Riley-Purgatory-Bluff Creek Watershed District

Board of Managers Regular Meeting
Friday, March 1, 2019
1:00pm Board Meeting
DISTRICT OFFICE
18681 Lake Drive East
Chanhassen

Agenda

1. Call to Order

2. Matters of general public interest

Information

Welcome to the Board Meeting. Anyone may address the Board on any matter of interest in the watershed. Speakers will be acknowledged by the President; please come to the podium, state your name and address for the record. Please limit your comments to no more than three minutes. Additional comments may be submitted in writing. Generally, the Board of Managers will not take official action on items discussed at this time, but may refer the matter to staff for a future report or direct that the matter be scheduled on a future agenda.

3. Reading and approval of minutes

Action

a. Board of Manager Meeting, February 6, 2019

4. Organizational Actions

Action

- a. Committees
 - i. Personnel
 - ii. Governance
- 5. Permit and Cost-Share Database

Information

6. Lower Riley Creek Enhancement Plan

Information

7. Citizen Advisory Committee

Action

- a. Report
- b. Motion

8. Consent Agenda

(The consent agenda is considered as one item of business. It consists of routine administrative items or items not requiring discussion. Any manager may remove an item from the consent agenda for action.)

- a. Accept February Staff Report
- b. Accept February Engineer's Report (with attached Inspection Report)

- c. Authorize President to execute Cooperative Agreement with the City of Eden Prairie and Lower Minnesota Watershed District after execution from City of Eden Prairie.
- d. 2018-071 Minnetonka High School Approve permit with staff recommendations and stipulations.
- e. 2018-072 Hyland Park Parking Improvements Approve permit with staff recommendations and stipulations.
- f. Approve Task Order for Hyland Lake Alum Application
- g. Approve Task Order for Lake Riley Subwatershed Assessment
- h. Approve Task Order for Mitchell Lake Subwatershed Assessment
- i. Approve Task Order for RPBCWD Permit/Grant Database System Agreement
- j. Approve Task Order 6f WOMP Station

9. Action Items

Action

- a. Accept January Treasurer's Report
- b. Approve Paying of the Bills
- c. Direct Governance Committee to review Fund Balance Policy Update and Investment Deposit Policy
- d. Wetland Restoration Project at Pioneer Trail [Chanhassen transfering grant to wd]
 - i. Adopt Resolution 2019-007 to enter grant agreement for Flood Hazard with Minnesota Department of Natural Resources
 - ii. Authorize Administrator to enter into purchasing agreement with property owner at 730 Pioneer Trail
 - iii. Authorize Administrator to enter into negotiation with the property owner at 750 Pioneer Trail
- e. Adopt Resolution 2019-008 to amend 2018 plan's cost-share program
- f. Approve Release of Cost-share Program
- g. Authorize Administrator to execute Task Order 26 Stormwater model Option Alternative Phase A
- h. AIS Survey
- i. After-the-fact permit applications (Manager Koch)
- j. Permit fees and data (Manager Koch)
- k. Hire IT Consultant (Manager Koch)
- 1. Create and Audit and Risk Committee (Manager Koch)
- m. Hire and HR Consultant (Manager Koch)

10. Discussion Items

Information

- a. Chloride Management Plan Rule J Section 3.8
- b. Upcoming April Board Meeting:
 - i. Board/Staff Retreat Governance
 - ii. Eden Prairie/Board Workshop March 19, 2019, 5:00pm

11. Upcoming Events

Information

- First Friday Hike with the Watershed, March 1, 12:00-1:00pm, Purgatory Creek Park, Minnetonka
- Carver County Stormwater Workshop, March 8, 8:30-11:30, Chaska Government Center
- RPBCWD at Eden Prairie Home and Garden Expo, March 16th, 9am-3pm, Grace Church, Eden Prairie
- CAC Meeting, March 18, 2019, 6:00 pm, 18681 Lake Drive E, Chanhassen
- Smart Salting Training for Schools, March 25th, 9am-2:30pm, Bloomington Public Works
- Regular Board Meeting, April 3, 2019, 7:00pm, 18681 Lake Drive East, Chanhassen
- First Friday Hike with the Watershed, April 5th, 12:00-1:00pm, Location TBD
- Meet and Greet, April 10, 2019, 4:00pm-6:30pm, 18681 Lake Drive East, Chanhassen

MEETING MINUTES

Riley-Purgatory-Bluff Creek Watershed District

February 6, 2019, Board of Managers Cost-Share Programs Workshop and Monthly Meeting

PRESENT:

Managers:

Jill Crafton, Treasurer

Larry Koch

Dorothy Pedersen, Vice President

Dick Ward, President

David Ziegler, Secretary

Staff:

Claire Bleser, RPBCWD Administrator

Zach Dickhausen, RPBCWD Water Resources Technician

Terry Jeffery, Project and Permit Manager

Michelle Jordan, RPBCWD Community Outreach Coordinator

Josh Maxwell, RPBCWD Water Resources Coordinator Scott Sobiech, Engineer (Barr Engineering Company) Maya Swope, RPBCWD Outreach and Office Assistant*

Louis Smith, Smith Partners

Other attendees:

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Joan Palmquist, CAC

Marilynn Torkelson, EP CAC

Bill Satterness, Eden Prairie Resident*

Lori Tritz, CAC

Laurie Susla, LLCA *Indicates meeting only

1. Cost-Share Program Workshop

President Ward called to order the Wednesday, February 6, 2019, Board of Managers Cost-Share Program Workshop at 5:30 p.m. at the District Office, 18681 Lake Drive East, Chanhassen, MN 55317.

Ms. Jordan reported that staff and the CAC have been taking a look at the District's Cost-Share Program as directed by the Board. She summarized the history of the program. She pointed out that in 2018 the District received two grant applications that challenged the program's review process and parameters, which prompted action to take a look at the program. Ms. Jordan reviewed in detail the process the staff and CAC moved through to examine the program. She explained the process included: identifying the need for the program, assessing the current program, including identifying barriers, researching existing programs of other watersheds, and

developing and proposing adjustments to the District's program.

Ms. Jordan responded to managers' questions and comments. There was discussion on whether the District should continue a cost-share program.

Ms. Jordan presented proposed changes to the program:

• Create mini-grants to award up to \$250 for physical as well as community engagement projects that have quantifiable benefits to water quality, conservation, and habitat and that support the District's 10-year

15 goals. Manager Koch recommended the District make this program simple for people to understand, 16 provide sample project ideas, publicize the program, and collect and publicize testimonials. 17 • Create a sub-committee to review all grants. Ms. Jordan noted that staff and CAC recommend that the subcommittee would include District staff and two CAC members. 18 19 • Use a scoring sheet to assess projects based on project outcomes. 20 • Increase the residential grant amount to \$5,000. • Delegate authority to Administrator to approve residential and non-profit grants less than \$10,000. Ms. 21 22 Jordan noted that this change would require a Plan Amendment because the District's 10-Year Plan states 23 that the Board of Managers will review all Cost-Share applications. 24 • Remove conservation from the residential grant program. 25 • Require projects to demonstrate improvement; Or for projects that are the "better alternative" to fund only up to the difference between its cost and the cost of the traditional approach. 26 27 Ms. Jordan described the next steps in this process of updating the Cost-Share Program. She said that staff would like the managers' feedback as well as CAC feedback and will review and incorporate the feedback; develop 28 29 content for the District's website and dedicated webpage and printed materials; Meet with the CAC in February 30 and bring back to the Board in March. 31 Administrator Bleser talked about the plan amendment process. 32 Manager Koch said he would like to see the revisions staff makes after receiving feedback from the managers and 33 CAC. He also said he would like to see information on past Cost-Share Program projects the District funded. 34 Administrator Bleser said the District's annual communication includes that information for each year's Cost-35 Share projects. Manager Pedersen commented on the proposed application requirement that projects have at least two bids for work. She noted it could be difficult for applicants to find two contractors to bid on certain types of 36 37 work. 38 President Ward stated that the Board's discussion tonight indicates the managers like the program presented and 39 want to fast-track the process for getting it fully developed. 40 Attorney Smith addressed the actions the Board could take to order the drafting of the plan amendment and public hearing notice publication. The Board decided it would add this topic to tonight's monthly meeting agenda. 41 42 Manager Koch moved to adjourn the workshop. Manager Pedersen seconded the motion. President Ward 43 adjourned Upon a vote, the motion carried 5-0. The workshop adjourned at 6:45 p.m. 2. Call to Order 44 President Ward called to order the Wednesday, February 6, 2019, Board of Managers Monthly Meeting at 7:00 45 p.m. at the District Office, 18681 Lake Drive East, Chanhassen, MN 55317. 3. Approval of the Agenda 46 Manager Pedersen requested adding an action item to authorize staff to start the plan amendment process.

Manager Ziegler seconded the motion. Manager Koch moved to amend the motion to also layover until the

Board's March monthly meeting items 6, 11c, 11d, 11h, 11i, and 11 j, add an action item about permit fees and

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add an action item about the Frontier Trail property that has an unpermitted project. The motion died due to lack of a second. President Ward called the question for the motion on the table. <u>Upon a vote, the motion carried 5-0.</u>

4. Matters of General Public Interest

Mr. Bill Satterness of 8597 Red Oak Drive, Eden Prairie, commented he served on the District's CAC committee from 2010 to 2014, chaired the Committee in 2013, and is the Director of the Friends of Red Rock Lake. He noted that today he is presenting his own views. Mr. Satterness commented AIS is an issue that taxpayers care deeply about, and the District should do more about AIS. He spoke in support of the AIS group being proposed by Manager Koch. Mr. Satterness noted that the District's purview is to protect, manage, and restore water resources and he spoke in favor of the District enthusiastically fighting AIS. Mr. Satterness shared some history of the watershed, CAC, and District decisions, particularly about the issue of the District voting on providing funding to cities in the watershed for AIS work.

Ms. Laurie Susla of 7008 Dakota Avenue, Chanhassen, commented that she was really surprised that at the Board's previous monthly meeting the Board turned down creating an Aquatic Invasive Species (AIS) working group. She said she thinks it is a great idea and hopes the Board will reconsider its decision. Ms. Susla stated she is in favor of hiring the HR and IT consultant. She said she thinks having a review process in place is important. Ms. Susla remarked she is curious about the District's fund balance policy and is curious about the difference between working capital and a contingency or reserve fund. Ms. Susla stated that if the District has committed funds set aside for projects, then it is too much to have contingency funds, too. Ms. Susla commented that she believes the Board should discuss items raised by the public and the Board should have a follow-up process for public comments.

5. Reading and Approval of Minutes

a. Minutes of Board of Managers Meeting, January 9, 2019

Manager Ziegler noted spelling correction on page 3, line 87 and page 4, line 118. He requested an edit on page 5, line 159 to add the words "The motion," so the sentence reads, "...record. The motion..." Manager Ziegler shared a correction to the minutes requested by CAC member Palmquist, so that her comments on page 6, starting on line 176, reads, "Manager Koch asked Ms. Palmquist how many new members could be effectively added to the CAC. She responded that it was her understanding the Board had indicated it wanted 12 members on the CAC, and she felt the CAC could accommodate adding new members to bring it up to that level. She commented also that the CAC tends to have attrition every year."

Manager Crafton requested to add the word "noted" to page 3, line 87, so the sentence reads, "Attorney Welch noted..."

Attorney Smith had a correction on page 7, line 238, to replace the words "seconded the" with "voted against the..."

Manager Ziegler moved to approve the January 9, 2019, meeting minutes as amended. Manager Crafton seconded the motion. <u>Upon a vote</u>, the motion carried 5-0.

b. Minutes of Board of Managers Special Meeting, November 14, 2018

Manager Ziegler moved to accept the November 14, 2018, minutes as presented. Manager Crafton seconded the motion. <u>Upon a vote</u>, the motion carried 5-0.

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c. Minutes of the Board of Managers Special Meeting, August 9, 2018
Manager Ziegler moved to accept the August 9, 2018, minutes as amended. Manager Crafton seconded the motion. Upon a vote, the motion carried 5-0.

6. Organizational Activities

a. Committees: Personnel; Governance

Manager Koch moved to layover this item to the Board's March monthly meeting. Manager Ziegler seconded the motion. Upon a vote, the motion carried 5-0.

7. 2018 Annual Report

Administrator Bleser reviewed with the managers the draft 2018 Annual Report Summary. She went into further detail about the annual report and summarized the District's 2018 work and activities in the following areas: CAC, Education and Outreach, Wetland Management, Groundwater, Stormwater Ponds, and Projects. Mr. Maxwell reported on the District's 2018 data collection and monitoring. Administrator Bleser noted that the Board would get a written copy of the report for the Board's March monthly meeting.

8. Duck Lake Subwatershed Update

Ms. Jordan reminded the Board that the District's 10-Year Plan identified a goal of reducing phosphorous loading to Duck Lake. She reported that Barr Engineering looked at the feasibility of practices to reduce phosphorous loading in the subwatershed, and the City of Eden Prairie is partnering with the District on this initiative. Ms. Jordan stated that four practices have been identified as projects to work toward the reduction goal and that residents in the subwatershed can sign up to participate in: rain garden, tree planting, rain barrel, or rain-garden-in-a-box. She explained the District's goal is to have 10 rain gardens installed, 50 trees planted, 50 rain barrels, and 50 rain gardens-in-a-box planters installed. Ms. Jordan reported on the District's outreach to publicize the initiative, how residents can sign up online, and how many sign-ups have taken place to-date.

9. Citizen Advisory Committee

Ms. Lori Tritz, CAC President, reported that the District's Cost-Share Program has been the topic that has taken the majority of the CAC's time and has been the primary topic of the CAC's discussion. She said the CAC anticipates wrapping up discussions about the Cost-Share Program at the next CAC meeting.

10. Consent Agenda

Manager Koch moved to approve the Consent Agenda with the deletion of requirement 7 in the report on permit 2015-036 Saville modification under Consent Item 10d. Manager Pedersen seconded the motion. <u>Upon a vote, the motion carried 5-0</u>. The Consent Agenda items included: 10a – Accept January Staff Report; 10b – Accept January Engineer's Report (with inspection report attached); 10c – Authorize Administrator Bleser to Enter into Grant Agreement with BWSR for the Mitchell Lake and Lake Riley/Rice Marsh Lake Subwatershed Assessments; 10d – Approve Permit 2015-036 Saville Modification with Engineer Recommendations; 10e – Approve Revised Scope of Work for Hennepin County Chloride Initiative.

11. Action Items

a. Accept December Treasurer's Report

Treasurer Crafton reported that she and the District Administrator reviewed the report in accordance with the District's practices and procedures. She moved to accept the report as presented. Manager Pedersen seconded the motion. Manager Koch stated he has questions on the report, but he will postpone his questions to next month's Board meeting if the Board agrees to add an agenda item next month to discuss the 2018 budget items ended the fiscal year over budget and discuss fund allocation and carry-over. The Board and staff indicated consent. <u>Upon a vote</u>, the motion carried 5-0.

b. Approve Paying of the Bills

Manager Crafton moved to pay the bills. Manager Pedersen seconded the motion. <u>Upon a vote, the motion carried 5-0.</u>

c. Approve Fund Balance Policy Update

Manager Koch moved to layover this item until the Board's March monthly meeting. Manager Ziegler seconded the motion. <u>Upon a vote, the motion carried 5-0.</u>

d. Approve Investment Deposit Policy

Manager Koch moved to layover this item until the Board's March monthly meeting. Manager Ziegler seconded the motion. <u>Upon a vote</u>, the motion carried 5-0.

e. Permit 2018-073 Preserve Boulevard and Eden Lake Outlet

Engineer Sobiech summarized the project, went through the Engineer's review of the project, and explained the four variances requested by the applicant. He said the Engineer recommends approval and noted that he believes there is adequate technical information provided by the applicant for the Board to decide on the variances.

Manager Koch moved to, based on District engineer and staff recommendation, grant the four variance requests as set forth in the staff and engineer report included in this month's Board packet. Manager Ziegler seconded the motion. <u>Upon a vote, the motion carried 5-0.</u>

Manager Koch moved to approve Permit 2018-073 with the terms and conditions set forth on pages 11 and 12 of the Permit Application Review report prepared by Scott Sobiech for the Board's February 6, 2019, meeting [included as follows] and the requirement that the project will have continuous monitoring for three years as staff deems appropriate for the project and the City of Minnetonka reimburses the District for the cost of the monitoring devices plus costs for the time and labor for monitoring:

Approval of the permit issuance contingent upon:

1. Continued compliance with General Requirements.

- 2. Financial Assurance in the amount of \$54,890.
- 3. The applicant must submit authorization from Alan Au (or the owner of his property, if different) to apply for the permit modification.
- 4. The applicant must provide the name and contact information of the individual responsible for erosion control at the site. RPBCWD must be notified if the responsible individual responsible for erosion control at the site. RPBCWD must be notified if the responsible individual changes during the permit term.
- 5. The applicant must submit documentation verifying the soils present, infiltration capacity of the soil and groundwater elevation at the proposed bioretention basin #1, bioretention basin #2, rock trench #1 and rock trench #2. This can be accomplished by soil boring, permeability tests, infiltrometer test, potholing or other methods, if the soils, groundwater elevation is higher than anticipated or infiltration capacity is less than anticipated, design modifications to ensure compliance with RPBCWD requirements would need to be submitted (in the form application for a permit modification or new permit.)
- 6. Permit applicant must provide a chloride management plan that designates the individual authorized to implement the chloride management plan and the MPCA-certified salt applicator engaged in implementing the plan.
- 7. Receipt in recordation a maintenance declaration for the stormwater management facilities and wetland buffer. The declaration must also include a stormwater-reuse irrigation map, reuse monitoring and reporting plan, be recorded on the property owned by Alan Au (or the owner of the property, if different), and include dedication of rights to drain stormwater to and rely on treatment provided by the stormwater practice on the Au property. Drafts of any and all documents to be recorded must be approved by the District prior to recordation.
- 8. Receipt of an additional permit fee of \$9,185 for excess cost recovery.

By accepting the permit, when issued, the applicant agrees to the following stipulations:

- 1. Per Rule J Subsection 4.5, upon completion of the site work, the permittee must submit as-built drawings demonstrating that at the time of final stabilization, stormwater facilities conform to design specifications as approved by the District.
- 2. Per Rule J Subsection 2.6, performance monitoring, the applicant must monitor the proposed irrigation systems to provide the volume abstraction as presented in the design. The recorded reuse volume must be submitted to the RPBCWD annually for five years; \$5,000 of the financial assurance required above all will be retained to assure timely submittal of the first and second annual reports. If it is determined that the irrigation systems are not performing as designed, a revised design must be submitted to the District for approval to demonstrate that the volume abstraction and water quality standard is achieved.
- 3. Single-family homes to be constructed on lots in the subdivision created under the terms of permit 2015-036, if issued, must have an impervious surface area

Draft Minutes of 2/6/19 RPBCWD Board of Managers Cost-Share Program Workshop and Monthly Meeting

and configuration materially consistent with the approved plans. Individual lot design that differs materially from the approved plans (e.g., in terms of total impervious area) will need to be the subject of a request for a permit modification or new permit, which will be subject to review for compliance with all applicable regulatory requirements.

Manager Ziegler seconded the motion. <u>Upon a vote, the motion carried 5-0</u>.

f. Scope of Services for Legal Compliance Review of the District

Manager Koch moved to layover this item until the Board's March monthly meeting. Manager Pedersen seconded the motion. <u>Upon a vote, the motion carried 5-0</u>.

g. Develop AIS Working Group

Manager Koch said he sees the idea of an Aquatic Invasive Species (AIS) working group is for the District to be the focal group to organize and strategize around what the constituents are wanting – a plan to stop the spread of zebra mussels and other AIS. Manager Koch moved to direct staff to develop an AIS working group. The motion died due to lack of a second.

Administrator Bleser announced she would like to bring an idea to the Board at its March monthly meeting and would like to get more information from the Bassett Creek Watershed Management Commission about a direction it has taken, which could be something for the District to investigate as it considers an AIS working group.

There was a lengthy discussion about the idea of an AIS working group and what would need to be considered. The Board directed staff to gather the information needed and to bring a proposal in front of the Board at its March monthly meeting.

h. Hire IT Consultant

Manager Koch moved to layover agenda items 11h – Hire IT Consultant, 11i - Create an Audit and Risk Committee, and 11j - Hire an HR Consultant – to the Board's March monthly meeting. Manager Ziegler seconded the motion. <u>Upon a vote, the motion carried 5-0</u>.

- i. Create an Audit and Risk Committee [See item 11h.]
- j. Hire HR Consultant [See item 11h.]

k. Direct Staff to Prepare Plan Amendment for Cost-Share Program

Manager Koch moved to direct staff to prepare and publish the Plan Amendment regarding item 9.7.2 in the District's 10-Year Plan to amend the language in the Plan to reflect the Board will not review all Cost-Share applications, as discussed by the Board and staff earlier this evening in the Cost-Share Program workshop. Manager Ziegler seconded the motion. <u>Upon a vote, the motion carried 5-0</u>.

247 Chanhassen Water Quality Opportunity/Cost-Share Pleasant View Road 248 Mr. Jeffery highlighted that an opportunity project may be coming up, and he will bring it to the Board 249 when it does 250 251 b. Upcoming March Board Meeting 252 i. Cooperative Agreement with the City of Eden Prairie for Lower Riley Creek 253 ii. Stormwater Model Update, Flood Risk, Mapping, Mitigation and Adaptation Task Order 254 iii. Cost-Share and Permitting Database Update 255 Governance Workshop iv. 256 v. Board and Staff Workshop 257 vi. City of Eden Prairie/RPBCWD Board Workshop on March 19, 2019, at 5 p.m. 258 vii. Items held over from this evening's meeting. 259 13. Upcoming Events 260 First Friday Hike with the Watershed, March 1, Noon-1:00 p.m., Purgatory Creek Park, 261 262 RPBCWD Regular Monthly Board Meeting, March 6, 2019, 7:00 p.m., District Office, 18681 263 Lake Drive East, Chanhassen 264 Citizen Advisory Committee Meeting, March 18, 2019, 6:00 p.m., District Office, 18681 Lake 265 Drive East, Chanhassen 266 14. Adjourn Manager Koch moved to adjourn the meeting. Manager Pedersen seconded the motion. Upon a vote, the motion 267 268 carried 5-0. The meeting adjourned at 10:24 p.m. 269 270 271 272 273 Respectfully submitted, 274 275 276 David Ziegler, Secretary

12. Discussion Items

RPBCWD February staff report

Membership	Advisory Committees	Internal Policies	Administration Accounting and Audit
	Engage with the Technical Advisory Committee on water conservation, chloride management and emerging topics Engage with the Citizen Advisory Committee on water conservation, annual budget and emerging topics. Facilitate recruitment of CAC members for 2019.	Work with Governance Manual and Personnel Committees to review bylaws and manuals as necessary	Coordinate with Accountant for the development of financial reports. Coordinate with the Auditor. Continue to work with the Treasurer to maximize on fund investments. Water Quality Fact Sheet are completed.
The District has become a member of Eden Prairie Chamber of Commerce and Southwest Chamber of Commerce	The CAC will be meeting in February. No TAC meetings this month looking at the month of April for our next TAC meeting.	No committee have been established yet for 2019. However, an Investment Policy and Governance Manual amendment are being proposed this month.	Staff update Administrator Bleser worked with both the Accountant and Auditor this month.
			Partners

Aquatic Invasive Species	Regulatory Program
Review AIS monitoring program Develop and implement Rapid Response Plan as appropriate Coordinate with LGUs and keep stakeholders aware of AIS management activities. Manage and maintain the aeration system on Rice Marsh Lake as per the Riley Chain of Lakes Carp Management Plan. Review AIS inspection program.	Review regulatory program to maximize efficiency. Engage Technical Advisory Committee and Citizen Advisory Committee on possible rule changes. Implement regulatory program.
The Riley Purgatory Summit has been rescheduled due to inclement weather.	2 permit applications received. 4 permits have been issued administratively. 9 Applications are currently under review. Staff Jeffery has met with potential applicants on 2 pending projects. Staff Jeffery has been attending monthly stakeholder meetings for the forthcoming Hwy 101 reconstruction project. Staff Jeffery and Engineer Sobiech will be hosting a workshop on extended detention for stream protection on March 27th.
City of Chanhassen City of Eden Prairie University of Minnesota MN DNR Carver County	

District Hydrology and Hydraulics Model	Data Collection	Cost-Share	
Coordinate maintenance of Hydrology and Hydraulics Model. Coordinate model update with LGUs if additional information is collected. Partner and implement with the City of Bloomington on Flood Evaluation and Water Quality Feasibility.	Continue Data Collection in permanent sites. Identify monitoring sites to assess future project sites.	Review program to determine efficiencies and needs. Recommend modification as necessary. Review applications and recommend implementation.	Keep abreast in technology and research in AIS.
	Staff has been monitoring DO levels in lake and monitoring at WOMP stations. Duck lake has incurred a fish kill. Water quality report was submitted to the board in February. Staff is working on testing spent lime medium to determine efficiencies.	Staff Jordan is incorporating CAC and Board feedback into final draft. The final draft will be presented to the CAC at their February meeting. The board will be getting final updates at the board packet.	Please Board Packet in regards to AIS initiative.
	Metropolitan Council		

Lake Vegetation Management	Groundwater Conservation	Education and Outreach
Work with the University of Minnesota or Aquatic Plant Biologist, Cities of Chanhassen and Eden Prairie, lake association, and residents as well the Minnesota Department of Natural Resources on potential treatment. Implement herbicide treatment as needed. Secure DNR permits and contract with herbicide applicator. Lakes the District is monitoring for treatment include: Lake Susan, Lake Riley, Lotus Lake, Mitchell Lake, Red Rock Lake and Staring Lake. Work with Three Rivers Park District for Hyland Lake	Work with other LGUs to monitor assess and identify gaps. Engage with the Technical Advisory Committee to identify potential projects. Develop a water conservation program (look at Woodbury model)	Implement Education & Outreach Plan, review at year end. Manage partnership activities with other organizations. Coordinate Public Engagement with District projects.
The Riley Purgatory Summit has been scheduled for February 26 due to weather conditions. The summit bring state and LGUs together with Consultants and university researchers together to identify next steps	Carver County WMO is piloting a groundwater conservation project in Chaska. Staff has been in contact with them to learn more about the project.	The District will be partnering with Richfield Bloomington WMO and offering a smart salting workshop for Bloomington school. Educator mini grants has been released. The webpage has been updated based on community feedback.
City of Eden Prairie City of Chanhassen University of Minnesota	TBD	Smart Salt Parking Lot and Sidewalk for school: RBWMO and City of Bloomington

University of Minnesota	Repair and Maintenance Grant	Total Maximum Daily Load	Opportunity Projects
Review and monitor progress on University of Minnesota grant. Support Dr John Gulliver and Dr Ray Newman research and coordinate with local partners. Keep the manager abreast to progress in the research. Identify next management steps.	Develop and formalize grant program.	Continue working with Minnesota Pollution Control Agency on the Watershed Restoration And Protection Strategies (WRAPS). Engage the Technical Advisory Committee.	Assess potential projects as they are presented to the District
Work on the Newman grant continues (analysis and presentation at the Riley-Purgatory Summit). Core Analysis have begun on the Gulliver research.	No Updates	No Updates	of AIS. Staff Jordan met with school stakeholders and engineering consultant to workshop high level project concepts with cost and maintenance estimates.
Stormwater ponds ponds partners: City of Bloomington, Chanhassen, Eden Prairie, Minnetonka and Shorewood Plant Management: City of Chanhassen City of Eden Prairie		MPCA	St Hubert Catholic Community

Bluff Creek One Water		Management	Wetland														(WCA)	Conservation Act	Wetland	Watershed Plan									Anniversary	Watershed 50 year
		requiring protection.	Identify potential restoration/rehabilitate wetlands and wetland														the District	Represent the District on Technical Evaluation Panel throughout	Administer WCA within the Cities of Shorewood and Deephaven.	Review and identify needs for amendments.								Implement anniversary events.	Finalize anniversary program for 2019.	Come explore with us!
	database.	MNRAM into our	Staff continues to input	UofM Arboretum.	along T.H. 5 to the	the trail construction	TEP discussions for	participating in the	Staff Jeffery has been	26 th .	held on February	Lake Road which was	the TEP for Duck	Staff Jeffery attended	and Shorewood.	for both Deephaven	the annual reports	submitted to BWSR	Staff Jeffery has	Cost-share amendment	watershed.	Friday walk with the	event is our first	Our next anniversary	Festival was success.	Our Lake Ann Winter	the public.	and are available to	Explorer are done	The Junior Watershed
	MNDNR	Chanhassen	City of							ACOE	DNR	BWSR	MCWD	Chanhassen	City of	Deephaven	City of	Shorewood	City of				Park District	Three Rivers	Carver County	Chanhassen	City of	partners:	event	Snowshoe

Lower Riley Creek Stabilization	Lake Riley Alum Lake Susan Improvement Phase 2	Wetland Restoration at 101 Restoration at 101 Riley Creek One Water	Bluff Creek Tributary Restoration	Chanhassen High School Re-use
Coordinate agreement and acquire easements if needed for the restoration of Lower Riley Creek reach D3 and E. Implement Project. Continue Public Engagement for project and develop signage of restoration.	Continue to monitor the waters. Complete final site stabilization and spring start up. Finalize and implement E and O for project. Monitor Project.	Remove 3 properties from flood zone, restore a minimum 7 acres and as many as 16 acres of wetlands, connect public with resource, reduce volume, rate, pollution loads to Bluff Creek	Implement and finalize restoration. Monitor Project.	Continue to work with all partners. Complete site restoration and start system. Finalize and implement E and O for project. Monitor Project.
Administrator Bleser met with the City of Eden Prairie and discussed the Enhancement Plan and cooperative agreement. Please see board packet for updates.	No updates No updates	Staff Jeffery is working on transferring DNR grants from the City of Chanhassen to RPBCWD; and is working with the landowners.	No updates. Waiting for weather to cooperate for archeologists.	No update
City of Eden Prairie Lower Minnesota Watershed District	City of Chanhassen Clean Water Legacy Amendment	City of Chanhassen MN DNR	City of Chanhassen	ISD 212 City of Chanhassen Metropolitan Council

The state of the s	control	Hyland Lake Internal Load	Duck Lake Raingarden Project	Purgatory Creek One Water	Upper Riley Creek	Rice Marsh Lake Watershed Load Project 1	Rice Marsh Lake Alum Treatment
		Implement Hyland Lake Alum application.	Work with the City to implement neighborhood BMP. Identify neighborhood BMP to help improve water resources to Duck Lake. Implement neighborhood BMPs.		Work with City to develop scope of work (in addition to stabilizing the creek can we mitigate for climate change) Conduct feasibility Develop cooperative agreement with the City of Chanhassen Order Project Start design	Conduct feasibility. Develop cooperative agreement with City of Chanhassen	Monitor Project.
	Associates on a Task Order	Administrator Bleser is working with Wenck	Staff Jordan hosted an info session and 18 residents attended. Over 50 residents have expressed interest in adopting a best management practice on their property our goal is 88 which is 25% participation in the Duck Lake watershed.		On hold until Public Works Director and Water resources Coordinator have been hired.	On hold until Public Works Director and Water resources Coordinator have been hired.	No updates
0.00	City of Bloomington	Three Rivers Park District	City of Eden Prairie		City of Chanhassen	City of Chanhassen	City of Eden Prairie City of Chanhassen

Center for Watershed Protection	Science Talk	Impact Magazine & 2019 Specialty Conference	Professional Development	Silver Lake Restoration	Scenic Heights	Lotus Lake – Internal Load Control
Staff Jeffery will be attending the Center for Watershed Protection Annual Conference focusing on stormwater. The conference will highlight innovative stormwater management practice that could be applicable to our area. Some topics covered include tree use and stormwater credits.	Staff Swope will be attending Science Talk in Portland Oregon. Science Talk is a one of a kind conference where scientist and communicators come together to empower and inspire the science communication community to expand communication potential and affect the world. The conference promotes responsible practices and communication.	Staff Jordan has submitted a first draft to IMPAC magazine. The article is titled: Weaving Education and Outreach Into Your Projects: An Integral Part of Creating Success.		Order project Design Project Work with the City of Chanhassen for Design, cooperative agreement and implementation	Continue implementing restoration effort. Work with the City of Minnetonka and Minnetonka School District on Public Engagement for project as well as signage.	Monitor treatment and plant populations.
				No Updates.	Administrator Bleser presented to the school board.	No updates
				City of Chanhassen	Minnetonka Public School District City of Minnetonka Hennepin County	

		Institute	Environmental Law				Staff presentations		Panel	Technical Advisory
all 10 EPA regions, and EPA Headquarters will be participating, totaling over 200 people.	Conservation Training Center (NCTC) in Shepherdstown, West Virginia. Staff from all 50 states, DC, all 5 territories, 17 tribes,	workshop as part of a two-day training from Wednesday, May 29 to midday Friday, May 31, 2019 at the National	Staff Bleser was invited to lead a communication/engagement	water resource managers attended.	Resources Extension Program on the 21st of February. Over 35	one-day training as part of the University Minnesota Water	Staff Bleser taught a section of a Lake Management Tools	regards to stormwater pond as pollutant loaders.	Panel for research being conducted by Gulliver and Finlay in	Staff Bleser was asked to participate on the Technical Advisory



Memorandum

To: Riley-Purgatory-Bluff Creek Watershed District Board of Managers and District Administrator

From: Barr Engineering Co.

Subject: Engineer's Report Summarizing February 2019 Activities for March 1, 2019, Board Meeting

Date: February 22, 2019

The purpose of this memorandum is to provide the Riley-Purgatory-Bluff Creek Watershed District (RPBCWD) Board of Managers and the District Administrator with a summary of the activities performed by Barr Engineering Co., serving in the role of District Engineer, during February 2019.

General Services

- a. Working with RPBCWD staff to update large wall map to reflect District branding and 2018 boundary change.
- b. Met with Administrator Bleser and city of Eden Prairie (Rod Rue and Patrick Sejkora) on February 8th about the Lower Riley Creek restoration project. The meeting resulted in revisions to the draft cooperative agreement and the Lower Riley Creek Corridor Enhancement Plan. As follow-up to the meeting the design plans were resent to the city and there was additional communication about the city's bridge portion of the project. The City indicated they would like to get the cooperative agreement on the March 5th Council agenda.
- c. Participated in February 20th regroup meeting with Administrator Bleser, Counsel Smith, Manager Ward, and staff Jeffery.
- d. Participated in the February 6th cost share workshop.
- e. Participated in the February 6th regular Board of Managers meeting.
- f. Prepared Engineer's Report for engineering services performed during February 2019.
- g. Miscellaneous discussions and coordination with Administrator Bleser about WOMP monitoring assistance, Hydrologic and Hydraulic model enhancement scope of work, potential aquatic invasive species rapid response plan task order, and upcoming Board meeting agenda.

Permitting Program

a. Permit 2015-036: Saville West: This project involves construction of a 5-lot single-family home subdivision in Minnetonka. The permit was conditionally approved on June 7, 2017; however, the conditions of approval have not yet been fulfilled. The applicant submitted a permit modification request on October 10, 2018 to replace the conditionally approved residential reuse systems with underground rock infiltration beds. Notified applicant of Board's conditional approval at the February 6, 2019 regular meeting and responded to addition guestions from the applicant.

To: From: Riley-Purgatory-Bluff Creek Watershed District Board of Managers and District Administrator

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- b. Permit 2018-028 Oak Point Elementary Parking Lot: This project involves construction of a new parking lot and walkway in the southwest portion of the Oak Point Elementary School parcel on Staring Lake Parkway in Eden Prairie. The permit was conditionally approved at the September 5, 2018 regular meeting. The applicant submitted a modification request on January 22, 2019. Review comments were provided to the applicant on February 5th. Because the application is considered complete but the applicant has not addressed the comments in time for the March 1st meeting, the applicant requested a 60-day extension for the permit review period.
- c. Permit 2018-073: Preserve Boulevard and Eden Lake Outlet: The project proposes to reconstruct Preserve Blvd from Anderson Lakes Pkwy to Prairie Center Drive, replace the Eden Lake outlet with a stormwater pumping station discharging to Neil Lake, fill a portion of the Eden Lake floodplain, and provide wetland buffers. Stormwater management facilities including one wet pond, a propriety stormwater filter chamber and the use of an existing city maintained stormwater pond to provide water quality treatment and rate control for runoff prior to discharging offsite. This project triggers RPBCWD Rules B, C, D, and J. Notified applicant of Board's conditional approval at the February 6, 2019 regular meeting Discussed maintenance agreement and required monitoring stipulation with Carter Schulze (city of Eden Prairie). The City is on board with the monitoring requirement but is concerned that the stipulation does not provide flexibility for the City to do/have vendor do/ or hire out the monitoring piece but requires reimbursement of District and engineer costs. Once the monitoring plan is defined, the City might potentially asked the Board to reconsider the requirement to reimburse cost and instead allow the City, vendor, or different consultant monitor.
- d. Permit 2019-001: Galpin Site/Nelson Property: The project proposes to construction of a 191 lot single family residential development on approximately 161 acres west of Lake Ann and Lake Lucy (formerly the Prince property). The site is located 0.5 miles north of Highway 5 on the east side of Galpin Blvd in Chanhassen, MN. There are 14 wetlands onsite, some of which the city of Chanhassen, the local governmental unit responsible for WCA, will allow to be filled and mitigated. The large wetland complex in the center of the site will be preserved and receives all stormwater runoff from the upland areas. This wetland is directly connected to Lake Ann and Lake Lucy. The site will be mass graded prior to construction of public improvements for urban development, including storm sewer and six stormwater basins. No development is proposed along the Lake Lucy and Lake Ann shorelines. This project will trigger RPBCWD Rules B, C, D, G, and J. Received materials on January 24th and completed completeness review with comments provided to the applicant on February 13, 2019. The application is considered incomplete. Met with applicant and Permit coordinator Jeffry on February 11, 2019 to discuss review comments.
- e. Permit 2019-003: Stable Path: The project proposes to create a 17 lot subdivision of detached single-family homes on +/- 5.9 acres of land located along Stable Path in Eden Prairie, MN. This project will trigger RPBCWD Rules for erosion prevention and sediment control (Rule C) and stormwater management (Rule J). Reviewed preliminary comments Permit Manager Jeffery provided the applicant, discuss permit application with Permit Manager Jeffery and received revised submittal materials on February 13th, reviewed materials, drafted review memo, and responded to applicant that additional clarification on 1) if the linear work on Thomforde Trailis being conducted on behalf of the city, the city needs to

Riley-Purgatory-Bluff Creek Watershed District Board of Managers and District Administrator

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be a co-applicant or at a minimum authorize the application for the permit for work on its property, 2) using rain barrels for abstraction means they will need to be included in the maintenance declaration recorded with the county and show on the associate exhibit, and 3) lack of an HOA is not a condition inherent to the property and is a self-created restriction (I.e., Are there other condition on the site that are limiting the potential harvest and reuse stormwater?) Worked with Permit Coordinator Jeffery on a permit 60-day review period extension to allow the applicant to explore community reuse or individual lot reuse system as a means to provide abstraction to the maximum extent practicable.

- Permit 2019-004: Duck Lake Road reconstruction: The project includes full reconstruction of Duck Lake Road from Duck Lake Trail to Mallard Court in Eden Prairie, MN. The project also includes replacing the culvert under Duck Lake Road, installing a backyard drain behind the homes along pardons Drive, constructing an infiltration basin, and filling a portion of the floodplain of Duck Lake with only partial compensatory storage proposed). This project will trigger RPBCWD Rules B, C, D, F, G, and J. The applicant is requesting a variance from the requirement to provide compensatory storage (Rule B, subsection 3.2), the minimum wetland buffer width requirement (Rule D, subsection 3.2), no net increase in flood stage associated with a waterbody crossing (Rule G, subsection 3.2a), no increase in peak discharge (Rule J, subsection 3.1a), water quality treatment of all site runoff (Rule J, subsection 3.1c), and wetland protection criteria (Rule J, subsection 3.10bii). Received materials on January 22, 2019 and completed completeness review with comments provided to the applicant on February 7, 2019. The application is considered incomplete. Also took part in a conference call with Permit Coordinator Jeffery, BWSR and the DNR to discuss fill in public waters and wetland impacts. Both agencies express concerns that the alternative proposed is not the least environmentally impactful. The DNR also confirmed that a project specific work in public waters permit is required for the project because the RPBCWD general permit does not apply to fill in public waters. Will also be attending a February 25th meeting with the applicant to discuss review comments.
- g. Permit 2019-007: Beverly Hill: The project proposes to construction of a 17 lot single family residential development on approximately 7.1 acres in Eden Prairie. The site is located at This project will trigger RPBCWD Rules C, and J. Received materials on February 8th and completed completeness review with comments provided to the applicant on February 19th. The application is considered incomplete because the submittal was missing an electronic copy of construction plans and the electronic HydroCAD models and P8 models, thus a full review could not be complete.
- h. Met with Permit Manager Jeffery on February 6th to discuss check list development, regulatory roles and responsibilities, restricted site determinations, MPCA infiltration prohibition on clay soils and in the groundwater emergency response areas, developer/engineer workshop toward end of March, potential restricted site sequencing revisions to include extended detention and/or fee in lieu options, and improving regional stormwater allowances.
- i. Performed erosion control inspections of active sites on February 18th and 19th. (see attached inspection report).
- Miscellaneous conversations with Permit Manager Jeffery about technical questions on permit requirements for potential development and redevelopment projects.

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Data Management/Sampling/Equipment Assistance

- a. Prepared, uploaded and verified 2018 spent lime Sonde field data, Eden Prairie collected field data and two RMB calcium lab reports.
- Converted 2015-present RPBCWD collected oxidation potential readings to be on the 3M KCL silver chloride scale for future consistency in data comparisons.

Task Order 6: WOMP Station Monitoring

Purgatory Creek Monitoring Station at Pioneer Trail

a. Download and review data.

Purgatory Creek Monitoring Station at Valley View Rd

- a. Download and review data.
- b. Review and summarize 2018 data. Prep data for entry into database.

Task Order 13b: Lake Susan Watershed Treatment and Stormwater Reuse Enhancements Design and Construction Administration

- Performed construction administration tasks including review of as-built drawings and update of plan set to reflect changes. Record drawings were submitted to the City of Chanhassen and RPBCWD on February 6, 2019.
- b. All punch list items, with the exception of the items noted under the following item (c) have been completed by Peterson.
- c. Remaining items to be completed during winter 2018/2019 or at spring start-up
 - 1. Prepare as-built drawings per PDFs provided by Peterson (Barr Engineering).
 - 2. Plant live plugs per the plans (Peterson)
 - Coordinate with Watertronics on programming changes needed over the winter (Peterson). Re-upload system program with implemented changes to match the functional description in Div. 4090000 Section 1.09 and the requests for the HMI screen read-outs (Peterson/Watertronics)
 - Verify system functions according to the functional description in Div. 409000 after programming modifications with Watertronics (Peterson/Barr Engineering)
 - Dial in VFD and float set points for the iron-enhanced sand filter system (Peterson/Barr Engineering)
 - 6. Re-start the system and train of City staff on operations (Peterson)

Task Order 14b: Lower Riley Creek Final Design

- a. We are continuing to coordinate with the city of Eden Prairie about incorporating the plans and specifications into the construction documents.
- We are also continuing to coordinate with the City regarding final language and format of buffer signs.

Riley-Purgatory-Bluff Creek Watershed District Board of Managers and District Administrator

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c. Based on February 8th meeting with city of Eden Prairie staff and Administrator Bleser the city plans to include the revised cooperative agreement for Council approval at their March 5th meeting.

Task Order 19: Chanhassen High School Stormwater Reuse Design

a. No activity during February.

Task Order 21B: Bluff Creek Stabilization Project

a. No activity during February.

Task Order 23: Scenic Heights School Forest Restoration

a. No activity during February.

Task Order 24: Preliminary Engineering Study for Silver Lake Water Quality Treatment Project

a. The final feasibility study report was provided to the Managers at the December Board meeting. Barr staff are working with Administrator Bleser to prepare a Task Order for completing the next phase of work.

Task Order 25: Duck Lake Water Quality Improvement Project

a. Barr staff presented information on rain gardens and other water quality practices at a public meeting for Duck Lake Watershed residents on February 12, 2019. The meeting was organized and led by Community Outreach Coordinator Jordan. Barr also provided display materials for the meeting.





RPBCWD Board of Managers

From:

Dave Melmer

Subject: February 18 and 19, 2019—Erosion Inspection

Date:

February 21, 2019

Project: 23/27-0053.14 PRMT 9016

Barr staff has inspected construction sites in the Riley Purgatory Bluff Creek Watershed District for conformance to erosion and sediment control policies. Listed below are construction projects and the improvement needed for effective erosion control. The sites were inspected from February 18 and 19, 2019

Site Inspections

2015-010	Children's Learning Adventure - Private -	2019-02-1
	Commercial/Industrial	
	Northwest Corner of Highway 5 and Galpin Avenue Chanhassen, Minnesota 55317	
	No change since January inspection.	
	, , , , , , , , , , , , , , , , , , , ,	
2015-016	Blossom Hill - Private - Residential	2019-02-18
	10841 Blossom Rd Eden Prairie, Minnesota 55347	
	No change since January inspection.	
2015-036	Saville West Subdivision - Private - Residential	2019-02-19
	5325 County Road 101 Minnetonka, Minnesota 55345	
	No change since January inspection. Site is snow covered.	
2015-050	Arbor Glen Chanhassen - Private - Residential	2019-02-19
	9170 GREAT PLAINS BLVD Chanhassen, Minnesota	2010 02 10
	55317	
	Perimeter control (silt fence). Roadway and detention pond installed. All slopes have been stabilized and covered. Rock	
	entrances installed at sites. BMPs are adequate.	
	Construction at multiple sites underway. Site is snow	
	covered.	
2015-055	Hampton Inn Eden Prairie - Private -	2019-02-18
	Commercial/Industrial	
	11825 Technology Drive Eden Prairie, Minnesota 55344 Site construction continues. Building demolition complete.	
	BMP's are in place. Piling currently being installed along with	
	excavation activity and foundation work.	
2016-017	SWLRT - Government - Other	2019-02-18
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Varies Eden Prairie, Minnesota 55344	2010 02-10

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SWLRT work continues at Emerson site. BMP's installed. No other activity observed to date. 2019-02-19 2016-019 Powers Ridge Lot 2 - Private - Commercial/Industrial 1361 Lake Dr. West Chanhassen, Minnesota 55317 No site activity observed to date. 2019-02-18 Prairie View Enclave - Private - Commercial/Industrial 2016-020 12701 Pioneer Trail Eden Prairie, Minnesota 55347 No activity observed to date. Foxwood Development - Private - Residential 2019-02-19 2016-026 9150 and 9250 Great Plains Blvd Chanhassen, Minnesota Multiple house construction has begun-BMP's look good-silt fences and rock entrances installed/ good perimeter control. Silt fences have been installed on unsold lots. Catch basin protection has been removed in areas. Additional silt fences have been installed across site. Bare soils have been spraytac'd vegetation sprouting. Because site is snow covered the January CA (spoil pile erosion protection) will remain open until visual on correction can be verified. 2019-02-18 2016-032 CSAH 61 Improvements - Government - Linear N/A Eden Prairie, Minnesota 55347 No change since January inspection. Most of site is snow covered.(February-2019) 2019-02-18 2016-033 Anderson Lakes-Purgatory Trail - Government - Other Anderson Lakes PKWY and Purgatory Creek Eden Prairie, Minnesota 55344 No construction observed to date. Chanhassen West Water Treatment Plant - Government -2016-041 2019-02-19 Other 2070 Lake Harrison Road Chanhassen, Minnesota 55317 No change since January inspection. 2019-02-19 2016-042 18663 St. Mellion Place--Eden Prairie (Bear Path) No change since January inspection. 2019-02-19 2017-001 Kopesky 2nd Addition - Private - Residential 18340 82nd St Eden Prairie, Minnesota 55347 Site grading complete-house construction continues at two sites. Perimeter control installed. BMP's are good. Infiltration

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2017-030	Elevate - Private - Commercial/Industrial 12900 Technology Drive Eden Prairie, Minnesota 55344	2019-02-18
2017-029	Tweet Pediatric Dentistry - Private - Commercial/Industrial 7845 Century Blvd. Chanhassen, Minnesota 55317 No change since January inspection.	2019-02-19
	No change since January inspection. Site is snow covered.	
2017-026	6135 Ridge Road	2019-02-19
2017-024	Prairie Bluffs Senior Living - Private - Residential 10280 Hennepin Town Rd Eden Prairie, Minnesota 55347 Construction continues. Perimeter silt fence installed and biologscatch basin protection in place. BMP's look good. Minor tracking to streetsite representative was contacted and stated that the street is swept regularly. Site entrances have "refreshed" with another layer of rock. Silt fence down is some areas/bare soils not covered/stabilized. CA opened for silt fence maintenance and bare soils. Site representative was notified. Due to snow covered, the January CA will remain opened.	2019-02-18
2017-023	Eden Prairie Assembly of God - Private - Commercial/Industrial 16591 Duck Lake Trail Eden Prairie, Minnesota 55346 Construction complete. Perimeter control silt fence still installed. BMP's look good. Site grading is complete. Areas appear to have been sprayed. Will inspect spring -2019 for vegetation growth and establishment.	2019-02-19
2017-022	Chanhassen High School Stormwater Reuse - Government - Other 220 Lyman Blvd Chanhassen, Minnesota 55317 No change since January inspection.	2019-02-19
2017-007	Cedarcrest Stables - Private - Residential 16870 CEDARCREST DR Eden Prairie, Minnesota 55347 No activity observed to date.	2019-02-19
	No activity observed to date.	
2017-006	6687 Horseshoe Curve Chanhassen	2019-02-19
	basins completed. Basin protection is good. Site is snow covered.	

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Construction continues. Perimeter control installed. Catch basin protection installed. Some catch basins have bladders installed and drainage will be directed to other basins. BMP's

look good. Site is well maintained. February-2019.

2017-031

Lion's Tap - Private - Commercial/Industrial 16180 Flying Cloud Drive Eden Prairie, Minnesota 55347 2019-02-18

No activity observed to date.

2017-032

11193 Bluestem Lane - Government - Other 11193 Bluestem Lane Eden Prairie, Minnesota 55347 2019-02-18

No change since January inspection.

2017-037

The Venue - Private - Commercial/Industrial 525 W 78th St Chanhassen, Minnesota 55317

2019-02-19

Construction continues. BMP's installed. Construction continues. Additional BMP's installed--catch basin protection removed for winter in some locations. Lower parking area complete.

2017-038

West Park - Private - Residential 760& 781 Lake Susan Drive 8601 Great Plains Blvd Chanhassen, Minnesota 55317 2019-02-19

Construction continues. Street installation on north and south side completed. Rock entrance installed on south side and construction at two individual house sites continues. Perimeter control installed. Catch basin protection installed. BMP's look good. Additional silt fences have been installed. Bare soils that are not being worked have been stabilized. Heavy tracking observed on street on south end of project site. Landscaping at some sites underway or completed. BMP's look good. Site representative was notified for tracking - November (2018). Tracking has not been addressed. CA will stay open. Site representative notified again in January 2019. Because the site is snow covered, the CA will remain open until visual confirmation of correction.

2017-039

Mission Hill Senior Living - Private - Residential 8600 Grate Plains Boulevard Chanhassen, Minnesota 55317

Construction continues. BMP's installed look good. Site perimeter control installed. Catch basin protection installed. Site is in good shape. South swale has been stabilized. Roadway installed. Site is snow covered.

2019-02-19

2017-047

Fawn Hill - Private - Residential 7240 Galpin Road Chanhassen, Minnesota 55331

No change since January inspection.

2019-02-19

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2017-052	Old Excelsior Senior Living - Private - Residential 17705 Hutchins Drive Minnetonka , Minnesota 55345	2019-02-19
	No change since January inspection.	
2017-063	Clear Springs Elementary 2018 Gymnasium Addition - Government - Other 5621 County Road #101 Minnetonka, Minnesota 55345 No change since January inspection.	2019-02-19
2017-064	Scenic Heights Elementary School Forest Restoration - Government - Other 5650 Scenic Heights Drive Minnetonka, Minnesota 55345 Site has been selectively cleared. Inflow area modified and BMP's installed. Restoration suspended for winter. Site is snow covered.	2019-02-19
2017-069	Scheels Redevelopment - Private - Commercial/Industrial 8301 Flying Cloud Dr. Eden Prairie, Minnesota 55344 BMP's installed. Demolition of building complete. Site earthwork and building construction continues. Much of site is snow covered.	2019-02-18
2017-072	O'Reilly Auto Parts Eden Prairie - Private - Commercial/Industrial 8868 AZTEC DRIVE Eden Prairie, Minnesota 55347 No construction activity observed to date.	2019-02-18
2017-073	Preserve Village - Private - Residential 9625 Anderson Lakes Pkwy Eden Prairie, Minnesota 55344 Construction of building complete. BMP's installed. Catch basin protection is adequate. Site is well contained for runoff protection. Additional areas of bare soils observed-not covered to date. Infiltration basin construction continues. Site representative was notified about graded soils not being covered. CA opened for uncovered soils. Site is snow covered so CA remains open.	2019-02-18
2018-001	Panera - Private - Commercial/Industrial 531 W. 79th Street Chanhassen, Minnesota 55317 Construction complete. BMP's installed in areas where landscaping is not complete. Filtration basin installed no bio rolls at toe of basin, no outlet protection at pipe location in basin site representative was notified after November (2018) inspection. CA remains open because of ground frozen and snow covered. Will inspect next spring after snow melt.	2019-02-19

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2018-004	903 Lake Drive Chanhassen - Government - Other 903 Lake Drive Chanhassen, Minnesota 55317	2019-02-19
	No change since January inspection.	
2018-011	Maloney Shoreline Stabilization - Existing Single-Family 108 Pioneer Trail Chanhassen, Minnesota 55327	2019-02-19
	No activity observed to date.	
2018-014	Eden Prairie Road Reconstruction - Government – Linear Eden Prairie, Minnesota 55347	2019-02-18
	Construction activity observed at south end. BMP's installed. Construction has begun on roadway. Road closed on north end. (February-2019). Most of site is snow covered.	
2018-015	Starbucks Coffee House - Private - Commercial/Industrial 19285 Highway 7 19245 Highway 7 Shorewood, Minnesota 55401	2019-02-19
	No change since January inspection.	
2018-016	Avienda - Private - Commercial/Industrial SW corner of Powers and Lyman Boulevard Chanhassen, Minnesota 55317 No activity observed to date.	2019-02-19
2018-020	9770 Sky Lane - Existing Single-Family 9770 Sky Lane Eden Prairie, Minnesota 55347	2019-02-18
	No change since January inspection.	
2018-021	9810 Sky Lane - Existing Single-Family 9810 Sky Lane Eden Prairie, Minnesota 55347	2019-02-18
	No change since January inspection.	
2018-022	Sunrise Park Court Improvement - Government - Other 9401 Bloomington Ferry Road Bloomington, Minnesota 55438 No change since January inspection.	2019-02-18
	140 Glange Since Canada y Inspection.	
2018-024	Kittelson Pool - Existing Single-Family 2165 Wynsong Lane Chanhassen, Minnesota 55317	2019-02-19
	No change since January inspection.	

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Magellan Pipeline UCD Dig 8 through 12	2019-02-19
Site work has begun at SW corner of site. Minimal BMP's installed to date. Access pads installed.	
MAMAC - Private - Commercial/Industrial 8189 Century Boulevard Chanhassen, Minnesota 55317	2019-02-19
Construction continues. Perimeter control silt fence installed. Temporary BMP's installed. Security fence installed. BMP's adequate. Work has suspended. Site is snow covered.	
Oak Point Elementary School Parking Lot - Government - Other	2019-02-18
55347 No construction observed to date.	
Basin 05-11-A Cleanout - Government - Other Corner of Sequioa and Ginger Eden Prairie, Minnesota 55346 No change since January inspection.	2019-02-19
Eden Prairie Senior Living - Private - Residential 8460 Franlo Rd Eden Prairie, Minnesota 55344	2019-02-18
Construction continues. Perimeter control installed. BMP's look good. Minor street tracking observed. Rock entrances have been refreshed. Soils onsite are not covered/stabilized. CA opened for bare soils. Site representative was notified. Because site is snow covered the CA will remain open until it can be verified.	
Emerson Site Improvements - Private - Commercial/Industrial 12001 Technology Drive Eden Prairie, Minnesota 55344 No change since January inspection.	2019-02-18
Center Point Carver Line Receiver	2019-02-19
No change since January inspection.	
Abra Auto Body - Private - Commercial/Industrial 13075 Pioneer Trail Eden Prairie, Minnesota 55347 No activity observed to date.	2019-02-18
	2019-02-19
	Site work has begun at SW corner of site. Minimal BMP's installed to date. Access pads installed. MAMAC - Private - Commercial/Industrial 8189 Century Boulevard Chanhassen, Minnesota 55317 Construction continues. Perimeter control silt fence installed. Temporary BMP's installed. Security fence installed. BMP's adequate. Work has suspended. Site is snow covered. Oak Point Elementary School Parking Lot - Government - Other 13400 Staring Lake Parkway Eden Prairie, Minnesota 55347 No construction observed to date. Basin 05-11-A Cleanout - Government - Other Corner of Sequioa and Ginger Eden Prairie, Minnesota 55346 No change since January inspection. Eden Prairie Senior Living - Private - Residential 8460 Franlo Rd Eden Prairie, Minnesota 55344 Construction continues. Perimeter control installed. BMP's look good. Minor street tracking observed. Rock entrances have been refreshed. Soils onsite are not covered/stabilized. CA opened for bare soils. Site representative was notified. Because site is snow covered the CA will remain open until it can be verified. Emerson Site Improvements - Private - Commercial/Industrial 12001 Technology Drive Eden Prairie, Minnesota 55344 No change since January inspection. Center Point Carver Line Receiver No change since January inspection.

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2018-044 Smith Village - Private - Residential 2019-02-19 16389 Glory Lane Eden Prairie, Minnesota 55344 No site activity observed to date. 2018-047 Peterson Borrow Site - Private - Commercial/Industrial 2019-02-18 15900 Flying Cloud Drive Eden Prairie, Minnesota 55347 BMP's in place. Pit is being used. 2018-049 D'Alessandro Home - Existing Single-Family 2019-02-19 18702 Heathcote Dr Deephaven, Minnesota 55391 Construction has continues. Perimeter control installed. Biologs installed. Silt fence missing on west/northwest side of site--no protection. Rock entrance is good. Minor tracking to street. Site representative was notified (December/2018). CA opened for missing silt fence. Because the site is snow covered the CA will remain open until a correction is confirmed. 2018-050 2019-02-18 Eden Prairie Cemetery - Private - Commercial/Industrial 8810 Eden Prairie Road Eden Prairie, Minnesota 55437 No change since January inspection. 2018-052 HCRRA Culvert Replacement - Government - Linear 2019-02-19 Hennepin County Wayzata and Deephaven, Minnesota 55401 No change since January inspection. 2018-053 2019-02-19 Roberts Residence - Existing Single-Family 5925 Ridge Road Shorewood, Minnesota 55331 BMP's installed. Construction suspended for winter. 2018-055 Park Trail Improvement Project - Government - Other 2019-02-18 1700 W. 98th Street Bloomington, Minnesota 55431 Trail work has started on NW section. BMP's in place. SE section has been surveyed. Work has suspended for winter. 2018-056 Bluff Creek Restoration - Government - Other 2019-02-19 Liberty on Bluff Creek, Outlot B Audubon Road Chanhassen, Minnesota 55317 No change since January inspection. 2018-058 Walker Home - Existing Single-Family 2019-02-19 9108 Stephens Pointe Eden prairie, Minnesota 55347

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Perimeter control installed. Rock entrance is installed. Excavation and foundation complete. BMP's look good to

	Excavation and foundation complete. BMP's look good to date. Site is snow covered.	
2018-059	Mason Point Landscaping - Existing Single-Family 15363 Mason Pointe Eden Prairie, Minnesota 55347	2019-02-18
	No change since January inspection.	
2018-060	Loichinger Residence	2019-02-18
	No change since January inspection.	
2018-061	McCoy Lake Inlet Sediment Removal - Government - Other	2019-02-18
	Mitchell Road and Cumberland Road Eden Prairie,	
	Minnesota 55347 No change since January inspection.	
2018-063	Lake Susan Trail Rehab 2018 - Government - Other	2019-02-19
	903 Lake Drive East Chanhassen, Minnesota 55317	
	No change since January inspection.	
2018-064	Balaen Home - Existing Single-Family 18366 82nd St W Eden Prairie, Minnesota 55347	2019-02-19
	No change since January inspection.	
2018-067	Hennepin Co Library - Eden Prairie Branch Refurb - Government - Other	2019-02-18
	565 Prairie Center Drive Eden Prairie, Minnesota 55344 No activity observed to date.	
2018-068	DriSteem Warehouse Expansion - Private -	2019-02-18
	Commercial/Industrial 14949 Technology Drive Eden Prairie, Minnesota 55344	
	Construction has begun. Foundation installation underway.	
	Catch basin protection will need to be installed once	

Please contact me at 952.832-2687 or dmelmer@barr.com if you have questions on the projects listed above or any additional items that need to be addressed for the erosion control inspections.

temperatures allow for it. Bio-rolls in place onsite



18681 Lake Drive East Chanhassen, MN 55317 952-607-6512 www.rpbcwd.org

Riley Purgatory Bluff Creek Watershed District Permit Application Review

Permit No: 2018-071

Received complete: January 16, 2019

Board Meeting: March 1, 2019

Applicant: Paul Bourgeois, ISD #276 **Consultant:** Cliff Buhman, Inspec

Project: Minnetonka High

Minnetonka High School Lacrosse Fields – Minnetonka Schools is proposing to construct a turf lacrosse field where a grass field is currently. An underground stormwater detention and infiltration system and appurtenant storm sewer infrastructure will be constructed to

address storm water management on the site.

Location: 18301 Highway 7, Minnetonka 55345

Reviewer: Terry Jeffery, Permit Coordinator

Rule Conformance Summary

Rule	Issue Erosion Control Plan		Conforms to RBPCWD Rules?	Comments
С			See Comment	See rule specific permit condition C1
J	Stormwater	Rate	Yes	
	Management	Volume	Yes	
		Water Quality	Yes	
		Low Floor Elev.	Yes	
		Maintenance	See Comment	See rule specific permit condition J1
L	Permit Fee		NA	Governmental Agency
M	Financial Assurance		NA	Governmental Agency

Proposed Action

Manager	moved and Manager	seconded adoption of the following
resolutions based of	on the permit report that follows and	the presentation of the matter at the March 1,
2019 meeting of th	e managers:	
	pplication for Permit 2018-071 is appommendations section of the attache	proved, subject to the conditions and stipulations ed report;
variances and pern authorized and dire	nit have been affirmatively resolved, t	strator that the conditions of approval of the the RPBCWD president or administrator is ant, Permit 2018-071 on behalf of RPBCWD.

Project Description

The project proposes the construction of a turf lacrosse field at Minnetonka Senior High School totaling 1.323 acre. In conjunction with these additions, storm sewer will be added to capture and convey this runoff to a proposed underground detention and infiltration system. Total new impervious surface is equal to 1.323 acre. No existing impervious surface will be disturbed for this project. The proposed underground detention system with underlying infiltration will provide the required storm water rate, volume and quality control. The project site information is summarized below:

- 1. Total Site Area: 96.16 acres (4,188,730 square feet)
- 2. Existing Site Impervious Area: ±34.5 acres (±1,502,820 square feet)
- 3. New (Increase) in Site Impervious Area: 1.323 acres (±3.8% increase)
- 4. Disturbed Site Impervious Area: 0.0 acres (0.0 square feet)
- 5. Total Disturbed Area: 1.494 acres (65,079 square feet)

Submittals:

- 1. Permit Application dated December 20,2018.
- 2. Design Plan Sheets C1 C6, prepared by Inspec, dated December 20, 2018 (C2 C5 revised January 8, 2019)
- 3. Storm Water Management Plan dated January 15, 2019
- 4. MIDS calculator (pre) results dated December 3, 2018
- 5. MIDS calculator (post) results dated December 3, 2018
- MIDS calculator summary dated December 3, 2018
- 7. HydroCAD model dated December 4, 2018
- 8. Geotechnical Evaluation Report, prepared by Braun Intertec, dated December 5, 2018

Rule Specific Permit Conditions

Rule C: Erosion and Sediment Control

Because the project will alter 1.494 acres (65,079 square feet) of land-surface area the project must conform to the requirements in the RPBCWD Erosion and Sediment Control rule (Rule C, Subsection 2.1).

The erosion control plan prepared by Inspec, Inc includes installation of silt fence and inlet protection for storm sewer catch basins, the retention of native soils, soil decompaction and placement of six (6) inches of topsoil. To conform to the RPBCWD Rule C requirements the following revisions are needed:

C1. The Applicant must provide the name and contact information of the individual responsible for erosion and sediment control at the site. RPBCWD must be notified if the responsible party changes during the permit term.

Rule J: Stormwater Management

Because the project will alter 1.494 acres (65,079 square feet) of land-surface area, approval under the RPBCWD Stormwater Management Rule is required (Rule J, Subsection 2.1). The criteria listed in Subsection 3.1 will apply only to the newly created impervious surface on the project parcel because the project only increases the impervious by 3.8 percent and doesn't disturb any of the existing impervious surface on the parcel. (Rule J, Subsection 2.3) Total new impervious surface equals 1.323 acres or 3.8 percent of the existing impervious surface on the site. This is under the 50 percent disturbed or expanded impervious area threshold for applicability of stormwater management requirements.

The school is proposing to install an underground detention system with underlying infiltration to provide the rate control, volume abstraction, and water quality management on the site. The site will also capture and treat surface water runoff from the developed residential area to the east of the school. The entire system, including the off-site runoff, will be routed to the existing storm sewer.

Rate Control

To meet the rate control criteria listed in Subsection 3.1.a, the 2-, 10-, and 100-year post development peak runoff rates must be equal to or less than the existing discharge rates at all locations where stormwater leaves the site from the new and disturbed impervious areas. The Applicant used HydroCAD models to simulate runoff rates for pre- and post-development conditions for the 2-, 10-, and 100-year frequency storm events using a nested rainfall distribution, and a 100-year frequency, 10-day snowmelt event. The existing and proposed 2-, 10-, and 100-year frequency discharges from the site are summarized in the table below. The project modeling confirms the proposed project conforms to RPBCWD Rule J, Subsection 3.1.a.

Modeled Discharge Location	2-Year Discharge (cfs)		10-Year Discharge (cfs)		100-Year Discharge (cfs)		10-Day Snowmelt (cfs)	
	Ex	Prop	Ex	Prop	Ex	Prop	Ex	Prop
Existing MH to SW	2.54	0.00	4.55	0.36	9.22	2.52	1.08	0.04

Volume Abstraction

Subsection 3.1.b of Rule J requires the abstraction onsite of 1.1 inches of runoff from the new impervious surface of the parcel (1.323 acre). An abstraction volume of 0.121 acre-feet (5,280 cubic feet) is required from the 1.323 acre of new impervious area on the project for volume retention. Braun

Intertec advanced four (4) borings in the location of the proposed underground detention and infiltration practice. These borings all indicated B soils at the infiltration elevation and to a depth of more than five feet below this elevation. The geotechnical report recommends an infiltration rate of 0.6 inches per hour. In designing the system, the engineer used a safety factor of 50% so the design is based upon an assumed infiltration rate of 0.3 inches per hour. Staff agrees that the geotechnical data reviewed, including soil texture and the absence of underlying confining layers, as well as Minnesota Stormwater Manual guidance, supports this approach.

The bottom of the proposed detention/infiltration feature is to be set at 970.5 feet msl. No groundwater was observed within any of the borings advanced in the proposed infiltration area. These borings were to an elevation of 958.5 to 962.8 feet. This minimum separation to groundwater of 7.5 feet is greater than the required three feet of separation to groundwater.

The proposed system provides abstraction for 1.1" of runoff from 1.323 acres of new impervious surface. The regulated abstraction volume from the new impervious surface is 0.121 ac-ft or 5,270 cubic feet. In addition to the on-site runoff, the system will treat 1.38 acres from an adjoining neighborhood. The system, as designed, will abstract 0.198 ac-ft or 8,608 cubic feet of water. Pretreatment will be provided via a sump manhole located prior to discharging into the detention/infiltration system. Given the volume of water entering the system, the design depth below the outlet, and the infiltration rates, the system has been designed to draw dawn within 48 hours as required. This design is compliant with Rule J, Subsection 3.1.b.

The table below summarizes the volume abstraction on the site for the proposed 2019 improvement. The proposed project is in conformance with Rule J, Subsection 3.1.b.

Required Abstraction Depth (inches) 1.1	Required Abstraction Volume (cubic feet)	Provided Abstraction Volume (cubic feet) ¹
1.1	5,270	8,608

¹The volume reduction shown is the amount provided which includes, in addition to the newly constructed impervious area, existing and undisturbed impervious area which will be directed to the BMP.

Water Quality Management

Subsection 3.1.c of Rule J requires the Applicant provide for at least 60 percent annual removal efficiency for total phosphorus (TP), and at least 90 percent annual removal efficiency for total suspended solids (TSS) from site runoff. The Applicant is proposing to construct an underground detention system with underlying infiltration to achieve the required TP and TSS removals and submitted MIDS modeling to assess expected TP and TSS removal rates.

The regulated load from the 1.323 acres of proposed new impervious surface for the improvements is 123 pounds of TSS and 0.67 pound of TP.

Given the drainage areas on the site, the system provides water quality treatment for runoff from 0.46 acres (1.38ac X 33% impervious) of the existing impervious surface in addition to the 1.323 acres of proposed new impervious surface. This results in the system reducing the TSS load 377 lbs and the TP load 2.07 lbs. The table below summarizes the water quality treatment provided for the site.

Pollutant of Interest	Regulated Site Loading (lbs/yr)	Required Load Removal (lbs/yr) ¹	Provided Load Reduction (lbs/yr)
Total Suspended Solids (TSS)	123	110.7 (90%)	377 (>100%) ²
Total Phosphorus (TP)	0.67	0.402 (60%)	2.07 (>100%)2

¹Required load reduction is calculated based on the removal criteria in Rule J, Subsection 3.1c and the new and reconstructed impervious area site load.

In addition to the annual removals summarized in the table above, the proposed improvements result in a net reduction in both TP and TSS leaving the site from existing conditions. Existing TP loading from the site is 0.67 lb/yr while proposed conditions will be 0.28 lb/yr. TSS sees a reduction from 123 lbs/yr to 52 lbs/yr. Based on information reviewed, the proposed project conforms to Rule J, Subsection 3.1.c.

Low floor Elevation

No structure may be constructed or reconstructed such that its lowest floor elevation is less than 2 feet above the 100-year event flood elevation and no stormwater management system may be constructed or reconstructed in a manner that brings the low floor elevation of an adjacent structure into noncompliance according to Rule J, Subsection 3.6.

The low floor elevation of the structure and the flood elevation of the adjacent stormwater management feature are summarized below. The RPBCWD permit coordinator concurs that the proposed project is in conformance with Rule J, Subsection 3.6.

Structure	Low Floor Elevation (feet)	100-year Event Flood Elevation (feet)	Freeboard (feet)
Pagel Arena	975.9	973.17	2.73

Maintenance

Subsection 3.7 of Rule J requires the submission of maintenance plan. All stormwater management structures and facilities must be designed for maintenance access and properly maintained in perpetuity

²The TSS and TP removal is higher than required removal because the system treats a larger, undisturbed area of the existing impervious area.

to assure that they continue to function as designed. The applicant has provided a signed maintenance agreement which comports with District requirements.

Rule J, subsection 3.8 requires a chloride management plan.

J1. To close out the permit, the applicant must provide a chloride management plan which, at a minimum, designates an individual authorized to implement the chloride plan and an MPCA certified salt applicator engaged in the implementation of the chloride plan at the site.

Applicable General Requirements:

- 1. The RPBCWD Administrator shall be notified at least three days prior to commencement of work.
- Construction shall be consistent with the plans and specifications approved by the District as a part of the permitting process. The date of the approved plans and specifications is listed on the permit.
- 3. The applicant must provide the name and contact information of general contractor responsible for the site.

Findings

- 1. The proposed project includes the information necessary, plan sheets, and erosion control plan for review.
- 2. The proposed project will conform to Rule C if the Rule Specific Permit Conditions listed above are met

Recommendation:

Approval, contingent upon:

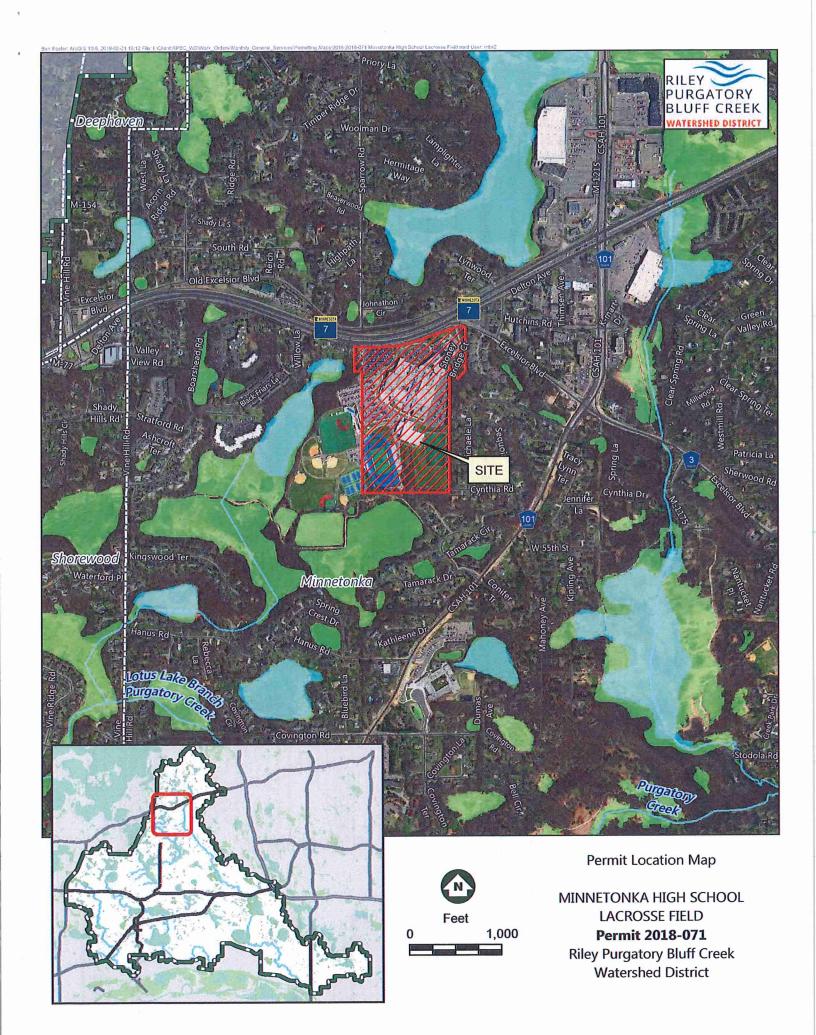
1. Continued compliance with General Requirements.

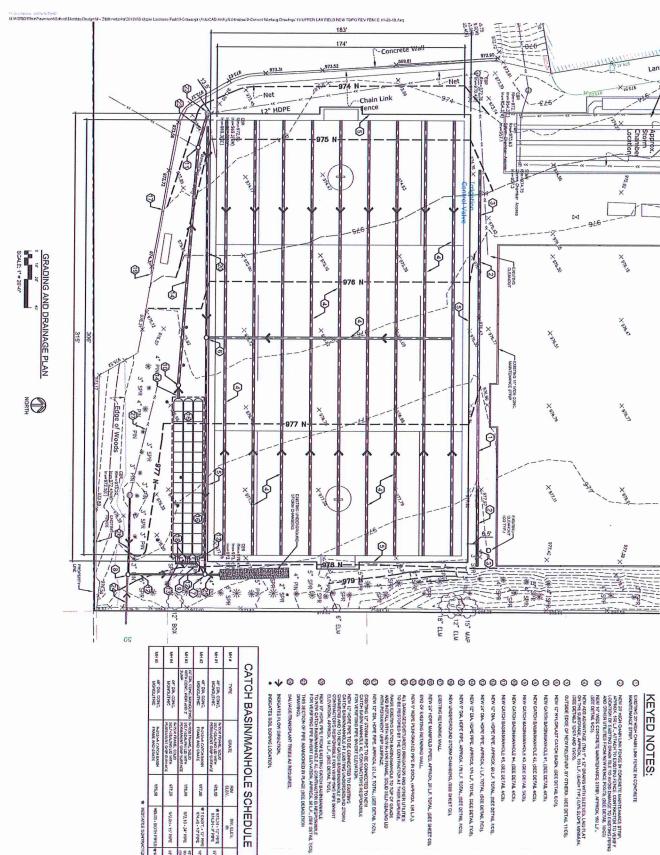
By accepting the permit, when issued, the applicant agrees to the following stipulations:

- 1. Per Rule J Subsection 4.5, upon completion of the site work, the permittee must submit as-built drawings demonstrating that at the time of final stabilization, stormwater facilities conform to design specifications as approved by the District.
- To close out the permit, the applicant must provide a chloride management plan which, at a minimum, designates an individual authorized to implement the chloride plan and an MPCA certified salt applicator engaged in the implementation of the chloride plan at the site.

Poord	Action
buard	ACHOR

It was moved by Manager	_, seconded by Manager	to approve permi
application No. 2018-071 with the condi-	tions recommended by staff.	





Q 251B

MINNETONKA PUBLIC SCHOOLS ISD - 276

MINNETONKA HIGH SCHOOL

T DAIST. - 12" PIPE Bald at 1074A

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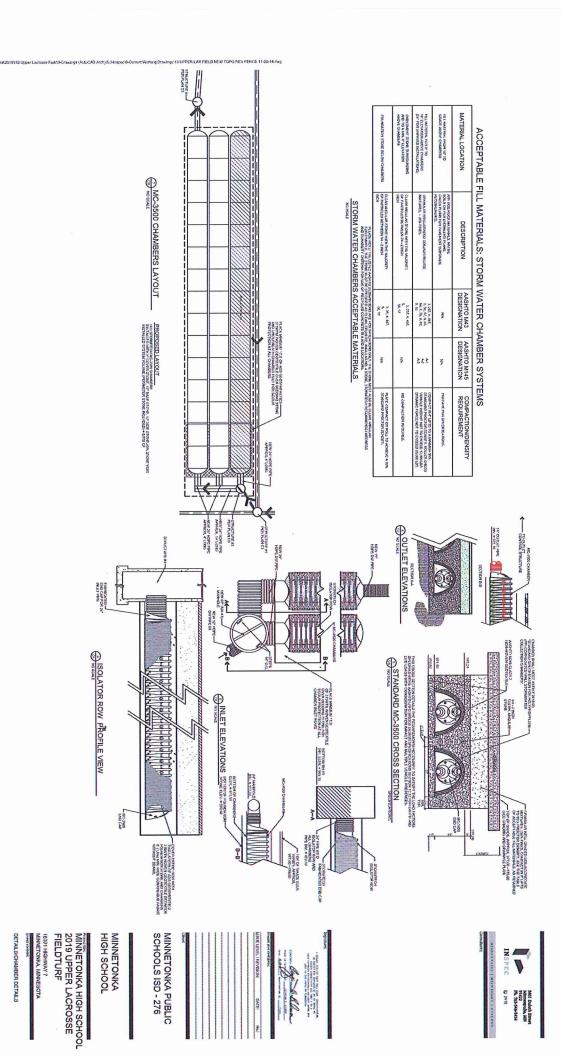
345-51 - 60-246 972.10 - 24" PIPE

FIELDTURF MINNETONKA HIGH SCHOOL 2019 UPPER LACROSSE

GRADING AND DRAINAGE PLAN

CLIENT PROJECT No.: INSPEC PROJECT No.:

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DATE: CLIENT PROJECT No.: INSPEC PROJECT No.: PROJECT MGRE



18681 Lake Drive East Chanhassen, MN 55317 952-607-6512 www.rpbcwd.org

Riley Purgatory Bluff Creek Watershed District Permit Application Review

Permit No: 2018-072

Received complete: December 28, 2018 (60-Day permit-review period Extension issued 2/12/19)

Board Meeting: March 1, 2019

Applicant:

Three Rivers Park District, Josh Bowe

Consultant: SEH Inc., Toby Muse

Project:

Three Rivers Park – Hyland Park Parking Lot and Pedestrian Safety Improvements

Location:

10145 East Bush Lake Rd, Bloomington, MN

Reviewer:

Terry Jeffery, Permit Coordinator

Rule Conformance Summary

Rule	Erosion Control Plan Wetland and Creek Buffers		Conforms to RBPCWD Rules?	Comments
С			See comment	See Rule Specific Permit Condition C1.
В			Yes	
J Stormwater Managemen	Stormwater	Rate	Yes	
	Management	Volume	Yes	
		Water Quality	Yes	
		Low Floor Elev.	Yes	
		Maintenance	See Comment	See Rule Specific Permit Condition J1.
L	Permit Fee		See Comment	Government Agency
M	Financial Assur	ance	See Comment	Government Agency

Proposed Board Action		
	ermit report that follows and t	seconded adoption of the following the presentation of the matter at the March 1,
	ion for Permit 2018-072 is app ndations section of the attache	roved, subject to the conditions and stipulations d report;
permit have been affirmat directed to sign and delive	그런 얼마를 하는데 하는데 하는데 하는데 하는데 하는데 없다.	

Project Description

This project will involve rehabilitation of existing bituminous surface, realignment of segments of the park entrance, and the construction of new parking areas. To provide stormwater management pervious pavement and two bioretention features will be constructed. There is one wetland on site that is downstream of the proposed project area shown in figure 1 on page 5. No untreated stormwater runoff will be directed to this wetland. The receiving water is Hyland Lake.

The project site information is summarized below:

- 1. Total Site Area: 880.28 acres
- 2. Existing Site Impervious Area: 27.91 acre (approximately 15.5 acres tributary to Hyland Lake)
- 3. New (Increase) in Site Impervious Area: 0.432 acres (1.5% increase in site impervious area)
- 4. New or fully reconstructed impervious surface: 5.39 acres¹ (19.3% of existing site impervious area)
- 5. Area of pavement rehabilitation without disturbance of underlying native soils: 1.51 acres (65,776 square feet)
- 6. Total Disturbed Area: 11.73 acres (135,040 square feet)

Exhibits:

- 1. Permit Application from Three River Park dated December 20, 2018.
- 2. Response email to District Comments dated February 12, 2019
- 3. Civil Design Plan Sheets (105 sheets) dated October 22, 2018 (revised February 7, 2019)
- 4. Project Narrative Technical Memorandum dated December 21, 2018
- 5. MIDS Model Existing Conditions dated June 27, 2018 (revised July 26, 2018)
- 6. MIDS Model Proposed Conditions dated June 27, 2018 (revised July 26, 2018)
- 7. Existing and Proposed Conditions HydroCAD Model dated December 21, 2018
- 8. Geotechnical Evaluation Report by Northern Technologies, LLC dated June 13, 2018
- 9. Soil Boring and Laboratory Testing Report by Braun Intertec Dated June 3, 2011
- 10. Wetland Delineation Report by SEH, Inc. dated July 16, 2018.
- 11. MN Routine Assessment Methodology v. 3.0 dated July 16, 2018

¹ 0.86 acre of the 5.39 acre of new or fully reconstructed impervious surfaces is trails, ten or less feet in width, bordered downgradient by a pervious vegetated area at least 50% as wide as the trail.

12. Notice of Decision for WCA Wetland Boundary and Type determination and No Loss determination dated September 24, 2018.

Rule Specific Permit Conditions

Rule C: Erosion and Sediment Control

Because the project will alter 11.73 acres (510,959 square feet) of land-surface area the project must conform to the requirements in the RPBCWD Erosion and Sediment Control rule (Rule C, Subsection 2.1).

The erosion control plan prepared by SEH, Inc includes installation of perimeter control where applicable, inlet protection for storm sewer catch basins, rock construction entrances, sequencing of construction activities, protection of infiltration areas during site development, placement of a minimum of 6 inches of topsoil, decompaction of areas compacted during construction to 1400 kilopascals or less, retention of native topsoil onsite, and final stabilization methods. The contractor to be responsible for erosion control at the site needs to be determined and a place holder has been included in the plans. (RPBCWD must be notified if the responsible party changes during the permit term.) To conform to the RPBCWD Rule C requirements the following revisions are needed:

C1. The Applicant must provide the name and contact information of the individual responsible for day to day erosion and sediment control inspection and maintenance at the site.

Rule D: Wetland and Creek Buffer

Because the project will trigger Rule J and there is a wetland on the property that is downgradient of the proposed activity, the project will need to conform to Rule D. The City of Bloomington is the Wetland Conservation Act Local Government Unit for the city, within which the park is located. Staff has reviewed the delineation and concur with Bloomington that the delineated boundary and type are accurately reflected in the report. Staff has reviewed the MNRAM and concur that it accurately assesses the wetland as high value. High value wetlands are required to have a 60-foot average buffer with a minimum width of 30 feet.

The applicant has shown a buffer with a minimum width of 60 feet and an average width of 60 feet. Under existing conditions, the buffer area consists of native vegetation and there is no grading or other disturbance proposed within the buffer. To conform to the RPBCWD Rule D requirements the following revisions are needed:

D1. Three Rivers must enter into a maintenance agreement with RPBCWD to document the buffer location and maintenance requirements.

Rule J: Stormwater Management

Because the project will involve disturbance of 11.73 acres (510,599 square feet) of area, and fully reconstructs and creates new impervious surfaces, the project must meet the criteria of RPBCWD's Stormwater Management rule (Rule J, Subsection 2.3). As less than 50% of the existing impervious surface will be disturbed and the total impervious area in the park will increase less than 50 percent, the criteria in section 3 applies only to fully reconstructed and newly constructed impervious surface. The total impervious area to be treated for the site is 4.53 acres. (5.39 acres of new or fully reconstructed less 0.86 acre of trails exempted Rule J, subsection 2.2.d.)

The applicant is proposing to construct a bioretention feature as well as infiltration beneath pervious pavers after deducting the volume necessary to compensate for the pavers. Pretreatment will be provided through the construction of a sump manhole with a SAFL baffle. These practices will be used to provide the required rate control, volume abstraction and water quality management on the site.

Rate Control

To meet the rate control criteria listed in Subsection 3.1.a, the 2-, 10-, and 100-year post development peak runoff rates must be equal to or less than the existing discharge rates at all locations where stormwater leaves the site. The Applicant used a HydroCAD hydrologic model to simulate runoff rates for pre- and post-development conditions for the 2-, 10-, and 100-year frequency storm events using a nested rainfall distribution, and a 100-year frequency, 10-day snowmelt event. Under proposed conditions, the entire site drains from north to southwest and leaves the site via a connection to the existing storm sewer in the southwest corner of the property. The existing and proposed 2-, 10-, and 100-year frequency discharges from the site are summarized in the following table.

Modeled Discharge Location	2-Year Discharge (cfs)		10-Year Discharge (cfs)		100-Year Discharge (cfs)		10-Day Snowmelt (cfs)	
	Ex	Prop	Ex	Prop	Ex	Prop	Ex	Prop
Hyland	41	40	105	105	273	273	20	19

The proposed project conforms to RPBCWD Rule J, Subsection 3.1.a

Volume Abstraction

Subsection 3.1.b of Rule J requires the abstraction onsite of 1.1 inches of runoff from all new and fully reconstructed impervious surface on the parcel. An abstraction volume of 18,104 cubic feet is required from the 4.53 acres of reconstructed and new impervious area on the project for volume retention. The applicant is proposing two bioretention basins and infiltration beneath a pervious pavers parking area beyond that volume needed to compensate for the pavers to provide abstraction volume. The table below summarizes the volume abstraction on the site.

Required Abstraction	Required Abstraction	Provided Abstraction	Abstraction Depth
Depth (inches)	Volume (cubic feet)	Volume (cubic feet) ¹	Provided (inches)
1.1	18,104	15,155	0.92

¹ The volume reduction shown is the amount provided which includes, in addition to the newly constructed impervious area, existing and undisturbed impervious area which will be directed to the BMP.

The applicant is requesting that the site be considered restricted and staff concurs that the unique nature of this site makes achieving additional abstraction impractical to achieve.

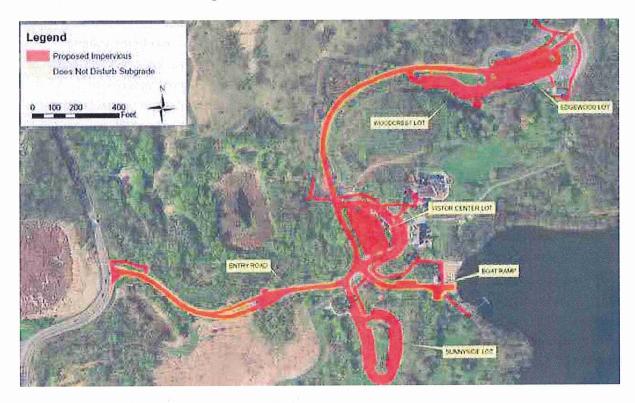


Figure 1Proposed improvements at Hyland Park for reference to discussion to follow.

Utility Conflicts

The applicant and their consulting engineer evaluated capturing runoff from the visitor center and the playground area. The open space adjacent to these two facilities has substantial utility conflicts. Underground electrical is installed pell-mell throughout the area to feed outdoor lighting, the buildings, and other facilities. In addition, both gas and telephone are buried down gradient of the visitor center and would conflict with the construction of a bioretention facility.

Soil and Topography Considerations

Soil borings advanced during the construction of the playground facility found lean clays and sandy lean clays throughout the soil profile to a depth of at least 21 feet. These soils are in the hydrologic soil group "D," which are not conducive to infiltration.

Capture and use was also considered but there are no irrigated areas.

See figure 1 on page 5 for reference to the proposed work and the parking lot layout. The plans call for a bioretention basin within the island of the Sunnyside Lot. The Edgewood lot will have pervious pavement and achieve infiltration below the parking lot. The volume calculations removed that volume necessary to compensate for the pavers, using only the remaining volume to apply to the volume reduction requirements. The Visitor Center and Woodcrest lots, as well as the reconstructed section of road, were all found to have soils in the hydrologic soil group "D," which are not conducive to infiltration. A total of twenty-one (21) soil borings were advanced throughout the entire project area. In addition, four double ring infiltrometer (DFI) tests were performed. One at each of the four parking: Sunnyside, Visitor Center, Woodcrest, and Edgewood.

Configuration of Existing Impervious Surfaces

While there is a substantial amount of impervious surface throughout the subject property from which to try to achieve additional abstraction, these areas are largely trails. In order to capture an adequate volume from these trails, long, linear features would be necessary as there is no curb and gutter or conveyance on the trails. This means drainage sheet flows off the trails and would need to be captured along the entire length of the trails. Further exacerbating this issue is the fact that the park area is heavily wooded and construction of bioretention features would necessitate the removal of significant areas of woodland and ancillary benefits such as leaf interception, evapotranspiration, and wildlife habitat.

The applicant evaluated other areas on the site where additional runoff might possibly be captured and abstracted. The possibility of capturing and treating runoff from the boat launch was considered as the launch is to be milled and overlain. However, capturing this runoff would require full reconstruction of the boat launch to direct water to a location where it could be captured. By reconstructing the launch, additional treatment would be required and provides yet another opportunity for sediment to be introduced to Hyland Lake. This would also require additional tree removal and disturbance within the shoreland.

Three Rivers Park staff and the Three Rivers Winter Ski Trail Map, both confirm that the areas adjacent to the trails are used for cross country skiing. This activity will result in compaction of the area and, over time, a loss in infiltrative capacity and treatment efficacy in these areas.

The borings advanced by NTI, LLC in the proposed location for the Sunnyside infiltration basin showed silty sand beginning at two feet and extending to a depth of at least 834 MSL. No water was encountered within this or any of the other borings in the vicinity of the proposed bioretention basin. This indicates that the basin meets the minimum separation of three feet to ground water or another restrictive layer. A DRI test was performed in the location of the proposed basin. The tested infiltration rate in this area was initially 6.0 inches per hour and declining to 4.0 inches per hour at 3 hours and 15 minutes. In compliance with RPBCWD rules and MN Stormwater Manual guidance, the basin was designed using a 50% margin of safety, so the model used 2.0 inches per hour. Pretreatment to the Sunnyside basin is provided by a sump manhole and SAFL Baffle.

In addition to the borings advanced in the Visitor Center parking lot, a DRI was performed. Measured infiltration rates were 0.010 inches per hour. This is effectively impervious and not conducive to infiltration.

The DRI performed at the Woodcrest parking lot demonstrated an infiltration rate of 0.06 inches per hour. This is consistent with "D" soils and is not conducive to infiltration.

Borings advanced in the proposed pervious paver section with underground infiltration at the Edgewood lot indicated poorly graded sand (SP-SM) with silt over clayey sand (SC) with intermittent sand layers. Soils classified as SP are in the hydrologic soil group "A" while SM soils are in "B." Soils classified as SC are in the "D" group. The DRI test showed infiltration rates at the proposed infiltration surface to be 0.35 inches per hour. As with the Sunnyside Basin, the design engineer used a rate that is 50% of the measured rate as is required by RPBCWD rule J, subsection 3.1.b.ii.C.

The borings showed no water or another confining layer until an elevation of at least 834.3. The design provides at least three feet of separation to groundwater from the bottom of the infiltration surface which is at an elevation of 841. The design of the infiltration practices complies with RPBCWD rules. (Rule J, Subsection 3.1.b).

Staff finds that because of the reasons discussed, the site is restricted and that abstraction of 0.92 inches off all new and fully reconstructed surface is the maximum extent practicable. The proposed project conforms to Rule J, Subsection 3.3.

Water Quality Management

Subsection 3.1.c of Rule J requires the Applicant provide for at least 60 percent annual removal efficiency for total phosphorus (TP), and at least 90 percent annual removal efficiency for total suspended solids (TSS) from site runoff. The developer is proposing a bioretention basin and a pervious paver parking area with underground infiltration to meet the water quality requirements. The table below summarized the water quality treatment provided for the site. Based on information reviewed, the proposed project conforms to Rule J, Subsection 3.1.c.

Pollutant of Interest	Regulated Site Loading (lbs/yr)	Required Load Removal (lbs/yr) ¹	Provided Load Reduction (lbs/yr)
Total Suspended Solids (TSS)	1857.0	1671.3 (90%)	1770.9 (95.4%)
Total Phosphorus (TP)	10.222	6.133 (60%)	7.713 (75.5%)

¹Required load reduction is calculated based on the removal criteria in Rule J, Subsection 3.1c and the new and reconstructed impervious area site load.

Low floor Elevation

No structure may be constructed or reconstructed such that its lowest floor elevation is less than 2 feet above the 100-year event flood elevation and no stormwater management system may be constructed or reconstructed in a manner that brings the low floor elevation of an adjacent structure into noncompliance according to Rule J, Subsection 3.6.

The low floor elevations of the structure and the adjacent stormwater management feature 100-year event flood elevations are summarized below.

Stormwater Facility	Low Floor Elevation of Building Adjacent to Facility (feet)	100-year Event Flood Elevation of Adjacent Stormwater Facility (feet)	Freeboard (feet)
Edgewood lot Infiltration to Jan's Place	846.65	840.00	6.65

The proposed freeboard separation is compliant with Rule J, subsection 3.6.

Maintenance

Subsection 3.7 of Rule J requires the submission of maintenance plan. All stormwater management structures and facilities must be designed for maintenance access and properly maintained in perpetuity to assure that they continue to function as designed.

J1. Permit applicant has provided a draft maintenance agreement. Once approved by RPBCWD, the plan must be signed by Three Rivers Park District.

Rule L: Permit Fee:

Fees for the project are:		
Rule C & J	NA	Govt
Rule M: Financial Assurance:		
	NA	Govt

Applicable General Requirements:

- 1. The RPBCWD Administrator shall be notified at least three days prior to commencement of work.
- 2. Construction shall be consistent with the plans and specifications approved by the District as a part of the permitting process. The date of the approved plans and specifications is listed on the permit.

Findings

- 1. The proposed project includes the information necessary, plan sheets and erosion control plan for review.
- 2. The proposed project will conform to Rule C and Rule J if the Rule Specific Permit Conditions listed above are met.

Recommendation:

Approval, contingent upon:

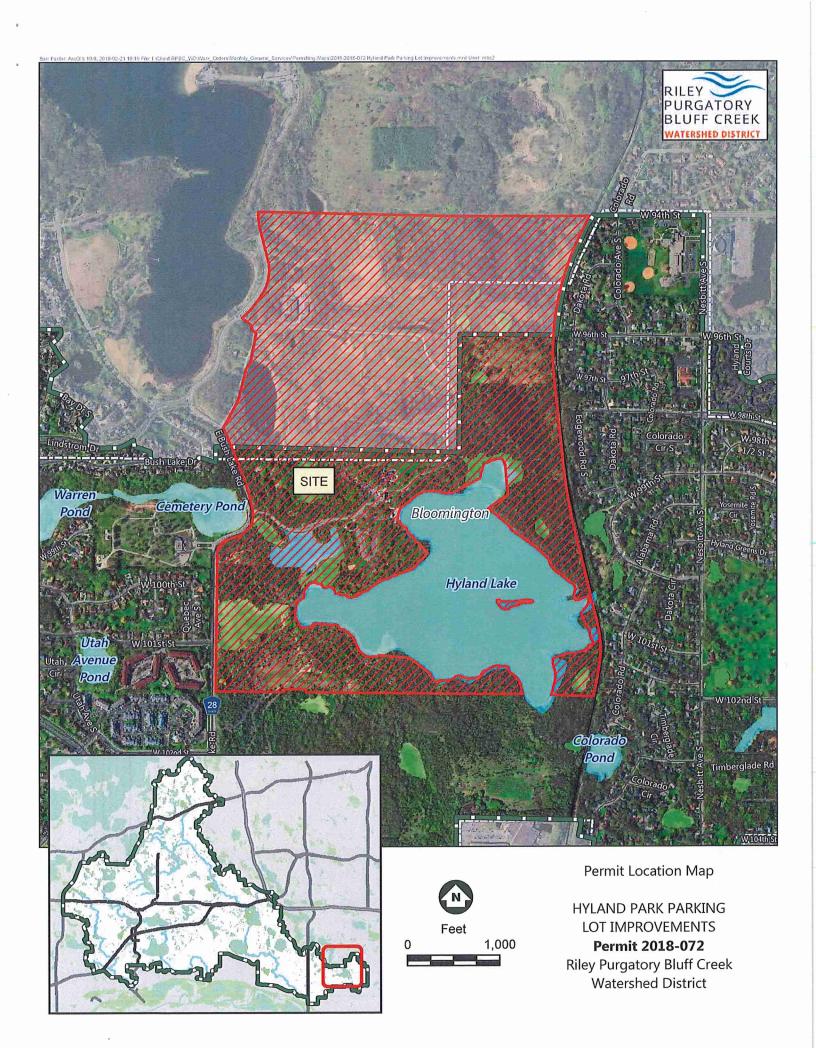
- 1. Continued compliance with General Requirements.
- 2. The Applicant must provide the name and contact information of the individual responsible for day to day erosion and sediment control inspection and maintenance at the site.
- Receipt of a signed and executed maintenance agreement. The agreement must be reviewed and approved by RPBCWD.

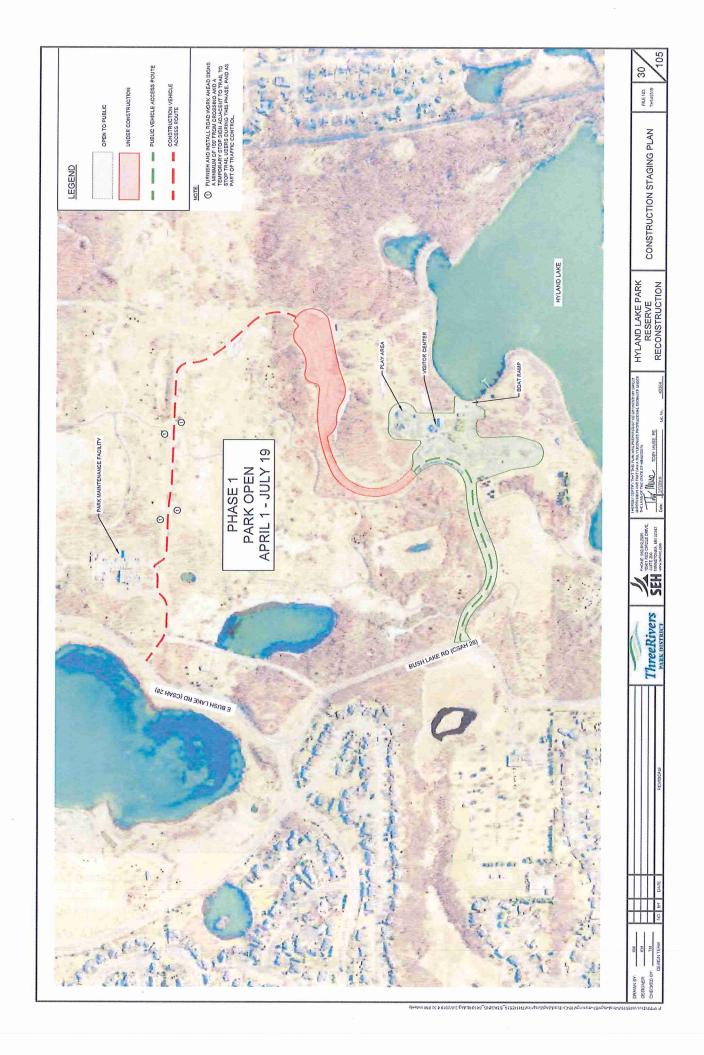
By accepting the permit, when issued, the applicant agrees to the following stipulations:

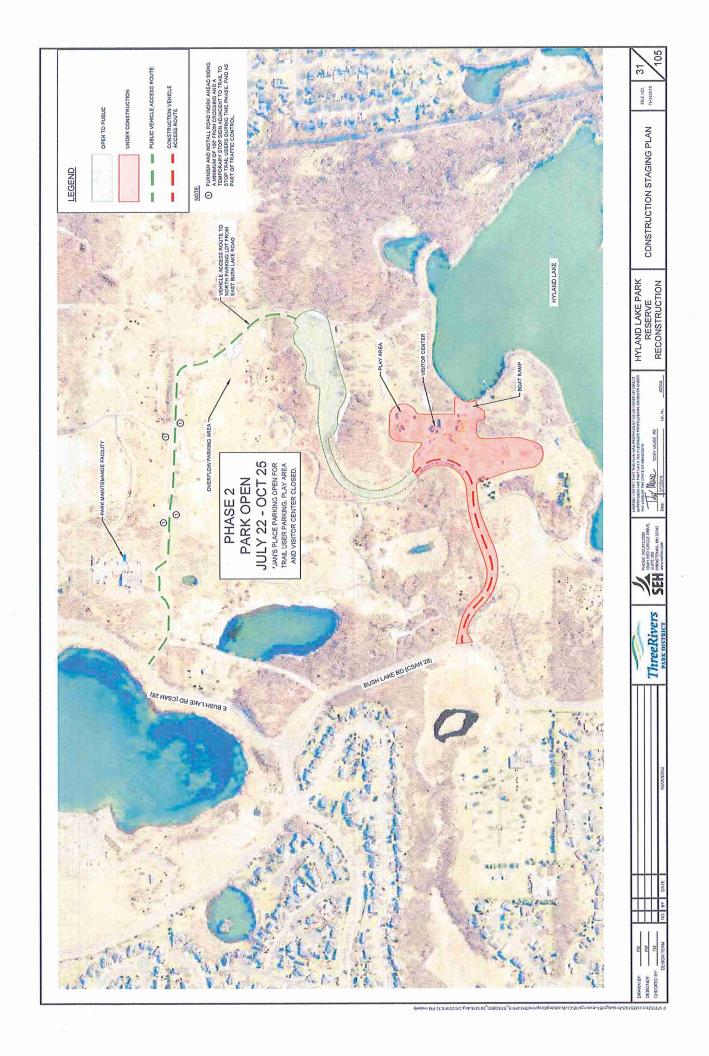
- 1. Per Rule J Subsection 4.5, upon completion of the site work, the permittee must submit as-built drawings demonstrating that at the time of final stabilization, stormwater facilities conform to design specifications as approved by the District. No financial assurance may be released prior to the provision of as-built drawings.
- 2. To close out the permit, the applicant must provide a chloride management plan which, at a minimum, designates an individual authorized to implement the chloride plan and an MPCA certified salt applicator engaged in the implementation of the chloride plan at the site.

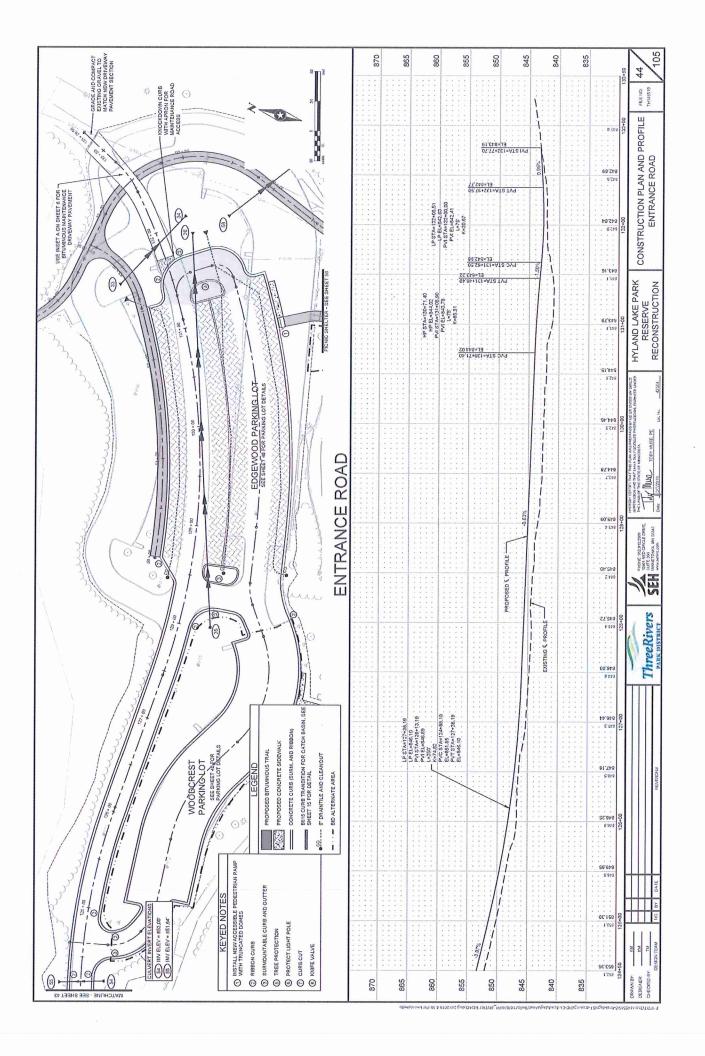
Boa	rd	Act	tion

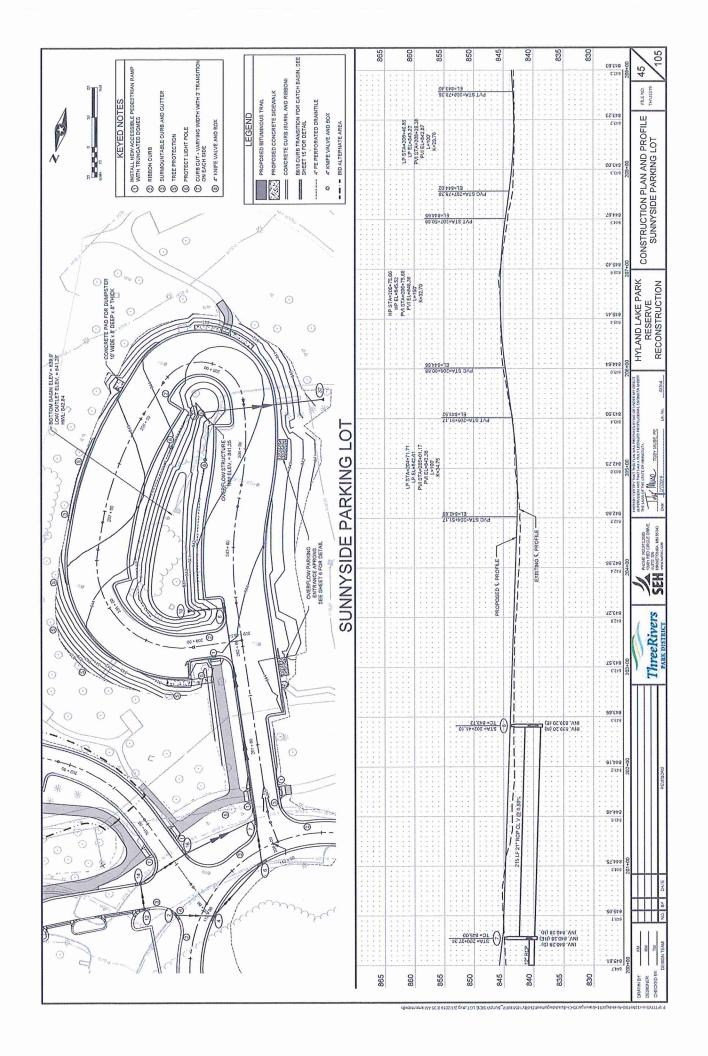
It was moved by Manager ______, seconded by Manager _____ to approve permit application No. 2018-072 with the conditions recommended by staff.













Responsive partner. Exceptional outcomes.

February 22, 2019

Dr. Claire Bleser

District Administrator Riley Purgatory Creek Watershed District 18681 Lake Drive East Chanhassen, MN 55317

RE: Proposal for Alum Plans and Specification for Hyland Lake

Dear Dr. Bleser:

Thank you for the opportunity to continue to provide our services to Riley Purgatory Bluff Creek Watershed District (District). As requested, Wenck Associates, Inc. (Wenck) has prepared this proposal to assist the District and the Three Rivers Park District in developing plans and specifications for alum applications on Hyland Lake. This proposal only addresses plans and specifications and observation for the prescribed initial dose. Future alum doses will require an additional proposal.

Following is a scope of work for implementing alum treatments on Hyland Lake.

1. Review of Alum Dose for Hyland Lake

The first step in the process is to review the final dose for Hyland Lake that includes the labile P fraction that dominates sediment phosphorus in Hyland Lake. Wenck will work with Dr. Bill James to review the final dose for Hyland Lake aimed at controlling long-term sediment phosphorus release from lake sediments.

2. Development of alum application quote documents

The next step in completing an alum application on Hyland Lake is to develop the application quote documents. Wenck will develop the final alum dosing quote request for Hyland Lake based on the results of the reviewed alum dose completed in Task 1. Wenck will use these results with input from the District to develop specifications for the alum application that include application rates, locations, timing, equipment requirements, staging and any other necessary information.

3. Permitting

Currently, alum applications in Minnesota do not require a permit from either the Minnesota Pollution Control Agency (MPCA) or the Minnesota DNR. However, the MPCA does request a

Dr. Claire BleserDistrict Administrator
RPBCWD
2/22/2019



letter outlining the details of the project for their review. Wenck will develop the letter to the MPCA and answer any questions the MPCA may have for the project. Wenck will also document the letter and response from the MPCA.

4. Contractor selection and contractor management

The Project Engineer will coordinate all project specification, bidding and application activities. An outline of the tasks is provided below:

- · Quote assistance pre-quote meetings, quote analysis, and contractor recommendation
- · Contract administration notice of award and review of contracts, insurance, and bonds
- · Contract management meetings and contractor coordination
- · Project oversight and documentation daily notes, photographs, and record plans
- Project QA/QC testing water quality monitoring

5. Application observation and monitoring

The alum application on Hyland Lake will likely be conducted in the Spring of 2019 and take approximately 2 to 3 days. Wenck will be on-site during the initial set-up at both locations and early application period for both application events. For subsequent days, Wenck will check in with the contractor, review notes, answer questions, and review water quality data to ensure progress. Wenck will also provide a written monitoring protocol to District staff and the contractor if more detailed water quality monitoring is necessary.

5. Budget and Timeline

Wenck will not exceed the authorized budget of \$9,200 for the scope of services described above. If additional work outside this scope is requested by the District, Wenck will provide an additional quote at that time.

Table 1: Cost estimate for developing a laboratory derived alum dose in Hyland Lake.

	Task	Wenck Associates	Laboratory and Direct Costs	Total Cost
1	Review of Alum Dose for Hyland Lake	\$ 1,500	\$ -	\$ 1,500
2	Development of alum application quote documents	\$ 3,000	\$ -	\$ 3,000
3	Permitting	\$ 800	\$ -	\$ 800
4	Contractor selection and contractor management	\$ 2,100	\$ -	\$ 2,100
5	Application observation and monitoring	\$ 3,000	\$ 200	\$ 3,200
	TOTAL	\$ 10,400	\$ 200	\$ 10,600

Dr. Claire BleserDistrict Administrator
RPBCWD
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Table 2: Proposed Timeline.

	Task	Completion Date
1	Review of Alum Dose for Hyland Lake	March 15, 2019
2	Development of alum application specifications and bid documents	March 30, 2019
3	Permitting	March 30, 2019
4	Project bidding, contractor selection and contractor management	April 30, 2019
5	Application observation and monitoring	June 2019

On behalf of the 300+ employee-owners of Wenck, thank you for this opportunity to work with the RPBCWD. Should you have any questions or need clarification of anything presented in the attached proposal, please do not hesitate to call me at 763-252-6829.

Wenck Associates, Inc.

Joe Bischoff, Principal Wenck Associates, Inc.

Project Manager/Principal (763) 252-6829

jbischoff@wenck.com

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Responsive partner. Exceptional outcomes.

February 22, 2019

Dr. Claire Bleser

District Administrator Riley Purgatory Creek Watershed District 18681 Lake Drive East Chanhassen, MN 55317

RE: Lake Riley Lake Internal Loading of Stormwater Ponds and Subwatershed Assessment

Dr. Bleser:

Thank you for the opportunity to present this scope of work to assist the Riley Purgatory Creek Watershed District (RPBCWD) and the City of Eden Prairie in completing the Lake Riley subwatershed assessment. This scope of work is based on the workplan outlined in the Lake Riley and Rice Marsh Lake Subwatershed Assessment (C19-2903) Accelerated Implementation Grant (2019). The objective of the proposed work is to update the UAA project list by determining the role of internal loading in providing excess nutrients to Lake Riley. The final report will identify best management practices (BMPs) from in-pond structures to public outreach.

Scope of Work

The scope of work is outlined below.

1. Monitoring Plan

a. A monitoring plan (Technical Memo) for the 2019 field season will include: water quality, sediment chemistry, and long-term dissolved oxygen, DO, sampling in the selected stormwater ponds.

2. Pond Selection

a. Five ponds will be selected based on the following criteria: Qualitative data from City inspections, previously determined watershed loading from P8, NURP Ratio, treatment near sensitive water bodies, historic land use, previously monitored, converted wetlands, and depth of basin.

3. Pond Monitoring

a. In-pond monitoring will occur throughout the 2019 season according to the Monitoring Plan in task 1. The majority of pond monitoring (i.e. water quality, long term DO, and sediment chemistry) will be completed by the RPBCWD staff. Sediment cores will be collected from each selected pond and analyzed for sediment chemistry and phosphorus release rate.

4. Subwatershed Assessment

- a. Dissolved Oxygen Modeling and Internal Phosphorus Loading Potential
 - Two dimensional hydrodynamic and water quality models will be built for selected pond to better understand DO dynamics, mixing and internal loading potential. The dissolved oxygen models will be combined with

Dr. Claire BleserDistrict Administrator
RPBCWD
2/22/2019



already collected sediment data and phosphorus release rates to develop an assessment tool to estimate the extent and magnitude of phosphorus loading from stormwater pond sediments.

b. Water Quality Modeling and Updates

i. Water quality models were previously prepared by Wenck for the City of Eden Prairie during the Phase VI inventory and assessment program. During this phase, bathymetry was collected for stormwater basis that have open water and drain to Lake Riley. Additionally, Barr Engineering at the request of the RPBCWD developed a P8 model to determine loading to Lake Riley and Rice Marsh Lake (Rice Marsh Lake and Lake Riley: Use Attainability Analysis Update, 2016). Both models will be examined and updated to determine new loading rates. The XPSWMM hydrology/hydraulic model developed for the RPBCWD will be used to calibrate the models.

c. BMP Selection

i. Following the update to the water quality models and assessing the internal loading from select ponds, BMPs will be assessed at strategic locations throughout the watershed. The BMP assessment will look at structural practices such as iron-enhanced sand filters, limestone weirs, or alum treatments. The proposed practices will include a general cost estimation and an expected reduction if the BMP were implemented.

5. Meetings

 a. A project kickoff meeting will detail the project timeline and establish major milestones. Wenck anticipates meeting with the RPBCWD, City of Eden Prairie, Barr Engineering (RPBCWD's District Engineer), and other key constituents. The total number of meetings anticipated is four.

6. Reporting

- a. A report will be prepared with the results of the internal load assessment, water quality modeling updates, and BMP selection. The final report will include several graphics and tables summarizing the analysis completed.
- b. Wenck will keep the RPBCWD up-to-date with progress on the watershed assessment. This will be in the form of brief technical memo at the end of each month stating the progress to date, the anticipated activities for the coming month and budget updates.

Cost Estimate

Wenck will perform the work stated above on a time and materials basis for a total estimated cost of \$55,000. The proposed budget includes purchasing field monitoring equipment, collecting sediment cores and developing the subwatershed assessment. The proposed budget is on a time and materials basis and will not exceed the amount without authorization from the RPBCWD. In the event of follow-up or out of scope work items are identified or requested by RPBCWD, Wenck will work with RPBCWD to develop a scope of work and budget and not proceed with identified task(s) without authorization from RPBCWD. The following table outlines our cost estimation for completing tasks 1-6 in the Scope of Work.

Dr. Claire BleserDistrict Administrator
RPBCWD
2/22/2019



Task	Description	Labo	Labor Cost		Mileage/Equipment		tal Cost
1	Monitoring Plan	\$	700			\$	700
2	Pond Selection	\$	1,900			\$	1,900
3	Pond Monitoring	\$	5,350	\$	21,500	\$	26,850
4	Subwatershed Assessment: Internal Loading, Modeling, BMP Selection	\$	12,400			\$	12,400
5	Meetings	\$	6,750			\$	6,750
6	Reporting	\$	6,400			\$	6,400
				Tot	al Project Cost	\$	55,000

Schedule

Below is a proposed schedule and milestone goals for the Riley Lake subwatershed assessment.

- Partner Kickoff Meeting: April 2019
- Monitoring Plan and Pond Selection: May 2019
- Pond Monitoring: May November 2019
- Progress Meeting: November 2019
- Data Analysis, Subwatershed Assessment and BMP Identification: November 2019 May 2020
- Report discussion and final recommendations: May 2020
- Preliminary Report: July 2020
- Final Report and Completion: October 2020

On behalf of the 300+ employee-owners of Wenck, thank you for this opportunity to work with the RPBCWD. Should you have any questions or need clarification of anything presented in the attached proposal, please do not hesitate to call me at 763-252-6829.

Sincerely,

Joe Bischoff, Principal Wenck Associates, Inc. Project Manager/Principal (763) 252-6829 jbischoff@wenck.com



February 22, 2019

Dr. Claire Bleser

District Administrator Riley Purgatory Creek Watershed District 18681 Lake Drive East Chanhassen, MN 55317

RE: Mitchell Lake Internal Loading of Stormwater Ponds and Subwatershed Assessment

Dr. Bleser:

Thank you for the opportunity to present this scope of work to assist the Riley Purgatory Creek Watershed District and the City of Eden Prairie in completing the Lake Mitchell subwatershed assessment. This scope of work is based on the workplan outlined in the Lake Mitchell Subwatershed Assessment (C19-2904) Accelerated Implementation Grant (2019). The objective of the proposed work is to determine which ponds will be further investigated to determine if internal loading contributes to excessive nutrient transport to Lake Riley. The final report will identify best management practices (BMPs) from in-pond structures to public outreach.

Scope of Work

The scope of work is outlined below.

1. Monitoring Plan

a. A monitoring plan (Technical Memo) for the 2019 field season will include: water quality, sediment chemistry, and long-term dissolved oxygen, DO, sampling in the selected stormwater ponds.

2. Pond Selection

a. Four Ponds will be selected based on the following criteria: Qualitative data from City Inspections, previously determined watershed loading from P8, NURP Ratio, treatment near sensitive water bodies, historic land use, previously monitored, converted wetlands, and depth of basin.

3. Pond and Lake Monitoring

- a. In-pond monitoring will occur throughout the 2019 season according to the Monitoring Plan in task 1. The majority of pond monitoring (i.e. water quality, long term DO, and sediment chemistry) will be completed by the RPBCWD staff. Sediment cores will be collected from each selected pond and analyzed for sediment chemistry and phosphorus release rate.
- b. Sediment chemistry and phosphorus release rates will be collected at different locations on Mitchell Lake for internal load analysis and sediment activation dosing.

4. Subwatershed Assessment

a. Dissolved Oxygen Modeling and Internal Loading Potential

Dr. Claire BleserDistrict Administrator
RPBCWD
2/22/2019



i. Two dimensional hydrodynamic and water quality models will be built for each selected pond to better understand DO dynamics, mixing and internal loading potential. The dissolved oxygen models will be combined with already collected sediment data and phosphorus release rates to develop an assessment tool to estimate the extent and magnitude of phosphorus loading from stormwater pond sediments.

b. Water Quality Modeling and Updates

i. Water quality models were previously prepared by Wenck for the City of Eden Prairie during the Phase V inventory and assessment program. During this phase, bathymetry was collected for stormwater basis that have open water and drain to Mitchell Lake. The models will be reviewed and calibrated with monitoring and flow data if available.

c. BMP Selection

- i. Following the update to the water quality models and assessing the internal loading from select ponds, BMPs will be assessed at strategic locations throughout the watershed. The BMP assessment will look at structural practices such as iron-enhanced sand filters, limestone weirs, or alum treatments. The assessment will include a list of practices, their costs, and the expected phosphorus load reduction. The prioritized list of ponds that now includes an internal phosphorus loading assessment will be used to evaluate appropriate practices to reduce or eliminate the internal load. The P8 model will be used to identify other practices, costs, and effectiveness to develop a list of projects to reduce watershed phosphorus loading.
- ii. Costs and phosphorus load reductions from controlling internal phosphorus loading in Mitchell Lake will be determined by the collection and analysis of intact sediment cores to determine mobile phosphorus fractions and release rates. Cores analyzed to determine the appropriate amount of alum needed to inactivate 90% of the mobile phosphorus. The assessment will result in a design cost, estimated life span, and expected internal phosphorus load reductions.

5. Meetings

a. A project kickoff meeting will detail the project timeline and establish major milestones. Wenck anticipates meeting with the RPBCWD, City of Eden Prairie, Barr Engineering (RPBCWD's District Engineer), and other key constituents. The total number of meetings anticipated is four.

6. Reporting

- a. A report will be prepared with the results of the internal load assessment, water quality modeling updates, and BMP selection. The final report will include several graphics and tables summarizing the analysis completed.
- b. Wenck will keep the RPBCWD up-to-date with progress on the watershed assessment. This will be in the form of brief technical memo at the end of each month stating the progress to date, the anticipated activities for the coming month and budget updates.

Cost Estimate

Wenck will perform the work stated above on a time and materials basis for a total estimated cost of \$70,000. The proposed budget includes purchasing field monitoring equipment, collecting sediment cores and developing the subwatershed assessment. The proposed budget is on a time and materials basis and will not exceed the amount without authorization from the

Dr. Claire BleserDistrict Administrator
RPBCWD
2/22/2019



RPBCWD. In the event of follow-up or out of scope work items are identified or requested by RPBCWD, Wenck will work with RPBCWD to develop a scope of work and budget and not proceed with identified task(s) without authorization from RPBCWD. The following table outlines our cost estimation for completing tasks 1-6 in the Scope of Work.

Task	Description	Labor Cost		Milea	ge/Equipment	Tota	al Cost
1	Monitoring Plan	\$	700			\$	700
2	Pond Selection	\$	1,400			\$	1,400
3	Pond Monitoring	\$	7,100	\$	28,900	\$	36,000
4	Subwatershed Assessment: Internal Loading, Modeling, BMP Selection	\$	18,700			\$	18,700
5	Meetings	\$	5,600			\$	5,600
6	Reporting	\$	7,600		·	\$	7,600
	Total Project Cost						70,000

Schedule

Below is a proposed schedule and milestone goals for the Mitchell Lake subwatershed assessment.

- Partner Kickoff Meeting: April 2019
- Monitoring Plan and Pond Selection: May 2019
- Pond Monitoring: May November 2019
- Progress Meeting: November 2019
- Data Analysis, Subwatershed Assessment and BMP Identification: November 2019 May 2020
- Report discussion and final recommendations: May 2020
- Preliminary Report: July 2020
- Final Report and Completion: October 2020

On behalf of the 300+ employee-owners of Wenck, thank you for this opportunity to work with the RPBCWD. Should you have any questions or need clarification of anything presented in the attached proposal, please do not hesitate to call me at 763-252-6829.

Sincerely,

Joe Bischoff, Principal Wenck Associates, Inc. Project Manager/Principal

(763) 252-6829 jbischoff@wenck.com

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18681 Lake Drive East Chanhassen, MN 55317 952-607-6512 www.rpbcwd.org

From: Claire Bleser

To: Board of Managers

Re: Permit and Grant Database Agreement (item 8i)

Dear Managers,

Staff has worked to refine the needs of our database. Please find attached a quote for the Permit and Grant Database. Total cost of proposal is \$39,900. I recommend that \$25,000 be taken from the permitting budget and \$14,900 from the cost share program.

Staff recommendations:

Authorize Administrator Bleser to enter into an agreement with Houston Engineering for task order titled Permit and Grant Database System Agreement with funds coming from Permitting (\$25,000) and cost-share (\$14,900) programs.



Maple Grove Office 763.493.4522 763.493.5572

7550 Meridian Circle North, Suite 120 Maple Grove, MN 55369

February 21, 2019

Claire Bleser Riley Purgatory Bluff Creek Watershed District 18681 Lake Drive East Chanhassen, MN 55317

Subject: Permit and Grant Database System Agreement

The purpose of this letter is to memorialize the agreement ("Agreement") among Houston Engineering, Inc. ("Engineer") and the Riley Purgatory Bluff Creek Watershed District ("Client") for this project.

The compensation for this agreement is listed by task in the scope of services. I believe this Agreement accurately sets forth our understanding. If so, I would ask you, or an authorized representative sign the agreement and email it back to us.

Sincerely,

HOUSTON ENGINEERING INC.

Brian Fischer

Brian Fischer

GIS Project Manager



Maple Grove Office	763.493.4522	763.493.5572
	1	

7550 Meridian Circle North, Suite 120 Maple Grove, MN 55369

CLIENT/OWNER SERVICES AGREEMENT PROJECT NAME: _RPBCWD Permit and Grant Data	abase System
~	HOUSTON PROJ. MGR.: Brian Fischer
CLIENT/OWNER NAME: Riley Purgatory Bluff Creek WD	
CLIENT/OWNER ADDRESS: _18681 Lake Drive East,	Chanhassen, MN 55317
CLIENT/OWNER PHONE NO.: _952-607-6512	CLIENT/OWNER CONTACT: Claire Bleser
between HOUSTON ENGINEERING, INC. ("Houston") and Rile	nd entered into effective as of this <u>1st</u> day of <u>March</u> , 20 <u>19</u> , by and <u>by Purgatory Bluff Creek Watershed District</u> ("Client"). <u>Recitals</u>
 Client has requested Houston to perform certain profession <u>RPBCWD Permit and Grant Database System</u> ("Project"). 	al services in connection with a project generally referred to as
B. Houston desires to provide the professional services reques	sted by Client in accordance with this Agreement.
NOW, THEREFORE, for good and valuable consideration, t Client agree as follows:	he receipt and sufficiency of which is hereby acknowledged, Houston and
1. Services. Houston shall perform the services set forth of this Agreement.	in Attachment A ("Services") in accordance with the terms and conditions
2. Term of Agreement. This Agreement shall commence performance of the Services as of that date. This Agreement searlier pursuant to the terms and conditions of this Agreement.	e on the date first stated above, and Houston is authorized to commence that terminate on the <u>31</u> day of <u>December</u> , 20 <u>19</u> , unless terminated
Attachments. The Attachments below, which have been a part of this Agreement: ATTACHMENT A - SERVICES ATTACHMENT B - GENERAL TERMS AND CONI ATTACHMENT C - Amendment to General Terms ATTACHMENT D - FEE SCHEDULE - DATED ALTA/NSPS LAND TITLE SURVEY RIDER	
4. Compensation. \$ 39,900	n an hourly basis commensurate with the attached Fee Schedule ction Cost
CLIENT/OWNER	HOUSTON ENGINEERING, INC.
BY:AUTHORIZED REPRESENTATIVE	BY:AUTHORIZED REPRESENTATIVE
TITLE:	TITLE:
PLEASE SIGN AND RETURN ONE COPY TO HO	



7550 Meridian Circle North, Suite 120 Maple Grove, MN 55369

Exhibit A – Scope of Services

OVERVIEW

Houston Engineering, Inc. (HEI) provided an onsite demonstration to staff at the Riley Purgatory Bluff Creek Watershed District (RPBCWD) on August 3rd, 2018. The demonstration included our product called MS4Front (www.ms4front.com) and a couple of custom permit/grant web-based database applications developed by HEI. After the demonstrations the discussion concluded that the custom solution developed for Capitol Region Watershed District's (CRWD) matched closest with RPBCWD needs and a request was made to provide a cost estimate to leverage that solution. The scope and cost estimate were developed by working with RPBCWD staff to define the customizations that need to be made to the existing CRWD application to meet the districts needs. Below are a list of tasks and cost estimate to implement a custom data management system for RPBCWD's permit and grant programs.

TASK 1: INITIAL SOFTWARE CONFIGURATION AND SETUP

HEI will setup an instance of the CRWD web application and database on cloud server for hosting. As part of the initial setup HEI will:

- Setup a unique domain name to access the web application.
- Replace the CRWD branding (logo and title) with RPBCWD.
- Setup 2 initial logins as administrators.
- Configure the map viewer and load up to 10 GIS layers. These layers include district boundary, subwatershed boundaries, parcels, D soils, DWSMA emergency response areas, flood plains, public waters, NWI and historic aerial photos.

TASK 2: IMPLEMENT REQUESTED REVISIONS TO SOFTWARE

During the project definition period there were several customizations or revisions that are needed to meet the needs of the district. Those customizations are listed below with applicable wireframes.

Permit Module

- Overview tab configure 9 template letters and reports. HEI will work with the permit coordinator to draft these in a Microsoft Word format. These letters include Application Received; Application Incomplete; Application Complete; Permit Conditionally Approved; Permit Issuance Cover Letter; Annual Monitoring Report Due; Permit Expiring; Notice of Probable Violation; Permit Closeout.
- Description tab change the Amendment group label to Permit Modification as shown in Figure 1.
- Status/Tracking tab update Status drop down to: Completeness Review; Incomplete; Complete and Under Review; Board Meeting Scheduled; Permit Approved with Conditions; Permit Executed; Under Construction; Construction Complete; Monitoring Period; Permit Close. Change Comment Logs label to Correspondence Logs and add communication type drop down, contact name and topic as new fields. Change Comment to Notes. Shown in Figure 2.





HOUSTON ENGINEERING INC.

- Modify flags to: Alt Comp, Govt Agency, Commercial, Residential, Industrial, Redevelopment, Linear, I&M plan, Maintenance Agreement/Declaration, Permit Fee, Signed Application, Resp EPCS Contact, Native H&H Model, Native WQ Model, Atlas 14, Nested Distribution, 10-day snowmelt, Electronic Submittal, EOC
- Modify Rules checkboxes to Rule B through Rule K
- Rename Volume Control label to Stormwater Management
- Delete Filtration checkbox
- Add greyed out fields for Existing Impervious, Proposed Impervious, Newly Constructed Impervious, Total Disturbed Area, Regulated Volume, 1.1 Volume, Abstracted Volume, Offsite abstraction, TP Regulated Load, TP 90% removal, TSS Regulated Load, TSS 90%, TSS Removal and Eligible Bank Volume from BMP attributes associated with this permit.
- Add a new group section titled Wetlands to the tab. In this section add a table that has columns Wetland Number, Management Class, Buffer area required, Buffer area provided, Notes. Table should allow for as many rows to be added as needed.
- Under Conditions section. Move completed to after notes column and add a new column for Date Completed.
- Surety & Fees tab revise this tab to Figure 3.
- Public permit application form setup a public application form like CRWD. Modify form to match RPBCWD application form. Add functionality when uploading a document to have the user specify document type and document notes.
- Export files modify the excel export files with the new fields added in the customization of the permit tabs.
- Inspection tab no updates to the inspection tab or checklists. Only need to modify the inspection report with a new header.
- Permit Review File Module Add a button to start a permit from a review file.
- Grant Module
 - Dashboard Adjustment to lists section to include or exclude on the district's grant types.
 - Overview Tab Modifications to 3 template letters.
 - Description Tab modify grant type list with 6 types. They include CS Local Govt/Business; CS – Non-Profit; CS – Individual; Earth Day Mini; Action Projects; Master Water Stewards
 - Public grant application form setup 3 different grant application forms with workflow processes like CRWD.
- BMP Map/Main Dashboard update the BMP map export options with new fields added in the permit and grant customizations.
- Email alerts configure permit and grant email alerts
- Advance Search page add new filters for permit flags and rules.
- Capital Projects Module no changes needed.

TASK 3: DATA MIGRATION AND FINAL CONFIGURATION

The district previously had two databases that collected permit information which can be exported into an Excel file. HEI will merge the two spreadsheets into one master permit database spreadsheet and map the



763,493,5572 Maple Grove Office 763.493.4522

7550 Meridian Circle North, Suite 120 Maple Grove, MN 55369

columns to the new database structure. HEI will then write an import script to import the historic permit information into the new database. HEI will only be able to populate information that matches between the two sources.

TASK 4: TESTING AND REVISIONS

Upon completion of Task 3, HEI will provide access to the application via a URL. CRWD will using the URL to test the application and provide a prioritize list of feedback to HEI for revisions. HEI will make up to 40 hours of revisions based on the prioritization list. HEI assumes these revisions will be limited to the current functionality and no new enhancements will be added.

TASK 5: HOSTING AND SUPPORT

HEI will provide hosting of the software application on a shared cloud server for an annual fee of \$4,000. Since the development of the project won't begin until approximately June, the first year's annual fee is \$2,000. This fee also includes minor bug fixes that are identified through the use of the application and email support. Any request for revisions or enhancements to the software will be considered hourly maintenance obligations by the district. For reference CRWD has been budgeting approximately \$10,000 a year for enhancements in addition to the hosting fee.

ASSUMPTIONS

The following assumptions were made in preparing the proposal:

- HEI has mutual ownership to the software code developed under this agreement to market and sell to other organizations.
- All existing code that is re-used from CRWD or MS4front applications is owned by CRWD or Houston Engineering.
- The technology used to build the software will be based on HTML 5, JavaScript, PHP and Postgresql.
- RPBCWD will be responsible for maintenance and support costs of the custom solution.
- The application was developed on an older version of the MS4Front code and is not being maintained as part of the current agreement. A couple features of MS4Front are still used but most are not being used.

COST ESTIMATE

This contract will be setup as a fixed fee. Invoices will be submitted periodically (customarily on a monthly basis) and are due and payable upon receipt. Invoices will include the amount of work currently performed on the total project costs for that given period. Hosting will start at the development of the software product.

Costs:

Task 1: Initial Software Configuration and Setup: \$4,000

Task 2: Implement Requested Revisions or Enhancement to Software: \$21,000

Task 3: Data Migration: \$4,500

Task 4: Testing and Revisions: \$8,400

Task 5: Annual Hosting and Support (July 1, 2019 thru December 31st, 2019): \$2,000



Total Cost Estimate: \$39,900

Maple Grove Office P 763.493.4522 F 763.493.5572

7550 Meridian Circle North, Suite 120 Maple Grove, MN 55369



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FIGURES

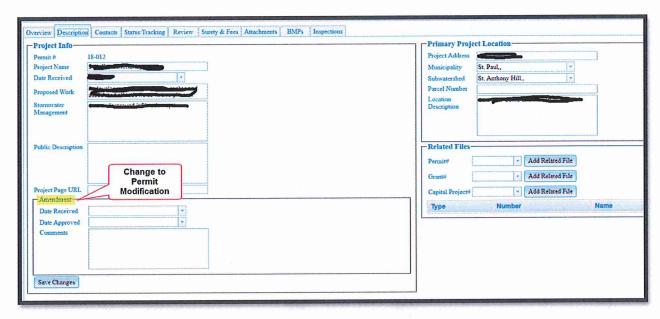


Figure 1

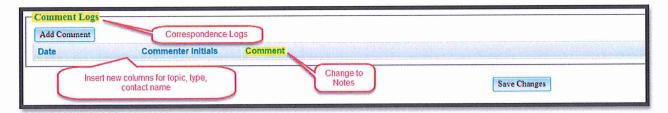
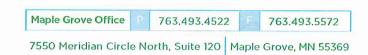


Figure 2





01/18/2018 6110	\$2,100.00 application fee	8	
+ Add Record			
Surety Notes			
General Comments		☐ Escraw Agreement Required Escraw Agreement Received	Save Changes
		Usurety Returned as Undeinverable Date Amount S	
		Usurety Returned to MN Date Amount 5	
		Surety to Regional Compliance Fund	
		Amount S Fund Uste Spent	
urety Register—			
alance: \$12,100.00 Date Type Expires Draw By Ch	eck# Payer Debit Credit /	RCWD Memo Used Surety	
		8	
03/07/2018 cash	\$5,000.00		

Figure 3



Attachment C - Amendment to General Terms and Conditions

Amendment to the General Terms and Conditions ("GC's"), which are part of the Client/Owner Services Agreement ("Agreement") dated <u>January 24</u>, 20<u>17</u>, by and between Houston Engineering, Inc. ("Houston") and ("Client").

The following clauses are hereby incorporated and made a part of the Agreement, to either replace or supplement the terms thereof. In the event of any conflict or discrepancy between the terms of this Amendment and the terms of the GC's, the terms of this Amendment shall control.

TASK ORDER No. 6f- 2019 WOMP Station Services Pursuant to Agreement for Engineering Services Riley Purgatory Bluff Creek Watershed District and BARR Engineering Company. February 20, 2019

This Task Order is issued pursuant to Section 1 of the above-cited engineering services agreement between the Riley Purgatory Bluff Creek Watershed District (District) and BARR Engineering Company (Engineer) and incorporated as a part thereof.

1. Description of Services:

TASK A

Perform operation and maintenance tasks related to the Purgatory Creek Monitoring Station located at Pioneer Trail in Eden Prairie (Pioneer Trail Station). The Pioneer Trail Station is enrolled in Metropolitan Council's (MCES) Watershed Outlet Monitoring Program (WOMP). As part of the WOMP, the District will work with MCES in a cooperative effort to collect flow, rainfall, and water quality data at the Pioneer Trail Station.

TASK B

Perform operation and maintenance, data management, and project management tasks related to the Purgatory Creek Monitoring Station located at Valley View Rd in Eden Prairie (Valley View Rd Station). (Note: the Valley View Rd Station will not be enrolled in MCES'S WOMP, so this station will be the sole responsibility of the District).

2. Scope of Services:

TASK A - Pioneer Trail Station

The District Engineer will perform operation and maintenance tasks for the Pioneer Trail Station as requested by the MCES WOMP Coordinator and approved by the District Administrator. In 2019, the MCES will continue transitioning from composite auto-sampling to discrete auto-sampling for storm events at this station. The MCES installed a new auto-sampler and datalogger system in 2018. The MCES began developing the operation methods for the new system and will continue to do so in 2019. Also, cooperators will continue to receive training in its operation. The bi-weekly grab sampling regime adopted in 2017, will continue in 2019. MCES staff will continue to be responsible for conducting flow measurements and rating curve development. However, the MCES may request District and/or Barr staff to take a flow measurement on occasion, if MCES staff is unavailable. A placeholder contingency budget was added to cover tasks for potential flow measurement.

Tasks will include:

- a) Supporting District staff bi-weekly grab sampling efforts, including project coordination with MCES and data and file management. District staff will be responsible for grab sample collection, delivery to lab, and completion of sample submission forms for the lab.
- b) Setting sample activation parameters (i.e. activation level and volume) to trigger the station's auto-sampler during storm events. Collecting storm event samples for significant events (i.e. rainfall > ½ in.) and delivering these samples to the MCES lab located on Childs Rd., St. Paul, MN.

- c) Performing routine maintenance of the equipment at the station; including verifying/calibrating water quality sensors, clearing debris from sensors, changing out desiccants, prepping the station for spring monitoring, and winterizing the station.
- d) Troubleshooting equipment issues, as needed. The MCES will rely on the District staff and engineer to assess equipment problems if they arise. The amount of troubleshooting in any given year is unpredictable. Therefore, the maintenance portion of the budget has included up to 20 hours of time to troubleshoot equipment issues. If additional time beyond what has been assumed in the budget below is needed, the troubleshooting effort will be coordinated with the District Administrator. The assumed time allocated for troubleshooting equipment will not be exceeded without prior authorization by the District Administrator.
- e) Managing of continuous water quality, rainfall, and flow data; including downloading and reviewing data, and assisting MCES with year-end data QA/QC and summary.
- f) Potential miscellaneous tasks including any tasks associated with the transition to the new sampling regime, such as training, meetings, or equipment installation; and flow measurements if requested by the MCES WOMP coordinator. These tasks are included below in the placeholder contingency budget.

NOTE: As part of the WOMP contract, the MCES responsibilities include all laboratory work/fees associated with the sampling, data management (year-end QA/QC, summarizing, storing in database), major maintenance costs (i.e. replacement cost of equipment, subcontractor fees for repair, etc.), and project management/coordination tasks.

TASK B - Valley View Road Station

The District Engineer will perform the following operation and maintenance tasks:

- a) Supporting District staff bi-weekly grab sampling efforts, project coordination and data and file management. District staff will be responsible for grab sample collection, delivery to lab and completion of sample submission forms for the lab.
- b) Setting sample activation parameters (i.e. activation level and volume) to trigger the station's auto-sampler during storm events. Collecting storm event composite samples for significant events (i.e. rainfall > ½ in.) and delivering these samples to a certified laboratory for testing.
- c) Performing routine maintenance of the equipment at the station; including verifying/calibrating water quality sensors, clearing debris from sensors, changing out desiccants, and winterizing the station.
- d) Troubleshooting equipment issues, as needed. The amount of troubleshooting in any given year is unpredictable. Therefore, the maintenance portion of the budget has included up to 20 hours of time to troubleshoot equipment issues. If additional time beyond what has been assumed in the budget below is needed, the troubleshooting effort will be coordinated with the District Administrator. The assumed time allocated for troubleshooting equipment will not be exceeded without prior authorization by the District Administrator.
- e) Performing stage-discharge measurements for development, verification and/or updating of the rating-curve equation (i.e., the relationship between stream flow and water level that is developed based on manual measurements at a monitoring station).
- f) Downloading and reviewing monitoring data (i.e. stage, flow, conductivity, temperature, rainfall, turbidity) throughout the monitoring period; including QA/QC tasks.

- g) Year-end QA/QC and summary of all monitoring data for the station.
- h) Managing and coordinating project.

Note: A certified laboratory will provide the lab work services. A budget has been included for anticipated lab fees for samples collected from the Valley View Station based on the MCES Lab's analyte costs.

3. Deliverables:

TASK A:

The water quality, flow, and rainfall data collected at the Pioneer Trail Station will be stored in a database maintained by MCES. The District and the District Engineer will have access to this data either through the MCES website or per request to the MCES WOMP coordinator.

TASK B:

QA/QC'd water quality, flow, and rainfall data will be summarized and stored per the District Administrator's instruction (for example, in an MS Excel, Access, or EQuIS Database).

4. Budget:

Services under this Task Order will be compensated for in accordance with the engineering services agreement and will not exceed \$39,000, without written authorization by the Administrator. (Note: the District will likely be reimbursed \$5,000 through a State Grant Agreement with MCES) Table 1 provides a summary of the anticipated cost for major tasks associated with scope of services described above. Attachment 1 provides additional detail of the anticipated cost for each task and subtask, schedule, and laboratory costs.

Table 1. Summary of Task Order ## Anticipated Cost for Major Tasks

Task	Description	Labor Costs ¹	Other Expenses ²	Total Cost	
Α	Operate and Maintain the Purgatory Cr. WOMP Station at Pioneer Trail in Cooperation with MCES for 2019	\$13,600	\$1,450	\$15,050	
В	Operate and Maintain the Purgatory Cr. Monitoring Station at Valley View Rd for 2019	\$16,300	\$7,650	\$23,950	
Task Order ## Total					

¹Labor costs will be billed on an hourly rate per time spent on each task, but will not exceed amount shown without written authorization. District staff will be responsible for monthly grab sample collection, delivery to lab and data management. ²Other expenses billed as costs incur, including purchase of new equipment, mileage, laboratory charges (if applicable), equipment rental if needed, and supplies as necessary.

5. Schedule and Assumptions Upon Which Schedule is Based

a) TASK A: The project schedule is included as part of Attachment 1. The Pioneer Trail Station is operated and maintained year-round. b) TASK B: The project schedule is included as part of Attachment 1. This schedule is weather dependent; for example, a late spring and ice conditions could push back Mar-2019 tasks to April-2019.

IN WITNESS WHEREOF, intending to be legally bound, the parties hereto execute and deliver this Agreement.

By	RILEY PURGATORY BLUFF CREEK WATERSHED DISTRIC
lts	lts
Date:	Date:
	APPROVED AS TO FORM & EXECUTION

Task/Phase	Subtask	Description	Labor Costs ¹	Other Expenses ²	Total Cost	Schedule
asily i mase			医器件经从 市			
		Bi-Weekly Grab Samples: support RPBCWD staff as part of a collaborative sampling effort,				
<u></u>	1	coordinate with MCES staff, and manage data and files. RPBCWD staff will typically collect the				
- L		samples.	\$500.00	\$50.00	\$550.00	Jan to Dec-19
one.						
<u>P.</u>		St. 5 t S I II . t II . t I				
E Ø		Storm Event Samples: collect samples during storm events (assumes sampling begins in March and 15 sampleable storm events of > 0.5" of rain occur). Note: In 2019 MCES will continue to				
atio	2	refine the sample collection method using the new system. A new sampler, datalogger,				
\$		modem, etc. were installed last year as MCES transitioned from composite auto-sampling to				
Σ		discrete auto-sampling for storm events at this site. This will include continued training for				
×		cooperators on how to operate the new system.	\$5,600.00	\$600.00	\$6,200.00	Mar to Nov-19
ج بي				7 3 5		
Task A tory Cr	_	Maintenance: verify/calibrate sensors, troubleshoot problem issues				
7 gat	3	as necessary, prepare for monitoring season in spring, and winterize station.	\$3,000.00	\$300.00	\$3,300.00	Jan to Dec-19
Per	1 - 2 - 1					
the	4	Data management: download and review data throughout monitoring period. Assist MCES				
ä.		with year's end data QA/QC and summary.	\$1,500.00	\$0.00	\$1,500.00	Jan to Dec-19
Task A Operate and Maintain the Purgatory Cr. WOMP Station at Pioneer Trail				Control of		
Σ	20.0	Contingency: miscellaneous tasks, which may include flow measurements as needed, training				
anc	5	on new equipment, and meetings with MCES and RPBCWD staff regarding the transition to the	4	A	40 500 00	law to D
ate		new sampling program.	\$3,000.00	\$500.00	\$3,500.00	Jan to Dec-19
ber			\$13,600.00	\$1,450.00		
O	Subtotals Task A Sub	statals	\$15,600.00	\$1,430.00	\$15,050.00	
	Task A Sul	(Cotal)				
	1	Bi-weekly Grab Samples: support RPBCWD staff as part of a collaborative sampling effort and				
n B		manage data/files. RPBCWD staff will typically collect the samples.	\$500.00	\$50.00	\$550.00	Mar to Dec-19
iţ						
lonit	2	Storm event samples: collect composite samples during storm events (assumes sampling				
<u>بر</u>		begins in March and 15 sampleable storm events of > 0.5" of rain occur).	\$5,600.00	\$600.00	\$6,200.00	Mar to Nov-19
Z Z						
ato iew	3	Maintenance: verify/calibrate sensors, troubleshoot problem issues		****	44 400 00	I t- D 10
B ourg	_	as necessary, prepare for monitoring season in spring, and winterize station.	\$4,000.00	\$400.00	\$4,400.00	Jan to Dec-19
Task B Maintain the Purgatory C Station at Valley View Rd.		Rating Curve: perform stage-discharge measurements to verify rating curve is accurate and				
n th	4	update rating curve if needed.	\$2,700.00	\$300.00	\$3,000.00	Mar to Dec-19
ntai ion	Ten de la constitución de la con	appare rating curve in needed.	\$2,700.00	\$300.00	45,555.65	
Mail		Data management: download and review data throughout monitoring period.				
Б 2	5	Year's end QA/QC tasks and data summary.	\$3,500.00	\$0.00	\$3,500.00	Jan to Dec-19
o a						
Task B Operate and Maintain the Purgatory Cr. Monitoring Station at Valley View Rd.						
ô.						
	Subtotals		\$16,300.00	\$1,350.00		
EN STONE OF THE	Task B - Su	intotals		No Restauration	\$17,650.00	I VSCRE A STA
	1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Analyte	Lab Test Cost	No. of Samples	Total Cost	
		Alkalinity	\$13.50		\$270.00	
					\$847.50	
			\$28.25	30		
for		Bacteria, E. Coli	\$28.25 \$18.00		\$360.00	
sts for				20	\$360.00 \$146.25	
g Costs for		Bacteria, E. Coli Carbon, Total Organic	\$18.00	20 15	\$146.25 \$630.00	
ting Costs for on		Bacteria, E. Coli Carbon, Total Organic Chemical Oxygen Demand	\$18.00 \$9.75 \$15.75 \$15.50	20 15 40 25	\$146.25 \$630.00 \$387.50	
Testing Costs for tation		Bacteria, E. Coli Carbon, Total Organic Chemical Oxygen Demand Chloride	\$18.00 \$9.75 \$15.75 \$15.50 \$15.25	20 15 40 25 40	\$146.25 \$630.00 \$387.50 \$610.00	
k B ory Testing Costs for .w Station		Bacteria, E. Coli Carbon, Total Organic Chemical Oxygen Demand Chloride Chlorophyll-a Dissolved Phosphorus Hardness	\$18.00 \$9.75 \$15.75 \$15.50 \$15.25 \$8.25	20 15 40 25 40	\$146.25 \$630.00 \$387.50 \$610.00 \$82.50	
Task B oratory Testing Costs for View Station		Bacteria, E. Coli Carbon, Total Organic Chemical Oxygen Demand Chloride Chlorophyll-a Dissolved Phosphorus Hardness Metals	\$18.00 \$9.75 \$15.75 \$15.50 \$15.25 \$8.25 \$36.00	20 15 40 25 40 10	\$146.25 \$630.00 \$387.50 \$610.00 \$82.50 \$144.00	
Task B aboratory Testing Costs for lley View Station		Bacteria, E. Coli Carbon, Total Organic Chemical Oxygen Demand Chloride Chlorophyll-a Dissolved Phosphorus Hardness Metals Nitrogen, Ammonia	\$18.00 \$9.75 \$15.75 \$15.50 \$15.25 \$8.25 \$36.00 \$8.25	20 15 40 25 40 10 4	\$146.25 \$630.00 \$387.50 \$610.00 \$82.50 \$144.00 \$330.00	
Task B ed Laboratory Testing Costs for Valley View Station		Bacteria, E. Coli Carbon, Total Organic Chemical Oxygen Demand Chloride Chlorophyll-a Dissolved Phosphorus Hardness Metals Nitrogen, Ammonia Nitrogen, Kjeldahl and Total Phosphorus	\$18.00 \$9.75 \$15.75 \$15.50 \$15.25 \$8.25 \$36.00 \$8.25 \$15.25	20 15 40 25 40 10 4 40	\$146.25 \$630.00 \$387.50 \$610.00 \$82.50 \$144.00 \$330.00 \$610.00	
Task B pated Laboratory Testing Costs for Valley View Station		Bacteria, E. Coli Carbon, Total Organic Chemical Oxygen Demand Chloride Chlorophyll-a Dissolved Phosphorus Hardness Metals Nitrogen, Ammonia Nitrogen, Kjeldahl and Total Phosphorus Nitrogen, Nitrate+Nitrite	\$18.00 \$9.75 \$15.75 \$15.50 \$15.25 \$8.25 \$36.00 \$8.25 \$15.25	20 15 40 25 40 10 4 40 40	\$146.25 \$630.00 \$387.50 \$610.00 \$82.50 \$144.00 \$330.00 \$610.00 \$310.00	
Task B ticipated Laboratory Testing Costs for Valley View Station		Bacteria, E. Coli Carbon, Total Organic Chemical Oxygen Demand Chloride Chlorophyll-a Dissolved Phosphorus Hardness Metals Nitrogen, Ammonia Nitrogen, Kjeldahl and Total Phosphorus Nitrogen, Nitrate+Nitrite Phosphorus, orthophosphate	\$18.00 \$9.75 \$15.75 \$15.50 \$15.25 \$8.25 \$36.00 \$8.25 \$15.25 \$15.25	20 15 40 25 40 10 4 40 40 40	\$146.25 \$630.00 \$387.50 \$610.00 \$82.50 \$144.00 \$330.00 \$610.00 \$310.00 \$620.00	
Task B Anticipated Laboratory Testing Costs for Valley View Station		Bacteria, E. Coli Carbon, Total Organic Chemical Oxygen Demand Chloride Chlorophyll-a Dissolved Phosphorus Hardness Metals Nitrogen, Ammonia Nitrogen, Kjeldahl and Total Phosphorus Nitrogen, Nitrate+Nitrite Phosphorus, orthophosphate Solids, Total and Volatile Suspended	\$18.00 \$9.75 \$15.75 \$15.55 \$15.25 \$8.25 \$36.00 \$8.25 \$15.25 \$7.75 \$15.50	20 15 40 25 40 10 4 40 40 40 40	\$146.25 \$630.00 \$387.50 \$610.00 \$82.50 \$144.00 \$330.00 \$610.00 \$310.00 \$490.00	
Task B Anticipated Laboratory Testing Costs for Valley View Station		Bacteria, E. Coli Carbon, Total Organic Chemical Oxygen Demand Chloride Chlorophyll-a Dissolved Phosphorus Hardness Metals Nitrogen, Ammonia Nitrogen, Kyeldahl and Total Phosphorus Nitrogen, Nitrate+Nitrite Phosphorus, orthophosphate Solids, Total and Volatile Suspended Sulfate	\$18.00 \$9.75 \$15.75 \$15.55 \$15.25 \$8.25 \$36.00 \$8.25 \$15.25 \$15.25 \$15.25 \$15.30	20 15 40 25 40 10 4 40 40 40 40 40 40 20	\$146.25 \$630.00 \$387.50 \$610.00 \$82.50 \$144.00 \$330.00 \$610.00 \$310.00 \$620.00 \$490.00	
Task B Anticipated Laboratory Testing Costs for Valley View Station		Bacteria, E. Coli Carbon, Total Organic Chemical Oxygen Demand Chloride Chlorophyll-a Dissolved Phosphorus Hardness Metals Nitrogen, Ammonia Nitrogen, Kjeldahl and Total Phosphorus Nitrogen, Nitrate+Nitrite Phosphorus, orthophosphate Solids, Total and Volatile Suspended	\$18.00 \$9.75 \$15.75 \$15.55 \$15.25 \$8.25 \$36.00 \$8.25 \$15.25 \$7.75 \$15.50	20 15 40 25 40 10 4 40 40 40 40 40 40 20	\$146.25 \$630.00 \$387.50 \$610.00 \$82.50 \$144.00 \$330.00 \$610.00 \$310.00 \$490.00	Budgeting

¹Labor costs will be billed on an hourly rate per time spent on each task, but will not exceed amount shown without written authorization.

Other expenses billed as costs incur, including purchase of new equipment, mileage, equipment rental if needed, and supplies as necessary.

		4	



February 22, 2019

Claire Bleser
District Administrator
Riley Purgatory Bluff Creek Watershed District
18681 Lake Drive E.
Chanhassen, Minnesota 55317

Dear Claire:

Enclosed please find the checks and Treasurer's Report for Riley Purgatory Bluff Creek Watershed District for the one month ending January 31, 2019.

Please examine these statements and if you have any questions or need additional copies, please call me.

Sincerely,

REDPATH AND COMPANY, LTD.

Went Ails

Mark C. Gibbs, CPA

Enclosure



To The Board of Managers Riley Purgatory Bluff Creek Watershed District Chanhassen, Minnesota

Accountant's Opinion

The Riley Purgatory Bluff Creek Watershed District is responsible for the accompanying January 31, 2019 Treasurer's Report in the prescribed form. We have performed a compilation engagement in accordance with the Statements on Standards for Accounting and Review promulgated by the Accounting and Review Services Committee of AICPA. We did not audit or review the Treasurer's Report nor were we required to perform any procedures to verify the accuracy or completeness of the information provided by the Riley Purgatory Bluff Creek Watershed District. Accordingly, we do not express an opinion, a conclusion, nor provide any form of assurance on the Treasurer's Report.

Reporting Process

The Treasurer's Report is presented in a prescribed form mandated by the Board of Managers and is not intended to be a presentation in accordance with accounting principles generally accepted in the United States of America. The reason the Board of Managers mandates a prescribed form instead of GAAP (Generally Accepted Accounting Principles) is this format gives the Board of Managers the financial information they need to make informed decisions as to the finances of the watershed.

GAAP basis reports would require certain reporting formats, adjustments to accrual basis and supplementary schedules to give the Board of Managers information they need, making GAAP reporting on a monthly basis extremely cost prohibitive. An independent auditing firm is retained each year to perform a full audit and issue an audited GAAP basis report. This annual report is submitted to the Minnesota State Auditor, as required by Statute, and to the Board of Water and Soil Resources.

The Treasurer's Report is presented on a modified accrual basis of accounting. Expenditures are accounted for when incurred. For example, payments listed on the Cash Disbursements report are included as expenses in the Treasurer's Report even though the actual payment is made subsequently. Revenues are accounted for on a cash basis and only reflected in the month received. legeth and Company, LH.

REDPATH AND COMPANY, LTD.

St. Paul, Minnesota February 22, 2019

RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT

Treasurers Report

January 31, 2019

REPORT INDEX

Page #	Report Name
1	Cash Disbursements
2	Fund Performance Analysis – Table 1
3	Multi-Year Project Performance Analysis – Table 2
4	Balance Sheet
5	Klein Bank VISA Activity

RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT Cash Disbursements January 31, 2019

Accounts Payable:

Check #	Payee	Amount
4722	Barr Engineering	\$31,877.94
4723	CenterPoint Energy	1,313.51
4724	CenturyLink	199.89
4725	City of Chanhassen	25,000.00
4726	Coverall of the Twin Cities	373.67
4727	CSM Financial, LLC	7,751.68
4728	Dunn & Semington, LLC	62.00
4729	ECM Publishers, Inc.	1,664.40
4730	Eden Prairie Chamber of Commerce	50.00
4731	Freshwater Society	1,000.00
4732	Dean C. Hansen	1,000.00
4733	HDR Engineering, Inc.	2,105.16
4734	HealthPartners	4,917.33
4735	Houston Engineering	404.25
4736	Iron Mountain	89.95
4737	Lincoln National Life Insurance	448.21
4738	Metro Sales, Inc.	441.71
4739	M.W. Wireworks, Inc.	775.00
4740	Philips HealthCare	1,277.92
4741	Purchase Power	135.95
4742	Redpath & Company	2,483.25
4743	RMB Environmental Laboratories	615.00
4744	Smith Partners	14,089.07
4745	Southwest News Media	1,655.10
4746	Xcel Energy	609.40
	Total Accounts Payable:	\$100,340.39
Payroll Disbursements:		
	Payroll Processing Fee	180.52
	Employee Salaries	33,505.82
	Employer Payroll Taxes	2,648.50
	Employer Benefits (H.S.A. Match)	525.00
	Employee Benefit Deductions	(396.26)
	Staff Expense Reimbursements	58.62
	PERA Match	2,512.92
	Total Payroll Disbursements:	\$39,035.12
	January, 2019 Expenditures paid on 2/6/19:	15,754.46
	2018 Expenditure (City of Chanhassen)	(25,000.00)
TOTAL DISBURSEMEN	TS:	\$130,129.97

Memos

The 2019 mileage rate is .58 per mile. The 2018 rate was .54.5 Klein Bank VISA will be paid on-line.

RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT Fund Performance Analysis - Table 1 January 31, 2019

	2019 Budget	Fund Transfers	Revised 2019 Budget	Current Month	Year-to-Date	Year-to Date Percent of Budge
REVENUES						
Plan Implementation Levy	\$3,602,500.00		\$3,602,500.00	-	-	0.00%
Permit	50,000.00	-	50,000.00	3,050.00	3,050.00	6.10%
Grant Income	708,079.00	-	708,079.00	-		0.00%
Investment Income	35,000.00	-	35,000.00	15,134.07	15,134.07	43.24%
Past Levies	2,511,789.00	-	2,511,789.00	*	-	0.00%
Partner Funds	432,000.00		432,000.00			0.00%
TOTAL REVENUE	\$7,339,368.00	\$0.00	\$7,339,368.00	\$18,184.07	\$18,184.07	0.25%
EXPENDITURES						
Administration			42 222 22	2 770 50	2 770 60	6.60%
Accounting and Audit	42,000.00	-	42,000.00	2,770.60	2,770.60	
Advisory Committees	5,000.00	-	5,000.00	-		0.00%
Insurance and bonds	20,000.00		20,000.00	7.040.00	7.042.00	0.00%
Engineering Services	106,000.00		106,000.00	7,842.00	7,842.00	7.40%
Legal Services	78,000.00	F 1	78,000.00	10,504.82	10,504.82	13.47%
Manager Per Diem/Expense	20,000.00	-	20,000.00		-	0.00%
Dues and Publications	12,000.00		12,000.00	3,319.50	3,319.50	27.66%
Office Cost	144,000.00	-	144,000.00	19,181.47	19,181.47	13.32%
Permit Review and Inspection	135,000.00		135,000.00	18,180.53	18,180.53	13.47%
Recording Services	10,000.00	- 44	10,000.00	993.19	993.19	9.93%
Staff Cost	550,000.00	- I <u>- I - I - I - I - I - I - I - I - I</u>	550,000.00	49,709.62	49,709.62	9.04%
Subtotal	\$1,122,000.00	\$0.00	\$1,122,000.00	\$112,501.73	\$112,501.73	10.03%
Programs and Projects				7 . + 3		F-117.4
District Wide				000.40	202.12	7.000
10-year Management Plan	5,000.00		5,000.00	383.13	383.13	7.66%
AIS Inspection and early response	75,000.00		75,000.00	425.95	425.95	0.57%
Cost-share	267,193.00		267,193.00	404.25	404.25	0.15%
Creek Restoration Action Strategies Phase						
Data Collection and Monitoring	186,000.00	-	186,000.00	8,576.56	8,576.56	4.61%
District Wide Floodplain Evaluation - Atlas 14/SMM model	30,000.00	- 3	30,000.00		0.00	0.00%
Education and Outreach	119,000.00		119,000.00	3,422.68	3,422.68	2.88%
Plant Restoration - U of M	42,000.00	-	42,000.00		-	0.00%
Repair and Maintenance Fund *	177,005.00		177,005.00	-		0.00%
Wetland Management*	145,272.00	— III	145,272.00	-	4 6 6 6	0.00%
District Groundwater Assessment	Pr 77' F.	-		-		
Groundwater Conservation*	130,000.00		130,000.00			0.00%
Lake Vegetation Implementation	75,000.00		75,000.00	-		0.00%
Opportunity Project*	200,000.00		200,000.00			0.00%
	10,000.00		10,000.00			0.00%
TMDL - MPCA	86,092.00		86,092.00	اديكا المعم		0.00%
Stormwater Ponds - U of M			120,800.00	1,000.00	1,000.00	0.83%
Hennepin County Chloride Initiative	120,800.00		217,209.00	1,000.00	1,000.00	0.00%
Lower Minnesota Chloride Cost-Share	217,209.00	÷0.00		\$14,212.57	\$14,212.57	0.75%
Subtotal Bluff Creek	\$1,885,571.00	\$0.00	\$1,885,571.00	\$14,212.57	\$14,212.57	0.7570
Bluff Creek Tributary*	291,091.00		291,091.00	325.00	325.00	0.11%
Chanhassen High School *	41,905.00		41,905.00	26.00	26.00	0.06%
Wetland Restoration at Pioneer	561,870.00		561,870.00		2	0.00%
Subtotal	\$894,866.00	\$0.00	\$894,866.00	\$351.00	\$351.00	0.04%
Riley Creek	- 7034,000.00	40.00	400 1,000.00			
Lake Riley - Alum Treatment*	5,000.00		5,000.00		· · · · · · · ·	0.00%
Lake Susan Water Quality Improvement Phase 2 *	13,420.00		13,420.00		T-1-1	0.00%
Rice Marsh Lake in-lake phosphorus load	73,983.00		73,983.00	1 2 2	-	0.00%
Rice Marsh Lake Water Quality Improvement Phase 1	150,000.00		150,000.00			0.00%
Riley Creek Restoration (Reach E and D3)	1,680,562.00		1,680,562.00	436.17	436.17	0.03%
Lake Riley & Rice Marsh Lake Subwatershed Assessment	72,500.00		72,500.00		_	0.00%
Upper Riley Creek Stabilization	425,000.00	- 1 - 1	425,000.00	rd PLUG		0.00%
Subtotal	\$2,420,465.00	\$0.00	\$2,420,465.00	\$436.17	\$436.17	0.02%
Purgatory Creek	F0 000		F0 000 C0	+1-4-1-1		0.00%
Purgatory Creek Rec Area- Berm/retention area - feasibility/design	50,000.00		50,000.00			
Lotus Lake in-lake phosphorus load control	105,772.00		105,772.00	-		0.00%
Silver Lake Restoration - Feasibility Phase 1	168,013.00		168,013.00			0.00%
Scenic Heights	111,226.00	-	111,226.00	0.00		0.00%
Hyland Lake in-lake phosphorus load control	120,000.00		120,000.00			0.00%
Mitchell Lake Subwatershed Assessment	87,500.00		87,500.00		•	0.00%
Duck Lake watershed load	213,955.00		213,955.00	2,628.50	2,628.50	
Subtotal	\$856,466.00	\$0.00	\$856,466.00	\$2,628.50	\$2,628.50	0.31%
Reserve	\$160,000.00	\$0.00	160,000.00		-	0.00%
TOTAL EXPENDITURE	\$7,339,368.00	\$0.00	\$7,339,368.00	\$130,129.97	\$130,129.97	1.77%
EXCESS REVENUES OVER (UNDER) EXPENDITURES	\$0.00	\$0.00	\$0.00	(\$111,945.90)	(\$111,945.90)	

^{*}Denotes Multi-Year Project - See Table 2 for details

RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT Muti-Year Project Performance Analysis - Table 2 January 31, 2019

		CNI	FIINDING SOLIBCE		Month Ended	200		
	Total Project	District funds	Partner Fund	Grants	01/31/19	To-Date	Costs	Remaining
Programs and Projects							2000	Weillelling Weillelling
District Wide								
District Wide Floodplain Evaluation - Atlas 14/SMM model	30,000.00	30,000.00	ı					30,000,00
Repair and Maintenance Fund	202,005.00	177,005.00		,			25.000.00	177,005,00
Wetland Management	150,000.00	150,000.00	٠		,	,	29.728.31	120 271 69
Groundwater Conservation	130,000.00	130,000.00	•					130.000.00
Opportunity Project*	200,000.00	200,000.00			1			200,000,000
Hennepin County Chloride Initiative	120,800.00	19,000.00		101,800.00	1.000.00	1.000.00	1,000,00	119 800 00
Lower Minnesota Chloride Cost-Share	217,209.00	20,000.00		197,209.00		-	-	217.209.00
Stormwater Ponds - U of M	86,092.00	44,092.00	42,000.00	í	,		1	86.092.00
Subtotal	\$1,136,106.00	\$770,097.00	\$42,000.00	\$299,009.00	\$1,000.00	\$1,000.00	\$55,728.31	1.080.377.69
Bluff Creek								
Bluff Creek Tributary*	292,362.00	242,362.00	50,000.00		325.00	325.00	95.984.54	196.377.46
Chanhassen High School *	208,000.00	208,000.00	100,000.00	200,000.00	26.00	26.00	451,121.10	56.878.90
Wetland Restoration at Pioneer	561,870.00	450,000.00	0.00	111,870.00		,		561.870.00
Subtotal	\$1,362,232.00	\$900,362.00	\$150,000.00	\$311,870.00	\$351.00	\$351.00	\$547.105.64	\$815.126.36
Riley Creek								
Lake Riley - Alum Treatment 1st dose *	260,000.00	260,000.00					254.999.83	5 000 17
Lake Susan Water Quality Improvement Phase 2 *	662,491.00	330,000.00	99,091.00	233,400.00		,	649.070.80	13.420.20
Rice Marsh Lake in-lake phosphorus load	150,000.00	150,000.00				,	76.017.94	73 982 06
Riley Creek Restoration (Reach E and D3) *	1,565,000.00	1,265,000.00	300,000.00		436.17	436.17	180,931.32	1.384.068.68
Lake Riley & Rice Marsh Lake Subwatershed Assessment	72,500.00	12,500.00	5,000.00	55,000.00				72 500 00
Upper Riley Creek Stabilization	450,000.00	450,000.00	0.00					450,000,00
Subtotal	\$3,159,991.00	\$2,467,500.00	\$404,091.00	\$288,400.00	\$436.17	\$436.17	\$1,161,019.89	\$1.998.971.11
Purgatory Creek								
Purgatory Creek Rec Area- Berm/retention area - feasibility/design	20,000.00	20,000.00	í					50,000,00
Lotus Lake in-lake phosphorus load control	345,000.00	345,000.00			,		239.227.04	105.772.96
Scenic Heights	260,000.00	165,000.00	45,000.00	50,000.00	à		148.773.76	111,226.24
Mitchell Lake Subwatershed Assessment	87,500.00	12,500.00	5,000.00	70,000.00	1			87,500.00
Duck Lake watershed load	220,000.00	220,000.00			2,628.50	2,628.50	8,673.00	211,327.00
Subtotal	\$962,500.00	\$792,500.00	\$50,000.00	\$120,000.00	\$2,628.50	\$2,628.50	\$396,673.80	\$565,826.20
Total Multi-Year Project Costs	\$6.620.829.00	\$4 930 459 00	\$646,001,00	61 010 270 00	64 447 67	ii		
		X	00.150,040¢	91,013,279.00	\$4,415.6/	\$4,415.6/	\$2,160,527.64	\$4,460,301.36

Riley Purgatory Bluff Creek Watershed District Balance Sheet As of January 31, 2019

ASSETS

Current Assets

	A001
General Checking-Klein	\$579,723.04
Checking-Klein/BMW	1,815,862.69
Investments-FMV	(2,513.77)
Investments-Standing Cash	38,866.77
Investments-Wells Fargo	3,393,642.67
Accrued Investment Interest	8,670.64
Due From Other Governments	135,722.75
Taxes Receivable-Delinquent	20,556.16
Pre-Paid Expense	38,906.63
Security Deposits	7,244.00

Total Current Assets:

\$6,036,681.58

LIABILITIES AND CAPITAL

Current Liabilities

Accounts Payable	\$163,946.79
Retainage Payable	13,469.38
Salaries Payable	17,844.75
Permits & Sureties Payable	761,416.00
Deferred Revenue	20,556.16
Unavailable Revenue	6,666.16

Total Current Liabilities:

\$983,899.24

Capital

Fund Balance-General	\$4,183,185.70
Net Income	869,596.64

Total Capital

\$5,052,782.34

Total Liabilities & Capital

\$6,036,681.58

RILEY PURGTORY BLUFF CREEK WATERSHED DISTRICT Klein Bank VISA Activity January 31, 2019

DATE	PURCHASED FROM	AMOUNT	DESCRIPTION	ACCOUNT #	RECEIPT
01/01/10	NAMES OF THE PARTY				
01/21/19	MAWD		Conference Registration	10-00-4010	Y
01/21/19	MAWD		Conference Registration	10-00-4010	Y
01/28/19	Crumb		CAC Meeting	10-00-4800	N
01/29/19	Randy's		Trash Expense	10-00-4215	N
01/30/19	Chaska Parks & Recreation		Staff Teambuilding	10-00-4321	Y
01/31/19	Target		Office Supplies	10-00-4200	Y
01/31/19	Office Depot		Office Supplies	10-00-4200	Y
02/05/19	Adobe		Software	10-00-4203	Y
02/06/19	Kowalski's		Board Meeting Expense	10-00-4010	Y
02/11/19	Microsoft	127.89	Software	10-00-4203	Y
		\$1,466.99	General Administration Total		
01/23/19	Forestry Supplies*	(204.84)	Data Collection Supplies	20-05-4201	V
01/24/19	Amazon		Data Collection Resources	20-05-4260	Y Y
01/25/19	Facebook		Event Promotion	20-03-4260	Y
01/29/19	Freshwater Society		Salt Symposium Registration	20-08-42/5	Y
01/29/19	Freshwater Society		Salt Symposium Registration	20-08-4265	Y
01/31/19	SuperAmerica		Gas for Vehicle	20-08-4263	Y
01/31/19	Home Depot		Data Collection Supplies	20-05-4322	Y
02/01/19	Home Depot		Event Supplies	20-03-4201	Y
02/01/19	Office Depot		Event Supplies Event Supplies	20-08-4205	Y
02/11/19	Kwik Trip		Gas for Vehicle	20-05-4322	Y
02/12/19	Eden Prairie Chamber of Commerce		Membership Dues	20-03-4322	Y
		\$1,028.32	District-Wide Total		
		\$2,495.31	GRAND TOTAL		

^{*}Correction from December, 2018 (listed twice on detail).



18681 Lake Drive East Chanhassen, MN 55317 952-607-6512 www.rpbcwd.org

From: Claire Bleser

To: Board of Managers

Re: 9c Governance Committee

Dear Managers,

I recommend that the 2019 Governance Committee review the Fund Balance Policy and Investment Policy. These proposed Policies are an update to the Governance Manual.

Staff Recommendation

The Board of Managers direct the Governance Committee to review with Staff the Fund Balance Update and Investment Deposit Policies and report back to the Board of Managers.

		*
	*	

Local Government Resolution

BE IT RESOLVED that the <u>Riley Purgatory Bluff Creek Watershed District</u>, hereinafter referred to as the "Applicant" act as legal sponsor for the project contained in the <u>Flood Damage Reduction Grant Assistance Program Application</u> to be submitted on <u>March 4, 2019</u> and that <u>Claire Bleser</u>, <u>Administrator</u> is hereby authorized to apply for the Department of Natural Resources for funding of this project on behalf of the Applicant.

BE IT FURTHER RESOLVED that the Applicant has the legal authority to apply for financial assistance, and the institutional, administrative, and managerial capability to ensure adequate acquisition, maintenance and protection of the proposed project.

BE IT FURTHER RESOLVED that the Applicant has the financial capability to provide any required matching funds.

BE IT FURTHER RESOLVED that the Applicant has not incurred any costs and has not entered into any written agreements to purchase property proposed by this project.

BE IT FURTHER RESOLVED that the source of Applicant's matching funds shall not include other State funds.

BE IT FURTHER RESOLVED that the source of Applicant's matching funds shall be \$157,250 as identified in the 2019 Annual Budget under the line item "Wetland Restoration and Flood Mitigation."

BE IT FURTHER RESOLVED that the Applicant hereby pledges to complete the project or phase if it exceeds the total funding provided by the Department of Natural Resources and any required local match.

BE IT FURTHER RESOLVED that the Applicant has not violated any Federal, State, or local laws pertaining to fraud, bribery, graft, kickbacks, collusion, conflict of interest or other unlawful or corrupt practice.

BE IT FURTHER RESOLVED that upon approval of its application by the state, the Applicant may enter into an agreement with the State of Minnesota for the above- references project, and that the Applicant certifies that it will comply with all applicable laws and regulations as stated in the contract agreement.

NOW, THEREFORE BE IT RESOLVED that <u>District Administrator</u> is hereby authorized to execute such agreements as are necessary to implement the project on behalf of the applicant.

I CERTIFY THAT the above resolution was adopted by the <u>Board of Managers</u> of the <u>Riley Purgatory Bluff Creek Watershed District</u> on <u>March 1, 2019</u>.

SIGNED:	WITNESSED:
(Signature)	(Signature)
(Title)	(Title)
(Date)	(Date)

RESOLUTION NO. 19-008

RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT BOARD OF MANAGERS

RESOLUTION TO ADOPT ADJUSTMENT TO ADMINISTRATION OF DISTRICT COST-SHARE PROGRAM

offered the following resolution and moved its adoption, seconded by

Manag	ger:	
WHEI	REAS the Riley Purgatory Bluff Creek Watershed District (District) is responsible for	
	preparation, adoption and implementation of a watershed management plan for the	Rile

Manager

- WHEREAS the Riley Purgatory Bluff Creek Watershed District (District) is responsible for the preparation, adoption and implementation of a watershed management plan for the Riley Purgatory Bluff Creek watershed pursuant to Minnesota Statutes section 103B.231, subdivisions 3 through 10, directed by the District's third-generation Watershed Management Plan that achieves the purposes of Minnesota Statutes Ch. 103B and 103D;
- WHEREAS in 2018 the District adopted its 10-year watershed plan to guide its management of activities within the watershed from 2018 2028 in conformance with Minnesota Statutes Ch. 103B and 103D, and Minn. R. 8410; this plan includes the District's Cost-Share Program at Plan Ch. 9.7;
- WHEREAS the Board of Managers seeks to adjust the administration of the District's Cost-Share Program by delegating review and approval of cost share applications for grants of \$10,000 or less to the administrator;
- WHEREAS pursuant to Minn. R. 8410.0140, subp. 1a(F) the Board of Water and Soil Resources has confirmed that the Board's delegation of review and approval of cost share applications for grants of \$10,000 or less to the administrator is an adjustment to how the District carries out program activities within its discretion;
- WHEREAS the Board of Managers finds that the proposed change provides a helpful administrative revision to the District's cost-share program by delegating authority for approval of smaller dollar-amount projects to the administrator;
- **NOW, THEREFORE, BE IT RESOLVED** that the Riley Purgatory Bluff Creek Watershed District Board of Managers hereby adopts the attached adjustment to the District's cost-share program in accordance with Minnesota Rules Part 8410.0140, and authorizes its immediate distribution to the distribution list of agencies and individuals who received a copy of the District's 2018-2028 10-year plan;

The question was on the adoption	of the resolution and there v	vere yeas and	nays as
follows:		·—— •	

	<u>Yea</u>	Nay	<u>Abstain</u>	Absent
CRAFTON KOCH PEDERSEN WARD ZIEGLER				
Upon vote, the chair declare	ed the resolution	1	_·	
Dated:	·			
				,
		Dav	id Ziegler, Secretary	
	* * * *	* * * *	* * *	
I, David Ziegler, se hereby certify that I have c appears of record and on transcription thereof.	ompared the ab	ove resolution		thereof as the same
IN TESTIMONY W	HEREOF, I set	my hand this	day of,	2019.
		Dav	id Ziegler, Secretary	

9.7 Cost-Share Program

The Cost Share Program provides funding and technical assistance for projects that protect and conserve water resources and increases public awareness of the vulnerability of these resources and solutions to improve them. The program seeks to decrease barriers to - and incentivize the implementation of - best management practices, and shift cultural norms toward making these practices common-place. The Cost Share Program supports several of the District's Goals and Strategies as listed in Table Error! No text of specified style in document.-1.

Table Error! No text of specified style in document.-1 Supported by the Cost Share Program Goal and Strategies

Goal	Strategy
EO3 (Education & Outreach)	EO S9. The District will continue to implement its cost-share program to provide incentive for residents, businesses, institutions and local governmental units to implement watershed best management practices.
WQual1, WQual2, & WQual3	WQual S1. The District seeks to minimize the negative impacts of erosion and sedimentation through the District's regulatory, education and outreach, and incentive programs.
(Water Quality)	WQual S3. The District encourages cities and developers to seek opportunities to incorporate habitat protection or enhancement into development and redevelopment projects.
	WQual S6. The District will seek opportunities to establish and preserve natural corridors for wildlife habitat and migration.
	WQual S7. The District will promote the use of natural materials and bioengineering for the maintenance and restoration of shorelines and streambanks where appropriate.
	WQual S11. The District recognizes the multiple benefits of vegetated buffers and promotes the use of vegetated buffers around all waterbodies.
	WQual S12. The District will assist and cooperate with cities, MPCA, MDNR, MnDOT, other watershed and other stakeholders in implementing projects or other management actions based on the Minnesota Pollution Control Agency's Twin Cities Metro Chloride TMDL.
	WQual S13. The District will continue to minimize pollutant loading to water resources through implementation of the District's capital improvement, regulatory, education and outreach, and incentive programs.
	WQual S15. The District will cooperate with other entities to investigate treatment effectiveness of emerging practices.
Ground1 (Groundwater)	Ground S1. The District will promote the conservation of groundwater resources through its education and outreach program and will work with cities to encourage conservation practices (e.g. water reuse).
WQuan2 (Water	WQuan S1. The District will preserve and enhance the natural function of the floodplain and maintain floodplain storage volume.
Quantity)	WQuan S2. The District will promote strategies that minimize baseflow impacts.
	WQuan S3. The District will continue to promote infiltration, where feasible, as a best

Goal	Strategy
	management practice to reduce runoff volume, improve water quality, and promote aquifer recharge.
	WQuan S7. The District promotes/encourages cities and developers to implement Low Impact Development (LID) practices and will work with cities to reduce regulatory barriers to LID practices.
	WQuan S9. The District will work with cities and other stakeholders to encourage conservation practices (e.g. water reuse) to protect creeks, lakes and wetlands.

The cost-share program is organized into three tiers by stakeholder group:

- 1. Local Government and Commercial Facilities aimed at building capacity for installation of water-quality improvement practices in conjunction with projects such as municipal street reconstruction, stormsewer retrofits, school property improvements and commercial property projects.
- 2. Lake Associations, Homeowners Associations and Nonprofits designed to tap into the knowledge these organizations have regarding opportunities and priorities for stormwater-management in their areas, and their potential to ensure installation of shoreline and streambank restorations, rain gardens, filter strips, pervious surfaces and restoration of wetlands and habitat.
- 3. Single-Family Residential Projects designed to support community member interest in protecting clean water through restoration of residential shorelines and streambanks, installation of filter and buffer strips, restoration of wetlands and habitat, construction of rain gardens and use of pervious surfaces.

Participants contribute in-kind (labor or materials) and/or monetary resources to their projects and commit to long-term maintenance. They sign a funding agreement detailing the location and specifications of the project. The District provides technical assistance in review of project design and inspection to help ensure that best practices are properly and effectively constructed.

Applications for cost-sharing will be accepted on an annual a regular basis. After being awarded a grant, participants have one year to complete the project or request an extension. Funds are disbursed to participants after documented completion of the project to the specifications detailed in the funding agreement. The District will annually

assess outcomes of the cost-share program to determine whether alterations or additions to the focus areas is warranted.

9.7.1 Available Funding

The District will fund its cost-share programs from the *ad valorem* property tax levied annually on property within the watershed, as well as through other funding sources such as regional, state or federal grants. The budget for the program in 2018 will be \$200,000. The Board of Managers will annually set the budget for the cost-share programs in a manner that meets program needs and prudently aligns with the District's overall financial capacity.

9.7.2 Eligibility Criteria for Disbursing Funds

Applicants are eligible for one cost-share grant per property per year. Applications are reviewed and ranked based on their potential to contribute to the goals of the program:

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

Projects must be located within the District. Funding will not be awarded for work required as part of a permit requirement, but may be awarded toward the incremental cost of BMPs that will provide water quality treatment beyond permit requirements.

The Board of Managers will review and approve all-cost share applications above \$10,000, and delegate review and approval of cost share applications for grants of \$10,000 or less to the Administrator. Prior to approving a cost share award in excess of \$20,000 for capital construction, the Board of Managers will hold a noticed public hearing according to Minnesota Statutes section 103B.251.

		¥		

RE: cost-share amendment

Christopher, Steve (BWSR) <steve.christopher@state.mn.us>

Thu 2/14/2019 11:38 AM

To:Claire Bleser <cbleser@rpbcwd.org>;

Cc:Michelle Jordan <mjordan@rpbcwd.org>;

Claire,

I agree that this can be processed without the minor amendment public hearing requirements. You will still need to distribute the changes in accordance with Subpart 5 of the same part of Rule:

§Subp. 5. Distribution of amendments.

Each organization must maintain a distribution list of agencies and individuals who have received a copy of the plan. An organization shall distribute copies of amendments to all on the distribution list and post the amendments on the organization's website within 30 days of adoption.

Let me know if there are any questions.

Steve Christopher I Board Conservationist

Minnesota Board of Water and Soil Resources (BWSR) 520 Lafayette Road North St. Paul, MN 55155 651-249-7519 Web I Twitter I Facebook

From: Claire Bleser [mailto:cbleser@rpbcwd.org] Sent: Thursday, February 14, 2019 11:10 AM

To: Christopher, Steve (BWSR) < steve.christopher@state.mn.us>

Cc: Michelle Jordan <mjordan@rpbcwd.org>

Subject: cost-share amendment

Hi Steve,

Please find attached cost-share amendment. As discussed can you confirm that pursuant to Minn. Rule 8410.0140, Subpart 1A (F) it may be considered a change not requiring an amendment because it is simply "an adjustment to how [the District] will carry out program activities within its discretion."

Thanks!

Claire



Dr. Claire Bleser District Administrator Riley-Purgatory-Bluff Creek Watershed District BLUFF CREEK 18681 Lake Drive East, Chanhassen, MN 55317 WATERSHED DISTRICT cbleser@rpbcwd.org | 952-607-6512



18681 Lake Drive East Chanhassen, MN 55317 952-607-6512 www.rpbcwd.org

From: Claire Bleser

To: Board of Managers

Re: Task Order 26 Stormwater Model (item 8g)

Dear Managers,

Staff has worked with the City of Bloomington on a project furthering our knowledge on the impacts of future coming storms in the Hyland Lake region. The primary goals of the effort would be to assess potential multi-faceted mitigation measures to address flood-prone areas, reduce the potential for downstream creek erosion, minimize adverse impacts, and improve water quality while considering the changing environment. Staff recommends updating our model to meet these goals. Additional funds will be needed in order to complete this effort and I recommend using funds from reserve to complete this project. At this time, I recommend only approving doing Optional Phase A of the project.

Staff recommendations:

Authorize Administrator Bleser to enter into an agreement with BARR engineering for Optional Phase A of Task Order 26 with additional funds coming from Reserve (\$18,000). The remainder of the funds will come from District Wide Floodplain Evaluation (\$30,000).



18681 Lake Drive East Chanhassen, MN 55317 952-607-6512 www.rpbcwd.org

MEMORANDUM

TO:

Board of Managers

FROM:

Terry Jeffery et al

RE:

Interpretive policy and financial assurance – chloride management

DATE:

February 25, 2019

RPBCWD adopted amendments to its Stormwater Management Rule last year to support and drive improved management of chloride use on impervious surfaces. The operative, substantive requirement added in subsection 3.8 is:

An applicant for a permit under this rule for land-disturbing activity on property *other than a single-family home site* must provide a plan for post-project management of chloride use on the site that includes, at a minimum:

- Designation of an individual authorized to implement the chloride plan; and
- b. Designation of a Minnesota Pollution Control Agency-certified salt applicator engaged in the implementation of the chloride plan for the site.

(Emphasis added.) Unlike other elements of the stormwater and wetland & creek buffers rule, the exemption from the chloride-management plan requirement applies to "single-family home site[s]," not "existing single-family" properties, creating both the need and the opportunity to clarify through an interpretive policy. Given this, arguably the provision is ambiguous in its application to single-family home properties to be developed under a subdivision plan. In such cases, it is appropriate for the board that adopted the rule to adopt an interpretive policy to clarify the application of the provision.

At the March 1 meeting of the managers, staff would like to gather the managers' thoughts and direction on an interpretive policy that **limits the applicability to the public and common areas of residential subdivision developments; individual home properties would be excluded**. Among the points considered by staff in developing this preliminary policy framework were:



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- Roads and common areas in a subdivision development are almost uniformly maintained and operated by either a homeowner's association (which usually hires a professional property-management provider) or the city;
- Packaged deicer, as is used by most single-family property owners, accounts for only 5 percent of the salt use in the metro area. Given this, limiting the operation of the provision to roads and common areas in residential subdivisions will effectively and efficiently serve the policy purpose;
- The logistical complexities of imposing chloride-management requirements on individual property owners would not result in commensurate reduction in chloride use, though RPBCWD can use the opportunity to provide individual property owners with information on the risk chloride pose for water resources.

Staff reasons that a policy delineating the properties subject to the chloride-plan requirement along the lines stated above best serves the purpose and intent of the rule, in proper balance with burden imposed on property owners, at a reasonable cost to the RPBCWD in terms of staff time and professional resources.

Staff's operating plan is to gather input from the managers at the March meeting, then shape the policy accordingly and return with a final policy for adoption at the April regular meeting.

(N.B. In preparing for board consideration of the policy question raised here, staff realized as well that the recent update to the financial assurances schedule did not include designation of an amount to be retained specifically to secure submission of a chloride-management plan from a permittee. Unless directed otherwise by the board, staff will prepare an update to the schedule for adoption in April that includes a designation of \$5,000 for the purpose.)