridor for fish and wildlife habitat.

Desk Top Design

The design process begins with desktop work to calculate flow rates, velocities, shear stress, peak and sustained water surface elevations, and an on-site assessment to identify priority areas and to determine likely causes which contribute to the degradation.

Ben Scharenbroich Senior Engineering Technician City of Plymouth April 3, 2018



Air Photo Record

Wenck completed an analysis of historic, georeferenced, aerial photos in Arc GIS from sources including the Minnesota Historical Aerial Photographs Online (MHAPO) service, MnGEO aerial image server from the Minnesota Geospatial Information Office, and the Farm Service Agency (FSA). Photos were available from 1937 to 2016 and were reviewed for an understanding of channel movement, watershed build out and changes in in-coming flow patterns. A map book of aerials, Appendix A, was assembled with 1 representative aerial per decade, unless there was a distinct change in creek centerline, land development, etc. We can visually determine from the aerial analysis that there has been some natural meander migration, but at a slow rate with enough room in the meander belt to not pose a problem for current homes and infrastructure.

Topographic Record

We attempted to determine if the channel has incised from the earliest recorded channel elevations. Ideally, we would create a channel centerline longitudinal profile from our topographic survey of the project completed in February 2018 and compare that to historic topographic data. The historic data however is too coarse to provide a baseline to answer if the channel is incising. Minnesota LiDAR elevation data is a decade old and only measures surface elevation, not bathymetry of waterbodies and streams. We were able to reference the September 2007 Elm Creek Channel Study by Bonestroo, for some representative cross-section data. The surveyed bed elevation is _94.2′. But without X, Y coordinates there is no certainty to where this cross section is located to compare with our surveyed data. Therefore, the historic record is of limited value in noting channel bed downcutting.

FEMA 100-year Elevation

Wenck was able to get the digitalized version of the 100-year floodplain elevation from the EIm Creek FIRM #27053C0167F data available from the MN DNR. Flood elevations are referenced to the National Geodetic Vertical Datum of 1929 (NGVD 29). Since the data is digital, it was exported to AutoCAD and will be added to the design plans and referenced on the channel cross sections. Since this is a non-detailed study area, the 100-year flood elevation is for reference only. The floodplain data is unmodernized (the reach in question is an unnumbered A zone) and will likely be updated in the next round of floodplain edits.

Base Flow Determination

Wenck used the FEMA Flood Insurance Study summary of discharges to determine estimated 1 and 2-year event flows through Elm Creek. Using log probability paper to extrapolate the peak discharge for the 10%, 2% and 1% annual chance events to the 1 and 2-year event. Wenck estimates the 1 and 2 year the flow rates to be 110 and 140 cfs. This is slightly lower than the Bonestroo report notes at 147cfs for the 1yr and 200cfs for the 2yr. For the purposes of this work we will use 150cfs and 200cfs for the 1 and 2-year events.

Ben Scharenbroich Senior Engineering Technician City of Plymouth April 3, 2018



Channel Hydraulics

Using the baseflow and discharge estimates from the Bonestroo and FEMA reports, we have completed open channel flow and shear stress calculations for different storm frequencies are summarized in the following table for the entire reach.

	Discharge, Q (cfs)	Velocity, V (fps)	Depth of Flow (ft)	Shear Stress (lb/ft²)
1-yr	150	4.8	2.4	0.4
2-yr	200	5.3	2.9	0.5
100-yr	245	5.6	3.2	0.6

Conclusion

Based on the desktop analysis, Wenck has determined that there isn't enough evidence to show that the channel has meandered or downcut enough to warrant raising the channel bed in all or a portion of this reach. This will eliminate the need to complete HEC-RAS modeling and show no-rise in the floodplain elevation as long as the effective cross section of the channel remains the same through our stabilization design.

Based on the desktop analysis, Wenck has also determined that the bank stabilization practices consisting of Class II or II riprap, and root wad and log materials will be stable and resist the estimated channel flow velocities. This is confirmed by experience and observation of the same materials being used and in place for over 3 years on the downstream stabilization project.

COOPERATIVE AGREEMENT FOR 2018-03 ELM CREEK STREAM RESTORATION PROJECT PHASE III

This Agreement is made as of this ___ day of ______, 2018, by and between the Elm Creek Watershed Management Commission, a joint powers watershed management organization (hereinafter the "Commission"), and the City of Champlin, a Minnesota municipal corporation (hereinafter the "City").

WITNESSETH:

WHEREAS, the Commission has adopted the Elm Creek Watershed Management Plan as amended on May 9, 2018 (the "Plan"), a watershed management plan within the meaning of Minn. Stat., § 103B.231; and

WHEREAS, the Plan includes a capital improvement program ("CIP") that lists a number of water quality project capital improvements; and

WHEREAS, the water quality projects identified in the CIP include the **Elm Creek Stream Restoration Project Phase III,** more fully described in Attachment One to this Agreement, which is hereby made a part hereof (the "Project"); and

WHEREAS, the Plan specifies that projects in the CIP will be partially funded by a County tax levy under Minn. Stat., § 103B.251; and

WHEREAS, on September 12, 2018, the Commission adopted a resolution ordering the Project, directing that it be constructed by the City and that the Commission's share of the Project costs be certified to Hennepin County for payment in accordance with Minn. Stat., § 103B.251; and

WHEREAS, it is expected that Hennepin County will levy taxes throughout the watershed for the Project, for collection and settlement in 2019; and

WHEREAS, the City is willing to construct the Project on the terms and conditions hereinafter set forth.

NOW, THEREFORE, ON THE BASIS OF THE PREMISES AND MUTUAL COVENANTS AND AGREEMENTS HEREINAFTER SET FORTH, THE PARTIES AGREE AS FOLLOWS:

- 1. The Project will consist of improvements in the City as more fully described in Attachment One.
- 2. The City will design the Project and prepare plans and specifications for construction of the Project. Plans and specifications are subject to approval by the Commission's consulting engineer and the City of Champlin City Engineer.
- 3. The City will advertise for bids and award contracts in accordance with the requirements of law. The City will award the contract and supervise and administer the construction of the Project to assure that it is completed in accordance with plans and specifications. The City will

require the contractor to provide all payment and performance bonds required by law. The City will require that the Commission be named as additional insured on all liability policies required by the City of the contractor. The City will require that the contractor defend, indemnify, protect and hold harmless the Commission and the City, their agents, officers, and employees, from all claims or actions arising from performance of the work of the Project conducted by the contractor. The City will supervise the work of the contractor. However, the Commission may observe and review the work of the Project until it is completed.

- 4. The City will pay the contractor and all other expenses related to the construction of the Project and keep and maintain complete records of such costs incurred.
- 5. The Commission will secure payment from the County in accordance with Minn. Stat., § 103B.251 in the amount of one hundred thousand dollars (\$100,000). It is understood that tax settlement from the County is not expected to occur until 2019.

Out-of-pocket costs related to the Project, incurred and paid by the Commission for publication of notices, securing County tax levy, preparation of contracts, review of proposed contract documents and administration of this contract shall be repaid from funds received in the tax settlement from Hennepin County. Amounts received from the County, up to \$100,000, less reimbursement to the Commission of such expenses are available for reimbursement to the City for costs incurred by the City in the design and construction of the Project. Reimbursement to the City will be made on completion of the project and submittal of as-builts. Reimbursement to the City will be made as soon as funds are available provided a request for payment has been received from the City providing such detailed information as may be requested by the Commission to substantiate costs and expenses.

- 6. Reimbursement to the City will not exceed the amount received from the County, up to \$100,000, for the Project less any amounts retained by the Commission for Commission expenses. All costs of the Project incurred by the City in excess of such reimbursement, including all costs incurred in excess of estimated project costs due to unforeseen conditions or any other cause, shall be borne by the City or secured by the City from other sources.
- 7. All City books, records, documents, and accounting procedures related to the Project are subject to examination by the Commission.
- 8. The City will secure all necessary local, state, or federal permits required for the construction of the Project.
- 9. The project will be constructed on land owned or easements held by the City.
- 10. The City will have ownership of the associated improvements, and will maintain them in good operating condition in perpetuity or until such time as they are replaced with like improvements.
- 11. The City will defend, indemnify, protect and hold harmless the Commission and its agents, officers, and employees, from any claims arising out of the design, construction, or maintenance of the Project, including environmental claims. Nothing herein shall be deemed a waiver of the limitations of liability in Minnesota Statutes, Chapter 466.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized officers on behalf of the parties as of the day and date first above written.

ELM CREEK WATERSHED					
MANAG	MANAGEMENT COMMISSION				
Ву:					
	Its Chair				
And by:					
	Its Administrator				
CITY OF	CHAMPLIN				
Rv.					
Бу	Its Mayor				
And by:					
	Its Manager				

ATTACHMENT ONE

Elm Creek Stream Restoration Phase III, City of Champlin EC WMC 2018 CIP

Summary

Elm Creek Stream Restoration project is a high priority project multiple phase project in cooperation with the City of Champlin, Elm Creek Watershed Management Commission and Hennepin County to restore water resources that within the City of Champlin and the Elm Creek Watershed. The City of Champlin Management Plan developed in 2008 has identified goals for accelerating programs and projects for improved habitat, water quality and flood control through a variety of conservation measures in areas surrounding Champlin Minnesota. Prioritization and implementation of appropriate protection, enhancement and restoration measures on area lands, streams, ditches, rivers, lakes and wetlands within the City of Champlin and Elm Creek Watershed have been accelerated through use of conservation decision making tools which aid in determining high priority projects that are beneficial to the City of Champlin, Elm Creek Watershed and the Upper Mississippi River Watershed. The Elm Creek Habitat Restoration Project is divided into six phases. Phase 1 included replacement of the existing Mill Pond dam in May of 2016. Phase 2 is the Mill Pond aquatic habitat restoration through installation of habitat structures and restoration of deep water habitat refuge lake depths by removal of excess nutrient laden sediments in the three bays of the Mill Pond which is a full funded project proposed for construction in November 2017-February 2018. Phase 3 is a continuation of an existing 3,000 linear feet Elm Creek Watershed District stream restoration project. This phase includes 2,287 linear feet of stream bank restoration of Elm Creek which is located up gradient of and flows through the Mill ponds ultimately into the Mississippi River. Design plans have been completed in cooperation with the MNDNR, Elm Creek Management Commission and Hennepin County.

Problem statement

Elm Creek is impaired water with low dissolved oxygen, restoring the stream banks and providing habitat structure will reduce downstream sedimentation and provide native habitat improvements including root wads, boulder vanes, toe wood, boulder clusters and rock riffles with varied substrate to enhance aquatic species habitat including sensitive species such as Blanding's Turtle.

Project objectives

The riparian areas of the creek will be restored with native planting buffer using both plugs and Native seeding that will filter sediments and nutrients from direct runoff. Our current water plan Specifically identifies goals for accelerating projects for improved habitat, water quality and flood control. The project allows the City of Champlin to meet these goals and open opportunities for the public that includes recreation, fishing and educational experiences.

Elm Creek Stream

Methods

In preparing the Habitat Restoration Plan, the City of Champlin utilized all available data which includes hydrologic assessments and completed field surveys of Elm Creek Phase 3 project based on standards in the Minnesota Department of Natural Resources (MNDNR) Fisheries Stream Survey Manual, Rosgen Channel Characterization Information relative to topography was obtained from MNDNR LiDAR data generating one foot elevation contours from Digital Elevation Models (DEM), topographic contour data was ground-truthed by documenting existing stream conditions. This funding request includes permit requirements, construction supervision, costs for materials, construction and installation services. Our experience in completing previous phases of habitat restoration projects we have effectively reduced costs on the project, achieved overall project goals and allows effectively efficient project completion schedule.

Experience / Abilities

The City of Champlin is successful in completing projects that improve the watershed related to urban and rural impacts. Our participation from volunteer efforts is measured by the total number of participants reached through outreach efforts. The City of Champlin has been successful in receiving grant funds for various programs. Some of these grant funds related to previous phases of the project include clean water grants, flood hazard mitigation grants, LCCMR Grants and State of MN Bonding Dollars.

Funding Review

The proposed budget for the improvement is estimated at \$400,000. It is anticipated that the EC WMC will fund 25% cost share (\$100,000). The City has been awarded a \$200,000 grant from the DRN CPL Grant Program.

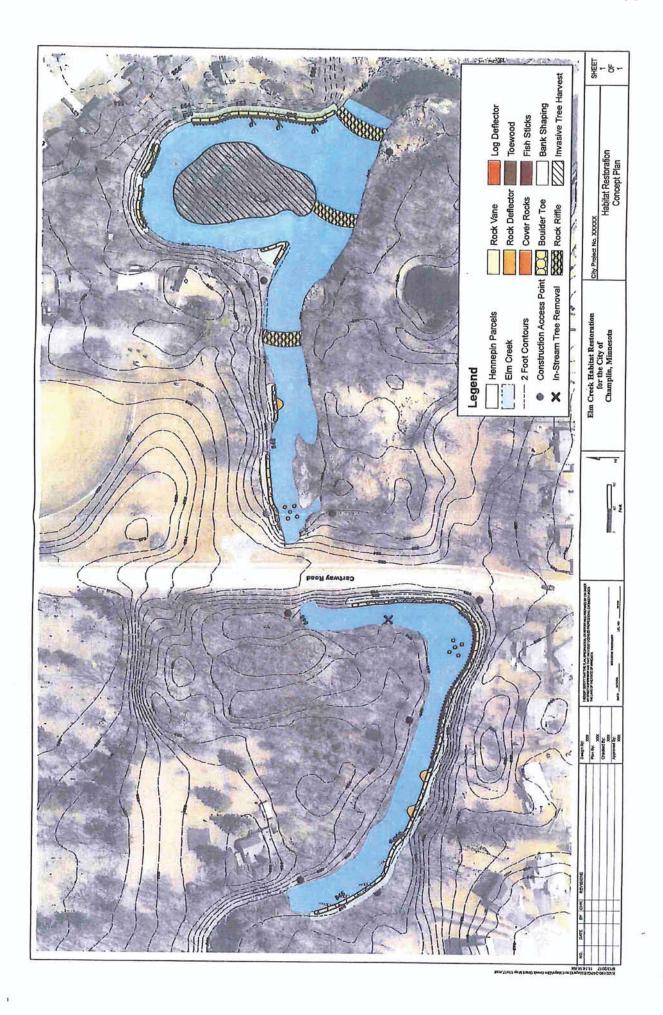
Ехнівіт А

Elm Creek Watershed Management Commission Capital Improvement Project Submittal

(This submittal will be rated on its completeness and adherence to the goals of the Commission.

A second page may be used to provide complete responses.)

		ricecona page maj se accate					
City	CHAMPLIN						
Conta	ontact Name TODD TUOMINEN						
Telep	hone	ne 763-923-7120					
Email		ttuominen@ci.champlin.mn.us					
Addre	ss	1195	11955 Champlin Drive, Champlin MN 55316				
Projec	ct Name	ELM CREEK STREAM	RESTORATION PHASE III, IMPROVEN	MENT PROJECT			
	1. Is project in Me	ember's CIP? (X) yes () no Proposed CIP Year = 2018				
	Has a feasibilit no	y study or an engineering i	report (circle one) been done for this proje	ect?(X)yes()			
	I			Amount			
	Total Estimated Pr			\$400,000			
		mmission Share (up to 25%, r	not to exceed \$250,000)	\$100,000			
	Other Fundin	g Sources (name them)		\$300,000			
		ope of the project?		\$400,000			
	4. What is the purpose of the project? What water resource(s) will be impacted by the project? The proposed Elm Creek Stream improvement will restore stream bank and aquatic habitat installation of habitat structures and restoration of stream bank habitat, removal of excess nutrient laden sediments.						
-	and projected r Elm Creek is imp habitat structure including root wa substrate to enha 6. How does the p Elm Creek is impai	nutrient reduction.) aired water with low disso will reduce downstream s ids, boulder vanes, toewoo ance aquatic species habit project contribute to achieving red water with low dissolved	rould result from the project? (Include size blved oxygen, restoring the stream bank edimentation and provide native habitated, boulder clusters and rock riffles wit at including sensitive species such as go the goals and programs of the Commissions, high TSS and high Total P. The Including TSS and high Total P. The Including Sensitive Sensitiv	ts and providing timprovements h varied Blandings Turtle.			
0/10		et result from a regulatory m	VLA from the Elm Creek TMDL. andate? (X) yes () no How?				
0/10/20	8. Does the project address one or more TMDL requirements? (X) yes () no Which? TSS, TOTAL P, Increases DO.						
0/10/20	9. Does the project have an educational component? (X) yes () no Describe. The project will be included in Elm Creek Mill Pond Educational program, which will be coordinated with the Champlin Environmental Resources Commission and area schools.						
0/10	(X)yes()r	no Identify the LGUs. Cit	186 - 540 - Marian Basa 1810 1864	with this project?			
10/20	11. Is the project in	all the LGUs' CIPs? (X)	yes () no				
1-34	(For TAC use)						
	12. Does project imp	rove water quality? (0-10)	15. Promote groundwater recharge? (0-3)				
	13. Prevent or correct	et erosion? (0-10)	16. Protect and enhance fish and wildlife h	abitat? (0-3)			



COOPERATIVE AGREEMENT FOR 2018-04 DOWNS ROAD TRAIL RAIN GARDENS PROJECT

	This Agree	ment is made	as of this	da	y of _		, 201	8, by and betw	een the Elm
Creek	Watershed	Management	Commission,	а	joint	powers	watershed	management	organization
(herein	after the "C	ommission"), a	nd the City of	Cha	amplin	, a Minne	esota munici	pal corporation	ı (hereinafter
the "Ci	ty").								

WITNESSETH:

WHEREAS, the Commission has adopted the Elm Creek Watershed Management Plan as amended on May 9, 2018 (the "Plan"), a watershed management plan within the meaning of Minn. Stat., § 103B.231; and

WHEREAS, the Plan includes a capital improvement program ("CIP") that lists a number of water quality project capital improvements; and

WHEREAS, the water quality projects identified in the CIP include the **Downs Road Trail Rain Gardens Project**, more fully described in Attachment One to this Agreement, which is hereby made a part hereof (the "Project"); and

WHEREAS, the Plan specifies that projects in the CIP will be partially funded by a County tax levy under Minn. Stat., § 103B.251; and

WHEREAS, on September 12, 2018, the Commission adopted a resolution ordering the Project, directing that it be constructed by the City and that the Commission's share of the Project costs be certified to Hennepin County for payment in accordance with Minn. Stat., § 103B.251; and

WHEREAS, it is expected that Hennepin County will levy taxes throughout the watershed for the Project, for collection and settlement in 2019; and

WHEREAS, the City is willing to construct the Project on the terms and conditions hereinafter set forth.

NOW, THEREFORE, ON THE BASIS OF THE PREMISES AND MUTUAL COVENANTS AND AGREEMENTS HEREINAFTER SET FORTH, THE PARTIES AGREE AS FOLLOWS:

- 1. The Project will consist of improvements in the City as more fully described in Attachment One.
- 2. The City will design the Project and prepare plans and specifications for construction of the Project. Plans and specifications are subject to approval by the Commission's consulting engineer and the City of Champlin City Engineer.
- 3. The City will advertise for bids and award contracts in accordance with the requirements of law. The City will award the contract and supervise and administer the construction of the Project to assure that it is completed in accordance with plans and specifications. The City will

require the contractor to provide all payment and performance bonds required by law. The City will require that the Commission be named as additional insured on all liability policies required by the City of the contractor. The City will require that the contractor defend, indemnify, protect and hold harmless the Commission and the City, their agents, officers, and employees, from all claims or actions arising from performance of the work of the Project conducted by the contractor. The City will supervise the work of the contractor. However, the Commission may observe and review the work of the Project until it is completed.

- 4. The City will pay the contractor and all other expenses related to the construction of the Project and keep and maintain complete records of such costs incurred.
- 5. The Commission will secure payment from the County in accordance with Minn. Stat., § 103B.251 in the amount of seventy-five thousand dollars (\$75,000). It is understood that tax settlement from the County is not expected to occur until 2019.

Out-of-pocket costs related to the Project, incurred and paid by the Commission for publication of notices, securing County tax levy, preparation of contracts, review of proposed contract documents and administration of this contract shall be repaid from funds received in the tax settlement from Hennepin County. Amounts received from the County, up to \$75,000, less reimbursement to the Commission of such expenses are available for reimbursement to the City for costs incurred by the City in the design and construction of the Project. Reimbursement to the City will be made on completion of the project and submittal of asbuilts. Reimbursement to the City will be made as soon as funds are available provided a request for payment has been received from the City providing such detailed information as may be requested by the Commission to substantiate costs and expenses.

- 6. Reimbursement to the City will not exceed the amount received from the County, up to \$75,000, for the Project less any amounts retained by the Commission for Commission expenses. All costs of the Project incurred by the City in excess of such reimbursement, including all costs incurred in excess of estimated project costs due to unforeseen conditions or any other cause, shall be borne by the City or secured by the City from other sources.
- 7. All City books, records, documents, and accounting procedures related to the Project are subject to examination by the Commission.
- 8. The City will secure all necessary local, state, or federal permits required for the construction of the Project.
- 9. The project will be constructed on land owned or easements held by the City.
- 10. The City will have ownership of the associated improvements, and will maintain them in good operating condition in perpetuity or until such time as they are replaced with like improvements.
- 11. The City will defend, indemnify, protect and hold harmless the Commission and its agents, officers, and employees, from any claims arising out of the design, construction, or maintenance of the Project, including environmental claims. Nothing herein shall be deemed a waiver of the limitations of liability in Minnesota Statutes, Chapter 466.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized officers on behalf of the parties as of the day and date first above written.

ELM CREEK WATERSHED					
MANAGEMENT COMMISSION					
Ву:					
	Its Chair				
And by:					
	Its Administrator				
CITY OF	CHAMPLIN				
CITTOI	CHAIVII LIIV				
Rv:					
Бу					
	Its Mayor				
A I I.					
And by:					
	Its Manager				

ATTACHMENT ONE

EXHIBIT A

Elm Creek Watershed Management Commission Capital Improvement Project Submittal

(This submittal will be rated on its completeness and adherence to the goals of the Commission.

A second page may be used to provide complete responses.)

City	CHAMPLIN						
	ct Name TODD TUOMINEN						
Telep	Store to called autobactic bisson	9 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4					
Email	7.0.40.00	ttuominen@ci.champlin.mn.us					
Addre		119	11955 Champlin Drive, Champlin MN 55316				
	ot Name		•	SARDEN IMPROVEMENT	PROJECT		
	1. Is project in M	ember's CIP? (X) yes () no	Proposed CIP Year = 2018	3		
		ty study or an engineering		one) been done for this proje	ect?(X)yes()		
					Amount		
	Total Estimated P	roject Cost			\$300,000		
	Estimated Co	ommission Share (up to 25%,	not to exceed \$25	(0,000)	\$100,000		
	Other Fundir	g Sources (name them)			\$200,000		
					\$300,000		
	 What is the purpose of the project? What water resource(s) will be impacted by the project? The proposed raingarden will improve water quality in the Mill Pond and Elm Creek. What is the anticipated improvement that would result from the project? (Include size of area treated and projected nutrient reduction.) Elm Creek is impaired water with low dissolved oxygen, excess TSS AND Total P. Project will reduce sedimentation and total P going into Mill Pond. Project will help improve conditions for aquatic species habitat including sensitive species such as Blandings Turtle. 						
	Elm Creek is impa	oroject contribute to achieving ired water with low dissolved Creek is part of Champlin's N	d oxygen, high	TSS and high Total P. The In	sion? mprovements to the		
0/10	7. Does the proje	ct result from a regulatory m	nandate? (X) yes () no How?			
0/10/20	8. Does the proje	ect address one or more Tises DO.	MDL requireme	ents? (X)yes ()n	o Which? TSS,		
0/10/20	included in Elm (ct have an educational com Creek Mill Pond Education esources Commission and	al program, w	hich will be coordinated v			
0/10	10. Do all the LGU	ls responsible for sharing in	the cost of the	project agree to go forward	with this project?		
	(X) yes () no Identify the LGUs. City of Champlin						
10/20	11. Is the project in	n all the LGUs' CIPs? (X)	yes () no				
1-34	(For TAC use) 12. Does project im 13. Prevent or corre 14. Prevent flooding	Company of the Compan	16. Protect	e groundwater recharge? (0-3) and enhance fish and wildlife I e or create water recreation fac	nabitat? (0-3)		
TOTAL (pos	ss 114)				Adopted April 11, 2012		
			*		Adopted April 11, 2012		

Downs Road Area Rain Garden and Storm Sewer Improvements

Project Overview

The areas north of the Mill Pond were constructed prior to ponding and water quality requirements for storm water runoff. City staff has identified drainage and erosion issues on Down Road Avenue adjacent to the Elm Creek. The drainage area includes Down Road and the exiasting Parking lot of the Champlin Methodist Church. The anticipated benefits include a reduction in rate of flows to the Elm Creek and a reduction in the total phosphorous (TP) and total suspended solids (TSS) tributary to the Mill Pond. Also, the Phase I pond will serve as the compensatory storage for floodplain fill for fill areas required for the project. The Trail/Access Road project is scheduled for construction in 2018 and requires permitting for the filling of flood plain and wetland mitigation.

Construction

The proposed work includes the replacement of storm outlet and the construction of a Rain Garden/Pond on the Church property. The City is negotiating project easements The Rain Garden/Pond will provide treatment of storm water for the existing parking lot and Down Road. The storm sewer is expected to be modified and treated in raingarden and routed through an adjacent development pond. Downs road will be reconstructed in the future improvement projects and the storm sewer will be connected to the new rain garden/pond.

Funding Review

The proposed budget for the Rain Garden/Pond improvement is estimated at \$300,000. The City will fund \$225,000 for the project. And it is proposed that the Elm Creek WMC fund \$75,000. The EC WMC CIP has identified 12,500 (2018 CIP) and \$62,500 (2019 CIP).





Preliminary Concept Plan Champlin, Minnesota 12/05/17 | 010927-000





Church Parking Lot Easements



701 Xenia Avenue South | Suite 300 | Minneapolis, MN 55416 | (763) 541-4800

July 26, 2018

Elm Creek Watershed Management Commission 3235 Fernbrook Lane Plymouth, MN 55447 763-553-1144

Cc: Judie Anderson; Watershed Administrator

Re: Proposal to Request Funding to Complete a Subwatershed Assessment for Fish Lake in Maple Grove

On behalf of the City of Maple Grove, this proposal is being provided to request assistance in funding to complete the Fish Lake Subwatershed Assessment.

The TMDL study for Fish Lake was completed in 2016 as part of the Elm Creek Watershed Commission watershed-wide TMDL and WRAPS reports. Since the completion of the study, progress has been made by completing an alum treatment, completing additional street sweeping, and other best management practices. Although the load reduction identified in the TMDL study is for internal loading, the proposed Fish Lake Subwatershed Assessment will help the City define activities for watershed load reductions to compliment the alum treatment. This will also include looking at opportunities for treatment upstream of Edward Lake.

The Subwatershed Assessment will consist of completing hydrologic and water quality models to verify the existing watershed conditions for Fish Lake. The following items will be identified as part of the Subwatershed Assessment final report:

- Areas discharging untreated stormwater to Fish Lake, as well as areas where treatment may be enhanced.
- Improvement options will be developed and evaluated to determine the amount of stormwater treatment benefit.
- Constructability analysis will be completed to ensure improvements provide a feasible/achievable solution.
- Cost-benefit analysis will be completed to help prioritize the projects that will provide the "best bang for the buck" based on initial cost, annual maintenance cost, and overall phosphorus removed annually.

The projected cost to complete the Fish Lake Subwatershed Assessment is \$35,000. We are excited to work with you on this project. Please do not hesitate to contact Stephanie at 763-762-2828 with any questions.

Sincerely,

WSB & Associates, Inc.

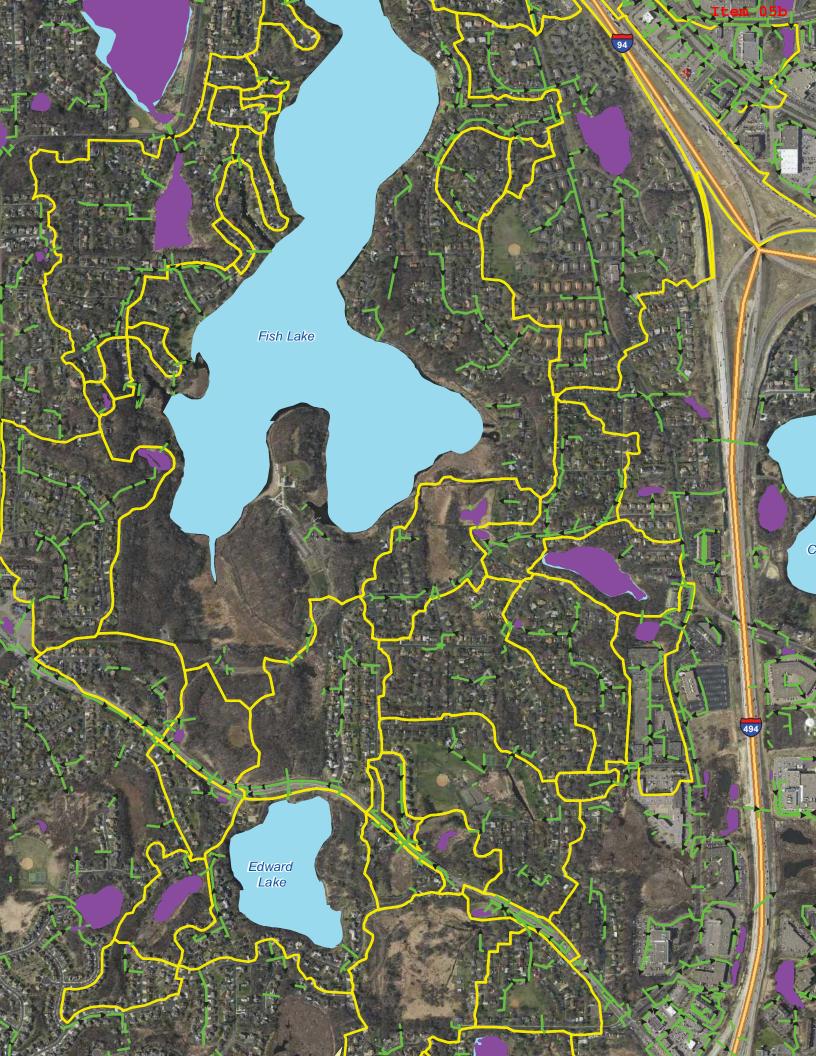
Stephanie Hatten

Water Resources Engineer

terlune Hatter

Jake Newhall, PE Project Manager

Attachments: Fish Lake Subwatershed Assessment Figure



elm creek Watershed Management Commission

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August 16, 2018

Mr. Thomas Berry Wenck Associates 7500 Olsen Memorial Highway, Suite 300 Golden Valley, MN 55427

Re: Dayton Local Water Management Plan Commission Review

Dear Mr. Berry;

On behalf of the Elm Creek Watershed Management Commission, I have reviewed the City of Dayton's Local Water Management Plan dated May 2018 for conformance with the Commission's 3rd Generation Watershed Management Plan and per MN Statutes 103B and Minnesota Rules 8410. Prior to a final recommendation of approval, we would like to see the following comments, recommendations and clarifications considered in your plan;

- 1) The city's future land use plans shows complete development (build-out) by 2040. We recommend the city updates its 2008 comprehensive stormwater management plan taking into account the updated land use information while also updating the infrastructure maps, costs, ECWMC and NPDES 1.1" abstraction requirements and Atlas 14 rainfall data analysis.
- 2) The plan generally follows the ECWMC rules and standards and appears to be in compliance. Complete compliance is hard to discern based on the wording in some of the sections. As an example, in Section 5, Goal 8, Policy 8.1 the plan states, 'City goals, policies and ordinances shall be consistent with NPDES, Metropolitan Council, MDNR, MPCA, Elm Creek Watershed Management Commission and BWSR requirements, including but not limited to MS4, ISTS, feedlot, floodplain, shoreland, Mississippi River Corridor Critical Area and wetland requirements. In addition most of the other goals and policies mention the terms 'shall' and 'preferred' as they relate to the policy to carry out said goals. This seems to be vague and allows for greater variation in actually carrying out and achieving your goals.
- 3) The Commission would like to see a specific plan for adopting and enforcing a livestock manure management ordinance similar to the ECWMC model ordinance guidelines.
- 4) The Commission requests the modifications or clarifications of the comments and recommendations provided by the Metropolitan Council in their June 29, 2018 correspondence (attached).

Thank you for the opportunity to review your Surface Water Management Plan. Please contact me at 612-348-7338 if you have any questions on this information.

Sincerely,

James C. Kujawa

Technical Advisor to the Commission

Judie Anderson Executive Secretary, ECWMC cc Judy Sventek, Metropolitan Council

Tina Goodroad, Dayton City Administrator

June 29, 2018

Judie Anderson, Administrator Elm Creek Watershed Management Commission 3235 Fernbrook Lane North Plymouth, MN 55447

RE: City of Dayton draft Local Water Management Plan Review No. 21963-1

Dear Ms. Anderson:

The Metropolitan Council (Council) has completed its review of the City of Dayton's (City) draft Local Water Management Plan (Plan). The Plan was reviewed for consistency with the Minnesota Rules Part 8410.0160 and the Council's 2040 Water Resources Policy Plan (Policy Plan) particularly with respect to Appendix C-2: Local Surface Water Management Plan Elements.

The City has shown commitment to the management and improvement of the water resources within and outside its boundaries. This commitment has been demonstrated by, for example:

- The implementation plan states that the City will continue to work with developers to incorporate MIDS standards into new development and redevelopment projects during permit reviews.
- A dedicated ordinance, Mississippi River Corridor (Ch. 1001.07), to protect the Mississippi River Critical Area Corridor and the Outstanding Resource Value Water designation of the Mississippi River.

The Plan continues this commitment, but it does require some additional information to meet the requirements of Minnesota Rules Part 8410.0160 and the Council's 2040 Water Resources Policy Plan (Policy Plan).

- 1. Table 3.2, 2010 Land Use in the City of Dayton, needs to be updated from 2010 to current land use information.
- 2. Diamond Creek is shown as discharging from French Lake on Figures 3.1 and 3.5, but it is shown discharging from Diamond Lake on Figures 3.2, 3.3, 3.4, and 3.6. These figures should be corrected to show consistency.
- 3. The Plan includes by reference a trunk stormwater system map which is provided on the city's website. This map shows drainage area boundaries, flow paths, and existing and proposed conveyance infrastructure. However, the map was last updated in 2007. Assuming changes have been made to the stormwater system since 2007, this map needs to be updated to reflect current conditions.
- 4. The plan is required to have a description of volumes and rates per Minnesota Rules 8410.0160. The plan includes by reference a hydraulic model, which was created in 2008. The Plan states that this model can be used to identify drainage areas, volumes, rates, and flow paths. This hydraulic model should be updated to current conditions and the use of Atlas 14 precipitation frequency curves. Providing more detailed information in the Plan about the hydraulic model would be helpful to the Plan user.



- These rules also require area and elevations for stormwater storage adequate to meet performance standards or official controls. The model should be updated to Atlas 14 rainfall event frequency curves and 2040 land use conditions.
- 6. Atlas 14 is referenced once in the Plan (Policy 2.5 for Goal 2): storm sewer design for the 10-year event. Atlas 14 should also be incorporated into the Goals and Policies (section 5) for calculating precipitation amounts and stormwater runoff rates beyond just storm sewer design and the 10-year event (for example, policies 2.2, 2.3, 2.4, 2.7).
- 7. The Implementation Actions table (Table 6.2) needs to provide a schedule, estimated costs, and funding sources for each item. The items in the Implementation Actions table need to be prioritized as well. These items need to be provided in the Plan per Minnesota Rules 8410.0160.
- 8. The Plan is required to provide a section titled "Amendments to Plan", per Minnesota Rules 8410.0160, that establishes the process by which amendments may be made.
- 9. The roles of the City and the Elm Creek Watershed Management Commission are not clearly defined in the Plan with respect to carrying out the implementation actions plan including the implementation of WRAPS and TMDLs. These roles need to be clearly defined in the Plan.

Council staff would like to thank you for producing the Water Resources Management Plan and the opportunity to comment on it. If you have any questions about these comments, please contact Brian Johnson at (651) 602-8743, or brian.johnson@metc.state.mn.us

Sincerely,

Sam Paske

Assistant General Manager, MCES, Environmental Quality Assurance Dept.

cc: Tina Goodroad, City of Dayton

Sarah Nalven, Wenck Associates

Tom Berry, Wenck Associates

Katie Rodriguez, Metropolitan Council District 1

Freya Thamman, Metropolitan Council Sector Representative

Raya Esmaeili, Metropolitan Council Referrals Coordinator

Brian Johnson, Water Resources Section

elm creek Watershed Management Commission

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STAFF REPORT September 6, 2018

2014-015 Rogers Drive Extension, Rogers. This project involves improvements along Rogers Drive from Vevea Lane to Brockton Lane. The project is located east of I-94, south of the Cabela development. The total project area is 8.0 acres; proposed impervious surfaces total 5.6 acres. Site plans received July 1, 2014 meet 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.

2015-004 Kinghorn Outlot A, Rogers. This is a 31-acre site located between the Clam and Fed Ex sites on the west side of Brockton Road and I-94. The proposed site will have two warehouse buildings with associated parking and loading facilities. In June 2015 the Commission approved this project with three conditions. Revisions have yet to meet the Commission's approval conditions. This project was extended by the City of Rogers earlier this year. It will remain active on the Staff Report.

2016-005W Ravinia Wetland Replacement Plan, Corcoran. In December 2016 the Commission approved Staff's findings and recommendations on this wetland replacement plan. Final wetland impacts are 1.22 acres. Wetland credits created on site will be 4.01 acres. Excess credits of 0.75 acres are proposed to be used on Lennar's Laurel Creek development in Rogers (2017-014). All approval contingencies have been met and construction completed.. Vegetation planting and management took place throughout 2017. Barr Engineering will provide monitoring *starting in 2018*, to ensure the replacement meets the performance standards of the approved plans.

2016-040 Kinghorn 4th Addition, Rogers. This is a 13.7-acre parcel located in the northwest corner of the intersection of Brockton Lane and Rogers Drive. An industrial warehouse with 8.8 acres of new impervious area is proposed for the site. The plan includes the use of a NURP pond and a biofiltration basin to meet Commission requirements for rates, water quality and abstraction. The adjacent site is likely to be developed in the near future and some of the stormwater features were oversized to accommodate future development. In November 2016 the Commission approved the project conditioned on: 1) approval of only this phase; future phases will need additional review and approval; 2) final modifications to the hydrologic modeling; 3) additional details are provided for a proposed water re-use system; 4) an O&M Plan for the pond and biofiltration basin is completed and recorded on the final plat; 5) modification of the storm sewer system to maximize the area draining to the NURP pond; and 6) receipt and review of wetland-related documentation if wetlands are present. Condition #1 required no action, so has been met. Condition #2 has been met for the current design; however, any future design modifications will require additional review. Conditions #3-6 remain outstanding and are expected to be addressed during final design. Staff has discussed the project with the City and been in contact with the project engineer to receive an update, but no new information has been provided.

2016-047 Hy-Vee North Maple Grove. The applicant is proposing to disturb 13 acres of a 20.4-acre site located at the northeast corner of Maple Grove Parkway and 99th Avenue for the purpose of constructing a grocery store, fuel station, convenience store and parking facilities. Staff sent preliminary review comments and requested revisions on December 14. In their findings dated January 10, 2017, Staff recommended approval of this project subject to 1) receipt, approval, and recordation of an Operations and Maintenance Plan for the pond and the iron-enhanced

filtration system, 2) revisions for items relating to buffer requirements and erosion and sediment control as enumerated in the findings, and 3) receipt of a signed and dated final plan set. The Commission approved Staff's recommendations at their January 11, 2017 meeting with the additional requirement that the Commission receive and comment on a WCA impact notice. No new information has been received to date.

2017-039 Rush Creek Apartments, Maple Grove. This project is located in the southwest quadrant of the intersection of Bass Lake Road (CSAH 10) and Troy Lane (CSAH 101). The project area is 8.2 acres in size and includes two phases of construction. Phase I is 236 apartment units located on 6.0 acres; Phase II is a future 76-unit apartment building located on 2.2 acres in Outlot C of this development. The Commission will review this project for conformance to rules D, E and I. Findings with no recommendations dated November 15, 2017, were provided to the applicant and City. The applicant requested and was granted an extension of the deadline (per MN statute 15.99) to December 31, 2018.

2017-044 Reserve at Medina 2nd Addition, Medina. Erosion control plans for the final buildout of this addition of the Reserve at Medina project were originally approved under permit #2013-002. This addition is located southeast of Hackamore Road and Pinto Drive (CR116), immediately east of the First Addition, and will allow for the construction of 46 new single-family homes. The plans are in conformance with the previously approved project and require small modifications in order for Staff to complete its administrative review. Revised plans were submitted to Staff on July 27, 2018. Staff found the required modifications had been made and administratively approved the project on August 16, 2018. This item will be removed from the report.

2017-050W Ernie Mayer Wetland/floodplain violation, Corcoran. The Commission was informed of a potential wetland violation occurring on four parcels in Corcoran. Initial site inspection appears to confirm the wetland violation. An access road was constructed from Larkin Road into these parcels. The road appears to be constructed in MN Wetland Conservation Act jurisdictional wetlands within the Rush Creek floodplain. A Technical Evaluation Panel (TEP) met onsite on December 11 to advise the Local Government Unit (the Commission) as to the extent of any violation and the development of a restoration order for any violation that has occurred on this site. An informational meeting with the TEP and applicant was held on January 30,2018. Another TEP was held May 22, 2018, for the field investigation. In addition to the road work wetland filling, extensive ditching and drain tile installation was verified on site. All this work appears to be in violation of Commission permiting and WCA requirements TEP findings were provided to all parties concerned. Mayers requested another TEP to provide additional information to the panel. The TEP meeting was held on July 20. Some revisions to the impacts were accepted by the TEP, but the TEP found the original violations to the WCA still existed. A restoration order was issued to Mayers giving him until September 15 to respond or restore the violation areas to their original conditions. A request for an extension to November 1, 2018 was received from Mayers' attorney. The DNR Conservation Officer and LGU staff agreed to the extension and will issue it to them.

2018-004 Rush Creek Restoration Project, Maple Grove. The City is proposing to restore 2,400 feet of Rush Creek just north of Territorial Road adjacent to the Enclave on Rush Creek development. This is within the Three River Parks corridor that was obtained when the development was platted and is being reviewed for compliance o the Commission's grading and floodplain requirements. Staff has completed its review. This item was pulled from the agenda at the Commission's June meeting due to concerns from a partner agency. No further progress or communication has occurred and this project will not be brought forward for the Commission's review until the parties have reached agreement on proceeding.

2018-005 Sundance Greens, Dayton. This site consists of seven parcels totaling 310 acres. Approximately half is the Sundance Golf course and the other half is agricultural land. The applicant is proposing a long term, phased residential development with 665 residential units while maintaining a portion (9 of the 18 holes) of the golf course. Total new impervious area will be 71 acres. The site is being reviewed for Commission Rules D, F, and I. Staff's review and findings dated February 23, 2018 were provided to the City and applicant. Because the plans do not meet the Commission's requirements no recommendations were given. The decision deadline per MN 15.99 was extended by Staff to June 2, 2018 giving the applicant the opportunity to respond to their findings. The applicant requested and was granted an extension to October 10, 2018. Revisions were received July *31 and are being reviewed by Staff at this time . Findings and recommendations are provided in the packet for the Commissions consideration. An updated recommendation will be provided to the Commission at their meeting.*

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

2018-007 Copper Creek of Nottingham, Maple Grove. This is a 4.03 acre in-fill project in the Nottingham development section of Maple Grove. It is located about 1/4 mile northeast of the intersection of Nottingham Parkway at Bass Lake Road along 73rd Place/Xene Lane cul-de-sac. Nine new single family residential lots are proposed. The current site plans dated February 12, 2018 do not meet the Commission's standards for water quality, abstraction and erosion controls. Staff's review and findings were sent to the City and applicant on March 6. The decision deadline per MN Statute 15.99 expired on June 20, 2018. After numerous requestes to the City and the applicant, no new information has been received. Staff will notify the applicant and the City that the site plans do not meet the Commission's requirements and unless an extension to the 15.99 deadline is received by August 15, the application will be denied and a new application will have to be provided in order for this project to move forward.

2018-013 Wayzata Elementary School #9, Plymouth. This site is the southwest 24-acre area of a 73-acre parcel. The property was subdivided into a phased 111 residential subdivision on 49 acres last year (ECWMC project 2017-036, The Enclave of Elm Creek) with this area site to be reviewed and approved when submitted. Stormwater was designed and approved by the Commission with both projects as one management system, but the final plans for the school site had not been determined at the time of the Enclave review. The approval for project 2017-036 was contingent upon, a) the school project review and approval or b) an alternative abstraction design be implemented in the residential project. This submittal is for the school project review and approval. The Commission review for the Elementary School site will be for rules D, E, F and I. At their July meeting, the Commission approved Staff's recommendation dated June 20, 2018, with the further condition that site grading in Medina cannot proceed until all WCA and grading regulations for the portion of the school site within the jurisdiction of the City of Medina are permitted by Medina. *The Medina WCA application notice was received in August. This item will be removed from the report*.

2018-014 Refuge at Rush Creek (formerly Fehn Meadows 2nd Addition), Corcoran. The site is currently a 63-acre agricultural property located west of Cain Road on CR 117. The applicant proposes to subdivide the site into 14-residential lots. *Pubic road and trail access will impact two wetland basins, totaling 16,537 SF of type 1 wetland impacts. Replacement at a 2:1 ratio in Bank Service Area (BSA) 7, Major Watershed 20 (Metro Mississippi)- is proposed.* The wetland replacement plan has been noticed per WCA requirements. *The Commission approved this project with conditions at their August meeting. These were: 1) Certification from MN BWSR that 0.7593 acres of wetland banking credits from account #1643 have been transferred for use on this site or an escrow of \$90,000 is received from the applicant, 2) Preservation and buffer areas meet the Commission and City requirements for buffer and preservation, 3) \$4,000 per acre escrow is secured by the ECWMC for buffer/preservation compliance and 5-year monitoring plan, and 4) Operation and maintenance plans for stormwater ponds are approved by the Commission and City and recorded on the property title.*

2018-020 North 101 Storage, Rogers. This is an existing 3-acre lot in the northwest corner of Highway 101 and CR144. The current land use is a combination of mini-storage units and outdoor storage. The site is proposed for complete demolition and the construction of seven new mini-storage buildings. Site plans must comply with Rules D and E. Because the project is disturbing over 50% of the site area (100% actual), Staff review will be the same as for a new development and stormwater management plans must comply with all impervious areas. At their July meeting the Commission approved Staff findings dated July 9, 2018, pending four items relating to abstration requirements and the infiltration system. *No new information has been received as of this update.*

2018-021 113th Lane Extension/Brockton/101, Rogers. The City of Rogers is proposing to extend 113th Lane to provide a second access to the proposed second phase of the Laurel Creek Development. The proposed road will extend from Brockton Lane to the development entrance. It will inlude a 4-lane divided roadway from Brockton Lane to the development entrance; an off-road trail north of 113th Lane; and construction of an intersection to meet County turn-lane requirements. The project will create 2.13 acres of new impervious surface. The project was conditionally approved at the July Commission meeting. The conditions include submittal of signed final plans and finalization of the wetland mitigation plan. The project has been delayed until 2019, so submittals to meet the conditions have not yet been received.

2018-022 Fernbrook Fields, Maple Grove. The City of Maple Grove is planning to construct athletic fields in the southwest intersection of 99th Avenue North and Fernbrook Lane. This project site is 19 acres in size and will consist of constructing four full-size, multi-purpose athletic fields. Staff site review will be for compliance with the Commission's Rules D, E and I. If findings and a recommendations were not available at the July meeting, the applicant requested administrative approval for their grading and eroison control plans assuming the risk of changes necessary to conform to the Commission's final decision. Staff granted administrative approval to begin grading and erosion control on this site on July 20, 2018, along with a review that made no recommendation on the project. Revised plans were received and reviewed by Staff. In accordance with Staff's findings dated August 7, 2018, the Commission approved this project at their August meeting with no conditions, This item will be removed from the report.

2018-023 King Solutions Distribution Center, Dayton. This is site is in the Wicht industrial Park. A 97,750 SF commercial/industrial building and its associated parking and utility construction are proposed. Regional ponding was constructed as part of the overall stormwater management plan. Review will be for grading, erosion controls and conformance to the original stormwater management plan assumption. Staff reviewed the plans and issued an adminstrative approval on July 23, 2018. *This item will be removed from the report*.

2018-025 Watten Wetland Delineation/Replacement Plan, Corcoran. This is an application for a wetland boundary/type determination, wetland replacement plan, and the sequencing analysis of the replacement plan. This is a vacant 5-acre residential flag lot on CR 10. Kjolhaug Environmental Services did the wetland delineation on December 12, 2017 with a follow-up visit on May 2, 2018. Anderson Engineering completed the wetland replacement plan for construction of a residential gravel driveway (12' wide) for access to the buildable area. 4,422 SF (0.1015 acres) of one wetland basin will be impacted. 0.2030 acres of wetland banking credits are proposed to be purchased from B. Engstrom bank account 1643 (major watershed #20, BSA 7) for replacement of the impacts. At their August meeting the Commission approved this project pending receipt of BWSR certification of 0.2030 acres of wetland credits transfer for 0.1015 ac. of impacts.

2018-026 Windrose, Maple Grove. This proposed 8.5-acre townhome site is in the east quadrant of CR 101 and Bass Lake Road. The stormwater management plans for this area were approved by the Commission for their Second Generation Watershed Management Plan *under project 2009-004 (Hustad Property/Markets at Rush Creek)*, but never completely constructed. The Commission approved Staff's finding and recommendations dated July 20, 2018. Final plan approval is contingent upon verification of the wetland approvals by the City of Maple Grove and the approval and recording of the operation and maintenance plan on the filter basins.

2018-027 CR202 Bridge, Dayton. This is a replacement bridge on Elm Road in the Elm Creek Park Reserve. Staff has been working with the DNR and Hennepin County on the floodplain issues as they relate to the replacement. Staff review is for conformance with rules E and F. In their findings dated July 24, 2018, Staff recommended approval of this project subject to a number of minor plan revisions and receipt of the project review fee. As of this writing, Staff has not received these items. The project review fee has been issued by the County and should be received yet this week.

2018-029 McConn, Plymouth. This is a 6-acre parcel proposed to be developed into eight residential lots. It is located on the north side of CR 47 between Vagabond and Urbandale Lanes. The Commission's review will be for compliance with rules D, E and I. *In their findings dated July 24, 2018, Staff recommended approval of this project subject to submittal of a SWPPP for a complete erosion control plan. meeting. The Commission approved this recommendation at their August meeting. The SWPPP was received August 8, 2018. This item will be removed from the report.*

2018-030 Pineview Meadows, Dayton. This is 38.25 acre, mutiple parcel subdivision proposed to be developed into 84 residential lots. Located south of Dayton River Road, between Pineview and Vinewood Lanes, the project will be reviewed for conformance with rules D, E, G, I and K. This item has previously been discussed at the June and July 2018 Commission meetings in regards to a variance from Commission rules related to a landlocked drainage area. Staff reviewed the plans and variance request based on plans submitted for review on July 11, 2018. Staff also granted administrative approval for grading and erosion control to begin on the project site. *The Commission took two actions on this project at their August meeting. First, the three required variances to the Commission's rules were approved; secondly the project was approved with no conditions. No outstanding items remain. This item will be removed from the report.*

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

2018-031 North Dayton AUAR, Dayton. This is an Environmental Review document known as an Alternative Urban Area Review (AUAR) for a 560-acre area in the City of Dayton. It is similar in nature to an Environmental Impact Statement. The land in question is generally located north of North Diamond Lake Road, south of Dayton River Road, east of the Daytona Golf Club, and west of Oxbow Lane and the adjacent farmstead Staff received the document for review on July 17, 2018. The review is for the conversion of the area to approximately 1500 to 1700 residential units and a commercial development area. Staff reviewed the document for consistency with Elm Creek rules and comment on any other larger scale issues in the area. No issues of concern were apparent in the document. General comments of complaince to the Commission's rules and standards were provided to the City and Hennepin County. This item will be removed form the report.

2018-032 Encore Development, Corcoran. This project is generally located west of Brockton Lane (101) and south of Steig Road, with a portion located north of Steig Road. The project includes a combination of residential and commercial development on 226 acres, including 398 lots and 13 acres of commercial area. Plans were received for the project on July 13, 2018. A wetland replacement plan for filling and mitigating 0.4263 acres of impacts was also submitted with the application.

Wetland Issues. A Technical Evaluation Panel held on August 23 found the replacement and mitigation proposed from the wetland replacement plan application to be consistent with the MN WCA chapter 8420 rules with the exception of using wetland 7 as a source of irrigation for the project. The applicant was requesting a no-loss certificate from the LGU for excavating an irrigation pond in wetland 7. The TEP felt that using wetland 7 for irrigation can, in effect be considered drainage impacts to this wetland if not managed properly. The issues that come into play for this irrigation pond are: a) the increase in the amount of water entering this basin because of the changes in land use and water volumes from the development, b) the well water used to augment the normal water elevation in the wetland because it will affect the bounce in the irrigation pond and the surrounding wetland area, c) the timing, bounce and duration of the irrigation drawdown, and d) the outlet control structure to the wetland will affect the duration of the saturation on this wetland basin.

The TEP requested hydrology modeling and management information information that would maintain the wetlands normal water elevations and duration of saturation similar to the pre-existing conditions to their satisfaction. This information has been provided but has not been reviewed by the TEP. An update and recommendation on the wetland replacement plan and irrigation management plan (no-loss request for wetlnad 7) will be provided to the Commission at their meeting, if available.

2018-033 Cloquet Island Estates, Dayton. This is a proposal to develop approximatly 77 acres of farmland near the intersection of North Diamond Lake Road and Dayton River Road. It will include the construction of 193 single-family homes and increase imprevious area by approximately 24.4 acres. Stormwater will be managed through seven wet detention ponds, one filtration bench, and one new infiltration bench. Staff is reviewing the plans at this time and a recommendation will be provided at the September meeting.

2018-034W NE Trunk Sanitary Sewer, Corcoran. This is an application from the City for a wetland determination of noloss for temporary impacts to wetlands associated with installing this sewer line from the City of Rogers/Maple Grove/Dayton/Corcoran corner to the Encore development at Steig Road. Staff will issue a no-loss certificate for temporary impacts when the site plans meet the WCA requirements. Currently the only delay is the timeline for vegetation establishemnt in the wetlands. WCA requires a 6-month period be specified or an extension request to that deadline granted from the LGU. This will be required on the site plan for Staff approval.

2018-035 Edgewater East, Maple Grove. This is a 43-lot residential subdivision located on approximately 27 acres. The project is located near the northwest corner of Bass Lake Road and Brockton Lane. An incomplete application was submitted on July 16, 2018. The applicant was notified that the application was considered incompete on July 17, 2018. No new information has been received to date.

2018-037 Elm Creek Restoration Reach D, Plymouth. This project proposes to implement stream restoration along

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

3,850 feet of Elm Creek. Plans were received on July 25, 2018. Staff is working to complete its review and will bring forward a recommendation to the meeting if it is available.

2018-038 Vincent Wood, Rogers. This is a 19 acre parcel that was previously approved for eight apartment buildings by the Commission in 2015. The new site plans propose two apartment buildings with 4.25 acres of impervious areas. The project includes two stormwater ponds to provide water quality treatment, and a filtration bench has been proposed in one of the ponds to meet the abstraction requirements which were not in place as of the last project approval. If available, findings and recommendations will be provided to the Commission at their meeting. Staff is also considering a request for permission to begin grading prior to formal Commission approval.

2018-039 Greenway North, Plymouth. This a 27-acre site consists of 5 rural single family lots south of CR 47 and west of Troy Lane. Pulte Homes is proposing to develop the area in two phases into 37 single family residential lots and 103 townhomes. This development was reviewed for compliance to the Commission rules D, E, F, and I. If available, findings and a recommendation will be provided to the Commission at their meeting.

2018-040 Rush Creek Commons, Phase II, Maple Grove. Maple Grove is proposing to reconstruct approximately 1,600 feet of Brockton Lane, converting Brockton Lane from a rural roadway to an urban section with curb and gutter and storm sewer. The project will also construct a trail for approximately 1,300 feet on the south side of Bass Lake Road and will add curb and gutter for approximately 500 feet along a currently rural segment of Bass Lake Road. The project will disturb 3.8 acres The proposed project is a linear project that will create less than one acre of new impervious surface but is considered to be an extension of the adjacent Rush Creek Commons development and is, therefore, required to be reviewed by the Commission. Staff administratively granted grading permit approval to begin grading prior to the Commission taking formal action on the project at the applicant's risk. If availible, Staff will bring forward a recommendation to the Commission at the meeting

2018-041W Homestead Trail Wetland Delineation, Savoie property, Corcoran. This is a wetland boundary and type review on a 16-acre rural residential lot. It has been noticed and reviewed per WCA requirements. Staff will issue an approval decision if no other comments are received before the public notice deadline date of September 10.

2018-042 Ostrom Hills, Maple Grove This is a 10 acre site along Lawndale Lann and 68th Avenue. 15 single family residental lots are proposed. Site plans are not considered complete. Staff are awaiting authorization from the City of Maple Grove before proceeding.

2018-043 Bee Hive Homes, Maple Grove. This is a 2.9 acre lot on Weaver Lake Road at W. Fish Lake Road (across from Medtronics). It is proposed to be developed into two single story senior housing buildings. Site plans are not considered complete. Staff are awaiting authorization from the City of Maple Grove before proceeding.

2018-044 OSI Phase II, Medina. OSI is a proposed new office building located on the company's existing commercial/industrial property located at the intersection of MN Highway 55 and Arrowhead Road. The project involves the construction of a new building and associated parking and landscaped areas as well as utilities to serve the building and site. It will be reviewed for compliance to the Commission rules D, E, F, and I. The applicant has been notified of an incomplete application. Fees, city authorization and the applicants signature have not been received.

FINAL RECORDINGS ARE DUE ON THE FOLLOWING PROJECTS:

2013-046 Woods of Medina. Medina. In January 2015 the Commission approved this project with two conditions. *This project remained active throughout this period with the final plat recently approved by the City. No significant changes were made to the original plans. The two conditions were 1) compliance to the WCA requirements and 2) final approval and recording of the O & M plans. The WCA condition has been met with only the O&M plan condition remaining.*

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.

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

2016-002 The Markets at Rush Creek, Maple Grove. This is a proposal to develop 40 acres of a 123-acre planned unit development located in the southwest quadrant of the intersection of CSAH 101 and CSAH 10. In May 2016 the Commission granted Staff authority to administratively approve the project and report any updates. *Updated plans with some minor layout revisions were reviewed by Staff and administratively approved on July 24, 2018, contingent upon the Operation and Maintenance Plan approval and recordings*.

2016-052 The Woods at Rush Creek, Maple Grove. At their March 2017 meeting, the Commission approved Staff's findings and recommendations dated February 15, 2017. Outstanding items are the biofiltration pond, O & M plans, and recording.

2017-014 Laurel Creek, Rogers. At their June 14, 2017 meeting 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 by the City as to whether the City or the HOA will be responsible for the operation and maintenance of the stormwater management facility. In his August 31, 2017 email, Andrew Simmons responded that the O&M agreement is still being negotiated.

2017-016 Territorial Woods, Maple Grove. Approved at the September 13, 2017 Commission meeting contingent upon receipt of an O & M agreement meeting the Commission's rules. The agreement was approved by the City and is in the process of being recorded.

2017-017 Mary Queen of Peace Catholic Church, Rogers. At their June 14, 2017 meeting the Commission granted Staff approval authority pending satisfactory compliance with Staff's findings. All items from the findings have been completed with the exception of the O&M agreement for the stormwater facilities. In his August 31, 2017 email, Andrew Simmons responded that he has the O&M agreement in hand, just awaiting recordation. On June 7, 2018 Simmons reported that the Church is in the process of revising stormwater management plan for site to include water reuse instead of biofiltration pond. Commission should receive a revised application in near future. There are also underlying utility easement issues with this project that are holding up the final recording of the plat against which to record the maintenance agreement.

2017-019 Medina Senior Community, Medina. This item was approved at the Commission's September 2017 meeting subject to conditions. All of the conditions have been met with the submission of revised plans, with the exception of the final recordings of the O&M agreements and easements. On June 6, 2018, city staff reported that the applicant is anticipated to be recording documents and starting construction in the summer.

2017-021 Hindu Society of MN, Maple Grove. At their June 14, 2017 meeting, the Commission approved this project per Staff's recommendations. All the recommendations have been met with the exception of the O&M plan agreements.

2017-029 Brayburn Trails, Dayton. At their August 2017 meeting the Commission approved Staff's findings dated August 2, 2017 with five conditions. All of the conditions have been met with the submission of revised plans, with the exception of the final recordings of the O&M agreements and easements. On March 7, 2018, the City reported: final plat approval has not been granted, easements will be recorded as plats are approved. Ponds will be maintained by the City of Dayton. An agreement, and additional easement, will be required for a water re-use system within one of the ponds (between the City and HOA). This system is not part of the first addition – the timing of said improvements/agreement is unknown. Construction is expected to start in 2018.

2017-034 Plymouth Memory Care, Plymouth. This project was approved by the Commission at its September 2017 meeting subjec to the receipt of an O&M agreement acceptable to the Commission. On June 7, 2018, city staff reported that the applicant is working with them to finalize the maintenance agreement. It is anticipated the agreement will be recorded by July.

2017-037 Corcoran L-80 Lift Station, Corcoran. Staff recommended the Commission approve this project contingent upon the project meeting the Commission wetland buffer requirements. This item was approved by the Executive Committee of the Commission in October 2017. Revised plans meet the Commission's buffer requirements with the

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

exception of the final easment recordings. On March 6, 2018, city staff informed the Commission that they are working with a land surveyor and will complete the recordations before construction is completed.

2017-038 Bass Lake Estates, Corcoran. This is a proposed residential development consisting of 55 single family lots and one commercial lot on a 40-acre site. At their March 14, 2018 meeting, the Commission approved Staff's findings dated March 13, 2018 which recommended approval contingent upon the applicant recording the maintenance agreements and easements within 90 days of final plat recording.

2018-001 Rush Creek Commons, Maple Grove. Approved at the February 14, 2018 meeting contingent upon meeting the Commission's operation and maintenance requirements on the stormwater facilities, i.e., all ponds and biofiltration basins must have drainage and utility easements and operation and maintenance agreements over them. These must be recorded on the property title and a copy of the recordations must be provided to the Commission within 90 days after final plat approval.

2018-018 Summers Edge Phase III, Plymouth. This is a 15-acre parcel located at the northeast corner of the intersection of Brockton Lane and Medina Road. The proposed development consists of 45 single-family homes on a parcel that is currently vacant. Staff review was for compliance with rules D, E, and I. The Commission approved Staff's recommendations dated June 12, 2018 at their June 13 meeting, subject to receipt of final easements over the wetland buffers within 90 days of final platting in a format acceptable to the Commission.

2018-028 Tricare Third Addition, Maple Grove This is a 2.1-acre area that will be split out of an 85-acre parcel north of CR 30 at 96th Avenue and Dunkirk Lane. An 18,000 SF commercial retail building with its associated parking and utilities are proposed. *In their findings dated August 7, 2018, Staff recommended approval contingent on approval and recordation of the operations and maintenance plan on the filter basins.* The Commission further recommended *that the City of Maple Grove consider an oil/debris type of seperator in the parking lot manhole.*

LOCAL PLANS

Maple Grove Draft Surface Water Management Plan. Staff reviewed the City of Maple Grove's Draft Surface Water Management Plan dated January 2018. Their comments were included in their letter to the City dated March 7, 2018.

FEMA FLOODPLAIN MAPPING

Elm Creek Floodplain Mapping: Staff continues its collection of and preparation of background data in GIS to use in the preparation of the hydology and hydraulics modeling. Staff is also working on ensuring the models selected for use are working correctly at this time and working out a few bugs. Actual work products should start to become available at the Commission's meeting in October.

CLEAN WATER FUND GRANTS

North Fork Rush Creek SWA Implementation: Staff applied for a Clean Water Fund grant from BWSR to implement the recently completely SWA. \$142,110.00 was requested from the state, with a required match of \$35,527.50. The Rural Conservationist will take the lead on recruiting and implementing projects if the grant is successful.

Diamond Creek SWA: Hennepin County added this as their recommendation for a SWA to the Metro Conservation District SWA grant and it was submitted. Staff expect to hear back on all BWSR grant proposals in early December 2018.

COUNTY DITCHES

Ditches 3 & 16: These two ditches in Corocoran will be surveyed this fall and in the spring landowners will be approached about doing projects on their property that benefit water quality as well as addressing any drainage problems. The Rural Conservationist will be handling this work acting as the drainage authority.

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

Minnesota Wetland Conservation Act **Notice of Decision**

Local Government Unit (LG	10)	Address			
Elm Creek Watershed Management Commission			ernbrook Ln N, Plym	nouth, MN	
	1. PROJECT INFORM	ATION			
Applicant Name Chris Rains Project Name Refuge at Rush Creek (former Fehn Meadows 2 nd Addition) #0311923130002			Date of Application April 24, 2018	Application Number 2018-014	
Attach site locator map.					
Гуре of Decision:					
☐ Wetland Boundary or Typ	pe No-Loss lacement Plan		xemption S	equencing	
Гесhnical Evaluation Panel Fi	indings and Recommendation (if	any):			
Approve	Approve with cond	itions] Deny	
	OCAL GOVERNMENT UN	NIT DE	CISION		
Date of Decision: August 8 ,	2018				
				Denied	
Date of Decision: August 8, Approved	2018	(include	below)	Denied	

Wetlands may not be impacted until all applicable conditions have been met!

BWSR Forms 7-1-10 Page 1

LGU Authorized Signature:

Signing and mailing of this completed form to the appropriate recipients in accordance with 8420.0255, Subp. 5 provides notice that a decision was made by the LGU under the Wetland Conservation Act as specified above. If additional details on the decision exist, they have been provided to the landowner

and are available from the LGU upon request.					
Name	Title				
James C Kujawa	Technical Advisor to the LGU				
Signature	Date	Phone Number and E-mail			
/ (2)/-	August 17, 2018	612-348-7338			
Jan (h		James.Kujawa@hennepin.us			

THIS DECISION ONLY APPLIES TO THE MINNESOTA WETLAND CONSERVATION ACT. Additional approvals or permits from local, state, and federal agencies may be required. Check with all appropriate authorities before commencing work in or near wetlands.

Applicants proceed at their own risk if work authorized by this decision is started before the time period for appeal (30 days) has expired. If this decision is reversed or revised under appeal, the applicant may be responsible for restoring or replacing all wetland impacts.

This decision is valid for three years from the date of decision unless a longer period is advised by the TEP and specified in this notice of decision.

3. APPEAL OF THIS DECISION

Pursuant to MN Rule 8420.0905, any appeal of this decision can only be commenced by mailing a petition for appeal, including applicable fee, within thirty (30) calendar days of the date of the mailing of this Notice to the following as indicated:

Check one:

Appeal of an LGU staff decision. Send	Appeal of LGU governing body decision.
petition and \$0 fee (if applicable) to:	Send petition and \$500 filing fee to:
Elm Creek Watershed Management Commission	Executive Director
3235 Fernbrook Ln N	Minnesota Board of Water and Soil Resources
Plymouth, MN 55447	520 Lafayette Road North
	St. Paul, MN 55155

4. LIST OF ADDRESSEES

SWCD TEP member: (email only) Stacey. Lijewski@co.hennepin.mn.us
BWSR TEP member: (email only) Ben Meyer (ben.meyer@state.mn.us).
LGU TEP member (if different than LGU Contact):
DNR Regional Office (email only) Becky.Horton@state.mn.us
WD or WMO (if applicable):
Applicant: (email only)Chris Rains, chris@rainsproperties.com
City of Corcoran: Brad Marten bmartens@ci.corcoran.mn.us
Members of the public who requested notice (notice only) Ben Hodapp , bhodapp@ae-mn.com
Corps of Engineers Project Manager (notice only) Justin.T.Berndt@usace.army.mil
BWSR Wetland Bank Coordinator (wetland bank plan applications only)

6. ATTACHMENTS

In addition to the site locator map, list any other attachments:
⊠ ECWMC findings and decision dated August 17, 2018
◯ Wetland Replacement Plan Addendum from Anderson Engineering dated August 6, 2018

BWSR Forms 7-1-10 Page 2

elm creekWatershed Management Commission

ADMINISTRATIVE OFFICE 3235 Fernbrook Lane Plymouth, MN 55447 PH: 763.553.1144 E-mail: judie@jass.biz

TECHNICAL OFFICE
Hennepin County Public Works
Department of Environment and Energy
701 Fourth Ave. South, Suite 700
Minneapolis, MN 55415
PH: 612.348.7338

E-mail: james.kujawa@hennepin.us

Refuge at Rush Creek (Formerly called Fehn Meadows 2nd Addition) Corcoran, Project #2018-014

<u>Project Overview:</u> This is a 63-acre agricultural parcel located south of CR 117 about ½ mile west of Cain Road. Rush Creek is located along the south property line of this site. The development project will result in the construction of 14 new family residential lots and approximately 2900 linear feet of new street construction. The ECWMC will review this site for compliance to Rules D (Stormwater Management), E (Erosion and Sediment Control), F (Floodplain), G (Wetland Alteration) and I (Buffer Strips)

Applicant: Rains Properties, Chris Rains, 624 Central Avenue, Osseo, MN 55369. Phone: 612-599-0372. Email: chris@rainsproperties.com

Agent/Engineer: Civil Engineering Site Design. Scott Dahlke, P.O. Box 566, Monticello, MN 55362. Phone: 612-619-8625. Email; sdahlke@civilesd.com

Exhibits:

- 1) ECWMC Request for Plan Review and Approval, received April 24, 2018.
- 2) Refuge At Rush Creek Site Plans dated July 17, 2018
 - a. Sheet C0, Project Location Plan
 - b. Sheets C1.1 to C1.4, Final PUD Development Plan
 - c. Sheets C2.1 to C2.3, Grading and Drainage Plans
 - d. Sheets C3.1 to C3.3, Storm Sewer Utility Plan
 - e. Sheet C4, Street Profile Plan
 - f. Sheet C5, Storm Water Pollution Prevention Plan
 - g. Sheets C6.1 to C6.2, Details Plan
 - h. Sheet C7, Resource Inventory Plan.
 - i. Sheet C8, Co. Road 117 Turn Lane Plan
- 3) Refuge at Rush Creek Drainage Analysis dated July 17, 2018.
- 4) Sheet 1 of 1, Elm Creek Watershed Abstraction Exhibit dated August 7, 2018
- 5) Refuge at Rush Creek Preliminary Draft (Plat) for City Submittal, 2 of 2 sheets, dated July 16, 2018
- 6) Draft Homeowners Declaration of Covenants and Easements, no signatures
- 7) Sheet 1 of 1, Topography Survey for Rains Property dated August 10, 2017.
- 8) Septic Soils Data
- 9) Soils Site Characterization, Pheasant Ridge Project, dated July 20, 2017.

- 10) Sheet 1 of 1 Qualifying Conservation Area Exhibit received August 2, 2018
- 11) Draft Conservation Easement for preservation areas received August 2, 2018.
- 12) Wetland Conservation Act Exhibits;
 - a. MN Joint Application for Activities Affection Water Resource in MN for Fehn Meadows Second Addition, dated April 16, 2018.
 - b. ECWMC WCA Notice of Application for sequencing and wetland replacement plan dated April 27, 2018.
 - c. Wetland Replacement Plan Addendum from Anderson Engineering, dated August 6, 2018

Findings;

- 1) A complete application was received April 24·2018. The initial 60-day decision period per MN Statute 15.99 expires June 23, 2018, it was extended to August 22, 2018 by the applicants agent.
- 2) This site area and resources require a project review for the following rules and standards per the ECWMC 3rd Generation Stormwater Management Plan, Appendix C. Rule D (Stormwater Management), Rule E (Erosion and Sediment Control), Rule F (Floodplain), Rule G (Wetland Alteration) and Rule I (Buffer Strips)
- 3) The existing site is 62.9 acres is size and consists of approximately 52 acres of cropland and 10.3 acres of wetlands/woodland/grassland.
- 4) The proposed site will be developed into 14 single-family residential lots with approximately 4.85 acres of new impervious areas, 20.3 acres of open/preservation areas, 38.4 acres of lot area and 4.0 acres of right-of-way areas. Four (4) new stormwater ponds are proposed to collect the majority of the street and front yard water from the site.
- 5) Three wetland impacts will occur on, filling 16,537 sq. ft.
- 6) 33,074 sq. ft. of wetland banking credits are proposed to be purchased to mitigate the impacts.
- 7) Approximately 620 cubic yard of floodplain filling will occur. Excavating 915 cubic yards in the floodplain will mitigate for the filling.

Stormwater Management

- 8) The main portion of the property drainage flows to a series of low areas and wetland basins on site which are drain tiled for farming practices to a large wetland complex along the west side of the property. This wetland then drains south via a drainage ditch along the west property line before outleting into Rush Creek.
- 9) Storm water will be collected by storm sewer from the street, driveways, and front lawns and routed to four stormwater NURP ponds. 3.12 acres of 4.85 acres of the new impervious areas will be routed into the four basins.
- 10) 4.85 acres of new impervious areas are proposed. Approximately 1.0 acre of impervious area is considered disconnected. This will result in 3.85 acres of impervious area that needs to meet abstraction requirements. This equals 0.353 ac. ft. (15,373 cubic feet) of abstraction.

- 11) To obtain abstraction credits, the applicant is proposing to permanently preserve, under conservation easement, 7.59 acres in two outlots to meet the Commission's abstraction requirements. The Commission's current standards for credits toward compliance with our abstraction requirements, states; Credits towards compliance with the abstraction requirement may be achieved by; 2) Preserving undisturbed forest or grassland conservation areas. Conservation areas must remain undisturbed during construction and must be protected by a permanent conservation easement prescribing allowable uses and activities on the parcel and preventing future development. 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 plan. The applicant may compute a credit of 0.75 inches over the conservation area and apply that toward the abstraction volume requirement
 - a. The issues related to this proposal are;
 - i. Undisturbed vs disturbed areas. Our standard requires <u>undisturbed forest</u> <u>or grassland</u>. The majority of the area being proposed for conservation easements are currently cropland or highly disturbed areas from past farming or drainage.
 - ii. A ditched area of 23,400 sq. feet is present behind lots 6 and 7 in this development. This area has been highly disturbed from the construction of this ditch. The side slopes are 1:1 and it is 6' deep. This ditch is also the main conveyance of water from this site into Rush Creek. Eliminating that area would bring the amount of land under conservation easement to 7.01 acres (305,356 sq. ft.)
 - 1. Using our full credit of 0.75" over the revised areas would equal 19,085 cubic feet of abstraction credits
 - 2. Using 0.50" credits over the revised areas would equal 12,723 cubic feet of abstraction credits.
 - iii. A long-term maintenance plan should be included for our review and approval. It will need to include performance standards for native vegetation establishment (75% minimum) and invasive, non-native vegetation (15% maximum) and a 5-year monitoring plan. Monitoring should be done by the Commission.
 - iv. An escrow of \$4,000 per acre for establishment, maintenance and monitoring should be required if the Commission is okay with the proposal and monitoring.
 - v. Easement monument locations and signage must be provided for review and approval.
- 12) Staff estimates pre-development phosphorus loads at 53 lbs/year and post development loads at 20.8 lbs/year.
- 13) Staff estimates pre-development TSS loads at 4105 lbs/year and post development at approximately 1,450 lbs/year.

14) Stormwater summary is as follows;

Condition	TP	TSS	Abstraction	Conservation Preservation
(based on 17.0 acres)	Load	Load	(cu. ft.)	area
	(lbs/yr)	(lbs/yr)		(cu. ft.)
Pre-development (baseline)	53	4,105	N/A	Required= 15,373
Post-development without	26.1	1,752	15,373	<u>Kequirea= 15,575</u>
BMPs				0.7522_10.107
Post-development with	21.8	1,450	19,197	0.75"=19,197
BMPs				
Net Change	-31.2	-2,655	-3,824	

15) Rate controls meet the Commission's standards. They are as follows:

	2-yr (cfs)	10-yr (cfs)	100-yr (cfs)
Pre-Development West	50.4	92.8	187.5
Post-Development West	31.7	68.8	154.2
Pre-Development South	31.0	55.6	110.2
Post-Development South	18.1	38.7	89.2

Grading, Erosion and Sediment Controls

- 16) Provide channel protection measures (ditch block/bio-rolls or similar) in the following areas;
 - a. between the road and basin 51 and
 - b. Where the CR 117 ditch runs into lot 1.
- 17) Numerous subsurface drain tiles exist on the site. We recommend specific plan notes that address how these will be disabled or maintained so existing and future drainage issues will not be occur from remnant tile lines.
- 18) An existing drain tile intake (elevation = 919.9) is located near the south property line of the existing parcel. FES B5 has an invert elevation of 920.5 near this tile inlet. Is an this adequate system to intercept flows and not create water ponding on the adjacent property?

Wetlands

- 19) The Commission approved the wetland delineation in August of 2015.
- 20) Based on the site plans, 16,537 sq. ft. of wetland impacts are proposed;
 - a. The applicant is proposing to build a 60' wide public street access and associated sidewalk that would cross and impact approximately 13,695 square feet of the narrowest portion of Wetland 1.
 - b. A second impact to Wetland 1 of 1,992 sf is proposed to accommodate pedestrian walking trail across Wetland #1 to access the preserved upland open space "island" surrounded by Wetland 1. Wetland 1 is a Type 1, seasonally flooded basin that has been historically farmed in normal years.

Refuge at Rush Creek, Corcoran 2018-014 August 17, 2018

- c. 850 sq. ft. of wetland will be impacted during the construction of the turn lanes required on CR 117. The applicant is requesting Hennepin County to purchase 1,700 sq. ft. (0.04 ac.) from the BWSR road replacement plan bank
- 21) Wetland Sequencing Analysis; (the TEP and staff believe avoidance and minimization are adequately addressed)
 - a. Avoidance discussion:

The applicant considered the possibility of constructing the road alignment along the western side lot line, but this would involve a greater amount of wetland impact. The "No-Build" option was considered and dismissed because it does not meet the purpose and need of the project. The applicant contacted the adjacent landowners to the west, south, and east regarding potential land acquisition or access from those directions with no success. The proposed design will maintain wetland hydrology through culverts and other stormwater management techniques that will maintain or improve existing hydrology to the existing wetlands. Based on this, the TEP felt avoidance was not practical for the purpose and scope of the project.

b. Minimization discussion;

The proposed locations of the public road and trail minimize wetland impacts to the greatest extent practicable by crossing at the narrowest portion of the wetland. In addition, the width of the proposed road is the minimum required for safe vehicular passage and emergency access on a public access road, and the 2:1 side slopes are the steepest feasible slope for a road of this type. The TEP felt minimization of wetland impacts was achieved to the extent practical.

- c. Rectification of Impacts
 - i. 16,537 sq. ft. (0.3796 acres) of wetland impacts are proposed.
 - ii. 32,714 sq. ft. (0.7593 acres) is proposed to be purchased from BWSR certified wetland banking account #1643 in Dayton.
- d. No other public comments were received on this wetland replacement plan during the public comment period.
- e. A wetland replacement plan escrow of \$90,000 will be required from the applicant if BWSR certified wetland banking credit transfer (2:1 ratio) has not occurred before grading work begins.

Buffers

- 22) The Commission standards require 25' average and 10' minimum buffers on all wetland basins and 50' buffer along Rush Creek (above the ordinary high water level of the creek)
 - a. All wetland basins show 25' wetland buffers.
 - b. Rush Creek must have a 50' buffer established above the ordinary high water elevation or 25' from the fringe wetland area along the creek, whichever is greater. Site plans will meet this condition.
 - c. Native grass seed must be specified on the buffer plantings and preservation areas.

Floodplains;

23) The Rush Creek Floodplain runs along the west and south portions of this development. The base flood elevation (1% flood chance) is 919.0 (1929 NGVD) on the west side of the site and decreases to 917.0 at the SE corner of the property.

Refuge at Rush Creek, Corcoran 2018-014 August 17, 2018

- 24) Flood Zone Impacts will equal 620 cubic yards for road and trail construction along outlot A. Compensatory excavation will be 915 cubic yards in filter basin 2.
- 25) All proposed low floor elevations are 2' or more above the BFE to Rush Creek.

Decision by ECWMC August 8, 2018:

Approval contingent upon final staff approval and;

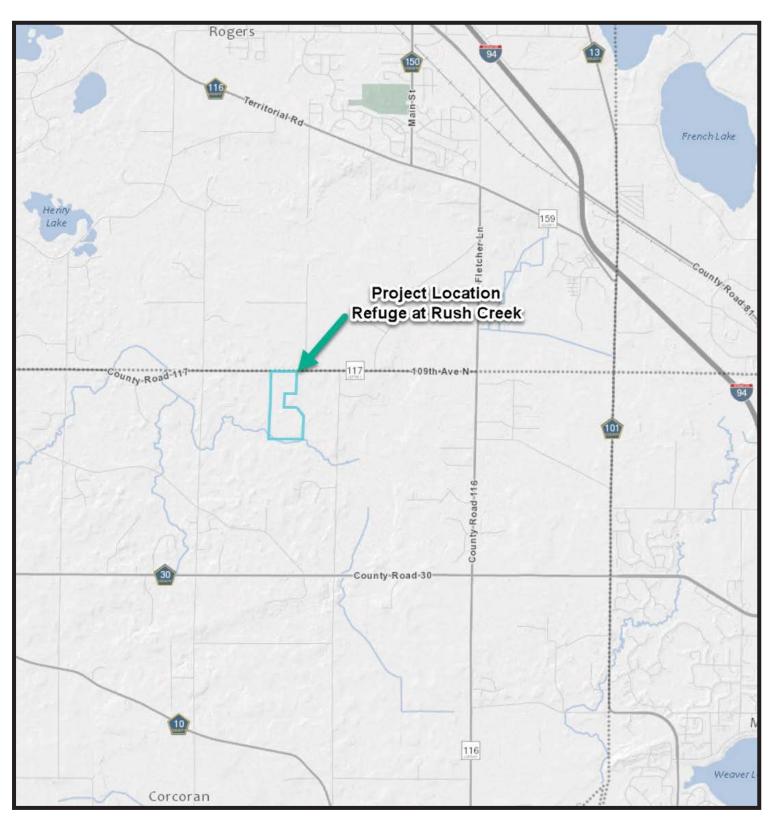
- Certification from MN BWSR that 0.7593 acres of wetland banking credits from account #1643 have been transferred for use on this site or an escrow of \$90,000 is received from the applicant.
- Preservation and buffer areas meet the ECWMC and City of Corcoran's requirements for buffer and preservation. \$4,000 per acre escrow is secured by the ECWMC for buffer/preservation compliance and 5-year monitoring plan.
- Operation and maintenance plans for storm water ponds are approved by the Commission and City and recorded on the property title.

Hennepin County
Department of Environment and Energy
Advisor to the Commission

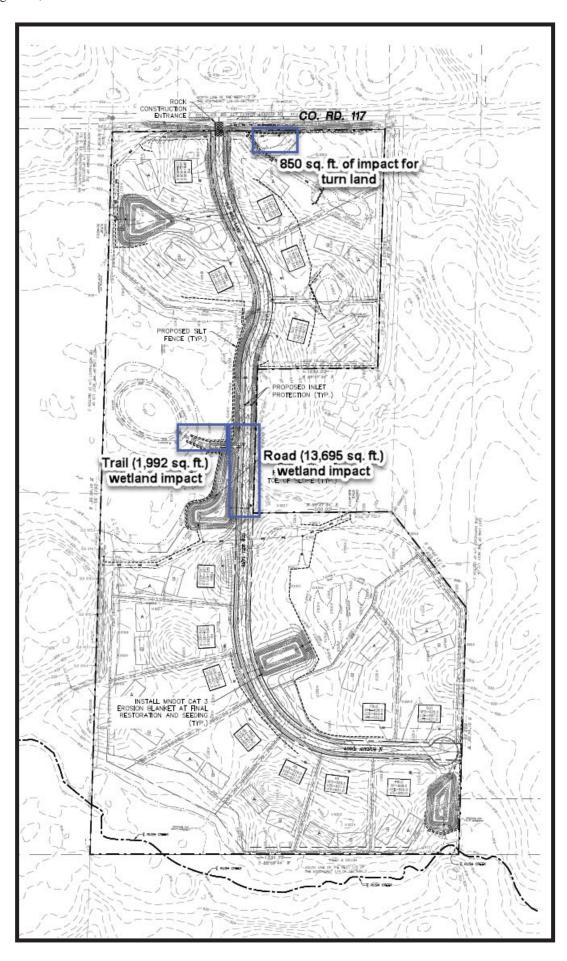
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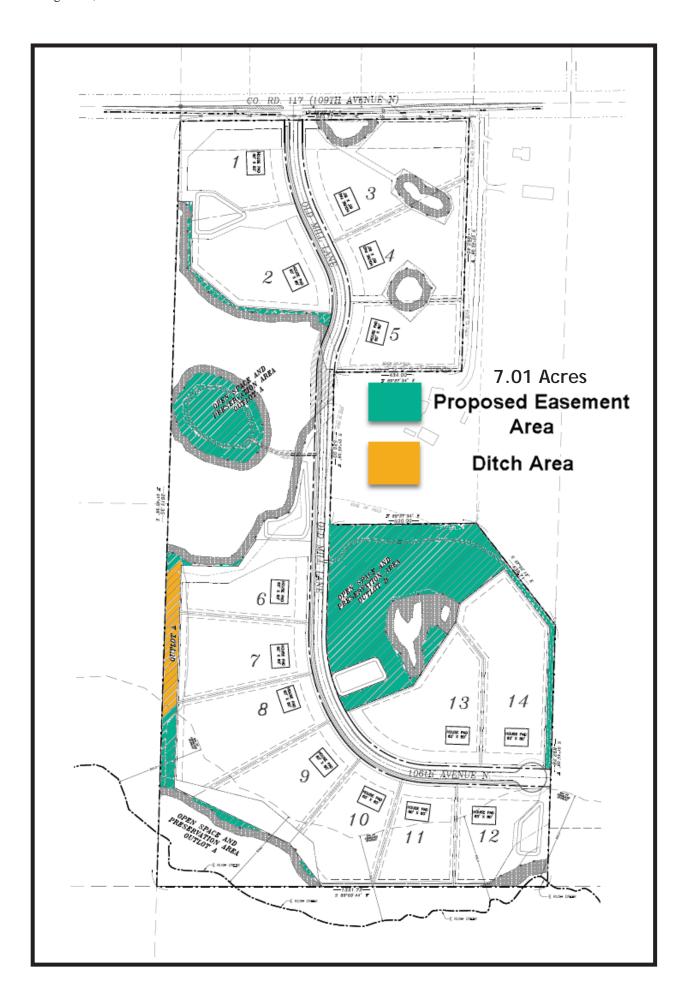
August 17, 2018
Date

Location Map









13605 1st Avenue North, Suite 100 • Plymouth, Minnesota 55441 • (763) 412-4000 Main • (763) 412-4090 Fax • www.ae-mn.com

MEMORANDUM

TO: Jim Kujawa, Elm Creek WMC

Melissa Jenny, US Army Corps of Engineers

FROM: Ben Hodapp

DATE: August 6, 2018

SUBJECT: Wetland Replacement Plan Addendum – Impact Quantity Change

Refuge at Rush Creek (Formerly Fehn Meadows 2nd Addition) –

109th Ave N/Co Rd. 10, Corcoran, MN

ECWMC: 2018-014

USACE: MVP-2017-01589-MMJ

This memo is intended as an addendum to the April 24, 2018 Wetland Replacement Plan to summarize additional impact and provide more details pertaining to mitigation.

- 1. The project formerly known as Fehn Meadows 2nd Addition is now Refuge at Rush Creek.
- 2. Upon review of proposed development, Hennepin County is requiring widening County Road 117 to accommodate the addition of a left-turn lane for west bound traffic. This highway improvement was not previously identified or accounted for in the April 24, 2018 wetland replacement plan. The additional impact is 850 sf of direct, permanent impact to Wetland #6 and results in an overall project permanent impact increase from 15,687 sf to 16,537 sf.

Additional Impact for CR117 turn lane:

Aquatic Resource Type (wetland, lake, tributary etc.)	drain or	Impact	Size of Impact ²	Overall Size of Aquatic Resource ³	Existing Plant Community Type(s) in Impact Area ⁴	County, Major Watershed #, and Bank Service Area # of Impact Area ⁵
Wetland	Fill	Р	850 sf	0.15 acres	Fresh Wet	Hennepin, 20,
			(0.0195 ac)		Meadow	BSA 7

3. As a result of the increased permanent impacts, the increased total project compensatory mitigation required at a 2:1 replacement ratio is now 0.7592 ac.

4. The applicant is currently in discussions with Hennepin County regarding the County Road 117 safety improvements for west bound traffic left-turn lane resulting in 850 sf of impact. Hennepin County is determining whether the County will be responsible for providing compensatory mitigation in the amount of 1,700 sf (0.0390 ac). If Hennepin County does not provide compensatory mitigation, the project applicant will provide via purchase of bank credits.

The applicant has executed a Purchase Agreement (attached) with the Robert Engstrom Wetland Bank (Account 1643 located within Hennepin County, Major Watershed #20, Bank Service Area 7) for the purchase of up to 0.7592 ac. of USACE certified bank credits; 0.7592 ac. if Hennepin County does not provide mitigation for CR117 or 0.7202 ac. of USACE certified bank credits if Hennepin County does provide mitigation for CR117.

Wetland Bank Account #	County	Major Watershed #	Bank Service Area #	Credit Type (if applicable)	Number of Credits
1643	Hennepin	20– Mississippi (metro)	7	Type 3	0.3796
1643	Hennepin	20– Mississippi (metro)	7	Type 2	0.3796

Attachments:

- Figure 3 Revised Wetland Delineation Map by Kjolhaug Environmental Services
- Co Road 117 Turn Lane Plan draft 7/30/2018 by Civil Engineering Site Design
- Purchase Agreement for Wetland Banking Credits by Wetland Credit Agency

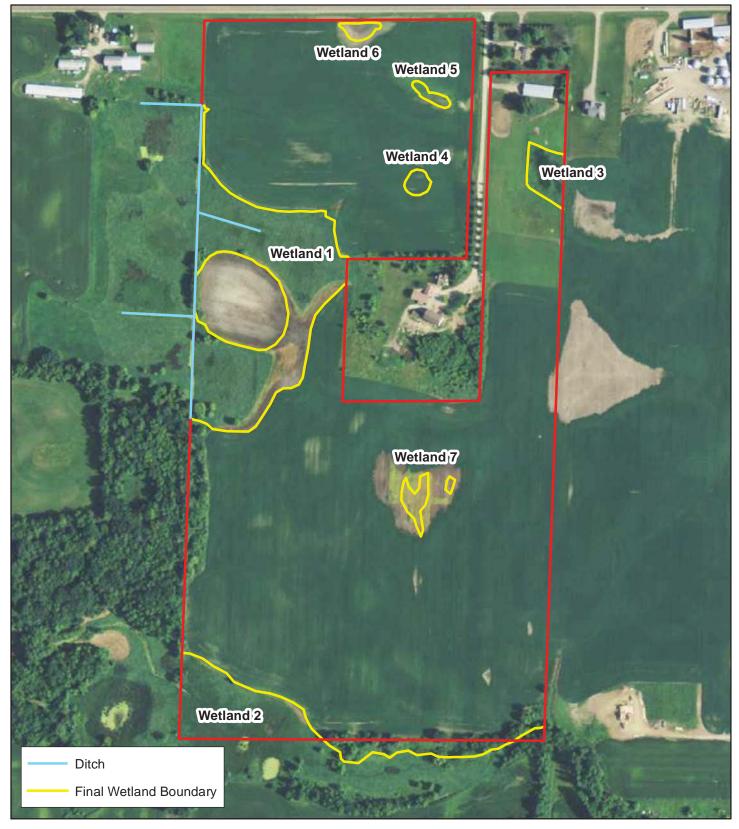
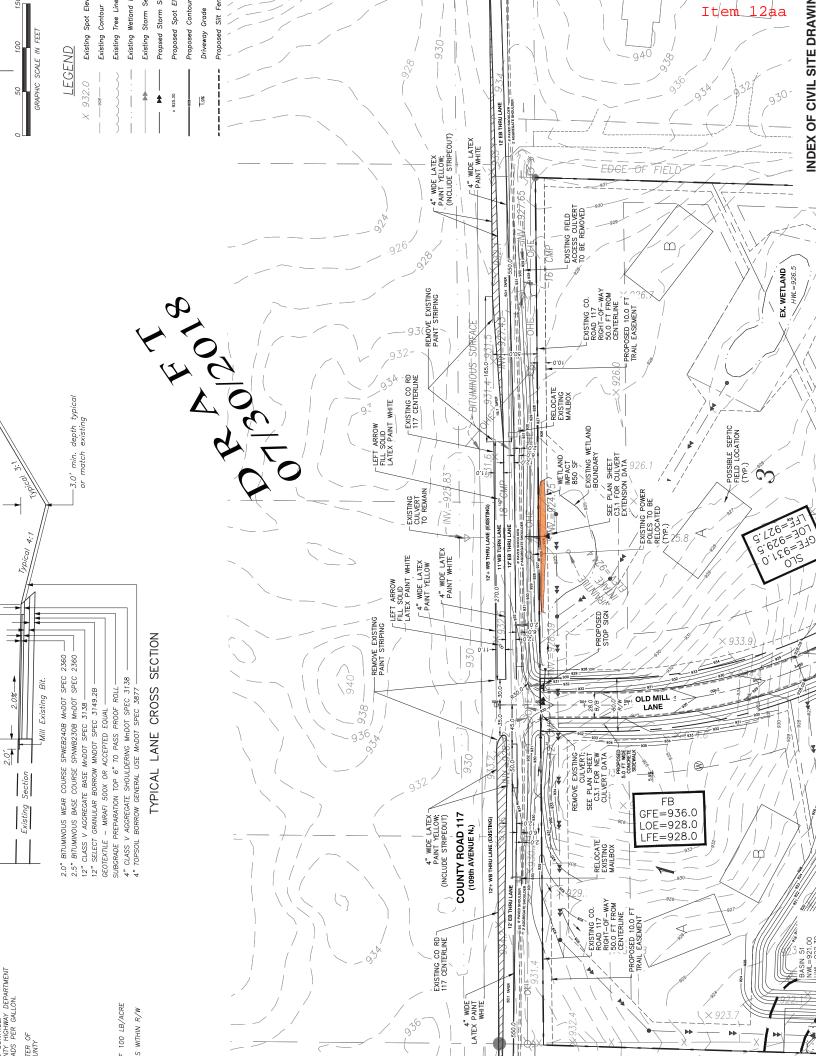


Figure 3 - Revised Delineation Map (2013 FSA Photograph)



109th Ave N (KES 2014-237) Corcoran, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.





AGREEMENT FOR PURCHASE OF WETLAND BANKING CREDITS

This Agreement for Purchase of Wetland Banking Credits ("Agreement") is made this 6th day of August, 2018 between Wetland Credit Agency, Inc. ("Broker") and Chris Rains ("Buyer"). (Broker and Buyer are collectively referred to as "Parties").

WETLAND CREDIT ACCOUNT(S)							
Acct. No.	County	Major Watershed	BSA	Account Owner			
1643	Hennepin	20 – Mississippi (metro)	7	R. Engstrom ("Seller")			

1. Buyer agrees to buy the wetland banking credits ("Credits") listed below:

	CREDITS TO BE SOLD							
Credit Sub- Group ¹	Acres	Wetland Circ. 39 Type ²	Plant Community Type ³	Cost per Acre	Account Number	Total		
A.	0.3796	3	shallow marsh	\$117,612.00	1643	\$44,645.52		
B.	0.3796	2	fresh (wet) meadow	\$117,612.00	1643	\$44,645.52		
C.								
D.								
E.								
Totals	0.7592					\$89,291.04		

Check here if additional credit sub-groups are part of this account and are listed on an attachment to this document.

A separate credit sub-group shall be established for each wetland or wetland area that has different wetland characteristics.

Circular 39 types: 1, 1L, 2, 3, 4, 5, 6, 7, 8, B, U.

- 2. Statement Regarding Credits:
 - a) The Credits are deposited in an account in the Minnesota Wetland Bank administered by the Minnesota Board of Water and Soil Resources ("BWSR") pursuant to Minn. Rules Chapter 8420.0700-.0760.
 - b) Seller owns the Credits and has the right to sell the Credits to Buyer.
- 3. Buyer will pay a total of \$89,291.04 for the Credits, as follows:
 - a) \$89,291.04 to be paid on the Closing Date defined and listed below.

Page 1 of 2

³Wetland plant community type: shallow open water, deep marsh, shallow marsh, sedge meadow, fresh meadow, wet to wet-mesic prairie, calcareous fen, open bog or coniferous bog, shrub-carr/alder thicket, hardwood swamp or coniferous swamp, floodplain forest, seasonally flooded basin. See Wetland Plants and Plant Communities of Minnesota and Wisconsin (Eggers and Reed, 1997) as modified by the Board of Water and Soil Resources, United States Army Corps of Engineers..

- 4. In addition to the fees for the Credits in paragraph 3, Buyer agrees to pay the Withdrawal Fee and Easement Stewardship Fee totaling \$1,741.60 to Broker as required by BWSR. At closing, Broker will execute a check made out for this amount payable to BWSR.
- 5. The closing of the purchase and sale shall occur on or before November 6th, 2018 ("Closing Date"). The Closing Date may only be extended or changed by written consent of both Parties. Upon payment of the purchase price, Broker attests that Seller has agreed to sign a fully executed Application for Withdrawal of Credits in the form specified by BWSR.
- 6. Buyer shall apply to the appropriate Local Government Unit ("LGU") and any other required regulatory or governmental agency for approval of a replacement plan utilizing the Credits as the means of replacing impacted wetlands. If the LGU or other regulatory or government agency has not approved the Buyer's application for a replacement plan utilizing the Credits by the Closing Date, and no extension of the Closing Date has been agreed to by the Parties in writing, then either Buyer or Broker may cancel this Agreement by giving written notice to the other at the address identified below. In the event of cancellation by either Party, neither Buyer nor Broker shall have any further obligations to each other and waive any and all claims that they may have against the other under this Agreement and Agreement will be null and void.
- 7. Buyer agrees that Broker is acting in good faith on behalf of a third party Seller, and that if Seller fails to perform under this Agreement, Broker shall have no liability to Buyer and shall not be held responsible for any claims or damages. Buyer waives any and all claims that Buyer has or may have against Broker resulting from this Agreement. Broker shall however refund any monies paid to it by Buyer.
- 8. Buyer further agrees and understands that Broker has made no representations or warranties to Buyer other than as contained herein and agrees and understands that it is Buyer's sole obligation to determine if the proposed replacement plan will be approved, and to seek approval of the proposed replacement plan by all required appropriate governmental regulatory agencies and Buyer waives any and all claims it may have against Broker if the proposed replacement plan is not approved by the required governmental entities or agencies.
- 9. Buyer further agrees that Agreement is not valid until a signed copy is provided to Broker. If Buyer has not forwarded a signed copy to Broker within 7 days after date signed by Broker, Agreement is null and void and neither Buyer nor Broker shall have any further obligations under this Agreement.

(Signature of Broker) (Date)	(Signature of Buyer)	(Date)	
By: Eric Trelstad, Wetland Credit Agency, LLC	By:		
Its: Owner	Its:		
Address: 12940 Overlook Road	Address:		
Dayton, MN 55327			
612-360-4700			

Minnesota Wetland Conservation Act Notice of Decision

Local Government Unit (LGU)	Address
Elm Creek Watershed Management Commission	3235 Fernbrook Ln N, Plymouth, MN
	55447

	1. PROJECT INFORMATION	1		
Applicant Name Craig Watten 1009 Prospect St. Sault Ste Marie, MI 49783	Project Name Watten Parcel 21155 CR10, Corcoran, MN. PID 1511923340006	Date of Application June 20, 2018	Application Number 2018-025W	
Attach site locator map.				
Type of Decision:				
	oe No-Loss E	xemption S	equencing	
⊠ Repla	acement Plan 🔲 Ba	nking Plan		
Fechnical Evaluation Panel Fin	ndings and Recommendation (if any):			
	Approve with conditions] Deny	
	OCAL GOVERNMENT UNIT DE	CCISION		
2. Let Date of Decision: August 8,		_	Denied	
Date of Decision: August 8,	2018	_	Denied	
Date of Decision: August 8, 2 Approved LGU Findings and Conclusion	2018 ☑ Approved with conditions (includents (attach additional sheets as necessary)	e below) [
Date of Decision: August 8, 2 Approved LGU Findings and Conclusion This is a decision for a wetland I of said plan. Boundary/Type replan report by Anderson Engine This is a 5-acre flag-lot on CR 1 December 12, 2017 with a follow Routine Determination method if Supplement to the Corps of Engunder the MN WCA. Anderson Engineering complete wide) for access to the buildable wetland 1 will be impacted. 0.2 bank account 1643 (major water)	2018 Approved with conditions (include	cement plan and the seque atted May 3, 2018. Wetland 27, 2018). rvices did the wetland delivere delineated on the parcheation Manual and the Rest Region (Version 2.0) as tion of a residential gravel 1018). 4,422 sq. ft. (0.1015) posed to be purchased fropacts.	ncing analysis d Replacement ineation on cel using the gional s required I driveway (12' 5 acres) of om B. Engstrom	

Wetlands may not be impacted until all applicable conditions have been met!

BWSR Forms 7-1-10 Page 1

LGU Authorized Signature:

Signing and mailing of this completed form to the appropriate recipients in accordance with 8420.0255,						
Subp. 5 provides notice that a decision was made by the LGU under the Wetland Conservation Act as						
specified above. If additional details on the decision exist, they have been provided to the landowner						
and are available from the LGU upon request.		_				
Name	Name Title					
James C Kujawa	Technical Advisor to the LGU					
Signature	Signature Date Phone Number and E-mail					
August 17, 2018 612-348-7338						
Jan (h		James.Kujawa@hennepin.us				
()						

THIS DECISION ONLY APPLIES TO THE MINNESOTA WETLAND CONSERVATION ACT. Additional approvals or permits from local, state, and federal agencies may be required. Check with all appropriate authorities before commencing work in or near wetlands.

Applicants proceed at their own risk if work authorized by this decision is started before the time period for appeal (30 days) has expired. If this decision is reversed or revised under appeal, the applicant may be responsible for restoring or replacing all wetland impacts.

This decision is valid for three years from the date of decision unless a longer period is advised by the TEP and specified in this notice of decision.

3. APPEAL OF THIS DECISION

Pursuant to MN Rule 8420.0905, any appeal of this decision can only be commenced by mailing a petition for appeal, including applicable fee, within thirty (30) calendar days of the date of the mailing of this Notice to the following as indicated:

Check one:

Appeal of an LGU staff decision. Send	Appeal of LGU governing body decision.
petition and \$0 fee (if applicable) to:	Send petition and \$500 filing fee to:
Elm Creek Watershed Management Commission	Executive Director
3235 Fernbrook Ln N	Minnesota Board of Water and Soil Resources
Plymouth, MN 55447	520 Lafayette Road North
	St. Paul, MN 55155

4. LIST OF ADDRESSEES

\boxtimes	SWCD TEP member: (email only) Stacey. Lijewski@co.hennepin.mn.us
\boxtimes	BWSR TEP member: (email only) Ben Carlson (ben.carlson@state.mn.us).
	LGU TEP member (if different than LGU Contact):
	DNR TEP member:
\boxtimes	DNR Regional Office (email only) Becky.Horton@state.mn.us
	WD or WMO (if applicable):
\boxtimes	Applicant: (email only) Craig Watten craig.watten@outlook.com
\boxtimes	City of Corcoran: Brad Marten bmartens@ci.corcoran.mn.us
\boxtimes	Members of the public who requested notice (notice only) Kjolhaug Environmental Services.
	adam@kjolhaugenv.com; Anderson Engineering of MN LLC, bhodapp@ae-,m.com
\boxtimes	Corps of Engineers Project Manager (notice only) mvp-reg-inquiry@usace.army.mil
	BWSR Wetland Bank Coordinator (wetland bank plan applications only)

6. ATTACHMENTS

In addition to the site locator map, list any other attachments:	
⊠ ECWMC findings and decision dated August 17, 2018	
◯ Wetland Replacement Plan Addendum from Anderson Engineering dated July 27, 2018	

BWSR Forms 7-1-10 Page 2

elm creek

Watershed Management Commission

ADMINISTRATIVE OFFICE 3235 Fernbrook Lane Plymouth, MN 55447 PH: 763.553.1144 E-mail: judie@jass.biz

TECHNICAL OFFICE
Hennepin County Public Works
Department of Environment and Energy
701 Fourth Ave. South, Suite 700
Minneapolis, MN 55415
PH: 612.348.7338

E-mail: james.kujawa@hennepin.us

Watten Parcel Driveway-21155 CR 10 Corcoran, Project #2018-025W

Project Overview: This an existing lot on CR 10 approximately 1/3 of mile east of Trail Haven Road in Corcoran. The project site is a vacant residential flag lot (PID 1511923340006) owned by Craig Watten who is proposing a driveway to access the southern portion of the lot for a future single-family residential home. The applicant is proposing to build a driveway that would cross and affect approximately 4,422 square feet of a wetland. As the Local Government Unit in charge of administering the MN Wetland Conservation Act for the City of Corcoran this project will be reviewed for compliance to the ECWMC and MN Wetland Conservation Act requirements. No other Elm Creek Watershed Management Commission rules apply to this application.

Applicant: Crain Watten, 1009 Prospect Street, Sault Ste Marie, MI 49783. Phone: 810-309-1521. Email: craig.watten@outlook.com

<u>Agent:</u> Wetland Replacement Plan: Anderson Engineering of MN, Attn. Ben Hodapp, 13606 1st Ave. N, Ste 100, Plymouth, MN 55441. Phone: 763-412-4005. Email: bhodapp@ae-mn.com Wetland Delineation: Kjolhaug Environmental Services, Attn. Adam Cameron, 2500 Shadywood Road #130, Orono, MN 55331. Phone: 952-401-8757. Email: adam@kjolhaugenv.com Exhibits:

- 1) ECWMC Request for Plan Review and Approval and associated fees received June 20, 2018.
- 2) Correspondence from Anderson Engineering regarding wetland delineation and wetland replacement plan applications.
- 3) Watten Property Wetland Delineation Report by Kjolhaug Environmental Services dated May 3, 2018.
- 4) Craig Watten MN Joint Application for Activities Affecting Water Resources in MN by Anderson Engineering dated June 19, 2018.
- 5) Wetland Replacement Plan Addendum-Impact Quantity Change, Watten Parcel, by Anderson Engineering dated July 27, 2018.
- 6) ECWMC Notice of Project Application dated June 29, 2018.

Watten Parcel Driveway Replacement Plan 2018-025W, Corcoran August 17, 2018

Findings;

- 1) A complete application was received on June 20, 2018. The initial 60-day decision period per MN Statute 15.99 will expire on August 19, 2018.
- 2) This is an existing lot with no plat changes proposed. Our review will be for compliance with the ECWMC and State of MN wetland requirements
- 3) Per resolutions by the ECWMC and the City of Corcoran, the ECWMC is the LGU in charge of administering the MN WCA as amended within the City of Corcoran.
- 4) Wetland Replacement Plan Sequencing Analysis
 - a. Purpose and Need; the purpose of this project is to build a residential driveway (12-feet wide) to access the buildable portion of the vacant flag lot. Access is needed in order to construct and access the proposed house.
 - b. Avoidance; the wetland is in the 'stem' portion of the flag lot. It is not practicable to avoid wetland impacts. The applicant evaluated access easement from neighboring parcels and received no positive indications from neighboring landowners. Complete avoidance of the wetland would not meet the project's purpose and need.
 - c. Minimization; the proposed location of the driveway minimizes wetland impact to the greatest extent practicable by,
 - i. crossing the wetland area at the narrowest portion of the wetland,
 - ii. minimizing the width of the proposed driveway to the minimum required for safe vehicular passage,
 - iii. the 2:1 side slopes of the driveway are the steepest feasible slope for a gravel driveway of this type,
 - iv. the proposed design will maintain wetland hydrology through culvert(s) under the driveway,
 - v. temporary impacts will be minimized through the installation of silt fences and erosion control BMPS during construction.
 - d. Replacement of Impacts;
 - i. Wetland impacts will be 4,422 sq. ft. (0.1015 ac)
 - ii. 8,844 sq. ft. of replacement is proposed in BWSR certified wetland bank in Dayton. (Account #1643)
 - iii. A signed purchase agreement to purchase of 0.2030 acres (8,844 sq. ft.) wetland banking credits was part of the replacement plan submittal
- 5) Per the public notice requirements of the MN WCA, the ECWMC noticed the application on June 29, 2018 with comments requested prior to July 25, 2018.
- 6) One comment from the Area Wetland Specialist for the Board of Water and Soil Resources was received. He agreed with the delineation, sequencing analysis and replacement plan.
- 7) Staff reviewed the wetland delineation in the field and requested some minor adjustments to the boundary. Revisions were made by the applicant and approved by EC staff. Final boundaries are reflected in the replacement impacts above.
- 8) The application meets the standards and requirements of the MN Wetland Conservation Act and the Elm Creek Watershed Management Commission.

Watten Parcel Driveway Replacement Plan 2018-025W, Corcoran August 17, 2018

- 9) Driveway construction cannot begin until the wetland impacts are rectified by receipt of a certified transfer of wetland banking credits to this project from the BWSR.
 - a. If the applicant wishes to start construction prior to receiving certification from BWSR, a cash escrow or acceptable letter of credit for \$25,000 must be provided to the ECWMC administrative office.

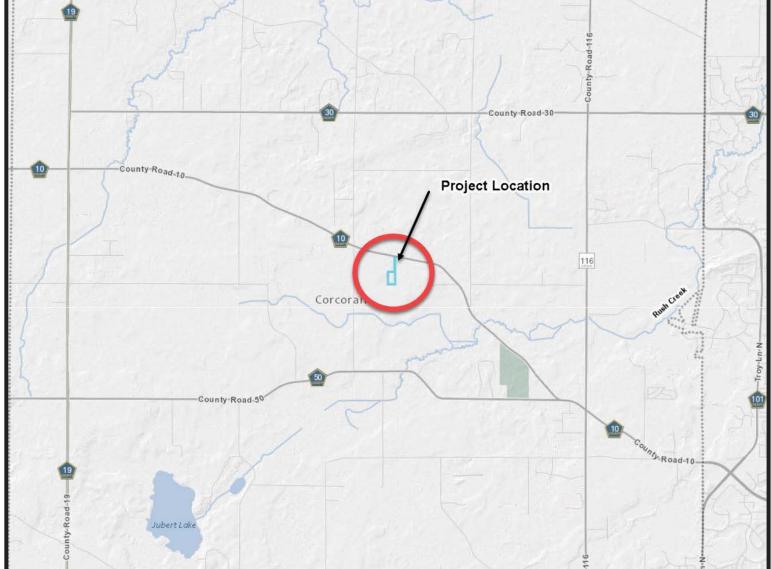
Decision on August 8, 2018 from the Elm Creek Watershed Management Commission :

Approval pending receipt of BWSR certification of 0.2030 acres of wetland credits transfer for 0.1015 ac. of impacts on this project or escrow of \$25,000.

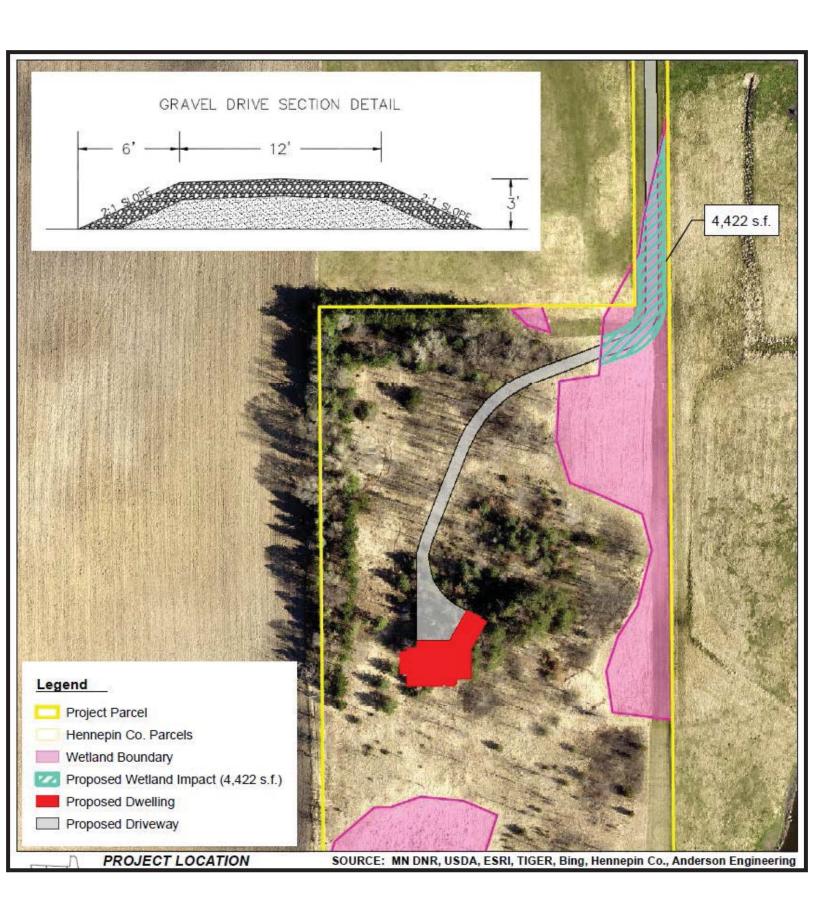
Hennepin County
Department of Environment and Energy
Advisor to the Commission

Location Map

August 17, 2018









13605 1st Avenue North, Suite 100 • Plymouth, Minnesota 55441 • (763) 412-4000 Main • (763) 412-4090 Fax • www.ae-mn.com

MEMORANDUM

TO: Jim Kujawa, Elm Creek WMC

Melissa Jenny, US Army Corps of Engineers

FROM: Ben Hodapp

DATE: July 27, 2018

SUBJECT: Wetland Replacement Plan Addendum - Impact Quantity Change

Watten Parcel Driveway - 21155 County Road 10, Corcoran, MN

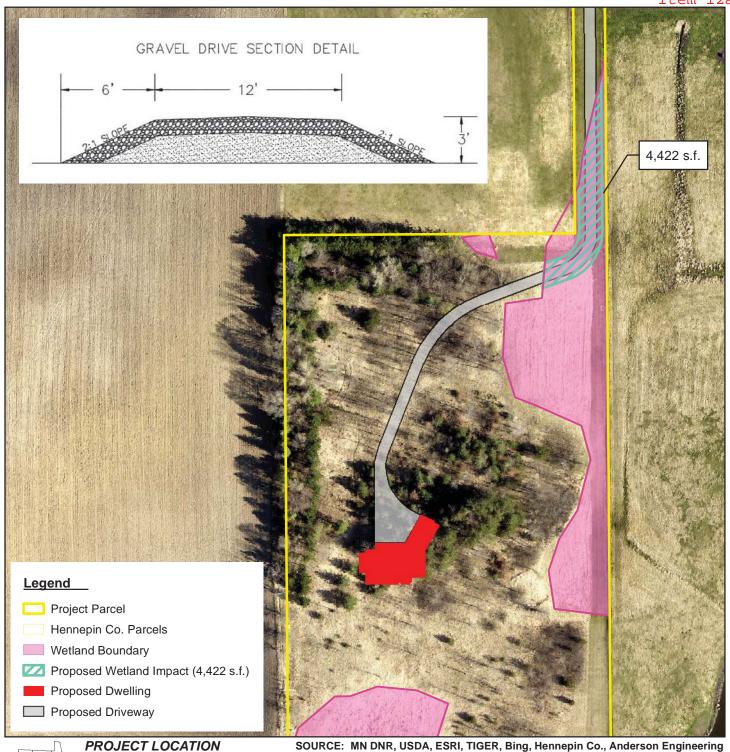
ECWMC: 2018-025W

USACE: MVP-2018-01162-MMJ

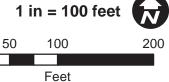
Based on the TEP field review meeting conducted Friday, July 13, 2018, Kjolhaug Environmental Services (KES) made field revisions to delineated wetland boundaries identified in the KES wetland delineation report dated May 3, 2018. A revised wetland delineation report will be responsibility of KES. KES provided GPS files to Anderson of the new wetland boundary which results in a reduction of direct permanent impact from 6,280 sf to 4,422 sf.

Aquatic Resource Type (wetland, lake, tributary etc.)	remove	Impact	Size of Impact ²	Overall Size of Aquatic Resource ³	Existing Plant Community Type(s) in Impact Area ⁴	County, Major Watershed #, and Bank Service Area # of Impact Area ⁵
Wetland	Fill	P	6,280 sf (0.1442 ac) 4,422 sf (0.1015 ac)	4.4 acre	Fresh Wet Meadow	Hennepin, 20, BSA 7

Consequently, the compensatory mitigation required at a 2:1 replacement ratio has been reduced from 0.2884 ac to 0.2030 ac. The applicant has executed a new Purchase Agreement (attached) for the purchase of 0.2030 ac. USACE certified bank credits from the Robert Engstrom Wetland Bank - Account 1643 located within Hennepin County, Bank Service Area 7.



PROJECT LOCATION



21155 County Road No. 10 Corcoran, Hennepin County, MN City of Corcoran Hennepin County, MN PID: 053-1511923340006



ENVIRONMENTAL SERVICES • LANDSCAPE ARCHITECTURE

Anderson Engineering of Minnesota, LLC 13605 1st Avenue North Suite 100 Plymouth, MN 55441 763-412-4000 (o) 763-412-4090 (f) www.ae-mn.com

WETLAND IMPACT - FIGURE 3 WATTEN PARCEL



AGREEMENT FOR PURCHASE OF WETLAND BANKING CREDITS

This Agreement for Purchase of Wetland Banking Credits ("Agreement") is made this 26th day of July, 2018 between Wetland Credit Agency, Inc. ("Broker") and Char Kohner ("Buyer"). (Broker and Buyer are collectively referred to as "Parties").

		WETLAND CREDI	T ACCOUNT	(S)	
Acct. No.	County	Major Watershed	BSA	Account Owner	
1643	Hennepin	20	7	B. Engstrom ("Seller")	

Buyer agrees to buy the wetland banking credits ("Credits") listed below:

			CREDITS TO BE SO	LD		
Credit Sub- Group ¹	Acres	Wetland Circ. 39 Type ²	Plant Community Type ³	Cost per Acre	Account Number	Total
A.	0.1015	3	shallow marsh	\$121,968.00	1643	\$12,379.75
В.	0.1015	2	fresh (wet) meadow	\$121,968.00	1643	\$12,379.75
C.						
D.	(
E.						
Totals	0.2030		Ouns are part of this account and or			\$24,759.50

Check here if additional credit sub-groups are part of this account and are listed on an attachment to this document.

A separate credit sub-group shall be established for each wetland or wetland area that has different wetland characteristics.

Circular 39 types: 1, 1L, 2, 3, 4, 5, 6, 7, 8, B, U.

Wetland plant community type: shallow open water, deep marsh, shallow marsh, sedge meadow, fresh meadow, wet to wet-mesic prairie, calcareous fen, open bog or coniferous bog, shrub-carr/alder thicket, hardwood swamp or coniferous swamp, floodplain forest, seasonally flooded basin. See Wetland Plants and Plant Communities of Minnesota and Wisconsin (Eggers and Reed, 1997) as modified by the Board of Water and Soil Resources, United States Army Corps of Engineers..

- Statement Regarding Credits:
 - a) The Credits are deposited in an account in the Minnesota Wetland Bank administered by the Minnesota Board of Water and Soil Resources ("BWSR") pursuant to Minn. Rules Chapter 8420.0700-.0760.
 - Seller owns the Credits and has the right to sell the Credits to Buyer.
- 3. Buyer will pay a total of \$24,759.50 for the Credits, as follows:
 - a) \$24,759.50 to be paid on the Closing Date defined and listed below.

Page 1 of 2

- 4. In addition to the fees for the Credits in paragraph 3, Buyer agrees to pay the Withdrawal Fee and Easement Stewardship Fee totaling \$661.59 to Broker as required by BWSR. At closing, Broker will execute a check made out for this amount payable to BWSR.
- 5. The closing of the purchase and sale shall occur on or before September 15th, 2018 ("Closing Date"). The Closing Date may only be extended or changed by written consent of both Parties. Upon payment of the purchase price, Broker attests that Seller has agreed to sign a fully executed Application for Withdrawal of Credits in the form specified by BWSR.
- 6. Buyer shall apply to the appropriate Local Government Unit ("LGU") and any other required regulatory or governmental agency for approval of a replacement plan utilizing the Credits as the means of replacing impacted wetlands. If the LGU or other regulatory or government agency has not approved the Buyer's application for a replacement plan utilizing the Credits by the Closing Date, and no extension of the Closing Date has been agreed to by the Parties in writing, then either Buyer or Broker may cancel this Agreement by giving written notice to the other at the address identified below. In the event of cancellation by either Party, neither Buyer nor Broker shall have any further obligations to each other and waive any and all claims that they may have against the other under this Agreement and Agreement will be null and void.
- 7. Buyer agrees that Broker is acting in good faith on behalf of a third party Seller, and that if Seller fails to perform under this Agreement, Broker shall have no liability to Buyer and shall not be held responsible for any claims or damages. Buyer waives any and all claims that Buyer has or may have against Broker resulting from this Agreement. Broker shall however refund any monies paid to it by Buyer.
- 8. Buyer further agrees and understands that Broker has made no representations or warranties to Buyer other than as contained herein and agrees and understands that it is Buyer's sole obligation to determine if the proposed replacement plan will be approved, and to seek approval of the proposed replacement plan by all required appropriate governmental regulatory agencies and Buyer waives any and all claims it may have against Broker if the proposed replacement plan is not approved by the required governmental entities or agencies.
- 9. Buyer further agrees that Agreement is not valid until a signed copy is provided to Broker. If Buyer has not forwarded a signed copy to Broker within 7 days after date signed by Broker, Agreement is null and void and neither Buyer nor Broker shall have any further obligations under this Agreement.

(Signature of Broker) (Date)

By: Eric Trelstad, Wetland Credit Agency, Inc.

Its: Owner

Address: 12940 Overlook Road Dayton, MN 55327

Dayton, MN 55327 612-360-4700 Char Hohner 7/26/18
(Signature of Buyer) (Date)

By: Char Kohner

Its: ______ Address: 3220 Nathan Lana

Address: 3220 Nathan Lane N. Plymouth, MN 55441

elm creek Watershed Management Commission

ADMINISTRATIVE OFFICE 3235 Fernbrook Lane Plymouth, MN 55447 PH: 763.553.1144 E-mail: judie@jass.biz

TECHNICAL OFFICE
Hennepin County Public Works
Department of Environment and Energy
701 Fourth Ave. South, Suite 700
Minneapolis, MN 55415
PH: 612.348.7338

E-mail: james.kujawa@hennepin.us

<u>Greenway North</u> <u>Plymouth, Project #2018-039</u>

<u>Project Overview:</u> This a 26.9 acre site consists of 5 rural single family lots south of CR 47 and west of Troy Lane. Pulte Homes is proposing to develop the area in two phases into 37 single family residential lots and 103 townhomes. This development will require compliance to the Commission's Stormwater Management Plan, Rule D-Stormwater Management, Rule E-Erosion and Sediment Control, Rule F-Floodplain Alteration and Rule I-Buffer Strips

Applicant: Pulte Homes, Paul Heuer, 7500 Flying Cloud Drive, Suite 670, Eden Prairie, MN 55344. Phone: 952-229-0722. Email: pultegroup.com

Agent/Engineer: Alliant Engineering, Seth Loken, 733 Park Ave. S., Suite 700, Minneapolis, MN 55402. Phone: 612-758-3080. Email: sloken@alliant-inc.com

Exhibits:

- 1) ECWMC Request for Plan Review and Approval, received August 6, 2018.
- 2) Greenway North Mass Grading Plat Plan Set, 42 of 42 Sheets. Last revision date of August 3, 2018, No signatures.
- 3) ECWMC Greenway West project review and decision dated April 11, 2018 (project 2018-010)
- 4) Greenway North Stormwater Management Hydrologic and Hydraulic Study, Final Plat Submittal, dated August 3, 2018. Contains;
 - a. Study Narrative
 - b. Drainage Area Maps
 - c. Atlas 14 Precipitation Estimate
 - d. Rate Control HydroCAD Calculation Reports
 - e. Land Cover Maps
 - f. Water Quality Calculations
 - i. Non-degradation Calculations
 - ii. Walker's P8 Model estimating pond Phosphorus removal efficiency
 - 1. Additional P8 information received August 29, 2018.
 - g. Volume Control Map and Calculations
 - h. Geotechnical Report.

Findings;

1) A complete application was received August 6, 2018. The initial decision period deadline per MN Statute 15.99 is October 5, 2018.

- 2) This site generally drains south and east through a series of small wetlands connected by a channel that runs under Troy Lane and Peony Lane before entering the large wetland/floodplain complex along Elm Creek in the NW Greenway area of Plymouth.
- 3) At this time, the applicant is requesting; a) approval of the stormwater management plans for Greenway North and the revised section (~6 acres) of Greenway West and b) approval of mass grading the rest of the site.
- 4) This site plan require compliance on the ECWMC rules for, stormwater management (Rule D), Erosion and Sediment Control (Rule E), Floodplain (Rule F) and Buffer Strip (Rule I)

Stormwater Management

- 5) For stormwater treatment, the applicant is proposing four filtration basins to provide rate, volume, water quality treatment of the stormwater runoff controls. Three of the four basins are in the Greenway North site area and the fourth basin is in the Greenway West area.
- 6) The City of Plymouth will provide the long term operation and maintenance on the permanent stormwater basins for this site.
- 7) <u>Abstraction volume</u> meets the Commission's standard; Total new impervious area for the site is 12.767 acres before any credits = 50,979 cubic feet of abstraction required. After 1.22 acres of previous impervious areas and disconnected credits = 11.55 acres or 46,107 cubic feet are required. Actual volume proposed = 57,333 cubic feet.
 - a. Proposed pre-treatment generally consists of 4' sump manhole at the last CBMH before a basin inlet. No specific standards are provided for pre-treatment devices or volumes. The Commission suggests the following minimum sump manholes/baffles/skimmers.
 - i. The last CBMH in the street prior to the four basins are fitted with a minimum of a 4' sump MH with a skimmer and baffle. (CBMH's 101, 301, 401, 501, 601, 802)
 - ii. 4' sump MH with baffle on CBMH's 311, 304, 103, 504, 804,
 - b. Combined filtration volumes for the four basins = 57,333 cubic feet based on 35% soil void space in the engineered soils and 100% between the bottom of the basin and outlet flow. Basin 1=27,968 cubic feet, basin 2=4,607 cubic feet, basin 3=13,684 cubic feet and basin 4=11,074 cubic feet.
 - c. Drawdown for each basin will be less than 48 hours. Basin 1=20 hours, Basin 2=41 hours, basin 3=20 hours and basin 4=16 hours
- 8) <u>Nutrient and TSS loads</u> meet the Commission's standards. The P8 model was used to compare pre and post development loads.
 - a. Pre-development phosphorus loads = 13.1 lbs/year
 - b. Post-development phosphorus loads = 11.8 lbs/year
 - c. Pre-development TSS loads = 4,013 lbs/year
 - d. Post-development TSS loads = 2,677 lbs/year

Stormwater Management Summary:

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Condition (based on 17.0 acres)	TP Load (lbs/yr)	TSS Load (lbs/yr)	Abstraction (cu. ft.)	Filtration (cu. ft.)	Annual Volume (ac. ft.)
Pre-development (baseline)	13.1	4,013	N/A	N/A	15.4
Post-development without BMPs	28.7	9,023		46,107	37.1
Post-development with BMPs	11.8	2,677		57,333	9.1*
Net Change	-1.3	-1,336	N/A	10,226	N/A*

^{*}Assumes up to 1.1" rainfall volume will remain on site. Filtration does not accomplish this.

9) Rate Controls meet the Commission's standards.

(summary at Troy Lane)	2-yr (cfs)	10-yr (cfs)	100-yr (cfs)
Pre-Development Rates	122.6	260.8	597.6
Post-Development Rates	122.4	202.1	274.1

- 10) The City of Plymouth is the LGU in charge of administering the Wetland Conservation Act on this site. No wetlands appear to be impacted by this development.
- 11) Wetland and watercourse buffers meet the Commission's standards of 10' minimum and 25' average buffer widths.

Erosion and sediment control plans meet the Commission's requirements.

Floodplains; There is a zone A designated floodplain that traverses this property, running generally northwest to southeast. Sections of Walnut Grove Lane and 59th Place will cross the floodplain flowage path. In addition, a small section of the 60th Place cul-de-sac, portions of Outlot J, Lots 1 to 7, Block 27 and Lots 4 to 7 of Block 24 fall within the floodplain overlay district on this property. Elevations will have to be modeled for this flood zone with quantities of fill and mitigation that comply with the Commissions Rule F determined.

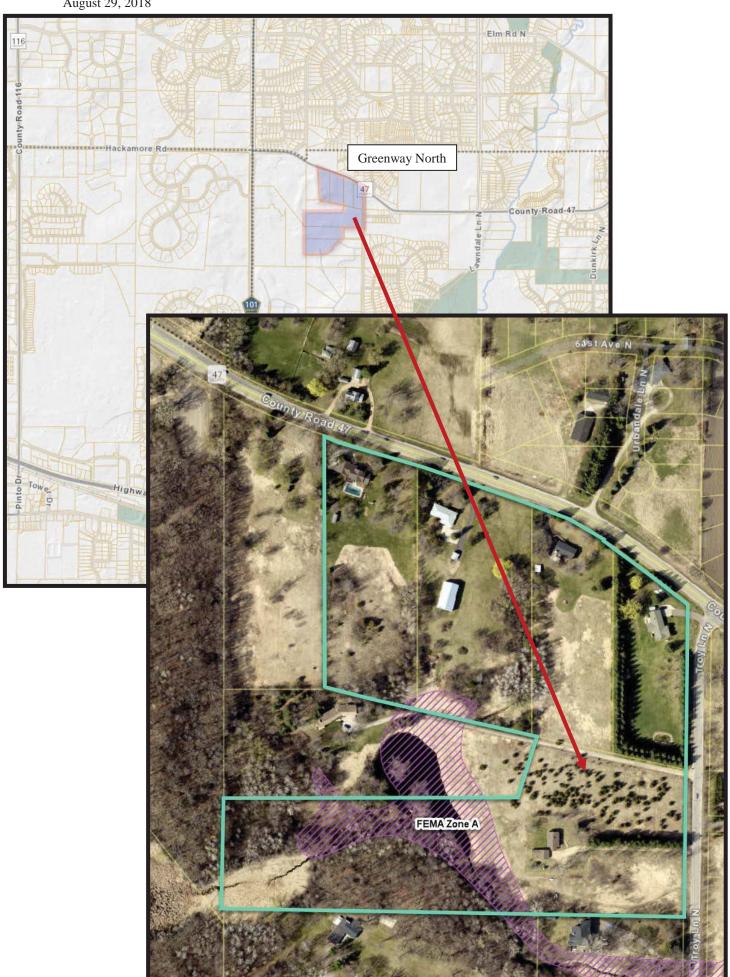
Recommendation: None at this time. ECWMC Floodplain requirements must be met.

Hennepin County Department of Environment and Energy Advisor to the Commission

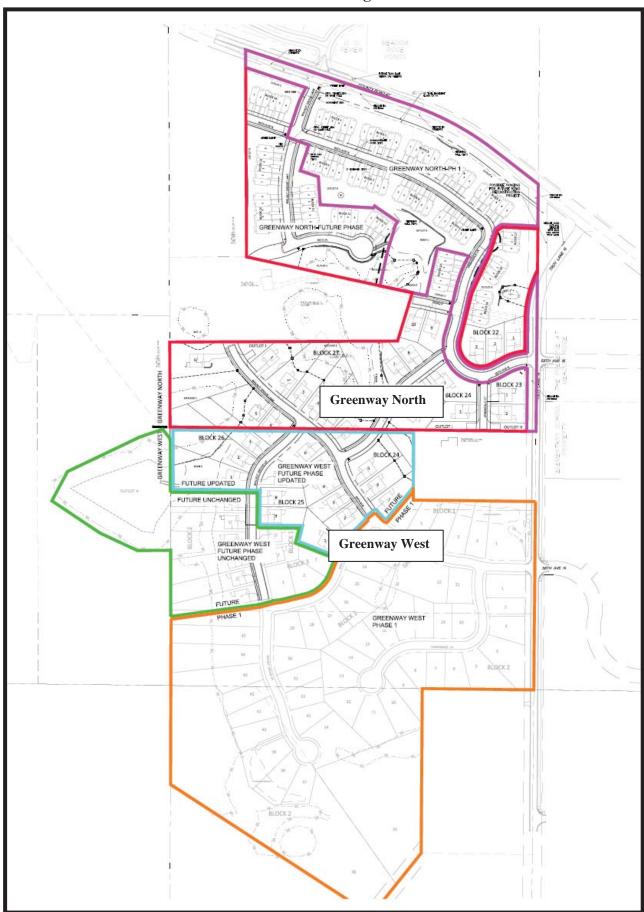
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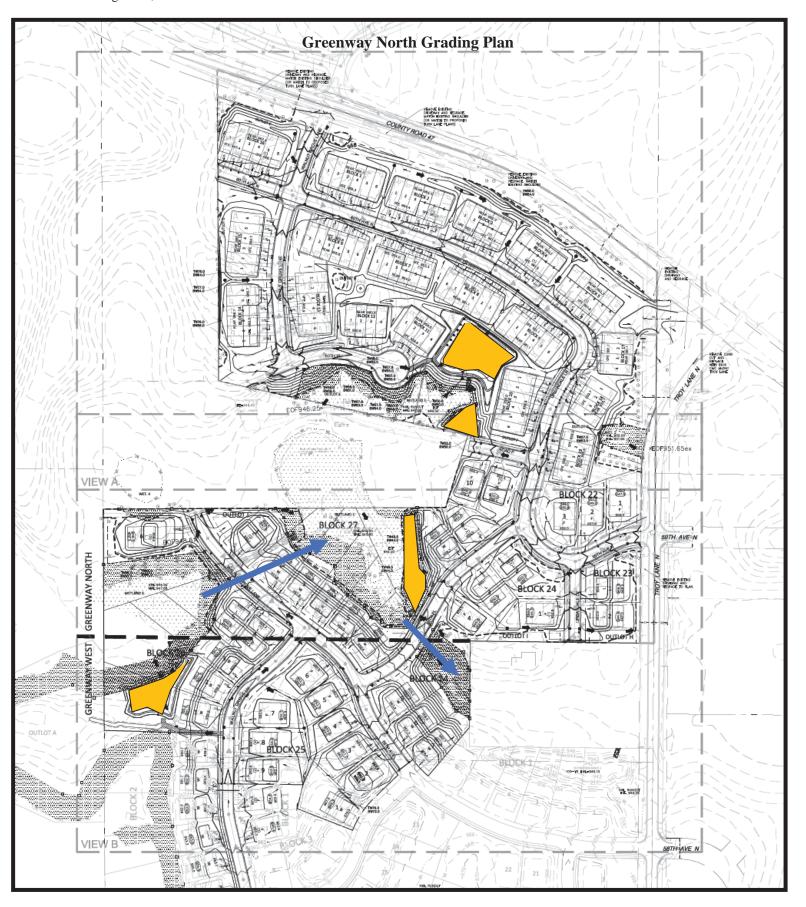
August 29, 2018

Greenway North (2018-039) City of Plymouth August 29, 2018



Overall Phasing Plan





elm creekWatershed Management Commission

ADMINISTRATIVE OFFICE 3235 Fernbrook Lane Plymouth, MN 55447 PH: 763.553.1144 E-mail: judie@jass.biz

TECHNICAL OFFICE
Hennepin County Public Works
Department of Environment and Energy
701 Fourth Ave. South, Suite 700
Minneapolis, MN 55415
PH: 612.348.7338

E-mail: james.kujawa@hennepin.us

Sundance Greens Dayton, Project #2018-005

<u>Project Overview:</u> This site consists of 7 parcels that total 310 acres. Approximately ½ is the Sundance Golf Course and the other ½ agricultural land. The applicant is proposing a long term phased residential development with 665 residential units while maintaining a portion (9 of the 18 holes) of the golf course. Total new impervious area will be 71 acres. The Commission will review this site for Stormwater Management (Rule D), Erosion and Sediment Control (Rule E), Floodplain Alteration (Rule F), and Buffer Strips (Rule I)

Applicant: Sundance Development, LLC, Attn. Mr. Tom Dehn, 11261 Fernbrook Lane N., Maple Grove, MN 55369. Phone: 612-328-2215. Email: tom.dehn@powerlodge.com.

<u>Agent/Engineer:</u> Campion Engineering Services, Inc., Attn. Marty Campion, 1800 Pioneer Creek Center, Maple Plain, MN 55359. Phone: 763-479-5172. Email: mcampion@campioneng.com

Exhibits:

- 1) ECWMC Request for Project Review and Approval, received February 2, 2018.
- 2) Request from Agent/Engineer for project extensions to October 10, 2018.
- 3) Project review fees for a low density (<40% impervious area) new development with floodplain impacts ≥ 100 cubic yard. \$6550.
- 4) Preliminary Street and Storm Sewer Plan Sheets 18 to 21 of 45 received July 31, 2018
- 5) Preliminary Grading Plan Sheets 23 to 27 of 45 received July 31, 2018
- 6) Wetland Buffer and Impact Plan Sheets 33 to 37 of 45 received July 31, 2018
- 7) Details Sheets 44 and Outlet Control Structure Details sheet 45 of 45, received July 31, 2018.
- 8) Preliminary Plans for; Sundance Greens by Campion Engineering, dated January 5, 2018, no signature. (1-11x17 set and 1-electronic submittal)
 - a. Sheet 1 of 45, Cover Sheet
 - b. Sheets 2-6 of 45, Existing Conditions.
 - c. Sheet 7 of 45, Phasing Exhibit,
 - d. Sheets 8-12 of 45, Preliminary Plat
 - e. Sheets 13-17 of 45, Preliminary Sanitary Sewer & Watermain Plan
 - f. Sheets 18-22 of 45, Preliminary Street and Storm Sewer Plan
 - g. Sheets 23-27 of 45, Preliminary Grading Plan
 - h. Sheets 28-32 of 45, Preliminary Storm Water Pollution Plan

- i. Sheets 33-37 of 45, Preliminary Wetland Impact & Buffer Exhibit,
- j. Sheet 38 of 45, Preliminary Tree Inventory
- k. Sheets 39-43 of 45, Preliminary Tree Survey & Removal Plan
- 1. Sheet 44 of 45, Street Details,
- m. Sheet 45 of 45, Outlet Control Structure Details.
- 9) Stormwater Management Plan, Sundance Greens, by Civil Methods, Inc. dated January 5, 2018. (1 hard copy and 1 electronic submittal)
- 10) Sheet 1 of 1 by Civil Methods, Inc., Sundance Greens Impervious Area Disconnection (1 electronic submittal)
- 11) Response to ECWMC February 23, 2018 findings. Response letter includes updated stormwater management plan information. Letter and SWMP updates are dated April 19, 2018. Received at ECWMC on July 31, 2018.
- 12) Wetland Delineation Information;
 - a. Fernbrook Lane Property Wetland Delineation Report by Midwest Natural Resources, Inc. dated November 13, 2017. Approved by Dayton January 16, 2018.
 - b. Sundance/Dehn Development Wetland Boundary Map and Approval Notice of Decision dated February 13, 2017,
 - c. Project 2013-025, Sundance Woods WCA information and City of Dayton notice of decision dated October 7, 2013.

Findings;

- 1) A complete application was received February 2, 2018. The decision deadline per MN Statute 15.99 has been extended by the Agent/Engineer to October 10, 2018.
- 2) The complete site consists of 310 acres. The Sundance Golf Course is approximately 160 acres of the site with the remaining areas being agriculture fields (~122 acres) with approximately 20 acres of woods and small areas of farmsteads and wetlands. Rush Creek Parkway was constructed through the SE parcel in 2014 for access to the Sundance Woods Development (EC #2013-025).
- 3) The developer proposes to reconfigure the golf course from an 18-hole to a 9-hole course (approximately 80 acres of the site). The remaining areas will be phased in over several years, creating 472 single family lots, 92 multiple family homes and a senior housing facility (665 total residential units).

Floodplain

- 4) There is a large zone A (no base flood elevation determined) floodplain complex that extends through this site. Technical Memo dated September 12, 2016 from Civil Methods Inc. models the 100 year floodplain in this area at an elevation of 907.9.
- 5) This memo and supporting documentation should be submitted to the MNDNR and FEMA for a letter of map amendment.
- 6) Using 907.9 as the 100 year elevation throughout this site floodplain impacts will occur at the following locations;
 - I. The west edge of block 9,
 - II. The access road (Street 2) to and portions of Block 7
 - III. The west portion of Block 1

Stormwater Management Plan

- 7) The project proposes to manage storm water through the use of 9 NURP and pretreatment ponds, 5 biofiltration basins and one infiltration pond.
- 8) There are three main discharge points from this development.
 - I. This flows to the southwest through a wetland/floodplain complex before it discharges into Rush Creek approximately ½ mile away.
 - II. This flows to the south where it discharges in two areas from this property traveling about 500' before entering Rush Creek. *Note: Subcatchement 11 is more critical for runoff and volume controls because of its proximity to the creek and the lack of any restriction of flow like wetlands prior to this water getting to the creek.
 - III. This runs to the east/northeast ¾ of a mile where it discharges into Powers Lake which flows into the floodplain/wetland complex and meanders ½ of a mile before it hits Elm Creek.
- 9) Pre and post-development flow rates for the 2, 10 and 100 year storm events are as follows:

	2-Year (2.9") Runoff Rate (cfs)		10-Year (4.3") Runoff Rate (cfs)		100-year (7.3") Runoff Rate (cfs)	
	Pre-Dev	Post-Dev	Pre-Dev	Post-Dev	Pre-Dev	Post-Dev
#1-Southwest	31.4	19.0	69.3	56.7	235.0	186.5
#2- South	19.4	12.8	42.9	30.8	128.3	62.4
Subcatchement/pond 11	9.85	3.89	24.33	12.25	62.17	22.9
#3-East/Northeast 29.1 12.4		49.6	19.8	212.7	33.2	

- 10) Total treatment volume requirements for 70.9 acres of new impervious areas = 283,104 cubic feet prior to any volume credit. With volume credits (disconnected flows) 269,872 (6.195 acre feet) cubic feet of abstraction is required for this site.
 - I. The golf course parking area in subcatchement 3b will have channelized flows coming off of the north end of it. This area cannot be claimed as disconnected.
 - II. Total abstraction credits on this site will be 282,346. Actual filtration volume will be 238,628 cubic feet on 5 biofiltration ponds and an additional 43,718 cubic feet of water will be abstracted in the infiltration pond.
 - III. All biofiltration ponds will draw down within 48 hours or less.
 - IV. For infiltration basin 12, exfiltration will have to be modeled per MPCA guidelines based on the soils in place. We recommend percolation tests or similar analysis for determining exfiltration potentials.
 - V. Vegetation plans for the Biofiltration basins are required.
 - VI. If the City of Dayton does not accept the responsibility for operating and maintaining the storm sewer system on site, all stormwater facilities must have Operation and Maintenance plans and agreements meeting the City and Commission's requirements recorded on the property title to this project.

- 11) Based on P8, pre and post development phosphorus and TSS loads meet the Commission standards.
 - I. TP before development = 200.9 lbs/year
 - II. TP after development = 75.9 lbs/year
 - III. TSS before development = 200,491 lbs/year
 - IV. TSS after development = 8,285 lbs/year.
- 12) Pre-treatment is needed on basins 2aP, 11P (bio-filter basin), 10aP, and 12P.
- 13) The outlet to pond 8P appears to be landlocked.
- 14) A good opportunity exists to enhance wetland 5 for a more aesthetic pleasing wetland basin for the future residents.
- 15) Ponds 1, 3, 4, and 6 have mean average depths of <4.0'. The Commission requires NURP ponds have a mean average depth (Cumulative storage/surface area at NWL) of 4.0 or greater.

Erosion and Sediment Controls

16) A new application with an erosion and sediment control (and/or SWPPP) and grading plan must be submitted for each phase of construction as this project progresses. At this time we will need Phase I grading and erosion control plans. We will review each phase for consistency with the approved SWMP, grading and erosion controls. Specific construction sequencing must be provided with each phase identifying all the temporary, interim and permanent erosion control practices for that phase and the timing of said practices. Specifics for the filter basin (see item X above) must also be provided.

Wetland Buffers

- 17) Wetland buffer monumentation must be placed per the Commission's standard of;
 - I. A maximum spacing of 200 feet
 - II. As necessary to accurately define the edge of the buffer strip and
 - III. At each parcel line where it crosses a buffer strip.
- 18) Some wetland buffers are shown at less than 25' (as examples, see wetlands 4, 6 and 7 at greens 3, 4, 5 and 7 and tee 6). Commission rules allow a minimum of 10' wide buffer with an average of 25' buffer strip. Please show where the average is made up in these areas.
- 19) 25' buffers encroach into many back and side yard areas on this site. Many of these areas can utilize the 10' minimum width/25' average to provide better usable spaces in back yard areas (as examples wetlands 8, 9, 10, 13, 15 and 21-all of these wetlands have areas that can minimize buffer in yard areas by placing additional buffer square footage outside of back yard areas)

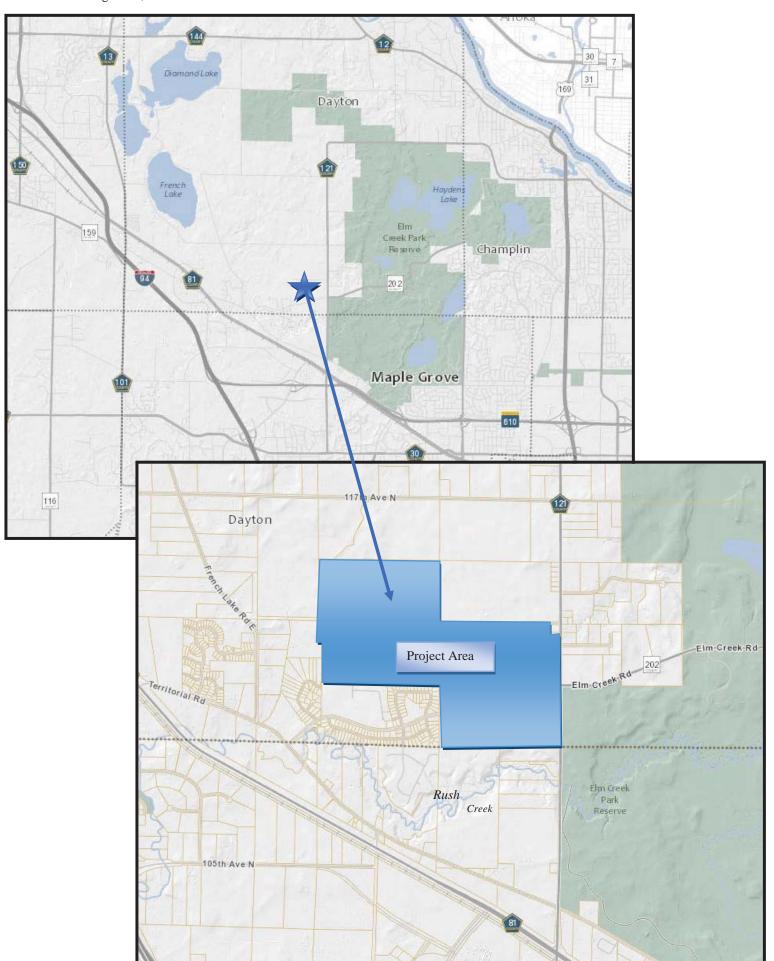
Recommendation: None at this time. Erosion control plans, wetland buffers and floodplain mitigation plans must meet the Commission's requirements.

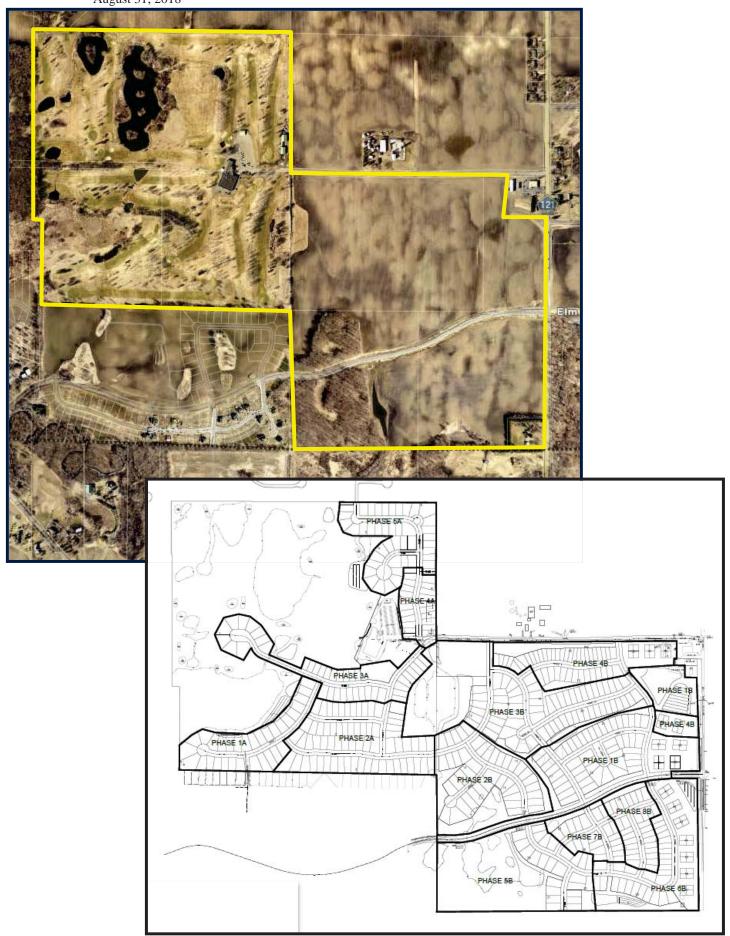
Hennepin County
Department of Environment and Energy
Advisor to the Commission

for Col

August 31, 2018

Date







Minnesota Wetland Conservation Act Notice of Application

Local Government Unit (LGU) Elm Creek Watershed Management Commission Address c/o JASS 3235 Fernbrook Lane, Plymouth, MN 55447						
Applicant Name Project Name Date of Application						
Terry Savoie 21801 Homestead Trail Corcoran	21801 Homestead (PID281192343000		Application August 15 2018	Number 2018-041W		
Type of Application (check all that apply):						
Wetland Boundary or Type	☐ No-Loss	☐ Exemption ☐ Sequencing				
Replacemen	nt Plan	Banking Plan				
Summary and description of proposed Anderson Engineering of MN, LLC at 21801 Homestead Trail (PID: 281 (Section 28, Township 119 North, R WCA protocols. Fieldwork for this meeting wetland criteria, were ident	completed a wetland in 1923430007) in Corco lange 23 West) The we site investigation was of	nvestigati ran, Hen tland deli complete	on within the project nepin County, Minne neation was complete d on June 5, 2018. Tw	sota. ed per MN		
2. APPLIO	CATION REVIEW	AND D	ECISION			
Signing and mailing of this complete Subp. 3 provides notice that an applic specified above. A copy of the applic	cation was made to the	LGU un	der the Wetland Cons			
Name and Title of LGU Contact Person James C. Kujawa Technical Advisor to the Commission Comments must be received by (min business-day comment period): September 10, 2018, 4:30 PM			(minimum 15			
Address (if different than LGU)	1:0	Date, time, and location of decision: 1:00 p.m., September 11, 2018, 701 Fourt Ave. S., Suite 700, Mpls, MN 55415				
Phone Number and E-mail Address 612-348-7338		cision-m Staff	aker for this applicati	for this application:		
James.kujawa@hennepin.us		Governing Board or Council				
Signature:			Date: Augu	ust 17, 2018		

BWSR Forms 7-1-10 Page 1 of 2

3. LIST OF ADDRESSEES

SWCD TEP member: (email only) Stacey. Lijewski@co.hennepin.mn.us
BWSR TEP member: (email only) Ben Carlson (ben.carlson@state.mn.us)
LGU TEP member (if different than LGU Contact):
DNR TEP member:
NR Regional Office (email only) Becky.Horton@state.mn.us
WD or WMO (if applicable):
Applicant: (email only) terry@buyashed.com
☐ City of Corcoran: Brad Marten bmartens@ci.corcoran.mn.us
Members of the public who requested notice (notice only) Anderson Engineering
bhodapp@ae-mn.com
Corps of Engineers Project Manager (notice only) mvp-reg-inquiry@usace.army.mil
BWSR Wetland Bank Coordinator (wetland bank plan applications only)

4. MAILING INFORMATION

For a list of BWSR TEP representatives: www.bwsr.state.mn.us/contact/WCA_areas.pdf

For a list of DNR TEP representatives: www.bwsr.state.mn.us/wetlands/wca/DNR TEP contacts.pdf

➤ Department of Natural Resources Regional Offices:

NW Region:	NE Region:	Central Region:	Southern Region:
Reg. Env. Assess. Ecol.	Reg. Env. Assess. Ecol.	Reg. Env. Assess.	Reg. Env. Assess. Ecol.
Div. Ecol. Resources	Div. Ecol. Resources	Ecol.	Div. Ecol. Resources
2115 Birchmont Beach Rd. NE	1201 E. Hwy. 2	Div. Ecol. Resources	261 Hwy. 15 South
Bemidji, MN 56601	Grand Rapids, MN	1200 Warner Road	New Ulm, MN 56073
	55744	St. Paul, MN 55106	

For a map of DNR Administrative Regions, see: http://files.dnr.state.mn.us/aboutdnr/dnr regions.pdf

For a list of Corps of Project Managers: www.mvp.usace.army.mil/regulatory/default.asp?pageid=687 or send to:

US Army Corps of Engineers St. Paul District, ATTN: OP-R 180 Fifth St. East, Suite 700 St. Paul, MN 55101-1678

For Wetland Bank Plan applications, also send a copy of the application to:

Minnesota Board of Water and Soil Resources

Wetland Bank Coordinator 520 Lafayette Road North

St. Paul, MN 55155

5. ATTACHMENTS

In addition to the application, list any other attachments:
◯ Wetland Investigation Report, Savoie Property, 21801 Homestead Trail by Anderson
Engineering dated June 13, 2018.

BWSR Forms 7-1-10 Page 2 of 2