Riley-Purgatory-Bluff Creek Watershed District

Board of Managers Public Hearing

Monday, **May 15, 2017 – 6:00pm**
PBCWD District Office
18681 Lake Drive East
Chanhassen

Agenda

1. **Call to Order**
2. **Public Hearing: Bluff Creek Tributary Plan Amendment**
3. **Public Hearing: Order Bluff Creek Tributary Project**
4. **Approve Task Order 21b-Bluff Creek Reach BT3A Stabilization Project-Final design and construction administration**
5. **Permit 2017-010: Lake Riley Park Improvement**
6. **Permit 2017-029: Tweet Dental**
7. **Repair and Maintenance Fund Request Minnetonka – Covington Road**
8. **Accept Treasurer's Report**
9. **Approve Paying of the Bills**
10. **Approve Boundary Changes with Carver County Water Management Organization**
11. **Approve Signage Proposal for District Office**
12. **Adjourn**

All bolded items are action items.

Public Notice
(Official Publication)
Notice of Public Hearing
Riley Purgatory Bluff Creek Watershed District
Bluff Creek Southwest Branch Stabilization and Restoration Project

PLEASE TAKE NOTICE that the Board of Managers of the Riley Purgatory Bluff Creek Watershed District will hold a public hearing consistent with Section 103B.231, subdivision 11 of Minnesota Statutes, and Minnesota Rule 8410.0140, on May 15, 2017 at 6:00 p.m. at District Office, 18681 Lake Drive East, Chanhassen, MN to consider adopting an amendment to the District's Water Resources Management Plan to include a stabilization and restoration project on Bluff Creek Southwest Branch located west of Audubon and north of Pioneer Trail.

All interested parties are invited to appear at the public hearing to offer comments and ask questions in order to advise the Board of Managers on whether to approve the proposed plan amendment.

If the Board of Managers adopts the proposed plan amendment, the Board will proceed to hold a second public hearing pursuant to Section 103B.251 of Minnesota Statutes to consider ordering the Bluff Creek Southwest Branch Stabilization and Restoration Project.

The total estimated project cost for this project is $200,000. The District proposes to pay for the estimated $200,000 project cost through its ad valorem property tax levy authorized by Minnesota Statutes Section 103B.241 for the implementation of its water management plan. Approximately 77% of this levy will be paid by properties in Hennepin County, and 23% paid by properties in Carver County.

All interested parties are invited to appear at the public hearing to offer comments and ask questions in order to advise the board of managers on whether to order the proposed project.

Further information is available by contacting the District Administrator, Claire Bleser, cbleser@rpbcwd.org, or 952-607-6512, or by visiting the District website: www.rpbcwd.org.

Dated: April 14, 2017

BY ORDER OF THE BOARD OF MANAGERS

Mary Bisek, Secretary

RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT

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

Date: Thursday, March 30, 2017

To: Cities, Counties, Met Council, and State Review Agencies

From: Claire Bleser, Riley-Purgatory-Bluff Creek Watershed District

Re: Minor Plan Amendment

The Riley-Purgatory-Bluff Creek Watershed District proposed a plan amendment to its 2011 Comprehensive Watershed Resources Management Plan. The Bluff Creek Southwest Branch and Stabilization is in the top tier for restoration projects. This reach was rated as being unstable, with poor water quality, moderately poor habitat, and a moderate risk to infrastructure. In addition, if the head cut continues towards the wetland it could result in the drainage of the wetland.

The proposed amendment was sent out on February 6th with the comment period ending on March 23, 2017. Minnesota Department of Natural Resources submitted comments. After careful review of the comments, the Riley-Purgatory-Bluff Creek Watershed District modified it's plan amendment to provide further details on the proposed restoration. The board adopted this amendment at their April 5, 2017 board meeting.

Enclosed is the additional section of the plan that was adopted. The full plan is available on the RPBCWD website: www.rpbcwd.org. Hard copies are available upon request.
Thank you for taking part in the review process of the District's plan amendment.

Sincerely,

Claire Bleser

Minnesota Department of Natural Resources
Ecological and Water Resources Division
Central Region Headquarters
1200 Warner Road, St Paul MN 55106

03/22/2017

Claire Bleser
District Administrator
Riley Purgatory Bluff Creek Watershed District
14500 Martin Drive Suite 1500
Eden Prairie, MN 55344

Re: Plan Amendment: Bluff Creek Southwest Branch

The DNR appreciates the opportunity to review and comment on the Riley-Purgatory-Bluff Creek Watershed District's Plan Amendment "to restore the School Forest and improve water quality in the Purgatory Creek subwatershed, and to restore an ecologically diverse and safe outdoor learning environment that promotes sound forest and watershed stewardship for future generations in partnership with Minnetonka Public Schools".

Our Area Hydrologist has reviewed the plan and offers the following comments for your consideration.

She suggests that the 5th paragraph (below) is not clearly stated. She also recommends that a figure to illustrate what is occurring would be helpful in describing what is occurring .

However, in arecent field visit 1 12-inch culvert from a stormwater pond outlet in the left overbank of this reach is severely eroded and perched approximately 6 feet above the channel bed. An adjacent wetland located south of the project reach has a natural overflow point that contributes flow to a secondary tributary. Significant channel incision has occurred in this tributary with a 4 to 5□foot tall headcut very near the tributary origin from the wetland. Continued migration of the headcut to the wetland could result in draining the wetland.

A description of the methods for the proposed work is recommended, or at a minimum, perhaps discussion that the minimal impact solution will be selected for implementation.

Thank you for the opportunity to comment on the RPBCWD Plan Amendment. If you have questions, feel free to contact Area Hydrologist, Jennie Skancke at jennie.skancke@state.mn.us or by phone at (651)259-5790.

Sincerely,

Jeanne M. Daniels

Jeanne Daniels, District Manager
Jeanne.daniels@state.mn.us

651-259-5784

ec. Terri Yearwood, EWR
Jennie Skancke, EWR
Steve Christopher, BWSR

Minnesota Department of Natural Resources • Division of Ecological and Water Resources
1200 Warner Road, St. Paul, MN, 55106

7.4a.7 Bluff Creek Southwest Branch Stabilization and Restoration

Need

Bluff Creek, within the municipal boundary of Chanhassen, Carver County, has a catchment of 5.8 square miles with the main stem being 6.8 miles long. Bluff Creek is a small tributary of the Lower Minnesota River. The upper reach of the watershed is primarily comprised of urban land use with some areas of forested upland and meadow. The middle reach is a mixture of various land uses but is rapidly urbanizing. The lower reach has steep valley walls, is highly sinuous, and lined with trees.

In 2002, Bluff Creek was listed on the 303(d) list of impaired waters for elevated turbidity levels measured at the Metropolitan Council Environmental Services (MCES) Watershed Outlet Monitoring Program (WOMP) station located on the main stem of the creek downstream of Old Highway 212. In 2004, Bluff Creek was placed on the Minnesota Pollution Control Agency's (MPCA) list of impaired waters in need of a Total Maximum Daily Load (TMDL) study for impaired biota due to low fish IBI scores. In 2013, the TMDL Implementation Plan was published identifying the projects that would reduce sediment loads to the creek but also address habitat fragmentation.

The 2015 CRAS Report evaluated segments of all creeks in the watershed by dividing the key categories for prioritizing restoration efforts into two tiers. The first tier was defined as consisting of categories that affect public health and safety, align with the goals in the District's Plan, and represent the key reasons why restoration projects are undertaken. These categories include: infrastructure risk, erosion and channel stability, ecological benefit, and water quality. The second tier of categories include those that provide supporting benefit to stream restoration, including watershed benefits, public education, partnership opportunities, and project cost per pound of phosphorus.

The CRAS report identified reaches BT-3A as a being in the top tier for prioritizing restoration projects. Reach BT-3A was rated as being unstable, with poor water quality, moderately poor habitat, and a moderate risk to infrastructure.

However, in a recent field visit one 12-inch culvert from a stormwater pond outlet in the left overbank of this reach is severely eroded and perched approximately 6 feet above the channel bed. An adjacent wetland located south of the project reach has a natural overflow point that contributes flow to a secondary tributary. Significant channel incision has occurred in this tributary with a 4 to 5 foot tall headcut very near the tributary origin from the wetland. Continued migration of the headcut to the wetland could result in draining the wetland. The attached Figure 1-2 from the Bluff Creek Stream Stabilization Assessment shows both the perched culvert and the headcut near the wetland.

Claire Bleser 3/30/2017 3:29 PM
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Claire Bleser 3/30/2017 3:29 PM
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Stabilization approach

The Bluff Creek Stream Stabilization Assessment included concept plans to stabilize the reach by either raising the stream bed to reconnect to the floodplain or modifying the incised channel to create a Rosgen Type B channel to provide more long term stability. The ravine with the head

cut moving toward the wetland will be stabilized with grade control to prevent further migration of the head cut toward the wetland. Specific approaches and techniques for both the main channel and the tributary from the wetland will be determined during final design; however natural-looking techniques that minimize disturbance are preferred.

Description

Reach BT3A is approximately 2,200 feet long and is the head of a tributary to Bluff Creek. The reach starts at a storm sewer outlet from Audubon Road and ends at Pioneer Trail. It was a watershed area of approximately 205 acres. The upper approximately 1,700 feet of the reach are on property owned by the City of Chanhassen and the lower approximately 500 feet of the reach are on property owned by MnDOT.

Estimated Construction Cost: $200,000

Funding

The District would expect to fund these project elements by means of its watershed-wide ad valorem levy. However, if there are cost-sharing or grant opportunities with other public agencies, the District would explore these as sources of funding as well. Some of this work may be suited for the District's cost-share program, in which case procedures and funding would be determined under those program criteria.

BLUFF CREEK
REACH BT3A
Bluff Creek Feasibility Study
Riley Purgatory Bluff Creek
Watershed District

TASK ORDER No. 21b – Bluff Creek Reach BT3A Stabilization Project:
Final Design and Construction Administration Services
Pursuant to Agreement for Engineering Services
Riley Purgatory Bluff Creek Watershed District and BARR Engineering Company.
March 29, 2017

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:
   Barr will work with District staff to complete the engineering, design and construction services to restore an approximately 2,200-foot reach of an unnamed tributary to Bluff Creek, referred to as Reach BT3A, in Chanhassen, Minnesota. The upper approximately 1,700 feet of the reach are located on property owned by the city of Chanhassen, and the lower approximately 500 feet of the reach are located on Minnesota Department of Transportation (MnDOT) owned land. This tributary to Bluff Creek was inspected in 2015 as part of the District's Creek Restoration Action Strategy (CRAS) project, and again by District and Barr staff in January 2017. Erosion was observed throughout Reach BT3A, and was more severe in the upper half of the reach, with detrimental effects on water quality and stream habitat. This project would provide final design for stabilization of Reach BT3A based on the findings of the January 2017 feasibility study. Project design would be followed by preparation of bid documents and construction support services. Barr would also prepare required permit applications in advance of project construction.

   Barr's scope of work activities are divided into three phases:

   Phase 1: Bluff Creek Stabilization Assessment (Previous Task Order 21a)
   Phase 2: Final Design and Permitting (This Task Order);
   Phase 3: Construction Administration Services (This Task Order).

2. Scope of Services:
   Engineer's services under this task order shall include:

   PHASE 2. FINAL DESIGN AND PERMITTING

   Final design and permitting includes multiple tasks in order to ensure the project is designed properly, and that key stakeholders (District, city of Chanhassen, Minnesota Department of Natural Resources [MNDNR], and U.S. Army Corps of Engineers [USACE]) can provide input and feedback at regular intervals in the design process. These tasks are described below.

   Task 2-1. Kick-off Meeting and Regular Project Meetings

   A kick-off meeting will be held with District and Barr staff to discuss the overall project, intermediate deadlines and deliverables for each deadline. The meeting will also provide an opportunity to define initial roles to be filled by District Staff and Barr Staff. It is assumed that District Staff will provide assistance with stakeholder coordination.

The project team will meet weekly to review project progress, address questions, and discuss outstanding issues. District Staff will be invited to participate in weekly project meetings at their discretion.

Task 2-2. Site Visits

Barr staff will complete up to three site visits to verify suitability of proposed design elements. It is anticipated that one site visit would be completed prior to 60% design and up to two additional site visits would be completed prior to final design. District staff will be notified of the site visits and invited to participate at their discretion.

Task 2-3. Stakeholder Meeting

District and Barr Staff will coordinate a meeting with key project stakeholders to facilitate early discussion about the project and identify critical stakeholder concerns. This task assumes one stakeholder meeting at approximately 60% design with the city of Chanhassen, MNDNR, USACE and any other public entities with a stake in the project and one public open house for residents in nearby neighborhoods. The kick off meeting in Task 2-1 will help establish a tentative schedule for each meeting and identify key dates to provide notices and/or send information to stakeholders.

Task 2-4. Preliminary (60%) Design and Opinion of Probable

The preliminary design will be advanced based on District and stakeholder input. Hydraulic modeling will be conducted to inform the design. In particular, it will be used to evaluate flow depths and estimate existing and proposed channel velocities. This will help to ensure that the proposed design will withstand anticipated creek flows while not impacting adjacent private properties. A preliminary opinion of probable construction cost will be prepared. The 60% design drawings will be provided electronically in pdf format.

The 60% design will be provided to the District Administrator and city of Chanhassen for additional feedback. It is assumed that comments will be provided within two weeks of providing the drawings.

Task 2-5. QA/QC Review

Barr will utilize other experienced stream restoration staff not directly involved in the design of the project to provide QA/QC review at the 60%, 90% and final design phases.

Task 2-6. Wetland Delineation

Barr staff will complete a field wetland delineation of all areas that could potentially be disturbed by project construction, including but not limited to channel stabilization locations, access routes, and staging areas. The wetland delineation will be completed in accordance with the 1987 USACE Manual and relevant regional supplement.

Barr will draft a wetland delineation report documenting the presence of wetlands and other waters in the survey area. Upon review and approval by the District, Barr will submit the delineation report and a request for delineation concurrence to the Local Government Unit (LGU) responsible for administering the Minnesota Wetland Conservation Act – in this case, the city of

Chanhassen. If requested by the LGU, Barr will participate in one meeting with the Technical Advisory Panel to review the wetland delineation on-site.

Findings of the wetland delineation will be used to inform project permitting.

Task 2-7. Cultural Resources Desktop Review

Barr staff will complete a desktop review for cultural resources that may be present in areas of project disturbance in support of project permitting. The review will consist of submitting a data request to the State Historic Preservation Office and summarizing and presence and proximity of known cultural resources sites to the project area.

Task 2-8. Permitting Assistance

Barr will complete permit applications for the project, including the development of a stormwater pollution prevention plan (SWPPP). It is assumed that a MNDNR Work in Public Waters Permit and USACE Regional General Permit 3 will be required, as well as local permits such as the RPBCWD permit. It is assumed that the District will provide timely review of permit application materials prior to submittal and that permit fees will be paid by the District directly.

The identified permitting processes typically require eight to twelve weeks, and it is assumed that permitting will begin following completion of 60% design.

Task 2-9. Final Engineering and 90% Design

After gaining additional input from stakeholders regarding the advanced design, Barr will continue to refine the design and prepare the 90% drawings and opinion of cost for review by District staff and delivery to the Board.

Task 2-10. 90% Delivery to RPBCWD Board of Managers

Barr staff will deliver the 90% design to the District Board of Managers at their regularly scheduled meeting and work with District Administrator to determine if a presentation is warranted.

Task 2-11. Final Construction Drawings

Upon review and approval of the 90% design by District staff or the Board of Managers, Barr will complete the final construction drawings (bid-ready).

Task 2-12. Engineer's Opinion of Probable Cost

Upon completion of the final design, Barr will prepare an Engineers Opinion of Probable Cost. This cost estimate will accompany the finished plan set for final approval by the District.

Task 2-13. Technical Specifications and Construction Documents

Barr will provide technical specifications and a project bidding form for the project. Barr will develop technical specification sections using Construction Specifications Institute (CSI) format including all "upfront" sections such as general conditions, supplementary conditions, summary of work and those related to bidding and contracting. The development of the technical specification will be coordinated with the District Administrator and Counsel. Barr assumes specifications will

be in CSI format with Engineers Joint Contract Documents Committee (EJCDC) general conditions. Barr reserves the right to modify budget if technical specification format is other than stated in this paragraph.

Task 2-14. Final Design Memorandum

Barr will complete a final design memorandum to document the various components and assumptions that influenced the final design.

Task 2-15. Project Management

Project Management is a key component to help meet project milestones. In addition, project management will help make sure the work meets the expectations of District staff and other stakeholders and that work is completed in a satisfactory manner within the project timeline and within the agreed-upon budget.

Barr will continue to provide updates to the project team that document project progress and coordinate tasks. Barr will provide the District with monthly progress reports and budget status updates as part of the monthly invoicing process. Barr will solicit District Staff feedback on an ongoing basis to maintain clear and timely communication.

Task 2-16. City of Chanhassen Agreement

District staff will coordinate with the city of Chanhassen to assist District legal counsel in developing a draft agreement regarding restoration and maintenance of Reach BT3A. This task will be led by District staff and counsel, but Barr providing input on technical components during development of the agreement. The agreement will specify the responsibilities of each organization, as well as the long-term inspection and maintenance of the restoration efforts.

Task 2-17. Phase I Environmental Assessment

Barr often recommends completing a Phase I environmental assessment during the early stages of the project to determine if there is a reasonable probability of encountering contamination issues in the project site. The results of this assessment will help generate more accurate construction cost estimates and evaluate the feasibility of the project. Barr staff will complete this assessment and provide a summary document. It is acknowledged that the risk of contamination being present within the project reach appears to be low, so this task is suggested as an optional task.

PHASE 3. CONSTRUCTION ADMINISTRATION

Phase 3 includes the tasks associated with bidding the project and completing construction. Individual tasks are described below. Work associated with this Phase 3 would only occur if District Managers decide to move the project forward and advertise for construction bids.

Task 3-1. Bidding Assistance

Barr will conduct: a mandatory pre-bid meeting and site visit (if warranted); prequalification of bidders, if appropriate; review of bids; and follow-up inquiries with bidders. Advertising and bidding dates will be coordinated with District Administrator. It is assumed that advertising for bids would occur in the District's official newspapers.

Barr will prepare recommendations on contractor selection, if requested.

Task 3-2. Pre-Construction Meeting

Barr will conduct a preconstruction meeting with the selected contractor to discuss critical aspects of the restoration project. Safety and erosion control are always key components of the preconstruction meeting. Additional items on the agenda will likely include site access, construction limits, hours of operation, and utilities in the area.

Task 3-3. Construction Administration and Observation

Barr will provide construction planning and coordination with District and contractor(s), as well as to develop final construction sequencing and schedule. Barr will review construction access and equipment/material staging areas with contractor(s) and District staff.

Barr will act as general liaison between contractor(s) and District during the construction process, providing construction oversight as necessary to confirm that all work adheres to the approved plan. Barr will schedule site visits by design team members, review work progress, and document quality and compliance through ground photos and field notes during construction. Barr will review pay requests and change orders as needed. It is assumed that the total construction time will be approximately three weeks, and Barr staff will be on site to provide oversight and guidance for a portion of every day work is occurring. The construction observation budget assumes a total of 62 hours of time to complete the various aspects of this task.

Task 3-4. Post-Construction Memorandum

Barr will complete a memorandum to document key aspects of the construction process, including design changes, any unanticipated obstacles or hindrances to construction, key field notes, and final construction costs. It is assumed that a post-construction survey will not be completed.

Task 3-5. Project Management

Barr will provide updates to the project team to document project progress and coordinate tasks. Barr will provide monthly progress reports and budget status updates as part of the monthly invoicing process. Barr will solicit District feedback on an ongoing basis to ensure clear and timely communication.

Assumptions

Barr has made several assumptions scope of work items in this agreement. Assumptions relating to individual work tasks are listed above in the task detailed descriptions. However, additional assumptions that do not correspond with a single work task are listed below:

- Other than possible hand augers, no soil borings will be conducted.
- Post-construction survey and record drawings are excluded from this scope of work
- Barr will prepare one presentation for the District Board prior to final design approval, before bidding the project.
- Meetings with the MNDNR and other stakeholders will last approximately 1 hour and will be held at District's office.

- The project site is free from contamination.
- Total time required to complete construction administration and documentation will not exceed 62 hours, based on an assumed total construction timeframe of three weeks.
- No property acquisition will be needed for the project. If property acquisition is needed, those services will be coordinated with the District Administrator on a time and expense basis.
- The proposed budget includes costs for mileage reimbursement for site visits and site observation.
- The District will provide all available and applicable GIS and CAD files to Barr in an electronic format.
- Deliverables will be provided to the District in an electronic format.
- Permit fees will be paid directly by the District. If needed to expedite the application process, Barr will pay the permit fees, if directed by District Administrator, and charge that expense to the District as needed. This effort will be coordinated with the District Administrator on a time and expense basis.
- Preparation of a phase 1 environmental assessment will not be needed
- Preparation of an Environmental Assessment Worksheet (EAW) or Environmental Impact Statement will not be required.

3. Deliverables:
   The following deliverables will be prepared and provided to the District:

   Phase 2: Final Design and Permitting

   - Copies of permit applications
   - 60% plan drawings
   - Stakeholder Meeting agendas, meeting minutes and a summary of the discussion (up to 2 meetings)
   - 90% plan drawings
   - Final construction drawings
   - Final Engineer's Opinion of Probable Cost to accompany final plans.
   - Technical specifications and provisions
   - Contract documents for the bid process

   Phase 3: Construction Administration

   - Advertisement for Bid
   - Pre-bid meeting agenda (if necessary)
   - Bid tab following bid submittals
   - Meeting agenda
   - Meeting minutes
   - Regular updates to District staff about construction progress
   - Construction photos and field notes
   - Pay applications from contractor(s)
   - Change orders (if necessary)
   - Post-construction memorandum

4. Budget:

Services under this Task Order will be compensated for in accordance with the engineering services agreement and will not exceed $62,700, or $65,700 if Task 2-17 is included, without written authorization by the Administrator or Board of Managers. The following table provides a breakdown of the anticipated cost for major tasks associated with scope of services describe above.

Task	Task Description	Anticipated Budget	Anticipated Completion Date
Phase 2: Final Design, EAW Preparation and Permitting			
2-1	Kick-off Meeting and Project Meetings	$2,500	Ongoing
2-2	Site Visits	$1,300	Ongoing
2-3	Stakeholder Meeting	$1,250	May 2017
2-4	60% Design and Cost Estimate	$8,900	May 2017
2-5	QA/QC Review	$1,400	Ongoing
2-6	Wetland Delineation	$4,400	April 2017
2-7	Cultural Resources Desktop Review	$500	April 2017
2-8	Permitting Assistance	$6,000	June 2017
2-9	90% Design and Cost Estimate	$4,800	July 2017
2-10	90% Delivery to Board of Managers	$1,200	August 2017
2-11	Final Construction Drawings	$2,400	August 2017
2-12	Engineer's Cost Estimate	$1,250	August 2017
2-13	Technical Specifications	$5,200	August 2017
2-14	Final Design Memo	$3,500	August 2017
2-15	Project Management	$3,000	Ongoing
2-16	Chanhassen Agreement Assistance	$2,700	August 2017
Phase 2 Subtotal		**$50,300**	
2-17	Phase I Environmental Assessment (Optional)	$3,000	May 2017
Phase 2 Subtotal with optional Task 2-17		**$53,300**	
Phase 3: Construction Administration			
3-1	Bidding Assistance	$1,700	September 2017
3-2	Pre-Construction Meeting	$800	October 2017
3-3	Construction Administration and Observation	$7,200	May 2018
3-4	Post-Construction Memorandum	$1,700	June 2018
3-5	Project Management	$1,000	Ongoing
Phase 3 Subtotal		**$12,400**	
Task Order 14b Total		**$62,700**	
Task Order 14b Total with optional Task 2-17		**$65,700**	

5. Schedule and Assumptions Upon Which Schedule is Based
   The proposed schedule (above) is based on the substantial construction occurring during the fall of 2017, with final site restoration being completed in spring 2018. The schedule outlined above assumes project initiation will occur in April 2017. The schedule may be modified depending on actual initiation of project work, permit approvals, and stakeholder coordination efforts.

IN WITNESS WHEREOF, intending to be legally bound, the parties hereto execute and deliver Phases 2 & 3 of this Agreement.

CONSULTANT	**RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT**
By_____	By_____
Its__Vice President_____	Its_____
Date:	Date:
	APPROVED AS TO FORM & EXECUTION
	_____

RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT

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

Riley Purgatory Bluff Creek Watershed District Permit Application Review

Permit No: 2017-010

Received complete: April 21, 2017

Applicant: City of Eden Prairie, Matt Bourne

Consultant: Amy Anderson, WSB

Project: Lake Riley Park Improvements – The project proposes the construction of a new parking lot, entrance road, boat launch, bituminous trails, storage building pad, and small seating and picnic areas. An AIS cleaning station is also proposed. The project includes seven infiltration basins/rainwater gardens to provide storm water quantity, volume and quality control.

Location: 9100 Riley Lake Road, Eden Prairie, MN

Reviewer: Scott Sobiech, Barr Engineering

Rules: Applicable rules checked

X	Rule B: Floodplain Management		Rule H: Appropriation of Public Waters
X	Rule C: Erosion and Sediment Control		Rule I: Appropriation of Groundwater
	Rule D: Wetland and Creek Buffers	X	Rule J: Stormwater Management
	Rule E: Dredging and Sediment Removal		Rule K: Variances and Exceptions
	Rule F: Shoreline/Streambank Stabilization		Rule L: Permit Fees
	Rule G: Waterbody Crossings		Rule M: Financial Assurances

Rule Conformance Summary

Rule	Issue		Conforms to RBPCWD Rules?	Comments
B	**Floodplain Management and Drainage Alterations**		Yes	
C	**Erosion Control Plan**		See Comment	See Rule Specific Permit Conditions C1-C3.
J	**Stormwater Management**	Rate	Yes	
		Volume	See Comment	See Rule Specific Permit Conditions J1.
		Water Quality	See Comment	See Rule Specific Permit Conditions J2.
		Low Floor Elev.	See Comment	See Rule Specific Permit Conditions J3.
		Maintenance	See Comment	See Rule Specific Permit Condition J4.
L	**Permit Fees**		NA	Governmental Entity
M	**Financial Assurance**		NA	Governmental Entity

Project Description

The project proposes the construction of a new parking lot, entrance road, boat launch, , AIS cleaning station, small seating/picnic areas, storage building pad and installation of sand landward of the ordinary high water level (OWH) to expand the existing beach area.. Proposed improvements to the boat launch will be located in the existing location, and are proposed to bring the boat launch up to standards set by the DNR. The project includes seven infiltration basins/rainwater gardens to provide storm water quantity, volume and quality control.

The applicant submitted information indicating that a project specific permit is being pursued from the DNR for the work associated with the boat launch reconstruction. Project-specific DNR permitting for the reconstruction of the boat launch means the boat launch reconstruction would be exempt from RPBCWD permit requirements under Rule E (Rule E, Subsection 2.2) and Rule F (Rule F, Subsection 2.2). The boat launch does not trigger Rule G because the rule does not apply to placement or replacement of structures in public waterbodies, and Lake Riley is a public water. The replacement of the boat launch in Lake Riley as provided in the plans submitted by the city will not have exacerbate flood risks. The project site information is summarized below:

1. Total Site Area: 36.55 acres
2. Existing Site Impervious Area: 7.48 acres (993,168 square feet)
3. New Site Impervious Area: 2.24 acres (100,623 square feet) (29.9% increase in site impervious area)
4. Total Disturbed Area: 5.15 acres

Exhibits:

1. Permit Application dated February 22, 2017.
2. Design Plan Sheets dated February 22, 2017 (revisions received April 3, 2017).
3. Project Narrative dated February 22, 2017.
4. Drainage Area Map dated February 21, 2017 (revised April 21, 2017)
5. Rule J Variance Request Memo dated February 21, 2017 (Written withdrawal of request received on April 3, 2017)
6. XPSWMM models for existing and proposed conditions dated February 21, 2017 (revised May 1, 2017)
7. MIDS water quality models for existing and proposed conditions dated February 21, 2017 (revised May 1, 2017)
8. Modeling Memorandum dated April 21, 2017 with associated figures
9. Geotechnical Report dated February 7, 2017 (revised April 11, 2017)
10. Sequencing Analysis for Protection of Proposed Lake Riley Boat Launch and Shoreline stabilization dated April 3, 2017.

11. Email correspondences dated May 11, 2017 indicated a DNR project specific permit is being pursued for work in public waters associated with the boat launch.

Rule Specific Permit Conditions

Rule B: Floodplain Management and Drainage Alterations

Because the proposed park improvements involve land-disturbing activity below the 100-year flood elevation of Lake Riley, the project activities must conform to the RPBCWD's Floodplain Management and Drainage Alterations rule (Rule B).

The District provided WSB with the 100-year flood elevation of Lake Riley at this location is 866.24 M.S.L. (Atlas 14). The low floor elevations of the specified structures are summarized in the following table:

Structure	Low Floor Elevation Structure (feet)	Lake Riley 100-year Flood Elevation (feet)	Freeboard (feet)
Lakeside Patio	872.04	866.24	5.80
Overlook Seating	869.82	866.24	3.58
North Beach Seating	872.00	866.24	5.76
South Beach Seating	871.64	866.24	5.40
Northeast Picnic Area	874.09	866.24	7.85
Northwest Picnic Area	873.92	866.24	7.68
Southwest Picnic Area	872.20	866.24	5.96
Storage Building Pad	873.00	866.24	6.76

All of these elevations are more than 2 feet above the 100 year elevation of Lake Riley of 866.24 complying with Rule B, Subsection 3.1. Rule B, Subsection 3.4 does not apply to this site because Lake Riley is a waterbody not a watercourse. The supporting materials demonstrate, and the RPBCWD Engineer concurs, that the land-disturbing activity result in no fill being placed and 110 cubic yards of compensatory storage will be created below the 100-year floodplain, thus providing a net increase in the floodplain storage. The storage is provided at the same elevation (+/- 1 foot) below the 100-year floodplain, thus the project conforms to Rule B, Subsection 3.2. The project will not alter surface flows (Rule B, Subsection 3.3). A note on the plan sheet indicates that activities must be conducted to minimize the potential transfer of aquatic invasive species conforming to Rule B, Subsection 3.5.

The proposed project conforms to the floodplain management and drainage alteration requirements of Rule B.

Rule C: Erosion and Sediment Control

Because the project will alter 5.15 acres (217,602 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 WSB includes installation of silt fence, inlet protection for storm sewer catch basins, a rock construction entrance, placement of a minimum of 6 inches of topsoil, and retention of native topsoil onsite. 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 control at the site. RPBCWD must be notified if the responsible individual changes during the permit term.
C2. Update Plan sheet L4.5 to include a rock construction entrance for the Jacques Barn Infiltration Basin site.
C3. The erosion control plan must be updated to include the following note:
    a. Soil surfaces compacted during construction and remaining pervious upon completion of construction must be decompacted through soil amendment and/or ripping to a depth of 18 inches while taking care to avoid utilities, tree roots and other existing vegetation prior to final revegetation or other stabilization.

Rule J: Stormwater Management

Because the project will alter 5.15 acres (217,602 square feet) of surface area, approval under the RPBCWD Stormwater Management Rule is required. The proposed land-disturbing activities will increase the imperviousness of the entire site by 21.5% (i.e., less than the 50 percent increase threshold in section 2.3 for application of the stormwater criteria to all impervious area of the project site), and disturb 2.8% of the existing impervious area (i.e., less than 50 percent of the existing impervious area), therefore under the paragraph 2.3 redevelopment framework, the RPBCWD stormwater management criteria apply only to the new and disturbed impervious surface on the site.

The Applicant is proposing seven infiltration basins to provide the required rate control, volume abstraction and water quality management on the site. Pretreatment for the infiltration basins is provided by rain guardian pretrement chambers and vegetated filter strips.

Rate Control

In order 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 XPSWMM 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. The site includes two discharge locations from the site. 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
Southern	0.73	0.02	4.62	2.39	22.72	20.3	3.61	3.51
Northern	0	0	0	0	1.04	1.04	0.42	0.42

Volume Abstraction

Subsection 3.1.b of Rule J requires the abstraction onsite of 1.1 inches of runoff from the new and disturbed impervious surface of the parcel (2.24 acres). However, 0.7 acres of impervious surface is exempt from the stormwater requirements because this area represents construction of 10-foot wide trails with a pervious buffer downgradient at least half the trail width (Rule J, Subsection 2.2d). An abstraction volume of 6,149 cubic feet is required from the 1.54 acres (67,082 square feet) of new or reconstructed impervious area on the project for volume retention. The Applicant proposed seven infiltration basins with pretreatment of runoff provided by rain guardian pretreatment structures and vegetated filter strips. The table below summarizes the volume abstraction on the site.

Required Abstraction Depth (inches)	Required Abstraction Volume (cubic feet)	Provided Abstraction Volume (cubic feet)
1.1	6,149	6,868

Soil borings performed by Braun show that soils in the project area are primarily silty sand or sand; the MN Stormwater Manual indicates an infiltration rate of 0.8 inches per hour for such soils. The soil boring information summarized in the table below shows that groundwater is at least 3 feet below the bottom of the proposed infiltration basins (Rule J, Subsection 3.1.b.ii).

Proposed BMP	Groundwater Elevation (feet)	Bottom Elevation of BMP (feet)	Separation (feet)
PR2	863.9	869.5	5.6
PR3	864.2	869.5	5.3
PR4	865.3	873.0	7.7
PR5	864.8	870.5	5.7
PR6	863.4	868.5	5.1
PR7	862.6	868.3	5.7
PR8	No boring provided	884.0	See condition

To conform to the RPBCWD Rule J, Subsection 3.1.b the following revision is needed:

J1. Paragraph 4.3c of the rule requires a soil boring at the proposed infiltration sites to demonstrate that the bottoms of the infiltration basins are at least 3 feet above the water table, the soils present below the basin and confirm the infiltration capacity. The applicant must submit documentation verifying the soils present, infiltration capacity of the soil and the groundwater elevation at the proposed infiltration basin PR8. This can be accomplished by soil boring, infiltrometer test, potholing or other methods.

Water Quality Management

Subsection 3.1.c of Rule J requires the Applicant to 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 seven infiltration basins/rainwater gardens with pretreatment provided by a rain guardian pretreatment structures or vegetated strips to achieve the required TP and TSS removals and submitted MIDS modeling to estimate the TP and TSS removals. The table below summarizes 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)	652.3	587.1 (90%)	638 (97.8%)
Total Phosphorus (TP)	3.59	2.15 (60%)	3.51 (97.8%)

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

While the water quality modeling submitted confirms the design will conform with the water quality requirements the following information is needed to connect the water quality modeling to the construction drawings.

J2. The Applicant must provide updated construction drawings consistent with the water quality modeling.

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 structures and the adjacent stormwater management feature are summarized below. The RPBCWD Engineer concurs that the proposed project is in conformance with Rule J, Subsection 3.6.

Structure	Structure Elevation (feet)	100-year Flood Elevation (feet)	Freeboard (feet)	Nearest SW Facility	Distance Between Structure and Adjacent SW Facility (feet)	GW Elevation (feet)	Required Separation to GW based on Appendix J, Plot 6 (feet)	Provided Separation to GW (feet)
Lakeside Patio	872.04	866.24	5.8	Lake	na	na	na	na
Overlook Seating	869.82	866.24	3.58	Lake	na	na	na	na
North Beach Seating	872.00	871.3	0.7	PR2	12	863.9	0.16	8.1
South Beach Seating	871.64	871.23	0.41	PR3	5	864.2	0.18	7.44
Northeast Picnic Area	874.09	874.33	-0.24	PR4	4	865.3	0.18	8.79
Northwest Picnic Area	873.92	872.69	1.23	PR5	7	864.8	0.18	9.12
Southwest Picnic Area	872.20	870.83	1.37	PR6	15	863.4	0.18	8.8
Storage Building Pad	873.00	870.83	2.17	PR6	na	na	na	na

An analysis in accordance with Appendix J1 was completed for the three picnic areas and two beach seating areas adjacent stormwater features when the low floor elevation of the proposed structure (defined in the RPBCWD rules as any impervious building or other object that is constructed or placed on the ground and that is, or is intended, to remain in place for longer than a temporary period) was less than the required 2 feet above the 100-year event flood elevation of the adjacent stormwater feature. As shown in the above table most of the structures are either 2 feet above the 100-year flood elevation or provide adequate separation from groundwater in conformance with Rule J, Subsection 3.6. The one exception is the proposed Northeast seating area which is below the 100-year flood elevation of the adjacent stormwater facility which would cause the area to be partially inundated during the 100-year event. To conform to Rule J, Subsection 3.6 the following revision is needed:

J3. The applicant must modify the design of the Northeast Picnic area or infiltration basin/rainwater garden PR4 so the low elevation is at least 0.18 feet above the 100-year flood elevation.

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.

J4. Permit applicant must provide a draft maintenance and inspection plan. Once approved by RPBCWD, the plan must be documented in a written agreement with the RPBCWD.

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.
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 conforms to Rule B .
4. The proposed project will conform to Rules C and J if the Rule Specific Permit Conditions listed above are met.
5. The applicant submitted information indicating that a project specific permit is being pursued from the DNR for the work associated with the boat launch reconstruction. Obtaining a project-

specific permit from the DNR for the reconstruction of the boat launch means the boat launch reconstruction would be exempt from RPBCWD permit requirements under Rule E (Rule E, Subsection 2.2) and Rule F (Rule F, Subsection 2.2).

6. The proposed boat launch installation is outside the scope of Department of Natural Resources General Permit #2015-1192, and DNR approval of the boat launch reconstruction is not obtained by virtue of meeting RPBCWD regulatory requirements.

Recommendation:

Approval, contingent upon:

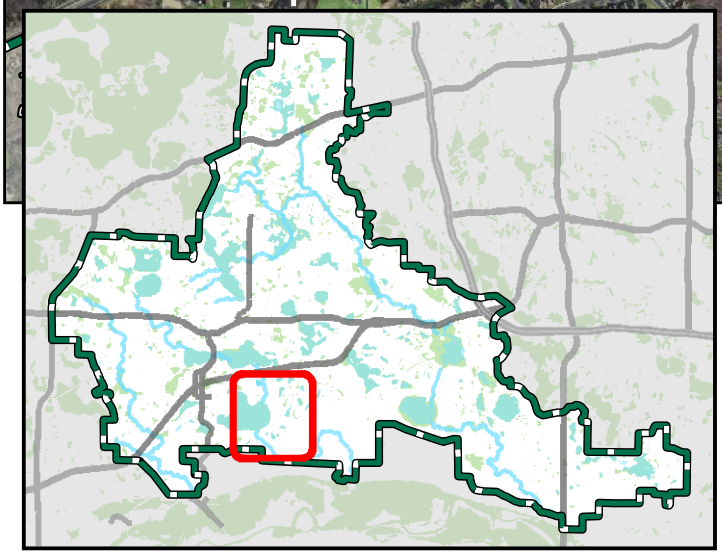
1. Continued compliance with General Requirements.
2. Applicant providing the name and contact information of the individual responsible for erosion and sediment control for the project.
3. Update Plan sheet L4.5 to include a rock construction entrance for the Jacques Barn Infiltration Basin site.
4. The erosion control plan must be updated to include the following note:
    a. Soil surfaces compacted during construction and remaining pervious upon completion of construction must be decompacted through soil amendment and/or ripping to a depth of 18 inches while taking care to avoid utilities, tree roots and other existing vegetation prior to final revegetation or other stabilization.
5. Receipt of documentation verifying the soils present, infiltration capacity of the soil and the groundwater elevation at the proposed infiltration basin PR8 site. This can be accomplished by soil boring, infiltrometer test, potholing or other methods.
6. The Applicant must provide updated construction drawings consistent with the water quality modeling.
7. The applicant must modify the design of the Northeast Picnic area or infiltration basin/rainwater garden PR4 so the low elevation is at least 0.18 feet above the 100-year flood elevation.
8. Permit applicant must provide a draft maintenance agreement and inspection plan for the management of stormwater BMPs, including exhibit clearly identifying stormwater BMPs. Once approved by RPBCWD, the City must enter an agreement with RPBCWD to maintain the project facilities in accordance with the plan.

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.

Board Action

It was moved by Manager _____, seconded by Manager _____ to approve permit application No. 2017-010 with the conditions recommended by staff.



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Feet

0 1,000

Permit Location Map

RILEY LAKE PARK
RENOVATIONS
Permit 2017-010
Riley Purgatory Bluff Creek
Watershed District

LEGEND:

CONSTRUCTION LIMITS	ROCK CONSTRUCTION ENTRANCE (OR EQUIVALENT)
EXISTING CONTOUR	CONSTRUCTION / TREE PROTECTION FENCE
EXISTING SPOT GRADE	BIOROLL
EXISTING DECIDUOUS TREE	SILT FENCE
EXISTING CONIFER TREE	FLOATING SILT CURTAIN

NOTE:

REFER TO ELECTRICAL PLAN SHEETS FOR MODIFICATION REQUIREMENTS FOR EXISTING ELECTRICAL AND COMMUNICATION UTILITIES

GENERAL:

CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO BIDDING AND CONSTRUCTION START. CONTRACTOR IS RESPONSIBLE FOR ALL LOCATES. ALL LOCATES SHALL BE REVIEWED BY THE OWNER/LA-E PRIOR TO CONSTRUCTION START.

CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING STRUCTURES, UTILITIES, TREES, SITE AMENITIES, ETC. THAT ARE TO REMAIN FROM DAMAGE DURING CONSTRUCTION.

THE CONTRACTOR SHALL VERIFY W/THE OWNER THAT THE REQUIRED PERMITS ARE ISSUED PRIOR TO USE OF ACCESS POINTS.

CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY DAMAGE TO EXISTING ITEMS TO REMAIN (AT CONTRACTOR'S EXPENSE) AND IS CONSIDERED INCIDENTAL TO THE CONTRACT.

DIMENSIONS TAKE PRECEDENCE OVER SCALE. DIMENSIONS ARE TO BACK OF CURB WHERE APPLICABLE, UNLESS STATED OTHERWISE. FIELD VERIFY (FV) ITEMS SHALL BE FIELD VERIFIED BY THE CONTRACTOR.

NO ACTIVITY AFFECTING THE BED OF A PUBLIC WATER MAY BE CONDUCTED BETWEEN APRIL 1ST AND JUNE 30TH TO MINIMIZE IMPACTS ON FISH SPAWNING AND MIGRATION.

** ANY DISCREPANCIES FOUND THAT AFFECT THE WORK SHALL BE REPORTED TO THE OWNER/L.A.-E. FOR CLARIFICATION PRIOR TO ANY ADDITIONAL WORK BEING COMPLETED.

CONSTRUCTION STAGING AND ACCESS AREAS:

THE OWNER SHALL FIELD VERIFY THE LOCATION OF CONSTRUCTION ACCESS AT THE TIME OF CONSTRUCTION.

THE CONTRACTOR SHALL VERIFY W/THE OWNER THAT THE REQUIRED CITY PERMITS ARE ISSUED PRIOR TO USE OF ACCESS POINTS.

THE CONTRACTOR SHALL ENSURE EXISTING ROADS REMAIN FREE OF MUD AND DEBRIS THROUGHOUT CONSTRUCTION.

REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

GENERAL SITE & VEGETATION REMOVALS:

ALL REMOVALS WILL BE COMPLETED BY THE CONTRACTOR, UNLESS SPECIFIED OTHERWISE. CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSING OF ALL ITEMS OFF-SITE, UNLESS SPECIFICALLY APPROVED OTHERWISE BY LA-E.

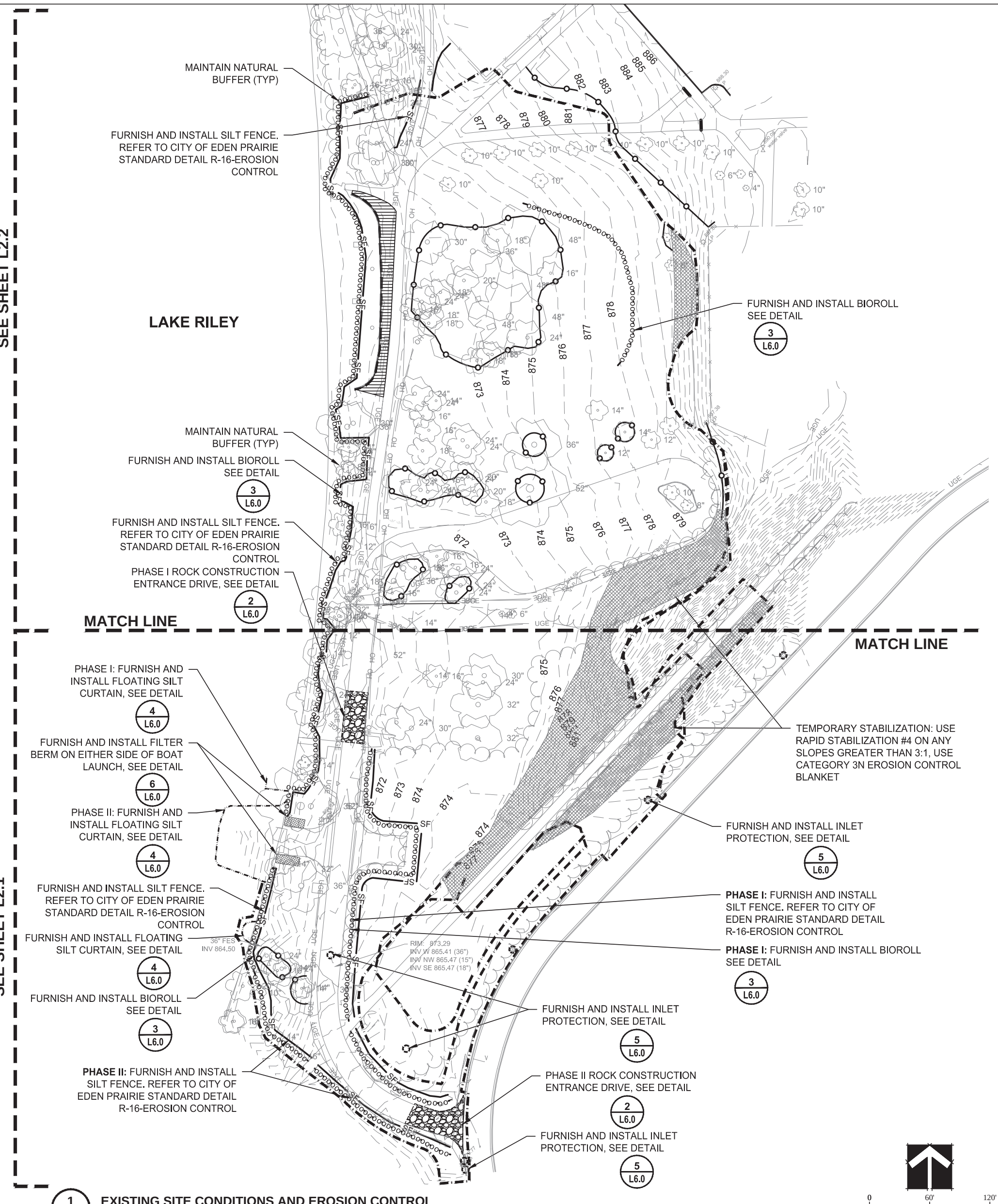
ALL ITEMS AND TREES NOT SPECIFICALLY MARKED FOR REMOVAL OR RELOCATION SHALL REMAIN PROTECTED AND UNDISTURBED DURING CONSTRUCTION. ANY DAMAGE TO TREES AND ITEMS THAT ARE TO REMAIN SHALL BE REPLACED AT CONTRACTOR'S EXPENSE.

THE CONTRACTOR IS RESPONSIBLE FOR CLEARING AND REMOVALS OF ALL PLANT MATERIALS, WHICH INCLUDES TREES, SHRUBS, GROUND COVERS, ETC. AND SHALL INCLUDE GRUBBING AND REMOVAL OF ALL STUMPS (TYP) AS DIRECTED BY THE LA-E/OWNER. CONTRACTORS OPTION TO RECLAIM AND SALVAGE ASPHALT PAVEMENT FOR RE-USE. VERIFY WITH OWNER LOCATIONS OF STOCKPILES.

ACTIVITIES MUST BE CONDUCTED SO AS TO MINIMIZE THE POTENTIAL TRANSFER OF AQUATIC INVASIVE SPECIES (E.G., ZEBRA MUSSELS, EURASIAN WATERMIFOIL, ETC.) TO THE MAXIMUM EXTENT POSSIBLE.

EROSION CONTROL REQUIREMENTS:

1. ALL STREETS IN AND ADJACENT TO THE PROJECT SHALL REMAIN CLEAN AND PASSABLE AT ALL TIMES. ADJACENT STREET AND CURB LINE TO BE SWEPT FREE OF DEBRIS AT THE END OF EACH WORK DAY, OR AS OFTEN AS NEEDED TO ENSURE PUBLIC SAFETY
2. INLET PROTECTION WILL BE INSTALLED AT ALL CATCH INLETS WITHIN THE PROJECT AREA PER STANDARD DETAILS
3. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY REMOVALS
4. EROSION CONTROL SILT FENCE AND/OR BIOROLLS SHALL BE ERECTED ALONG THE INSIDE OF THE CONSTRUCTION LIMITS IN ALL AREAS OF THE SITE WHERE DRAINAGE FLOWS MAY CAUSE SEDIMENT TO BE DEPOSITED ON ADJACENT OFF-SITE PROPERTIES OR IN AREAS BEYOND THE CONSTRUCTION LIMITS - REFER TO PLAN.
5. BIOROLLS SHALL CONSIST OF STRAW OR WOOD FIBER 6"- 7" DIA. ROLL ENCLOSED IN PLASTIC OR POLYESTER NETTING. THEY SHALL BE SECURED IN PLACE USING 2" X 2" X 18" LONG WOODEN STAKES AT 2' 0" SPACING, DRIVE THROUGH NETTING AND FIBER ROLL
6. THE CONTRACTOR SHALL PROTECT ALL EXISTING AND PROPOSED CATCHBASINS AND STORM SEWERS FROM SILTATION BY INSTALLING AND MAINTAINING EROSION CONTROL FENCING AROUND ALL STRUCTURES FOR THE DURATION OF THE CONSTRUCTION PERIOD. THE CONTRACTOR SHALL CLEAN SILT BUILD-UP FROM ALL STORM SEWERS AFFECTED BY CONSTRUCTION, AS REQUIRED, DURING CONSTRUCTION AND PRIOR TO FINAL ACCEPTANCE OF THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMMEDIATE CLEANING OF ALL MUD, DIRT AND DEBRIS IN PUBLIC STREETS.
7. IN THE EVENT THAT PERMANENT STABALIZATION CANNOT BE IMPLEMENTED WITHIN 7 DAYS AFTER CONSTRUCTION ACTIVITY IN THE DISTURBED AREA HAS CEASED, TEMPORARY STABILIZATION BMPS MUST BE SCHEDULED TO OCCUR WITHIN THAT 7 DAY TIME FRAME (EXCEPT WHERE CALLED OUT BY NOTE 8)
8. RAPID STABILIZATION METHOD 4 SHALL BE IMPLEMENTED THE LAST 200' OF THE NORMAL WETTEED PERIMETER OF ALL DRAINAGE POINTS WITHIN 24 HOUR, OR A SEDIMENT TRAP MUST BE INSTALLED PER THE APPROVED STANDARD DETAILS WITHIN 24 HOURS OF CONNECTING THE UTILITIES.
9. FLOATING SILT CURTAIN SHALL BE INSTALLED AS CLOSE TO THE SHORELINE AS POSSIBLE
10. CONTRACTOR TO BE RESPONSIBLE FOR ALL SEDIMENT AND EROSION CONTROL
11. CONCRETE SLURRY FROM REMOVAL OPERATIONS MUST BE VACUUMED UP IMMEDIATELY. NO CONCRETE WASHOUT SHALL COME IN CONTACT WITH THE GROUND AND MUST BE PROPERLY DISPOSED OF
12. ALL STOCKPILES MUST HAVE PERIMETER SEDIMENT CONTROL IMPLEMENTED AND MAINTAINED AT ALL TIMES. STOCKPILES TO RECEIVE RAPID STABILIZATION METHOD 3 IF UNWORKED FOR 7 DAYS
13. CONTRACTOR MUST SUBMIT A DEWATERING PLAN TO THE ENGINEER FOR APPROVAL 10 DAYS PRIOR TO ANY DEWATERING ON SITE. THE PLAN MUST INCLUDE A DEWATERING SYSTEM PRIOR TO DISCHARGING INTO RECEIVING WATER. THE DEWATERING PLAN MUST ENSURE THAT THE DISCHARGE WATER IS FREE OF SEDIMENT AND TURBID WATER IN ACCORDANCE WITH THE PROJECT SPEC. THE DEWATERING PLAN MUST ALSO INCLUDE A COMPONENT FOR ONSITE TESTING AND MONITORING OF TURBIDITY AND PH.
14. INCORPORATE POLY PLASTIC FOR TEMPORARY COVER/END OF DAY COVER IN THE EVENT THAT TEMPORARY OR PERMANENT STABILIZATION MEASURES ARE INFEASIBLE TO PROTECT EXPOSED SOILS
15. REFER TO SHEET L4.0 FOR ADDITIONAL EROSION CONTROL MEASURES TO BE IMPLEMENTED WITH PROPOSED GRADING AND STORM SEWER.
16. ALL TEMPORARY EROSION AND SEDIMENT CONTROL BMPs MUST BE REMOVED UPON FINAL STABILIZATION.



1 L2.0 EXISTING SITE CONDITIONS AND EROSION CONTROL
1"= 60'

City of Eden Prairie
Riley Lake Park
Overall Existing Conditions And Erosion Control Plan

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED REGISTERED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA
Jeffrey W. Dettner
DATE: March 22, 2017 LIC. NO. 51899
WSB & Associates, Inc.
701 Xenia Avenue South, Suite 300
Minneapolis, MN 55416
Tel: (763) 541-4800 • Fax: (763) 541-1700
wsbeng.com
engineering • planning • environmental • construction

SCALE: AS NOTED
PLAN BY: JLA · DESIGN BY: JWD
CHECKED BY: JLA · PROJECT NO: 02127-070
RECORD COPY BY: · DATE: 04-03-2017

SHEET
L2.0

Drawing File: k:\02127-070\cad\plan\02127-070-l-demo-plan.dwg, Page Setup: ----, Sheet Layout: L2.0 Overall Existing Conditions And Erosion Control Plan

Date:

PROPOSED LAYOUT NOTES:

THE LAYOUT INFORMATION PROVIDED ON THIS SHEET IS FOR BIDDING PURPOSES AND VERIFICATION OF CRITICAL LAYOUT DIMENSIONS. THE OWNER/L.A. RESERVES THE RIGHT TO REVISE THE PROJECT LAYOUT TO AVOID UNFORESEEN CONSTRAINTS, SUCH AS MATURE TREES, UNFORESEEN SOIL CONSTRAINTS, ETC. THESE ADJUSTMENTS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. CHANGES IN BID QUANTITIES WILL BE BASED ON A PER UNIT BASIS FOR UNIT BID ITEMS LISTED ON THE BID FORM.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR GENERATION OF LAYOUT POINTS FROM THE ACADRI4 DISK (SUPPLIED BY L.A.-E) AND ALL PROJECT FIELD STAKING DURING THE COURSE OF THE PROJECT AS DEFINED IN THE SPECIFICATIONS UNDER - SPECIAL CONDITIONS.

TO AVOID LAYOUT CONFLICTS OR UNCERTAINTIES, THE CONTRACTOR AND SURVEYOR SHALL MEET WITH THE L.A.-E @ THE START OF THE PROJECT TO REVIEW SITE LAYOUT AND GRADING REQUIREMENTS. THE CONTRACTOR AND/OR SURVEYOR SHALL ALSO INITIATE A MEETING WITH THE L.A.-E AT ANY POINT WHEN QUESTIONS ARISE.

FIELD STAKING AND GRADE STAKES SHALL BE REVIEWED AS NECESSARY WITH THE L.A.-E TO ENSURE THAT THE LAYOUT AND GRADING ARE PROPERLY INTERPRETED.

GENERAL NOTES:

CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO BIDDING AND CONSTRUCTION START.

CONTRACTOR SHALL BE RESPONSIBLE FOR ALL LOCATES. ALL LOCATES SHALL BE REVIEWED BY THE OWNER/LA-E PRIOR TO CONSTRUCTION START.

CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING STRUCTURES, UTILITIES, TREES, SITE AMENITIES, ETC. THAT ARE TO REMAIN FROM DAMAGE DURING CONSTRUCTION.

CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY DAMAGE (AT CONTRACTOR'S EXPENSE), TO EXISTING ITEMS TO REMAIN (AT CONTRACTOR'S EXPENSE) AND IS CONSIDERED INCIDENTAL TO THE CONTRACT.

DIMENSIONS TAKE PRECEDENCE OVER SCALE. FIELD VERIFY (FV) ITEMS SHALL BE FIELD VERIFIED BY THE CONTRACTOR.

** ANY DISCREPANCIES FOUND THAT AFFECT THE WORK SHALL BE REPORTED TO THE OWNER/L.A.-E. FOR CLARIFICATION PRIOR TO ANY ADDITIONAL WORK BEING COMPLETED.

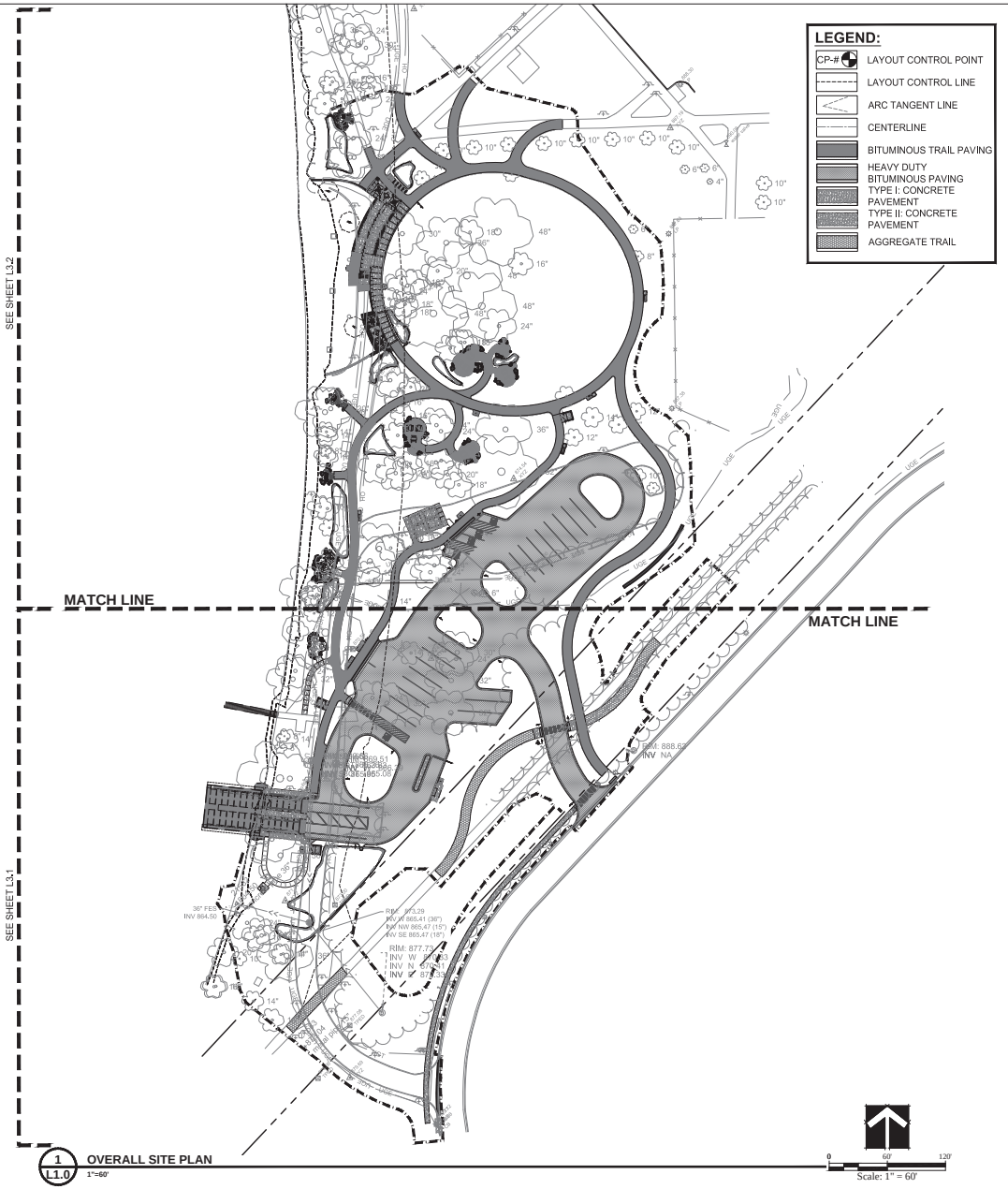
CONSTRUCTION ACCESS:

THE OWNER SHALL FIELD VERIFY THE LOCATION OF CONSTRUCTION ACCESS AT THE TIME OF CONSTRUCTION.

THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ROCK CONSTRUCTION ENTRANCE DRIVE FOR THE DURATION OF CONSTRUCTION. (SEE SPECIFICATIONS AND DETAIL FOR ADDITIONAL INFORMATION)

TRAIL LAYOUT NOTE:

ALL TRAILS SHALL BE FIELD STAKED ACCORDING TO PLAN WITH FINAL ADJUSTMENTS/APPROVAL BY LA-E AT ALL TIMES. RADII VARY - REFER TO LAYOUT FOR SPECIFIC RADIUS JUNCTURES.



City of Eden Prairie
Riley Lake Park

Overall Site Plan

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

Jeffrey W. Dahmer
DATE March 22, 2017
LIC. NO. 51899

SCALE: AS NOTED
PLAN BY: JLA
DESIGN BY: JWD
DRAWN BY: JLA
PROJECT NO: 02127-070
RECORD COPY BY:
DATE: 04-06-2017

REVISIONS
NO. DATE EXPLANATION

WSB
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Minneapolis, MN 55416
TEL (763) 541-4800 • FAX (763) 541-1700
wsbeng.com

engineering • planning • environmental • construction

SHEET
L3.0

Date:
Drawing File: k:\02127-070\cad\plan\02127-070-site-plan.dwg, Page Setup: ---, Sheet Layout: L3.0 Overall Site Plan

GENERAL NOTES:

CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO BIDDING AND CONSTRUCTION START. CONTRACTOR IS RESPONSIBLE FOR ALL LOCATES. ALL LOCATES SHALL BE REVIEWED BY THE OWNER/LA-E PRIOR TO CONSTRUCTION START.

CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING STRUCTURES, UTILITIES, TREES, SITE AMENITIES, ETC. THAT ARE TO REMAIN FROM DAMAGE DURING CONSTRUCTION.

CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY DAMAGE TO EXISTING ITEMS TO REMAIN (AT CONTRACTOR'S EXPENSE) AND IS CONSIDERED INCIDENTAL TO THE CONTRACT.

MATERIAL REMOVED FROM LAKE RILEY, BELOW THE 100 YEAR FLOOD PLAIN SHALL BE DISPOSED OF OFF SITE BY THE CONTRACTOR.

DIMENSIONS TAKE PRECEDENCE OVER SCALE. FIELD VERIFY (FV) ITEMS SHALL BE FIELD VERIFIED BY THE CONTRACTOR.

** ANY DISCREPANCIES FOUND THAT AFFECT THE WORK SHALL BE REPORTED TO THE OWNER/L.A.-E. FOR CLARIFICATION PRIOR TO ANY ADDITIONAL WORK BEING COMPLETED.

UTILITY NOTES:

PRIOR TO BEGINNING WORK ON THIS PROJECT, THE CONTRACTOR SHALL HAVE ALL PUBLIC AND PRIVATE UTILITY LOCATIONS MARKED ON THE PROJECT SITE.

DISCREPANCIES BETWEEN LOCATIONS SHOWN AS EXISTING CONDITIONS ON PLAN SHEETS AND THOSE ACTUALLY MARKED ON THE PROJECT SITE SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE LA-E/OWNER. ALL LOCATES SHALL BE INCIDENTAL TO THE PROJECT.

STATE LAW: 48 HOURS BEFORE EXCAVATING, CALL GOPHER STATE ONE-CALL AT 651-454-0002 FOR FIELD LOCATION OF UNDERGROUND UTILITY LINES. THIS IS A FREE SERVICE WHICH WILL LOCATE UTILITY-COMPANY LINES, BUT WILL NOT LOCATE CITY OR PRIVATELY OWNED LINES.

REFER TO CIVIL PLAN SHEETS FOR INFORMATION RELATED TO PROPOSED UTILITIES. COORDINATE WITH ELECTRICAL CONTRACTORS FOR SITE ELECTRICAL WORK AND SITE LIGHTING.

TOPSOIL & EARTHWORK REQUIREMENTS:

TOPSOIL SHALL BE STRIPPED FROM ALL DISTURBED AREAS AND STOCKPILED IN PILES NOT EXCEEDING 8 FEET IN DEPTH FOR RESPREAD. NOTE: LOCATION OF STOCKPILE SHALL BE DETERMINED BY THE OWNER/LA-E IN THE FIELD. STOCKPILE AREA WILL REQUIRE SILT FENCE AROUND IT. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

AS EARTHWORK PROGRESSES, THE CONTRACTOR SHALL REMOVE ALL FILL SOILS ENCOUNTERED FROM AREAS TO BE PAVED AND REPLACE WITH NATIVE SAND SOILS (WHICH MAY BE MINED ON SITE IF APPROVED OF BY THE OWNER) OR IMPORTED COMMON BORROW TO ACHIEVE PROPER COMPACTION, AS INDICATED IN THE GEOTECHNICAL REPORT. THE CONTRACTOR MAY WORK EXISTING SAND SOILS WITH APPLICATION OF WATER IF PROPER COMPACTION CAN BE ACHIEVED BENEATH AREAS TO BE PAVED. REFER ALSO TO THE GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

A MIN. 6 INCH DEPTH OF A TOPSOIL SHALL BE PLACED ON ALL AREAS INDICATED FOR TURF AND NATIVE SEED AREAS, EXCLUDING AREAS THAT ARE HARD SURFACED, OR STATED OTHERWISE. THE TOPSOIL SHALL BE FINE GRADED, RAKED AND DRAGGED TO PROVIDE A SMOOTH, UNIFORM SURFACE. TOPSOIL GRADES SHALL BE WITHIN .05 FEET OF INDICATED FINISHED GRADE AND SHALL BE TRUE TO GRADIENTS SHOWN ON PLANS.

SPOT GRADES & DRAINAGE REQUIREMENTS:

THE CONTRACTOR AND SURVEYOR SHALL REVIEW ALL GRADING WITH THE LA-E PRIOR TO CONSTRUCTION TO ENSURE PROPER DRAINAGE AND GRADING.

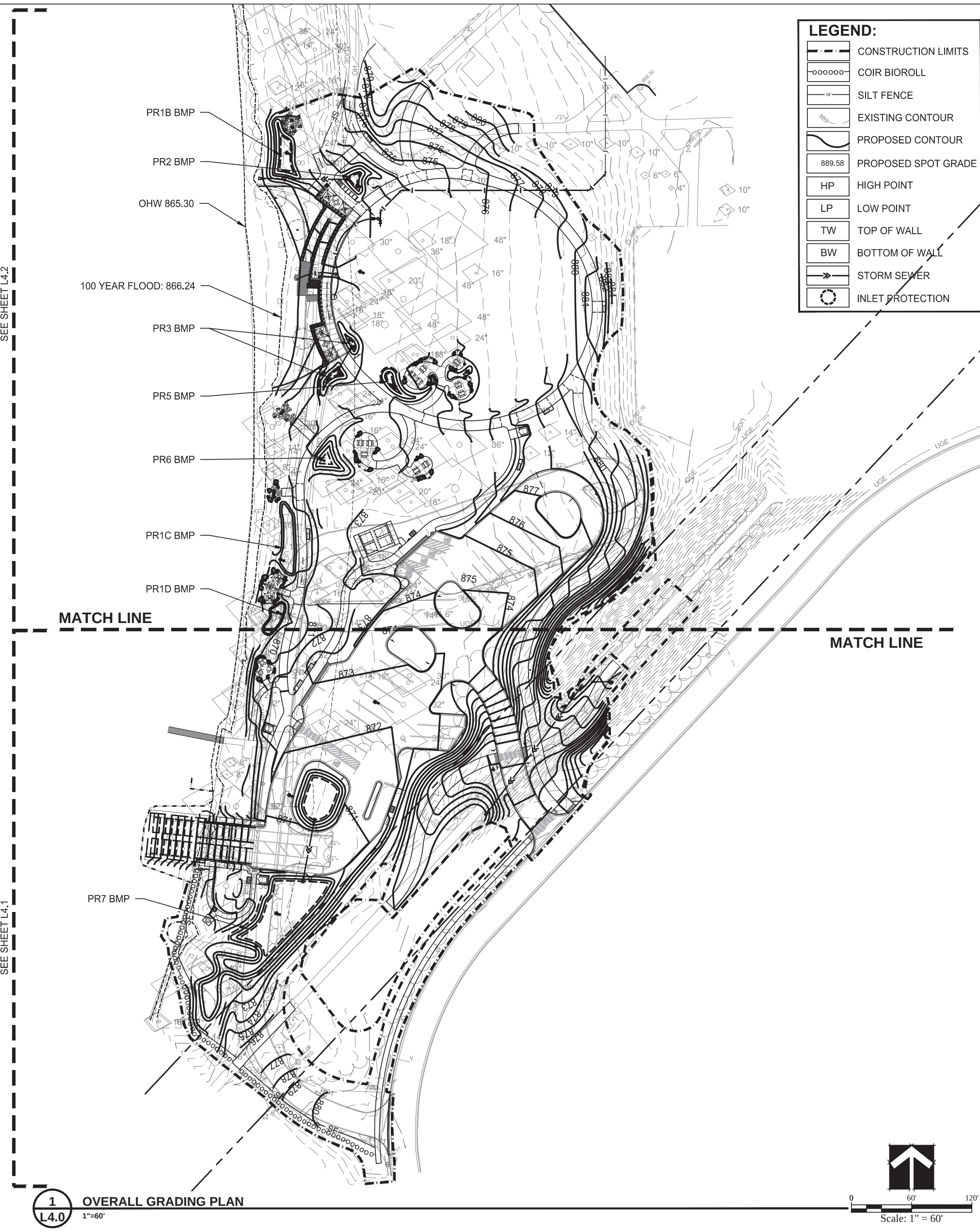
THE INTENT OF ALL PROPOSED SPOT GRADES AND GRADING IN GENERAL IS TO MATCH EXISTING GRADES ADJACENT TO NEW CONSTRUCTION AND TO ENSURE PROPER DRAINAGE AND BLENDING OF NEW GRADES WITH EXISTING ONES. SPOT GRADES SHOWN ARE TO FINISH GRADE. CONTRACTOR SHALL SUBCUT IN ACCORDANCE WITH THE PLANS, DETAILS AND SPECIFICATIONS. CONTRACTOR SHALL FIELD VERIFY AND CONFIRM ALL GRADES WITH THE LA-E AFTER INITIAL SURVEY / STAKING WORK AND PRIOR TO START OF GRADING OPERATIONS.

A 1.5% CROSS SLOPE SHALL BE MAINTAINED ACROSS ALL CONCRETE PADS / PAVEMENTS / AND ASPHALT TRAILS UNLESS STATED OTHERWISE ON THE PLAN.

REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND INFORMATION.

SUBCUT REQUIREMENTS:

GRADES AS SHOWN ARE TO FINISH GRADE. GRADING CONTRACTOR SHALL SUBCUT IN ACCORDANCE WITH THE PLANS, DETAILS AND SPECIFICATIONS.



1 L4.0 OVERALL GRADING PLAN
1"=60'

Scale: 1" = 60'

City of Eden Prairie
Riley Lake Park

Overall Grading Plan

SCALE: AS NOTED
PLAN BY: JLA | DESIGN BY: JWD
CHECKED BY: JLA | PROJECT NO. 02127-070
RECORD COPY BY: | DATE: 04-03-2017

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

Jeffrey w. Dettner
DATE: March 22, 2017 LIC. NO. 51899

WSB
701 Xenia Avenue South, Suite 300
Minneapolis, MN 55416
Tel: (763) 541-4800 • Fax: (763) 541-1700
wsbeng.com
engineering • planning • environmental • construction

SHEET
L4.0

Drawing File: k:\02127-070\cad\plan\02127-070-l-grad-plan.dwg. Page Setup: ----, Sheet Layout: L4.0 Overall Grading Plan

Date:

1 L3.1 GRADING ENLARGEMENT "A"
1"= 30'

Drawing File: k:\02127-070\cad\plan\02127-070-grad-plan.dwg, Page Setup: ----, Sheet Layout: L4.1 Grading Plan Area A

Date:

City of Eden Prairie
Riley Lake Park

Site Plan Enlargements

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

Jeffrey W. Dahmer
DATE March 22, 2017
LIC. NO. 51899

SCALE AS NOTED
PLAN BY J.A.
DESIGN BY JWD
DRAWN BY J.A.
PROJECT NO. 02127-070
RECORD COPY BY
DATE 04-06-2017

REVISIONS
DATE
DESCRIPTION

WSB
701 Xenia Avenue South, Suite 300
Minneapolis, MN 55416
TEL (763) 541-4800 • FAX (763) 541-1700
www.wsb.com

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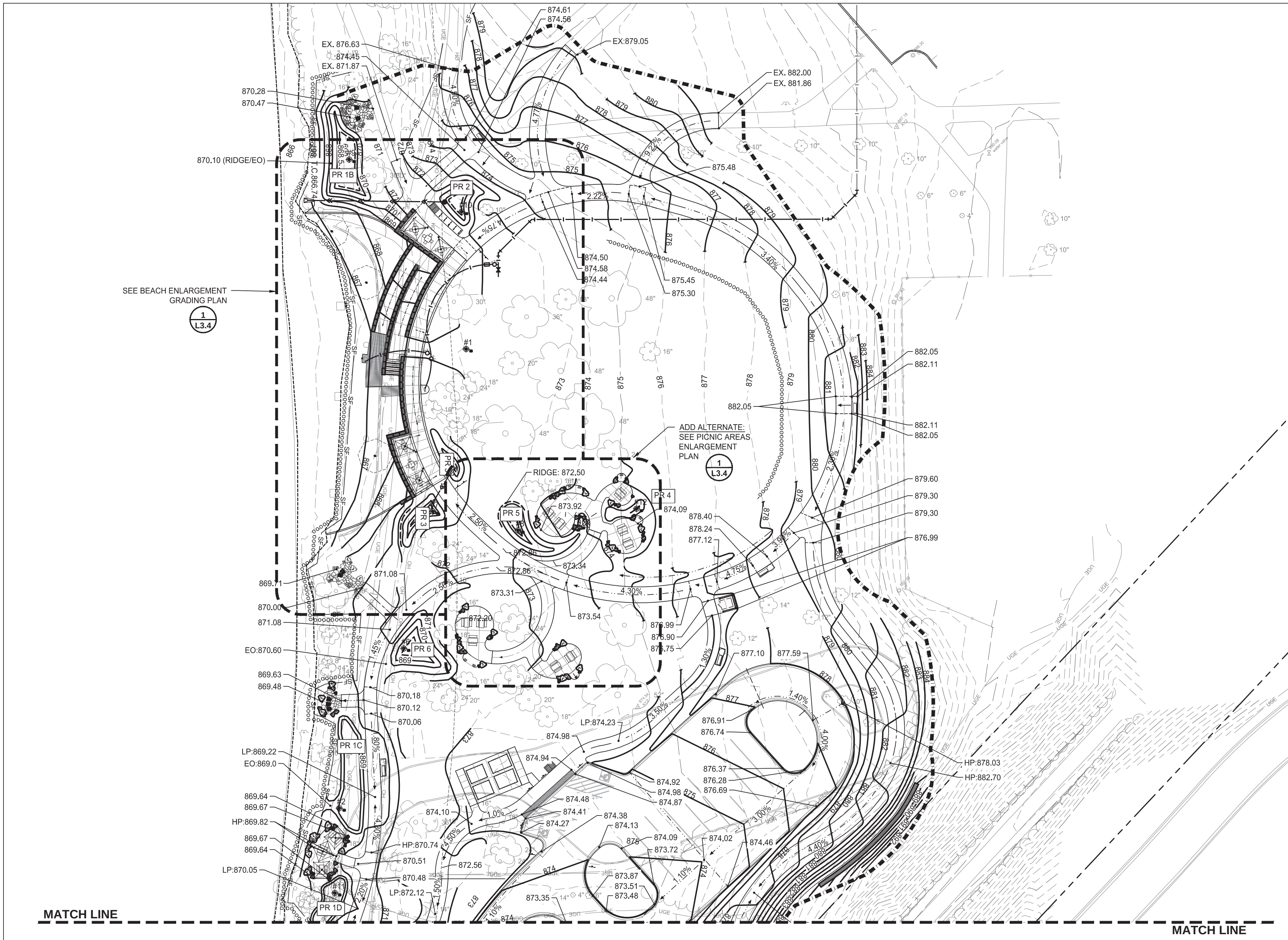
SHEET
L4.1

Drawing File: k:\02127-070\cad\plan\02127-070-l-grad-plan.dwg, **Page Setup:** ----, **Sheet Layout:** L4.2 Grading Plan Area B

Date:



1 / L4.2 GRADING ENLARGEMENT "A"
1"= 30'

LEGEND:

- CONSTRUCTION LIMITS
- COIR BIOROLL
- SILT FENCE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- 889.58 PROPOSED SPOT GRADE
- HP HIGH POINT
- LP LOW POINT
- TW TOP OF WALL
- BW BOTTOM OF WALL
- DRAIN TILE
- STORM SEWER
- INLET PROTECTION

0 30' 60'
Scale: 1" = 30'

REVISION NO.	DATE	EXPLANATION

SCALE: AS NOTED
PLAN BY: JLA
DESIGN BY: JWD
CHECKED BY: JLA
PROJECT NO: 02127-070
RECORD COPY BY:
DATE: 04-03-2017

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

Jeffrey w. Deitner
DATE: March 22, 2017 LIC. NO: 51899

City of Eden Prairie
Riley Lake Park

Grading Plan Area B

WSB & Associates, Inc.
701 Xenia Avenue South, Suite 300
Minneapolis, MN 55416
Tel: (763) 541-4800 • Fax: (763) 541-1700
wsbeng.com
engineering • planning • environmental • construction

SHEET
L4.2

RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT

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

Riley Purgatory Bluff Creek Watershed District Permit Application Review

Permit No: 2017-029

Received complete: April 14, 2017

Applicant: Rob and Torii Conrad

Consultant: Brian Schultz, Schultz Engineering

Project: Tweet Dental – This is new construction on an existing lot of record. It involves the construction of a new dental facility approximately 5,700 square feet in size and all appurtenant infrastructure including bituminous driveway and parking lot and concrete sidewalks. It will also involve the construction of a filtration basin and an infiltration basin and associated stormwater conveyances.

Location: 7845 Century Boulevard, Chanhassen, MN

Reviewer: Terry Jeffery, Project Manager and Permit Coordinator

Rules: Applicable rules checked

	Rule B: Floodplain Management		Rule H: Appropriation of Public Waters
X	Rule C: Erosion and Sediment Control		Rule I: Appropriation of Groundwater
	Rule D: Wetland and Creek Buffers	X	Rule J: Stormwater Management
	Rule E: Dredging and Sediment Removal		Rule K: Variances and Exceptions
	Rule F: Shoreline/Streambank Stabilization	X	Rule L: Permit Fees
	Rule G: Waterbody Crossings	X	Rule M: Financial Assurances

Rule Conformance Summary

Rule	Issue		Conforms to RBPCWD Rules?	Comments
C	**Erosion Control Plan**		See Comment	See Rule Specific Permit Condition C1.
J	**Stormwater Management**	Rate	Yes	
		Volume	Yes	
		Water Quality	Yes	
		Low Floor Elev.	Yes	
		Maintenance	See Comment	See Rule Specific Permit Condition J1.
L	**Permit Fee**		Yes	$1,500 was received on April 14, 2017.
M	**Financial Assurance**		See Comment	The financial assurance has been calculated at $83,340.

Project Description

The project site information is summarized below:

1. Total Site Area: 2.03 acres
2. Existing Site Impervious Area: 0.09 acre
3. New (Increase) in Site Impervious Area: 0.54 acre (0.45 acre increase in site impervious area)
4. Total Disturbed Area: 1.24 acres

Exhibits:

1. Permit Application dated April 17, 2017.
2. Civil Design Plan Sheets (Sheets 1-12) dated March 24, 2017 (received April 20, 2017) and revised May 5, 2017.
3. Stormwater Management Design Memo dated January 26, 2017 (revised May 8, 2017).
4. HydroCAD Model in January 26, 2017 Stormwater Management Design Memo (revised May 8, 2017).
5. Report of Geotechnical Exploration and Engineering Review by Northern Technologies, LLC dated December 5, 2016.
6. P8 Model Output run April 24, 2017 also in Jan. 26, 2017 Storm Water Calculations memorandum. Revised in May 8, 2017 Strom Water Calculations memorandum
7. P8 Model dated April 20, 2017. Revised May 8, 2017.
8. SWPPP Narrative and contents dated May 9, 2017.

Rule Specific Permit Conditions

Rule C: Erosion and Sediment Control

Because the project will disturb 1.24 acres 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 Schultz Engineering and Site Design includes installation of silt fence, erosion control blanket, inlet protection for storm sewer catch basins, a rock construction entrance, protection of filtration and infiltration practices, placement of a minimum of 6 inches of topsoil, decompaction of areas compacted during construction, and retention of native topsoil onsite. 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 1.24 acres (54,014 square feet) of land-surface area the project must meet the criteria of RPBCWD's Stormwater Management rule (Rule J, Subsection 2.1). The criteria listed in Subsection 3.1 apply to the entire project parcel because the project is a new development as the existing hardcover is the result of the paved access from Century Boulevard to the Holiday Inn Express east of the subject property.

The developer is proposing the construction of an infiltration basin (IB1) that will have overflow directed to a filtration system with an elevated underdrain (FB) before discharging into the existing storm sewer to the south. The green space throughout the site will be planted in deep rooted prairie grasses; further contributing to rate control and water quality.

Rate Control

In order 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. Under existing conditions, the site sheet flows from north to south and discharges off-site as diffuse overland flow before routing to the catch basin manhole (CBMH) located at the southeast corner of the existing site access and Century Boulevard. Under the proposed conditions, most the site will be routed through the treatment train while a small portion (DA3) will continue to sheet flow south. These areas will discharge to the same CBMH as existing conditions.

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. The existing and proposed 2-, 10-, and 100-year frequency discharges from the site are summarized in the table below. The proposed project is in conformance with 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
CBMH Century and Access Road	1.14	0.91	2.56	2.10	6.24	5.28	1.28	1.28

Volume Abstraction

Subsection 3.1.b of Rule J requires the abstraction onsite of 1.1 inches of runoff from all impervious surface of the parcel. An abstraction volume of 2,173 cubic feet is required from the 0.54 acres (27,000 square feet) of impervious area on the project for volume retention. The Applicant proposed one

infiltration feature (IB1) in line with a biofiltration basin (FB) with an elevated underdrain. Pretreatment of runoff will be provided by a sump manholes and two rain guardians. The table below summarizes the volume abstraction on the site.

Soil borings performed by Northern Technologies, Inc. show that soils in the project area are primarily clays; the MN Stormwater Manual indicates an infiltration rate of 0.06 inches per hour for such soils. The soil borings show no groundwater was observed within 21 feet of the existing surface. Groundwater is at least 3 feet below the bottom of the proposed biofiltration basins (Rule J, Subsection 3.1.b.ii). The staff concurs that soil information, existing topography, and limited green space show that the abstraction standard in Subsection 3.1 of Rule J cannot practicably be met, the site is considered a restricted site and stormwater runoff volume must be managed in accordance with Subsection 3.3 of Rule J. In order to accomplish the full 1.1 inch of infiltration volume, and achieve drawdown within 48 hours, the management facilities would need to be approximately double in size. The facilities cannot be made deeper as the slow infiltration rates of hydrologic group D soils precludes adequate drawdown time. The only remaining green space to increase the areal coverage of the facilities on the subject property is sloped steeply towards MN T.H. 5 and would not be suitable for infiltration. The applicant is choosing to plant the area in native, drought resistant grasses providing an additional, unmodeled surface water management benefit.

For restricted sites, Subsection 3.3 of Rule J requires rate control in accordance with Subsection 3.1a and that abstraction and water quality protection be provided in accordance with the following sequence: (a)Abstraction of at least 0.55 inches of runoff from site impervious surface determined in accordance with paragraphs 2.3, 3.1 or 3.2, as applicable, and treatment of all runoff to the standard in paragraph 3.1c; or (b) Abstraction of runoff onsite to the maximum extent practicable and treatment of all runoff to the standard in paragraph 3.1c; or (c) Off-site abstraction and treatment in the watershed to the standards in paragraph 3.1b and 3.1c. The table below summarizes the volume abstraction on the site. Based on information reviewed, the proposed project conforms to Rule J, Subsection 3.1.b.

Required Abstraction Depth (inches)	Provided Abstraction Depth (inches)	Provided Abstraction Volume (cubic feet)
0.55	0.56	1,086

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 an infiltration basin and a biofiltration basin with an elevated underdrain to achieve the required TP and TSS removals and submitted a P8 model to estimate the TP and TSS removals.

Pollutant of Interest	Required Removal (%)	Estimated Removal (%)
Total Suspended Solids (TSS)	90	92
Total Phosphorus (TP)	60	75

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 elevations of the structures and the adjacent stormwater management feature are summarized below.

Location Riparian to Stormwater Facility	Low Floor Elevation of Building (feet)	100-year Event Flood Elevation of Adjacent Stormwater Facility (feet)	Freeboard (feet)	Provided Distance Between Building and Adjacent Stormwater Feature (feet)	Required Separation to Groundwater based on Appendix J, Plot 1 (feet)	Provided Separation to Groundwater based on Appendix J, Plot 1 (feet)
Proposed Building	972.0	969.23 (Biofiltration Basin FB)	2.67			
Proposed Building	972.0	969.62 (Infiltration Basin IB1)	2.38			

The low floor elevation of the proposed of the proposed building is 2.67 feet higher than the 100-year flood elevation of the adjacent filtration/infiltration basin. The RPBCWD Staff concurs that the proposed project is in conformance with Rule J, Subsection 3.6.

Maintenance

Subsection 3.7 of Rule J requires the submission of a 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 must provide a draft maintenance and inspection plan. Once approved by RPBCWD, the plan must be recorded on the deed in a form acceptable to the District.

Rule L: Permit Fee:

Fees for the project are:

Rule C & J $1,500

Rule M: Financial Assurance:

Rules C: Silt fence: 1,100 L.F. x $2.50/L.F. = ... $2,750

Restoration: 0.7 acres x $2,500/acre = ... $1,750

Rules J: Infiltration: 9,332 S.F. x $6/S.F. = ... $55,990

Contingency (10%) $6,050

Administration (30%) $16,800

Total Financial Assurance $83,340

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.
3. Return or allowed expiration of any remaining surety and permit close out is dependent on the permit holder providing proof that all required documents have been recorded and providing as-built drawings that show that the project was constructed as approved by the Managers and in conformance with the RPBCWD rules and regulations.

Findings

1. The proposed project includes the information necessary, plan sheets and erosion control plan for review.

2. The proposed project will conform to Rules C and J if the Rule Specific Permit Conditions listed above are met.

Recommendation:

Approval, contingent upon:

1. Continued compliance with General Requirements.
2. Financial Assurance in the amount of $83,340.
3. Submission of the name and contact information of the individual responsible for erosion and sediment control for the site.
4. Receipt in recordation a maintenance declaration for the stormwater management facilities. A draft must be approved by the District prior to recordation.

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.

Board Action

It was moved by Manager _____, seconded by Manager _____ to approve permit application No. 2017-029 with the conditions recommended by staff.

City of minnetonka
Where quality is our nature

14600 Minnetonka Blvd. • Minnetonka, MN 55345
(952) 939-8200 • Fax (952) 939-8244
eminnetonka.co

April 28, 2017

Riley-Purgatory Bluff Creek Watershed District
Attn: Claire Bleser
18681 Lake Dr. East
Chanhassen, MN 55317

RE: Covington Rd. Pipe Replacement – Application for Maintenance Funds

Dear Ms. Bleser:

Thank you for your assistance and continued coordination throughout the investigation and development of this project. Based on previous conversations with Riley Purgatory Bluff Creek Watershed District (RPBCWD), the city of Minnetonka (City) is requesting assistance from the infrastructure Repair and Maintenance Fund offered by RPBCWD in the amount of $25,000 to replace and realign the pipe underlying Covington Rd. The total cost of the project is anticipated to be $75,000.

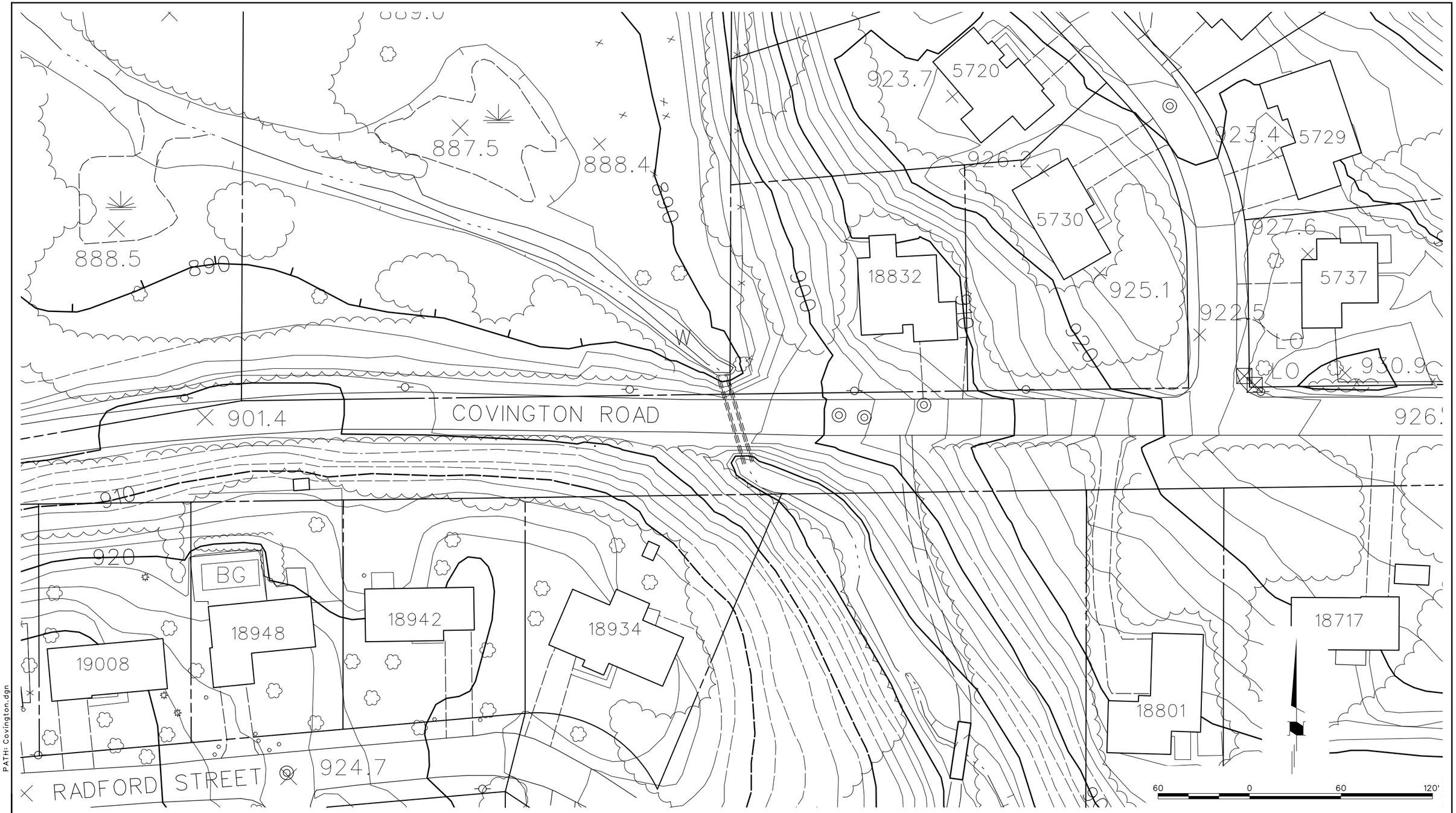
To provide context for the project, the Silver Lake branch of Purgatory Creek passes underneath Covington Rd. in a 36-inch corrugated metal pipe, which has deteriorated significantly in the past few years. Coordination with district staff revealed that this particular area of Purgatory Creek is a high priority for stabilization in an effort to reduce downstream sediment loading. After review and coordination with district staff, the city has determined that open-cut replacement and realignment of the pipe with the channel of Purgatory Creek will better support stabilization initiatives in this portion of the creek corridor.

Enclosed are several photos detailing the condition of the pipe and the surrounding roadway area as well as a site plan detailing existing conditions.

The city is appreciative of this opportunity to coordinate with the RPBCWD. If there are any questions or concerns moving forward, please feel free to contact me.

Thanks,

Tom Dietrich
Water Resources Engineering Coordinator
14600 Minnetonka Blvd.
Minnetonka, MN 55345
Direct: (952) 939-8233
General: (952) 939-8200
www.eminnetonka.com



PATH: Covington.dgn

PLOTTED BY: fyang

NOTES
500 FOOT GRID BASED ON HENNEPIN CO. COORDINATE SYSTEM
VERTICAL DATUM - 1929 MEAN SEA LEVEL DATUM
CONTOUR INTERVAL - 2'
DATE OF PHOTOGRAPHY - 2005

DISCLAIMER
This drawing is not a legally recorded plat or an accurate survey. It is intended to be only an approximate representation of information from various government offices and other sources. It should not be used for a purpose that requires exact measurement or precision. People who use this drawing do so at their own risk. The City of Minnetonka is not responsible for any inaccuracies contained in the drawing. The City of Minnetonka provides no warranty, express or implied, about the correctness of the information.

LEGEND

PROPERTY LINES	BRIDGES	GUARDRAIL (BEAM)	MANHOLES	SPOT ELEVATION	932.4	WETLAND	
ROW CENTERLINES	CURB & GUTTER	GUARDRAIL (CABLE)	WATER HYDRANTS	INDEX CONTOUR (10')	970	SHORELINE, STREAMS	
ROW RADIAL LINES	EDGE OF PAVEMENT	WALKS & PATIOS	CATCHBASINS	INDEX DEPRESSION		WATER ELEVATION	W.E. 938.1
SECTION LINE (FULL)	GRAVEL, TRAIL EDGE	SIGNS	CULVERT	INDEX APPROXIMATE		BELOW GROUND	BG
SECTION LINE (1/4)	DRIVEWAYS	TRAFFIC SIGNAL	TREES	INTERMEDIATE CONTOUR (2')		ABOVE GROUND	AG
BUILDINGS	RAILROAD	POLES, STREETLIGHTS	SHRUBS, BUSHES	INTERMEDIATE DEPRESSION		ORNAMENTAL LIGHT	LO
BLDGS (CONST)	FENCE	UTILITY BOX	TREE GROUP EDGE	INTERMEDIATE APPROXIMATE			
SHEDS & DECKS	RETAINING WALL	POSTS	STUMPS	COORDINATE GRID CROSS			

City of minnetonka
14600 MTKA BLVD, MTKA, MN. 55345 PH: 952-939-8200

DATE: 5/10/2016

COVINGTON ROAD CULVERT

RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT

Treasurers Report

March 31, 2017

REPORT INDEX

RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT
Cash Disbursements
March 31, 2017

Accounts Payable		Amount
Amy Herbert LLC	$	767.94
Barr Engineering Company		63,326.97
BlueCross BlueShield of Minnesota		3,312.50
CAPREF Eden Prairie LLC		12,900.00
Claire Bleser		205.28
David and Jill Haeg		1,851.00
Delta Dental		360.75
ECM Publishers, Inc.		2,573.25
Freshwater Scientific Services, LLC		10,000.00
Jen Heyer		240.00
JMSC Futurity, PLLC		1,395.00
John and Nancy Post		300.00
Josh Maxwell		117.55
Klein Bank Visa		9,633.41
Larson Records Management		169.40
Life Time Fitness		5,175.00
Perry Forster		1,139.29
Purchase Power		148.80
Richard Chadwick		295.78
Smith Partners PLLP		13,549.04
Southwest Newspapers		2,302.05
SRF Consulting Group		339.41
The Lincoln Nathional Life Insurance Company		864.63
Zachary Dickhausen		7.00
Total Accounts Payable	**$**	**130,974.05**

Payroll Disbursements		Amount
Payroll Processing Fee	$	145.00
Manager Payroll Taxes		91.80
Employee Salaries		18,682.42
Employee Payroll Taxes		1,351.99
PERA Match		1,401.18
Total Payroll Disbursements	**$**	**21,672.39**
Total Disbursements	**$**	**152,646.44**

Memos

The 2016 mileage rate is 0.54¢ per mile. The 2017 mileage rate is 53.5¢. Klein Bank Visa will be paid online.

RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT
Fund Performance Analysis - Table 1
March 31, 2017

	2017 Budget	Month Ended Mar. 31, 2017	Year to Date Mar. 31, 2017
REVENUES			
Other Income - Refunds	0.00	0.00	1,875.00
Other Income - District Floodplain	0.00	0.00	22,080.00
Plan Implementation Levy	2,859,000.00	0.00	9,476.83
Permit Income	15,000.00	400.00	10,700.00
TOTAL REVENUES	**$ 2,874,000.00**	**$ 400.00**	**$ 44,131.83**
EXPENDITURES			
Administration			
Accounting/Audit	$ 39,500.00	$ 1,540.00	$ 4,920.00
Advisory Committee	4,000.00	611.90	3,408.83
Engineering Services	103,000.00	6,930.00	23,906.00
Insurance and Bonds	12,000.00	783.58	2,350.75
Legal Services	75,000.00	7,610.94	26,432.10
Manager Expenses	18,500.00	1,854.13	3,044.20
Dues and Memberships	8,000.00	0.00	4,000.00
Office Costs	95,000.00	15,633.76	53,376.48
Permit Review and Inspection	90,000.00	15,481.06	40,201.24
Recording Services	15,000.00	767.94	3,759.67
Employee Cost	450,000.00	25,645.55	76,799.77
Total Administration Costs	**$ 910,000.00**	**$ 76,858.86**	**$ 242,199.04**
Programs and Projects			
District Wide			
‡ Education & Outreach	$ 114,000.00	10,422.68	13,236.32
AIS Inspection and Early Response	75,000.00	0.00	0.00
Cost Share Program	200,000.00	2,112.10	3,214.88
District Wide Floodplain Eval- Atlas 14	30,000.00	0.00	0.00
Data Collection	180,000.00	2,393.55	19,732.76
U of M Plant Restoration	75,000.00	0.00	0.00
TMDL	10,000.00	150.00	1,028.00
Watershed - 10 Year Plan	75,000.00	5,535.50	20,382.94
○ Repair and Maintanance	100,000.00	0.00	0.00
○ ♦ Community Resilience MPCA	0.00	30.00	24,026.55
Creek Restoration Action Straegies Phase 2	20,000.00	2,028.00	7,382.50
District Groundwater Assessment	30,000.00	4,804.50	8,637.00
Total District Wide Costs	**$ 909,000.00**	**$ 27,476.33**	**$ 97,640.95**
Bluff Creek One Water			
○ ♦ Fish Passage Bluff Creek	$ 0.00	4,373.01	4,373.01
○ Bluff Creek Tributary	0.00	0.00	15,709.05
○ ♦ Chanhassen HS reuse	50,000.00	20,543.90	75,017.60
Total District Wide Costs	**$ 50,000.00**	**$ 24,916.91**	**$ 95,099.66**
Riley Creek One Water			
Lake Riley EWM Treatment	$ 25,000.00	0.00	0.00

○ Denotes Multi-Year Project - See Table 2 for details
♦ Grants are supplementing the projects - See table 3 for further details
* Denotes the project will be overlapping by one year as it was not fully complete by year end.
‡ Includes the Master Design items - See Table 2 to details

See Accountants Compilation Report

RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT
Fund Performance Analysis - Table 1
March 31, 2017

	2017 Budget	Month Ended Mar. 31, 2017	Year to Date Mar. 31, 2017
○ Lake Riley Alum Treatment	0.00	0.00	491.95
○ ♦ Lake Susan Improvement Phase 2	0.00	970.73	13,391.08
○ ♦ Chanhassen Town Center	0.00	0.00	10,644.50
Rice Marsh Lake Aeration	0.00	0.00	267.23
Lake Riley - CLP Treatment	10,000.00	0.00	0.00
Lake Susan - CLP Treatment	10,000.00	0.00	0.00
Rice Marsh Lake WQ Improvement - Phase 1	20,000.00	0.00	0.00
Rice Marsh Lake Winter Fish Kill Prevention	10,000.00	0.00	83.79
Riley Creek Restoration	600,000.00	4,449.10	9,241.10
Total Riley Creek One Water Costs	**$ 675,000.00**	**$ 5,419.83**	**$ 34,119.65**
Purgatory Creek One Water			
○ Purgatory Creek Restoration	$ 0.00	908.00	1,228.00
Mitchell Lake Plant Management	15,000.00	0.00	0.00
Red Rock Lake Plant Management	15,000.00	0.00	0.00
Starring Lake Plant Management	20,000.00	0.00	0.00
♦ Fire Station 2 Water Reuse	20,000.00	529.31	655.91
Purgatory Creek Rec Area	50,000.00	0.00	0.00
Hyland Lake UAA	20,000.00	0.00	14.00
Lotus Lake - Phase 1	20,000.00	0.00	0.00
Silver Lake Restoration - Phase 1	20,000.00	0.00	0.00
○ ♦ Scenic Heights	0.00	1,113.10	2,221.10
Total Purgatory Creek One Water Costs	**$ 180,000.00**	**$ 2,550.41**	**$ 4,119.01**
Contingency Reserve			
Contingency Reserve	$ 135,000.00	$ 0.00	$ 0.00
Total Contingency Reserve Costs	**$ 135,000.00**	**$ 0.00**	**$ 0.00**
TOTAL EXPENDITURES	**$ 2,859,000.00**	**$ 137,222.34**	**$ 473,178.31**
Excess (Deficiency)	**$ 15,000.00**	**$ (136,822.34)**	**$ (429,046.48)**

○ Denotes Multi-Year Project - See Table 2 for details
♦ Grants are supplementing the projects - See table 3 for further details
* Denotes the project will be overlapping by one year as it was not fully complete by year end.
‡ Includes the Master Design items - See Table 2 to details

See Accountants Compilation Report

RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT
Multi-Year Project Performance Analysis - Table 2
March 31, 2017

	Total Available for Project	2017 Budget	Month Ended Mar. 31, 2017	Year to Date Mar. 31, 2017	Lifetime Costs	Remaining Budget Funds
Projects						
○ ♦ Chanhassen Town Center	63,000.00	0.00	0.00	10,644.50	33,235.50	29,764.50
○ ♦ Fish Passage Bluff Creek	415,000.00	0.00	4,373.01	4,373.01	29,166.40	385,833.60
○ Lake Lucy Iron Enhanced	85,000.00	0.00	0.00	0.00	62.32	84,937.68
○ Lake Riley Alum Treatment	260,000.00	0.00	0.00	491.95	235,469.51	24,530.49
○ Lake Susan Improvements	275,000.00	0.00	0.00	0.00	272,134.10	2,865.90
○ ♦ Lake Susan Improvement Ph 2	383,400.00	0.00	970.73	13,391.08	30,132.86	353,267.14
○ Purgatory Creek Restoration	661,094.00	0.00	908.00	1,228.00	332,453.56	328,640.44
○ ♦ Chanhassen HS Reuse	250,000.00	50,000.00	20,543.90	75,017.60	86,154.70	163,845.30
○ ♦ Community Resilience MPCA	47,000.00	0.00	30.00	24,026.55	42,201.68	4,798.32
○ ♦ Scenic Heights	260,000.00	0.00	1,113.10	2,221.10	2,221.10	257,778.90
○ Bluff Creek Tributary	200,000.00	0.00	0.00	15,709.05	15,709.05	184,290.95
Total Multi-Year Project Costs	**$ 2,899,494.00**	**$ 50,000.00**	**$ 27,938.74**	**$ 147,102.84**	**$ 1,078,940.78**	**$ 1,820,553.22**
Programs						
○ Repair and Maintenance	$102,005.00	100,000.00	0.00	0.00	0.00	102,005.00
○ Survey and Analysis	37,257.00	0.00	0.00	0.00	24,165.26	13,091.74
Total Program Costs	**$ 139,262.00**	**$ 100,000.00**	**$ 0.00**	**$ 0.00**	**$ 24,165.26**	**$ 115,096.74**
Other						
Total Other	**$ 0.00**	**$ 0.00**	**$ 0.00**	**$ 0.00**	**$ 0.00**	**$ 0.00**
Total Multi-Year Project Costs	**$ 3,038,756.00**	**$ 150,000.00**	**$ 27,938.74**	**$ 147,102.84**	**$ 1,103,106.04**	**$ 1,935,649.96**

Grant and Other Income Performance Analysis - Table 3
March 31, 2017

	Total Available for Project	Total Grant Amount	Required District Match	Additional District Funds	Partner Funds
○ ♦ Chanhassen Town Center	$ 63,000.00	$ 48,000.00	$ 12,000.00	$ 3,000.00	$ 0.00
○ ♦ Fish Passage Bluff Creek	415,000.00	150,000.00	168,300.00	77,500.00	19,200.00
○ ♦ Lake Susan Improvement Ph 2	383,400.00	233,400.00	58,350.00	91,650.00	0.00
♦ Metropolitan Council - WOMP	5,000.00	5,000.00	0.00	0.00	0.00
○ ♦ Chanhassen HS Reuse	250,000.00	200,000.00	50,000.00	0.00	0.00
♦ Fire Station 2 Water Reuse	98,287.00	73,715.00	24,572.00	0.00	0.00
○ ♦ Community Resilience MPCA	47,000.00	27,000.00	10,000.00	0.00	10,000.00
○ ♦ Scenic Heights	260,000.00	50,000.00	0.00	165,000.00	45,000.00
Total Grants and Other Income	**$ 1,521,687.00**	**$ 787,115.00**	**$ 323,222.00**	**$ 337,150.00**	**$ 74,200.00**

○ Denotes Multi-Year Project - See Table 2 for details

♦ Grants are supplementing the projects - See table 3 for further details

* Denotes the project will be overlapping by one year as it was not fully complete by year end.

‡ Includes the Master Design items - See Table 2 to details

See Accountants Compilation Report

RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT

Balance Sheet

As of March 31, 2017

ASSETS		
Current Assets		
Checking	$	3,597,585.95
Money Market Savings		75,520.41
Investments		0.00
Total Current Assets	$	3,673,106.36
Other Assets		
Security Deposit		9,744.00
Prepaid Expenses		13,957.41
Delinquent Property Taxes		17,622.16
Total Other Assets	$	41,323.57
Total Assets	**$**	**3,714,429.93**
LIABILITIES AND NET ASSETS		
Liabilities		
Current Liabilities		
Accounts Payable	$	263,330.92
Payroll Withholding		275.42
Accrued Payroll		10,816.15
PERA Withholding		(0.01)
Total Current Liabilities	$	274,422.48
Other Current Liabilities		
Retainages Payable		23,786.93
Total Other Current Liabilities	$	23,786.93
Long-Term Liabilities		
Deferred Revenues	$	17,622.16
Unearned Revenue		132,396.16
Permit Escrows		626,500.00
Total Long-Term Liabilities	$	776,518.32
Total Liabilities	$	1,074,727.73
Net Assets		
Cumulative Fund Balance	$	3,068,998.68
Excess (Deficiency) Current		(429,296.48)
Total Net Assets	$	2,639,702.20
Total Liabilities and Net Assets	**$**	**3,714,429.93**

RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT
Klein Bank Visa Activity
March 30, 2017

DATE	PURCHASE FROM	AMT	DESCRIPTION	ACCT #	Rcpt	Total
6-Mar	MAWD	$ 100.00	Conferences & Training - A	70302	y	$ 100.00
1-Mar	26 Piada	$ 99.37	Manager General Expenses	70402	y	
1-Mar	Cub Foods	$ 36.09	Manager General Expenses	70402	y	$ 135.46
22-Feb	DNR	$ 50.00	Conferences & Training - S	71002	n	
6-Mar	MAWD	$ 200.00	Conferences & Training - S	71002	y	
9-Mar	Northwest Environ	$ 495.00	Conferences & Training - S	71002	y	
14-Mar	Northwest Environ	$ (495.00)	Conferences & Training - S	71002	y	$ 250.00
28-Feb	Kowalski's	$ 25.16	Education & Outreach	93002	y	
6-Mar	Kowalski's	$ 14.18	Education & Outreach	93002	n	
22-Feb	Lunds&Byerlys	$ 12.86	Education & Outreach	93002	y	
16-Mar	Sign a Rama	$ 56.79	Education & Outreach	93002	y	
15-Mar	SW Newspapers	$ 72.00	Education & Outreach	93002	y	$ 180.99
17-Mar	Capitol City Stn	$ 51.91	Data Collection	100802	y	
24-Feb	Holiday	$ 71.60	Data Collection	100802	y	
13-Mar	Home Depot	$ 23.32	Data Collection	100802	y	
1-Mar	Merlins Ace Hdwe	$ 25.94	Data Collection	100802	y	
20-Mar	Merlins Ace Hdwe	$ 49.48	Data Collection	100802	y	
27-Feb	Mtka Minnoco	$ 8.83	Data Collection	100802	n	
28-Feb	SuperAmerica	$ 55.68	Data Collection	100802	y	$ 286.76
28-Feb	26 Piada	$ 39.28	Office Cost	170402	y	
8-Mar	Amazon	$ 199.00	Office Cost	170402	y	
25-Feb	Bed Bath & Beyond	$ 160.90	Office Cost	170402	y	
24-Feb	Best Buy	$ 160.90	Office Cost	170402	y	
22-Feb	Brueggers	$ 12.49	Office Cost	170402	y	
24-Feb	Caribou	$ 12.16	Office Cost	170402	y	
27-Feb	Caribou	$ 31.68	Office Cost	170402	y	
8-Mar	CenturyLink	$ 219.60	Office Cost	170402	y	
25-Feb	Fully	$ 755.00	Office Cost	170402	y	
6-Mar	GE Appliances	$ 149.95	Office Cost	170402	y	
13-Mar	GE Appliances	$ 231.09	Office Cost	170402	y	
3-Mar	General Delivery	$ 23.58	Office Cost	170402	y	
9-Mar	General Delivery	$ 20.92	Office Cost	170402	y	
17-Mar	General Delivery	$ 61.16	Office Cost	170402	y	
27-Feb	Gina Maria's Pizza	$ 58.54	Office Cost	170402	n	
24-Feb	Home Depot	$ 103.99	Office Cost	170402	y	
7-Mar	Home Depot	$ 54.85	Office Cost	170402	y	
7-Mar	Home Depot	$ 487.82	Office Cost	170402	y	
28-Feb	Jr Copier	$ 1,750.00	Office Cost	170402	n	
27-Feb	Kowalski's	$ 26.31	Office Cost	170402	y	
27-Feb	Lakewinds	$ 84.04	Office Cost	170402	y	
19-Mar	Microsoft	$ 53.64	Office Cost	170402	y	
24-Feb	Milios	$ 19.97	Office Cost	170402	y	
8-Mar	Sears	$ (21.36)	Office Cost	170402	n	
8-Mar	Sears	$ (566.43)	Office Cost	170402	y	
8-Mar	Sears	$ (14.99)	Office Cost	170402	y	
28-Feb	Sova	$ 260.35	Office Cost	170402	y	
8-Mar	Sova	$ 91.40	Office Cost	170402	y	
24-Feb	Target	$ 16.40	Office Cost	170402	n	
24-Feb	Target	$ 262.81	Office Cost	170402	y	
24-Feb	Target	$ 164.80	Office Cost	170402	y	
24-Feb	Target	$ 3.26	Office Cost	170402	y	
25-Feb	Target	$ 525.63	Office Cost	170402	y	
1-Mar	Target	$ (85.48)	Office Cost	170402	y	
1-Mar	Target	$ (27.77)	Office Cost	170402	y	

1-Mar	Target	$ (20.30)	Office Cost	170402	y	
1-Mar	Target	$ (21.35)	Office Cost	170402	y	
1-Mar	Target	$ 32.68	Office Cost	170402	y	
1-Mar	Target	$ 125.44	Office Cost	170402	y	
1-Mar	Target	$ 106.83	Office Cost	170402	y	
1-Mar	Target	$ 39.30	Office Cost	170402	y	
4-Mar	Target	$ 27.49	Office Cost	170402	n	
27-Feb	U-Haul	$ 0.51	Office Cost	170402	n	
27-Feb	U-Haul	$ 83.35	Office Cost	170402	y	
23-Feb	USPS	$ 1.00	Office Cost	170402	n	
15-Mar	Verizon	$ 1,064.78	Office Cost	170402	y	
23-Feb	Warners Stellian	$ 1,008.14	Office Cost	170402	y	
24-Feb	WayFair	$ 211.02	Office Cost	170402	y	
27-Feb	Wayfair	$ 169.02	Office Cost	170402	y	
7-Mar	Wayfair	$ 135.50	Office Cost	170402	y	
9-Mar	WayFair	$ 214.99	Office Cost	170402	y	
17-Mar	WayFair	$ 71.54	Office Cost	170402	y	
10-Mar	Webstaurant	$ 104.77	Office Cost	170402	y	$ 8,680.20
TOTAL PURCHASES		**$ 9,633.41**				**$ 9,633.41**

Total Credits	-
TOTAL DUE	**$ 9,633.41**

Moving People and Business Forward

Riley Purgatory Bluff Creek
Watershed District
Eden Prairie, MN

To the Board of Managers:

Accountant's Opinion

The Riley Purgatory Bluff Creek Watershed District is responsible for the accompanying March 31, 2017 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 the 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 outside 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.

JMSC

JMSC, PLLC
St. Louis Park, MN
April 28, 2017

Resolution 2017-002

RESOLUTION SUPPORTING CHANGE OF BOUNDARY BETWEEN
CARVER COUNTY WATERSHED MANAGEMENT ORGANIZATION AND
RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT

WHEREAS, as a result of the recent generation of more precise topographic data, the hydrologic boundaries of the Carver County Watershed Management Organization (CCWMO), the Minnehaha Creek Watershed District (MCWD), and the Riley Purgatory Bluff Creek Watershed District (RPBCWD) can be more precisely ascertained; and

WHEREAS, these improved data and the ongoing subdivision and development of land allow for the legal boundary of these watersheds to more closely follow the hydrologic boundary; and

WHEREAS, the purpose of Minnesota Statutes Chapters 103B and 103D is to facilitate water resource management on a watershed basis, and that the legal boundaries of watershed management organizations should conform as closely as is practicable to hydrologic boundaries; and

WHEREAS, the parcels changing watersheds are listed on Exhibit A are proposed in each exhibit to be allocated to CCWMO, MCWD, or RPBCWD; and

WHEREAS, the parcels to be allocated to each district or watershed management organization are contiguous to each, and the alteration of the legal boundary of each watershed to include the identified parcels will advance the purposes of Minnesota Statutes Chapters 103B and 103D; and

NOW, THEREFORE BE IT RESOLVED, the Riley-Purgatory-Bluff Creek Watershed District supports the submission of a petition to the Minnesota Board of Water and Soil Resources pursuant to Minnesota Statutes 103D to alter the boundaries of the CCWMO and RPBCWD.

The question was on the adoption of the resolution and there were ___ yeas, ___ absent and __ nays as follows:

	Yea	**Nay**	**Abstain**	**Absent**
BISEK				
CHADWICK				
CRAFTON				
FORSTER				
YETKA				

Upon vote, the president declared the resolution **_____.**

* * * * * * * * * * * *

I, Richard Chadwick, secretary of the Riley Purgatory Bluff Creek Watershed District, do hereby certify that I have compared the above resolution with the original thereof as the same appears of record and on file with the District and find the same to be a true and correct transcription thereof.

IN TESTIMONY WHEREOF, I set my hand this _____ day of _____, 2017.

_____
Mary Bisek, Secretary

MCWD

District 5

District 4

CCWMO

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Legend

Affected Parcels (DRAFT)

Switch to CCWMO

Switch to MCWD

Switch to RPBCWD

Hydrologic Boundary (MCWD)

Hydrologic Boundary (RPBCWD)

Current Tax Boundary

Commissioner Districts

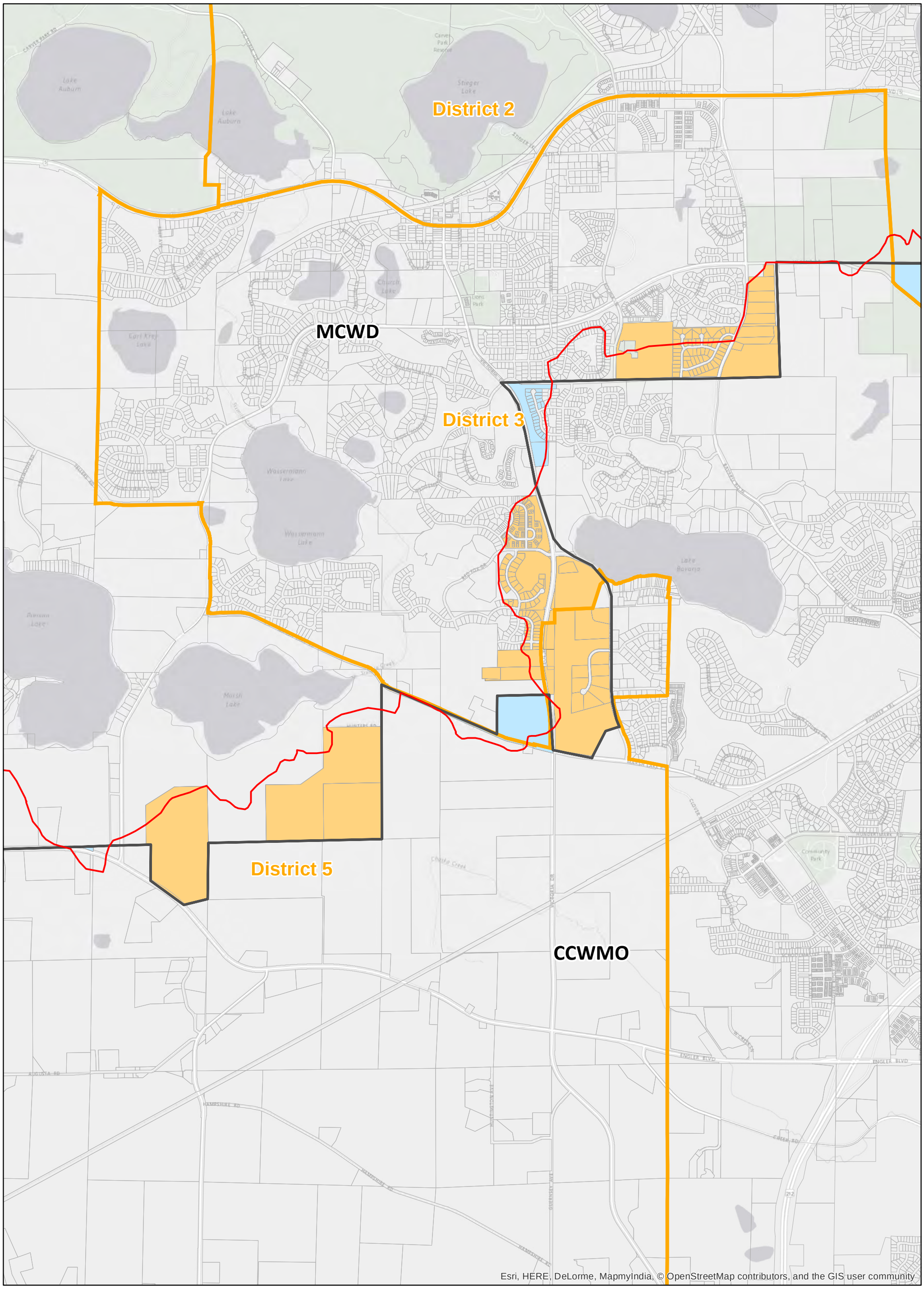
Parcel Boundaries

N

1 inch = 2,000 feet

CCWMO-MCWD-RPBCWD Boundary Change - DRAFT

January 17, 2017



Legend

- Affected Parcels (DRAFT)
- Switch to CCWMO
- Switch to MCWD
- Switch to RPBCWD
- Hydrologic Boundary (MCWD)
- Hydrologic Boundary (RPBCWD)
- Current Tax Boundary
- Commissioner Districts
- Parcel Boundaries

1 inch = 2,000 feet

CCWMO-MCWD-RPBCWD Boundary Change - DRAFT

January 17, 2017

MCWD

District 2

RPBCWD

CCWMO

District 1

District 3

LMWD

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Legend

Affected Parcels (DRAFT)

Switch to CCWMO

Switch to MCWD

Switch to RPBCWD

Hydrologic Boundary (MCWD)

Hydrologic Boundary (RPBCWD)

Current Tax Boundary

Commissioner Districts

Parcel Boundaries

N

1 inch = 2,000 feet

CCWMO-MCWD-RPBCWD Boundary Change - DRAFT

January 17, 2017

Exhibit A: Parcel List

PID	Current Watershed District	Proposed Watershed District
250350500	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
250350700	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
250351710	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
253300010	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
253300020	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
253300030	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
253300040	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
253300100	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
253300110	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
253300120	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
253300130	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
253300140	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
253300150	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
253300160	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
253300170	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
253300180	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
253300190	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
253350030	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258110010	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258110020	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258110030	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258110040	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258110050	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258110060	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258110070	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258110080	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258110090	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258110100	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258110110	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258110130	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258110140	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258110150	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258110160	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258110170	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258110180	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258110190	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258110200	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258110210	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258110220	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258120010	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258120020	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258120030	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258120040	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258120050	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258120060	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258120230	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO

Exhibit A: Parcel List

PID	Current Watershed District	Proposed Watershed District
258130010	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258130020	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258130030	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258130040	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258130050	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258130060	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258130070	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258140010	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258140020	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258140030	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258140230	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258140240	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258140250	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258140260	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258140270	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258140280	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258140290	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258140490	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258150010	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258150020	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258150030	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258150040	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258150050	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258150060	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258150070	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258150080	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258150090	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258160010	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258160020	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258160030	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258160040	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258160050	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258160060	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258160070	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258160080	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258660060	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258660070	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258660080	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258660090	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258660100	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258660110	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258660120	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258660130	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
258660140	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
300270520	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
300540020	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK

Exhibit A: Parcel List

PID	Current Watershed District	Proposed Watershed District
300540051	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
300560010	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
300560021	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
300600010	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
300600030	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
300600080	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
300600090	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
300600100	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
300600110	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
300600120	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
300600130	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
300600140	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
300600150	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
300620260	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
300620581	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
300640040	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
300640050	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
300640060	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
300640070	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
300640080	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
300640090	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
300640100	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
300640110	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
300640120	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
300640130	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
300640140	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
300640150	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
300640160	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
300640170	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
300640270	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
300640280	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
300640710	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
300640720	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
300640780	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
302050032	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
303090011	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
303090021	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
305390020	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
305390030	WS 067 CARVER CO WMO	WS 064 RILEY PURG BLUFF CREEK
305600010	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
305600020	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO
305600030	WS 064 RILEY PURG BLUFF CREEK	WS 067 CARVER CO WMO

Sign Source, Inc.
7660 Quattro Drive
Chanhassen, MN 55317
Web: http://www.sign-source.com

Estimate #: 44953

Option: LED lit option

Created Date:	April 05, 2017	**Prepared For:**	Riley Purgatory Bluff Creek Watershed District
Last Modified:	May 02, 2017	**Proof Due Date:**	April 06, 2017
Salesperson:	Sharon Mathison	**Contact:**	Claire Bleser ,District Administrator
Email:	sharonm@sign-source.com	**Office Phone:**	(952) 607-6512
Office Phone:	(952) 908- 9108	**Fax:**	N/A
Office Fax:	(952) 908- 9148	**Email:**	cbleser@rpbcwd.org
Entered by:	Sharon Mathison	**Address:**	18681 Lake Drive East Chanhassen, MN 55317

Description: Exterior wall sign and monument panel

Option: LED lit option

	Quantity	Unit Price	Subtotal
1	1	$4,497.76	$4,497.76

Description:LED lit channel letter option - Waves to be 3" deep face lit and letters to be 2" deep halo lit spaced off the wall.

- 1x) 318 in. W x 28 in. H Sign(s)

	Quantity	Unit Price	Subtotal
2	2	$81.50	$163.00

Description: New vinyl for existing monument sign panels. Same price either option

- 2x) 104.5 in. W x 11.5 in. H Sign(s)

	Quantity	Unit Price	Subtotal
3	1	$153.50	$153.50

Description: Exterior door sign

- 1x) 24 in. W x 12 in. H Sign(s)

	Quantity	Unit Price	Subtotal
4	1	$1,695.00	$1,695.00

Description: Installation of LED lit channel letters, vinyl on existing panels and exterior door sign.

- Work At Address: 18681 Lake Drive East
Chanhassen, MN 55317

	Quantity	Unit Price	Subtotal
5	1	$175.00	$175.00

Description: Permit and Handling fees

- 1x)

	Quantity	Unit Price	Subtotal
6	1	$462.00	$462.00

Description: Estimated final electrical connection assuming the primary power is within 10' of the sign.

- 1x)

Print Date: 5/2/2017 2:29:22PM **Tax ID:**

Sign Source, Inc.
7660 Quattro Drive
Chanhassen, MN 55317
Web: http://www.sign-source.com

Estimate #: 44953

Option: LED lit option

Subtotal:	$7,146.26
Total:	$7,146.26

Shipping & handling, if applicable, is additional. All estimated shipping & handling amounts are for reference only. Actual shipping & handling will be determined at time of shipment.

Payment due Net 30 days after completion. Please pay from invoice. (This is not an Invoice).

ESTIMATE IS GOOD FOR 30 DAYS UNLESS NOTED OTHERWISE

Jobs valued over $2,000 will be subject to a 3.5% processing fee if paid by credit card.
Payment Terms: Net 30 days

☐ **Estimate Accepted "As Is". Please proceed with Order.** ☐ **Other:** _____

☐ **Changes required, please contact me.** **SIGN:** _____ **Date:** / /

Print Date: 5/2/2017 2:29:22PM **Tax ID:**

Sign Source Limited Warranty: Sign Source, Inc. will repair or replace any product that fails due to faulty material or workmanship for one year from date of invoice. Sign Source will not assume responsibility for damage caused by careless handling, improper installation techniques, misuse, vandalism, or where repairs or alterations have been attempted by others.

Sign Source, Inc.
7660 Quattro Drive
Chanhassen, MN 55317
Web: http://www.sign-source.com

Estimate #: 44953

Option: Non-lit option

Created Date:	April 05, 2017	**Prepared For:**	Riley Purgatory Bluff Creek Watershed District
Last Modified:	May 02, 2017	**Proof Due Date:**	April 06, 2017
Salesperson:	Sharon Mathison	**Contact:**	Claire Bleser ,District Administrator
Email:	sharonm@sign-source.com	**Office Phone:**	(952) 607-6512
Office Phone:	(952) 908- 9108	**Fax:**	N/A
Office Fax:	(952) 908- 9148	**Email:**	cbleser@rpbcwd.org
Entered by:	Sharon Mathison	**Address:**	18681 Lake Drive East Chanhassen, MN 55317

Description: Exterior wall sign and monument panel

Option: Non-lit option

	Quantity	Unit Price	Subtotal
1	1	$3,885.72	$3,885.72

Description: Non-lit channel letter option - Waves and letters to be 2" deep reverse channel letters mounted flush to the wall.

- 1x) 320 in. W x 24 in. H Sign(s)

	Quantity	Unit Price	Subtotal
2	2	$81.50	$163.00

Description: New vinyl for existing monument sign panels. Same price either option

- 2x) 104.5 in. W x 11.5 in. H Sign(s)

	Quantity	Unit Price	Subtotal
3	1	$153.50	$153.50

Description: Exterior door sign

- 1x) 24 in. W x 12 in. H Sign(s)

	Quantity	Unit Price	Subtotal
4	1	$1,425.00	$1,425.00

Description: Installation of non-lit channel letters, vinyl on existing panels and exterior door sign.

- Work At Address: 18681 Lake Drive East
Chanhassen, MN 55317

	Quantity	Unit Price	Subtotal
5	1	$175.00	$175.00

Description: Permit and Handling fees

- 1x)

Print Date: 5/2/2017 2:29:22PM

Tax ID:

Sign Source, Inc.
7660 Quattro Drive
Chanhassen, MN 55317
Web: http://www.sign-source.com

Estimate #: 44953

Option: Non-lit option

Subtotal:	$5,802.22
Total:	$5,802.22

Shipping & handling, if applicable, is additional. All estimated shipping & handling amounts are for reference only. Actual shipping & handling will be determined at time of shipment.

Payment due Net 30 days after completion. Please pay from invoice. (This is not an Invoice).

ESTIMATE IS GOOD FOR 30 DAYS UNLESS NOTED OTHERWISE

Jobs valued over $2,000 will be subject to a 3.5% processing fee if paid by credit card.
Payment Terms: Net 30 days

☐ **Estimate Accepted "As Is". Please proceed with Order.** ☐ **Other:** _____

☐ **Changes required, please contact me.** **SIGN:** _____ **Date:** / /

Print Date: 5/2/2017 2:29:22PM **Tax ID:**

Sign Source Limited Warranty: Sign Source, Inc. will repair or replace any product that fails due to faulty material or workmanship for one year from date of invoice. Sign Source will not assume responsibility for damage caused by careless handling, improper installation techniques, misuse, vandalism, or where repairs or alterations have been attempted by others.