Riley-Purgatory-Bluff Creek Watershed District

Board of Managers Regular Meeting
Wednesday, **March 4, 2020, 7:00pm**
RPBCWD DISTRICT OFFICE
18681 Lake Drive East
Chanhassen

Agenda

1. **Call to Order** **Action**

2. **Approval of the Agenda** **Action**

3. **Feasibility: Middle Riley Creek** **Information**

4. **Feasibility: Wetland at 101** **Information**

5. **Feasibility: Outdoor Center Capture and Reuse Demonstration** **Information**

6. **Matters of general public interest** **Information**

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

7. **Reading and approval of minutes** **Action**
   a. Board of Manager Meeting, February 5, 2020

8. **Citizen Advisory Committee** **Action**
   a. Report
   b. Motion
   c. Application updates

9. **Consent Agenda**
   (The consent agenda is considered as one item of business. It consists of routine administrative items or items not requiring discussion. Any manager may remove an item from the consent agenda for action.)
   a. Accept February Staff Report
   b. Accept February Engineer's Report (with attached Inspection Report)
   c. Approve Task Order for Design of St Hubert Water Quality Project
   d. Approve Task Order for Lake Riley Alum 2nd Split Dose
   e. Approve Task Order for Kerber Pond Ravine Feasibility
   f. Approve Task Order for Upper Riley Creek Corridor Enhancement Plan development
   g. Approve Task Order for WOMP Station Assistance

h. Approve Change Order #2 for the Lower Riley Creek Restoration Project
i. Approve Permit 2018-016:Avienda permit modification request as presented in the proposed board action of the permit review report
j. Approve Pay App #4 Bluff Creek Southwest Branch Stabilization and Restoration
k. Approve Pay App #2 Riley Creek Branch Stabilization
l. Authorize President Ward to sign and mail comments to MPCA in regards to Planned Amendments to Rules Governing Water Quality Fees

10. Action Items **Action**

a. Pulled consent items
b. Accept January Treasurer's Report
c. Approve Paying of the Bills
d. Order Silver Lake
    i. Approve Task Order for Silver Lake BMP design
e. Adopt Resolution 2020-03 MPCA EA Grant Program for Community Resiliency Modeling and At-risk Prioritization of Purgatory Creek Watershed
f. Adopt Resolution 2020-04 MPCA Green Corps
g. Adopt Resolution 2020-05 Accepting transfer of 770 Pioneer Trail from Chanhassen for purpose of wetland restoration
h. Approve release of position openings and transfer of funds to support hire
i. PID #25 0360010 (No Physical Address), City of Chanhassen, Highway 101 Right of Way, City Request for Parcel Exchange
j. IT/IT consultant (LK)
k. Credit Cards (LK)
l. Investment of funds (LK)
m. Journal of votes
n. Shoreline and erosion (LK)
o. Permit variance resolution (LK)
p. Form of resolutions approving permit application (LK)
q. Internal calendar (LK)
r. Multi-year project report (LK)
s. Minnesota Data Practices Act requests and seminars (LK)
t. Update on 2020 Budget (LK)

11. Discussion Items **Information**

a. Manager Report
    i. Personnel Committee
    ii. Other matters
b. Administrator Report
c. Other

12. Upcoming Board Topics

a. **Middle Riley Order Public Hearing**
b. **Wetland @101 Order Public Hearing**
c. **Governance Workshop**, 9am March 2, 2020 at District Office

13. Upcoming Events **Information**

- MPCA Smart Salting for Property Managers training March 12th, 9am, 18681 Lake Drive East, Chanhassen.
- Citizen Advisory Committee Meeting, March 16, 2020, 6:00pm, 18681 Lake Drive East, Chanhassen
- Board of Managers Meeting, April 1, 2020. 7pm, 18681 Lake Drive E, Chanhassen

Feasibility Study

Water Harvest and Reuse Facility
Staring Lake Outdoor Center, Eden Prairie MN

January 23, 2020

ISG Project No. 19-23619

ISG
Architecture
Engineering
Environmental
Planning
ISGInc.com

REPORT FOR:
Riley-Purgatory-Bluff Creek
Watershed District
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APPENDICES

INTRODUCTION

The Staring Lake Outdoor Center located in Eden Prairie offers a wide variety of classes, workshops, and outdoor educational activities on their campus. The facility is currently renovating their standalone educational building, “Animal Junction”. The Riley-Purgatory-Bluff Creek Watershed, in partnership with the City of Eden Prairie Parks and Recreation Department and the Staring Lake Outdoor Center, is interested in retrofitting the building with a rainwater reuse system for use by participants. The reused water is intended for potable and/or non-potable applications and would serve as a water conservation demonstration for educational purposes.

OBJECTIVE

The purpose of this feasibility study is to complete conceptual tasks such as initial engineering calculations, a conceptual site plan, and a preliminary construction cost analysis in order to provide a “proof of concept” that would be used to initiate funding requests and administrative decisions.

EXISTING INFRASTRUCTURE

The Staring Lake Outdoor Center is currently renovating “Animal Junction” and will be adding a utility sink to be used in the classroom as well as a bathroom with one toilet and one sink. Animal Junction has an existing asphalt shingle roof with a gutter system that both appear to be in good condition. The roof has a medium pitch and is shaded on one side by trees. Preliminary review indicates that the existing gutter system can be repurposed for a rainwater catchment system. The Outdoor Center currently has two toilets, two sinks, and a kitchen sink that are connected to the City of Eden Prairie’s water and sewer.

REGULATORY STANDARDS

Non-Potable Use

Non-potable water is not of drinking water quality but may be used for non-contact purposes, the most common being irrigation and toilet flushing. Non-potable rainwater catchment systems are specifically addressed under the Minnesota Plumbing code, chapter 4714, as of January 23, 2016. The following list summarizes some of the requirements. Table 1 provides minimum water quality standards for non-potable use. Table 2 shows the required maintenance of a rainwater catchment system. A maintenance log is also required. The full language and requirements of Chapter 4714 are provided in Appendix A.

- Treatment shall consist of 5 micron or smaller absolute filter and a minimum of 0.5-log inactivation of viruses.
- Rainwater catchments systems shall have no direct connection to a potable water supply or alternate water source system unless separated by an air gap or reduced pressure backflow preventer. An automatic means to supply makeup water shall be provided to meet the system demand or in the case of system failure.
- If a portion of the rainwater catchment system is installed within a building, a cross-connection test is required before the system is activated.
- Rainwater collection systems shall only collect water from roof surfaces.
- Pumps supplying water for non-potable uses shall be capable of delivering no less than 15 psi at the most remote outlet served. If the pressure exceeds 80 psi, a listed pressure-reducing valve shall be installed to reduce the pressure to 80 psi or less.

- Signs shall be installed in areas visible to users and shall have at least ½" letters of a highly visible color on a contrasting background.
- Temperature, color and pH shall be measured and recorded with regular testing.

Table 1. Summary of water quality requirements for non-potable rainwater catchment systems.

Constituent	Unit	Limit
Turbidity	NTU	<1
E. coli	(MPN/100 ml)	2.2
Odor		Non-offensive

Table 2. Maintenance requirements.

Description	Minimum Frequency
Inspect and clean filters and screens, and replace.	Every three months
Inspect and verify that required disinfection, filters, and water quality treatment devices and systems are operational and maintaining minimum water quality requirements in Table 1702.9.4.	After initial installation and monthly thereafter. Exception: Every 12 months if electronically monitored
Inspect and clear debris from rainwater gutters, downspouts, and roof washers.	At the beginning of seasonal usage and monthly during seasonal usage.
Inspect and clear debris from roof or other aboveground rainwater collection surfaces.	At the beginning of seasonal usage and monthly during seasonal usage.
Remove tree branches and vegetation overhanging roof or other aboveground rainwater collection surfaces.	As needed.
Inspect pumps and verify operation	After initial installation and monthly thereafter.
Inspect valves and verify operation	After initial installation and monthly thereafter.
Inspect pressure tanks and verify operation	After initial installation and monthly thereafter.
Clear debris from and inspect storage tanks and locking devices and verify operation	After initial installation and monthly thereafter.
Inspect caution labels and marking	After initial installation and monthly thereafter.
Cross-connection inspection and test	After initial installation and annually thereafter.

Potable Use

Potable water must meet drinking water standards. Potable use of rainwater catchment (also referred to as "direct reuse") is allowed under the Safe Drinking Water Act and regulated by the Surface Water Treatment Rule. The system would be required to receive a variance from the local plumbing official. The Staring Lake Outdoor Center would be classified as a transient, non-community public water supply as the facility serves at least 25 people at least 60 days of the year, but does not serve the same 25 people over six months of the year. The system would be required to meet the following regulations:

- Provide disinfection residual as required by the Surface Water Drinking Act. Daily residual and turbidity testing as well as monthly bacteria testing is required.
- A "Qualified operator" is required, typically requiring additional formal training and certification.
- Achieve 2-log Cryptosporidium removal.
- Transient community must meet standards for contaminants that could have an immediate health impact such as bacteria and nitrates. Annual testing is required.
- Requires seasonal start up certification and inspection.

Current Minnesota Plumbing Code does not support direct reuse of rainwater for potable purposes. Likewise, the City of Eden Prairie building official has stated that without a modification to the current plumbing code, direct potable reuse would not be supported by the City.

CONCEPTUAL DESIGN

For the purpose of this feasibility study it has been assumed that the rainwater catchment system and treatment will be at Animal Junction and operated seasonally from May 1st-October 31st. The system will need to be drained and winterized at the end of October.

There will be some additional gutter system needed to transfer the water from one side of the roof system to the rainwater storage tank. Filter selection must include considerations for leaves and asphalt shingle debris. Additional filters and maintenance may be required. The roof area was calculated to be approximately 880 sf. Conceptual design included preliminary calculations of anticipated water availability. A spreadsheet was developed to explore the effect of wet, average, and dry years on the rainwater catchment system. Rainfall data from the past ten years was obtained from NOAA. In the past 10 years, 2018 was found to be a good representation of an average year of rainfall. Using 2018 rainfall data, the maximum reuse potential of the system was found to be approximately 10,500 gallons if operated from May 1st to October 31st. This reuse approximates to about 100 gallons per day, which equates to around 75 toilet flushes per day at 1.3 gal/flush. This would require a 1,400 gal of active storage and municipal water use for approximately 69 days.

By request from the Owner, four alternatives were considered for rainwater reuse:

1. Non-potable water use at Animal Junction
2. Non-potable water use at Animal Junction and the Outdoor Center
3. Potable water use at Animal Junction
4. Potable water use at Animal Junction and the Outdoor Center

As noted earlier, the City of Eden Prairie building official stated that direct potable reuse is not allowed in the state of Minnesota per the most recent plumbing code. Therefore, Alternatives 3 and 4 were not further evaluated.

The following sections document Alternatives 1 and 2, including preliminary calculations for anticipated water demand, storage tank sizing, filtration and disinfection options, and water delivery options. Options were also considered for several renewable energy sources and are summarized below. All water saving costs are based on $2.35/1000 gallons per the City of Eden Prairie's water rates for commercial services.

Alternative 1: Non-potable water use at Animal Junction

Alternative 1 proposes non-potable water use for toilet flushing at Animal Junction. The design demand for this alternative is described in Table 3. It assumes a high efficiency toilet with 1.3 gallons/flush will be used. Anticipated demand is based on current and predicted trends for the classroom. Table 4 provides a summary of results from the rainwater harvesting analysis for an average year (2018). This alternative utilizes approximately 70% of the maximum potential capture and would save approximately $17 in water costs in one year.

Figure 1 shows the preliminary site plan for Animal Junction. It is proposed that the rainwater storage tank be placed on the north side of the building on the existing concrete slab. The treatment skid containing the filters and UV system is preliminarily placed on the west side of the building between the structure and the canoe rack. The treatment skid will be contained within a protected housing and be placed on the existing concrete pad.

Table 3. Alternative 1 demand and proposed system summary.

Design Detail	Description	Demand
Infrastructure	1 toilet	Assuming 1.3 gals/flush
Peak demand	30 people in one half hour break	3.9 gpm
Average demand	45 flushes per day, Monday-Friday	59 gpd

Table 4. Alternative 1 water harvest calculation summary for an average year of rainfall.

Item	Value	Unit
Live storage in tank	850	gals
Approximate total tank storage	940	gals
Maximum consecutive days of an empty tank	3	days
Total number of days included in analysis	184	days
Number of days that use reuse water	128	days
Number of days that use municipal water	56	days
Percent of days that use municipal water	30%	
Total Capture Potential	10,533	gals
Total Demand	7,664	gals
Water Reused	7,333	gals
Total municipal water used	330	gals
Cost savings	$17.23	
Percent of capture potential used	69%	

Figure 1 Preliminary site layout of Animal Junction.

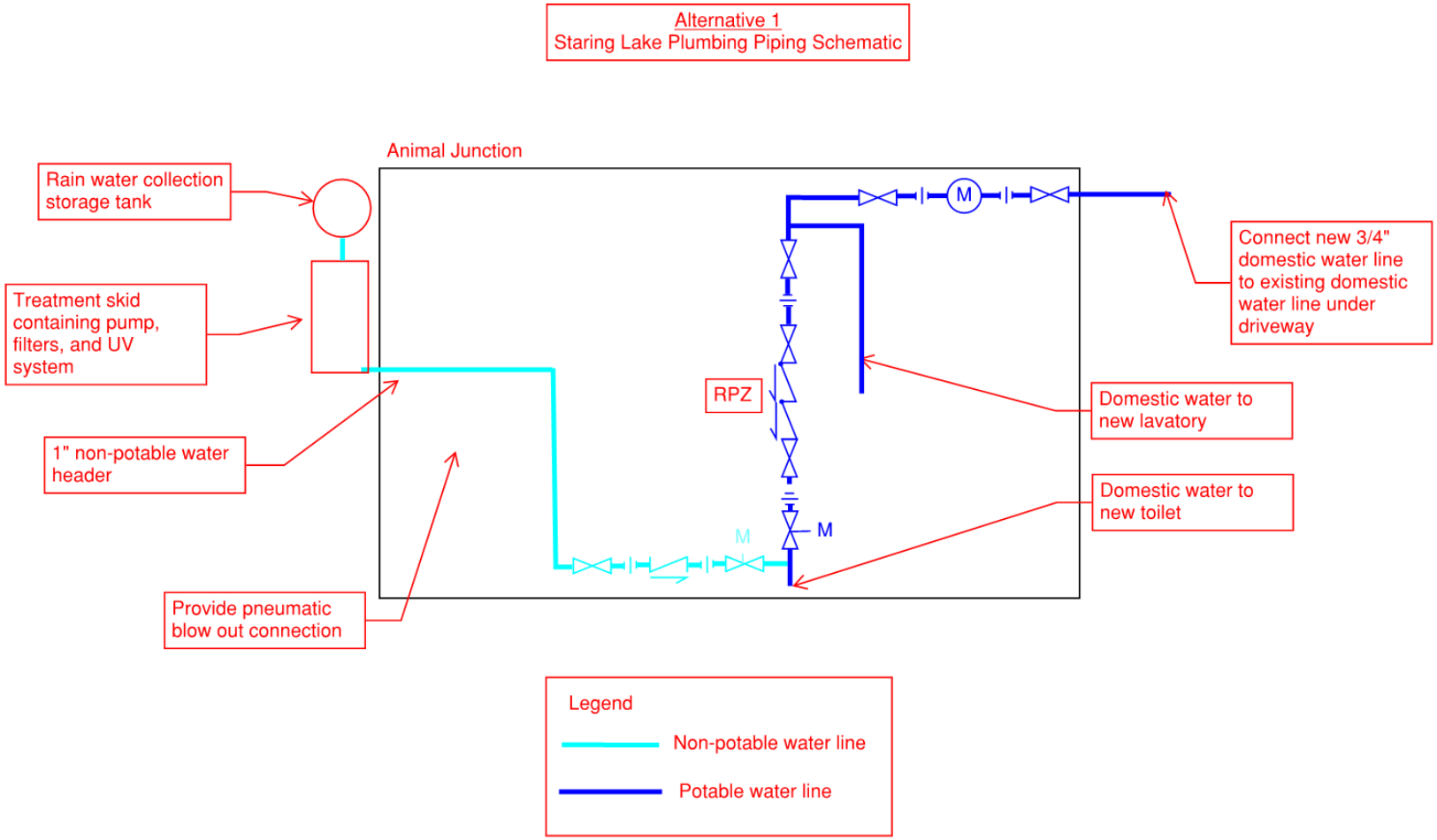


Figure 2. Plumbing piping schematic for Alternative 1..

Alternative 2: Non-potable water use at Animal Junction and the Outdoor Center

Alternative 2 proposes non-potable water use for toilet flushing at Animal Junction and the Outdoor Center. It was assumed that the two existing toilets in the Outdoor Center will be replaced with high efficiency toilets. Anticipated demand is based on current and predicted trends and is shown in Table 5. Table 6 provides a summary of results from the rainwater harvesting analysis for an average year (2018). This alternative utilizes 100% of the maximum potential capture and would save on average approximately $25/year in water costs.

Alternative 2 includes providing treated, non-potable water to the Outdoor Center and requires additional yard piping and plumbing connections. A preliminary site plan can be seen in Figure 2. A plumbing schematic was also developed to address plumbing code regulations for potable and non-potable cross connections. This schematic is shown in Figure 3.

Table 5. Alternative 2 demand summary.

Design Detail	Description	Demand
Infrastructure	3 toilets	Assuming 1.3 gals/flush
Peak demand	60 people in one half hour break	11.7 gpm
Average demand	90 flushes per day, Monday-Friday	117 gpd

Table 6. Alternative 2 water harvest calculation summary for an average year of rainfall.

Item	Value	Unit
Live storage in tank	1400	gals
Approximate total tank storage	1540	gals
Maximum consecutive days of an empty tank	15	days
Total number of days included in analysis	184	days
Number of days that use reuse water	103	days
Number of days that use municipal water	81	days
Percent of days that use municipal water	44%	
Total Capture Potential	10,553	gals
Total Demand	15,327	gals
Water Reused	10,547	gals
Total municipal water used	4,780	gals
Cost savings	$24.79	
Percent of capture potential used	100%	

Figure 3. Preliminary Site Plan for Alternative 2.

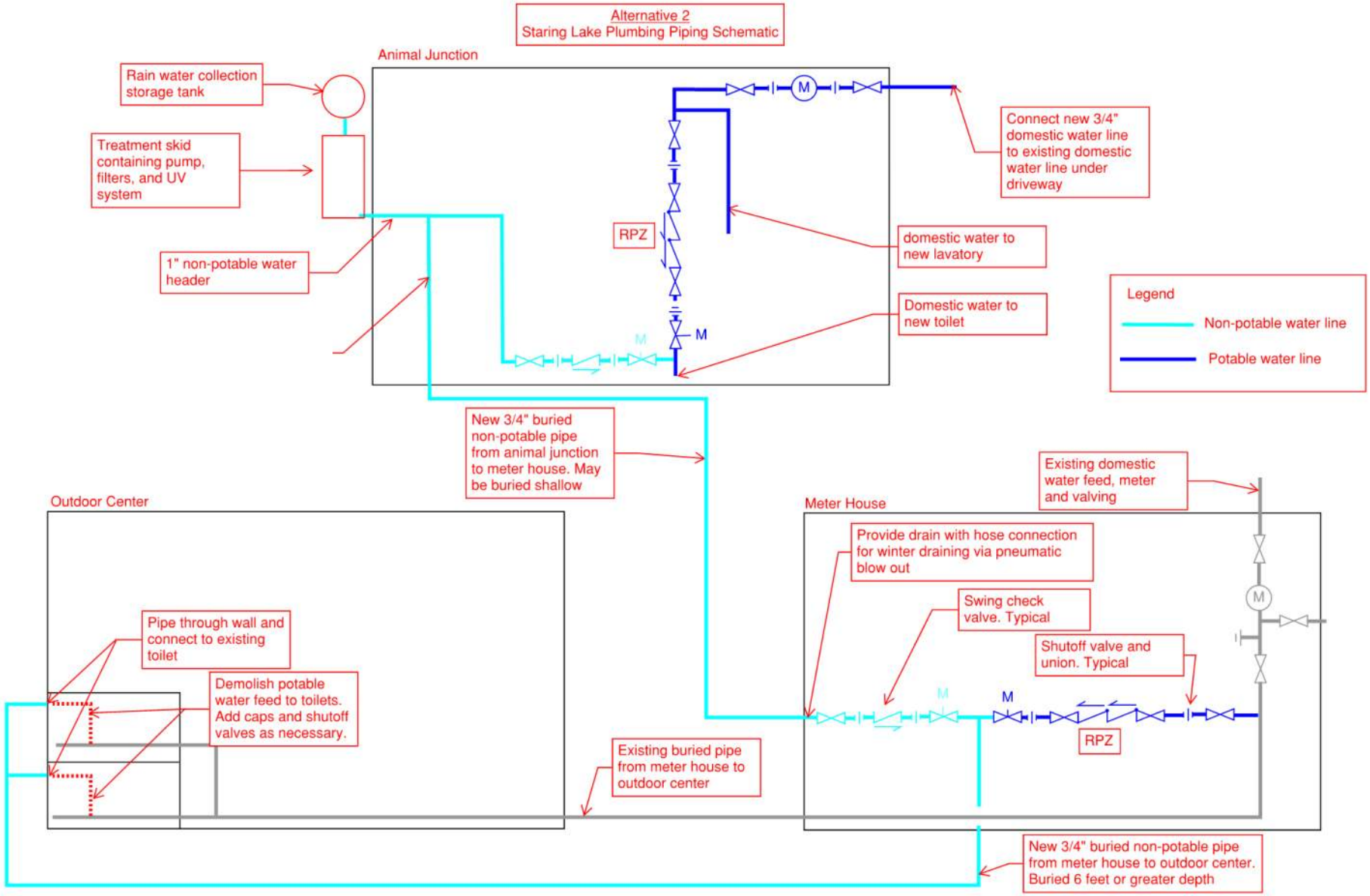


Figure 4. Plumbing piping schematic for Alternative 2.

Renewable Energy Options

Electrical energy is required to power the pump and UV system on the treatment skid. By request of the owner, renewable energy options have been explored as part of this feasibility report. Such a system would provide energy to the proposed treatment process as well as serve as an educational opportunity to the Center's many visitors.

Renewable energy options are often divided into two categories: solar and wind. There also may be some opportunities to use a hybrid system such as operating both wind and solar. It is anticipated that the system would be connected to the grid for backup power. This allows the system to run when renewable energy sources are not available. Rechargeable batteries are an option. They would be charged by renewable sources and used as part of the renewable energy system.

SOLAR

Solar panels are a common way to capture the sun's energy and convert it to electrical use. Solar panels have an average life span of 25-30 years. After 25 years they often produce less energy to the point where replacement is needed. The panels typically require little maintenance, though they should be washed about 2-4 times a year to remove dirt and debris. Systems are typically roof mounted but maybe also be panel mounted. An example can be seen in Figure 4.

For Alternative 1, a conservatively sized solar system would need to provide 2 kW of power. There are kits that can be assembled in a "do-it-yourself" fashion for around $4,500. A professionally assembled system will cost from $5,000 to $6,650. A conservatively sized solar system for Alternative 2 would need to provide 3 kW of power. "Do-it-yourself" kits are around $5,000. A professionally assembled system would cost from $8,850 to $10,500.

Figure 5. Solar panel example provided by Suner Powe.

WIND

Wind energy is typically captured through horizontal or vertical turbines to generate electricity. Considerations for implementing wind energy include high upfront costs, local wind consistency and speed, and potential restriction due to building codes. Other considerations include high maintenance, low efficiency, and potential aesthetic concerns. Ultimately it was determined that wind would not be a viable opportunity for this project due to high maintenance and inconsistent energy production.

COST ANALYSIS

A preliminary cost assessment was conducted for Alternatives 1 and 2. Two companies were solicited for budgetary costs: Rainwater Management Systems (RMS) and Water Control Inc. Unfortunately, Water Control was unable to scale down their system to the required size. Their information was reviewed but was not included in the analysis.

The complete information provided by Rainwater Management Systems can be found in Appendix B. The following paragraphs provide a summary of the two quotes provided. Alternative 1 included a tank with 1,000 gallon of active storage, a ¾ HP pump, and a 3-8 gpm treatment system. The final budgetary cost estimate can be seen in Table 7. The new bathroom construction, fittings, and connections to the existing water and sewer mains are assumed to be provided by others.

Alternative 2 included a tank with 1,300 gallons of active storage, a 1 HP pump, and a 5-15 gpm treatment system. The final budgetary cost estimates can be seen in Table 8. The new bathroom construction, fittings, and connections to the existing water and sewer mains are assumed to be provided by the City. Additional considerations and costs included in the probable cost include piping and plumbing to the Outdoor Center.

The two proposed systems have similar controls and treatment processes. These are described as following.

- Each Alternative proposes a vortex filter to be installed after the gutter system and before the rainwater storage tank. This filter is to address leaves and shingle debris to keep the storage tank clean and to protect the pump.
- Each Alternative includes a pressure transducer level sensor and readout. Redundant dry run protection is provided using a float switch. This scenario is valued at $535. Other level sensors are available such as ultrasonic ($1,300), exterior CorGal mounted ($700), or additional float switches to indicate full, half full, and empty (each float costs $79). These are considered to be add-alternates and are not included in the base cost provided below.
- Each Alternative includes a seasonal aluminum enclosure to house the treatment skid. The budgetary skids include pressure gauges before and after treatment and a manual flow meter. Other digital or analog flow meters are available. Upgrades to the flow meter will add approximately $200 to the base cost.
- Each Alternative also includes a check valve and Reduced Pressure Zone (RPZ) valve to provide cross connection protection. A motorized valve has also been included so the system will automatically switch to a potable water supply when the rainwater supply is exhausted or offline
- A simple controls display has been included that includes a “run light box” with three indicators:
    - Tank Empty (Red)
    - Rainwater Pump enabled (Green)
    - Domestic Backup on (Yellow)
- Each quote includes two days of installation oversight and training by RMS.
- RMS proposed green polyethylene tanks. Due to Eden Prairie’s screening ordinance, and for general aesthetics, stainless steel tanks were also evaluated. For Alternative 1, a tank with 1,000 gals of active storage, the additional cost of a stainless steel tank would be around $1,800. For Alternative 2, the additional cost would be around $2,300. Figure 5 illustrates the two tank material types.

Figure 6. Comparison of green polythethlyne tank to stainless steel tank.

Table 7. Alternative 1 engineer's opinion of probable cost (base).

No.	ITEM DESCRIPTION	UNIT	QTY	UNIT PRICE	TOTAL AMOUNT
1	1,000 gallon tank, a ¾ HP pump, and a 3-8 gpm treatment system	LS	1.00	$18,000.00	$18,000.00
2	3/4" Shutoff valves	LS	2.00	$30.00	$60.00
3	3/4" Motorized shutoff valve	LS	1.00	$450.00	$450.00
				Construction Costs	**$18,510.00**
				20% Contingency	$3,702.00
				25% Engineering Fees*	$4,627.50
				TOTAL PROJECT COST	$24,063.00

*Includes design, bidding, and construction administration

Table 8. Alternative 2 engineer's opinion of probable cost

No.	ITEM DESCRIPTION	UNIT	QTY	UNIT PRICE	TOTAL AMOUNT
1	1,300 gallons of active storage, a 1 HP pump, and a 5-15 gpm treatment system.	LS	1.00	$20,050.00	$20,050.00
2	3/4" Reduced Pressure Zone valve	LS	1.00	$1,000.00	$1,000.00
3	3/4" Check valve	LS	1.00	$150.00	$150.00
4	3/4" Motorized shutoff valve	LS	3.00	$450.00	$1,350.00
5	3/4" Shutoff valves	LS	4.00	$30.00	$120.00
6	Wire (for controls)	LS	250.00	$5.10	$1,275.00
7	2" non-metallic conduit	LF	250.00	$6.00	$1,500.00
8	3/4" PVC Schedule 40	LF	350.00	$47.00	$16,450.00
				Construction Costs	**$41,895.00**
				20% Contingency	$8,379.00
				25% Engineering Fees*	$10,473.75
				TOTAL PROJECT COST	$60,747.75

*Includes design, bidding, and construction administration

RECOMMENDATIONS

General recommendations should this project proceed include completing a Gopher State One Call to determine existing utility locations. Since we have assumed that no utility conflicts will be encountered, if utilities do exist and must be moved, this may have an effect on the preliminary site layout and potential piping cost.

Additional recommendations include trimming the trees around Animal Junction. This cost has not been evaluated and is assumed to be completed by the City. This trimming will help with the following:

- Reduce maintenance on existing gutters and proposed filtration system
- Increases allowable rain capture
- Reduce treatment needs and improve water quality by reducing leaf debris
- Potential to increase efficiency of any solar installation

We recommend installing and/or replacing existing toilets with high efficiency toilets that use approximately 1.28 gallons per flush. Another option is high efficiency dual toilets that use either 1.1 gallons per flush or 1.6 gallons per flush depending on the user's needs.

The final recommendation is to proceed with Alternative 1: Non-potable water use at Animal Junction. This was determined to be the most feasible option evaluated. While Alternative 2 uses the maximum potential of the rainwater harvesting system, the total demand is greater than what the system can supply. Alternative 2 also costs over twice as much as Alternative 1 for only a 30% increase in system usage and an $8/year additional water cost savings. It is recommended that Alternative 1 be implemented with the option to use the system for irrigation purposes to use the maximum potential of the system. As noted earlier, we do not recommend consideration of a direct potable option for hand washing.

Appendix A: Minnesota Plumbing Code

TABLE 1702.12

Minimum Alternate Water Source Testing, Inspection, and Maintenance Frequency

Description	Minimum Frequency
Inspect and clean filters and screens, and replace.	Every three months.
Inspect and verify that required disinfection, filters, and water quality treatment devices and systems are operational and maintaining minimum water quality requirements in Table 1702.9.4.	After initial installation and monthly thereafter. Exception: Every 12 months thereafter when electronically monitored.
Inspect and clear debris from rainwater gutters, downspouts, and roof washers.	At the beginning of seasonal usage and monthly during seasonal usage.
Inspect and clear debris from roof or other aboveground rainwater collection surfaces.	At the beginning of seasonal usage and monthly during seasonal usage.
Remove tree branches and vegetation overhanging roof or other aboveground rainwater collection surfaces.	As needed.
Inspect pumps and verify operation.	After initial installation and every 12 months thereafter.
Inspect valves and verify operation.	After initial installation and every 12 months thereafter.
Inspect pressure tanks and verify operation.	After initial installation and every 12 months thereafter.
Clear debris from and inspect storage tanks and locking devices and verify operation.	After initial installation and every 12 months thereafter.
Inspect caution labels and marking.	After initial installation and every 12 months thereafter.
Cross-connection inspection and test.*	After initial installation and thereafter in accordance with Section 1702.11.2.4.

*The cross-connection inspection and test shall be performed in accordance with this chapter by a plumber licensed under Minnesota Statutes, section 326B.46, and certified to ASSE Standard 5120.

4714.1702 NONPOTABLE RAINWATER CATCHMENT SYSTEMS.

Subpart 1. **Section 1702.1.** UPC section 1702.1 is amended to read as follows:

1702.1 General. The installation, construction, alteration, and repair of rainwater catchment systems intended to supply uses such as water closets, urinals, trap primers for floor drains and floor sinks, industrial processes, water features, vehicle washing facilities, cooling tower makeup, and similar uses shall be approved by the commissioner.

Subp. 2. **Section 1702.2.** UPC section 1702.2 is amended to read as follows:

1702.2 Plumbing Plan Submission. No permit for a rainwater catchment system shall be issued until complete plumbing plans have been submitted and approved by the commissioner in accordance with Minnesota Rules, part 1300.0215, subpart 6.

Subp. 3. **Section 1702.4.** UPC section 1702.4 is amended to read as follows:

1702.4 Connections to Potable or Reclaimed (Recycled) Water Systems. Rainwater catchment systems shall have no direct connection to a potable water supply or alternate water source system. Potable or reclaimed (recycled) water is permitted to be used as makeup water for a rainwater catchment system provided the potable or reclaimed (recycled) water supply connection is protected by an air gap or reduced-pressure principle backflow preventer in accordance with this code. An automatic means to supply the rainwater catchment system with makeup water shall be installed when there is insufficient rainwater to meet the required demand or due to system failure.

Subp. 4. **Section 1702.5.** UPC section 1702.5 is amended to read as follows:

1702.5 Initial Cross-Connection Test. Where a portion of a rainwater catchment system is installed within a building, a cross-connection test is required in accordance with section 1702.11.2, as amended. Before the building is occupied or the system is activated, the plumbing contractor shall perform the initial cross-connection test in the presence of the Authority Having Jurisdiction. The test shall be ruled successful before final approval is granted.

Subp. 5. **Section 1702.7.** UPC section 1702.7 is amended to read as follows:

1702.7 Rainwater Catchment System Materials. Rainwater catchment system materials shall comply with sections 1702.7.1 through 1702.7.4.

1702.7.1 Water Supply and Distribution Materials. Rainwater catchment water supply and distribution materials shall comply with Chapter 6, as amended in this code, and the requirements of this code for potable water supply and distribution systems, unless otherwise provided for in this section.

1702.7.2 Rainwater Catchment System Drainage Materials. Materials used in rainwater catchment drainage systems, including gutters, downspouts, conductors,

and leaders shall be in accordance with Chapter 11, as amended in this code, and the requirements of this code for storm drainage.

1702.7.3 Storage Tanks. Rainwater storage tanks shall comply with section 1702.9.5, as amended in this code.

1702.7.4 Collection Surfaces. The collection surface shall be constructed of a hard, impervious material.

Subp. 6. **Section 1702.9.** UPC section 1702.9.3 is amended to read as follows:

1702.9.3 Collection Surfaces. Rainwater catchment systems shall collect rainwater only from roof surfaces. Rainwater catchment systems shall not collect rainwater from:

(1) vehicular parking surfaces;

(2) surface water runoff;

(3) bodies of standing water; or

(4) similar nonroof surfaces.

1702.9.3.1 Prohibited Discharges. Overflows and bleed-off pipes from roof-mounted equipment and appliances, condensate, and other waste disposal shall not discharge onto roof surfaces that collect rainwater for rainwater catchment systems.

Subp. 7. **Section 1702.9.** UPC section 1702.9.4 is amended to read as follows:

1702.9.4 Minimum Water Quality. The minimum water quality for rainwater catchment systems shall meet the applicable water quality recommendations in Table 1702.9.4.

Subp. 8. **Section 1702.9.4.** UPC section 1702.9.4 is amended by adding the following table:

TABLE 1702.9.4

Measure	**Limit**
Turbidity (NTU)	<1
E. coli (MPN/100 mL)	2.2
Odor	Non-offensive
Temperature (degrees Celsius)	MR
Color	MR
pH	MR

MR = measured and recorded only

Treatment:

5 micron or smaller absolute filter

Minimum .5-log inactivation of viruses

Subp. 9. **Section 1702.9.5.** UPC subsection 1702.9.5.1 is amended to read as follows:

1702.9.5.1 Construction. Rainwater storage shall be constructed of solid, durable materials not subject to excessive corrosion or decay, watertight, and suitable for rainwater storage.

Subp. 10. **Section 1702.9.5.** UPC section 1702.9.5.6 (A) is amended to read as follows:

1702.9.5.6 (A) Animals and Insects. Rainwater tank openings shall be protected to prevent the entrance of insects, birds, or rodents into the tank and piping system. Screen installed on vent pipes, inlets, and overflow pipes shall be corrosion-resistant and have an aperture of not greater than 1/16 inch (1.6 mm) and shall be close-fitting.

Subp. 11. **Section 1702.9.5.** UPC section 1702.9.5 is amended by adding a new subsection as follows:

1702.9.5.8 Storage Tank Venting. A vent shall be installed on each tank. The vent shall extend from the top of the tank and terminate a minimum of 12 inches above grade, shall be a minimum of 1-1/2 inches in diameter, and shall be turned downward.

Subp. 12. **Section 1702.9.6.** UPC section 1702.9.6 is amended to read as follows:

1702.9.6 Pumps. Pumps serving rainwater catchment systems shall be listed. Pumps supplying water to water closets, urinals, and trap primers shall be capable of delivering not less than 15 pounds-force per square inch (psi) (103 kPa) residual pressure at the highest and most remote outlet served. Where the water pressure in the rainwater supply system within the building exceeds 80 psi (552 kPa), a listed pressure-reducing valve reducing the pressure to 80 psi (552 kPa) or less to water outlets in the building shall be installed in accordance with this code.

Subp. 13. **Section 1702.9.7.** UPC section 1702.9.7 is amended to read as follows:

1702.9.7 Roof Drains. Primary and secondary roof drain systems shall be designed and installed in accordance with Chapter 11, as amended in this code. Secondary roof drains shall be equipped with a working alarm.

Subp. 14. **Section 1702.9.8.** UPC section 1702.9.8 is amended to read as follows:

1702.9.8 Water Quality Devices and Equipment. The rainwater catchment system shall include filtration and disinfection to maintain the minimum water quality

requirements in Table 1702.9.4. At a minimum, a 5-micron absolute filter shall be provided along with disinfection to provide a 0.5-log inactivation of viruses. Devices and equipment used to treat rainwater shall be suitable for rainwater catchment system applications, properly designed, sized, and documented for the specific project by a Minnesota registered professional engineer.

Subp. 15. **Sections 1702.9.11 and 1702.9.12.** UPC sections 1702.9.11 and 1702.9.12 are deleted in their entirety.

Subp. 16. **Section 1702.10.** UPC section 1702.10.1 is amended to read as follows:

1702.10.1 Commercial, Industrial, and Institutional Restroom Signs. A sign shall be installed in restrooms in commercial, industrial, and institutional occupancies using nonpotable rainwater for water closets, urinals, or both. Each sign shall contain 1/2-inch (12.7 mm) letters of a highly visible color on a contrasting background. The location of the sign(s) shall be such that the sign(s) shall be visible to users. Each sign shall contain one of the following texts as determined by the application:

1702.10.1 (A) TO CONSERVE WATER, THIS BUILDING USES RAINWATER TO FLUSH TOILETS AND URINALS.

1702.10.1 (B) TO CONSERVE WATER, THIS BUILDING USES RAINWATER TO FLUSH TOILETS.

1702.10.1 (C) TO CONSERVE WATER, THIS BUILDING USES RAINWATER TO FLUSH URINALS.

1702.10.1 (D) TO CONSERVE WATER, THIS BUILDING USES RAINWATER TO *_____*

_____ shall indicate the rainwater usage.

Subp. 17. **Section 1702.11.** UPC section 1702.11.2 is amended to read as follows:

1702.11.2 Cross-Connection Inspection and Testing. The potable and rainwater catchment water systems shall be isolated from each other and independently inspected and tested to ensure there is no cross-connection in accordance with sections 1702.11.2.1 through 1702.11.2.4.

1702.11.2.1 Visual System Inspection. Prior to commencing the cross-connection testing and annually thereafter, a dual system inspection shall be conducted as follows:

Pumps, equipment, equipment room signs, and exposed piping in an equipment room shall be inspected for visible cross-connections, proper operation, and damage.

1702.11.2.2 Cross-Connection Test. The following procedure shall be followed by the plumbing contractor in the presence of the Authority Having Jurisdiction to determine whether a cross-connection has occurred:

(1) The potable water system shall be activated and pressurized. The rainwater catchment water system shall be shut down and completely drained.

(2) The potable water system shall remain pressurized while the rainwater catchment water system is completely drained. The minimum period the rainwater catchment water system is to remain completely drained shall be determined based on the size and complexity of the potable water system and rainwater catchment water distribution system, but in no case shall that period be less than one hour.

(3) Fixtures, potable water, and rainwater, shall be tested and inspected for flow. Flow from a rainwater catchment water system outlet indicates a cross-connection. No flow from a potable water outlet indicates that it is connected to the rainwater catchment water system.

(4) The drain on the rainwater catchment water system shall be checked for flow during the test and at the end of the testing period.

(5) The potable water system shall then be completely drained.

(6) The rainwater catchment water system shall then be activated and pressurized.

(7) The rainwater catchment water system shall remain pressurized for a minimum time specified by the Authority Having Jurisdiction while the potable water system is completely drained. The minimum period the potable water system is to remain completely drained shall be based on the size and complexity of the potable water system and rainwater catchment water distribution system but in no case shall that period be less than one hour.

(8) Fixtures, potable and rainwater catchment, shall be tested and inspected for flow. Flow from a potable water system outlet indicates a cross-connection. No flow from a rainwater catchment water outlet indicates that it is connected to the potable water system.

(9) The drain on the potable water system shall be checked for flow during the test and at the end of the testing period.

(10) Where there is no flow detected in the fixtures that would indicate a cross-connection, the potable water system shall be repressurized.

1702.11.2.3 Discovery of Cross-Connection. In the event that a cross-connection is discovered, the following procedure, in the presence of the Authority Having Jurisdiction, shall be activated immediately:

(1) Rainwater catchment water piping to the building shall be shut down at the meter and the rainwater water riser shall be drained.

(2) Potable water piping to the building shall be shut down at the meter.

(3) The cross-connection shall be uncovered and disconnected.

(4) The building shall be retested following procedures listed in sections 1702.11.2.1 and 1702.11.2.2.

(5) The potable water system shall be chlorinated with 50 ppm chlorine for 24 hours.

(6) The potable water system shall be flushed after 24 hours, and a standard bacteriological test shall be performed. Where test results are acceptable, the potable water system shall be permitted to be recharged.

1702.11.2.4 Inspection. An annual inspection of the rainwater catchment water system, following the procedures in Section 1702.11.2.1, shall be required. Cross-connection testing, following the procedures listed in section 1702.11.2.2, shall be required every five years.

Alternate testing requirements shall be permitted by the Authority Having Jurisdiction.

Subp. 18. **Section 1702.** UPC section 1702 is amended by adding the following section:

1702.12 Maintenance and Inspection. Rainwater catchment water systems and components shall be inspected and maintained in accordance with sections 1702.12.1 through 1702.12.3.

1702.12.1 Frequency. Rainwater catchment systems and components shall be inspected and maintained in accordance with Table 1702.12 unless more frequent inspection and maintenance is required by the manufacturer.

1702.12.2 Maintenance Log. A maintenance log for rainwater catchment systems is required. The property owner or designated appointee shall ensure that a record of testing, inspection, and maintenance in accordance with Table 1702.12 is maintained in the log. The log shall indicate the frequency of inspection and maintenance for each system.

1702.12.3 Maintenance Responsibility. The required operation, maintenance, monitoring, testing, and inspection of rainwater catchment systems shall be the responsibility of the property owner.

Subp. 19. **Section 1702.12.** UPC section 1702.12 is amended by adding the following table:

Subp. 20. **Section 1702.** UPC section 1702 is amended by adding a section as follows:

1702.13 Operation and Maintenance Manual. An operation and maintenance manual for rainwater catchment systems shall be supplied to the building owner by the system designer. The operating and maintenance manual shall include the following:

(1) Detailed diagram of the entire system and the location of system components.

(2) Instructions on operating and maintaining the system.

(3) Details on maintaining the required water quality in Table 1702.9.4.

(4) Details on deactivating the system for maintenance, repair, or other purposes.

(5) Applicable testing, inspection, and maintenance frequencies in accordance with Table 1702.12.

(6) A method of contacting the manufacturer(s).

Subp. 21. **Section 1702.** UPC section 1702 is amended by adding the following section:

1702.14 Separation Requirements. All underground rainwater service piping shall be separated from the building sewer piping in accordance with section 609.2. Treated, nonpotable water pipes shall be permitted to be run or laid in the same trench as potable water pipes with a 12-inch minimum vertical and horizontal separation when both pipe materials are approved for use within a building. Where horizontal piping materials do not meet this requirement, the minimum separation shall be increased to 60 inches. The potable water piping shall be installed at an elevation above the treated-nonpotable water piping.

Subp. 22. **Section 1702.** UPC section 1702 is amended by adding the following section:

1702.15 Abandonment. All rainwater catchment systems that are no longer in use and fail to be maintained in accordance with section 1702.12 shall be considered abandoned. Abandoned rainwater catchment systems are subject to sections 1702.15.1 and 1702.15.2.

1702.15.1 General. Every abandoned rainwater catchment system or part thereof covered under the scope of this chapter, as amended in this code, shall be disconnected from any remaining systems, drained, plugged, and capped per the requirements of this code. Abandoned systems must comply with chapter 11, Storm Drainage, as amended.

1702.15.2 Underground Tank. Every underground water storage tank that has been abandoned or otherwise discontinued from use in a rainwater catchment system covered under the scope of this chapter, as amended in this code, shall be completely drained and filled with earth, sand, gravel, or concrete or removed in a manner approved by the administrative authority.

Statutory Authority: *MS s 326B.43; 326B.435*

History: *40 SR 71*

Published Electronically: *October 31, 2016*

Appendix B: Rainwater Management Systems Proposal

Date
1/03/2020

Estimate #
1008-8686

ISG Inc./ Emily Meerdink
Staring Lake
Eden Prairie, MN

Rainwater Management Solutions, Inc. (RMS) Proposal

Engineer Estimate for Rainwater Harvesting System: Major Components

The information provided below is for cost estimating purposes only and should not be construed as a formal estimate or a quote for equipment and/or services until such time as equipment and design are approved by the engineer of record. The equipment noted below appears to fulfill the requirements of the proposed system based on information provided by Emily Meerdink in an email dated 12-17-19 with a preliminary site plan and the following information:

Alt. 1
One toilet
Demand of approximately 65 gal/day M-F
Storage tank w/ 1,000 gals of live storage
Minimum of 3 gpm

Alt. 2
Three toilets
Demand of approximately 130 gal/day M-F
Storage tank w/ 1300 gals of live storage
Minimum of 5 gpm

Contact Rainwater Management Solutions, Inc., Dave Stark at 218-428-4413 for additional information.

The following is a general breakdown of the inclusions RMS will be providing for the first system option of:
1000 Gallons Active Storage with ¾ HP Pump and 3 -8 GPM Treatment System.

Quantity	Components
	TANK AND IN TANK COMPONENTS
One (1)	Snyder Industries 1,200 Gallon Vertical GREEN SunShield Tank, 86" Diameter x 56.5" Height, 20" Fill opening.
One (1)	Above Ground Package to Include -WISY WFF 100 vortex filter without extension tube (QTY 1) *Note: The Wisy WFF100 Vortex Filter is rated to filter collected rainwater from up to 2,100 square feet of roof area.* -4" Fernco coupling (QTY 3) -Stainless Wall mount bracket (QTY 1) -Stainless Blind Insert for Full System Bypass Through Filter -8" of 4" S&D thin wall pipe (QTY 1) -1-1/4" Stainless Coarse Floating Filter w/ 7 foot 1 1/4" hose -Stainless 4" smoothing inlet (QTY 1) -4" Overflow Siphon (QTY 1) -4" tank gasket (QTY 2) for Inlet and Outlet -1" bulkhead fitting (QTY 2) for wire Extensions Level Sensor and Float Switch and pump line - 1 1/4" HOSE BARB BY 1 1/4 X MALE THREAD (QTY 1) - Box 30"L X 17"W X 30"T (QTY 1)
One (1)	Normally open float switch for low level pump protection and to open domestic valve.
One (1)	RMS Level Sensor – Readout on Control Box Exterior Mount
	SKID MOUNTED ITEMS AND CONTROLS
One (1)	Made to order skid housed in a SEASONAL aluminum enclosure with equipment mounted to powder washed steel base with unistrut mounts to include the following equipment to be pre-wired and plumbed in Type A Uponor Pex at RMS and tested prior to shipment: -Pressure Gauges and Ball Valves Before and After Treatment System - (Qty 2 Ea) -1" Inlet, Outlet and Domestic Connections - (Qty 1) -3/4 HP MQ 3-35 Pump - (Qty 1) -Pressure Tank for MQ Pump - (Qty 1) - RMS Luminor -UV System -8 gpm 2-sump, 1-10" filter with 5-micron polypropylene cartridge for sediment, 1-20" filter with carbon for taste/odor, lamp timer, lamp countdown, audible alarm, 1" MNPT ports – 30 mj/cm2@95% UVT at 8 gpm (Qty 1) -3/4" Manual Flow Meter - (Qty 1) -3/4" Check Valves on Pump Discharge and Between Rainwater and Domestic Lines (Qty 2) -3/4" RPZ (Qty 1) -3/4" Motorized Valve (Qty 1)
One (1)	UL Listed Combined Run Light Box and Single Point Power Connection 110V/1/60 **Controls:** -MQ 3/4 HP Pump -110v/1/60 - RMS Luminor -UV System -8 gpm 2-sump, 1-10" filter with 5-micron polypropylene cartridge for sediment, 1-20" filter with carbon for taste/odor, lamp timer, lamp countdown, audible alarm, 1" MNPT ports – 30 mj/cm2@95% UVT at 8 gpm -3/4" Motorized Valve for Domestic Water (Normally Closed Fail Open)- 110 v -Flow Meter – Manual Read -RMS Level Sensor – 4-20ma -Low Level Float Connection **Run Light Box with Three Lights:** -Tank Empty (Red) -Rainwater Pump Enabled (Green) -Domestic Backup On (Yellow) **Controls to Display:** -Tank Level -Flow Gallons Used on Manual Meter -Switch to Domestic When Water Is Low
Two (2)	Days of Installation Oversight and Training
	Schematic Design, Submittals Cut Sheets, O&M Manuals, Shop Drawings, Wiring Diagram and Install Instructions

Proposal Cost Information for Materials and Services Provided: $18,000

The following is a general breakdown of the inclusions RMS will be providing for the second system option of: 1300 Gallons Active Storage with 1 HP Pump and 5 - 15 GPM Treatment System.

Quantity	Components
	TANK AND IN TANK COMPONENTS
One (1)	Snyder Industries 1,500 Gallon Vertical GREEN SunShield Tank, 65" Diameter x 114" Height, 20" Fill opening.
One (1)	Above Ground Package to Include -WISY WFF 100 vortex filter without extension tube (QTY 1) *Note: The Wisy WFF100 Vortex Filter is rated to filter collected rainwater from up to 2,100 square feet of roof area.* -4" Fernco coupling (QTY 3) -Stainless Wall mount bracket (QTY 1) -Stainless Blind Insert for Full System Bypass Through Filter -8" of 4" S&D thin wall pipe (QTY 1) -1-1/4" Stainless Coarse Floating Filter w/ 7 foot 1 1/4" hose -Stainless 4" smoothing inlet (QTY 1) -4" Overflow Siphon (QTY 1) -4" tank gasket (QTY 2) for Inlet and Outlet -1" bulkhead fitting (QTY 2) for wire Extensions Level Sensor and Float Switch and pump line - 1 1/4" HOSE BARB BY 1 1/4 X MALE THREAD (QTY 1) - Box 30"L X 17"W X 30"T (QTY 1)
One (1)	Normally open float switch for low level pump protection and to open domestic valve.
One (1)	RMS Level Sensor – Readout on Control Box Exterior Mount
	SKID MOUNTED ITEMS AND CONTROLS
One (1)	Made to order skid housed in a SEASONAL aluminum enclosure with equipment mounted to powder washed steel base with unistrut mounts to include the following equipment to be pre-wired and plumbed in Type A Uponor Pex at RMS and tested prior to shipment: -Pressure Gauges and Ball Valves Before and After Treatment System - (Qty 2 Ea) -1" Inlet, Outlet and Domestic Connections - (Qty 1) -1 HP MQ 3-35 Pump - (Qty 1) -Pressure Tank for MQ Pump - (Qty 1) - RMS Luminor -UV System -8 gpm 2-sump, 1-10" filter with 5-micron polypropylene cartridge for sediment, 1-20" filter with carbon for taste/odor, lamp timer, lamp countdown, audible alarm, 1" MNPT ports – 30 mj/cm2@95% UVT at 8 gpm (Qty 1) -1" Manual Flow Meter - (Qty 1) -1" Check Valves on Pump Discharge and Between Rainwater and Domestic Lines (Qty 2) -1" RPZ (Qty 1) -1" Motorized Valve (Qty 1)
One (1)	UL Listed Combined Run Light Box and Single Point Power Connection 110V/1/60 **Controls:** -MQ 1 HP Pump -110v/1/60 - RMS Luminor -UV System -8 gpm 2-sump, 1-10" filter with 5-micron polypropylene cartridge for sediment, 1-20" filter with carbon for taste/odor, lamp timer, lamp countdown, audible alarm, 1" MNPT ports – 30 mj/cm2@95% UVT at 8 gpm -1" Motorized Valve for Domestic Water (Normally Closed Fail Open)- 110 v -Flow Meter – Manual Read -RMS Level Sensor – 4-20ma -Low Level Float Connection **Run Light Box with Three Lights:** -Tank Empty (Red) -Rainwater Pump Enabled (Green) -Domestic Backup On (Yellow) **Controls to Display:** -Tank Level -Flow Gallons Used on Manual Meter -Switch to Domestic When Water Is Low
Two (2)	Days of Installation Oversight and Training
	Schematic Design, Submittals Cut Sheets, O&M Manuals, Shop Drawings, Wiring Diagram and Install Instructions

Proposal Cost Information for Materials and Services Provided: $20,050

Benefits and Added Value of Working with RMS:

In addition to RMS supplying you both the design and components for your needs, the following highlight some summary additional benefits and value-added elements that RMS can provide you in conjunction with this project.

- Scale production drawings are created for the submittal. What is approved in the submittal is what will be fabricated.
- RMS provides a U.L. Listed Single Point Power Source for the rainwater harvesting system. The electrician lands power feed in one panel for the entire system and the power to remote cistern pumps and other devices is wired from this panel.
- RMS assists your contractor in determining the size and quantity of electrical and control cables necessary. RMS provides your contractor a detailed wiring schematic of the overall system as well as specific schematics for the system controller and single point power source.
- A "rapid connection" wiring schematic can be provided with every system that makes it simple to understand where electrical and control wiring is to be landed and connected.
- Pumps are ready for rapid installation into the tank. RMS provides instructions to your contractor how to install pumps in the cistern.
- All skid mounted equipment provided by RMS is tested prior to the leaving the fabrication facility.
- RMS builds its own controllers and electrical panels in its U.L. Listed panel shop. Controllers are tested to confirm that they operate appropriately with all skid mounted and field installed equipment.
- RMS has designed its system for integration of the controller with the equipment it provides.

Technical Support:

The above proposed project and pricing is for the system and related components. Two days of onsite technical support for construction oversight and system start-up and training is included in this proposal and can be scheduled upon request.

Should additional technical support and onsite assistance be needed it is available as outlined below:

- Onsite technical support is $1,500.00 per day per RMS person and is includes for up to eight hours on a single day, plus travel costs.
- The system can be function tested and the installing contractor can be trained on the operation and maintenance requirements.
- Within 30 days of the training/start-up completion a written report will be provided by RMS.

The trip to start-up the system is to be scheduled after the installing contractor has completed the system installation and has returned the Installation Checklist. Failure to accurately represent the completeness of the installation may result in an unsuccessful start-up trip and additional fees for a return trip. Additional trips to the project will be billed at same daily rate note above.

During the initial start-up visit, the system can be tested to simulate the systems ultimate demand created by the end use as best as possible. If the project site's end use is not complete or capable of accurately representing the system's ultimate demand, then it may be necessary for a return trip to make adjustments after the building is complete or occupied. RMS is not responsible for the costs of return trips to the site if any further technical support, such as system adjustments, are necessary and therefore additional charges may be billed for any additional trips.

Not all installation problems/errors can be located during on-site installation verification. It is critical that the installation contractor follows all instructions including protection of the system/equipment from construction debris. Damage due to construction debris entering the system will not be covered under warranty by RMS.

Specific Exclusions:

The following are specific exclusions from the above RMS scope of work and deliverables.

- Pipe, fittings, manual valves or check valves for required connections between any system, equipment or component of the rainwater harvesting system.
- Electrical and control wiring and conduit required for or between any system, equipment or component of the rainwater harvesting system.
- Electrical grounding of the system.
- Foundation design or construction for any equipment/components related to the rainwater harvesting system.
- Seismic analysis or buoyancy calculations.
- Permits, Inspections, Waivers or Professional Engineering Requirements.
- Water sample testing or any additional testing services.
- Lifting equipment as required for off-loading the system/equipment from the mode of delivery and setting in place.

Important Information regarding the systems/equipment proposed for this project:

Rainwater Management Solutions commercial rainwater harvesting systems/equipment is for NON-POTABLE water applications only. The customer is solely responsible for determining the suitability of the system/equipment for the intended application. RMS and its representative companies assume no risk or liability in connection therewith, regardless of RMS's knowledge of the system's/equipment's intended use and regardless of any suggestions or statements made by RMS.

Indoor installations of any system/equipment must include an appropriately sized drain system to prevent flooding. This is the customer's responsibility and as such, RMS will not be responsible for damage caused by flooding regardless of why or how it occurs.

This proposal is based upon review of the information provided to RMS at the time that a proposal was requested. **It is the customer's responsibility to review this proposal and to determine whether the systems/equipment contained within it is suitable for the project.** Systems/equipment and labor not specifically addressed under "Materials and Services Provided" are not included in this proposal.

Materials and Services Provided:

Connections between components using pipe, high and low voltage electrical wiring, and other connections between components, are provided and installed by others. Check valves and manual valves are not included. This proposal includes only the components and/or services listed below.

Notes:

All proposals and orders will be subject to RMS's standard terms and conditions, which if not attached to this correspondence are available upon request. Any deviations from those standard terms and conditions are noted in the following:

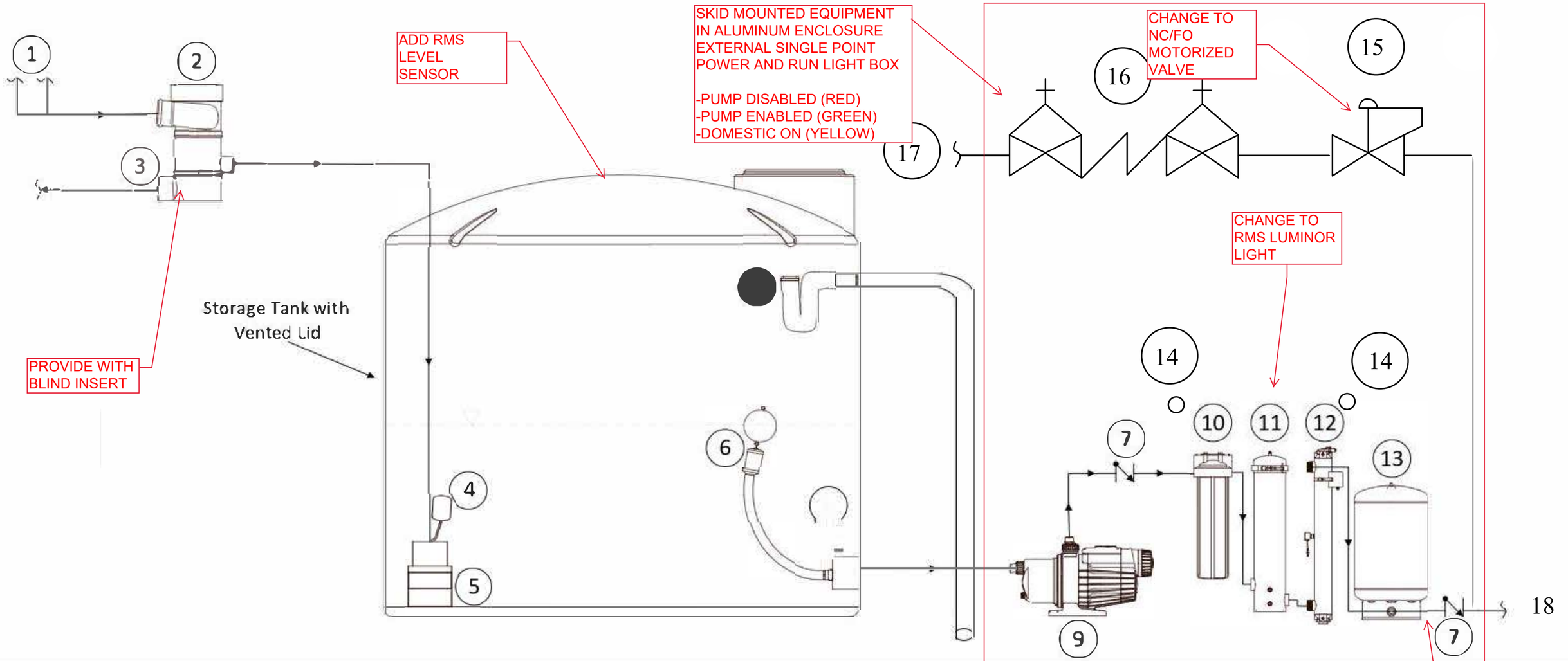
- *Pricing includes only listed equipment/services and quantities as noted above*
- *F.O.B Shipper – Prepay & Add*
- *Freight costs for tanks are not included*
- *50% upfront deposit required for tank purchase and to place skid in production*
- *Applicable taxes are not included*
- *Multiple invoices will be created with separate billing dates if system/equipment is delivered in multiple shipments. All invoices are to be paid in full within 30 days.*
- *Grant deadlines do not impact our payment terms. All invoices must be paid in 30-days for shipment.*

This Proposal is Valid Until February 3, 2020.

SITE MAP


Site Map
Animal Junction
40'5"
20'3.5"
Treatment and pump skid
Rainwater Storage Tank
N
Google Earth
60 ft

DRAFT SCHEMATIC



1. Rainwater Collection Point (roof drains, gutters, etc.)
2. WISY Vortex Filter (WFF-100 Up To 2,100 SF 4" Connections)
3. First Flush and Excess Water Outlet or Wyet to Tank Overflow
4. Low Water Cut Off Float Switch for Pump Protection (N/O)
5. Stainless Steel Smoothing Inlet
6. Floating Stainless Steel Suction Filter
7. Check Valve
8. Overf ow
9. Booster / Jet Pump
10. Sediment Filter
11. Carbon Filter
12. UV Light
13. Pressure Tank with Tank TEE
14. Pressure Gauges
15. Motorized Valve
16. RPZ (Backflow Prevention)
17. Domestic Water Backup
18. Treated Rainwater or Domestic Backup to End Use

RMS
RAINWATER MANAGEMENT SOLUTIONS™

ABOVEGROUND TANK WITH BOOST / JET PUMP AND PURIFICATION SYSTEM

DESIGN 11

WWW.RAINWATERMANAGEMENT.COM
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MEETING MINUTES

Riley-Purgatory-Bluff Creek Watershed District

February 5, 2020, RPBCWD Board of Managers Public Hearing and Monthly Meeting

PRESENT:

Managers:	Jill Crafton, Treasurer
	Larry Koch
	Dorothy Pedersen, Vice President
	Dick Ward, President
	David Ziegler, Secretary
Staff:	Amy Bakkum, MN Greencorps Member, RPBCWD
	Claire Bleser, RPBCWD Administrator
	Zach Dickhausen, Water Resources Technician II
	Terry Jeffery, Watershed Planning Manager
	B Lauer, Education and Outreach Assistant
	Josh Maxwell, Water Resources Coordinator
	Michael Welch, Attorney, Smith Partners
	Scott Sobiech, Engineer, Barr Engineering Company
	Maya Swope, Education and Outreach Coordinator
Other attendees:	Elizabeth Henley, Smith Partners
	Marilyn Torkelson, CAC

1. Call to Order

President Ward called to order the Wednesday, February 5, 2020, Board of Managers Public Hearing and Regular Monthly Meeting at 7:00 p.m. at the District Office, 18681 Lake Drive East, Chanhassen, MN 55317.

2. Approval of Agenda

Manager Koch asked to remove item 9c – Approve Resolution 2020-001 Permit Fee Schedule – from the Consent Agenda. He asked to move item 10f – Approve Fund Transfers – ahead in the agenda, directly after item 10b – Accept December Treasurer's Report. Manager Koch asked to remove from the agenda items 10h – Approve the release of two full-time positions for hire; 10j – Personnel/Personnel Consultant; 10k – Accounting Clerk; and 10p – Meet and Greet City Officials. President Ward added to the agenda just ahead of adjournment a closed session for a personnel matter. President Ward moved to approve the agenda as amended. Manager Pedersen seconded the motion. Upon a vote, the motion carried 5-0.

3. Public Hearing: St. Hubert

Administrator Bleser displayed a PowerPoint presentation about the St. Hubert opportunity project. She provided historical information about the District-St. Hubert partnership and talked about the District's identification of a campus retrofit as a possible opportunity project. She summarized the feasibility study findings and proposed project.

Administrator Bleser noted the District's Opportunity Project budget funded the feasibility study. She reported the estimated project cost is $277,000 and said the Metropolitan Council will fund $75,000 of the project costs, $15,000 per year for three years. She stated the Carver County Soil and Water Conservation District has communicated it will provide funds toward project design, but a specific funding amount has not been specified. Administrator Bleser said St. Hubert school has plans to contribute $45,000, and its governing body would need to take action to do so. She reminded the Board that later in the agenda is an action item on the resolution to order the St. Hubert Water Quality Project design.

President Ward opened the floor for public comment. Manager Koch said if the Board moves forward to order the project, he will want the approval contingent on St. Hubert providing funding. He asked about plans for signage for the project. Administrator Bleser responded the project will include signage and other educational components.

President Ward commented that the agreement will need clear language regarding the parcels that have previously been up for sale. Administrator Bleser said she has discussed this point with the District's Legal Counsel, and the cooperative agreement will address the issue.

President Ward called for further comments. Upon hearing none, Manager Ziegler moved to close the public hearing. Manager Koch seconded the motion. Upon a vote, the motion carried 5-0..

4. Wetland Report

Mr. Jeffery reported the District is two years into its wetland inventory and assessment program. He displayed a PowerPoint presentation and talked about historical wetland trends in terms of acreage throughout the U.S. He pointed out that the District's 10-Year Plan includes the goal to preserve and enhance the quantity as well as the functions and values of District wetlands.

Mr. Jeffery explained about the methods of wetland determination and emphasized the District is not doing wetland delineation. He talked about the MNRAM output and how staff ran that output through Rule D scoring matrices. He reported that staff has assessed 282 District wetlands, with the following results:

Classification	Number	Percent
Unassigned	17	6%
Exceptional	5	2%
High	44	16%

Medium	152	54%
Low	64	23%

Mr. Jeffery pointed out that the five exceptional wetlands were located on the property formerly owned by Prince.

Mr. Jeffery talked in detail about assigning value to wetlands and explained the concept of provisioning ecological services.

Mr. Jefferey addressed the District's next steps:

- Complete the inventory in 2021
- Use GIS to identify potential restorations and MnRAMS to identify potential rehabilitations
- Reach out to other organizations, such as Ducks Unlimited, BWSR, MN Land Trust, and cities
- Refine the prioritization process
- Develop a wetland management plan

Mr. Jeffery talked about the process of identifying wetlands. He said no action is required as this is an informational item. Mr. Jeffery responded to questions and comments, and managers and staff had a lengthy discussion about the information Mr. Jeffery presented. Managers requested Mr. Jeffery email the PowerPoint presentation to the Board.

5. Annual Report

Administrator Bleser presented a preview of the District's draft annual report, highlighting the District's 2019 activities, including, among others:

- 59 monitoring sites; 12 active projects; grants; and partnering with 36 organizations;
- An update to the District's Rules, and one plan amendment;
- AIS work; the Watershed Stewardship Grant Program, with 14 projects and 55,000 square feet restored;
- Data collection;
- Education and outreach; youth outreach; continuing education including conducting 22 trainings;

- Communications program;
- Watershed District 50th Anniversary events throughout the year;
- Community resiliency investigation – City of Bloomington;
- Permitting program – 52 permits issues;
- Plant restoration – University of Minnesota;
- Groundwater conservation program;
- Mn Green Corps – member Amy Bakkum's focus on residential stormwater Best Management Practices;
- Improvements in the Silver Lake subwatershed: chloride reduction and steep slope best practices campaign;
- Lake vegetation management: Red Rock Lake and Lotus Lake Curly-leaf pondweed treatment;
- Stormwater pond study by University of Minnesota St. Anthony Falls laboratory; and,
- Hennepin County chloride initiative.

Administrator Bleser went through and highlighted the District's 2019 projects per subwatershed. She responded to questions and comments, and she said the managers will receive a draft annual report next month.

6. Matters of General Public Interest

No matters were raised.

7. Reading and Approval of Minutes

a. December 11, 2019, RPBCWD Board of Managers Regular Monthly Meeting and Public Hearing

Manager Ziegler noted an edit on page 7, line 166, to replace the word "at" with the word "as." Attorney Welch noted a spelling correction on page 7, line 158, so the name reads, "Melissa Jenny." Manager Ziegler moved to accept the minutes as amended. Manager Crafton seconded the motion. Upon a vote, the motion carried 5-0.

b. September 23, 2019, RPBCWD Board of Managers Closed Session Administrator Review (morning meeting)

Attorney Welch noted the time reflected on page 1, line 2 should be "p.m." Manager Koch requested adding "Bleser" after "Administrator" on page 1, line 3. Manager Koch moved to accept the minutes as amended. Manager Pedersen seconded the motion. Upon a vote, the motion carried 5-0.

c. September 23, 2019, RPBCWD Board of Managers Closed Session Administrator Review (3 p.m. in the afternoon meeting)

Manager Ziegler moved to accept the minutes as amended. Manager Pedersen seconded the motion. Upon a vote, the motion carried 5-0.

8. CAC

Ms. Marilynn Torkelson highlighted the two key motions the CAC is recommending to the District Board. Manger Pedersen asked if the sample rain garden boxes could be displayed at the Silver Lake Garden Fair. There was discussion about the CAC's proposed resolution about soil health. Manager Zielger raised the topic of the Board developing a resolution to submit to MAWD for its 2020 annual meeting. He suggested the Board direct staff to investigate if there are other parties interested in co-authoring a resolution on the issue of soil health to bring to MAWD. The Board agreed that staff should investigate if other watersheds are interested in co-authoring a resolution on soil health for bring to the 2020 MAWD annual meeting.

9. Consent Agenda

Manager Ziegler moved to approve the Consent Agenda as amended. Manager Pedersen seconded the motion. Upon a vote, the motion carried 5-0. Consent Agenda items included: 9a – Accept January Staff Report; 9b – Accept January Engineer's Report (with attached Inspection Report); 9d – Approve Change Order #1 for the Lower Riley Creek Restoration Project to Extend Substantial Completion Date; 9e – Approve Payment Application #1 for the Lower Riley Creek Restoration Project; 9f – Approve Payment Application #3 for the Bluff Creek Tributary Restoration.

10. Action Items

a. Pulled Consent Agenda items

i. Approve Resolution 2020-001 Permit Fee Schedule

Mr. Jeffery talked through the permit fee process, including the steps for submitting the original fee with the application and if needed, fee replenishment. Manager Koch asked staff how the 45-day period for submitting the fee replenishment was derived. Mr. Jeffery said this was not pulled from the District's rules but was set because staff deemed it an appropriate length of time. Manager Koch said the permit application should clarify that the permit fee is due with the application submission. He added that in his view a 30-day period is sufficient for applicants to replenish the fees.

Manager Koch remarked he would like to see the District's permit fee schedule call out the details that make it clear the fee structure is for time and materials. He said the schedule should call out the information from the District's resolution.

Manager Koch stated he believes the District should be recouping its costs from staff time spent on permit applications pre-submittal. Mr. Jeffery commented that staff doesn't want to discourage applicants from coming in early to discuss

projects with the District.

President Ward remarked that the 45-day period for fee replenishment is too long and a 30-day period is plenty of time. Manager Koch asked about the process of refunding fees.

Attorney Welch stated the refunding of excess funds at permit close out is built into the structure and wouldn't come back to the Board. He said the release of the financial assurance is a different matter. Attorney Welch said the release of the financial assurance happens concurrently with the permit close out and could be delegated from the Board to the Administrator. He added that this resolution is not about financial assurances but about the permit fee schedule.

Attorney Welch offered a brief amendment to the resolution in front of the Board, adding to the first resolution language stating "effective for all private project applicants." There was discussion by the managers and staff about the length of time to provide for fee replenishment.

Manager Koch moved to direct Attorney Welch and Mr. Jeffery to revise the proposed resolution and fee schedule to reflect Manager Koch's previous comments. Attorney Welch said the structure of the language was purposefully stated broadly. He explained what the language, as written, means and why this language is used. Attorney Welch added that if the Board wants to direct staff to change language, the Board needs to be clear about what the it wants changed. Manager Koch said several of the costs and expenses are listed in the resolution and that language as well as the broad language should be inserted into the fee schedule. Manager Pedersen clarified that the motion is to change the fee replenishment time period from 45 days to 30 days and to add onto the last page of the fee schedule the language Manager Koch noted should be copied from the resolution. Manager Koch agreed. Manager Pedersen seconded the motion. Manager Koch moved to amend the motion to include the staff rates in the permit fee schedule. Manager Pedersen seconded the motion to amend.

President Ward asked if the staff rate information listed in the schedule is correct. Administrator Bleser said it is not and provided the correct information. Manager Koch moved to amend his motion to include the corrected staff rate. Manager Pedersen seconded the motion to amend. The motion to amend the motion carried 5-0.

President Ward called the question on the amended motion. Upon a roll call vote, the motion carried 5-0.

Manager	*Aye*	*Nay*	*Absent*	*Abstain*
Crafton	X			

Koch	X			
Pedersen	X			
Ward	X			
Ziegler	X			

b. Accept December Treasurer's Report

Manager Crafton moved to accept the Treasurer's Report as submitted. Manager Pedersen seconded the motion. Upon a vote, the motion carried 5-0.

i. **Approve Fund Transfers**

Manager Koch said he think it's appropriate to allocate enough money to cover the invoices or projected shortfalls. He moved to revise the fund transfer amounts to actuals in order to zero out and avoid deficit. Manager Pedersen seconded the motion. Upon a vote, the motion carried 5-0.

c. Approve Paying of Bills

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

d. Approval to Attend MAWD Legislative Days

President Ward, Manager Crafton, Manager Koch, and Manager Ziegler indicated interest in attending MAWD Legislative Days. There was discussion about CAC members attending. Manager Koch moved to authorize any member of the Board and up to two CAC members to attend. Manager Ziegler seconded the motion. Upon a vote, the motion carried 5-0. The Board agreed that all attending would need to be up to date on the District's talking points.

e. Resolution 2020-002 to Order St. Hubert Water Quality Project

Manager Ziegler moved to adopt Resolution 2020-002 to Order St. Hubert Water Quality Project Design Phase. Manager Pedersen seconded the motion. Attorney Welch noted staff will correct the date on the resolution to today's date Manager Koch moved to amend the motion to make the approval contingent on the firm approval by the authorized party for St. Hubert. Attorney Welch commented on Manager Koch's motion. There was discussion. Manager Koch's motion to amend died for lack of a second. President Ward called for a vote on the motion on the table. Upon a roll call vote, the motion carried 5-0.

Manager	*Aye*	*Nay*	*Absent*	*Abstain*
Crafton	X			
Koch	X			
Pedersen	X			
Ward	X			
Ziegler	X			

f. PID #25 0360010 (No Physical Address), City of Chanhassen, Highway 101 Right-of-Way, City Request for Parcel Exchange

Mr. Jeffery explained the Highway 101 project needs a portion of property the District owns in order to realign the highway. He stated the agreement between the City of Chanhassen and the District would allow the City to enter this property and allows some assurance of what the City would need to do in the unlikely event the transfer doesn't go through. Manager Koch asked for more details. Attorney Welch provided details. Manager Koch moved to authorize President Ward to sign the right-of-entry agreement with the City of Chanhassen on behalf of the District. Manager Pedersen seconded the motion. Upon a vote, the motion carried 5-0.

g. IT/IT Consultant

Manager Koch moved to table until the next Board meeting this item and items 10l – Credit Cards (LK), 10m – Investment of fund (LK), 10n – Journal of votes (LK), 10o – Shoreline and erosion (LK), 10q – Permit variance resolution (LK), 10r – Form of resolutions approving permit application (LK), 10s – Internal calendar (LK), 10t – Multi-year project report (LK), and 10u – Minnesota Data Practices Act requests and seminars (LK). Manager Ziegler seconded the motion. Upon a vote, the motion carried 5-0.

11. Discussion Items

a. Manager Report

i. Personnel Committee

Manager Pedersen reported that the Personnel Committee met.

ii. Other Matters

President Ward reported that a resolution submitted by the District to MAWD for consideration at the annual meeting was not adopted but is being brought forward at a house committee meeting on February 11 in St. Paul. Manager Crafton moved suggested staff draft a letter based on the District's proposed resolution

and to submit the letter to the committee chair. The Board authorized Manager Crafton to attend the committee hearing on behalf of the District.

b. Other

Attorney Welch reported on information about chloride liability legislation and his follow-up to get up-to-date information. Manager Crafton mentioned she and Gail Sheely of Nine Mile Creek Watershed District met with Brooke Asleson of the MPCA. Manager Crafton said there is a public comment period open until March 11 regarding the MPCA's ability to charge fees for education programs to cover the programs' costs. She said the District could consider submitting comments. President Ward said he hears the Board wants to support this but first the District needs to know who is leading the initiative and to whom to address the letter.

12. Upcoming Board Topics

President Ward said he doesn't think a 1.5-hour session before the next monthly meeting is enough time for the Governance Workshop. The Board and staff agreed to hold the Governance Workshop at 9:00 a.m. on Monday, March 2 at the District Office instead of as a workshop prior to the March monthly Board meeting.

13. Upcoming Events

- Watershed Stewardship Grant Open House, February 19, 2020, 6:00 p.m., District Office, 18681 Lake Drive East, Chanhassen
- Citizen Advisory Committee Meeting, February 24, 2020, 6:00 p.m., District Office, 18681 Lake Drive East, Chanhassen
- Board of Managers Meeting, March 4, 2020, 7:00 p.m., District Office, 18681 Lake Drive East, Chanhassen

14. Closed Session

Manager Pedersen moved to enter into closed session for personnel review of Administrator Bleser. Manager Koch seconded the motion. Upon a vote, the motion carried 5-0. The meeting moved into closed session at 9:15 p.m.

15. Adjournment

The managers reconvened in open session at 10:15 p.m. Manager Ziegler moved to adjourn the meeting. Manager Koch seconded the motion. Upon a vote, the motion carried 5-0. The meeting adjourned at 10:15 p.m.

Respectfully submitted,

_____

David Ziegler, Secretary

RPBCWD March Staff Report

Administration		Staff update	Partners
Accounting and Audit	Coordinate with Accountant for the development of financial reports. Coordinate with the Auditor. Continue to work with the Treasurer to maximize on fund investments.	Administrator Bleser has submitted requested information to the Auditor. The District Audit will be March 4 and March 5.	
Annual Report	Compile, finalize and submit an annual report to agencies	Draft Annual report will be submitted to the board at the Board Meeting	
Internal Policies	Work with Governance Manual and Personnel Committees to review bylaws and manuals as necessary	Governance Workshop will be March 2nd 9am.	
Advisory Committees	Engage with the Technical Advisory Committee on water conservation, chloride management and emerging topics Engage with the Citizen Advisory Committee on water conservation, annual budget and emerging topics. Facilitate recruitment of CAC members for 2019.	The CAC met for their regular meeting on February 24th. Draft minutes are included in the Board Packet. Administrator Bleser presented a presentation about Chloride given at MAWD. Staff provided program and project updates regarding a summer education series, Groundwater Conservation, and Watershed Stewardship Grants.	
MAWD		Save the Data: Legislative Days are March 18-19, 2020 Annual Meeting is December 4-6.	
Membership		No new updates.	
District-Wide			
Regulatory Program	Review regulatory program to maximize efficiency.	Two (2) permit applications have been received since the February meeting. These are currently being reviewed for completeness.	

	Engage Technical Advisory Committee and Citizen Advisory Committee on possible rule changes. Implement regulatory program.	In addition to the two new applications, three (3) other permit applications are currently under review; the extension of a trail along TH 5, the excavation/sediment removal of a roadside ditch in Eden Prairie, and an assisted care facility in Chanhassen. A Notice of Probable Violation (NOPV) was issued for a shoreline stabilization project on Lotus Lake where riprap was being placed without a permit. The contractor has responded to the NOPV but no meeting has occurred yet. Engineer Sobiech met with the City of Eden Prairie, the DNR and MN Dpt of Transportation to discuss the Duck Lake Rd project. No resolutions came from that meeting. Staff Jeffery, Engineer Sobiech, and Houston Engineering (HEI) will hold a kick-off meeting for the database development on February 28. Staff Jeffery met with staff from the City of Minnetonka to discuss the after the fact permit application requirements for emergency repairs on Vine Hill Rd.	
Aquatic Invasive Species	Review AIS monitoring program Develop and implement Rapid Response Plan as appropriate Coordinate with LGUs and keep stakeholders aware of AIS management activities. Manage and maintain the aeration system on Rice Marsh Lake as per the Riley Chain of Lakes Carp Management Plan. Review AIS inspection program.	Administrator Bleser recommends the increase in AIS Inspection to $32,000 for 2020.	City of Chanhassen City of Eden Prairie University of Minnesota MN DNR Carver County

	Keep abreast in technology and research in AIS. 2019 zebra mussel veliger testing.		
Cost-Share	Review program to determine efficiencies and needs. Recommend modification as necessary. Review applications and recommend implementation.	The District held a Watershed Stewardship Grant information open house on February 19th. 18 residents of the District attended. Staff Lauer updated guidelines, review criteria, promotion materials, and the application as needed. The District has received 14 site visit requests in the month of February. Staff Lauer has compiled a system to begin conducting these site visits as the ground thaws and snow melts.	Carver County Soil and Water Conservation District
Data Collection	Continue Data Collection at permanent sites. Identify monitoring sites to assess future project sites.	WOMP stations: Continued bi-weekly sampling of the station. Water Resources Report complete. Rice Marsh aeration unit up and running smoothly. Staff monitored Purgatory Chain of Lakes, Rice Marsh Lake, and a series of stormwater ponds once a month this winter. Staff assisted WENCK staff in collecting sediment cores as a part of alum treatment monitoring. on Lake Riley, Rice Marsh Lake, and Lotus Lake. Staff began prepping the field equipment for the 2020 season. Permission letter for carp removal was sent and received back this month from commercial fisherman Don Geyer. The District submitted a fisheries application to the DNR for fisheries monitoring. The 2019 data was finalized and sent to the DNR.	Metropolitan Council City of Eden Prairie University of MN City of Chanhassen MNDNR City of Minnetonka

District Hydrology and Hydraulics Model	Coordinate maintenance of Hydrology and Hydraulics Model. Coordinate model update with LGUs if additional information is collected. Partner and implement with the City of Bloomington on Flood Evaluation and Water Quality Feasibility.	The City of Minnetonka will be working on their H and H modeling in 2020. Due to the larger scope of work for the City of Eden Prairie, The District and the City are looking at performing work in 2020 and 2021. The District is looking at applying for an MPCA grant. The District is still fine tuning scope for 2020.	City of Bloomington City of Minnetonka City of Eden Prairie
Education and Outreach	Implement Education & Outreach Plan, review at year end. Manage partnership activities with other organizations. Coordinate Public Engagement with District projects.	Staff updated the District's water quality fact sheets with 2019 data and articles Master Water Stewards: Stewards continued classes and are working to plan capstone projects for this spring. On February 1st, staff led snowshoe hikes and nature bingo game at Chanhassen's Feb Fest event on Lake Ann. On February 5th, Staff worked with 6 classes at Eden Lake Elementary to explore winter in the outdoor learning center and learn about water monitoring. For many of the students, it was their first time looking into an ice hole on a frozen lake! On Feb 9th, Staff brought the watershed sandbox to the Minnetonka Kids Fest, where 275 kids and adults interacted with the sandbox. On February 22nd, staff hosted a booth and led a presentation at the Bloomington Home Improvement Fair. They discussed winter salt use and tips for protecting local waterways. On Feb 25th and 26th staff attended the Staring Lake Outdoor Center's "winter study day" to teach 4th grade students about water quality, chlorides, and dissolved oxygen Youth program: Staff Swope hosted a training on Feb 26th for CAC volunteers interested in	Feb Fest: City of Chanhassen, snowshoes provided by Mississippi Park Connection/ NPS, and Staring Lake Outdoor Center. Minnetonka Kid's Fest: City of Minnetonka Bloomington Improvement Fair: City of Bloomington 4th Grade Winter Study: Staring Lake Outdoor Center Adopt a drain: City of Eden Prairie, City of Minnetonka, City of Bloomington, Hamline

		assisting with school visits. Staff continue to plan for upcoming school visits and public tabling events this winter. Community members continue to sign up to adopt storm drains and keep them clear of leaves, dirt, and other debris through the Adopt-a-drain.org partnership. Service Learner: A volunteer from the University of Minnesota has begun working with Education and Outreach staff a few hours a week to assist with writing projects, materials development, and school visits.	University, Nine Mile Creek Watershed District Service learner: University of Minnesota
MN GreenCorps Update		Member Bakkum tabled at the MNLA Northern Green Expo and interacted with winter maintenance professionals surrounding their use of chloride. At the expo, Member Bakkum received 264 responses to a survey which focused on end-user education. Member Bakkum is using this survey data to inform upcoming educational materials. Member Bakkum participated in a snowplow ride-along at the City of Bloomington in an effort to better understand the needs and concerns of winter maintenance workers and will incorporate this perspective into future public education.	MPCA
Groundwater Conservation	Work with other LGUs to monitor assess and identify gaps. Engage with the Technical Advisory Committee to identify potential projects.	Staff Lauer created grant guidelines as well as a grant application for the Groundwater Conservation Grants. The application period for Groundwater Conservation grants opened as of Feb. 11 and will remain open until March 6th.	TBD

	Develop a water conservation program (look at Woodbury model)	The District has received one application for the Groundwater Conservation Grant from the City of Shorewood. Staff Lauer met with the City of Deephaven to discuss using grants for possible groundwater conservation programs/ projects.	
Lake Vegetation Management	Work with the University of Minnesota or Aquatic Plant Biologist, Cities of Chanhassen and Eden Prairie, lake association, and residents as well as the Minnesota Department of Natural Resources on potential treatment. Implement herbicide treatment as needed. Secure DNR permits and contract with herbicide applicator. Lakes the District is monitoring for treatment include: Lake Susan, Lake Riley, Lotus Lake, Mitchell Lake, Red Rock Lake and Staring Lake. Work with Three Rivers Park District for Hyland Lake	Staff have been working to establish roles and responsibilities with all partners regarding lake vegetation management. This will be finalized shortly.	City of Eden Prairie City of Chanhassen University of Minnesota MNDNR
Opportunity Projects	Assess potential projects as they are presented to the District	Staring Lake Outdoor Center's feasibility for water harvesting system will be presented at the board meeting.	St Hubert Catholic Community Carver County Soil & Water Conservation District
Total Maximum Daily Load	Continue working with Minnesota Pollution Control Agency on the Watershed Restoration And Protection Strategies (WRAPS). Engage the Technical Advisory Committee.	No new updates	MPCA

Repair and Maintenance Grant	Develop and formalize grant program.	No new update.	
University of Minnesota	Review and monitor progress on University of Minnesota grant. Support Dr John Gulliver and Dr Ray Newman research and coordinate with local partners. Keep the manager abreast to progress in the research. Identify next management steps.	Iron filings have been applied on three ponds in the District.	Stormwater ponds partners: Bloomington, Chanhassen, Eden Prairie, Minnetonka, Shorewood, and Limnotech. Plant Management: Chanhassen Eden Prairie
Watershed Plan	Review and identify needs for amendments.	Design task order is included in the board packet. Administrator Bleser confirmed that St Hubert will match the District funds with $45,000.	
Wetland Conservation Act (WCA)	Administer WCA within the Cities of Shorewood and Deephaven. Represent the District on Technical Evaluation Panel throughout the District	No WCA applications have been received in Deephaven. No WCA applications have been received in Shorewood.	City of Shorewood City of Deephaven City of Chanhassen City of Eden Prairie MCWD BWSR DNR ACOE
Wetland Management	Identify potential restoration/rehabilitate wetlands and wetland requiring protection.	Staff Jeffery and Staff Dickhausen are identifying the 2020 review area are preparing the postcards to mail to property owners. Staff Jeffery and Staff Dickhausen have begun desktop assessment of upcoming review areas.	City of Chanhassen Carver County MNDNR BWSR
Hennepin County Chloride Initiative	Phase 1: Develop a plan to target commercial and association-based sources or chloride pollution - businesses, malls, HOAs, property	The collaborative me in February. Administrator Bleser presented a proposal for next steps forward and Green Corps Member Bakkum presented findings from the MNLA conference.	

	management companies and the private applicators that they hire. We will hire a consultant to facilitate focus groups with private applicators, as well as those that execute contracts with private applicators. These focus groups will help identify needs and barriers for our target audience. The consultant will compile information into a plan for implementation.	Proposal is to sponsor additional training, finalize property management training, hands on training and develop smart salting coaching and support program.	
Lower Minnesota Chloride Cost-Share Program	The Lower Minnesota River Watersheds are coming together to offer cost-share grants.	Lower Minnesota Chloride is finalizing a grant program.	
Bluff Creek One Water			
Bluff Creek Tributary Restoration	Implement and finalize restoration. Monitor Project.	Most of the heavy lifting was performed and will be completed by the first week of January. Work will continue this spring for plantings.	City of Chanhassen
Wetland Restoration at 101	Remove 3 properties from flood zone, restore a minimum 7 acres and as many as 16 acres of wetlands, connect public with resources, reduction of volume, rate, pollution loads to Bluff Creek	All structures and appurtenances have been removed from the properties. Additional stabilization work needs to take place in March. A kickoff meeting was held on February 11th with appropriate agencies. It was determined that the scope of work being proposed is not likely to require a permit under WCA. A Corps permit may be required but should not be overly cumbersome. There is no DNR jurisdiction on the properties.	City of Chanhassen MN DNR

Riley Creek One Water			
Lake Riley Alum	Continuing to monitor the Lake.	Sediment cores taken to evaluate spring 2020 application.	
Lake Susan Improvement Phase 2	Complete final site stabilization and spring start up. Finalize and implement E and O for the project. Monitor project.	No new updates	City of Chanhassen Clean Water Legacy Amendment
Lake Susan Spent Lime	Replace media to improve functionality	Staff Jeffery has worked with Chanhassen Parks and Recreation Director to secure right of entry to replace media in the spent lime facility this winter.	City of Chanhassen
Lower Riley Creek Stabilization	Coordinate agreement and acquire easements if needed for the restoration of Lower Riley Creek reach D3 and E. Implement Project. Continue Public Engagement for project and develop signage of restoration.	Rachel Contracting continues work on Lower Riley and coordinating with both the City and the District.	City of Eden Prairie Lower MN River Watershed District
Rice Marsh Lake Alum Treatment	Continuing to monitor the Lake.	Sediment cores taken to evaluate the application.	City of Eden Prairie City of Chanhassen
Rice Marsh Lake Watershed Load Project 1	Conduct feasibility. Develop cooperative agreement with City of Chanhassen	District Engineer Sobiech is working with staff at Barr to complete a feasibility study for the area. This study should indicate potential BMPs, associated pollutant removals, associated cost, and potential data collection to be used for future projects as it pertains to new and emerging technologies.	City of Chanhassen
Upper Riley Creek	Work with City to develop scope of work (in addition to stabilizing the creek can we mitigate for climate change)	Administrator Bleser has met with the Public Works Director for Chanhassen and discussed this project. Bleser has shared the feasibility for Upper Riley Creek as well as information	City of Chanhassen

	Conduct feasibility Develop cooperative agreement with the City of Chanhassen Order Project Start design	from Lower Riley Creek. First step in the project is to formalize a corridor enhancement plan with the City.	
Purgatory Creek One Water			
PCRA Berm		Eden Prairie, District Staff, and Wenck met at the berm to discuss plans for the restoration work. The project moving forward will be as follows: -Complete the site survey and evaluate the existing subgrade at the boardwalk area when the snow and ice cover allow better accessibility. The survey will include the boardwalk area and the plunge pool, and evaluating the soil conditions at the boardwalk area. -The plans will include filling the plunge pool to build a surface that is suitable for carp removal, and removing the boardwalk and reconstructing the berm to the previous overflow elevation. -As requested by the watershed, we will evaluate whether it is feasible and permissible to construct a low-flow weir with gates or stop logs to allow low flows through the weir for carp removal during low flow periods. -Carp removals for this year may need to be performed at the boardwalk overflow location.	City of Eden Prairie
Duck Lake Water Quality Project	Work with the City to implement neighborhood BMP. Identify neighborhood BMP to help improve water resources to Duck Lake. Implement neighborhood BMPs.	The District hosted an open house on February 13th for residents receiving downspout planter boxes. Residents chose from prototypes of the boxes and completed paperwork to participate in the project. Planters will be built this winter and installed later in the spring.	City of Eden Prairie

Hyland Lake Internal Load control	Implement Hyland Lake Alum application.	Project is complete.	Three Rivers Park District City of Bloomington
Lotus Lake – Internal Load Control	Monitor treatment and plant populations.	Sediment cores were taken to evaluate alum application effectiveness.	
Scenic Heights	Continue implementing restoration effort. Work with the City of Minnetonka and Minnetonka School District on Public Engagement for project as well as signage.	Final grant report was submitted to Hennepin County for Grant reimbursement.	Minnetonka Public School District City of Minnetonka Hennepin County
Silver Lake Restoration	Order project Design Project Work with the City of Chanhassen for Design, cooperative agreement and implementation	Administrator Bleser met with City Manager Todd Gerhardt and Public Works Director Charlie Howley. They would like to advance this project. Ordering of the project is scheduled at the March board meeting.	City of Chanhassen
Professional Development			
	None at this time		

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BARR

Memorandum

To: Riley-Purgatory-Bluff Creek Watershed District Board of Managers and District Administrator
From: Barr Engineering Co.
Subject: Engineer's Report Summarizing February 2020 Activities for March 4, 2020, Board Meeting
Date: February 27, 2020

The purpose of this memorandum is to provide the Riley-Purgatory-Bluff Creek Watershed District (RPBCWD) Board of Managers and the District Administrator with a summary of the activities performed by Barr Engineering Co., serving in the role of District Engineer, during February 2020.

General Services

a. Participated in February 7th meeting with city of Eden Prairie staff and Administrator Bleser to discuss partnership to add detail to the Eden Prairie portion of the Riley Creek and Purgatory Creek stormwater model.

b. Participated in an agency/technical stakeholder meeting on February 10th with Administrator Bleser, two staff from Bearpath, city of Eden Prairie Staff, MnDNR Area Hydrologist (via phone) and USACE (via phone). Streambank stabilization options were discussed and agencies believed both options would be permittable and appreciated the early coordination. USACE requested that wetland and ordinary high water level impacts be separately identified during the permitting process, if the board decides to implement the projects. MnDNR expressed a preference to sloping the streambank back rather than install boulder walls. The Bearpath representatives were also supportive of the project and expressed potential to realign the #13 tee box to facilitate improved stabilization and creek buffer.

c. Participated in the February 10th with MnDNR Area Hydrologist (Jason Spiegel), Administrator Bleser, and Watershed Planning Coordinator Jeffery to discuss renewal of the general permit issued to RPBCWD for work in public waters. This permit allows RPBCWD to serve as a one stop shop for permitting many types of work in public waters, thus eliminating the need for applicants to get permits from RPBCWD and the MnDNR. MnDNR acknowledge that the last five years have gone well and there were no concerns mentions. MnDNR indicated that the District should continue to seek project specific work in public waters permits when conducting projects and suggested that a request for renewal be sent well in advance of the May 2020 expiration. Administrator Bleser committed to sending the request.

d. Participated in an agency/technical stakeholder meeting on February 11th with Watershed Planning Coordinator Jeffery, city of Chanhassen WCA representative, Carver County SWCD staff, BWSR staff, MnDNR Area Hydrologist (via phone) and USACE (via phone). After discussing the options the agencies believed the options would be permittable, acknowledge there is no real performance standard for restoration, and appreciated the early coordination. The was concern about the viability of a diverse restoration due to the extensive cattail presence on the properties to the east.

e. Continued assisting Staff Maxwell with iron filings application methods for pond project.

f. Discussed Lower Riley Creek poor soils conditions with Administrator Bleser resulting in the need for design changes, to import suitable material from offsite, for a construction change order. Rachel needed to begin importing soil material for use as fill immediately to keep the project moving forward in an effort to achieve the substantial completion date.

g. Participated in February 21st meeting with city of Minnetonka staff and Administrator Bleser to discuss partnership to add detail to the Minnetonka portion of the Purgatory Creek stormwater model. The City will likely undertake this work but is requested permission to use the RPBCWD model as a starting point for the efforts. Because portions of Shorewood and Deephaven are tributary to Purgatory Creek in Minnetonka, Administrator Bleser suggested that the District provide survey data for those portion outside of Minnetonka to improve the overall modeling effort and promote efficient use of public resources.

h. Met with Administrator Bleser on February 24th to strategize and begin preparing a grant applicant for the MPCA's grants for community strategies to adapt to climate change. The grants are to research, develop, and implement strategies for communities to adapt to the impacts of climate change and improve community resilience while achieving positive environmental outcomes. Because addressing flood risk related to climate change is a key item mentioned in the grant, the District is hoping to pursue a cooperative grant appliction with communities in the Purgatory Creek watershed to support the improved detail in the hydrologic and hydraulic models and prioritization of floodprone areas.

i. Participated in the February 5th regular Board of Managers meeting.

j. Participated in the February 5th Meet and Greet.

k. Prepared Engineer's Report for engineering services performed during February 2020.

l. Miscellaneous discussions and coordination with Administrator Bleser about CIP projects, assistance with audit requests for information, project staffing and upcoming Board meeting agenda.

Permitting Program

a. *Permit 2018-016: Avienda*: This project involves a mixed-use regional development in the southwest quadrant of the intersection of Lyman Boulevard and Powers Boulevard in Chanhassen Minnesota. The project will trigger the RPBCWD Floodplain, Erosion Control, Wetland and Creek Buffer and Stormwater Management Rules. The applicant is proposing an initial construction phase to include mass grading and construction of all public infrastructure. Permit application was conditionally approved at September 5, 2018. Some conditions of approval remain unfulfilled. The permit timeline was extended administratively August 28, 2019 for one year to September 5, 2020. Reviewed February 4, 2020, request for a permit modification for the following items: 1) Infiltration basin testing timing and 2) Change infiltration basins to combination filtration/infiltration basins. Developed permit modification report for consideration at the March 4, 2020 regular meeting.

b. *Permit 2020-001: The Overlook* – This project involves the construction of a low-density, single family residential home development consisting of 59 single family homes located in Eden Prairie, MN. The proposed development will include associated streets, underground utilities, and stormwater features including three infiltration basins and one sediment basin.

The proposed project triggers RPBCWD's erosion prevention and sediment control, wetland and creek buffers, and stormwater management rules. The permit application was received on January 7th and the initial submittal was reviewed on January 23rd. The application was considered incomplete due to missing wetland buffer and stormwater management requirements, and review comments to the permittee were sent on January 24th. Based on initial submittal review comments, the project will likely require stormwater management redesign to ensure erosion prevention near an outlet at Riley Creek. Redesign will trigger floodplain management and drainage alterations, and waterbody crossings and structures rules. The applicant is in the process of addressing preliminary review comments sent on January 24th and is in coordination with the City of Eden Prairie planning commission.

c. *Permit 2020-003: Moments of Chanhassen* – This project consists of the construction of a 48-unit memory care residential facility located in Chanhassen, MN. The proposed development will include associated parking areas, utilities, grading, and a stormwater feature including a filtration basin. The proposed project triggers RPBCWD's erosion prevention and sediment control, wetland and creek buffers, and stormwater management rules. Provided comments to applicant's engineer regarding the incomplete preliminary submittal and discussed wetland submittal information needed to assess compliance with wetland buffer requirements. Applicant sent LGU Notice of Decision resulting in a wetland delineation approval, wetland function and values assessment determination, and supporting documentation on February 5th. Reviewed wetland value determination based on RPBCWD Appendix D1 Criteria and provided comments to the applicant's engineer. Reviewed technical data on stormwater management facility media (shredded tires). Currently reviewing revised submittal received on February 18th for completeness and compliance with RPBCWD criteria.

d. *Permit 2019-051: Berrospid Addition* – This project is proposing to split an existing lot with one single family home at 7406 Frontier Trail in Chanhassen, MN into three separate lots for the addition of two single family homes. The project will include existing driveway improvements, associated utilities, and a stormwater infiltration basin. The proposed project triggers RPBCWD's floodplain management, erosion control, wetland and creek buffer, and stormwater management rules. The permit application was received on January 31st. The application was considered incomplete due to missing floodplain information and, creek buffer within the high risk erosion area. Preliminary review comments were sent to the permittee on February 17th. Based on initial submittal review comments, the project will likely require stormwater management facility redesign and the plans will need to account for fully compensatory flood storage if placement of fill is below the 100-year flood elevation.

e. *Permit 2020-008 Eden Ridge* – This project proposes to subdivide existing properties located at 15807 and 15817 Valley View Road in Eden Prairie, MN into 10 residential lots with additional outlots for stormwater management. Proposed construction includes site grading, stormwater management improvements, construction of a cul-de-sac (Ridge Way Lane), and associated utilities. Stormwater management facilities include two infiltration basins to provide water quality treatment, volume abstraction and rate control for runoff. This permit triggers RPBCWD's erosion and sediment control, and stormwater management rules. Application materials were submitted on February 18th with stormwater modeling materials submitted on February 21st. The preliminary submittal is currently under completeness review.

f. Continued developing materials for rule guidance materials, such as a guidance document, submission check list, and flow charts. Met with Watershed Planning Coordinator Jeffery to review draft materials.

g. Fielded miscellaneous calls from developer's engineers with questions about floodplain compensatory storage requirement, buffer criteria, and stormwater management criteria.

h. Worked with Counsel Welch and Watershed Planning Manager Jeffery on permit fee structure for the board's consideration.

i. Conducted erosion prevention and sediment control inspection on February 12-14th and provided a summary of sites with open corrective actions to Watershed Planning Manager Jeffery on February 14th.

j. Miscellaneous conversations with Watershed Planning Coordinator Jeffery and Administrator Bleser about technical questions on permit requirements for potential development and shoreline stabilization projects as well as renewal of the general permit with the MNDNR.

Data Management/Sampling/Equipment Assistance

a. Prepared, uploaded, and verified three RMB lab reports.

b. Prepared, uploaded, and verified 2019 Met Council data.

c. Verified 2019 pond data collected with the field app, and communicated with RPBCWD to correct sample dates.

d. Worked with RPBCWD to correct UR and UB composite sample start and end times in the database.

Repair and Maintenance

Lake Susan spent lime filter modification

a. Onsite observation of modifications to the Lake Susan spent lime filter.

    a. On February 18th, Sunram (the Contractor) mobilized to the site. The contractor placed trail closed signs, and removed the spent lime, granular filter, and underdrain system.

    b. On February 19th, the Contractor installed a new slotted underdrain system. The new under drain system includes 6 valves to adjust the flow rate through the underdrain pipes, and increase the residence time in the filter.

    c. On February 20th, the Contractor installed the valve on the inlet pipe, which allows for the system to be taken offline without adjustments to the stop logs in the upstream manhole.

    d. On February 21st, the Contractor installed the water level control structure within the system.

    e. On February 24th and 25th, the Contractor installed new filter media and the solar panel and controls for the automated water level control structure.

f. On February 26th, the Contractor plans to demobilize from the site and sweep the trail.

g. Site restoration for the area adjacent to the filter that was disturbed during maintenance activities will occur when the snow has melted.

h. During maintenance activities, there were a couple of changes that were need to field fit products.

   i. Six additional fitting were required to connect the 6-inch drain tile pipes to the 10-inch header pipes. The additional fittings were needed because the new underdrain tile had a thicker wall than the underdrain that was removed.

   ii. Additional 10-inch PVC bends were needed at the inlet pipe to lower the automated water level control structure. Without the additional bends, the water level control structure was approximately 2-inches above the grate. The additional piping was incorporated to prevent modifications of the grate or automated water level control structure.

i. The following photographs were taken during maintenance activities.

Photograph 1. A new shutoff valve was installed on the inlet pipe (the new shutoff valve has a red handle in the photograph), so that the system can be taken completely offline in the fall and for future maintenance. The automated water level control structure (black box) includes a gate that opens and closes on a preset schedule. The water level control structure is powered by a battery and solar panel which was installed adjacent to the filter.

Photograph 2. Photograph taken on February 24, 2019. The contractor used a paddle mixer to mix the sand and spent lime. After mixing the contractor dumped the mixed sand and spent lime into the filter. In the filter, sand has been placed around the under drain, inline valves have been installed (left side of the photograph), the water level control structure has been installed (bottom of the photograph), and new clean out risers were connected to the underdrain (the vertical white PVC pipes.

Task Order 6: WOMP Station Monitoring

Purgatory Creek Monitoring Station at Pioneer Trail

a. Download and review data.

b. File management – review and organize lab submission forms and set up files for 2020 monitoring.

Purgatory Creek Monitoring Station at Valley View Rd

a. Download and review data.

b. File management – review and organize lab submission forms and set up files for 2020 monitoring.

c. Data QA/QC and prep for entry into database.

d. Review MCES lab invoice.

e. Site visit to troubleshoot remote connection issue.

Task Order 14b: Lower Riley Creek Final Design

a. Met with Matt Bourne and Patrick Sejkora (City staff), Ryan Winge (Contractor Project Manager), Jeremy Rose (Contractor Superintendent) on site for weekly construction meetings

b. Processed Payment Application #2 with the contractor for mobilization, erosion control items, and dewatering.

c. Coordinated a meeting with Rachel Contracting, Barr and city of Eden Prairie to discuss options for revised access to areas with poor soils.

d. Developed a revised construction plan for the downstream section of the project. Based on discussions with Rachel Contracting and city of Eden Prairie, most of the reach downstream of Sta. 38+00 can not be constructed per the original design because of the poor soils. The revised design utilizes rock cross vanes, log vanes, and toe wood to stabilize the stream channel and provide improved habitat per the design goals, but reduces the quantities of materials that would be transported and installed over the poor soils. This necessary change in design was not anticipated in Barr's task order or amendments and might result in Barr exceeding the authorized budget. Barr continues to monitor the construction management budget closely and may need to submit a request for addition budget in the future.

e. Reviewed contractor's request for Change Order #2 to address poor soils conditions and revised design in anticipation of including in the March 4th packet materials.

f. Met on site with Rachel and sub-contractor to review clearing and grubbing quantities.

g. Continued general coordination with contractor and City and site construction observation.

h. Contractor has completed approximately 2,500 LF of the nearly 4,500 LF of stream restoration (as of 2/21). Project features installed include three manhole drop structures, VRSS, constructed rock/log riffles, constructed rock riffles, boulder cross vanes, toe wood, general grading, seeding, erosion control blanket, and bio-logs.

Toe wood and VRSS installation

Installing Rock/Log Riffles

Installation of erosion control blanket in completed section of stream

Task Order 21B: Bluff Creek Stabilization Project

a. Conducted site walk to verify final quantities for Pay App #4 associated with turf reinforcement mat and temporary mulch. Developed Pay App #4 for board approval at the March meeting.

b. As previously mentioned, final seeding, permanent erosion control features, and final plantings will be completed in the spring.

Task Order 23: Scenic Heights School Forest Restoration

a. No work was performed this period.

Task Order 25: Duck Lake Water Quality Improvement Project

a. Participated in an open house hosted for local residents who have signed up to receive a downspout planter box on February 13th. At the open house they were able to review the designs, select one of their choice, sign the agreement, and highlight where on their property they would like for the box to be installed. Barr is now working to prepare a contract with the contractors to fabricate and install the downspout planters at the agreed upon locations.

b. Solicited feedback from the city of Eden Prairie on the rain garden plans and specifications. Unfortunately, another homeowner dropped out of consideration for a residential rain gardens due to concerns about the necessary agreement, leaving only two viable sites remaining. The project will have quotes requested in the next several weeks for a spring/summer construction period.

Task Order 26: Stormwater Model Update and Flood-Risk Area Prioritization Identification for the Bloomington Portion of Purgatory Creek

a. On January 31st, staff met with Bloomington staff to provide a tutorial for how to update the prioritization list. The tutorial included examples of adjusting the scoring, explanation of how each criteria was evaluated, and calculations used to develop the prioritized list. Following the meeting Bloomington staff, were planning to continue to review the prioritized list and provide comments.

b. Following input from Administrator Bleser and City staff, Barr will update the framework to incorporate comments and prepare supporting documentation for the framework.

c. The prioritized list of flood-prone areas is intended to provide guidance on locations to complete further study and evaluation of flood-risk mitigation options. The order of the list may change over time as project are implemented or different partners are identified.

Task Order 28A: Rice Marsh Lake Subwatershed 12a Water Quality Project

a. Reviewed monitoring data sample timing with respect to flow data to better understand which data are suitable for model calibration.

b. Calibrated the P8 water quality model to suitable events from the monitoring data within the RM_12a watershed.

c. Continued analyzing various best management practice options given the site constraints, estimating phosphorus removals and developing cost estimates.

d. Incorporated bathymetry data for pond RM_12 received from the District in dredging option.

e. Began drafting the feasibility report and modeling results.

Task Order 29A: Middle Riley Creek Stabilization Feasibility Study

a. Revised preliminary alternatives for stabilization of the stream through Bearpath golf course based on comments received from RPBCWD staff and Bearpath staff during project kickoff meeting. Developed two options for stabilizing the stream include, 1) stabilization in place through the use of bio-engineering, or 2) moving the stream away from steep, eroding banks and adding some additional meanders to improved habitat and stream stability.

b. Conducted an agency/technical stakeholder meeting the second week of February. Attendees included two staff from Bearpath, Administrator Bleser, Barr Engineering staff, MNDNR Area Hydrologist (via phone) and USACE (via phone). Comments received from this meeting were incorporated into the preliminary concepts. Discussions regarding permitting will aid in the determination of viable alternatives.

c. Developed preliminary cost estimates and quantified TSS/TP benefits from the project. Began drafting feasibility level report. Project will be presented at the March 4th board meeting.

Task Order 30A: Pioneer Trail Wetland Restoration Feasibility Study

a. Prepared for and held an agency meeting on February 11th at the RPBCWD with representatives from the Minnesota Board of Water and Soil Resources, the U.S. Army Corps of Engineers, the City of Chanhassen, Carver County Watershed Management Organization, and Carver County Soil and Water Conservation District to discuss the proposed project, provide initial conceptual options, and request comments.

b. Refined the two proposed outlet configurations based on feedback from the February 11th agency planning meeting. These proposed outlet configurations outlets would retain more water on the site, similar to predevelopment conditions, without causing 10-year or 100-year, 24-hour design rainfall event peak-water elevations to rise above those experienced under existing conditions.

c. Simulated the existing, pre-development and proposed conditions using the 1950-2019 Minneapolis-St. Paul Airport climate data set to analyze approximately 70 years of rainfall. This data was then used to assess how proposed outlet configurations impact the water levels in the wetland respond over time and how closely they can simulate predevelopment conditions.

d. Created P8 models of the existing and two proposed outlet conditions to quantify the total suspended solids and total phosphorus benefits of the proposed outlet configurations.

e. Create conceptual design plans of the site showing possible restoration features including vegetation areas and paths/boardwalks.

f. Begin drafting draft feasibility level report. A summary of the feasibility report options for the project will be presented at the March 4th board meeting.

resourceful. naturally.
engineering and environmental consultants

BARR

To: RPBCWD Board of Managers
From: Dave Melmer
Subject: February 12-14, 2020—Erosion Prevention and Sediment Control Inspection
Date: February 26, 2020
Project: 23/27-0053.14 PRMT 9016

Barr staff has inspected construction sites in the Riley Purgatory Bluff Creek Watershed District for conformance to erosion prevention and sediment control policies. Listed below are construction projects and the improvement needed for effective erosion prevention and sediment control. The sites were inspected from February 12-14, 2020.

Site Inspections

2015-010	**Children's Learning Adventure - Private - Commercial/Industrial** **Northwest Corner of Highway 5 and Galpin Avenue** **Chanhassen, MN 55317** Site is compliant.	**2020-02-13**
2015-036	**Saville West Subdivision - Private - Residential** **5325 County Road 101 Minnetonka, MN 55345** Site is compliant.	**2020-02-14**
2015-050	**Arbor Glen Chanhassen - Private - Residential** **9170 GREAT PLAINS BLVD Chanhassen, MN 55317** Site has an open Corrective Action (CA) for silt fence overtopping and silt into detention pond south of 715 Crossroads Court.. See 9/20/19 inspection for information and photos. Terry Jeffery is aware of CA. Site representative was notified 9/20/19.	**2020-02-13**
2015-055	**Hampton Inn Eden Prairie - Private - Commercial/Industrial** **11825 Technology Drive Eden Prairie, MN 55344** Site is compliant.	**2020-02-12**
2016-017	**SWLRT - Government - Other** **Varies Eden Prairie, MN 55344** Site is compliant.	**2020-02-12**
2016-020	**Prairie View Enclave - Private - Commercial/Industrial** **12701 Pioneer Trail Eden Prairie, MN 55347** No activity observed. Permit has expired.	**2020-02-12**

2016-026	**Foxwood Development - Private - Residential** **9150 and 9250 Great Plains Blvd Chanhassen, MN 55317** Site is compliant.	**2020-02-13**
2016-032	**CSAH 61 Improvements - Government - Linear** **N/A Eden Prairie, MN 55347** Site is compliant.	**2020-02-12**
2017-001	**Kopesky 2nd Addition - Private - Residential** **18340 82nd St Eden Prairie, MN 55347** Site is compliant.	**2020-02-12**
2017-023	**Eden Prairie Assembly of God - Private - Commercial/Industrial** **16591 Duck Lake Trail Eden Prairie, MN 55346** Site is compliant.	**2020-02-13**
2017-024	**Prairie Bluffs Senior Living - Private - Residential** **10280 Hennepin Town Rd Eden Prairie, MN 55347** Site has open Corrective Action. See inspection dates 12/11/19 for information and photos. Site representative was notified on 12/11/19. Will readdress after spring thaw/snowmelt. Terry Jeffery is aware of issues.	**2020-02-12**
2017-026	**6135 Ridge Road - Existing Single-Family** **6135 Ridge Road Shorewood, MN 55331** Site is compliant.	**2020-02-13**
2017-028	**Great Plains Blvd/TH 101 Trail Extension - Government - Linear** **1500 LF south of Lyman Blvd on the west side of TH 101 Chanhassen, MN 55317** Site is compliant.	**2020-02-13**
2017-029	**Tweet Pediatric Dentistry - Private - Commercial/Industrial** **7845 Century Blvd. Chanhassen, MN 55317** Site is compliant.	**2020-02-13**
2017-030	**Elevate - Private - Commercial/Industrial** **12900 Technology Drive Eden Prairie, MN 55344** Site is compliant.	**2020-02-12**
2017-031	**Lion's Tap - Private - Commercial/Industrial** **16180 Flying Cloud Drive Eden Prairie, MN 55347** Site is compliant.	**2020-02-12**

2017-038	**West Park - Private - Residential** **760& 781 Lake Susan Drive 8601 Great Plains Blvd** **Chanhassen, MN 55317** Site is compliant.	**2020-02-13**
2017-039	**Mission Hill Senior Living - Private - Residential** **8600 Great Plains Boulevard Chanhassen, MN 55317** Site is compliant.	**2020-02-13**
2017-043	**Flying Cloud Dr Trail Improvements - Government - Other** **8251 FLYING CLOUD DR Eden Prairie, MN 55344** Site is compliant.	**2020-02-12**
2017-047	**Fawn Hill - Private - Residential** **7240 Galpin Road Chanhassen, MN 55331** Site is compliant.	**2020-02-13**
2017-054	**4238 Heathcote - Existing Single-Family** **4238 Heathcote Road Deephaven, MN 55331** Site is compliant.	**2020-02-13**
2017-065	**4818 Ridge Road - Existing Single-Family** **4818 Ridge Road Minnetonka, MN 55345** Site is compliant.	**2020-02-13**
2017-067	**4693 Vinehill Rd - Existing Single-Family** **4693 Vine Hill Rd, Excelsior, MN, 55331** Site is compliant.	**2020-02-13**
2017-069	**Scheels Redevelopment - Private - Commercial/Industrial** **8301 Flying Cloud Dr. Eden Prairie, MN 55344** Site is compliant.	**2020-02-12**
2017-072	**O'Reilly Auto Parts Eden Prairie - Private - Commercial/Industrial** **8868 AZTEC DRIVE Eden Prairie, MN 55347** Site is compliant.	**2020-02-12**
2018-006	**16200 Pine St - Existing Single-Family** **16200 Pine St Minnetonka, MN 55345** Site is compliant.	**2020-02-13**

2018-014	**Eden Prairie Road Reconstruction** **Eden Prairie, MN 55347** Site is compliant.	**2020-02-12**
2018-016	**Avienda - Private - Commercial/Industrial** **SW corner of Powers and Lyman Boulevard Chanhassen, MN 55317** No activity observed to date.	**2020-02-13**
2018-025	**Magellan Pipeline UCD Dig 8 through 12** **Chanhassen, MN 55317** Site is compliant. Placed call to site representative for status of project.	**2020-02-13**
2018-027	**MAMAC - Private - Commercial/Industrial** **8189 Century Boulevard Chanhassen, MN 55317** Site is compliant.	**2020-02-13**
2018-034	**Basin 05-11-A Cleanout - Government - Other** **Corner of Sequioa and Ginger Eden Prairie, MN 55346** Site is compliant. Work has begun on basin.	**2020-02-14**
2018-036	**Horseshoe Curve house construction - Existing Single-Family** **6675 Horseshoe Curve Chanhassen, MN 55317** Site is compliant.	**2020-02-13**
2018-038	**Eden Prairie Senior Living - Private - Residential** **8460 Franlo Rd Eden Prairie, MN 55344** Corrective Action remains open. See 9/20/19 inspection notes for information. Site representative was notified. Will readdress Corrective Action after spring thaw.	**2020-02-12**
2018-041	**Abra Auto Body - Private - Commercial/Industrial** **13075 Pioneer Trail Eden Prairie, MN 55347** Site is compliant. (Snow covered.). Unable to confirm vegetation growth or temporary that temporary BMP's have been removed. Will confirm after snowmelt.	**2020-02-12**
2018-043	**Control Concepts - Private - Commercial/Industrial** **8077 Century Boulevard Chanhassen, MN 55317** Site is compliant.	**2020-02-13**

2018-044	**Smith Village - Private - Residential** **16389 Glory Lane Eden Prairie, MN 55344** Site is compliant.	**2020-02-13**
2018-047	**Peterson Borrow Site - Private - Commercial/Industrial** **15900 Flying Cloud Drive Eden Prairie, MN 55347** Site is compliant.	**2020-02-12**
2018-048	**Kampe - Existing Single-Family** **19067 Magenta Bay Eden Prairie, MN 55374** Site is compliant.	**2020-02-12**
2018-052	**HCRRA Culvert Replacement - Government - Linear** **Hennepin County Wayzata and Deephaven, MN 55401** Construction complete. Silt fence and bio-rolls were still in place as of last inspection. Will inspect after snowmelt and notify site representative if temporary BMP's are still in place.	**2020-02-13**
2018-055	**Park Trail Improvement Project - Government - Other** **1700 W. 98th Street Bloomington, MN 55431** Site is compliant.	**2020-02-12**
2018-058	**Walker Home - Existing Single-Family** **9108 Stephens Pointe Eden prairie, MN 55347** Site has multiple Corrective Actions. Site representative and Terry Jeffery are aware of the issues. See site inspection dates for details/photos: 9/20/2019 and 10/23/19Issues will be addressed again after snowmelt.	**2020-02-12**
2018-059	**Mason Point Landscaping - Existing Single-Family** **15363 Mason Pointe Eden Prairie, MN 55347** Site is compliant.	**2020-02-12**
2018-060	**Loichinger Residence - Existing Single-Family** **16396 Stratus Court Eden Prairie, MN 55347** Site is compliant.	**2020-02-12**
2018-061	**McCoy Lake Inlet Sediment Removal - Government - Other** **Mitchell Road and Cumberland Road Eden Prairie, MN 55347** No activity observed to date.	**2020-02-12**
2018-062	**Lower Riley Creek Stabilization Project - Government - Other** **Ridge on Riley Creek, Outlot A Eden Prairie, MN 55344** Site is compliant.	**2020-02-12**

2018-066	**Castle Ridge Redevelopment - Private - Residential** **615-635 Prairie Center Drive Eden Prairie, MN 55344** Site is compliant.	**2020-02-12**
2018-067	**Hennepin Co Library - Eden Prairie Branch Refurb - Government - Other** **565 Prairie Center Drive Eden Prairie, MN 55344** Site is compliant.	**2020-02-12**
2018-068	**DriSteem Warehouse Expansion - Private - Commercial/Industrial** **14949 Technology Drive Eden Prairie, MN 55344** Site is compliant.	**2020-02-12**
2018-070	**4917 Vine Hill Rd** **4917 Vine Hill Rd Deephaven, MN 55331** Site is compliant.	**2020-02-13**
2018-072	**Hyland Park Parking Lot Improvements - Government - Other** **10145 E Bush Lake Rd Bloomington, MN 55438** Site is compliant.	**2020-02-12**
2018-073	**Preserve Boulevard Reconstruction - Government - Linear** **Preserve Boulevard Eden Prairie, MN 55344** Site is compliant.	**2020-02-12**
2018-074	**Eden Prairie Ground Storage Reservoir - Government - Other** **XXXX Eden Prairie Road Eden Prairie, MN 55344** Site is compliant.	**2020-02-13**
2019-001	**Park-Galpin Nelson Property - Private - Residential** **7141 Galpin Blvd Chanhassen, MN 55317** Site is compliant.	**2020-02-13**
2019-002	**Shelangoski Home - Existing Single-Family** **7516 Frontier Trl Chanhassen, MN 55317** Site is compliant.	**2020-02-13**
2019-003	**Stable Path - Private - Residential** **9650 Stable Path Eden Prairie, MN 55347** Site is compliant.	**2020-02-12**

2019-006	**2019 Mill and Overlay - Government - Linear** **Scenic Heights Drive Minnetonka, MN 55345** Site is compliant.	**2020-02-14**
2019-007	**Beverly Hill - Private - Residential** **16540 Beverly Drive & 9800 Eden Prairie Road Eden Prairie, MN 55347** Site is compliant.	**2020-02-12**
2019-008	**Staring Lake Pavilion - Government - Other** **14800 Pioneer Trail Eden Prairie, MN 55347** Site is compliant.	**2020-02-12**
2019-009	**5995 Ridge Rd Remodel - Existing Single-Family** **5995 Ridge Rd Shorewood, MN 55331** Site is compliant.	**2020-02-13**
2019-011	**Westwind Plaza - Private - Commercial/Industrial** **4795 County Rd. 101 Minnetonka, MN 55345** Site is compliant.	**2020-02-14**
2019-013	**Cozine Project** **272 Lakeview Road E Chanhassen, MN 55317** Site is compliant.	**2020-02-12**
2019-014	**Hennepin Town Road Turn Lane Improvements - Government - Linear** **10217 Hennepin Town Road Eden Prairie, MN 55347** Site is compliant.	**2020-02-12**
2019-015	**Lake Drive East Improvements - Government - Linear** **Lake Drive East Chanhassen, MN 55317** No activity observed to date.	**2020-02-13**
2019-017	**6650 Pawnee Drive - Existing Single-Family** **6650 Pawnee Dr. Chanhassen, MN 55317** Site has open Corrective Action. See prior inspection for information and photos. CA's will remain open thru spring -2020. Site is snow covered.Terry Jeffery is aware of issues.	**2020-02-13**

2019-018	**6657 Deerwood Drive - Existing Single-Family** **6657 Deerwood dr Chanhassen, MN 55317** Site has open Corrective Action. See prior inspection for information and photos. CA's will remain open thru spring -2020. Site is snow covered.Terry Jeffery is aware of issues.	**2020-02-13**
2019-019	**Sheldon Place - Private - Residential** **7960 Eden Prairie Rd Eden Prairie, MN 55347** Site is compliant.	**2020-02-13**
2019-020	**Dixon new home - Existing Single-Family** **3993 Hillcrest Road Deephaven, MN 55391** Site is compliant.	**2020-02-13**
2019-021	**2019 Miscellaneous Drainage Improvements - Government - Other** **Red Cherry Lane Minnetonka, MN 55345** Site is compliant.	**2020-02-14**
2019-022	**Woodcrest Place - Private - Residential** **17170 Beverly Drive Eden Prairie, MN 55347** Site is compliant.	**2020-02-12**
2019-023	**Minnetonka Library - Government - Other** **17524 Excelsior Blvd. Minnetonka, MN 55345** Site is compliant.	**2020-02-14**
2019-024	**Conifer Heights - Private - Residential** **5615 Conifer Trail 5616 Mahoney Ave Minnetonka, MN 55345** Site is compliant.	**2020-02-14**
2019-025	**Homestead Circle Sump Pump Collection - Government - Linear** **Homestead Circle Green Ridge Drive Pheasant Circle, MN 55346** Site is compliant.	**2020-02-13**
2019-026	**Ridgewood Church Parking Lot** **4420 County Road 101 Minnetonka, MN 55345** Site is compliant.	**2020-02-14**
2019-028	**Lifetime Parking Lot Chanhassen - Private - Commercial/Industrial** **2970 Water Tower Place Chanhassen, MN 55317** Site is compliant.	**2020-02-13**

2019-029	**Sheldon Ave Storm Sewer Improvements - Government - Linear** **16032 Sheldon Avenue Eden Prairie, MN 55344** No activity observed to date.	**2020-02-13**
2019-030	**Koeppen Shoreline Stabilization - Private - Residential** **516 Big Woods Blvd Chanhassen, MN 55317** Site is compliant.	**2020-02-13**
2019-031	**Leddy Shoreline Restoration - Private - Residential** **9470 Foxford Road Chanhassen, MN 55317** Site is compliant.	**2020-02-12**
2019-032	**West 79th St Chanhassen Parking Lot - Government - Other** **Unassigned - W. 79th St and Market Blvd Chanhassen, MN 55317** Site is compliant.	**2020-02-13**
2019-033	**Spring Rd Pedestrian Crossing - Government - Linear** **Spring Rd and Prospect Rd Eden Prairie, MN 55344** Site is compliant.	**2020-02-12**
2019-035	**Shadow Lane - Private - Commercial/Industrial** **2634 Shadow Lane Chaska, MN 55318** No activity observed to date.	**2020-02-13**
2019-036	**Miller Pool - Existing Single-Family** **18471 Heathcote Dr, Deephaven, MN 55391** Site is compliant.	**2020-02-13**
2019-037	**Maple Leaf Drive SPCS - Government - Linear** **19091 Maple Leaf Drive, Eden Prairie, MN 55346** Site is compliant.	**2020-02-13**
2019-040	**5328 Spring Ln Existing Single-Family** **15425 Highway 7, Suite 330Minnetonka, MN 55345** No activity observed to date.	**2020-02-14**
2019-041	**Engelstad Pool – Existing Single Family** **17773 Cascade Dr, Eden Prairie, MN 55347** No activity observed to date.	**2020-02-12**

2019-044	**6645 Horseshoe Curve – Melander – Other** **6645 Horseshoe Curve, Chanhassen, MN 55317** Site is compliant.	**2020-02-13**
2019-045	**16820 Excelsior Blvd Existing Single-Family** **6645 Horseshoe Curve Chanhassen, MN 55317** Site is compliant.	**2020-02-14**
2019-047	**Building Demolition and Site Restoration - Government - Linear, 7700 Market Blvd. Chanhassen, MN 55317** Site is compliant.	**2020-02-13**
2019-049	**Powers Blvd and Lake Lucy Rd - Government - Linear** **7700 Market Blvd. Chanhassen, MN 55317** Site appears compliant. Unable to determine site conditions due to snow cover.	**2020-02-13**

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

RILEY PURGATORY BLUFF CREEK
WATERSHED DISTRICT

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

To: Board of Managers
From: Claire Bleser, District Administrator
Re: Consent Item Task Orders

Friday, February 28, 2020

Dear Managers,

Please included as consent items the following Task Orders:

c. Design for St Hubert Water Quality Project
d. Lake Riley Alum 2nd Split Dose
e. Kerber Pond Ravine Feasibility
f. Upper Riley Creek Corridor Enhancement Plan Development
g. WOMP (monitoring) Station Assistance
m. Atlas 14 H and H model with the City of Minnetonka

Staff proposes that $100,000 funds from Lake Ann Wetland Restoration be transferred to St Hubert Water Quality Project. The Lake Ann Wetland Restoration has been postponed until the development site has been stabilized. Property developers restored hydrology to the wetland and staff proposes to wait and evaluate the site after work has been performed to validate the need or opportunity of enhancement. Lake Riley Alum, Kerber Pond and Upper Riley Creek Corridor Enhancement plant – all have been budgeted under their respective categories. WOMP station is budgeted through Data Collection and the Atlas 14 H and H model is within Community Resiliency.

Staff recommends approval of these items with fund transfer for the St Hubert Water Quality Project.

Manager _____ seconded by Manager _____ to approve fund transfers out of Lake Ann Wetland Restoration for $100,000 for St Hubert Water Quality Project and approve task orders:
c. Design for St Hubert Water Quality Project
d. Lake Riley Alum 2nd Split Dose
e. Kerber Pond Ravine Feasibility
f. Upper Riley Creek Corridor Enhancement Plan Development
g. WOMP (monitoring) Station Assistance
m. Atlas 14 H and H model with the City of Minnetonka.

SRF 13885.PP

February 27, 2020

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

Subject: Proposal for Professional Services for St. Hubert Campus Water Quality Project – Final Design and Construction Administration - Chanhassen, Minnesota

Dear Dr. Bleser:

Based on your request, SRF Consulting Group, Inc. (SRF) is pleased to submit this proposal to provide professional services to assist you and the St. Hubert's School with implementing water quality and landscaping improvements identified during the development of the 2019 Concept Plan for their Chanhassen campus.

Scope of Services

We propose to carry out the work ("Scope of Services") as described in the attached document, Exhibit A - Work Tasks and Person-Hour Estimate. Based on our discussions, it is our understanding that, in broad terms, the tasks included in this design phase include:

1. Coordinating with you and the St. Hubert School staff during the design process to develop documents that meet the overall goals of the Met Council's Stormwater Grant, the RPBCWD, and the St. Hubert Catholic Church and School.
2. Producing contract documents for the prairie restoration area identified in the Conceptual Design Study (April 2019) for construction in 2020.
3. Producing contract documents for the water quality BMP's identified in the Conceptual Design Study (April 2019) for construction in 2021.
4. Coordinating with the School and playground equipment vendors for the playground renovation.
5. Providing construction assistance with bidding and construction observation.

Please see the specific tasks and assumptions in the attachment for details.

Schedule

We will provide a schedule to complete the work upon authorization to proceed, adjusting the schedule as needed to complete this work within a mutually agreed-upon time schedule. We understand the need to begin the design process to complete the prairie restoration documents for planting in 2020 and will provide staffing for this work at the onset of the project.

Basis of Payment/Budget

We propose to be reimbursed for our services on an hourly basis for the actual time expended. Other direct project expenses such as printing, supplies, reproduction, etc., will be billed at cost and mileage will be billed at the current allowable IRS rate for business miles. Invoices are submitted on a monthly basis for work performed during the previous month. Payment is due within 30 days.

Based on our understanding of the project and our scope of services, we estimate the cost of our services to be $71,050 which includes both time and expenses, with a detailed breakdown in Exhibit A.

Changes in the Scope of Services

It is understood that if the scope or extent of work changes, the cost will be adjusted accordingly. Before any out-of-scope work is initiated, however, we will submit a budget request for the new work and will not begin work until we receive authorization from you.

Acceptance/Notice to Proceed

A signed copy of this proposal, mailed or emailed to our office, will serve as acceptance of this proposal and our notice to proceed. The email address is lgifford@srfconsulting.com.

We sincerely appreciate your consideration of this proposal and look forward to working with you on this project. Please feel free to contact us if you have any questions or need additional information.

Sincerely,

SRF CONSULTING GROUP, INC.

Leah Gifford, PE (MN)
Senior Associate

David Filipiak, PE (MN)
Principal

LG/DF/rb

This cost proposal is valid for a period of 90 days. SRF reserves the right to adjust its cost estimate after 90 days from the date of this proposal.

SRF Consulting Group, Inc.

Client: Riley-Purgatory-Bluff Creek Watershed District

Project: St. Hubert Campus Water Quality Project

Exhibit A - Work Tasks and Person-Hour Estimates

13385.PP

Subconsultants:

TASK NO.	SUMMARY OF TASKS
1.0	Meetings and Project Management
2.0	Data Collection/Concept Update
3.0	Preliminary Design (60% Plans) of Retrofit
4.0	Draft (90%) and Final (100%) Plan for Prairie Restoration
5.0	Draft (90%) and Final (100%) Design of Retrofit Plan
6.0	Coordination and Education and Outreach
7.0	Bidding Assistance and Construction Administration
8.0	Project Closeout Report

Project Overview:

This RPBCWD project is for the final design of the St. Hubert Campus Retrofits in Chanhassen, MN. Preliminarily this includes tree trenches, playground improvements, underground stormwater storage, parking lot reduction, rain garden, catch basin and gully repair, drain tile installation, prairie restoration, outdoor classroom, entryway re-configuration, and landscaping plans.

SRF Consulting Group, Inc. — Work Tasks and Person-Hour Estimates

Client: Riley-Purgatory-Bluff Creek Watershed District
Project: St. Hubert Campus Water Quality Project

13385.PP

TASK NO.	TASK DESCRIPTION	PRINCIPAL	SR. ASSOC.	ASSOCIATE	SR. PROF	PROF.	TECHNICAL	CLERICAL	TOTALS	EST. FEE
1.0	**Meetings and Project Management** Assumptions: Each meeting is up to 2 hours long plus travel time. Kick-off meeting will be in a workshop format with St. Hubert School (SHS) and RPBCWD staff. The goal is to listen to goals and expectations for the site, outdoor classroom, playground, and nature play areas. Discuss SHS construction budget and phasing considerations. Includes meeting preparation and notes. Client Deliverables:									
1.1	Design Kickoff Meeting (1)	2	12	0	0	0	0	0	14	$1,982
1.2	Preliminary Design (60%) Review Meeting (1)	0	7	0	0	0	0	0	7	$959
1.3	Draft Final Design (90%) Review Meeting (1)	0	7	0	0	0	0	0	7	$959
1.4	Project Management (biweekly calls, half hour each)	0	10	0	0	0	0	0	10	$1,370
1.5	Attendance at two (2) Board Meetings	0	8	0	0	0	0	0	8	$1,096
	SRF Deliverables: Meeting materials and meeting record. Bi-weekly PM calls.									
	SUBTOTAL - TASK 1	**2**	**44**	**0**	**0**	**0**	**0**	**0**	**46**	**$6,366**
2.0	**Data Collection/Concept Update** Assumptions: Field survey includes sanitary and storm utilities, limited topographic, limited planimetric Client Deliverables: As-Built building and site plans									
2.1	Gopher-One	0	0	1	0	2	0	0	3	$297
2.2	Complete Field and Utility Survey	0	2	0	16	0	0	0	18	$2,034
2.3	Review As-builts	0	0	1	0	2	0	0	3	$297
2.4	Update 2019 concept plan based on Kickoff Meeting discussions	0	2	0	0	2	0	0	4	$458
	SRF Deliverables: Survey base files, upon request									
	SUBTOTAL - TASK 2	**0**	**4**	**2**	**16**	**6**	**0**	**0**	**28**	**$3,086**

SRF Consulting Group, Inc. Work Tasks and Person-Hour Estimates

Client: Riley-Purgatory-Bluff Creek Watershed District

Project: St. Hubert Campus Water Quality Project

13385.PP

TASK NO.	TASK DESCRIPTION	PRINCIPAL	SR. ASSOC.	ASSOCIATE	SR. PROF	PROF.	TECHNICAL	CLERICAL	TOTALS	EST. FEE
3.0	**Preliminary Design (60% Plans) of Retrofit** Assumptions: One round of review and comment from WD and stakeholders in the preliminary design phase Comments, if received from multiple stakeholders, will be received at the same time and will be coordinated at a review meeting. H&H modeling will not be required. MIDS Water quality modeling will not be needed for design, but will be included in the final report as needed. Does not include structural wall design. Does not include water reuse system design. Does not include geotechnical borings or investigations. Assumes soils information not needed for underground storage or playground footings. Assumes benches and tables, seating areas will be provided by others. Future locations will be shown in plan view, but details will not be included. Client Deliverables:									
3.1	Stormwater BMP design (tree trenches, underground stormwater storage, inlet and gully repair, parking lot reduction, rain garden, french drain) -BMP placement and type selection -Connections to existing infrastructure -Sizing based on contributing area -Grading	2	8	8	0	16	0	0	34	$3,810
3.2	Landscaping Design -Playground container size, shape, user ages, and program -Nature play area including locations for boulders, climbers paths and other play features -Relocation of basketball courts -Tree trench planting plan and hardscape -Rain garden Planting plan -Outdoor classroom and native prairie restoration -Re-designed entry plaza including planting plan and hardscape -Locations for tables and seating -Preliminary plant species list and images	2	8	0	0	20	0	0	30	$3,274
3.3	Preliminary Plans (60%) -Title Sheet -Removal Plan -Grading and Construction Plan -BMP Design Details -Landscaping Plan -(Additional Sheets to be included during Final Design)	2	8	0	0	30	0	0	40	$4,194
3.4	Preliminary Cost Estimate	1	4	0	0	8	0	0	13	$1,453
	SRF Deliverables: Preliminary Plans and Estimate									
	SUBTOTAL - TASK 3	**7**	**28**	**8**	**0**	**74**	**0**	**0**	**117**	**$12,731**

SRF Consulting Group, Inc. Work Tasks and Person-Hour Estimates

Client: Riley-Purgatory-Bluff Creek Watershed District
Project: St. Hubert Campus Water Quality Project

13385.PP

TASK NO.	TASK DESCRIPTION	PRINCIPAL	SR. ASSOC.	ASSOCIATE	SR. PROF	PROF.	TECHNICAL	CLERICAL	TOTALS	EST. FEE
4.0	**Draft (90%) and Final (100%) Plan for Prairie Restoration** Assumptions: Plan will focus on vegetation establishment to be completed in late summer 2020. Design details including paths, locations for seating areas and educational features will be included but additional details will be finalized in the Retrofit Planset. Client Deliverables:									
4.1	Draft Plans -Title sheet -Removal Plan -Grading and Landscaping Plan (with Erosion Control) -SWPPP Sheets	0	4	0	0	20	0	0	24	$2,388
4.2	Draft Cost Estimate	0	2	0	0	2	0	0	4	$458
4.3	Draft Specifications	0	4	0	0	0	0	0	4	$548
4.4	Final Plans	0	4	0	0	8	0	0	12	$1,284
4.5	Final Cost Estimate	0	2	0	0	2	0	0	4	$458
4.6	Final Specifications	0	6	0	0	0	0	0	6	$822
	SRF Deliverables: Draft and Final Plans, Cost Estimate, and Specification for 2020 construction.									
	SUBTOTAL - TASK 4	**0**	**22**	**0**	**0**	**32**	**0**	**0**	**54**	**$5,958**
5.0	**Draft (90%) and Final (100%) Design of Retrofit Plan** Assumptions: See preliminary design assumptions Client Deliverables:									
5.1	Finalize designs based on preliminary coordination	0	4	0	0	8	0	0	12	$1,284
5.2	Draft Final Design Plans (90%) -Finalize sheets listed in Preliminary Design -Details -Erosion Control and Turf Establishment Plans -Stormwater Pollution Prevention Plan (SWPPP)	4	8	0	0	24	0	0	36	$3,980
5.3	90% Specifications	0	8	0	0	0	0	0	8	$1,096
5.4	90% Cost Estimate	0	2	0	0	8	0	0	10	$1,010
5.5	Final Plans (100%)	0	6	0	0	16	0	0	22	$2,294
5.6	100% Specification	0	8	0	0	0	0	0	8	$1,096
5.7	100% Cost Estimate	0	2	0	0	4	0	0	6	$642
	SRF Deliverables: Draft and final constructions plans, specifications and cost estimate									
	SUBTOTAL - TASK 5	**4**	**38**	**0**	**0**	**60**	**0**	**0**	**102**	**$11,402**

SRF Consulting Group, Inc. Work Tasks and Person-Hour Estimates

Client: Riley-Purgatory-Bluff Creek Watershed District
Project: St. Hubert Campus Water Quality Project

13385.PP

TASK NO.	TASK DESCRIPTION	PRINCIPAL	SR. ASSOC.	ASSOCIATE	SR. PROF	PROF.	TECHNICAL	CLERICAL	TOTALS	EST. FEE
6.0	**Coordination and Education and Outreach** Assumptions: Assumes Educational Signage will be used onsite. Signs will be infographic type signs featuring on site designs. Playground vendor coordination includes: - the submittal of playground container layout, program, user ages and budget to at least 3 playground equipment vendors to solicit bids on behalf of St. Hubert School. - one (1) meeting with St. Hubert School to review playground equipment bids, determine preferred choices, and make recommendation. - coordination with selected playground equipment vendor to incorporate equipment details in project plans, specifications, and construction phasing. No permits required other than NPDES and Chanhassen Grading Permit. Client Deliverables:									
6.1	Educational signage -One (1) sign messaging meeting -Three (3) draft educational signs -Three (3) final educational signs	0	14	0	0	40	0	0	54	$5,598
6.2	Develop three dimensional perspective rendering graphic of final design from south end of project looking towards school and playground, to be used by St. Hubert School in outreach and fundraising campaign.	0	2	0	0	12	0	0	14	$1,378
6.3	Playground vendor coordination	0	12	0	0	6	0	0	18	$2,196
6.4	NPDES and City of Chanhassen Grading Permits	0	2	0	0	2	0	0	4	$458
	SRF Deliverables: -Preliminary rendering graphic in JPEG or PDF format -One revision to rendering -Sign graphics in JPEG or PDF format -Design layout and required information to playground vendors -Meeting notes									
	SUBTOTAL - TASK 6	**0**	**30**	**0**	**0**	**60**	**0**	**0**	**90**	**$9,630**
7.0	**Bidding Assistance and Construction Administration** Assumptions: Staking and as-built survey the responsibility of the contractor Assumes two phases of construction, the first will be in the summer of 2020 and will receive quotes from at least 3 contractors. The second will exceed $175,000 and will be publicly bid. Client Deliverables:									

SRF Consulting Group, Inc. — Work Tasks and Person-Hour Estimates

Client: Riley-Purgatory-Bluff Creek Watershed District
Project: St. Hubert Campus Water Quality Project

13385.PP

TASK NO.	TASK DESCRIPTION	PRINCIPAL	SR. ASSOC.	ASSOCIATE	SR. PROF	PROF.	TECHNICAL	CLERICAL	TOTALS	EST. FEE
7.1	Bidding assistance	0	6	0	8	0	0	0	14	$1,702
7.2	Construction Observation (3 weeks of 50% time onsite)	4	16	0	60	0	0	0	80	$9,468
7.3	Shop Drawing Review	0	2	0	0	12	0	0	14	$1,378
7.4	RFIs	0	2	0	4	8	0	0	14	$1,450
7.5	Punchlist and Coordination	0	2	0	4	0	0	0	6	$714
7.6	Precon, Construction, Substantial and Final Completion (4) Meetings	0	12	0	12	0	0	0	24	$2,964
	SRF Deliverables:									
	SUBTOTAL - TASK 7	**4**	**40**	**0**	**88**	**20**	**0**	**0**	**152**	**$17,676**
8.0	**Project Closeout Report**									
	Assumptions:									
	Project Closeout report will include:									
	-Project goals and outcomes									
	-Contractor information									
	-Water quality improvement estimates using MIDS model									
	-Operation and Maintenance information									
	-Expediture of costs, including grant funding									
	-Figures and photos									
	-As-built plans									
	Client Deliverables:									
8.1	Project Closeout Report (Draft and Final)	0	8	0	0	16	0	0	24	$2,568
8.2	As-built MIDS WQ model (results included in report)	0	2	0	0	0	0	0	2	$274
8.3	As-built plans (included in report)	0	2	0	4	0	0	0	6	$714
	SRF Deliverables:									
	Draft and final closeout report									
	SUBTOTAL - TASK 8	**0**	**12**	**0**	**4**	**16**	**0**	**0**	**32**	**$3,556**
	TOTAL ESTIMATED PERSON-HOURS	**17**	**218**	**10**	**108**	**268**	**0**	**0**	**621**	
	AVERAGE HOURLY BILLING RATES	$169	$137	$113	$110	$92	$123	$68		
	ESTIMATED LABOR AND OVERHEAD	$2,873	$29,866	$1,130	$11,880	$24,656	$0	$0		$70,405
	ESTIMATED DIRECT NON-SALARY EXPENSES									$645
	TOTAL ESTIMATED FEE									**$71,050**

SRF Consulting Group, Inc.
Client: Riley-Purgatory-Bluff Creek Watershed District
Project: St. Hubert Campus Water Quality Project

Work Tasks and Person-Hour Estimates

13385.PP

TASK NO.	TASK DESCRIPTION	PRINCIPAL	SR. ASSOC.	ASSOCIATE	SR. PROF	PROF.	TECHNICAL	CLERICAL	TOTALS	EST. FEE
ESTIMATE OF DIRECT NON-SALARY EXPENSES:										
	MILEAGE:	Personal Vehicles		1080	Miles @	$0.575				$621
	REPRODUCTION:	Copy Duplication		0	Copies @	$0.10				$0
		Color Copies		0	Copies @	$0.35				$0
		Bond Prints		0	Prints @	$6.00				$0
		Mylar Prints		0	Prints @	$12.00				$0
	COURTHOUSE COPIES:			0	Copies @	$1.00				$0
	PRINTING:									$0
	SUPPLIES:									$0
	COMMUNICATIONS:	Mail, Express, Etc.		1		$24.00				$24
		Cell Phone Charges		0	Minutes @	$0.30				$0
	SUBCONSULTANTS:									$0
	ESTIMATED DIRECT NON-SALARY EXPENSES									$645

SUMMARY OF COSTS:		PRINCIPAL	SR. ASSOC.	ASSOCIATE	SR. PROF	PROF.	TECHNICAL	CLERICAL	TOTALS	
1.0	Meetings and Project Management	$ 338	$ 6,028	$ -	$ -	$ -	$ -	$ -	$ 6,366	
2.0	Data Collection/Concept Update	$ -	$ 548	$ 226	$ 1,760	$ 552	$ -	$ -	$ 3,086	
3.0	Preliminary Design (60% Plans) of Retrofit	$ 1,183	$ 3,836	$ 904	$ -	$ 6,808	$ -	$ -	$ 12,731	
4.0	Draft (90%) and Final (100%) Plan for Prairie Restoration	$ -	$ 3,014	$ -	$ -	$ 2,944	$ -	$ -	$ 5,958	
5.0	Draft (90%) and Final (100%) Design of Retrofit Plan	$ 676	$ 5,206	$ -	$ -	$ 5,520	$ -	$ -	$ 11,402	
6.0	Coordination and Education and Outreach	$ -	$ 4,110	$ -	$ -	$ 5,520	$ -	$ -	$ 9,630	
7.0	Bidding Assistance and Construction Administration	$ 676	$ 5,480	$ -	$ 9,680	$ 1,840	$ -	$ -	$ 17,676	
8.0	Project Closeout Report	$ -	$ 1,644	$ -	$ 440	$ 1,472	$ -	$ -	$ 3,556	
										$70,405

WENCK ASSOCIATES

Responsive partner.
Exceptional outcomes.

February 6, 2020

Dr. Claire Bleser
District Administrator
Riley Purgatory Creek Watershed District
18681 Lake Drive East
Chanhassen, MN 55317

RE: Proposal for Alum Plans and Specification for Lake Riley

Dear Dr. Bleser:

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

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

1. Review of Alum Dose for Riley Lake

The first step in the process is to review the final dose for Lake Riley using the two follow up sediment coring events. A final memo outlining the second dose for Lake Riley will be provided to the District.

2. Development of alum application quote documents

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

3. Permitting

Currently, alum applications in Minnesota do not require a permit from either the Minnesota Pollution Control Agency (MPCA) or the Minnesota DNR. However, the MPCA does request a letter outlining the details of the project for their review. Wenck will develop the letter to the MPCA and answer any questions the MPCA may have for the project. Wenck will also

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

document the letter and response from the MPCA.

4. Contractor selection and contractor management

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

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

5. Application observation and monitoring

The alum application on Lake Riley will likely be conducted in the Spring of 2020 and take approximately 2 to 3 days. Wenck will be on-site during the initial set-up and early application period for the application event. For subsequent days, Wenck will check in with the contractor, review notes, answer questions, and review water quality data to ensure progress. Wenck will also provide a written monitoring protocol to District staff and the contractor if more detailed water quality monitoring is necessary.

5. Budget and Timeline

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

Table 1: Cost estimate for developing plans and specifications for the second Lake Riley alum treatment.

Task		Wenck Associates	Laboratory and Direct Costs	Total Cost
1	Review of Alum Dose for Lake Riley	$ 1,500	$ -	$ 1,500
2	Development of alum application bid documents	$ 4,000	$ -	$ 4,000
3	Permitting	$ 400	$ -	$ 400
4	Bidding, contractor selection and contractor management	$ 3,100	$ -	$ 3,100
5	Application observation and monitoring	$ 2,000	$ 200	$ 2,200
	TOTAL	$ 11,000	$ 200	$ 11,200

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

Table 2: Proposed Timeline.

	Task	Completion Date
1	Review of Alum Dose for Hyland Lake	March 15, 2020
2	Development of alum application specifications and bid documents	March 15, 2020
3	Permitting	March 15, 2020
4	Project bidding, contractor selection and contractor management	April 15, 2020
5	Application observation and monitoring	May 2020

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

Wenck Associates, Inc.

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

ACCEPTED BY:

_____

By

_____

Its

_____

(Date)

WENCK

Responsive partner.
Exceptional outcomes.

Article 1 Our Agreement

Our agreement with you consists of these General Terms and Conditions and the accompanying written proposal or authorizatio (Agreement). This Agreement is our entire Agreement and supersedes all prior agreements. This Agreement may be modifie only in a writing signed by us, making specific reference to the provision modified. Directing us to start work prior to execution o this Agreement constitutes your acceptance of this Agreement.

The words "you," "we," "us," and "our" include officers, employee and subcontractors.

Any conflicting or additional terms in a purchase order, work orde or other form used to authorize our services are not part of our Agreement unless we specifically accept them in writing. If we cannot agree on mutually acceptable terms, we have the right to withdraw our proposal without liability to you or others, and you compensate us for services already rendered.

Article 2 Our Responsibilities

2.1 We will provide the services specifically described in ou Agreement. You agree that we are not responsible for services tha are not fairly included in our specific undertaking. Unless otherwis agreed in writing, our findings, opinions, and recommendations wi be provided to you in writing. You agree not to rely on oral findin opinions, or recommendations without our written approval.

2.2 In performing our services, we will use that degree of ca and skill ordinarily exercised by reputable members of our profess practicing under similar circumstances in the same locality at the same time.

2.3 Our duties do not include supervising your contractors commenting on, overseeing, or providing the means and methods their work, unless we accept such duties in writing. We will not be responsible for the failure of your contractors to perform in accordance with their undertakings, and the providing of our servi will not relieve others of their responsibilities to you or to others.

2.4 We will provide a health and safety program for our employees, but we will not be responsible for contractor, job, or si health or safety unless we accept that duty in writing. You will provide, at no cost to us, appropriate site safety measures as to w areas to be observed or inspected by us.

2.5 Our estimates of construction or remediation costs will based on information available to us and on our experience and knowledge. Such estimates are an exercise of our professional judgment and are not guaranteed or warranted. Actual costs may vary. You should allow a contingency in addition to estimated cos

2.6 Locations of field observations or sampling described in our report or shown on our sketches are based on information provided by others or estimates made by our personnel. You agree that such dimensions, depths, or elevations are approximations unless specifically stated otherwise in the report. You accept the inherent risk that samples or observations may not be representat of things not sampled or seen and that site conditions may change over time.

Article 3 Your Responsibilities

3.1 You agree to provide us with all site information and da to which you have access which may affect our services. We will n be responsible for locating buried objects at the site unless we acc that duty in writing. You agree to hold us harmless from claims, damages, losses, and related expenses involving buried objects tha were not properly marked or identified or of which you had knowledge but did not timely call to our attention or correctly sho on the plans you or others on your behalf furnished to us.

3.2 You will provide access to the site. In the cou of our work some damage is normal even when due care is exercis We will use reasonable care to minimize damage to the site but w will not be responsible for reasonable or normal damage. We have not included the cost of restoration of such damage in the estimat charges.

3.3 You agree to provide us with information in your possession or control relating to contamination at the work site.

3.4 Neither this Agreement nor the providing of services wi operate to make us an owner, operator, generator, transporter, treater, storer, or a disposal facility within the meaning of the Resource Conservation Recovery Act, as amended, or within the meaning of any other law governing the handling, treatment, stora or disposal of hazardous materials. You agree to hold us harmless indemnify us from any such claim or loss.

3.5 Monitoring wells are your property, and you are responsible for their permitting, maintenance, and abandonment unless we accept that duty in writing.

3.6 You agree to make disclosures required by law. In the event you do not own the site, you acknowledge that it is your dut to inform the owner of the discovery or release of contaminants at the site. You agree to hold us harmless and indemnify us from clai related to disclosures made by us that are required by law and fro claims related to the informing or failure to inform the site owner the discovery of contaminants.

Article 4 Reports and Records

4.1 Our reports, notes, calculations, and other documents a our computer software and data are instruments of our service to you, and they remain our property but are subject to a license to y for your use in the related project for the purposes disclosed to us. You may not transfer our reports to others or use them for a purpo for which they were not prepared without our written approval. Y agree to indemnify and hold us harmless from claims, damages, losses, and expenses, including attorney fees, arising out of such a transfer or use. At your request, we will provide endorsements of reports or letters of reliance, but only if the recipients agree to be bound by the terms of our agreement with you and only if we are paid the administrative fee stated in our then current Schedule of Charges.

4.2 Because electronic documents may be modified intentionally or inadvertently, you agree that we will not be liable damages resulting from change in an electronic document occurrin after we transmit it to you.

4.3 If you do not pay for our services in full as agreed, we m retain work not yet delivered to you and you agree to return to us of our work that is in your possession or under your control.

4.4 Samples and field data remaining after tests are conduc and field and laboratory equipment that cannot be adequately cleansed of contaminants are and continue to be your property. Th may be discarded or returned to you, at our discretion, unless with 15 days of the report date you give us written direction to store or transfer the materials at your expense.

4.5 Electronic data, reports, photographs, samples and othe materials provided by you or others may be discarded or returned you, at our discretion, unless within 15 days of the report date you give us written direction to store or transfer the materials at your expense.

Article 5 Compensation

5.1 You will pay for services as agreed upon or according to our then current Schedule of Charges if there is no other written agreement as to price. An estimated cost is not a firm figure. You agree to pay all sales taxes and other taxes based on your paymen our compensation. Our performance is subject to credit approval a payment of any specified retainer.

5.2 You will notify us of billing disputes within 15 days. You will pay undisputed portions of invoices on receipt. You agree to p interest on unpaid balances beginning 30 days after invoice dates a the rate of 1.5% per month, or at the maximum rate allowed by la

5.3 If you direct us to invoice another, we will do so, but yo agree to be responsible for our compensation unless you provide u with that person's written acceptance of all terms of our Agreeme and we agree to extend credit to that person and to release you.

5.4 Your obligation to pay for our services under this Agreement is not contingent on your ability to obtain financing, governmental or regulatory agency approval, permits, final adjudication of lawsuit in which we are not involved, your successf completion of a project, receipt of payment from another, or any other event. No retainage will be withheld.

5.5 You agree to compensate us in accordance with our fee schedule if we are asked or required to respond to legal process arising out of a proceeding related to the project and as to which v are not a party.

5.6 If we are delayed by factors beyond our control, or if project conditions or the scope or amount of work change, or if changed labor union conditions result in increased costs, decrease efficiency, or delays, or if the standards or methods change, we wi give you timely notice and we will receive an equitable adjustment our compensation.

5.7 In consideration of our providing insurance to cover clai made by you, you hereby waive any right of offset as to fees otherwise due us.

Article 6 Disputes, Damage, and Risk Allocation

6.1 Each of us will exercise good faith efforts to resolve disputes without litigation. Such efforts will include, but not be limited to, a meeting(s) attended by each party's representative(s) empowered to resolve the dispute. Before either of us commences action against the other, disputes (except collections) will be submitted to mediation.

6.2 Neither of us will be liable for special, incidental, consequential, or punitive damages, including but not limited to those arising from delay, loss of use, loss of profits or revenue, loss financing commitments or fees, or the cost of capital.

6.3 For you to obtain the benefit of a fee which includes a reasonable allowance for risks, you agree that our aggregate liabili for all claims will not exceed the proceeds from available insurance

6.4 You agree to indemnify and defend us from all liability t others in excess of the risk allocation stated above and to insure th obligation.

6.5 The prevailing party in any action relating to this agreement shall be entitled to recover its costs and expenses, including reasonable attorney fees, staff time, and expert witness fees.

6.6 The law of the state in which our servicing office is locat will govern all disputes. Each of us waives trial by jury.

Article 7 General Indemnification

7.1 We will indemnify and hold you harmless from and agai demands, damages, and expenses of others to the comparative extent they are caused by our negligent acts or omissions or those negligent acts or omissions of persons for whom we are legally responsible. You will indemnify and hold harmless from and agains demands, damages, and expenses of others to the comparative extent they are caused by your negligent acts or omissions or thos negligent acts or omissions of persons for whom you are legally responsible.

7.2 To the extent it may be necessary to indemnify either o under Section 7.1, you and we expressly waive, in favor of the oth only, any immunity or exemption from liability that exists under ar worker compensation law.

7.3 You agree to indemnify us against losses and costs arisi out of claims of patent or copyright infringement as to any process system that is specified or selected by you or by others on your behalf.

Article 8 Miscellaneous Provisions

8.1 We will provide a certificate of insurance to you upon request.

8.2 You and we, for ourselves and our insurers, waive all claims and rights of subrogation for losses arising out of causes of l covered by our respective insurance policies.

8.3 Neither of us will assign or transfer any interest, any cla any cause of action, or any right against the other. Neither of us wi assign or otherwise transfer or encumber any proceeds or expecte proceeds or compensation from the project or project claims to an third person, whether directly or as collateral or otherwise.

8.4 Our Agreement may be terminated early only in writing We will receive an equitable adjustment of our compensation in th event of early termination.

8.5 If a provision of this Agreement is invalid or illegal, all other provisions shall remain in full force and effect.

Dr. Claire Bleser
District Administrator
RPBCWD
2/6/2020

WENCK
Responsive partner.
Exceptional outcomes.

TASK ORDER No. 31A- Kerber Pond Ravine Stabilization Feasibility
Pursuant to Agreement for Engineering Services
Riley Purgatory Bluff Creek Watershed District and BARR Engineering Company.
February 27, 2020

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 determine the feasibility of a ravine stabilization project between Kerber Pond and Lotus Lake in Chanhassen. The assessment will review photographs collected by District staff to assess the ravine, 2019 site photographs, and information provided by the city of Chanhassen for erosion. Along this reach. In 2018 the city of Chanhassen approached the District for a potential partnership project to restore the ravine and storm sewer connection to Lotus Lake. The city indicated they have documented the release of large amounts of sediment into the lake after heavy rains. The city stated, "The sediment is so great that it clogs up our storm sewer system". In addition, the city provided a video showing of sediment/mud flowing out of the culvert at Frontier Trail. During a 2019 site walk with Planning Coordinator Jeffery, the channel appears incised in several locations and appears to deliver a large amount of sediment toward Lotus Lake.

		
Incised channel near the upstream end	Sanitary sewer infrastructure at risk and murky water flowing	Sediment laden water at Frontier Trail before being conveyed to Lotus Lake

The feasibility study will focus on feasibility options to restore the reach and reduce the pollutant loading to Lotus Lake, thus improving lake water quality and protecting the district's investment in the Lotus Lake alum treatment. This feasibility effort is identified in the District's 2020 budget. The feasibility study will be conducted in 2020. If a cost effective solution is identified and the board elects to implement a restoration project in partnership, a plan amendment might be needed. The development of a cooperative agreement with the city, access agreements with private property owners, and design and construction could potentially start in late-2020 with anticipated completion by late 2021. The feasibility study will evaluate up to two (2) options for the project reaches. Concept designs and conceptual level opinions of probable cost will be developed for each reach. The results will be summarized in a memorandum to be provided to the Board of Managers.

Barr's activity is anticipated to be divided into three phases:

Phase 1: Feasibility Study (This Task Order 31A)

Phase 2: Final Design and Permitting (Future Task Order anticipated in 2021);
Phase 3: Construction Administration Services (Future Task Order anticipated in 2021).

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

PHASE 1. FEASIBILITY AND CONCEPT DESIGN

Feasibility and concept design includes multiple tasks in order to ensure the project is feasible to meet the anticipated fast timeline to complete construction, including close coordination between key stakeholders (RPBCWD, city of Chanhassen) and agencies to properly assess the feasibility of a project within the identified reaches. These tasks are described below.

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

A kick-off meeting will be held with the District, City, and Barr staff to discuss the project. Key criteria for the project (scope and budget) will be reviewed and used to develop an initial list of stabilization options that may be feasible. The meeting will also provide an opportunity to define roles and responsibilities to be filled by District, Ciy, and Barr Staff.

Task 1-2. Data Review and Site Visits

Prior to the kick-off meeting, it will be expected that District and Barr staff will review the city's information, MPCA's Lots Lake Total Maximum Daily Load (TMDL), 2019 ravine walk and the CRAS to be familiar with the project reaches and the erosion issues previously identified. These information will then continue to be reviewed during the evaluation of the project feasibility. It is also assumed that District, city, and Barr staff will share photos and data from previous studies to assist with the review of background information.

Shortly after the kick-off meeting, Barr staff will coordinate with District and city staff to complete one site visit to improve knowledge of the site characteristics and gain additional context for photos available from the previously identified studies. An invite will be extended to the Minnesota Department of Natural Resources (MNDNR) area hydrologist and US Army Corps of Engineers (USACE) representative to solicit input on restoration techniques and permitting requirements. If feasible, the site visit and kickoff meeting may be scheduled on the same day to expedite the development of concepts. During this meeting, Barr staff will discuss stabilization approaches with District staff and work towards a consensus for a concept design approach for each reach that will address site-specific characteristics while meeting District goals for stream stabilization.

Task 1-3. Concept Development

Barr staff will develop Preliminary Concept Design schematic drawings for up to two (2) concept options for restoration/stablization. The drawings will be GIS based and primarily present a conceptual design to address the issues present and meet overall goals. A concept level opinion of probable cost range will also be developed for each concept. The concept development will also include a review of available hydrologic and hydraulic modeling previously completed for the District to understand anticipated flows, shear stress, and velocities for the reaches. A high level desktop study of environmental, cultural/historical, and wetland impacts will be conducted.

Barr will estimate the water quality benefits associated with stabilizing the reach by estimating the amount of erosion that could be prevented. This will help estimate a cost per unit of pollution (total suspended solids (TSS) and total phosphorus (TP)) prevented from entering Lotus Lake.

Once preliminary concepts have been developed, an agency/stakeholder meeting will be conducted either on-site (weather dependent) or at RPBCWD offices. Agencies/stakeholders invited to the meeting will include USACE, MNDNR, City of Chanhassen, and District staff.

Task 1-4. Preliminary Design Memorandum

Following the agency/stakeholder meeting Barr will incorporate comments into the feasibility concepts and complete a feasibility report to document the information gathered and the various components and assumptions that influence the concept design. It is assumed the RPBCWD staff will provide a written summary of their recent observations along Kerber Pond Ravine for inclusion in the summary memo. The report will provide the Managers with information needed to evaluate the merits of the potential projects. It will also include a recommendation to allow the Board to make a decision to partner on a city lead project, to proceed with a RPBCWD final design, or not pursue a project. Key components will likely include project purpose and objectives, documentation from tasks listed above, design criteria, potential implementation steps, cost range, and timeline as well as assumptions made to complete the design.

Task 1-5. Presentation to RPBCWD Board of Managers Assistance

Barr staff will assist RPBCWD's Administrator to present the preliminary design to the District Board of Managers at their regularly scheduled meeting.

Task 1-6. Project Management

Project Management will be required in all phases as careful project management will help to ensure the work meets the expectations of District staff and other stakeholders, and that it is completed in a satisfactory manner, within the project timeline and within the agreed-upon budget.

Assumptions

We have made several assumptions in preparing the scope of work for each work item in this agreement. Assumptions relating to individual work tasks are listed along with the detailed description. However, additional assumptions that do not correspond with a single work task are listed below:

- An assessment of the vegetation adjacent to the project area will not be completed in this phase.
- A wetland delineation of the project area will not be completed in this phase
- A Phase I Cultural and Historical Assessment will not be completed in this phase.
- A Phase I Environmental Assessment will not be completed in this phase.
- The project site is free from contamination as well as historic and cultural resources.
- All field survey, if needed, would be collected and provided by RPBCWD or the city.
- A tree inventory will not be conduct under this task order
- Feasibility and concept design will include one kickoff/site visit meetings with District staff and one agency meeting to discuss the plans and cost estimate.

- One presentation for the District Board prior to approving the project for final design
- 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.

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

   Phase 1: Preliminary Feasibility Design

   - Regular email updates about project progress
   - Concept drawings with estimates of TSS and TP load reductions
   - Concept Opinions of Probable Cost Ranges
   - Feasibility Design Report for District review
   - Communications with District staff if unforeseen issues arise with any aspect of the project, including the technical scope of work, project budget, stakeholder involvement, or project schedule.

4. Budget:
   Services under this Task Order will be compensated for in accordance with the engineering services agreement and will not exceed $18,900 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 1: Preliminary Feasibility Design			
1-1	Kick-off Meeting and Project Meetings	$2,000	ongoing
1-2	Data Review and Initial Site Visit	$2,000	April 2020
1-3a	Concept Design Development	$8,200	August 2020
1-3b	Agency meeting	$1,200	September 2020
1-4	Feasibility Design Report	$3,900	October 2020
1-5	Assistance with Presentation to RPBCWD Board	$800	October 2020
1-6	Project Management	$800	ongoing
Task Order 31A Total		**$18,900**	

5. Schedule and Assumptions Upon Which Schedule is Based
   The proposed schedule (above) is based on the assumption that task order will be authorized at the March 2020 regular meeting

IN WITNESS WHEREOF, intending to be legally bound, the parties hereto execute and deliver Phase 1 of this Agreement.

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

TASK ORDER No. 32A- Upper Riley Creek Ecological Enhancement Plan
Pursuant to Agreement for Engineering Services
Riley Purgatory Bluff Creek Watershed District and BARR Engineering Company.
February 27, 2020

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 and city of Chanhassen staff to develop an ecological enhancement plan for the portion of Riley Creek between Highway 5 and Lake Susan, also known as Upper Riley Creek. The document will be written to guide enhancement and stewardship efforts of ecological resources within the reach. The Ecological Enhancement Plan will document the goals of the partnership with the city and potential private property owners for the Upper Riley Creek Stabilization Project and establishes roles and responsibilities of Project partners for the 20-year project life. The plan is a key step in building a collaborative project with the city and critical component of a future cooperative agreement for the project.

   The assessment will review photographs collected by District staff to assess the creek, RPBCWD's 10-year Plan, 2017 Creek Restoration Action Strategy – Upper Riley Creek Sediment, MPCA's Lake Susan Total Maximum Daily Load (TMDL), and the CRAS to be familiar with the project reaches and the erosion issues previously identified. The Upper Riley Creek Stabilization Project is identified in the district's 10-year plan and Chanhassen's recent draft Local Surface Water Management Plan. In addition, work on the Upper Riley Creek project is included in the District's 2020 budget.

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

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

   A kick-off meeting will be held with the District, City, and Barr staff to discuss the project. Key criteria for the project (scope and budget) will be reviewed and used to develop an initial list of stabilization options that may be feasible. The meeting will also provide an opportunity to define roles and responsibilities to be filled by District, City, and Barr Staff. Up to four (4) project meetings at the RPBCWD office of up to one hour each are included to collaboratively develop the plan and receive feedback on various drafts of the document.

   Task 1-2. Site Visit and Vegetation Inspection

   Shortly after the kick-off meeting, Barr staff will coordinate with District and City staff to complete one (1) site visit to improve knowledge of the site characteristics and gain additional context for the photos obtained from the previously-identified studies. If feasible, the site visit and kickoff meeting may be scheduled on the same day to expedite the development of concepts.

   An ecologist from Barr will conduct an investigation of existing vegetation, including trees, and provide recommendations for vegetation components to preserve and/or incorporate into the design. The recommendations will help ensure the preserved and/or installed vegetation

complements the restoration efforts and enhances the local ecology along the restored channel banks.

Task 1-3. Wetland Delineation and Report

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 (1) meeting with the Technical Evaluation Panel (TEP) to review the wetland delineation on-site.

Findings of the wetland delineation will be used to inform the enhancement plan. A potential cost saving measure would be for District staff to complete the wetland delineations, develop the wetland report, and navigate the wetland conservation act process. Barr will coordinate with the Administrator during the delineation season to determine if District staff have capacity to complete this work.

Task 1-4. Phase I Archeological Assessment

An archeological assessment of the Area of Potential Impact (APE) is required for permitting, and Barr recommends completion of this assessment early in the project development phase to determine if there is a reasonable probability of encountering in-tact archeological artifacts or features within the project site. The results of this assessment will determine if additional archeological work is necessary prior to construction, and will help generate more accurate cost estimates for later stages of the project.

A Phase I Archaeological and Cultural Resources Survey of the Project APE

A Phase I cultural resources investigation includes systematic pedestrian survey and shovel testing across the proposed project site in an effort to identify potential surface and subsurface archaeological resources. Subsurface testing (i.e., shovel testing) will follow Minnesota Office of the State Archaeologist (MN OSA) survey guidelines. Primary shovel tests will be initiated within a single transect at 15-m intervals in areas suitable for subsurface testing (i.e., areas characterized by low slopes, little-to-no surface visibility, which are well-drained, and situated near perennial freshwater sources). Soils and topography within that transect will be examined on-site to help determine whether additional transects are necessary. Erosion exposure along the creek banks may allow for visual inspection of the subsurface soil types and conditions without requiring additional manual digging. Depending on the extent to which soils have been naturally exposed, these areas of erosion may provide sufficient survey coverage, thereby limiting the need for supplementary shovel testing. The work under this scope assumes that no architectural surveys, property identifications, evaluations, or further documentation of above-ground historic structures will occur.

Following the in-field Phase I archaeological assessment, Barr will prepare a draft report appendix summarizing the field survey methods, results and evaluation of the investigation data, and recommendations for the enhancement plan. A final report will be developed and submitted to USACE under a separate task order if the Board elects to implement the project.

The scope of work is based on the following assumptions:

- The USACE, as the lead federal agency, will handle all coordination with the State Historic Preservation Office (SHPO) and theTribal Historic Preservation Office (THPO). If these services are required, their scope and cost can be determined at a later date.
- No additional background research to supplement the previously-conducted Phase Ia literature review is needed. If the project area is altered in any way which differs from the way that the previously-conducted literature review describes the landscape, extent of manual disturbance, and overall composition, additional services would be provided on a time and materials basis; these logistics will be later approved by the Administrator.
- Should design revisions of the proposed stabilization measures modify the extent and/or nature of any areas of impact which are currently proposed, the initial Phase I inspection will need to be supplemented with further pedestrian survey, and possibly additional shovel tests. The scope and cost associated with any potential unbudgeted work would be coordinated with the Administrator on a time and materials basis.
- Barr will conduct pedestrian survey within the proposed boundaries of the project area in an effort to evaluate any indicators, visible at ground surface, of the potential presence of extant archaeological features, structures, or artifacts. Barr also assumes that the methodical excavation of no more than 30 shovel tests, placed at 15-m intervals, will constitute a reasonable effort to understand the subsurface nature of the proposed project site, including the extent of disturbed and/or natural soils, the nature of soil development throughout the area, and the occurrence of any in-tact and in situ cultural resources below the surface. The number of prescribed shovel tests noted here is primarily based on the extent of the areas within the project site boundaries that would be considered suitable for subsurface testing (i.e., areas characterized by low slopes, little-to-no surface visibility, which are well-drained, and situated near perennial freshwater sources). Areas which fall outside of these criteria and are therefore unlikely to yield accurate or useful subsurface data were not considered when calculating the number of shovel tests to be excavated.
    - Barr assumes that no archeological materials will be encountered during the pedestrian survey or shovel testing. Should previously-undiscovered resources be encountered, an additional scope (e.g., field delineation, preparation of site forms, and processing and storage of artifacts) would be determined in coordination with the Administrator and USACE.
- No architectural surveys, property identifications, evaluations, or further documentation of above-ground historic structures will occur. The cost herein does not include the implementation of any measures whichmay be recommended to mitigate potential adverse effects to historic properties by the project's proposed ground-disturbing/construction activities..

Task 1-5. Phase I Environmental Assessment

The Minnesota Pollution Control Agency's *What's in My Neighborhood* interactive web map indicates several sites of potential environmental concerns near the project area. Barr recommends completing a Phase I environmental site assessment consistent with ASTM E1527 –

13 during the early stages of project development to better assess the risk that past environmental releases could impact the project cost and execution. The results of this assessment will help identify data gaps related to potential releases and will generate more reasonable construction cost estimates and in the evaluation of the feasibility of the project. If "Recognized Environmental Concerns" are identified in the Phase I (e.g., nearby tank leak, etc., Barr will work with the Administrator to identify the timing for additional investigations to better determine potential environmental costs. For example, a Phase II field investigation (drilling/sampling) would be recommended to assess if the impacts are actually present in the project area. Services for a Phase II assessment would require a contract amendment because they are not part of this task order. Barr staff will complete the Phase I assessment and provide a summary within the enhancement plan.

Task 1-6. Geotechnical Assessment

A geotechnical engineer will inspect the eroded slope and provide input to the stabilization design. Factors that may be considered during assessment include: the soil type, slope, presence of groundwater, and constructability. Barr assumes that no soil boring will be conducted; if closer subsurface examination is necessary, no more than four (4) hand augers would be available for use In addition, the report will focus on streambank stabilization measures and will exclude geotechnical slope stability modeling.

Task 1-7. Technical Stakeholder Meeting

Barr will work with the District Administrator to schedule a technical stakeholder meeting. It is assumed the technical stakeholders will include RPBCWD Staff, DNR, USACE, City of Chanhassen, BWSR, and Barr. Early engagement from technical reviewers and permittees provides multiple benefits, including:

1) Early familiarity with the project, which helps permitters understand the genesis of the project, its identified objectives, and the thought process behind restoration measures;
2) Early input regarding permitting requirements or concerns, which helps develop more realistic permitting cost estimates for final design;
3) Early input on concepts and approaches, which often provides useful data which can demonstrate the ways that project implementation may help achieve multiple objectives from multiple stakeholders;
4) Potential for shared resources; other entities sometimes have additional information or resources that may be helpful in the completion of the study and/or implementation of the design.

Staff from DNR and USACE have recently expressed appreciation for opportunities to be involved early technical stakeholder meetings. It is assumed that the stakeholder meeting will take place on at RPBCWD office and last no more than 2 hours.

Task 1-8. Private Property Owner Meetings and Agreement Assistance

The overall project identified in the district's 2017 Creek Restoration Action Strategy – Upper Riley Creek Sediment identified potential work on approximately four private properties to fully implement the project. Barr will work with the District Administrator to schedule and attend up to two meetings with each private property owner (no more than 8 meeting in total). It is assumed that the meeting will occur at RPBCWD office and require no more than 16 hours. Early

engagement with these owners should help streamline the necessary access, work and maintenance agreements.

It is assumed that RPBCWD Administrator will lead coordination with the private property owners. Barr has allotted 30 hours of time to assist the district Administrator and legal counsel in developing draft agreements with the property owners to provide input on the technical aspects of the potential project (e.g., legal descriptions).

Task 1-9. Ecological Enhancement Plan Development

Following the agency/stakeholder meeting and collection of the additional field information described above, Barr will combine the data with information from the district's 2017 Creek Restoration Action Strategy – Upper Riley Creek Sediment to develop the ecological enhancement plan. It is assumed that the recommend concept in the 2017 Creek Restoration Action Strategy – Upper Riley Creek Sediment will serve as the basis for developing the enhancement plan. The draft ecological enhancement plan will be provided in electronic format only from review and comment by RPBCWD and city staff. Time has been allocated for two rounds of comments and revisions.

Task 1-10. Project Management

Project Management will be required in all phases as careful project management will help to ensure the work meets the expectations of District staff and other stakeholders, and that it is completed in a satisfactory manner, within the project timeline and within the agreed-upon budget.

Throughout the project, Barr will provide updates to the project team that document project progress and coordinate tasks. We will provide monthly progress reports and budget status updates. We will solicit feedback from you on an ongoing basis to ensure clear and timely communication.

Assumptions

We have made several assumptions in preparing the scope of work for each work item in this agreement. Assumptions relating to individual work tasks are listed along with the detailed description. However, additional assumptions that do not correspond with a single work task are listed below:

- The ecological enhancement plan does not include development of a maintenance plan or associated maps under this task order;
- The project site is free from contamination as well as historic and cultural resources;
- All field survey, if needed, would be collected and provided by RPBCWD or the City. If Barr is requested to provide these services, a task order amendment would be prepared for the additional services;
- A tree inventory will not be conducted under this task order;
- A Phase I cultural resources report is not included in the task order
- A Phase II environmental field investigation (drilling/sampling) is not included in the task order;
- District staff will coordinate site access for Barr staff with private property owners. If directed by the Administrator, Barr would instead provide those services on a time and expense basis;
- The proposed budget includes costs for mileage reimbursement for site visits and site observation, as needed;

- The District will provide all available and applicable GIS and CAD files to Barr in an electronic format.

3. Deliverables:
   The following deliverables will be prepared and provided to the RPBCWD:
   - Regular email updates about project progress;
   - Digital copy of Wetland Delineation and Report;
   - Digital copy of Ecological Enhancement Plan (draft and final);
   - Communications with District staff if unforeseen issues arise with any aspect of the project, including the technical scope of work, project budget, stakeholder involvement, or project schedule.
4. Deliverables:
   The following deliverables will be prepared and provided to the RPBCWD:
   - Regular email updates about project progress
   - Digital copy of Wetland Delineation and Report
   - Digital copy of Ecological Enhancement Plan (draft and final)
   - Communications with District staff if unforeseen issues arise with any aspect of the project, including the technical scope of work, project budget, stakeholder involvement, or project schedule.

5. Budget:
   Services under this Task Order will be compensated for in accordance with the engineering services agreement and will not exceed $71,900 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
1-1	Kick-off Meeting and Project Meetings	$5,200	ongoing
1-2	Site Visit and Vegetation Inspection	$2,500	June 2020
1-3	Wetland Delineation and Report	$8,300	June 2020
1-4	Phase I Archeological Assessment	$13,900	June 2020
1-5	Phase I Environmental Site Assessment	$12,000	May 2020
1-6	Geotechnical Assessment	$1,700	May 2020
1-7	Technical Stakeholder Meeting	$1,700	ongoing
1-8	Private Property Owner Meetings and Agreement Assistance	$8,100	ongoing
1-9	Ecological Enhancement Plan Development	$12,100	December 2020
1-10	Project Management	$6,400	ongoing
Task Order 32A Total		**$71,900**	

6. Schedule and Assumptions Upon Which Schedule is Based
   The proposed schedule (above) is based on the assumption that task order will be authorized at the March 2020 regular meeting

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

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

TASK ORDER No. 6G- 2020 WOMP Station Services
Pursuant to Agreement for Engineering Services
Riley Purgatory Bluff Creek Watershed District and BARR Engineering Company.
February 28, 2020

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

1. Description of Services:

   TASK A

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

   TASK B

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

2. Scope of Services:

   TASK A – Pioneer Trail Station

   The District Engineer will perform operation and maintenance tasks for the Pioneer Trail Station as requested by the MCES WOMP Coordinator and approved by the District Administrator. In 2020, the MCES will continue transitioning from composite auto-sampling to discrete auto-sampling for storm events at this station. The MCES installed a new auto-sampler and datalogger system in 2018. During the first year and a half of operation, this system has had several problematic issues and is still being modified and refined. Therefore, in 2020 MCES will continue developing and updating operation methods for the new system and will provide related training to cooperators. The bi-weekly grab sampling regime adopted in 2017, will continue in 2020. MCES staff will continue to be responsible for conducting flow measurements and rating curve development. However, the MCES may request District and/or Barr staff to take a flow measurement on occasion, if MCES staff is unavailable. A

placeholder contingency budget was added to cover tasks for potential flow measurement.

Tasks will include:

a) Supporting District staff bi-weekly grab sampling efforts, including project coordination with MCES and data and file management. District staff will be responsible for grab sample collection, delivery to lab, and completion of sample submission forms for the lab.
b) Setting sample activation parameters (i.e. activation level and volume) to trigger the station's auto-sampler during storm events. Collecting storm event samples for significant events (i.e. rainfall > ½ in.) and delivering these samples to the MCES lab located on Childs Rd., St. Paul, MN.
c) Performing routine maintenance of the equipment at the station; including verifying/calibrating water quality sensors, clearing debris from sensors, changing out desiccants, prepping the station for spring monitoring, and winterizing the station.
d) Troubleshooting equipment issues, as needed. The MCES will rely on the District staff and engineer to assess equipment problems if they arise. The amount of troubleshooting in any given year is unpredictable. Therefore, the maintenance portion of the budget has included up to 20 hours of time to troubleshoot equipment issues. If additional time beyond what has been assumed in the budget below is needed, the troubleshooting effort will be coordinated with the District Administrator. The assumed time allocated for troubleshooting equipment will not be exceeded without prior authorization by the District Administrator.
e) Managing of continuous water quality, rainfall, and flow data; including downloading and reviewing data, and assisting MCES with year-end data QA/QC and summary.
f) Potential miscellaneous tasks including any tasks associated with the transition to the new sampling regime, such as training, meetings, or equipment installation; and flow measurements if requested by the MCES WOMP coordinator. These tasks are included below in the placeholder contingency budget.

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

TASK B – Valley View Road Station

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

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

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

3. Deliverables:

TASK A:

The water quality, flow, and rainfall data collected at the Pioneer Trail Station will be stored in a database maintained by MCES. The District and the District Engineer will

have access to this data either through the MCES website or per request to the MCES WOMP coordinator.

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

4. Budget:
Services under this Task Order will be compensated for in accordance with the engineering services agreement and will not exceed $38,000, without written authorization by the Administrator. (Note: the District will likely be reimbursed $5,000 through a State Grant Agreement with MCES). If District staff elect to take on responsibility more of the services described above, Barr would only charge for the actual services provided. Table 1 provides a summary of the anticipated cost for major tasks associated with scope of services described above. Attachment 1 provides additional detail of the anticipated cost for each task and subtask, schedule, and laboratory costs.

Table 1. Summary of Task Order 06g Anticipated Cost for Major Tasks

Task	Description	Labor Costs[1]	Other Expenses[2]	Total Cost
A	Operate and Maintain the Purgatory Cr. WOMP Station at Pioneer Trail in Cooperation with MCES for 2020	$12,700	$1,150	$13,850
B	Operate and Maintain the Purgatory Cr. Monitoring Station at Valley View Rd for 2020	$17,000	$7,150	$24,150
Task Order 6G Total				$38,000

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

5. Schedule and Assumptions Upon Which Schedule is Based
   a) TASK A: The project schedule is included as part of Attachment 1. The Pioneer Trail Station is operated and maintained year-round.
   b) TASK B: The project schedule is included as part of Attachment 1. This schedule is weather dependent; for example, a late spring and ice conditions could push back Mar-2020 tasks to April-2020.

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

CONSULTANT
By_____
Its_____Vice President_____
Date:

RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT
By_____
Its___President_____
Date:

APPROVED AS TO FORM & EXECUTION

_____

Attachment 1: Breakdown of Services for Task Order 6G including Anticipated Cost and Schedule

Task/Phase	Subtask	Description	Labor Costs[1]	Other Expenses[2]	Total Cost	Schedule
Task A Operate and Maintain the Purgatory Cr. WOMP Station at Pioneer Trail	1	Bi-Weekly Grab Samples: support RPBCWD staff as part of a collaborative sampling effort, coordinate with MCES staff, and manage data and files. RPBCWD staff will typically collect the samples.	$500.00	$50.00	$550.00	Jan to Dec-20
	2	Storm Event Samples: collect samples during storm events (assumes sampling begins in March and 15 sampleable storm events of > 0.5" of rain occur).	$5,000.00	$500.00	$5,500.00	Mar to Nov-20
	3	Maintenance: verify/calibrate sensors, troubleshoot problem issues as necessary, prepare for monitoring season in spring, and winterize station.	$3,000.00	$300.00	$3,300.00	Jan to Dec-20
	4	Data management: download and review data throughout monitoring period. Assist MCES with year's end data QA/QC and summary.	$1,200.00	$0.00	$1,200.00	Jan to Dec-20
	5	Contingency: miscellaneous tasks, which may include flow measurements as needed, training on new equipment, and meetings with MCES and RPBCWD staff.	$3,000.00	$300.00	$3,300.00	Jan to Dec-20
	Subtotals		$12,700.00	$1,150.00		
	Task A Subtotals				$13,850.00	
Task B Operate and Maintain the Purgatory Cr. Monitoring Station at Valley View Rd.	1	Bi-weekly Grab Samples: support RPBCWD staff as part of a collaborative sampling effort and manage data/files. RPBCWD staff will typically collect the samples.	$500.00	$50.00	$550.00	Mar to Dec-20
	2	Storm event samples: collect composite samples during storm events (assumes sampling begins in March and 15 sampleable storm events of > 0.5" of rain occur).	$6,000.00	$600.00	$6,600.00	Mar to Nov-20
	3	Maintenance: verify/calibrate sensors, troubleshoot problem issues as necessary, prepare for monitoring season in spring, and winterize station.	$4,000.00	$350.00	$4,350.00	Jan to Dec-20
	4	Rating Curve: perform stage-discharge measurements to verify rating curve is accurate and update rating curve if needed.	$2,500.00	$150.00	$2,650.00	Mar to Dec-20
	5	Data management: download and review data throughout monitoring period. Year's end QA/QC tasks and data summary.	$4,000.00	$0.00	$4,000.00	Jan to Dec-20
	Subtotals		$17,000.00	$1,150.00		
	Task B - Subtotals				$18,150.00	

Task B Anticipated Laboratory Testing Costs for Valley View Station	**Analyte**	**Lab Test Cost**	**No. of Samples**	**Total Cost**	
	Alkalinity	$13.50	19	$256.50	
	Bacteria, E. Coli	$28.25	24	$678.00	
	Carbon, Total Organic	$18.00	19	$342.00	
	Chemical Oxygen Demand	$9.75	15	$146.25	
	Chloride	$15.75	39	$614.25	
	Chlorophyll-a	$15.50	24	$372.00	
	Dissolved Phosphorus	$15.25	39	$594.75	
	Hardness	$8.25	19	$156.75	
	Metals	$36.00	4	$144.00	
	Nitrogen, Ammonia	$8.25	39	$321.75	
	Nitrogen, Kjeldahl and Total Phosphorus	$15.25	39	$594.75	
	Nitrogen, Nitrate+Nitrite	$7.75	39	$302.25	
	Phosphorus, orthophosphate	$15.50	39	$604.50	
	Solids, Total and Volatile Suspended	$12.25	39	$477.75	
	Sulfate	$13.50	19	$256.50	
	Turbidity	$8.25	15	$123.75	
	Lab Testing Cost Subtotal			**$6,000.00**	Budgeting
Task Order 6G Total				**$38,000.00**	

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

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

resourceful. naturally.
engineering and environmental consultants

BARR

Memorandum

To: Claire Bleser – RPBCWD Administrator
From: Scott Sobiech, PE – Barr Engineering
Subject: Lower Riley Creek Project – Change Order #1
Date: February 28, 2020
Project: 23/27-0053.14 014B
c: Ryan Winge, Rachel Contracting, Inc.

Enclosed is Change Order 2 from Barr Engineering for work related to the above-referenced project, installing creek stabilization measures along Lower Riley Creek in Eden Prairie, Minnesota. Upon your review and approval, please sign return one copy to me and we will distribute.

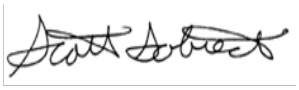
Items included by this change order include the following:

1. Changes due to unsuitable soil conditions
2. Substantial Completion Time Extension
3. Final Completion

Barr Engineering is recommending approval of Change Order 2.

Please call me at 952-832-2755 if you have any questions or concerns about the change order, or about any other related matters.

Sincerely,



Scott Sobiech, PE
Barr Engineering Company

Enclosures:
Lower Riley Creek – Change Order 2

Change Order

No. 2

Date of Issuance: 03/04/2020 Effective Date: 03/04/2020

Project: Lower Riley Creek Project	Owner: RPBCWD	Owner's Contract No.:
Contract: Lower Riley Creek Project		Date of Contract: July 23, 2019
Contractor : Rachel Contracting, Inc.		Engineer's Project No.:23/27-0053.14-014B

The Contract Documents are modified as follows upon execution of this Change Order:

Description:

The Contractor is hereby directed to make the following changes in the Contract Documents for the Lower Riley Creek Project in Eden Prairie, MN. The following items are included in this change order:

CO2-1. Changes due to unsuitable soil conditions

Description: CONTRACTOR shall provide all equipment, materials, and labor for work related to furnishing and installing the revised streambank stabilization features as shown on the drawings in Attachment A. The revised design results in changes to several bid quantities and the need for several additional bid items to account for new materials being needed, additional import of soil, and removal of some unsuitable soil from the construction site. Table CO2-1 provides a breakout of planned quantity adjustments based on IFC Drawings dated 2/12/2020 while Table CO2-2 summarizes the unit price additions.

Table CO2-1 Planned Quantity Adjustments Based On IFC Drawings Dated 2/12/2020

Item	Description	Bid Quantity	Units	Unit Price	Extension
N	Remove Storm Sewer (12" to 27" RCP and FES)	(16.2)	LF	$ 58.80	$ (952.56)
O	Remove Storm Sewer Manhole (48" Diameter)	(1.0)	EACH	$ 2,360.00	$ (2,360.00)
Q	Furnish & Install Manhole (48" Diameter)	(1.0)	EACH	$ 5,780.00	$ (5,780.00)
U	Furnish & Install Storm Sewer, 15" RC Pipe Class III	(30.2)	LF	$ 159.00	$ (4,801.80)
V	Furnish & Install Storm Sewer, 15" RC FES	(1.0)	EACH	$ 2,890.00	$ (2,890.00)
S	Salvage & Install Manhole Casting	(1.0)	EACH	$ 710.00	$ (710.00)
Y	Furnish & Install Class III Fieldstone Riprap	(56.0)	Ton	$ 54.90	$ (3,074.40)
Y	Furnish & Install Class II Fieldstone Riprap	(191.4)	TON	$ 54.90	$ (10,507.86)
Z	Furnish & Install Granular Filter Aggregate	(63.9)	TON	$ 51.30	$ (3,278.07)
CC	Install Toe Wood	(27.5)	LF	$ 45.80	$ (1,259.50)
AA	Install Boulder Vane, no Footers	(40.00)	LF	$ 73.30	$ (2,932.00)
AA	Install Boulder Vane, w/Footers	160.00	LF	$ 73.30	$ 11,728.00
BB	Install Log Vane	3.00	EACH	$ 262.50	$ 787.50
PP	Import Boulders	74.10	TON	$ 67.40	$ 4,994.34
					$ (21,036.35)

Table CO2-2 Planned Quantity Additions Based On IFC Drawings Dated 2/12/2020

Item	Description	Bid Quantity	Units	Unit Price	Extension
V	Furnish & Install Storm Sewer, 12" RC FES	1	LS	$3,420.00	$3,420.00
QQ	Install Geotextile Fabric (Based on Planned Quantity)	935	SY	$5.77	$5,399.16
RR	Import Common (Load Count Based on 16 CY Per Load)	2,000.00	CY	$38.22	$76,440.00
SS	Furnish & Install Class IV Fieldstone Riprap (To Be Used Where Directed)	220	Ton	$62.10	$13,662.00
TT	Export Unsuitable	300	CY	$49.27	$14,781.00
UU	Restocking Of Materials Associated with Storm Structure at STA. 40+19	1	LS	$3,690.95	$3,690.95
VV	Additional Cost for Storm Sewer Installation at STA 44+48	1	LS	$21,427.50	$21,427.50
XX	Toewood Option 1 (Detail 3/D-11)	0	LF	$45.80	$0.00
YY	Toewood Option 2 (Detail 4/D-11)	0	LF	$78.60	$0.00
ZZ	Cedar Tree Revetment (Per Detail 5/D-11) (To Be Used In Placed of Log Vane)	0	EACH	$998.00	$0.00
					$138,820.61

To facilitate construction of the project as intended the following language addition to the Earthwork 31 00 00 project specifications.

Add Section:
3.06 E. Unsuitable Soils Areas
1. Contractor shall remove unsuitable materials where feasible
2. In areas of where unsuitable soils must remain, quality compaction shall be performed to the extent practicable or as directed by the engineer.

Add Section:
3.06.D.2. In areas with restricted work limits or slopes steeper than 3:1, contractor shall quality compact soils to extent practicable or as directed by engineer

Reason for Change: In late January 2020 the contractor encountered soft mucky materials in the downstream reach of the project from approximately station 38+00 to the downstream end of the project. While trying to install the furthest downstream manhole the contractor attempted to dewater the loose material and over-excavate the material to remove it from the site in accordance with the contract documents. While doing so it was determined that excavation of the material was not feasible as the mucky soil immediately backfilled any type of excavation. It was also determined that as material was removed additional material appeared to be flowing into the excavation from underneath the banks of the creek, thus it was determined that excavating material could potentially lead to further stream bank instabilities and the contractor stopped work. In early February, the contractor worked with the engineer and the property owner to identify means to address the poor soil conditions discovered at the site. It was determined that the design of the stream bank stabilization features would need to be revised to accommodate these adverse site conditions. The attached revised design serves as the basis for many of the requests described in this change order to account for the unsuitable soil conditions at the site. In addition, new technical specifications sections need to be incorporated into the contract documents. to account for the unsuitable soils.

Additional soil needed to be imported to the construction site because the mucky soils encountered in the downstream reach, which were intended to be used in other portions of the project, were unsuitable for project use.

The unsuitable material that was excavated in an attempt to install the downstream manhole, storm sewer and rock riffle had to be removed from the project site because it could not be spoiled within the project limits.

CONTRACTOR request is included in Attachment B, including supporting information.

Change in Contract Price: The Contract Price will be increased by a price of $117,784.26. Section 01 22 00 Item 1.02 indicates "Changes in quantities of a Bid Item will be made by calculating the product of the Contractor bid quantity, plus or minus the quantity change, and the Unit Price. Actual quantities will not be measure in the field as the basis for payment unless specifically indicated in the Specifications for the individual Bid Item as indicated by the term "measured in the field." Payment for certain specific Bid Items will be on a unit price basis as indicated by the term "measured in the field" on the measurement description line for the Bid Item. Payment for these Bid Items will be the product of the actual field-measured quantity and the Unit Price."

Change in Contract Time: This item does result in a change in Contract Time. The following changes apply:

- All work within the channel or affecting the bed of Riley Creek must be complete by 3/14/2020
- Substantial completion (all work with the exception of final plantings and restoration of access routes) by 3/31/2020.
- Ready for Final Payment 6/30/2020, at which point the vegetation warranty period will commence.

Attachments (list documents supporting change):
Attachment A – Revised Drawing sheets
Attachment B – Rachel Contracting, Inc. Letter and Pricing Breakdown

CHANGE IN CONTRACT PRICE:	CHANGE IN CONTRACT TIMES:
Original Contract Price: $ 1,651,247.04	Original Contract Times: ☐ Working days ☒ Calendar days Substantial completion (days or date): 2/24/2020 Ready for final payment (days or date): 6/15/2020
[Increase] [Decrease] from previously approved Change Orders No. 0 to No. 1: $ N/A	[Increase] [Decrease] from previously approved Change Orders No. 0 to No. 1: Substantial completion (days): 3/14/2020 Ready for final payment (days): N/A
Contract Price prior to this Change Order: $ 1,651,247.04	Contract Times prior to this Change Order: Substantial completion (days or date): 3/14/2020 Ready for final payment (days or date): 6/15/2020
Increase of this Change Order: $ 117,784.26	Increase of this Change Order: Substantial completion (days or date): 3/31/2020 Ready for final payment (days or date): 6/30/2020
Contract Price incorporating this Change Order: $ 1,769,031.30	Contract Times with all approved Change Orders: Substantial completion (days or date): 3/31/2020 Ready for final payment (days or date): 6/30/2020

RECOMMENDED:	ACCEPTED:	ACCEPTED:
By: _____	By: _____	By: _____
Engineer (Authorized Signature)	Owner (Authorized Signature)	Contractor (Authorized Signature)
Date: 2/28/2020	Date: 2/28/2020	Date: 2-28-20

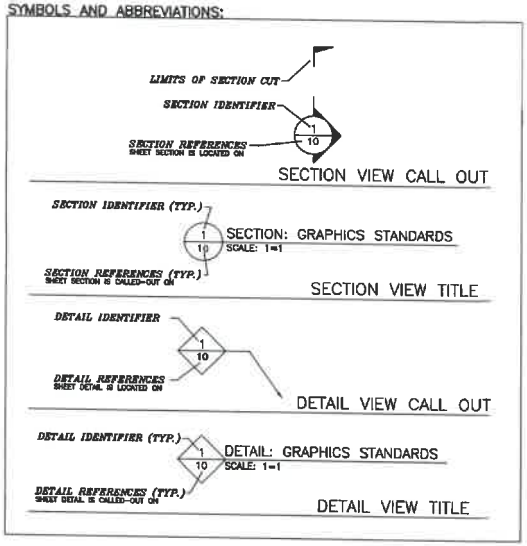
RILEY CREEK STABILIZATION

RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT

EDEN PRAIRIE, MN

MINNESOTA COUNTY MAP

SYMBOLS AND ABBREVIATIONS:



PROJECT LOCATION MAP

SCALE: 1" = 500'

INDEX OF SHEETS

CONTACTS:

ENGINEER CONTACT:
Adam K. Howard
Barr Engineering Co.
4300 MarketPointe Dr.
Minneapolis, MN 55435
952-832-2874
AHoward@barr.com

OWNER'S REPRESENTATIVE CONTACT:
Claire Blesser
14500 Martin Drive Suite 1500
Eden Prairie, MN 55344
952-687-1348
cblesser@rpbcwd.org

GOPHER STATE ONE CALL

GENERAL NOTES:

1. TOPO AND CONTROL GROUND SURVEY CONDUCTED BY BARR ENGINEERING CO. IN FEBRUARY 2017 IN HENNEPIN COUNTY FEET PROJECTION.
2. IMAGERY: COPYRIGHT PICTOMETRY INTERNATIONAL CORP AND HENNEPIN COUNTY, MINNESOTA, 2015.
3. OVERBANK TOPOGRAPHY FROM MnDNR 2011 LIDAR FOR HENNEPIN COUNTY, MN.
4. ALL HORIZONTAL COORDINATES ARE HENNEPIN COUNTY NAD83. VERTICAL DATUM IS NAVD88.

ISSUED FOR CONSTRUCTION
REVISED DRAWING

NO.	BY	CHK	APP.	DATE	REVISION DESCRIPTION
1	GDN	PJH2	AKH	07/12/2020	REVISED DRAWING
0	EPF	PJH2	JDW	04/24/2019	ISSUED FOR BID

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
PRINTED NAME: ADAM K. HOWARD
SIGNATURE
DATE: 2/12/2020 LICENSE #: 51967

RELEASED TO/FOR: CLIENT, BID, CONSTRUCTION

A	B	C	0	1	2	3

DATE RELEASED

BARR
Project Offices
Minneapolis, Minnesota
Ph: 1-800-632-2277
Corporate Headquarters
BARR ENGINEERING CO.
4300 MARKETPOINTE DRIVE
Suite 200
MINNEAPOLIS, MN 55435
Ph: 1-800-632-2277
Fax: (952) 832-2601
www.barr.com

Scale	AS SHOWN
Date	04/24/2019
Drawn	EPF
Checked	PJH2
Designed	BARR
Approved	JDW

RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT

RILEY CREEK STABILIZATION
EDEN PRAIRIE, MN.

TITLE SHEET & INDEX

BARR PROJECT No. 23/27-0053.14
CLIENT PROJECT No.
DWG. No. G-01
REV. No. 1

STRUCTURE POINTS				
POINT #	DESCRIPTION	ELEVATION	NORTHING	EASTING
100	X1	783.46	114402.91	471516.05
101	X2	785.46	114419.98	471507.66
102	X1	783.46	114422.97	471531.95
103	X2	785.46	114441.97	471530.56
104	X1	782.67	114427.42	471587.35
105	X2	784.67	114420.48	471604.60
106	X1	782.67	114443.46	471599.73
107	X2	784.67	114460.71	471601.75
108	X2	784.67	114448.56	471616.82
109	X1	782.10	114475.47	471629.67

STRUCTURE POINTS				
POINT #	DESCRIPTION	ELEVATION	NORTHING	EASTING
110	X2	784.10	114469.80	471631.01
111	X2	784.10	114478.57	471646.76
112	X1	781.52	114567.48	471690.56
113	X2	783.52	114584.60	471687.68
114	X2	783.52	114575.23	471706.10
115	X1	780.61	114592.64	471759.28
116	X2	782.61	114585.70	471775.54
117	X1	780.61	114606.70	471775.29
118	X2	782.61	114611.61	471792.91
119	X1	780.61	114632.52	471770.18

STRUCTURE POINTS				
POINT #	DESCRIPTION	ELEVATION	NORTHING	EASTING
120	X2	782.61	114645.24	471758.35
121	X2	782.61	114647.55	471778.89
122	X1	779.06	114768.25	471745.17
123	X2	781.06	114792.49	471749.18

STRUCTURE POINTS				
POINT #	DESCRIPTION	ELEVATION	NORTHING	EASTING
200	X1	784.50	114302.03	471407.78
201	X2	786.50	114317.19	471406.22
202	X1	784.50	114322.18	471431.54
203	X2	786.50	114337.07	471435.22
204	X1	784.00	114328.00	471498.48
205	X2	786.00	114319.95	471511.24
206	X1	781.12	114587.51	471695.08
207	X2	783.12	114602.83	471694.45
208	X1	781.12	114604.97	471716.93
209	X2	783.12	114614.57	471728.68
210	X1	780.06	114650.61	471772.80
211	X2	782.06	114664.15	471779.08
212	X1	780.06	114674.13	471757.28
213	X2	782.06	114682.83	471744.80
214	X1	779.75	114674.57	471702.59
215	X2	781.75	114681.84	471689.18

STRUCTURE POINTS				
POINT #	DESCRIPTION	ELEVATION	NORTHING	EASTING
300	X1	779.75	114664.37	471713.01
301	X2	781.75	114663.44	471694.68
302	X1	779.06	114759.88	471787.03
303	X1	779.06	114751.79	471786.39
304	X1	779.06	114754.64	471800.67
305	X2	782.33	114750.20	471772.09
306	X2	782.33	114745.25	471785.80
307	X2	782.33	114748.51	471802.96

SYMBOL AND PATTERN LEGEND

- EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- CONSTRUCTION LIMITS
- CITY STORM SEWER
- LOG/ROCK STEP POOL
- ROCK RIFFLE
- TOE WOOD
- VRSS
- ROCK CROSS VANE
- LOG VANE
- REMOVE AND SALVAGE TREE ≥ 8"
- PROTECT TREE ≥8"

MATCH LINE - SHEET C-09

DOUBLE BOULDER CROSS VANE (SPECIAL) SEE 1/D-05

PROTECT EXISTING TRAIL

PROPERTY LINE (TYP.)

CONSTRUCTION ACCESS

ROCK RIFFLE SEE 2/D-02

ROCK CROSS VANE (TYP.) SEE 2/D-01

DOUBLE BOULDER CROSS VANE (SPECIAL) SEE 1/D-05

STORM SEWER OUTFALL IMPROVEMENTS SEE 3/D-07 & 4/D-07

REPAIR EXISTING RIPRAP SLOPE BY ADDING 2' CLASS III RIPRAP AT TOE AND GRADING AT 2H:1V

LOG/ROCK STEP POOL SEE 1/D-01

LOG VANE (TYP.) SEE 1/D-02

PROPERTY LINE (TYP.)

(3) ADDITIONAL LOG VANES

TOE WOOD OPTIONS (SEE DETAILS 3 AND 4 ON DRAWING D-11)

(2) BOULDER CROSS VANES IN PLACE OF LOG/ROCK STEP POOL (SEE DETAIL 1 ON DRAWING D-11), VANE INVERT EL. 782.67 AT STA. 39+74, VANE INVERT EL. 782.10 AT STA. 40+17

BOULDER VANE IN PLACE OF ROCK RIFFLE (SEE DETAIL 1 ON DRAWING D-11), VANE INVERT EL. 781.52 AT STA. 41+28

ADDITIONAL LOG VANE

ADDITIONAL LOG VANE

STORM SEWER OUTFALL IMPROVEMENTS SEE 1/D-08 & 2/D-08

ROCK RIFFLE SEE 2/D-02

RIPRAP OUTFALL ACROSS CREEK (SEE DETAIL 2 ON DRAWING D-11) MAINTAIN 10' SEPARATION BETWEEN OUTFALL RIPRAP AND DOWNSTREAM BOULDER VANE

GRADING LIMITS (TYP.)

ROCK RIFFLE SEE 2/D-02

BOULDER CROSS VANE IN PLACE OF LOG/ROCK STEP POOL (SEE DETAIL 1 ON DRAWING D-11), VANE INVERT EL. 780.61 AT STA. 42+52

(2) ADDITIONAL LOG VANES

NOTES:

1. CONTRACTOR IS RESPONSIBLE TO LOCATE AND FIELD VERIFY ALL EXISTING UTILITIES PRIOR TO WORK.
2. ALL EXISTING ROADS, PARKING LOTS, TRAILS, FENCES, SIGNS, OR SIMILAR SHALL BE PROTECTED DURING CONSTRUCTION. CONTRACTOR RESPONSIBLE TO COORDINATE SURVEYS WITH THE CITY AND/OR OWNER TO DOCUMENT PRE-CONSTRUCTION EXISTING CONDITION ISSUES.
3. CONTRACTOR SHALL INSTALL AND MAINTAIN ALL EROSION CONTROL BMPS PRIOR TO COMMENCEMENT OF GRADING FOR EACH LOCATION DURING CONSTRUCTION. EROSION CONTROL PLANS ARE PROVIDED INSIDE THE PROJECT STORMWATER POLLUTION PREVENTION PLAN (SWPPP).
4. ALL GROUND DISTURBANCE GENERATED FROM GRADING ACTIVITIES SHALL BE STABILIZED AND RESTORED WITH A MINIMUM OF 6 INCHES OF TOPSOIL. SEED W/COVER CROP AND EROSION CONTROL BLANKET OR STRAW MULCH. THE TOPSOIL USED FOR RESTORATION MAY BE STOCKPILED FROM GRADING AREAS.
5. CONSTRUCTION LIMITS AS SHOWN ARE APPROXIMATE FINAL CONSTRUCTION LIMITS TO BE COORDINATED WITH THE CITY OF EDEN PRAIRIE AND STAKED IN THE FIELD.
6. CLEARING AND GRUBBING TO BE PERFORMED ONLY WITHIN GRADING LIMITS AND ACCESS ROUTES UNLESS DIRECTED BY ENGINEER.
7. TREES TO BE CLEARED WILL BE MARKED IN THE FIELD BY ENGINEER. ALL TREES >= 8" IN DIAMETER NOT MARKED FOR REMOVAL SHALL BE PROTECTED.
8. TREES IDENTIFIED BY ENGINEER FOR ADDITIONAL PROTECTION SHALL BE PROTECTED AGAINST ROOT COMPACTION, DAMAGE AND DISFIGUREMENT IN ACCORDANCE WITH MnDOT SPEC. 2572. PROTECTION OF TREES NOT IDENTIFIED TO BE REMOVED SHALL BE INCIDENTAL.
9. TREE SURVEY WAS COMPLETED 01/18/2018. "SIGNIFICANT TREES" MEET THE DEFINITION OF THE CITY OF EDEN PRAIRIE TREE REPLACEMENT REQUIREMENTS.
10. CONTRACTOR SHALL TAKE PRECAUTIONS TO MINIMIZE THE TRANSFER OF AQUATIC AND TERRESTRIAL INVASIVE SPECIES TO THE MAXIMUM EXTENT POSSIBLE.
11. COMPACTED SOIL MUST BE DECOMPACTED TO A SOIL COMPACTION TESTING PRESSURE OF LESS THAN 1,400 KILOPASCALS OR 200 POUNDS PER SQUARE INCH IN THE UPPER 12 INCHES OF SOIL.

GENERAL NOTES (STATION 38+00 TO 45+89)

1. INSTALL ALL PROJECT FEATURES WITH A LAYER OF GEOTEXTILE AND/OR WOOD BASE. MAY REQUIRE SOME ADDITIONAL ROCK AS NECESSARY TO IMPROVE STABILITY.
2. HAULING OF MATERIALS SUFFICIENT TO CONSTRUCT THE ROCK RIFFLES AND PROPOSED GRADING WILL NOT BE FEASIBLE GIVEN THE DENSE TREES IN THE OVERBANKS AND THE POOR SOILS IN THE CHANNEL.
3. CONSTRUCT BOULDER CROSS VANES IN PLACE OF PREVIOUSLY INDICATED ROCK RIFFLES.
4. GRADE BANKS AS FEASIBLE GIVEN THE MATERIAL AVAILABLE (MAY RESULT IN CHANNEL CROSS SECTION BEING OVERWIDE IN MUCH OF THIS REACH).
5. USE POOLS TO WASTE MUCK DISPLACED BY INSTALLATION OF STRUCTURES. POOLS THAT HAVE MUCK WILL REQUIRE THE INSTALLATION OF LOG VANES AND/OR CEDAR REVETMENT.

1 STABILIZATION PLAN: RILEY CREEK (STA. 36+00 TO 45+89)

0 30 60

HORIZONTAL SCALE IN FEET

ISSUED FOR CONSTRUCTION
REVISED DRAWING

NO.	BY	CHK	APP.	DATE	REVISION DESCRIPTION
1	GGN	PJH2	AKH	02/17/2020	REVISED STABILIZATION STRUCTURES
0	EPF	PJH2	JDW	04/24/2019	ISSUED FOR BID

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

PRINTED NAME ADAM K. HOWARD

SIGNATURE

DATE 2/12/2020 LICENSE # 51967

RELEASED TO/FOR	A	B	C	D	1	2	3
DATE RELEASED							

CLIENT
BID 04/24/19
CONSTRUCTION 02/17/20

BARR
Corporate Headquarters: Minneapolis, Minnesota
Ph: 1-800-632-2277

Project Office:
BARR ENGINEERING CO.
4300 MARKETPOINTE DRIVE
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MINNEAPOLIS, MN 55435
Ph: 1-800-632-2277
Fax: (952) 832-2601
www.barr.com

Scale	AS SHOWN
Date	04/24/2019
Drawn	EPF
Checked	PJH2
Designed	BARR
Approved	JDW

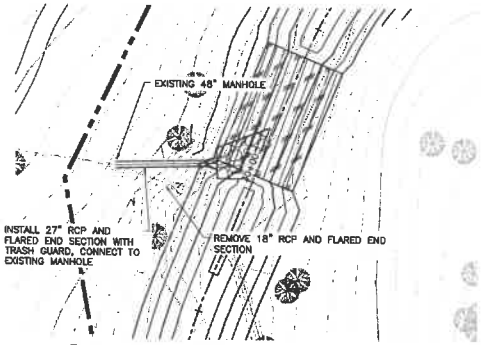
RILEY PURGATORY BLUFF CREEK
WATERSHED DISTRICT

RILEY CREEK STABILIZATION
EDEN PRAIRIE, MN.

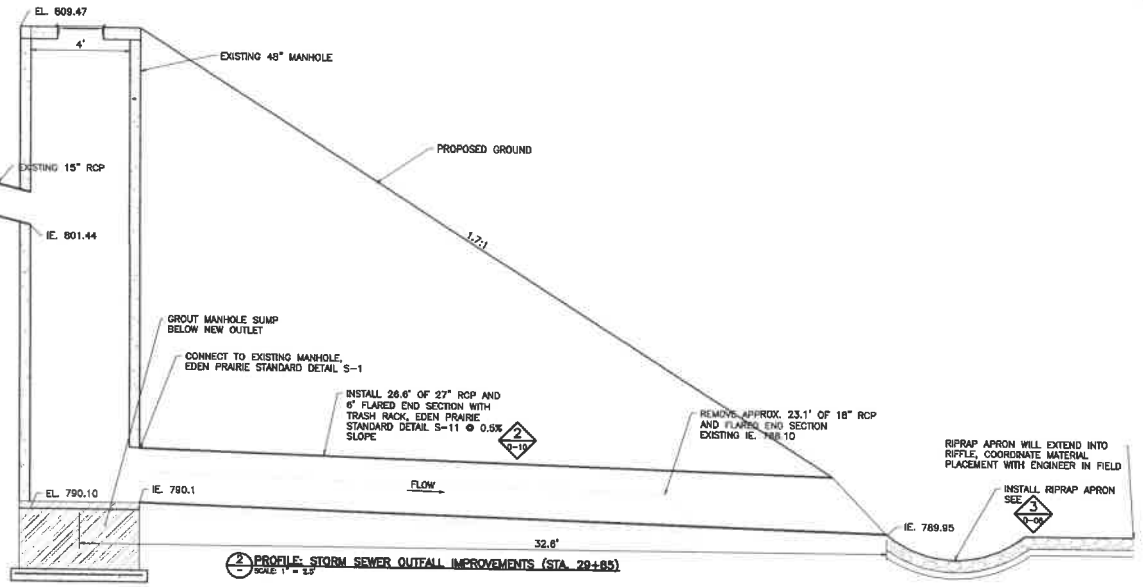
STABILIZATION PLAN
(STA. 36+00 TO 45+89)

BARR PROJECT No. 23/27-0053.14
CLIENT PROJECT No.
DWG. No. C-11
REV. No. 1

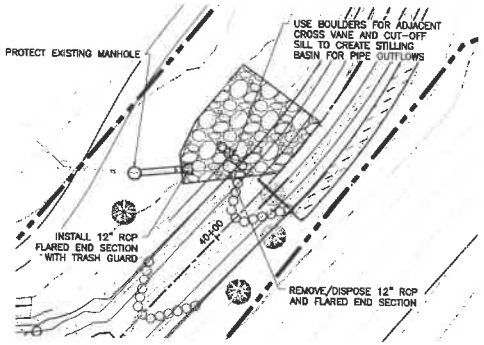
DADD USER: Greg Nelson FILE: C:\USERS\GGN\DROPBOX\RILEY CREEK\23270053314_REVISED C-11_PLAN_STAKEOUTLONG PLOT SCALE: 1:2 PLOT DATE: 2/27/2020 8:54 AM



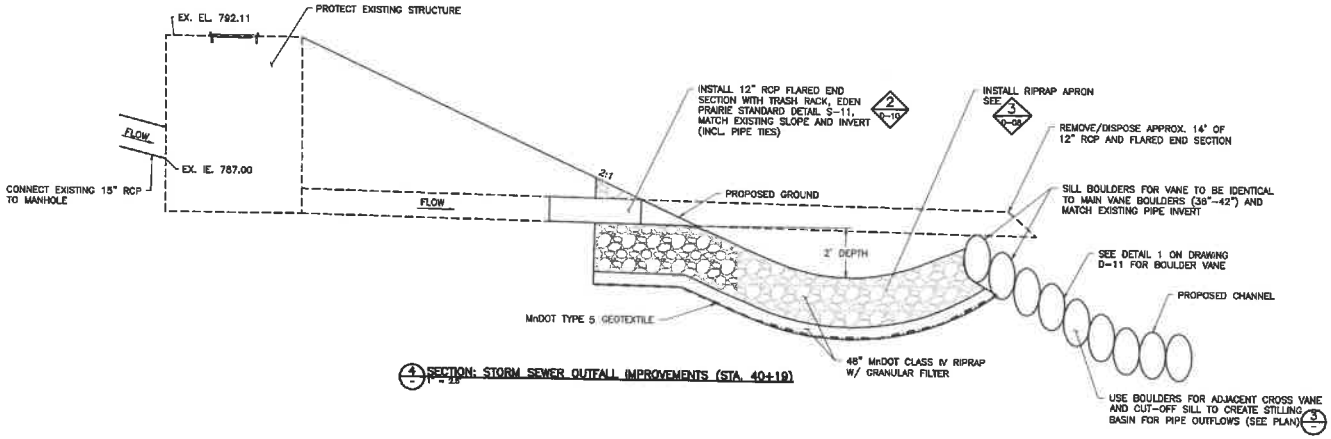
1 PLAN: STORM SEWER OUTFALL IMPROVEMENTS (STA. 29+85)
0 20 40
HORIZONTAL SCALE IN FEET



2 PROFILE: STORM SEWER OUTFALL IMPROVEMENTS (STA. 29+85)
SCALE 1" = 2.5'



3 PLAN: STORM SEWER OUTFALL IMPROVEMENTS (STA. 40+19)
0 20 40
HORIZONTAL SCALE IN FEET



4 SECTION: STORM SEWER OUTFALL IMPROVEMENTS (STA. 40+19)
1" = 2.5'

ISSUED FOR CONSTRUCTION
REVISED DRAWING

NO.	BY	CHK	APP.	DATE	REVISION DESCRIPTION
1	GDN	RJH2	AKH	02/12/2020	REVISED STORM AT STA. 40+19
0	EPF	RJH2	JDW	04/24/2019	ISSUED FOR BID

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
PRINTED NAME ADAM K. HOWARD
SIGNATURE
DATE 2/12/2020 LICENSE # 51967

RELEASED TO/FOR: CLIENT, BID, CONSTRUCTION
DATE RELEASED: A B C 0 1 2 3

BARR
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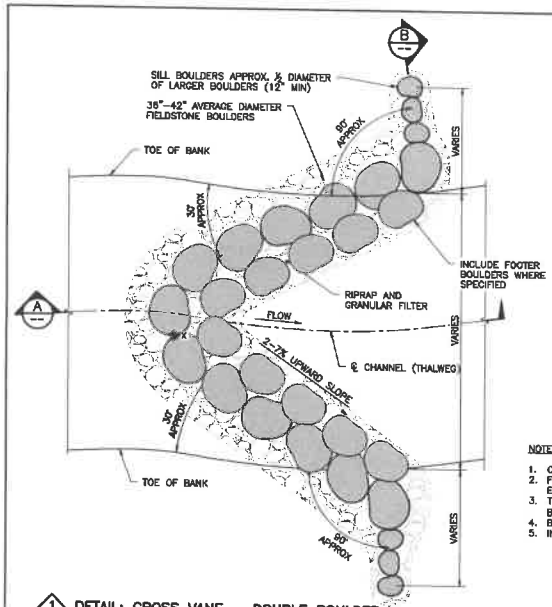
Scale	AS SHOWN
Date	04/24/2019
Drawn	EPF
Checked	PJM2
Designed	BARR
Approved	JDW

RILEY PURGATORY BLUFF CREEK
WATERSHED DISTRICT

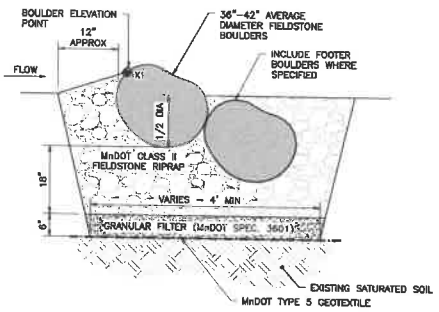
RILEY CREEK STABILIZATION
EDEN PRAIRIE, MN.

DETAILS

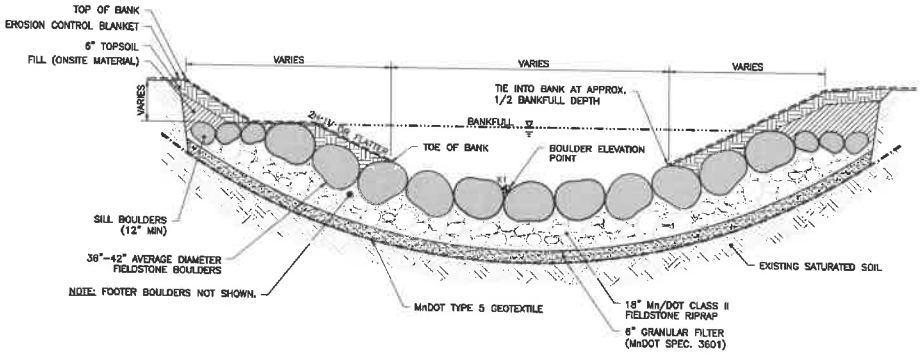
BARR PROJECT No. 23/27-0053.14
CLIENT PROJECT No.
DWG. No. D-07
REV. No. 1



1 DETAIL: CROSS VANE – DOUBLE BOULDER WITH SUBGRADE STABILIZATION



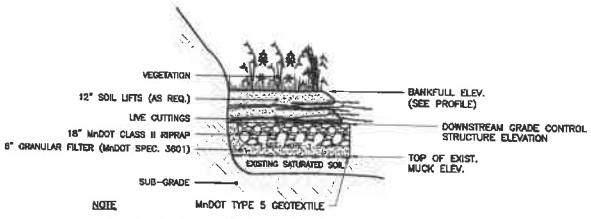
A SECTION: ROCK VANE – DOUBLE BOULDER WITH SUBGRADE STABILIZATION



B SECTION: CROSS VANE – DOUBLE BOULDER WITH SUBGRADE STABILIZATION

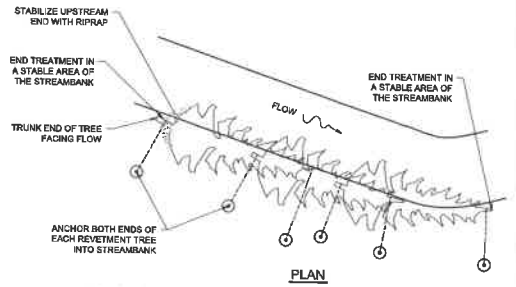
NOTES:

1. CROSS VANE LOCATIONS AND ELEVATIONS ARE APPROXIMATE AND MAY BE MODIFIED IN THE FIELD BY THE ENGINEER.
2. FINAL BOULDER PLACEMENT TO BE APPROVED BY THE ENGINEER IN THE FIELD. CONTRACTOR MAY BE REQUIRED TO ADJUST BOULDER ELEVATIONS AND ROTATION.
3. THERE SHALL BE NO SIGNIFICANT GAPS BETWEEN BOULDERS. RIPRAP BEDDING SHALL BE PLACED ON THE UPSTREAM SIDE OF THE BOULDERS TO PLUG SMALL GAPS (MAY REQUIRE HAND PLACEMENT).
4. BOULDERS OF AN UNSUITABLE SHAPE MAY BE RE-LOCATED OR REJECTED.
5. INSTALL EROSION CONTROL BLANKET ON DISTURBED BANKS.

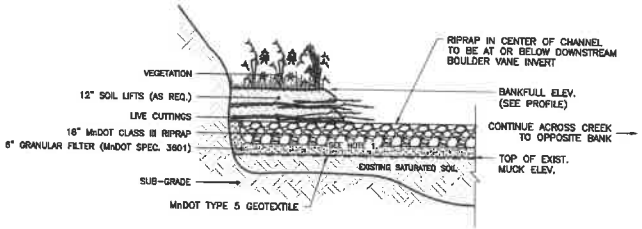


NOTE

1. WOODY DEBRIS MAY BE USED IN PLACE OF RIPRAP AND GRANULAR FILTER.
   1.1. DO NOT USE ROTTEN WOODY MATERIAL.
   1.2. PLACE GRANULAR FILTER MATERIAL OVER WOODY DEBRIS TO GRADE.

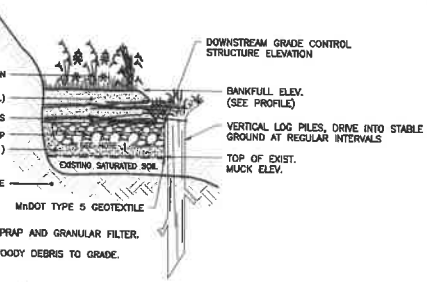


PLAN



2 DETAIL: RIPRAP OUTFALL ACROSS CREEK WITH SUBGRADE STABILIZATION

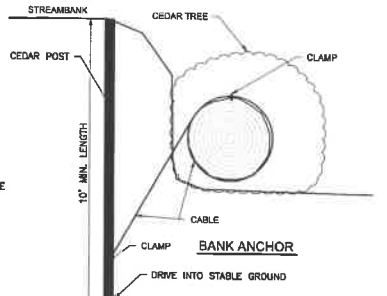
3 DETAIL: TOE WOOD, OPTION 1 WITH SUBGRADE STABILIZATION



NOTE

1. WOODY DEBRIS MAY BE USED IN PLACE OF RIPRAP AND GRANULAR FILTER.
   1.1. DO NOT USE ROTTEN WOODY MATERIAL.
   1.2. PLACE GRANULAR FILTER MATERIAL OVER WOODY DEBRIS TO GRADE.

4 DETAIL: TOE WOOD, OPTION 2 WITH SUBGRADE STABILIZATION



5 DETAIL: CEDAR TREE REVETMENT
NOT TO SCALE

NOTE

1.1. CEDAR REVETMENT TO BE USED IN PLACE OF LOG VANES IF NECESSARY. VERIFY NEED FOR INSTALLATION WITH ENGINEER BEFORE CONSTRUCTION.

ISSUED FOR CONSTRUCTION

NO.	BY	CHK	APP	DATE	REVISION DESCRIPTION
0	GGN	PJH2	AKH	02/11/2020	STABILIZATION DETAILS

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
PRINTED NAME ADAM K. HOWARD
SIGNATURE
DATE 02/12/2020 LICENSE # 51697

CLIENT								
BID								
CONSTRUCTION								
RELEASED TO/FOR	A	B	C	0	1	2	3	
DATE RELEASED								

BARR
Corporate Headquarters: Minneapolis, Minnesota
Project Office:
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www.barr.com

Scale	AS SHOWN
Date	02/10/2020
Drawn	GGN
Checked	PJH2
Designed	BARR
Approved	AKH

RILEY PURGATORY BLUFF CREEK
WATERSHED DISTRICT

RILEY CREEK STABILIZATION
EDEN PRAIRIE, MN.

DETAILS
WITH SUBGRADE STABILIZATION

BARR PROJECT No. 23/27-0053.14
CLIENT PROJECT No.
DWG. No. D-11
REV. No. 0

RACHEL | COMMITTED TO SAFETY

February 27, 2020

Mr. Scott Sobiech
Barr Engineering
4300 MarketPointe Drive
Minneapolis, MN 55435

Rachel Project #: 19062

Project Name: Lower Riley Creek Project 2019 – Eden Prairie, MN

Re: Contract Amendment Request #2 Rev. 1

Mr. Sobiech,

Rachel Contracting would like to formally request a contract amendment based on unforeseeable adverse site conditions encountered during construction. The conditions encountered have prompted proposed plan changes (IFC Drawings Dated February 12th of 2020) and resulted in additional project costs. The current site conditions have warranted the addition of unit prices to the project contract. As a result of the site conditions encountered Rachel is proposing the addition of contract language to the project specifications.

Bid Quantity Modifications per IFC Drawings Dated February 12th, 2020

Below is a breakout of planned quantity adjustments based on IFC Drawings dated February 12th, 2020

Item	Description	Bid Quantity	Units	Unit Price	Extension
N	Remove Storm Sewer (12" to 27" RCP and FES)	(16.2)	LF	$ 58.80	$ (952.56)
O	Remove Storm Sewer Manhole (48" Diameter)	(1.0)	EACH	$ 2,360.00	$ (2,360.00)
Q	Furnish & Install Manhole (48" Diameter)	(1.0)	EACH	$ 5,780.00	$ (5,780.00)
U	Furnish & Install Storm Sewer, 15" RC Pipe Class III	(30.2)	LF	$ 159.00	$ (4,801.80)
V	Furnish & Install Storm Sewer, 15" RC FES	(1.0)	EACH	$ 2,890.00	$ (2,890.00)
S	Salvage & Install Manhole Casting	(1.0)	EACH	$ 710.00	$ (710.00)
Y	Furnish & Install Class III Fielstone Riprap	(56.0)	Ton	$ 54.90	$ (3,074.40)
Y	Furnish & Install Class II Fieldstone Riprap	(191.4)	TON	$ 54.90	$ (10,507.86)
Z	Furnish & Install Granular Filter Aggregate	(63.9)	TON	$ 51.30	$ (3,278.07)
CC	Install Toe Wood	(27.5)	LF	$ 45.80	$ (1,259.50)
AA	Install Boulder Vane, no Footers	(40.00)	LF	$ 73.30	$ (2,932.00)
AA	Install Boulder Vane, w/Footers	160.00	LF	$ 73.30	$ 11,728.00
BB	Install Log Vane	3.00	EACH	$ 262.50	$ 787.50
PP	Import Boulders	74.10	TON	$ 67.40	$ 4,994.34
					$ (21,036.35)

The modified IFC drawings dated February 12th, 2020 indicate a reduction in the common excavation however, there has been additional common excavation performed in other areas of the project due to differing existing grades and slopes. Rachel proposes to leave the Common Excavation item as a plan quantity with no change to the planned quantity.

Unit Price Additions

Below is a breakout of unit price item additions to the contract. The unit cost of line item V (Furnish & Install Storm Sewer, 12" FES) is higher than that of item V (Furnish & Install Storm Sewer, 15" FES) as it requires a separate freight charge.

Item	Description	Bid Quantity	Units	Unit Price	Extension
	Unit Price Additions				
V	Furnish & Install Storm Sewer, 12" RC FES	1.00		$ 3,420.00	$ 3,420.00
QQ	Install Geotextile Fabric (Based on Planned Quantity)	935.00	SY	$ $5.77	$5399.16
RR	Import Common (Load Count Based on 16 CY Per Load)	2,000.00	CY	$ 38.22	$ 76,440.00
SS	Furnish & Install Class IV Fieldstone Riprap (To Be Used Where Directed)	220.00	Ton	$ 62.10	$ 13,662.00
TT	Export Unsuitable	300.00	CY	$ $49.27	$14,781.00
UU	Restocking Of Materials Associated with Storm Structure at STA. 40+19	1.00	LS	$ 3,690.95	$ 3,690.95
VV	Additional Cost for Storm Sewer Installation at STA 44+48	1.00	ls	$ $ $21,427.50	$21,427.50
					$138,820.61

See attached unit price breakdown for additional information.

see attached unit price breakdown sheets for redlined values

Alternate Detail Pricing

Item	Description	Bid Quantity	Units	Unit Price	Extension
	Alternates				
	Toewood Option 1 (Detail 3/D-11)	-	LF	$ 45.80	
	Toewood Option 2 (Detail 4/D-11)	-	LF	$ 78.60	
	Cedar Tree Revetment (Per Detail 5/D-11) (To Be Used In Placed of Log Vane)	-	EACH	$ 998.00	

Contract Specification Modifications

To facilitate construction of the project as intended the following language should be added to the project specifications.

Earthwork 31 00 00

Add Section E to 3.06

E. Quality Compaction

1. In areas of unsuitable soils, quality compaction shall be performed to the extent practical or as directed by the engineer
2. In areas with restricted site limits or slopes steeper than 3:1, contractor shall quality compact soils to extent practical or as directed by engineer

This contract amendment request results in an additional cost of $121,492.80 for an anticipated final contract amount of $1,772,739.84

Rachel Contracting intends to complete all work within the normal water level of the creek corridor by March 14th, 2020. Rachel assumes this will satisfy the requirements to achieve substantial completion.

Due to the adverse site conditions, additional labor and equipment was required to be reallocated from other project tasks in an effort to achieve completion of work and stay compliant with DNR permit regulations. Additional resources were moved from work outside of the normal water level of the creek corridor. As a result of reallocation of resources, Rachel is requesting the project final completion date be extended to June 30th, 2020. This includes all work outside of the normal water level of the creek corridor.

Lower Riley Creek Project 2019 - Eden Prairie, MN
Contract Amendment Request #2
Pricing Breakdown

Common Borrow

Item	Description	Quantity	Unit	Unit Cost	Extension
	Mobilize 336 to City Borrow Source	1	LS	$ 460.00	$ 460.00
	Load Common Borrow and Deliver to Jobsite Staging Area:				
	336 Excavator	45	HR	$ 245.00	$ 11,025.00
	Trucking	84	HR	$ 127.00	$ 10,668.00
	Skidsteer with Sweeper	10	HR	$ 185.00	$ 1,850.00
	Load Common Borrow from Staging Area and transport to Work Area:				
	380 Loader	30	HR	$ 205.00	$ 6,150.00
	730 Off Road Truck	30	HR	$ 225.00	$ 6,750.00
	Place Common Borrow:				
	323 Excavator w/GPS	58	HR	$ 230.00	$ 13,340.00
	Compactor	22	HR	$ 160.00	$ 3,520.00
	Skidsteer	58	HR	$ 165.00	$ 9,570.00
	Laborer	58	HR	$ 88.00	$ 5,104.00
	Superintendent w/Truck	58	HR	$ 130.00	$ 7,540.00
	Demobilize 336 from City Borrow Source	1	LS	$ 460.00	$ 460.00
				Total cost:	$ 76,437.00
				Quantity:	2,000
				Unit Price:	**$ 38.22**

Notes:

Common Borrow source supplied from the City Of Eden Pairie at no cost to Rachel. Material must be loaded and hauled to the construction site and then dumped at the staging area. Material must then be reloaded into an off road truck or trammed with a loader on the project site to the desired location. The material must then be placed in its final location.
Pricing does not include costs associated for work under spring road restrictions.
Pricing based on 16 CY per Load.

Lower Riley Creek Project 2019 - Eden Prairie, MN
Contract Amendment Request #2
Pricing Breakdown

Export Unsuitable Soils

Item	Description	Quantity	Unit	Unit Cost	Extension
	323 Excavator w/GPS	10.0	HR	$ 230.00	$ 2,300.00
	380 Loader	10.0	HR	$ 205.00	$ 2,050.00
	Skidsteer with Sweeper	2.5	HR	$ 185.00	$ 462.50
	Superintendent w/Truck	2.5	HR	$ 130.00	$ 325.00
	Trucking	56	HR	$ 127.00	$ 7,143.75
	Prevent Leaking	25	Load	$ 40.00	$ 1,000.00
	Dump Fee	300	CY	$ 5.00	$ 1,500.00
				Total cost:	$ 14,781.25
				Quantity:	300
				Unit Price:	**$ 49.27**

Notes:

Unsuitable Soils will be hauled to the Hammes Pit located by Lake Elmo. Material needs to be trammed to the staging area so that it can be loaded into trucks. Additional protection will be needed on the trucks so that the material will not leak out of the trucks during transport.
Pricing does not include costs associated for work under spring road restrictions.
Pricing based on 12 CY per Load.

Lower Riley Creek Project 2019 - Eden Prairie, MN
Contract Amendment Request #2
Pricing Breakdown

Geotextile Fabric

Item	Description	Quantity	Unit	Unit Cost	Extension
	Material + Tax + 15% Mark-up (25% waste)	1,250	SY	$ 1.25	$ 1,562.50
	323 Excavator w/GPS	4	HR	$ 230.00	$ 920.00
	Skidsteer	4	HR	$ 165.00	$ 660.00
	Laborer	24	HR	$ 88.00	$ 2,112.00
	Superintendent	4	HR	$ 130.00	$ 520.00
				Total cost:	$ 5,774.50
				Quantity:	1,000
				Unit Price:	**$ 5.77**

Notes:

Geotextile fabric to be installed in multiple locations and includes costs associated with small quantity installations.

Lower Riley Creek Project 2019 - Eden Prairie, MN
Contract Amendment Request #2
Pricing Breakdown

Storm Structure at Sta. 44.48

Item	Description	Quantity	Unit	Unit Cost	Extension
	Cost to Install Structure, Pipe and appurtenances:				
	Materials: (includes freight, tax and 15% mark-up)				
	Manhole, Pipe and FES	1.0	LS	$ 8,588.19	$ 8,588.19
	Casting	1.0	LS	$ 440.91	$ 440.91
	Granular Filter Aggregate	1.0	LS	$ 2,378.72	$ 2,378.72
	Geotextile Fabric	1.0	LS	$ 187.50	$ 187.50
	Misc Materials	1.0	LS	$ 183.08	$ 183.08
	Labor and Equipment:				
	323 Excavator w/GPS	32	HR	$ 230.00	$ 7,360.00
	380 Loader	30	HR	$ 205.00	$ 6,150.00
	Jumping Jack/Plate Compactor	20	HR	$ 20.00	$ 400.00
	Skidsteer	22	HR	$ 165.00	$ 3,630.00
	Trucking	2	HR	$ 127.00	$ 254.00
	Laborer	71	HR	$ 88.00	$ 6,248.00
	Superintendent w/Truck	32	HR	$ 130.00	$ 4,160.00
					$ 39,980.40

Items to be paid per Bid Item pricing

N	Remove Storm Sewer (12" to 27" RCP and FES)	15.0	LF	$ 58.80	$ 882.00
Q	Furnish & Install Manhole (60" Diameter)	1.0	EACH	$ 8,040.00	$ 8,040.00
T	Furnish & Install Manhole Casting	1.0	EACH	$ 849.00	$ 849.00
U	Furnish & Install Storm Sewer, 15" RC Pipe Class III	14	LF	$ 100.00	$ 1,400.00
V	Furnish & Install Storm Sewer, 15" RC FES	1	EACH	$ 2,890.00	$ 2,890.00
Z	Furnish & Install Granular Filter Aggregate	70.69	TON	$ 51.30	$ 3,626.40
	Geotextile Fabric	150	SY	$ 5.77	$ 865.50
				Total to be paid under item unit prices:	$ 18,552.90

Total cost to install:	$ 39,980.40
Cost paid under bid items:	$ 18,552.90
Additional cost to be paid under Lump Sum:	**$ 21,427.50**

Notes:

Total cost to install the structure and pipe less the items paid under the above listed bid items results in the additional lump sum costs as a result of the unsuitable soil conditions at the location of the structure and pipe.

RACHEL | COMMITTED TO SAFETY

Sincerely,

Ryan Winge

Ryan Winge
Estimator/Project Manager
Rachel Contracting, Inc.

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: 2018-016

Considered at Board of Managers Meeting: March 4, 2020

Project Procedural History: Permit application conditionally approved at September 5, 2018. Some conditions of approval remain unfulfilled. Permit timeline was extended administratively August 28, 2019 for one year to September 5, 2020.

Modification Request Received complete: February 4, 2020

Applicant:	Level 7 Development LLC, Bahram Akradi
Consultant:	Landform Professional Services, Steve Sabraski
Project:	Avienda – This project proposes construction of Phase I of the development which will encompass mass grading, installation of public utilities, public stormwater management systems, and construction of public streets, trails and sidewalks within Bluff Creek Boulevard, Avienda Parkway, and Sunset Trail. The stormwater management system includes filtration/infiltration basins, vegetated swales, and a detention pond, and will provide runoff volume abstraction, water quality treatment, and rate control.
Location:	SW corner of Powers and Lyman Boulevard Chanhassen, Minnesota
Reviewer:	Scott Sobiech, PE, Barr Engineering

Proposed Board Action

Manager _____ moved and Manager _____ seconded adoption of the following resolutions based on the permit report that follows and the presentation of the matter at the March 4, 2020 meeting of the managers:

Resolved that the modification to the application for Permit 2018-016 is approved, subject to the conditions and stipulations set forth in the Recommendations section of the attached report;

Resolved that on determination by the RPBCWD administrator that the conditions of approval have been affirmatively resolved, the RPBCWD president or administrator is authorized and directed to sign and deliver Permit 2018-016 to the applicant on behalf of RPBCWD.

Upon vote, the resolutions were adopted, _____ [VOTE TALLY].

Project Background

The site comprises approximately 116 acres of non-contiguous land located at the southwest and southeast corners of Lyman Boulevard (County Road 18) and Powers Boulevard (County Road 17) immediately north of U.S. Highway 212 in the City of Chanhassen, Minnesota. The majority of the site consists of farm fields with the southwest corner containing a wooded area. The fields, some of which have been idle for a couple years, are mostly separated by tree lines. There are 10 wetlands on site and two off but adjacent to the site; all are protected by the Wetland Conservation Act. A watercourse connects two of the wetlands. There are no public water wetlands on or adjacent to the site. Runoff from the northeast and eastern portion of the site drains east is eventually draining to Lake Susan, while the rest of the site drains west and south, ultimately reaching Bluff Creek.

The Board of Manager conditionally approved the applicant's variance requests and permit application at the September 5, 2018 meeting for the construction of Phase I of the Avienda development which entails mass grading roughly 96 acres of the site, installation of public utilities, public stormwater management systems, and construction of public streets, trails and sidewalks within Bluff Creek Boulevard, Avienda Parkway, and Sunset Trail. Much of the graded area will be converted to vegetated pervious area in anticipation of future site development. The stormwater management systems include filtration/infiltration basins, vegetated swales, and a detention pond will provide runoff volume abstraction, water quality treatment, and rate control.

The conditions of September 2018 approval were as follows:

1. Continued compliance with General Requirements.
2. Financial Assurance in the amount of $3,875,600.
3. Applicant providing the name and contact information of the individual responsible for erosion and sediment control at the site.
4. The applicant submitting documentation verifying the soils present, infiltration capacity of the soil and the groundwater elevation at North West Interim Basin, West North Interim Basin, Avienda Pkwy NE, East Central Interim Basin, Center North Interim Basin, Center South Interim Basin, Bluff Creek Blvd East, South East Interim Basin, South Center Interim Basin, Triangle Basin, Bluff Creek Blvd West, and West South Interim Basin. This can be accomplished by soil boring, permeability tests, infiltrometer test, potholing or other methods. If the soils, groundwater elevation or infiltration capacity are less than anticipated or result in noncompliance with separation to groundwater, design modifications to ensure compliance with RPBCWD requirements would need to be submitted (in the form an application for a permit modification or new permit).
5. Receipt of documentation demonstrating the Applicant has the necessary permissions to complete the proposed grading, and storm sewer construction outside the property boundary. The necessary permissions must be obtained prior issuance of a permit for the work

from RPBCWD. The property rights must allow for restoration with native vegetation, the designation of a buffer and the right to maintain that buffer.

6. Receipt in recordation a maintenance declaration for the operation and maintenance of the buffer and stormwater management facilities. A draft must be approved by the District prior to recordation.
7. Compliance with rule-specific permit conditions, including receipt of an additional permit fee of $16,136.88 for excess cost recovery.

The conditions on approval have not, to date, been completely fulfilled.

On February 4, 2020, RPBCWD receive the attached request for a permit modification for the following items:

a. Infiltration basin testing timing
b. Change infiltration basins to combination filtration/infiltration basins

The proposed terms and conditions of approval of the modification request, as provided below and as may be modified by the managers, will modify the prior approvals where applicable.

Allowing verification of the soils and infiltration capacity of the proposed filtration/infiltration basins during construction rather and prior to permit issuance (i.e., convert item 4 above from a condition of approval to a stipulation) has been permitted for other permit applications with similar site constraints. Changing the timing of the infiltration testing is being requested because the proposed basin bottoms are at elevations significantly below the existing site grades, thus requiring extensive excavation. **Because of the extensive site grading that will occur on the site, the RPBCWD engineer concurs that it will be very challenging to obtain accurate infiltration testing results until the grading as occurred. Given the site constraint and similar to other RPBCWD permit applications, the engineer recommends making the infiltration testing requirement a stipulation rather than a condition of approval.**

The applicant is also proposing to change the infiltration basins to a filtration/infiltration basin to accommodated compliance with both the RPBCWD requirements and MPCA's construction stormwater permit requirements. To accomplish this the applicant proposed to construct a sand filtration layer with underground retention areas out of clean rock or sand below an elevated draintile. The volume of water stored in the underground rock or sand retention is proposed to be consistent with the prior above ground basins (35,979 cubic feet) and meet the RPBCWD required 1.1 inches of abstraction from impervious surfaces (23,837 cubic feet). **Because the applicant proposes the same abstraction volume and flood storage volume, the prior stormwater rate control, volume, and water quality analysis remain valid and the engineer recommends approving the revised stormwater management facility designs.**

The RPBCWD permit fee schedule adopted in January 2019 indicates that costs of site inspections, analysis of the proposed activities, services of consultants and compliance assurance in excess of $5,000 for properties greater than 10 acres will be charged to the permit applicant. In accordance with the

adopted RPBCWD permit-fee schedule, because the engineer, legal, and staff time to review this permit exceeded $5,000 the applicant must submit an additional permit fee of $17,045.88 for excess cost recovery.

Because the applicant proposed to convert the above ground infiltration basins to filtration/infiltration basins, the financial assurance for the project was recomputed using the fincial assurance fee schedule adopted in January 2019., as presented below:

Rule C:

Perimeter Control: 18,000 L.F. x $2.50/L.F. = ...$45,000

Rock Entrances: 2 x $900/EA =.....$1,800

Inlet Protection: 134 x $100/EA = ...$13,400

Restoration: 96.6 acres x $2,500/acre = ...$241,600

Rule D:

Wetland and Creek Buffer: $5,000 + $1,000/acre over 10 acres = ...$5,000

Rule J:

Infiltration: 125% of Engineer's Opinion of Cost (1.25*$163,065) = ...$203,900

Filtration: 125% of Engineer's Opinion of Cost (1.25*$509,281) = ...$636,700

Wet Detention Basin: 125% of Engineer's Opinion of Cost (1.25*$375,000) = ...$468,800

Hydrodynamic Separators: 125% of Engineer's Opinion of Cost (1.25*$85,000) = ...$106,300

Swales: 125% of Engineer's Opinion of Cost (1.25*$17,000) = ...$21,300

Chloride Management: = ...$5,000

Administration (10%) $174,900

Total Financial Assurance.....$1,923,700

Applicable General Requirements:

1. The RPBCWD Administrator and Engineer 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.

Recommendation:

Approval of the permit contingent upon:

1. Continued compliance with General Requirements.
2. Financial Assurance in the amount of $1,923,700.

3. Applicant providing the name and contact information of the individual responsible for erosion and sediment control at the site.
4. Receipt of documentation demonstrating the Applicant has the necessary permissions to complete the proposed grading, and storm sewer construction outside the property boundary. The necessary permissions must be obtained prior issuance of a permit for the work from RPBCWD. The property rights must allow for restoration with native vegetation, the designation of a buffer and the right to maintain that buffer.
5. Receipt in recordation a maintenance declaration for the operation and maintenance of the buffer and stormwater management facilities. A draft must be approved by the District prior to recordation.
6. Compliance with rule-specific permit conditions, including receipt of an additional permit fee of $17,045.88 for excess cost recovery.
7. Receipt of updated construction drawings that incorporate the modified filtration/infiltration basin designs.

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

1. The applicant submitting documentation verifying the soils present, infiltration capacity of the soil and the groundwater elevation at North West Interim Basin, West North Interim Basin, Avienda Pkwy NE, East Central Interim Basin, Center North Interim Basin, Center South Interim Basin, Bluff Creek Blvd East, South East Interim Basin, South Center Interim Basin, Triangle Basin, Bluff Creek Blvd West, and West South Interim Basin. This can be accomplished by soil boring, permeability tests, infiltrometer test, potholing or other methods. If the soils, groundwater elevation or infiltration capacity are less than anticipated or result in noncompliance with separation to groundwater, design modifications to ensure compliance with RPBCWD requirements would need to be submitted (in the form an application for a permit modification or new permit).
2. Stake off and mark proposed infiltration facilities to prevent soil compaction by heavy equipment, stockpiling of materials, and traffic. If infiltration facilities are in place during construction activities, best practices must be deployed to prevent sediment and other material from entering the practice(s). Infiltration facilities must not be excavated to within 3 feet final grade until the contributing drainage area has been constructed and fully stabilized. Any accumulated sediment in an infiltration facility must be removed in manner that prevents compaction of the facility bottom. To provide a well-aerated, highly porous surface, the soils below an infiltration practice must be loosened to a minimum depth of 18 inches prior to installation or planting.
3. Soil surfaces compacted during construction and remaining pervious upon completion of construction must be decompacted to achieve:
    a. a soil compaction testing pressure of less than 1,400 kilopascals or 200 pounds per square inch in the upper 12 inches of soil or

b. a bulk density of less than 1.4 grams per cubic centimeter or 87 pounds per cubic foot in the upper 12 inches of soil.

4. 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.

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February 17, 2020

President Dick Ward and Board of Managers
Riley-Purgatory-Bluff Creek Watershed District
18681 Lake Drive East
Chanhassen, MN 55317

Re: Bluff Creek Southwest Branch Stabilization and Restoration Project – Pay Application #4
Barr Project # 23/27-0053.14-021

Dear President Ward and Board of Managers:

Enclosed is the Application for Payment #4 from Sunram Construction Company for work completed through 1/31/2020, on the above-referenced project. Upon your review and approval, please sign and return one copy to me. Barr will distribute a scan to the contractor and RPBCWD Administrator for district files.

Major items of work covered by this pay application include:

- Payment for remaining quantity of turf reinforcement mat installed and verified in the field by the engineer
- Furnishing and installing temporary mulch on disturbed areas that have not been blanketed
- Release of retainage for the portion of the work greater than 50% of the total project cost in accordance with the specifications

Barr Engineering has reviewed the application for payment, confirmed that the work for which payment is requested has been performed, believes to the best of our knowledge that the work has been performed in accordance with the terms of the contract with the Riley Purgatory Bluff Creek Watershed District, and is recommending payment in the amount of **$6,540.96**. Payments should be made directly to Sunram Construction Company.

Please call me at 952-832-2755 if you have any questions or concerns about the application for payment, or about any other related matters.

Sincerely,

Scott Sobiech, P.E.
Barr Engineering Co.

c: Claire Bleser, RPBCWD
Ryan Sunram, Sunram Construction Company

Enclosure #1 – Application for Payment – Progress Payment 4

Bluff Creek Southwest Branch Stabilization and Restoration Project
Progress Payment Number 4

1.0	Total Completed Through This Period	$206,094.23		
2.0	Total Completed Previous Period		$204,154.13	
3.0	Total Completed This Period			$1,940.10
4.0	Amount Retained, Previous Period		$10,207.71	
5.0	Amount Retained, This Period (See Note 1)		$0.00	
6.0	Total Amount Retained		$10,207.71	
7.0	Retainage Released Through This Period:			$4,600.86
8.0	Amount Due This Period			$6,540.96

Note 1: At rate of 5% until Completed to Date equals 50% of current Contract Price and a rate of 0% thereafter.

SUBMITTED BY:

Name: Ryan Sunram Date: 2/20/20

Title: Project Manager

Contractor: Sunram Construction Co

Signature: Ryan M. Sunram

RECOMMENDED BY:

Name: Scott Sobiech Date: 2/20/2020

Title: District Engineer

Engineer: Barr Engineering Company

Signature: Scott Sobiech

APPROVED BY:

Name: Dick Ward Date:

Title: President

Owner: Riley Purgatory Bluff Creek Watershed District

Signature:

Bluff Creek Southwest Branch Stabilization and Restoration Project
Piley Purgatory Bluff Creek Watershed District
Summary of Work Completed Through January 31, 2020- for Progress Payment Number 4

						(1) Total Completed Through This Period		Percent Complete	(2) Total Completed During Period 1		(3) Total Completed During Period 2		(4) Total Completed During Period 3		(5) Total Completed This Period	
1.04 Item	**Description**	**Unit**	**Estimated Quantity**	**Unit Price**	**Extension**	**Quantity**	**Amount**				**Quantity**	**Amount**	**Quantity**	**Amount**	**Quantity**	**Amount**
A	Mobilization/Demobilization	LS	1	$ 15,300.85	$ 15,300.85	0.75	$11,475.63	75%	0.25	$3,825.21	0.25	$3,825.21	0.25	$3,825.21	0	$0.00
B	Control of Water	LS	1	$ 1,500.00	$ 1,500.00	1.00	$1,500.00	100%	0	$0.00	0.5	$750.00	0.5	$750.00	0	$0.00
C	Traffic Control	LS	1	$ 1,500.00	$ 1,500.00	1.00	$1,500.00	100%	0	$0.00	0.5	$750.00	0.5	$750.00	0	$0.00
D	Rock Construction Entrance	Each	1	$ 1,500.00	$ 1,500.00	1.00	$1,500.00	100%	1	$1,500.00	0	$0.00	0	$0.00	0	$0.00
E	Sediment Log	LF	200	$ 4.00	$ 800.00	0.00	$0.00	0%	0	$0.00	0	$0.00	0	$0.00	0	$0.00
F	Silt Fence	LF	50	$ 5.00	$ 250.00	0.00	$0.00	0%	0	$0.00	0	$0.00	0	$0.00	0	$0.00
G	Floating Silt Curtain	Each	1	$ 400.00	$ 400.00	1.00	$400.00	100%	0	$0.00	1	$400.00	0	$0.00	0	$0.00
H	Tree Protection Fencing	LF	100	$ 5.00	$ 500.00	0.00	$0.00	0%	0	$0.00	0	$0.00	0	$0.00	0	$0.00
I	Inlet Protection	Each	5	$ 150.00	$ 750.00	1.00	$150.00	20%	0	$0.00	1	$150.00	0	$0.00	0	$0.00
J	Street Sweeping	LS	1	$ 1,000.00	$ 1,000.00	1.00	$1,000.00	100%	0	$0.00	0.5	$500.00	0.5	$500.00	0	$0.00
K	Clearing and Grubbing	Acre	1.5	$ 16,300.00	$ 24,450.00	2.46	$40,098.00	164%	2.2	$35,860.00	0	$0.00	0.26	$4,238.00	0	$0.00
L	Remove and Dispose of Trash and Non-Woody Debris	LS	1	$ 2,750.00	$ 2,750.00	1.00	$2,750.00	100%	0	$0.00	0.5	$1,375.00	0.5	$1,375.00	0	$0.00
M	Remove Storm Sewer	LS	1	$ 850.00	$ 850.00	1.00	$850.00	100%	0	$0.00	0	$0.00	1	$850.00	0	$0.00
N	Furnish and Install Manhole	Each	1	$ 4,500.00	$ 4,500.00	1.00	$4,500.00	100%	0	$0.00	0.5	$2,250.00	0.5	$2,250.00	0	$0.00
O	Furnish and Install Manhole Casing	Each	1	$ 500.00	$ 500.00	1.00	$500.00	100%	0	$0.00	0.5	$250.00	0.5	$250.00	0	$0.00
P	Furnish and Install Storm Sewer	LF	20	$ 155.00	$ 3,100.00	16.00	$2,480.00	80%	0	$0.00	0	$0.00	16	$2,480.00	0	$0.00
Q	Furnish and Install Flared End Section	Each	1	$ 2,500.00	$ 2,500.00	1.00	$2,500.00	100%	0	$0.00	0.5	$1,250.00	0.5	$1,250.00	0	$0.00
R	Common Excavation (P)	CY	2,200	$ 10.80	$ 23,760.00	2200.00	$23,760.00	100%	0	$0.00	1100	$11,880.00	1100	$11,880.00	0	$0.00
S	Grading (P)	SY	7,240	$ 1.40	$ 10,136.00	7240.00	$10,136.00	100%	0	$0.00	3620	$5,068.00	3620	$5,068.00	0	$0.00
T	Furnish and Install Riprap (CL I)	Ton	0	$ 100.00	$ -	0.00	$0.00	0%	0	$0.00	0	$0.00	0	$0.00	0	$0.00
T	Furnish and Install Riprap (CL III)	Ton	325	$ 76.25	$ 24,781.25	300.00	$22,875.00	92%	0	$0.00	250	$19,062.50	50	$3,812.50	0	$0.00
U	Furnish and Install Granular Backfill	Ton	12	$ 73.00	$ 876.00	12.00	$876.00	100%	0	$0.00	12	$876.00	0	$0.00	0	$0.00
V	Clear and Salvage Trees and Install as Root Wad	Each	19	$ 445.00	$ 8,455.00	24.00	$10,680.00	126%	18	$8,010.00	0	$0.00	6	$2,670.00	0	$0.00
W	Import and Install Root Wad	Each	19	$ 445.00	$ 8,455.00	24.00	$10,680.00	126%	0	$0.00	0	$0.00	24	$10,680.00	0	$0.00
X	Furnish and Install Boulder Vane	LF	200	$ 100.00	$ 20,000.00	200.00	$20,000.00	100%	0	$0.00	68.5	$6,850.00	131.5	$13,150.00	0	$0.00
Y	Turf Reinforcement Mat	SY	103	$ 12.00	$ 1,236.00	223.00	$2,676.00	217%	0	$0.00	0	$0.00	103	$1,236.00	120	$1,440.00
Z	Import Topsoil	CY	5	$ 100.00	$ 500.00	5.00	$500.00	100%	0	$0.00	0	$0.00	5	$500.00	0	$0.00
AA	Seed Area	Acre	1	$ 6,300.00	$ 9,324.00	1.48	$9,324.00	100%	0	$0.00	0	$0.00	1.48	$9,324.00	0	$0.00
BB	Seed Mix - Cover Crop	LB	152	$ 0.55	$ 83.60	152.00	$83.60	100%	0	$0.00	0	$0.00	152	$83.60	0	$0.00
BB	Seed Mix – Floodplain Forest Mix	LB	48	$ 115.00	$ 5,520.00	48.00	$5,520.00	100%	0	$0.00	0	$0.00	48	$5,520.00	0	$0.00
BB	Seed Mix – Upland Construction Mix	LB	8	$ 95.00	$ 722.00	7.60	$722.00	100%	0	$0.00	0	$0.00	7.6	$722.00	0	$0.00
CC	Plant Shrubs	Each	150	$ 64.00	$ 9,600.00	0.00	$0.00	0%	0	$0.00	0	$0.00	0	$0.00	0	$0.00
DD	Plant Trees	Each	15	$ 240.00	$ 3,600.00	0.00	$0.00	0%	0	$0.00	0	$0.00	0	$0.00	0	$0.00
EE	Furnish and Install Erosion Control Blanket	SY	5,772	$ 2.45	$ 14,141.40	2200.00	$5,390.00	38%	0	$0.00	0	$0.00	2200	$5,390.00	0	$0.00
FF	Furnish and Install Straw Mulch	SY	1,643	$ 0.30	$ 492.90	3310.00	$993.00	201%	0	$0.00	0	$0.00	1643	$492.90	1667	$500.10
GG	Furnish and Install Buffer Markers	Each	15	$ 200.00	$ 3,000.00	0.00	$0.00	0%	0	$0.00	0	$0.00	0	$0.00	0	$0.00
HH	Vegetation Establishment and Warranty Period	LS	1	$ 6,765.00	$ 6,765.00	0.00	$0.00	0%	0	$0.00	0	$0.00	0	$0.00	0	$0.00
			Total of Extensions =		**$ 213,599.00**		**$195,419.23**			**$49,195.21**		**$55,236.71**		**$89,047.21**		**$1,940.10**

Change Orders

1.04 Item	**Description**	**Unit**	**Estimated Quantity**	**Unit Price**	**Extension**	**Quantity**	**Amount**				**Quantity**	**Amount**	**Quantity**	**Amount**	**Quantity**	**Amount**
II	CO#1 - Project Delay (Wage and Material Cost Increase)	LS	1	10,675.00	$ 10,675.00	1.00	$10,675.00	100%	0	$0.00	0	$0.00	1	$10,675.00	0	$0.00
			Total of Extensions =		**$ 224,274.00**		**$206,094.23**			**$49,195.21**		**$55,236.71**		**$99,722.21**		**$1,940.10**

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BARR

February 17, 2020

President Dick Ward and Board of Managers
Riley-Purgatory-Bluff Creek Watershed District
18681 Lake Drive East
Chanhassen, MN 55317

Re: Riley Creek Branch Stabilization Project – Pay Application #2
Barr Project # 23/27-0053.14-014

Dear President Ward and Board of Managers:

Enclosed is the Application for Payment #2 from Rachel Contracting, Inc. for work completed through 1/31/20, on the above-referenced project. Upon your review and approval, please sign and return one copy to me. Barr will distribute a scan to the contractor and RPBCWD Administrator for district files.

Major items of work covered by this pay application include project mobilization, installation and operation of the dewatering practices (including all piping, pumps, and erosion control), installation of floating silt curtain at the downstream end of the project for erosion control, and periodic sweeping of the access roadways.

Barr Engineering has reviewed the application for payment, confirmed that the work for which payment is requested has been performed, believes to the best of our knowledge that the work has been performed in accordance with the terms of the contract with the Riley Purgatory Bluff Creek Watershed District, and is recommending payment in the amount of **$110,681.65**. Payments should be made directly to Rachel Contracting, LLC.

Please call me at 952-832-2755 if you have any questions or concerns about the application for payment, or about any other related matters.

Sincerely,

Scott Sobiech, P.E.
Barr Engineering Co.

c: Claire Bleser, RPBCWD
Ryan Winge, Rachel Contracting, Inc.

Enclosure #1 – Application for Payment – Progress Payment 2

Riley Creek Stabilization Project
Progress Payment Number 2

1.0	Total Completed Through This Period	$162,780.50		
2.0	Total Completed Previous Period		$46,273.50	
3.0	Total Completed This Period			$116,507.00
4.0	Amount Retained, Previous Period		$2,313.68	
5.0	Amount Retained, This Period (See Note 1)		$5,825.35	
6.0	Total Amount Retained		$8,139.03	
7.0	Retainage Released Through This Period:			$0.00
8.0	Amount Due This Period			$110,681.65

Note 1: At rate of 5% until Completed to Date equals 50% of current Contract Price and a rate of 0% thereafter.

SUBMITTED BY:
Name: Ryan Winge Date: 2/17/2020
Title: Project Manager
Contractor: Rachel Contracting, LLC
Signature:

RECOMMENDED BY:
Name: Scott Sobiech Date: 2/17/2020
Title: District Engineer
Engineer: Barr Engineering Company
Signature:

APPROVED BY:
Name: Dick Ward Date:
Title: President
Owner: Riley Purgatory Bluff Creek Watershed District

Signature:

Riley Creek Stabilization Project
Piley Purgatory Bluff Creek Watershed District
Summary of Work Completed Through January 31st, 2020- for Progress Payment Number 2

						(1) Total Completed Through This Period		Percent Complete	(2) Total Completed During Period 1		(3) Total Completed This Period	
1.04 Item	Description	Unit	Estimated Quantity	Unit Price	Extension	Quantity	Amount		Quantity	Amount	Quantity	Amount
A	Mobilization	L.S.	1	$ 132,210.00	$ 132,210.00	0.7	$92,547.00	70%	0.35	$46,273.50	0.35	$46,273.50
B	Control of Water	L.S.	1	$ 118,950.00	$ 118,950.00	0.55	$65,422.50	55%	0	$0.00	0.55	$65,422.50
C	Traffic Control	L.S.	1	$ 6,240.00	$ 6,240.00	0	$0.00	0%	0	$0.00	0	$0.00
D	Rock Construction Entrance	Each	2	$ 24,270.00	$ 48,540.00	0	$0.00	0%	0	$0.00	0	$0.00
E	Silt Fence, Type MS	L.F.	3,600	$ 4.20	$ 15,120.00	0	$0.00	0%	0	$0.00	0	$0.00
F	Sediment Control Log, Type Compost	L.F.	8,900	$ 4.80	$ 42,720.00	0	$0.00	0%	0	$0.00	0	$0.00
G	Floating Silt Curtain	Each	1	$ 1,390.00	$ 1,390.00	0.8	$1,112.00	80%	0	$0.00	0.8	$1,112.00
H	Inlet Protection	Each	6	$ 317.00	$ 1,902.00	0	$0.00	0%	0	$0.00	0	$0.00
I	Street Sweeping	L.S.	1	$ 7,170.00	$ 7,170.00	0.2	$1,434.00	20%	0	$0.00	0.2	$1,434.00
J	Temporary Stream Crossing	Each	1	$ 18,270.00	$ 18,270.00	0	$0.00	0%	0	$0.00	0	$0.00
K	Clearing and Grubbing (Medium Density)	Acre	3	$ 8,110.00	$ 25,952.00	0	$0.00	0%	0	$0.00	0	$0.00
L	Select Tree Removal and Salvage with Root Wad (8-12" Diameter)	Each	63	$ 156.50	$ 9,859.50	0	$0.00	0%	0	$0.00	0	$0.00
L	Select Tree Removal and Salvage with Root Wad (Greater than 12" Diameter)	Each	63	$ 197.00	$ 12,411.00	0	$0.00	0%	0	$0.00	0	$0.00
M	Channel Clean-up, Debris Removal and Disposal	L.S.	1	$ 4,530.00	$ 4,530.00	0.5	$2,265.00	50%	0	$0.00	0.5	$2,265.00
N	Remove Storm Sewer (12" to 27" RCP and FES)	L.F.	93	$ 58.80	$ 5,468.40	0	$0.00	0%	0	$0.00	0	$0.00
O	Remove Storm Sewer Manhole (48" Diameter)	Each	2	$ 2,360.00	$ 4,720.00	0	$0.00	0%	0	$0.00	0	$0.00
P	Remove Bituminous Path	S.Y.	590	$ 8.60	$ 5,074.00	0	$0.00	0%	0	$0.00	0	$0.00
Q	Furnish & Install Manhole (48" Diameter)	Each	2	$ 5,780.00	$ 11,560.00	0	$0.00	0%	0	$0.00	0	$0.00
Q	Furnish & Install Manhole (60" Diameter)	Each	2	$ 8,040.00	$ 16,080.00	0	$0.00	0%	0	$0.00	0	$0.00
R	Connect to Existing Manhole	Each	1	$ 1,950.00	$ 1,950.00	0	$0.00	0%	0	$0.00	0	$0.00
S	Salvage and Install Manhole Casting	Each	2	$ 710.00	$ 1,420.00	0	$0.00	0%	0	$0.00	0	$0.00
T	Furnish & Install Manhole Casting	Each	2	$ 849.00	$ 1,698.00	0	$0.00	0%	0	$0.00	0	$0.00
U	Furnish & Install Storm Sewer, 15" RC Pipe Class III	L.F.	59	$ 100.00	$ 5,900.00	0	$0.00	0%	0	$0.00	0	$0.00
V	Furnish & Install Storm Sewer, 15" RC FES	Each	2	$ 2,890.00	$ 5,780.00	0	$0.00	0%	0	$0.00	0	$0.00
U	Furnish & Install Storm Sewer, 27" RC Pipe Class III	L.F.	27	$ 159.00	$ 4,293.00	0	$0.00	0%	0	$0.00	0	$0.00
V	Furnish & Install Storm Sewer, 27" RC FES	Each	1	$ 3,980.00	$ 3,980.00	0	$0.00	0%	0	$0.00	0	$0.00
U	Furnish & Install Storm Sewer, 36" RC Pipe Class III	L.F.	27	$ 237.00	$ 6,399.00	0	$0.00	0%	0	$0.00	0	$0.00
V	Furnish & Install Storm Sewer, 36" RC FES	Each	2	$ 6,780.00	$ 13,560.00	0	$0.00	0%	0	$0.00	0	$0.00
W	Common Excavation (P)	C.Y.	5,650	$ 10.70	$ 60,455.00	0	$0.00	0%	0	$0.00	0	$0.00
X	Grading (P)	S.Y.	23,480	$ 1.70	$ 39,916.00	0	$0.00	0%	0	$0.00	0	$0.00
Y	Furnish & Install Class II Fieldstone Riprap	Ton	3,320	$ 54.90	$ 182,268.00	0	$0.00	0%	0	$0.00	0	$0.00
Y	Furnish & Install Class III Fieldstone Riprap	Ton	230	$ 54.90	$ 12,627.00	0	$0.00	0%	0	$0.00	0	$0.00
Z	Furnish & Install Granular Filter Aggregate	Ton	2,120	$ 51.30	$ 108,756.00	0	$0.00	0%	0	$0.00	0	$0.00
AA	Furnish & Install Boulder Vane, no Footers	L.F.	560	$ 73.30	$ 41,048.00	0	$0.00	0%	0	$0.00	0	$0.00
AA	Furnish & Install Boulder Vane, with Footers	L.F.	1,230	$ 73.30	$ 90,159.00	0	$0.00	0%	0	$0.00	0	$0.00
BB	Install Log Vane	Each	54	$ 262.50	$ 14,175.00	0	$0.00	0%	0	$0.00	0	$0.00
CC	Install Toe Wood	L.F.	540	$ 45.80	$ 24,732.00	0	$0.00	0%	0	$0.00	0	$0.00
DD	Furnish & Install VRSS	L.F.	4,190	$ 27.70	$ 116,063.00	0	$0.00	0%	0	$0.00	0	$0.00
EE	Import Topsoil	C.Y.	2,110	$ 18.30	$ 38,613.00	0	$0.00	0%	0	$0.00	0	$0.00
FF	Seed Area	Acre	5	$ 637.00	$ 3,325.14	0	$0.00	0%	0	$0.00	0	$0.00
GG	Cover Crop Seed Mix	Lbs.	140	$ 1.70	$ 238.00	0	$0.00	0%	0	$0.00	0	$0.00
GG	Floodplain Forest Seed Mix	Lbs.	80	$ 86.90	$ 6,952.00	0	$0.00	0%	0	$0.00	0	$0.00
GG	Upland Construction Seed Mix	Lbs.	17	$ -	$ -	0	$0.00	0%	0	$0.00	0	$0.00
HH	Plant Shrub, Bare Root	Each	1,934	$ 11.00	$ 21,274.00	0	$0.00	0%	0	$0.00	0	$0.00
HH	Plant Shrub, #2 Container	Each	309	$ 64.30	$ 19,868.70	0	$0.00	0%	0	$0.00	0	$0.00
II	Plant Tree, Bare Root	Each	43	$ 41.10	$ 1,767.30	0	$0.00	0%	0	$0.00	0	$0.00
II	Plant Tree, 2.5" Ball & Burlap	Each	53	$ 666.00	$ 35,298.00	0	$0.00	0%	0	$0.00	0	$0.00
JJ	Furnish & Install Erosion Control Blanket Category 3N	S.Y.	20,000	$ 2.40	$ 48,000.00	0	$0.00	0%	0	$0.00	0	$0.00
KK	Furnish & Install Straw Mulch	S.Y.	5,220	$ 2.60	$ 13,572.00	0	$0.00	0%	0	$0.00	0	$0.00
LL	Bituminous Path	S.Y.	590	$ 60.70	$ 35,813.00	0	$0.00	0%	0	$0.00	0	$0.00
MM	Furnish & Install Buffer Markers	Each	76	$ 227.50	$ 17,290.00	0	$0.00	0%	0	$0.00	0	$0.00
NN	Vegetation Establishment and Warranty Period (Three Years)	L.S.	1	$ 14,590.00	$ 14,590.00	0	$0.00	0%	0	$0.00	0	$0.00
PP	Import Boulders	Ton	750	$ 67.40	$ 50,550.00	0	$0.00	0%	0	$0.00	0	$0.00
				Total Base Bid:	**$ 1,530,497.04**							

Bid Add Alternate

						(1) Total Completed Through This Period		Percent Complete	(4) Total Completed During Period 1		(5) Total Completed This Period	
Item	Description	Unit	Estimated Quantity	Unit Price	Extension	Quantity	Amount		Quantity	Amount	Quantity	Amount
OO	Pre-Fabricated Pedestrian Birdge and Footings	L.S.	1	$ 120,750.00	**$ 120,750.00**	0	$0.00	0%	0	$0.00	0	$0.00
					Total Including Alternate:	**$ 1,651,247.04**	**$162,780.50**			**$46,273.50**		**$116,507.00**

[RPBCWD letterhead]

March 5, 2020

Denise Collins, Court Administrator
Office of Administrative Hearings
600 North Robert Street
P.O. Box 64620
St. Paul, Minnesota 55164-0620

Submitted via web: minnesotaoah.granicusideas.com

Re: Planned Amendments to Rules Governing Water Quality Fees, *Minnesota Rules*, Chapters 7002 and 7083; Revisor's ID Number R-4476; OAH Docket No. 65-9003-34479

Ms. Collins,

Riley-Purgatory-Bluff Creek Watershed District is a special purposes local unit of government with purposes and powers specified in Minnesota Statutes chapters 103B and 103D. RPBCWD pursues water-resources protection and improvement and flood risk mitigation strategies in accordance with its watershed-management plan *Planning for the Next Ten Years 2018-2027*. Among the water-quality goal statements in RPBCWD's plan is a commitment to "assist and cooperate" with cities in the watershed, the Minnesota Pollution Control Agency and other state agencies and stakeholders in "implementing projects or other management actions based on the … Twin Cities Metro Chloride TMDL."[1] In keeping with this explicit strategy, RPBCWD was among the first local governmental entities in the state to adopt a stormwater-management regulatory requirement aimed at reducing chloride contamination in watershed creeks, wetlands and lakes.[2] In short, RPBCWD is keenly aware of and concerned about the threat posed to water resources from the overuse of chloride (salt) compounds for deicing on impervious surfaces.

With regard to the above-captioned agency request for comments, RPBCWD strongly supports establishment of a program-fee structure that facilitates MPCA's provision of the Smart Salting education and certification program for commercial applicators. RPBCWD's support is contingent on amendment of state law to provide liability limitations for those having received such certification. That is, no fee should be charged for commercial salt applicators unless and until a tort-liability limitation for certified applicators is incorporated into state law, as provided in bills presently pending in the Legislature: House File 1502 and Senate File 1667. RPBCWD strongly encourages the agency to implement both of these key upgrades to its current chloride program as soon as possible.

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1 Plan p. 3-9, *available at* http://rpbcwd.org/application/files/5915/3210/6194/3.0_Goals_and_Strategies.pdf.

2 *See* Rule J – Stormwater Management, section 3.8, *available at* http://www.rpbcwd.org/application/files/5115/7781/4335/Rule_J-_Stormwater_Management_12.19.pdf.

In response to specific questions posed by the agency in its request for comments:

1. RPBCWD does foresee that the cost of complying with the proposed rule revision will exceed $25,000. But until details on the structure of the chloride-program fee are released, RPBCWD cannot make a definitive statement on this point.
2. RPBCWD may need to adopt an amendment to its Stormwater Management Rule to conform to a new fee structure established by MPCA. Until details on the structure of the chloride-program fee are released, though, RPBCWD cannot make a definitive statement on this point.

RPBCWD appreciates the opportunity to comment, and stands by to provide any further notes or feedback the agency may find useful in pursuing solutions to the critical water-resources problem of chloride contamination.

Sincerely,

Dick Ward
President

c/ Katie Smith, Assistant Division Director, MPCA (via email)

resourceful. naturally.
engineering and environmental consultants

BARR

February 27, 2020

Mr. Phil Olson
City Engineer
City of Minnetonka
14600 Minnetonka Boulevard
Minnetonka, MN 55345

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

Re: Atlas 14 Model Updates- Scope of Work for Portion of Purgatory Creek watershed tributary to Minnetonka

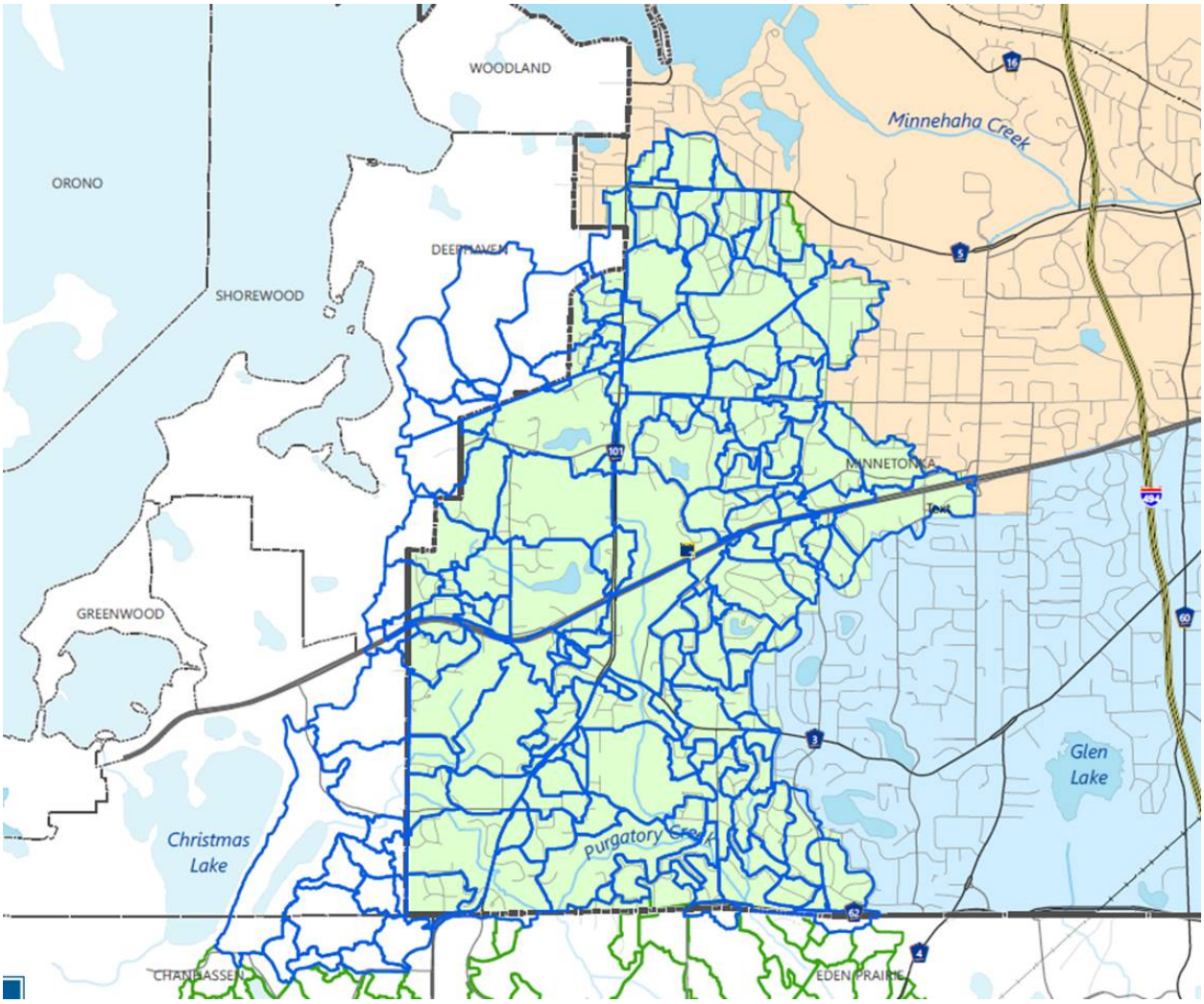
Dear Mr. Olson and Ms. Bleser:

As discussed during our February 21, 2020 meeting, the City of Minnetonka (City) plans to develop an updated stormwater model for the portion of the city within the Purgatory Creek watershed in 2020. The City is requesting to use the stormwater model developed by the Riley-Purgatory-Bluff Creek Watershed District (District) as a starting point, adding additional detail and conducting additional QA/QC in the portions of the model in Minnetonka, as appropriate. The updated model will serve as a tool for the City to establish updated flood management elevations and evaluate flood issues and potential mitigation measures.

During our meeting, it was discussed that the level of detail in the portion of the District's existing PCSWMM model within the cities of Shorewood and Deephaven is courser than desired due to limitations in available data at the time of model development. It was also discussed that the cities of Shorewood and Deephaven have indicated it would be beneficial if the District's stormwater model included additional detail and could be used to better identify flood-risk areas that are not adjacent to the creek, but do not have funds available for such an effort. More detailed modeling of portions of Shorewood and Deephaven would also benefit the City of Minnetonka through improved estimates of flows entering the city at various locations (see Figure 1). Given the mutual interests in updating the portions of the Purgatory Creek model upstream of the city of Minnetonka (primarily subwatersheds within Shorewood and Deephaven), a potential partnership between the City and District was discussed, in which the City would consider including the model updates in their Purgatory Creek modeling scope of work and the District would consider providing funding for updating the modeling for these upstream areas. A proposed scope

of work and estimated cost are summarized below for consideration by the City and District. Details regarding schedule can be discussed further. The City intends to complete updates to the Purgatory Creek stormwater modeling by the end of 2020.

Figure 1. Purgatory Creek subwatersheds (shown in blue). As shown, there are numerous locations where drainage from Shorewood and Deephaven flows into the city of Minnetonka.



Proposed Work Scope

Below is a proposed scope of work to add additional detail to the District's model in the portion of the Purgatory Creek watershed that is upstream of the city of Minnetonka (primarily Shorewood and Deephaven).

Task 1. Prepare Storm Sewer Information for areas outside of Minnetonka

It is our understanding that storm sewer information for the trunk storm sewer system in the portions of the Purgatory Creek watershed in Shorewood and Deephaven will be surveyed/collected by the District. It

is assumed that this data will be collected using GPS equipment and provided in a text file format, to include x, y, and z coordinates with pipe sizes and types included in descriptor fields. Task 1 includes converting the provided data into GIS nodes and links for the trunk storm sewer system (the portion of the storm sewer that connects waterbodies and low-areas).

Task 2. Stormwater Model Update

Task 2 includes updating the District's stormwater model of Purgatory Creek with more detailed subwatershed and storm sewer information to improve model resolution. The following updates will be made to the model:

- Review and Update Subwatershed Divides. The subwatershed divides should characterize the existing drainage patterns of the watershed. Subwatershed divides for the portion of Purgatory Creek watershed upstream of the city of Minnetonka (excluding Eden Prairie) will be updated based on the 1-meter LiDAR data collected by the MnDNR in 2011 and available storm sewer information. In some cases, existing subwatersheds will be subdivided to small depressions and ponds. It is assumed that Barr will not collect survey data for this update.
- Update storage curves. The storage curve (i.e. elevation-surface area relationship) for each pond, wetland, and lake should accurately characterize the available storage volume below the 100-year water surface elevation. The storage curves for the subwatersheds within the study area will be updated to characterize available storage capacity based on the 2011 LiDAR provided by the MnDNR.
- Storm sewer. The storm sewer information included in the model will be limited to the storm sewer that serves as the trunk storm sewer network, connecting modeled low-areas, ponds, wetlands, lakes, and creeks. The storm sewer information compiled in GIS (Task 1) will be imported into the stormwater model.
- Overland drainage paths. During large flood events water may overtop roadways or breakout of the creek and flow through the floodplain, back yards, streets, and in some cases, water can flow in a different direction than the main conveyance channel. It is assumed that overland flow paths will be defined based on available topographic data (i.e. LiDAR) and additional survey data will not be collected.
- Hydrologic parameters. Hydrologic parameters will be input consistent with calibrated parameters used for the rest of the Purgatory Creek watershed. Model parameters that will be adjusted include:
    - Percent Impervious – Recently, the University of Minnesota published a detailed impervious land cover dataset for the Twin Cities area. The dataset delineates building roofs, roads, and other impervious surfaces, which can be used to improve the estimate of impervious cover within the District's stormwater model. Improved definition of the impervious cover is of critical importance when increasing the resolution of a stormwater model.
    - Overland Roughness – Overland flow is surface runoff that occurs as sheet flow prior to concentrating into defined channels. The overland roughness parameter accounts for surface friction associated with overland flow and should reflect the existing land cover within the watershed.
    - Infiltration Parameters – Infiltration is the movement of water into the soil surface and will

vary with time. The Horton infiltration equation is the method used to simulate infiltration from subwatersheds in the model. Model input parameters used in the Horton infiltration equation will be reviewed to verify that they accurately reflect the infiltration capacity of soils within the watershed.

Project Budget

The estimated costs for completing the scope of work described above is summarized in Table 1.

Table 1. Estimated costs.

Task	Anticipated Budget[1]
Task 1. Prepare Storm Sewer Information[2]	$6,000
Task 2. Stormwater Model Update – Portion of Purgatory Creek Watershed Tributary to City of Minnetonka	$9,000
TOTAL	**$15,000**

1- Anticipated budget assumes additional survey of any missing data after receiving Task 1 survey data from the District is not required.
2- Storm sewer survey is only required for areas outside of Minnetonka.

We appreciate the opportunity to submit this scope of work for consideration and look forward to discussing this partnership opportunity further. Please contact me with any questions at (952) 832-2785.

Sincerely,

Janna Kieffer, PE
Vice President

REDPATH AND COMPANY

February 26, 2020

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

Dear Claire:

Enclosed please find the checks and Treasurer's Report for Riley Purgatory Bluff Creek Watershed District for the one month ending January 31, 2020.

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

Sincerely,

REDPATH AND COMPANY, LTD.

Mark C. Gibbs, CPA
Enclosure

REDPATH AND COMPANY

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

Accountant's Opinion

The Riley Purgatory Bluff Creek Watershed District is responsible for the accompanying January 31, 2020 Treasurer's Report in the prescribed form. We have performed a compilation engagement in accordance with the Statements on Standards for Accounting and Review promulgated by the Accounting and Review Services Committee of AICPA. We did not audit or review the Treasurer's Report nor were we required to perform any procedures to verify the accuracy or completeness of the information provided by the Riley Purgatory Bluff Creek Watershed District. Accordingly, we do not express an opinion, a conclusion, nor provide any form of assurance on the Treasurer's Report.

Reporting Process

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

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

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

Redpath and Company, Ltd.

REDPATH AND COMPANY, LTD.
St. Paul, Minnesota
February 26, 2020

RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT

Treasurers Report

January 31, 2020

REPORT INDEX

RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT
Cash Disbursements
January 31, 2020

Accounts Payable:

Check #	Payee	Amount	
5108	Barr Engineering	55,363.27	
5109	CenterPoint Energy	564.16	
5110	CenturyLink	199.20	
5111	City of Chanhassen	43.28	
5111	City of Chanhassen	25,000.00	2019
5112	City of Eden Prairie	5,000.00	
5112	City of Eden Prairie	25,000.00	2019
5113	Coverall of the Twin Cities	316.76	
5114	CSM Financial, LLC	7,492.38	
5115	ECM Publishers	333.20	
5116	Fortin Consulting, Inc.	1,500.00	
5117	HDR Engineering, Inc.	711.92	2019
5118	HealthPartners	6,180.98	
5119	Amy Herbert, LLC	1,371.32	
5120	Olivia R. Holstine	269.04	
5121	Iron Mountain	129.95	
5122	ISG - Accounts Receivable	2,516.25	
5123	KTJ 315, LLC	107,840.00	
5124	MAWD	7,500.00	
5125	Metro Sales, Inc.	319.17	
5126	Metro Watershed Partners	3,000.00	
5127	North American Lake Mgmt. Society	1,500.00	
5128	Dorothy E. Pedersen	2,671.44	2019
5129	Preserve Village, LLC	68,720.00	
5130	Principal Life Insurance Company	1,215.39	
5131	Purchase Power	265.61	
5132	Rachel Contracting, Inc.	110,681.65	
5133	Redpath & Company	3,137.63	
5134	RMB Environmental Laboratories, Inc.	2,386.00	
5135	Rosemount, Inc.	26,314.00	
5136	Smith Partners	9,230.15	
5137	Southwest News Media	502.93	
5138	SRF Consulting Group, Inc.	2,500.00	2019
5139	Natalie Stoneburner	249.64	
5140	Sunram Construction	6,540.96	
5141	Wenck, Inc.	19,162.03	
5142	Xcel Energy	687.49	
5143	Carver County	3,221.24	2019
5144	Wenck, Inc.	8,198.25	
5145	City of Eden Prairie	7,886.72	2019
5146	Olivia R. Holstine (February)	88.14	
5147	Larry Koch (February)	234.44	
	Total Accounts Payable:	**$526,044.59**	

RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT
Cash Disbursements
January 31, 2020

Payroll Disbursements:

Payroll Processing Fee	318.65
Employee Salaries	34,978.78
Employer Payroll Taxes	3,752.74
Employer Benefits (H.S.A. Match)	375.00
Employee Benefit Deductions	(294.10)
Staff Expense Reimbursements	512.45
PERA Match	2,694.44
Total Payroll Disbursements:	**$42,337.96**
VISA	7,102.38
Less VISA Credit Card - 2019 Expenses	(7,102.38)
Ck. #5123 - KTJ 315, LLC - Surety	(107,840.00)
Ck. #5129 - Preserve Village, LLC - Surety	(68,720.00)
Ck. #5135 - Rosemount, Inc. - Surety	(26,314.00)
January, 2020 Expenditures Paid 2/5/20:	24,715.27
Less February Expenses (Ck #5146 & 5147)	(322.58)
Less 2019 Expenses:	(66,991.32)
TOTAL DISBURSEMENTS:	**$322,909.92**

Memos
The 2020 mileage rate is .575 per mile. The 2019 rate was .58
Old National VISA will be paid on-line.

RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT
Fund Performance Analysis - Table 1
January 31, 2020

	2020 Budget	Fund Transfers	Revised 2020 Budget	Current Month	Year-to-Date	Year-to Date Percent of Budget
REVENUES						
Plan Implementation Levy	$3,703,000.00	-	$3,703,000.00	-	-	0.00%
Permit	25,000.00	-	25,000.00	3,050.00	3,050.00	12.20%
Grant Income	458,589.00	-	458,589.00	-	-	0.00%
Investment Income	75,000.00	-	75,000.00	8,014.91	8,014.91	10.69%
Past Levies	3,291,277.00	-	3,291,277.00	-	-	0.00%
Partner Funds	432,000.00	-	432,000.00	-	-	0.00%
TOTAL REVENUE	**$7,984,866.00**	-	**$7,984,866.00**	**$11,064.91**	**$11,064.91**	**0.14%**
EXPENDITURES						
Administration						
Accounting and Audit	$42,000.00	-	$42,000.00	$3,606.28	$3,606.28	8.59%
Advisory Committees	5,000.00	-	5,000.00	-	-	0.00%
Insurance and bonds	20,000.00	-	20,000.00	-	-	0.00%
Engineering Services	109,000.00	-	109,000.00	7,926.00	7,926.00	7.27%
Legal Services	84,000.00	-	84,000.00	6,578.32	6,578.32	7.83%
Manager Per Diem/Expense	20,000.00	-	20,000.00	255.06	255.06	1.28%
Dues and Publications	14,000.00	-	14,000.00	9,000.00	9,000.00	64.29%
Office Cost	150,000.00	-	150,000.00	17,027.66	17,027.66	11.35%
Permit Review and Inspection	135,000.00	-	135,000.00	14,311.40	14,311.40	10.60%
Permit and Grant Database	39,900.00	-	39,900.00	-	-	0.00%
Recording Services	17,000.00	-	17,000.00	1,371.32	1,371.32	8.07%
Staff Cost	600,000.00	-	600,000.00	46,344.05	46,344.05	7.72%
Subtotal	**$1,235,900.00**	-	**$1,235,900.00**	**$106,420.09**	**$106,420.09**	**8.61%**
Programs and Projects						
District Wide						
10-year Management Plan	$5,000.00	-	$5,000.00	$2,097.96	$2,097.96	41.96%
AIS Inspection and early response	85,000.00	-	85,000.00	763.14	763.14	0.90%
Cost-share	398,723.00	-	398,723.00	1,040.36	1,040.36	0.26%
Data Collection and Monitoring	192,000.00	-	192,000.00	8,902.55	8,902.55	4.64%
Community Resiliency	63,130.00	-	63,130.00	1,669.00	1,669.00	2.64%
Education and Outreach	123,000.00	-	123,000.00	12,023.05	12,023.05	9.77%
Plant Restoration - U of M	58,762.00	-	58,762.00	-	-	0.00%
Repair and Maintenance Fund *	267,730.00	-	267,730.00	1,227.00	1,227.00	0.46%
Wetland Management*	165,685.00	-	165,685.00	900.29	900.29	0.54%
Groundwater Conservation*	179,750.00	-	179,750.00	-	-	0.00%
Lake Vegetation Implementation	125,937.00	-	125,937.00	-	-	0.00%
Opportunity Project*	287,501.00	-	287,501.00	2,516.25	2,516.25	0.88%
Stormwater Ponds - U of M	79,985.00	-	79,985.00	10,930.96	10,930.96	13.67%
Hennepin County Chloride Initiative	114,830.00	-	114,830.00	1,656.80	1,656.80	1.44%
Lower Minnesota Chloride Cost-Share	217,209.00	-	217,209.00	-	-	0.00%
Subtotal	**$2,364,242.00**	-	**$2,364,242.00**	**$43,727.36**	**$43,727.36**	**1.85%**
Bluff Creek						
Bluff Creek Tributary*	65,037.00	-	65,037.00	7,853.46	7,853.46	12.08%
Wetland Restoration at Pioneer	12,724.00	-	12,724.00	6,036.28	6,036.28	47.44%
Subtotal	**$77,761.00**	-	77,761.00	**$13,889.74**	**$13,889.74**	**17.86%**
Riley Creek						
Lake Riley - Alum Treatment*	305,000.00	-	305,000.00		-	0.00%
Rice Marsh Lake in-lake phosphorus load	60,568.00	-	60,568.00	1,049.05	1,049.05	1.73%
Rice Marsh Lake Water Quality Improvement Phase 1	300,000.00	-	300,000.00	-	-	0.00%
Riley Creek Restoration (Reach E and D3)	1,592,925.00	-	1,592,925.00	119,935.00	119,935.00	7.53%
Lake Riley & Rice Marsh Lake Subwatershed Assessment	29,961.00	-	29,961.00	11,797.84	11,797.84	39.38%
Upper Riley Creek Stabilization	1,100,000.00	-	1,100,000.00	-	-	0.00%
Middle Rice Creek	-	18,900.00	18,900.00	5,037.45	5,037.45	26.65%
Lake Ann Wetland Restoration	150,000.00	-	150,000.00	-	-	0.00%
St. Hubert Water Quality Project	-	-	-	-	-	---
Subtotal	**$3,538,454.00**	**$18,900.00**	3,557,354.00	**$137,819.34**	**$137,819.34**	**3.87%**
Purgatory Creek						
Purgatory Creek Rec Area- Berm/retention area - feasibility/design	50,000.00	-	50,000.00	366.50	366.50	0.73%
Lotus Lake in-lake phosphorus load control	104,106.00	-	104,106.00	1,049.05	1,049.05	1.01%
Silver Lake Restoration - Feasibility Phase 1	255,931.00	-	255,931.00	4,414.00	4,414.00	1.72%
Scenic Heights	55,459.00	-	55,459.00	493.50	493.50	0.89%
Hyland Lake in-lake phosphorus load control	1,388.00	-	1,388.00	-	-	0.00%
Duck Lake watershed load	125,422.00	-	125,422.00	1,632.50	1,632.50	1.30%
Michell Lake Subwatershed Assessment	46,203.00	-	46,203.00	13,097.84	13,097.84	28.35%
Lotus Lake Kerber Pond	30,000.00	-	30,000.00	-	-	0.00%
Subtotal	**$668,509.00**	**$0.00**	668,509.00	**$21,053.39**	**$21,053.39**	3.15%
Reserve	**$100,000.00**	**($18,900.00)**	81,100.00	**$0.00**	-	0.00%
TOTAL EXPENDITURE	**$7,984,866.00**	**$0.00**	**$7,984,866.00**	**$322,909.92**	**$322,909.92**	**4.04%**
EXCESS REVENUES OVER (UNDER) EXPENDITURES	**$0.00**	**$0.00**	**$0.00**	**($311,845.01)**	**($311,845.01)**	

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

RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT
Muti-Year Project Performance Analysis - Table 2
January 31, 2020

		FUNDING SOURCE			Month Ended	Year	Lifetime	
	Total Project	District funds	Partner Fund	Grants	01/31/20	To-Date	Costs	Remaining
Programs and Projects								
District Wide								
Community Resiliency	**98,000.00**	98,000.00	-	-	1,669.00	1,669.00	36,538.50	61,461.50
Repair and Maintenance Fund	**277,005.00**	277,005.00	-	-	1,227.00	1,227.00	35,502.50	241,502.50
Wetland Management	**200,000.00**	200,000.00	-	-	900.29	900.29	60,215.35	139,784.65
Groundwater Conservation	**180,000.00**	180,000.00	-	-	-	-	250.00	179,750.00
Opportunity Project*	**300,000.00**	300,000.00	-	-	2,516.25	2,516.25	15,015.25	284,984.75
Stormwater Ponds - U of M	**106,092.00**	64,092.00	42,000.00	-	10,930.96	10,930.96	37,037.97	69,054.03
Hennepin County Chloride Initiative	**120,800.00**	19,000.00	-	101,800.00	1,656.80	1,656.80	7,627.11	113,172.89
Lower Minnesota Chloride Cost-Share	**217,209.00**	20,000.00	-	197,209.00	-	-	-	217,209.00
Subtotal	**$1,499,106.00**	**$1,158,097.00**	**$42,000.00**	**$299,009.00**	**$18,900.30**	**$18,900.30**	**$192,186.68**	**1,306,919.32**
Bluff Creek								
Bluff Creek Tributary*	**292,362.00**	242,362.00	50,000.00	-	7,853.46	7,853.46	329,566.24	(37,204.24)
Wetland Restoration at Pioneer	**561,870.00**	450,000.00	-	111,870.00	6,036.28	6,036.28	555,184.30	6,685.70
Subtotal	**$854,232.00**	**$692,362.00**	**$50,000.00**	**$111,870.00**	**$13,889.74**	**$13,889.74**	**$884,750.54**	**($30,518.54)**
Riley Creek								
Lake Riley - Alum Treatment 1st dose *	**560,000.00**	560,000.00	-	-	-	-	254,999.83	305,000.17
Rice Marsh Lake in-lake phosphorus load	**150,000.00**	150,000.00	-	-	1,049.05	1,049.05	90,481.86	59,518.14
Rice Marsh WQ 1	**300,000.00**	300,000.00	-	-	-	-	-	300,000.00
Riley Creek Restoration (Reach E and D3) *	**1,565,000.00**	1,265,000.00	300,000.00	-	119,935.00	119,935.00	388,067.27	1,176,932.73
Lake Riley & Rice Marsh Lake Subwatershed Assessment	**72,500.00**	12,500.00	5,000.00	55,000.00	11,797.84	11,797.84	54,336.81	18,163.19
Upper Riley Creek Stabilization	**450,000.00**	1,100,000.00	0.00	-	-	-	-	450,000.00
Subtotal	**$3,097,500.00**	**$3,387,500.00**	**$305,000.00**	**$55,000.00**	**$132,781.89**	**$132,781.89**	**$787,885.77**	**$2,309,614.23**
Purgatory Creek								
Purgatory Creek Rec Area- Berm/retention area - feasibility/design	**50,000.00**	50,000.00	-	-	366.50	366.50	366.50	49,633.50
Lotus Lake in-lake phosphorus load control	**345,000.00**	345,000.00	-	-	1,049.05	1,049.05	241,942.39	103,057.61
Silver Lake Restoration Project WQ1	**268,013.00**	268,013.00	-	-	4,414.00	4,414.00	16,495.83	251,517.17
Scenic Heights	**260,000.00**	165,000.00	45,000.00	50,000.00	493.50	493.50	205,034.75	54,965.25
Hyland Lake Internal Load	**150,000.00**	130,000.00	20,000.00	-	-	-	128,612.41	21,387.59
Duck Lake watershed load	**220,000.00**	220,000.00	0.00	0.00	1,632.50	1,632.50	96,209.52	123,790.48
Mitchell Lake Subwatershed Assessment	**87,500.00**	12,500.00	5,000.00	70,000.00	13,097.84	13,097.84	54,394.48	33,105.52
Subtotal	**$1,380,513.00**	**$1,190,513.00**	**$70,000.00**	**$120,000.00**	**$21,053.39**	**$21,053.39**	**$743,055.88**	**$637,457.12**
Total Multi-Year Project Costs	**$6,831,351.00**	**$6,428,472.00**	**$467,000.00**	**$585,879.00**	**$186,625.32**	**$186,625.32**	**$2,607,878.87**	**$4,223,472.13**

Riley Purgatory Bluff Creek Watershed District
Balance Sheet
As of January 31, 2020

ASSETS

Current Assets

General Checking-Old National	$1,738,343.25	
Checking-Old National/BMW	1,373,256.03	
Investments-Standing Cash	524,051.24	
Investments-Wells Fargo	3,916,144.24	
Accrued Investment Interest	21,874.72	
Accounts Receivable	270.00	
Due From Other Governments	105,021.73	
Taxes Receivable-Delinquent	36,003.36	
Pre-Paid Expense	24,742.32	
Security Deposits	7,244.00	
Total Current Assets:		**$7,746,950.89**

LIABILITIES AND CAPITAL

Current Liabilities

Accounts Payable	$774,471.75	
Retainage Payable	12,521.39	
Salaries Payable	20,455.28	
Permits & Sureties Payable	706,371.00	
Deferred Revenue	36,003.36	
Total Current Liabilities:		**$1,549,822.78**

Capital

Fund Balance-General	$5,166,684.23	
Carryover - 2019	$1,342,288.89	
Net Income	(311,845.01)	
Total Capital		**$6,197,128.11**
Total Liabilities & Capital		**$7,746,950.89**

RILEY PURGTORY BLUFF CREEK WATERSHED DISTRICT
OLD NATIONAL BANK VISA ACTIVITY
JANUARY 31, 2020

DATE	PURCHASED FROM	AMOUNT	DESCRIPTION	ACCOUNT #	RECEIPT
01/21/20	Verizon	375.53	Phone Bill	10-00-4240	Y
01/23/20	Office Depot	99.36	Office Expense	10-00-4260	Y
01/24/20	Kowalski's	24.26	Office Expense	10-00-4260	Y
01/27/20	Randy's Sanitation	100.33	Trash/Recycling	10-00-4215	Y
01/27/20	Kowalski's	40.43	Citizen's Adivsory Committee	10-00-4800	Y
01/27/20	Pizza Luce	97.05	Citizen's Adivsory Committee	10-00-4800	Y
01/28/20	Amazon	69.00	Office Expense	10-00-4200	Y
01/30/20	Kowalski's	214.94	Manager Expense	10-00-4010	Y
02/02/20	Amazon	342.02	Office Expense	10-00-4260	Y
02/04/20	Lunds & Byerly's	47.12	Manager Expense	10-00-4010	Y
02/04/20	Adobe Acrobat	16.10	Office Expense	10-00-4203	Y
		$1,426.14	**General Administration Total**		
01/23/20	Kowalski's	18.97	Education & Outreach	20-08-4265	Y
01/24/20	Brueggers Bagels	39.47	Data Collection Expense	20-05-4260	Y
01/26/20	Hologram	100.00	Data Collection Software	20-05-4260	Y
01/27/20	Shakopee Small Engine	146.56	Data Collection Expense	20-05-4260	Y
01/27/20	Hach Company	209.73	Data Collection Expense	20-05-4260	Y
01/29/20	Wild Ones	74.56	Cost Share Expense	20-03-4275	Y
01/30/20	Hoops & Threads	163.21	Data Collection Expense	20-05-4260	Y
01/31/20	Hach Company	137.16	Data Collection Expense	20-05-4650	Y
02/01/20	Amazon	127.73	Education & Outreach	20-08-4275	Y
02/04/20	The Home Depot	29.48	Education & Outreach	20-08-4260	Y
02/06/20	Menards	5.78	Data Collection Expense	20-05-4260	Y
02/07/20	Amazon	516.74	Data Collection Expense	20-05-4260	Y
02/08/20	Amazon	158.95	Data Collection Expense	20-05-4260	Y
		$1,728.34	**District-Wide Total**		
		$3,154.48	**GRAND TOTAL**		

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

UPDATED 2/25/20

	2019 Budget	Fund Transfers	Revised 2019 Budget	Current Month	Year-to-Date	Year-to Date Percent of Budget
REVENUES						
Plan Implementation Levy	$3,602,500.00	-	$3,602,500.00	1,735,872.48	3,581,485.08	99.42%
Minnesota Market Value Credit	-	-	-	35.20	57.61	---
Permit	50,000.00	-	50,000.00	3,950.00	44,343.50	88.69%
Grant Income	708,079.00	-	708,079.00	86,000.00	591,609.57	83.55%
Investment Income	35,000.00	-	35,000.00	5,894.08	109,652.44	313.29%
Miscellaneous Income	-	-	-	3,028.00	4,530.65	---
Past Levies	2,511,789.00	-	2,511,789.00	-	-	0.00%
Partner Funds	432,000.00	-	432,000.00	14,000.00	49,000.00	11.34%
TOTAL REVENUE	**$7,339,368.00**	**$0.00**	**$7,339,368.00**	**$1,848,779.76**	**$4,380,678.85**	**59.69%**
EXPENDITURES						
Administration						
Accounting and Audit	42,000.00	-	42,000.00	2,553.36	43,195.09	102.85%
Advisory Committees	5,000.00	-	5,000.00	229.78	1,958.46	39.17%
Insurance and bonds	20,000.00	-	20,000.00	(4,616.00)	16,186.00	80.93%
Professional Services	-	6,524.80	6,524.80	-	6,524.80	---
Engineering Services	106,000.00	-	106,000.00	8,619.00	106,311.70	100.29%
Legal Services	78,000.00	-	78,000.00	8,591.12	70,428.61	90.29%
Manager Per Diem/Expense	20,000.00	1,756.79	21,756.79	8,654.06	25,122.29	115.47%
Dues and Publications	12,000.00	1,678.08	13,678.08	1,233.00	14,911.08	109.01%
Office Cost	144,000.00	-	144,000.00	(10,891.12)	141,564.03	98.31%
Permit Review and Inspection	135,000.00	25,543.69	160,543.69	9,221.34	160,543.69	100.00%
Permit and Grant Database	-	39,900.00	39,900.00	-	-	0.00%
Recording Services	10,000.00	-	10,000.00	(1,021.00)	9,390.66	93.91%
Staff Cost	550,000.00	-	550,000.00	29,477.40	546,525.46	99.37%
Subtotal	**$1,122,000.00**	**$75,403.36**	**$1,197,403.36**	**$52,050.94**	**$1,142,661.87**	**95.43%**
Programs and Projects						
District Wide						
10-year Management Plan	5,000.00	26,353.11	31,353.11	4,517.24	31,353.11	100.00%
AIS Inspection and early response	75,000.00	-	75,000.00	57,886.72	64,088.03	85.45%
Cost-share	267,193.00	-	267,193.00	5,491.44	68,469.49	25.63%
Creek Restoration Action Strategies Phase	-	-	-	-	-	---
Data Collection and Monitoring	186,000.00	12,009.60	198,009.60	19,200.69	203,570.37	102.81%
District Wide Floodplain Evaluation - Atlas 14/SMM model	30,000.00	18,000.00	48,000.00	3,527.00	34,869.50	72.64%
Education and Outreach	119,000.00	-	119,000.00	173.12	100,445.41	84.41%
Plant Restoration - U of M	42,000.00	-	42,000.00	-	25,238.45	60.09%
Repair and Maintenance Fund *	177,005.00	-	177,005.00	1,015.00	9,275.50	5.24%
Wetland Management*	145,272.00	-	145,272.00	5,120.75	29,586.75	20.37%
District Groundwater Assessment	-	-	-	-	-	---
Groundwater Conservation*	130,000.00	-	130,000.00	-	250.00	0.19%
Lake Vegetation Implementation	75,000.00	-	75,000.00	9,189.23	24,062.99	32.08%
Opportunity Project*	200,000.00	-	200,000.00	2,500.00	12,499.00	6.25%
TMDL - MPCA	10,000.00	-	10,000.00	-	-	0.00%
Stormwater Ponds - U of M	86,092.00	-	86,092.00	-	26,107.01	30.32%
Hennepin County Chloride Initiative	120,800.00	-	120,800.00	1,142.06	5,970.31	4.94%
Lower Minnesota Chloride Cost-Share	217,209.00	-	217,209.00	-	-	0.00%
Subtotal	**$1,885,571.00**	**$56,362.71**	**$1,941,933.71**	**$109,763.25**	**$635,785.92**	**32.74%**
Bluff Creek						
Bluff Creek Tributary*	291,091.00	-	291,091.00	108,818.35	226,053.24	77.66%
Chanhassen High School *	41,905.00	-	41,905.00	(2,000.00)	1,609.50	3.84%
Wetland Restoration at Pioneer	561,870.00	-	561,870.00	3,944.22	549,146.02	97.74%
Subtotal	**$894,866.00**	**$0.00**	**$894,866.00**	**$110,762.57**	**$776,808.76**	**86.81%**
Riley Creek						
Lake Riley - Alum Treatment*	5,000.00	-	5,000.00	-	-	0.00%
Lake Susan Water Quality Improvement Phase 2 *	13,420.00	10,032.26	23,452.26	(11,844.50)	11,495.26	49.02%
Rice Marsh Lake in-lake phosphorus load	73,983.00	-	73,983.00	-	13,414.87	18.13%
Rice Marsh Lake Water Quality Improvement Phase 1	150,000.00	-	150,000.00	-	-	0.00%
Riley Creek Restoration (Reach E and D3)	1,680,562.00	-	1,680,562.00	50,801.80	87,637.12	5.21%
Lake Riley & Rice Marsh Lake Subwatershed Assessment	72,500.00	-	72,500.00	4,858.80	42,538.97	58.67%
Upper Riley Creek Stabilization	425,000.00	-	425,000.00	-	-	0.00%
Subtotal	**$2,420,465.00**	**$10,032.26**	**$2,430,497.26**	**$43,816.10**	**$155,086.22**	**6.38%**
Purgatory Creek						
Purgatory Creek Rec Area- Berm/retention area - feasibility/design	50,000.00	-	50,000.00	-	-	0.00%
Lotus Lake in-lake phosphorus load control	105,772.00	-	105,772.00	-	1,666.30	1.58%
Purgatory Creek at 101	-	-	-	-	90.00	---
Silver Lake Restoration - Feasibility Phase 1	168,013.00	-	168,013.00	2,100.00	12,081.83	7.19%
Scenic Heights	111,226.00	-	111,226.00	(9,760.38)	55,767.49	50.14%
Hyland Lake in-lake phosphorus load control	120,000.00	-	120,000.00	-	128,612.41	107.18%
Mitchell Lake Subwatershed Assessment	87,500.00	-	87,500.00	3,594.60	41,296.64	47.20%
Duck Lake watershed load	213,955.00	-	213,955.00	322.50	88,532.52	41.38%
Subtotal	**$856,466.00**	**$0.00**	**$856,466.00**	**($3,743.28)**	**$328,047.19**	**38.30%**
Reserve	**$160,000.00**	**($141,798.33)**	**18,201.67**	-	-	0.00%
TOTAL EXPENDITURE	**$7,339,368.00**	**$0.00**	**$7,339,368.00**	**$312,649.58**	**$3,038,389.96**	**41.40%**
EXCESS REVENUES OVER (UNDER) EXPENDITURES	**$0.00**	**$0.00**	**$0.00**	**$1,536,130.18**	**$1,342,288.89**	

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

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

UPDATED 2/25/20

	Total Project	FUNDING SOURCE			Month Ended 12/31/19	Year To-Date	Lifetime Costs	Remaining
		District funds	Partner Fund	Grants				
Programs and Projects								
District Wide								
District Wide Floodplain Evaluation - Atlas 14/SMM model	**48,000.00**	48,000.00	-	-	3,527.00	34,869.50	34,869.50	13,130.50
Repair and Maintenance Fund	**202,005.00**	177,005.00	-	-	1,015.00	9,275.50	34,275.50	167,729.50
Wetland Management	**150,000.00**	150,000.00	-	-	5,120.75	29,586.75	59,315.06	90,684.94
Groundwater Conservation	**130,000.00**	130,000.00	-	-	-	250.00	250.00	129,750.00
Opportunity Project*	**200,000.00**	200,000.00	-	-	2,500.00	12,499.00	12,499.00	187,501.00
Hennepin County Chloride Initiative	**120,800.00**	19,000.00	-	101,800.00	1,142.06	5,970.31	5,970.31	114,829.69
Lower Minnesota Chloride Cost-Share	**217,209.00**	20,000.00	-	197,209.00	-	-	-	217,209.00
Stormwater Ponds - U of M	**86,092.00**	44,092.00	42,000.00	-	-	26,107.01	26,107.01	59,984.99
Subtotal	**$1,154,106.00**	**$788,097.00**	**$42,000.00**	**$299,009.00**	**$13,304.81**	**$118,558.07**	**$173,286.38**	**980,819.62**
Bluff Creek								
Bluff Creek Tributary*	**292,362.00**	242,362.00	50,000.00	-	108,818.35	226,053.24	321,712.78	(29,350.78)
Chanhassen High School *	**508,000.00**	208,000.00	100,000.00	200,000.00	(2,000.00)	1,609.50	452,704.60	55,295.40
Wetland Restoration at Pioneer	**561,870.00**	450,000.00	-	111,870.00	1,944.22	549,148.02	549,148.02	12,721.98
Subtotal	**$1,362,232.00**	**$900,362.00**	**$150,000.00**	**$311,870.00**	**$108,762.57**	**$776,810.76**	**$1,323,565.40**	**$38,666.60**
Riley Creek								
Lake Riley - Alum Treatment 1st dose *	**260,000.00**	260,000.00	-	-	-	-	254,999.83	5,000.17
Lake Susan Water Quality Improvement Phase 2 *	**662,491.00**	330,000.00	99,091.00	233,400.00	(11,844.50)	11,495.26	660,566.06	1,924.94
Rice Marsh Lake in-lake phosphorus load	**150,000.00**	150,000.00	-	-	-	13,414.87	89,432.81	60,567.19
Riley Creek Restoration (Reach E and D3) *	**1,565,000.00**	1,265,000.00	300,000.00	-	50,801.80	87,637.12	268,132.27	1,296,867.73
Lake Riley & Rice Marsh Lake Subwatershed Assessment	**72,500.00**	12,500.00	5,000.00	55,000.00	4,858.80	42,538.97	42,538.97	29,961.03
Upper Riley Creek Stabilization	**450,000.00**	450,000.00	0.00	-	-	-	-	450,000.00
Subtotal	**$3,159,991.00**	**$2,467,500.00**	**$404,091.00**	**$288,400.00**	**$43,816.10**	**$155,086.22**	**$1,315,669.94**	**$1,844,321.06**
Purgatory Creek								
Purgatory Creek Rec Area- Berm/retention area - feasibility/design	**50,000.00**	50,000.00	-	-	-	-	-	50,000.00
Lotus Lake in-lake phosphorus load control	**345,000.00**	345,000.00	-	-	-	1,666.30	240,893.34	104,106.66
Scenic Heights	**260,000.00**	165,000.00	45,000.00	50,000.00	(9,760.38)	55,767.49	204,541.25	55,458.75
Mitchell Lake Subwatershed Assessment	**87,500.00**	12,500.00	5,000.00	70,000.00	3,594.60	41,296.64	41,296.64	46,203.36
Duck Lake watershed load	**220,000.00**	220,000.00	-	-	322.50	88,532.52	94,577.02	125,422.98
Subtotal	**$962,500.00**	**$792,500.00**	**$50,000.00**	**$120,000.00**	**($5,843.28)**	**$187,262.95**	**$581,308.25**	**$381,191.75**
Total Multi-Year Project Costs	**$6,638,829.00**	**$4,948,459.00**	**$646,091.00**	**$1,019,279.00**	**$160,040.20**	**$1,237,718.00**	**$3,393,829.97**	**$3,244,999.03**

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

ASSETS

Current Assets

General Checking-Old National	$2,135,078.94	
Checking-Old National/BMW	1,373,256.03	
Investments-Standing Cash	27,235.29	
Investments-Wells Fargo	4,404,945.28	
Accrued Investment Interest	21,874.72	
Accounts Receivable	1,591.00	
Due From Other Governments	105,021.73	
Taxes Receivable	18,953.62	
Taxes Receivable-Delinquent	36,003.36	
Pre-Paid Expense	24,742.32	
Security Deposits	7,244.00	
Total Current Assets:		**$8,155,946.29**

LIABILITIES AND CAPITAL

Current Liabilities

Accounts Payable	$668,174.23	
Retainage Payable	12,521.39	
Salaries Payable	21,029.19	
Permits & Sureties Payable	909,245.00	
Deferred Revenue	36,003.36	
Total Current Liabilities:		**$1,646,973.17**

Capital

Fund Balance-General	$5,166,684.23	
Net Income	1,342,288.89	
Total Capital		**$6,508,973.12**
Total Liabilities & Capital		**$8,155,946.29**

RESOLUTION NO. 2020-03
RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT
BOARD OF MANAGERS

ORDERING THE SILVER LAKE WATERSHED PHOSPHORUS CONTROL PROJECT AT PLEASANT VIEW

Manager _____ offered the following resolution and moved its adoption, seconded by Manager _____:

WHEREAS in 2016 the Minnesota Pollution Control Agency designated Silver Lake as impaired for aquatic recreation because of excessive nutrients, and Silver Lake continues to fall short of meeting its designated-use classification;

WHEREAS the Riley Purgatory Bluff Creek Watershed District's (District) 2018 10-Year Watershed Management Plan (Plan) identified excessive nutrient loading as an ongoing harm to water quality in Silver Lake, a public water within both Chanhassen and the City of Shorewood (Chapter 7, Purgatory Creek Watershed);

WHEREAS the capital improvement program in the Plan includes the Silver Lake Watershed Phosphorous Control Project (designated SiL_2), which includes measures to manage phosphorus loading to Silver Lake, including increasing storage in stormwater basins, installing bench or perimeter filters in such basins for soluble phosphorus removal and installing water-reuse systems to use basin water for irrigation;

WHEREAS in 2017, the District completed an update of a 1996 use attainability analysis for Silver Lake, focusing on: (1) assessing the water quality in Silver Lake based on updated physical, chemical and biological data; (2) improving understanding of current water quality concerns in the lake; and (3) identifying best management practices to improve and protect the lake's water quality and increase the likelihood of Silver Lake being removed from the state impaired waters list;

WHEREAS the District engineer prepared a feasibility report in December 2018 to assess options to further reduce phosphorus loading to and improve water quality in Silver Lake, and the engineer determined that construction of ditch checks with iron-enhanced sand in ravines upgradient of and tributary to Silver Lake would reduce loading of total phosphorus to Silver Lake by 2.6 to 4.7 pounds per year at an estimated annual cost of between $1,020 and $3,460 per pound;

WHEREAS based on these findings and an assessment of potential tree and upland impacts from construction, the District engineer recommended installation of ditch checks with iron-enhanced sand as the most efficacious and cost-effective conceptual design to address District goals for Silver Lake;

WHEREAS the optimal location of the ditch checks is a stream in a ravine that flows from

Pleasantview Road to Silver Lake through Pleasant View Preserve, a park area owned by the City of Chanhassen (Chanhassen);

WHEREAS further development of potential project designs by the District engineer in collaboration with the District and Chanhassen water-resources staff resulted in a final proposed design consisting of five ditch checks with iron-enhanced sand filtration and stabilization of the banks of a first-order stream in the Park, along with wetland restoration, to improve 0.3 acres of habitat (the Project);

WHEREAS the RPBCWD Board of Managers held a duly noticed public hearing on the Project on September 4, 2019, and took into consideration comments from members of the public about the need for project maintenance, for property owners adjacent to Silver Lake to work to prevent phosphorus from entering the lake, for understanding where the sources of phosphorus into the lake come from, and for providing public access to the lake;

WHEREAS Chanhassen operates its stormwater-management system under the state Municipal Separate Storm Sewer System general permit, and construction and maintenance of the Project is intended to accrue to the benefit of Chanhassen's fulfillment of its obligations under the MS4 permit;

WHEREAS total estimated project cost for the Project is $183,000 which RPBCWD proposes to pay for through the District's ad valorem property tax levy authorized by Minnesota Statutes Section 103B.241 for the implementation of its water management plan, approximately 77% of which will be paid by properties in Hennepin County and 23% paid by properties in Carver County;

WHEREAS the City of Chanhassen will be responsible for maintenance of the Project;

NOW THEREFORE BE IT RESOLVED that the Board of Managers finds that the implementation of the Project is consistent with the water quality of the District for the Purgatory Creek Watershed, and that the proposed Project will be conducive to public health, will promote the general welfare, and complies with the Watershed Law, the Metropolitan Water Management Planning Law, and the District's Plan;

BE IT FURTHER RESOLVED that the Board of Managers hereby orders the Project, and that the Administrator proceed, with the advice of legal counsel, to develop a cooperative agreement for the Project with the City of Chanhassen, for the due consideration and approval by the Board of Managers, which agreement must be approved by the Board of Managers prior to the issuance of any notice to proceed with the construction of the Project;

BE IT FURTHER RESOLVED that the Board of Managers hereby orders that the Engineer, under direction of the Administrator, proceed with making the necessary surveys, plans and specifications, and advertise for bids

The question was on the adoption of the resolution and there were _____ yeas and ____ nays as follows:

	Yea	**Nay**	**Abstain**	**Absent**
CRAFTON				
KOCH				
PEDERSEN				
WARD				
ZIEGLER				

Upon vote, the president declared the resolution _____.

Dated: _____ ___, 2020.

_____
David Ziegler, Secretary

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

I, David Ziegler, 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 _____, 2020.

_____
David Ziegler, Secretary

TASK ORDER No. 24B: Final Engineering and Design and Construction Observation for Silver Lake - Subwatershed SiL_2 Water Quality Treatment Project
Pursuant to Agreement for Engineering Services
Riley Purgatory Bluff Creek Watershed District and BARR Engineering Company.
February 24, 2020

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 complete the engineering and design of iron enhanced sand ditch checks and ravine stabilization in the Silver Lake watershed (subwatershed SiL_2). The conceptual design, preliminary engineering and hydraulic analysis were completed in December 2018 as part of Task Order 24. The services outlined in this Task Order 24B include the preparation of construction plans and specifications, construction administration, and preparation of a final construction memorandum.

   The preliminary engineering study completed as part of Task Order 24 recommends ravine stabilization and iron enhanced filtration ditch checks to treat discharge from Pleasantview Road, Ridge Road, and the tributary watershed. The conceptual design from the preliminary engineering study includes stabilizing the ravine with iron enhanced sand ditch checks and storm sewer modifications on Plesantview Road. The proposed system will be designed with a goal of restoring the ravine and reducing the total suspended solids and phosphorous loading to Silver Lake.

   The following design constraints will be considered as part of the final design process:

   - Installation of permanent BMPs and modifications to the stormwater system will remain on City of Chanhassen property or within the City right-of-way and/or stormwater easement
   - RPBCWD will coordinate obtaining access agreements with private property owners to perform work related to ravine restoration
   - The number of iron enhanced sand ditch checks will be minimized to reduce future maintenance requirements
   - Impacts to existing upland vegetation and tree removals should be minimized
   - System must be designed to stabilize the ravine, while maintaining sufficient high-flow capacity to avoid increases in the 100-year flood elevation on adjacent residential property
   - System must be designed for reasonable maintenance access

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

   Task 1. Final Engineering and Design

   The final engineering and design will involve collection of no more than two soil borings, construction drawings, technical specifications, an engineer's opinion of cost, and construction request for quotes package. The following services will be provided for Task 1.

- Soil Borings – Since the project site is located adjacent to a wetland, underground soil conditions must be determined to understand constructability issues. We have included costs associated with collecting two soil boring of sufficient depth to identify soil conditions.
- Construction Drawings – Development of detailed design drawing for the proposed ravine stabilization, ditch checks, and storm sewer modifications, including an erosion control plan, stormwater water pollution prevention plan (SWPPP), removals plan, and site restoration. The drawing set is anticipated to consist of approximately six drawings. The 60 percent and 90 percent drawings will be submitted to the RPBCWD administrator and the City of Chanhassen for review and comment. The 100 percent plans will be submitted to the RPBCWD Board of Managers for authorization to solicit quotes from construction contractors.
- Technical Specifications – 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 contracting. 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.
- Engineer's Opinion of Cost – To assist the District with project budgeting, Barr will provide an engineer's opinion of cost for the defined design elements in this agreement. The opinion of cost will be based on costs from similar projects and previous Barr project experience and be provided at the 100% design phases.
- Permitting – Permitting assistance, including preparation of permitting submittals and communication with applicable agencies. The following agency reviews and/or permits are anticipated:
    - City of Chanhassen – Grading permit.
    - RPBCWD – Floodplain, Erosion Control, Wetland Buffers, Streambank stabilization, Waterbody Crossings and Structures, and Stormwater Management

  Barr assumes that a Wetland Conservation Act (WCA) permit and City of Chanhassen wetland permit will not be needed, as attempts will be made to keep project construction outside of the wetland boundary. Barr assumes that a MnDNR Public Waters work permit will not be required because the location of the BMP is not located on a designated Public Water Inventory watercourse or basin. Barr assumes that a MPCA NPDES permit will not be required because attempts will be made to keep the disturbed area less than 1 acre. Barr assumes that a Section 404 permit or a Section 401 Water Quality Certification will not be required.
- Request for Quotation Package – Preparation of request for quotation and administration including preparing the price quote form, and response to questions.

Task 2. Construction Administration and Observation

Task 2 includes construction administration, quotation opening and quotation review, review of submittals, contract award, coordination with contractor, construction observation, and review and submittal of pay applications and change orders, as necessary. It is anticipated that the construction phase will extend for a period of about four months during the summer of 2021, with active

construction ongoing for approximately four weeks. Services provided as part of the construction administration and support includes the following:

- Award and Pre-construction Meeting – Meeting with all parties involved with the construction including but not limited to RPBCWD Administrator, contractor, sub-contractors, and City of Chanhassen. It is assumed that two persons from Barr will attend the office meeting and that a site visit will occur immediately following to review site conditions and discuss construction issues.
- Site Visits –A Barr engineering representative will be onsite to observe the construction during key times. This consists of on-site support and observation during the anticipated four weeks of construction to observe and document contractor's work, attend site meetings, and coordinate engineering issues with the contractor, owner and engineer. We have assumed one Barr staff on-site for 4 hours per visit for an average of three visits per week during the active construction period.
- Construction Administration Support –Interpreting contract documents and design intent, review of technical submittals, address requests for information and general project communication between contractor or Barr's onsite staff.

Upon completion of the project construction, the following documentation will be provided:

- Record Drawings –Barr will develop record drawings to document the construction. Record Drawings will include updating the Construction Drawing set with information from the post construction survey completed by the contractor including locations and elevations of structures.

Task 3. Construction Memorandum

Task 3 includes summarizing final design assumptions, performance expectations and design changes or modifications during the Construction Phase of the project. The construction memorandum will also compile such items as formal approved technical submittals, responses to requests for information from the contractor, maintenance information, construction photos, field notes, pay applications, change orders (if applicable), and record construction drawings. We have assumed that one draft will be provided to the District Administrator for review and comment. Comments on the draft memorandum will be incorporated into the final construction memorandum.

3. Additional Assumptions:

We have made several assumptions in preparing the scope of work for each work item in this agreement. Assumptions relating to individual work tasks are listed along with the detailed description. However, additional assumptions that do not correspond with a single work task are listed below:

- 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.
- No easements will be needed for the project. If easements are needed for work on private property, easements will be obtained by either the District Administrator or the City prior to construction.
- The District Administrator will coordinate obtaining access agreements with private property owners.

- The District Administrator will work with legal counsel to develop a cooperative agreement between RPBCWD and City of Chanhassen for activities related to construction and operation and maintenance of the BMP. Barr assumes that this agreement would establish procedures for performing specific tasks, define responsibilities of each organization, and allow access to City property for construction of a BMP and restoration of the ravine. If Barr's assistance is needed those services would be provided on a time and expense basis.
- Assume review comments from District Administrator and City of Chanhassen on 60% or 90% plans are provided within one week of submittal and are incorporated directly into the subsequent 90% or 100% submittal.
- Meetings with District Administrator and City of Chanhassen will be held at Barr's Office.
- Assumes up to two 1-hour long meetings during plan development with RPBCWD and City of Chanhassen staff.
- Assumes suitable soil conditions exist at concept design location (i.e., no modifications to the road embankment will be considered).
- Assumes construction contractor will be responsible for all construction staking and surveying.
- Assumes site characterization completed as part of Task Order 24 including wetland delineation and collection of survey data is sufficient for design and permitting.
- Assumes that the contractor will be responsible for obtaining permits not identified in this task order.
- There are no utility relocations necessary to construct a BMP or stabilize the ravine.
- A maintenance plan, if needed, would be developed after construction and is excluded from task order 24B

The proposed budget includes costs for mileage reimbursement for site visits and site observation.

4. Deliverables:
   The following deliverables will be prepared and provided to the RPBCWD:

   Task 1: Final Engineering and Design

   - 60% construction plans submittal
   - 90% construction plans submittal
   - Specifications and special provisions
   - Applicable permitting submittals
   - Final contract documents
   - Engineer's opinion of cost
   - Preparation of addenda, as necessary
   - Monthly progress updates

   Task 2: Construction Administration and Observation
   - Monthly construction progress updates
   - Engineer site visits
   - Record Construction drawings

   Task 3: Final Construction Memorandum

- Final construction memorandum, including documentation of design assumptions, field notes and documentation during site visits, submittals, requests for information (RFIs), field memorandum and deviations, construction photos, and record drawings

5. Budget:
Services under this Task Order will be compensated for in accordance with the engineering services agreement and will not exceed $64,400, without written authorization by the RPBCWD Administrator. Barr understands the importance of working as efficiently as possible while providing the services needed for design and construction. Therefore, we will look for cost saving during the entire design and construction process, such as looking to the City of Chanhassen to supply any existing soil boring information of the area in an effort to avoid unneeded duplication of past efforts. 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
1	**Final Engineering and Design**	
	Soil Borings	$3,500
	Construction Drawings & Technical Specifications	$33,700
	Engineer's Opinion of Cost	$2,500
	Permitting	$5,700
	RFQ Package/ Opening/Recommendation to the Board	$3,500
	Task 1 Subtotal	**$48,900**
2	**Construction Administration and Observation**	
	Award and Pre-construction Meeting	$900
	Engineer Site Visits (assumes up to a 4 week active construction period)	$6,900
	Construction Administration Support	$3,100
	Record Drawings	$800
	Task 2 Subtotal	**$11,700**
3	**Construction Memorandum**	
	Task 3 Subtotal	$3,800
	Task Order 24bTotal	**$64,400**

6. Tentative Schedule
The following proposed schedule has been developed assuming authorization in spring of 2020:

Task 1: Final Engineering and Design

- 60% construction plan submittal – August 2020
- 90% construction plan submittal – October 2020
- 100% plans and specifications, Board approval of project and request for quotations – December 2020
- Tentative Quotation opening – February 2021
- Board approval of quotation, Notice of Award – March 2021

Task 2: Construction Administration and Observation

- Contract award, review of submittals – April 2021
- Construction completion – July 2021
- Record drawings – August 2021

Task 3: Final Construction Memorandum

- Final construction memorandum – September 2021

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

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

Resolution 2020-04

Minnesota Pollution Control Agency
Fiscal Year 2020 Grant Program
Authorization Resolution

WHEREAS, Riley Purgatory Bluff Creek Watershed District has applied for a grant from the Minnesota Pollution Control Agency (MPCA), under its FY2020 Environmental Assistance Grant Program; and

WHEREAS, if MPCA funding is received, Riley Purgatory Bluff Creek Watershed District (name of your organization) is committed to implementing the proposed project as described in the grant application; and

WHEREAS, MPCA requires that Riley Purgatory Bluff Creek Watershed District (name of your organization) enter into a grant agreement with the MPCA that identifies the terms and conditions of the funding award;

BE IT RESOLVED THAT the Riley Purgatory Bluff Creek Watershed District (name of governing body) hereby agrees to enter into and sign a grant agreement with the MPCA to carry out the project specified therein and to comply with all of the terms, conditions, and matching provisions of the grant agreement and authorizes and directs Administrator (name of a position) to sign the grant agreement on its behalf.

Claire Bleser	Administrator
(Print name of signing officer)	*(Title)*
	March 4, 2020
(Signature of an officer with your governing body)	*(Date your governing body agreed to this resolution)*

RESOLUTION NO. 2020-04
RILEY-PURGATORY-BLUFF CREEK WATERSHED DISTRICT
BOARD OF MANAGERS

SUPPORT FOR APPLICATION TO HOST A MINNESOTA GREENCORPS MEMBER IN 2020-2021 PROGRAM YEAR

Manager _____ offered the following resolution and moved its adoption, seconded by Manager _____:

WHEREAS the Riley-Purgatory-Bluff Creek Watershed District (District) has applied to host an AmeriCorps member from the Minnesota GreenCorps, a program of the Minnesota Pollution Control Agency (MPCA), for the 2020-2021 program year; and;

WHEREAS if the MPCA selects the District, the organization is committed to implementing the proposed project as described in the host site application, and in accordance with pre-scoped position description; and

WHEREAS the MPCA requires that the District enter into a host site agreement with the MPCA that identifies the terms, conditions, roles and responsibilities;

NOW THEREFORE BE IT RESOLVED that the Board of Managers hereby agrees to enter into and sign a host site agreement with the MPCA to carry out the member activities specified therein and to comply with all the terms, conditions, and matching provisions of the host site agreement and authorizes and directs the Watershed District Administrator, to sign the grant agreement on its behalf.

The question was on the adoption of the resolution and there were ___ yeas, ___nays, ____abstains, and _____ absent as follows:

	Yea	**Nay**	**Abstain**	**Absent**
CRAFTON				
KOCH				
PEDERSEN				
WARD				
ZIEGLER				

Upon vote, the president _____.

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

I, David Ziegler, 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 4 day of March 2020.

_____
David Ziegler, Secretary

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

POSITION TITLE:	Administrative Assistant
REPORTS TO:	Administrator
TYPE:	Full-time, exempt from the provisions of the Fair Labor Standards Act.
Pay Grade:	$37,080 - $55,620 commensuration based on experience

PRIMARY OBJECTIVE

Perform skilled to highly skilled administrative and secretarial support to staff as it relates to the implementation of District goals and objectives. The Administrative Assistant provides support for: scheduling conference rooms, answering phones, assisting with the preparation of Board and CAC packets, handling shipping requests, providing technical support for guests using meeting rooms, updating District website, processing contracts, binding reports and setting up meeting rooms.

PRIMARY DUTIES AND RESPONSIBILITIES

1. Perform administrative and support duties for the District staff.
2. Greet the public and answer/screen phone calls in a courteous and professional manner, provide information and answer questions on a variety of issues related to the District, listen to concerns/complaints, assess needs, explain procedures, route calls, and/or take messages.
3. Schedule and make arrangements for meetings for District staff. Provide support for meetings hosted at RPBCWD. Meeting support includes technology, meeting materials, refreshments and room set up and arrangements.
4. Act as a host or greeter for visitors and the general public who enter our building.
5. Uses word processing, spreadsheet, and database management software (such as Word, Excel, Access, PowerPoint, etc.) to produce correspondence, minutes, reports, forms, budget and technical information.
6. Send and route all RPBCWD mail. Perform clerical duties such as typing and data entry, copying, assembling, mass mailings, faxing, filing, mail distribution, review, etc. Request courier services for shipping and receiving, order supplies, maintain document and report archiving and library.
7. Assists with records, filing and information retrieval system, both manual and automated (computer). Compose letters, memoranda, reports, and other written communications. Assist staff with surveys and collects/researches data for special projects.
8. Promote a diverse, inclusive, culturally competent, and respectful workplace.

ADDITIONAL FUNCTIONS:

1. When necessary, attend and take minutes at Board of Managers meetings, prepare minutes for review.
2. Keep staff informed of meetings, events, and deadlines by disseminating written and verbal information in a timely manner. Attend and participate in staff meetings to keep abreast of staff activities and to share the same type of information with them so that work efforts can be coordinated.
3. Maintain office supplies. Perform routine maintenance, troubleshooting and staff training on office equipment (printer/copier, postage machine, phone equipment) and arrange for necessary service calls.

4. Effectively listens, speaks, and interacts tactfully in a work group or with the public.
5. Ability to manage conflict with citizens and others.
6. Follows oral and written instructions.
7. Communicates with a diverse group of co-workers, supervisors, and the public in a cooperative, effective, and respectful manner.
8. Responds promptly and develops positive working relationships with internal and external audiences
9. Selects and uses the most appropriate method of communication with the public or coworkers.
10. Produces effective and readable non-technical reports, documents, and correspondence.

(The functions are intended only as illustrations of various types of work performed and are not necessarily all-inclusive. This position description is subject to change as the needs of the employer and requirements of the position change.)

SALARY: Salary range is from $37,080 - $55,620 and initial salary depends on qualifications and experience.

MINIMUM QUALIFICATIONS: The employee must possess High School diploma or GED equivalent. Three years of experience as administrative assistant including regular use of a personal computer, database management, word processing and spreadsheet software.

KNOWLEDGE, SKILLS and ABILITIES:
General

- Performs varied and challenging detail-oriented work.
- Ability to establish priorities, balance diverse work and implement projects successfully.
- Ability to take direction from supervisor and colleagues, work successfully with considerable independence (self-motivated) and use good time management skills.
- Excellent communication.

Reports to: The Administrator Assistant reports directly to, and is supervised by, the District Administrator. The position will meet with the District Administrator regularly to prioritize project workload commitments and to discuss issues pertaining to this position.

APPLICATION PROCESS:
This position is open until filled (First consideration February 28). Applications received during the final stage of the search are not guaranteed consideration. Apply by email to: cbleser@rpbcwd.org. Attach to the email in PDF format only the following 2 items: Cover letter and Resume with 3 professional references. Complete application submissions will be acknowledged by return email.

Reviewed by CSB, TJ, MS, JM

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

POSITION TITLE: Groundwater Program & Stewardship Coordinator
REPORTS TO: District Administrator
TYPE: Full-time, exempt from the provisions of the Fair Labor Standards Act
Pay Grade: $40,000- 60,000 commensuration based on experience

PRIMARY OBJECTIVE

The role of the Groundwater Program and Stewardship Coordinator is to improve and protect the water resources of the Riley Purgatory Bluff Creek Watershed District through the coordination and management of the Watershed Stewardship Grant Cost-share program and the Groundwater Conservation Program. The Groundwater Program and Stewardship Coordinator is also responsible for supporting the Communication Manager and other District Staff in the implementation of education and outreach programming. This role supports stewardship by identifying desired behavior change and barriers to those actions through the management of programs and creation of resources that help overcome those barriers.

PRIMARY DUTIES AND RESPONSIBILITIES

1. Manage the Watershed Stewardship Grant Cost-share Program that provides technical assistance and funding for projects that protect and conserve water resources, and increases public awareness of the vulnerability of these resources and solutions to improve them.
    a. Develop an annual budget
    b. Organize site visits and communicate with technician
    c. Prepare and negotiate grant agreements
    d. Lead grant funding recommendation committees
    e. Prepare funding recommendation reports
    f. Track individual projects and grant budgets
    g. Submit reimbursement requests
    h. Report progress and metrics
    i. Coordinate inspections
    j. Keep and organize electronic and paper records
    k. Evaluate and update program regularly
    l. Manage communication with grant applicants and awardees
    m. Organize promotional materials, events and programming
2. Develop and Coordinate the Groundwater Conservation Program to promote the conservation of groundwater resources through education and outreach and work with cities.
    a. Work with cities to encourage conservation practices and reduce groundwater consumption
    b. Manage Groundwater Conservation Grant Program
    c. Lead education programming

    d. Develop and coordinate Water Smart Meter Pilot Program
    e. Stay abreast of local opportunities and regional efforts
    f. Review, evaluate, and adjust program components regularly
3. Provide support for Education and Outreach programs
    a. Coordinate continuing education and volunteer opportunities for certified Master Water Stewards
    b. Support efforts of certified Master Water Stewards and promote stewardship growth
    c. Support youth programing
    d. Assist with tabling and public events
    e. Assist with creation of education and outreach related communications (newsletters, flyers, handouts, website, social media etc.)
4. Other duties and responsibilities
    a. Research and stay up to date with developments in the field of water resources
    b. Participates as a member of the staff team for District projects and programs by cooperating with other staff and consultants, contributing ideas, providing comments when requested, and helping where needed.
    c. Effectively represent water and watershed issues at meetings, conferences, before media, and to other local units of government, City Departments, The RPBCWD Board of Managers, partner organizations and the public
    d. Prepare reports and summaries for the District Administrator and Board of Managers as required/ requested
    e. Assist with day-to-day office activities such as room set-up, office supply inventory, event logistics, receipt and organization of District files and documents
    f. Perform other tasks as assigned by the District Administrator

(The functions are intended only as illustrations of various types of work performed and are not necessarily all-inclusive. This position description is subject to change as the needs of the employer and requirements of the position change.)

SALARY: Salary range is from $40,000 - $60,000 and initial salary depends on qualifications and experience.

MINIMUM QUALIFICATIONS: 3 years of experience preferred implementing water resource and/or environmental education, outreach and communications programs to a variety of audiences, managing and recruiting volunteers. Bachelor's degree in natural resources with an emphasis in communication or bachelor's degree in Education with experience in natural resources. A graduate degree in a related field may be considered in lieu of work experience. Knowledge of technical and regulatory water quality and storm water issues. Demonstrated written, verbal, and presentation skills. Demonstrated networking, team-building, research, coordination, and multi-tasking skills. Ability to work with a diverse public audience. Must have a reliable vehicle and a valid US driver's license with no recent suspensions.

DESIRED QUALIFICATIONS: Understanding of social marketing and behavioral change strategies. Experience with non-formal, non-traditional teaching settings (e.g., outside of classroom, adult learners). Training in volunteer management. Knowledge of Adobe Suites other similar publishing software, and experience in web updates and content design. Previous experience with local units of government and stormwater education or urban environmental education.

KNOWLEDGE, SKILLS AND ABILITIES

General

- Proficiency with a personal computer and Microsoft software packages for word processing, spreadsheet, database management and computer generated graphics, specifically, but not limited to, Microsoft Office, Excel, Word, Access, PowerPoint, Adobe InDesign, Illustrator and Photoshop.
- Ability to effectively use email and Internet applications and other common software applications.
- Ability to take direction, work independently with a minimum of supervision, use good time management practices, possess the ability to set priorities and balance large volumes of diverse work.
- Ability to work collaboratively to develop education and outreach programming with local and agency staff, consultants and associates.
- Ability to develop and maintain effective working relationships with the District Administrator, the Community Outreach Coordinator, RPBCWD Board of Managers, Citizens Advisory Committee, city and agency staff, members of the public, and other interested parties.
- Ability to effectively communicate verbally and in written form to a wide variety of audiences ranging from elected officials to K12 students.
- Creativity in developing and presenting educational information and exhibits.

APPLICATION PROCESS:

This position is open until filled (First consideration February 21). Applications received during the final stage of the search are not guaranteed consideration. Apply by email to: cbleser@rpbcwd.org. Attach to the email in PDF format only the following 2 items: Cover letter and Resume with 3 professional references. Complete application submissions will be acknowledged by return email.

Reviewed by CSB, TJ, MS, BL, JM

RESOLUTION NO. 2020-___
RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT
BOARD OF MANAGERS

AUTHORIZING EXECUTION OF LAND EXCHANGE AGREEMENT and TEMPORARY CONSTRUCTION EASEMENTS

CITY of CHANHASSEN, HIGHWAY 101 RECONSTRUCTION

Manager _____ offered the following resolution and moved its adoption, seconded by Manager _____:

WHEREAS the Riley Purgatory Bluff Creek Watershed District ("District") owns a parcel of land (PID #25 0360010) adjacent to County State Aid Highway (CSAH) 101 and riparian to Bluff Creek within the City of Chanhassen ("City") that provides District access to Bluff Creek and serves general water resource protection and conservation purposes;

WHEREAS the City is preparing to reconstruct and expand CSAH 101, between Pioneer Trail and Flying Cloud Drive, in accordance with plans reviewed by the District and the terms of District permit 2019-042;

WHEREAS to site the preferred realignment of CSAH 101, the City wishes to acquire a portion of the District's property, and the District Board of Managers wishes to facilitate the public purposes of the City where the District's water resource interests will not be damaged;

WHEREAS the City owns property adjacent to the District property, and has proposed an exchange of property in place of a conveyance involving a monetary payment;

WHEREAS the parties have drafted a property exchange agreement, under which the District property will be subdivided into two parcels, property of approximately equal area and value will be exchanged, due diligence will protect the District from title or pollutant contamination risk, and the City will bear the costs of title commitment, environmental assessment and closing;

WHEREAS the District Board of Managers has determined that the City property to be acquired will afford the District equivalent access to Bluff Creek and serve equivalent water resource purposes as the property to be conveyed to the City; and

WHEREAS the exchange agreement also provides for the District to convey to the City temporary construction easements on two parcels that the District will continue to own, and the District Board of Managers finds that such temporary use of the described area will not interfere with District activity or result in ongoing detriment to the burdened property.

NOW THEREFORE BE IT RESOLVED that the District Board of Managers approves the proposed exchange agreement and temporary easements. and authorizes their execution by the Board President, with any further non-material changes and on advice of counsel; and

BE IT FURTHER RESOLVED that the District Administrator is authorized, in consultation with counsel, to exercise judgment with respect to due diligence matters involved in the transaction, and to take all further steps necessary and appropriate to consummate the land exchange and easement conveyance in accordance with the document terms.

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

	Yea	Nay	Abstain	Absent
CRAFTON				
KOCH				
PEDERSEN				
WARD				
ZIEGLER				

Upon vote, the president declared the resolution _____.

Dated: March 4, 2020.

_____

David Ziegler, Secretary

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

I, David Ziegler, 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 _____, 2020.

_____

David Ziegler, Secretary

(3" Top Margin for Recording)

TEMPORARY CONSTRUCTION EASEMENT

County Highway 101 Reconstruction-Parcel 2 T.E.
PID Number: _____

Riley-Purgatory-Bluff Creek Watershed District, a political subdivision of the State of Minnesota, "Grantor," being the owner, in fee simple, of the real estate hereinafter described, grants to the **City of Chanhassen, a Minnesota municipal corporation**, "Grantee," its successors and assigns, the hereinafter described temporary construction easement.

Legal Description of Property

1. Grantor is the owner in fee simple of the following described real estate located in Carver County, Minnesota (the "Property"):

> **Parcel 2 T.E., as shown on Carver County Right of Way Play No. 29, on file and of record in the office of the Carver County Recorder, Carver County, Minnesota.**

Grant of Easement

2. For good and valuable consideration, the receipt and sufficiency of which are acknowledged by Grantor, Grantor bargains, sells, grants, and conveys to Grantee, its successors and assigns, a temporary construction easement over, under, across and upon the Property (hereinafter, "Easement Area"), which constitutes a portion of Parcel 2 as shown on Attachment A hereto.

Rights Within Easement Area

3. Said temporary construction easement shall include, but not be limited to, the right of the Grantee, its contractors, employees, agents and invitees to enter upon said Easement Area for the purpose of constructing highway, utility and drainage improvements, and all purposes in furtherance thereof, or related thereto, including inspecting, surveying, grading, sloping,

excavating, restoring, depositing earthen materials, moving and storing equipment, supplies, and materials, and removing pavement, sidewalks, bushes, trees, undergrowth and other buildings, improvements and obstructions as, in the judgment of Grantee, may interfere with Grantee's construction of such highway, utility and drainage improvements in accordance with its plans for its public project. Further, it is understood and agreed that the aforesaid consideration includes payment of damages for and permits removal or destruction of the trees, grass or other herbage; fences and other structures or other appurtenances within the Easement Area. Grantor agrees that all earth and other material necessarily excavated and removed from the Easement Area shall become the property of Grantee, and shall be used in the construction of Grantee's project, or be hauled away and disposed as Grantee may deem fit. Grantee agrees to replace topsoil and reestablish grass cover on exposed soil areas within the Easement Area where excavation and embankment construction takes place, and where clay or other poor soil is exposed.

4. Grantor and Grantee agree that the plan for said County Highway 101 Reconstruction Project which is on file in the office of the City Engineer for the City of Chanhassen, Minnesota, is, by reference, hereby made a part of this easement. In the event disputes arise, said plans shall control.

5. Notwithstanding any term of paragraphs 3 and 4, above, all of Grantee's activity under this temporary easement will conform to the following:

a. Grantee will not place any permanent improvement within the Easement Area. Grantee may alter grades and contours within the Easement Area in conformance with approved plans incorporated into Permit 2019-042 issued by Grantor. All Grantee work within the Easement Area will conform to Permit 2019-042.

b. Within the Easement Area, Grantee may not store hazardous or petroleum substances, and may not conduct refueling or vehicle/equipment maintenance or repair that involves the transfer or open storage of any hazardous substance or petroleum.

c. Grantor makes no representation or warranty as to the existence, location or nature of subsurface structures. Grantee is responsible for Gopher One compliance, for exercising care with respect to potential subsurface structures, and for any damage caused thereto by its activity.

d. Grantee accepts the condition of the Easement Area as-is, with no warranty or representation of Grantor as to its condition or the existence of any hazard, obvious or non-obvious, known or unknown. On behalf of itself, its employees, officials, contractors, subcontractors and agents, Grantee releases Grantor from any liability arising from the condition of the Easement Area.

Term of Temporary Easement

6. The temporary easement granted herein shall commence on **March 1, 2020** and shall terminate on **December 31, 2021.**

Transfer of Title

7. Grantor agrees to notify the City Engineer of the City of Chanhassen of any conveyance of its ownership interest in the Property. This notification shall be in writing to the address listed below at least 30 days in advance of the conveyance.

Environmental Matters

8. Grantee shall not be responsible for any costs, expenses, damages, demands, obligations, including penalties and attorneys' fees, costs, disbursements, or losses resulting from any claims, actions, suits or proceedings relating to a release or threatened release of any hazardous substances, pollutants, or contaminants existing on the Easement Area prior to the date of this instrument, except to the extent the actions of Grantee cause or contribute to a release of any such material within the meaning of applicable law.

Restoration of Property

9. Prior to the expiration of the temporary easement term, Grantee shall restore disturbed surfaces within the Easement Area in accordance with Grantee's restoration plan.

Indemnification.

10. Grantee will indemnify, defend and hold harmless Grantor from and against any liens, claims, losses, liability, or damage resulting from: (a) any liens which may be attached to the Property for labor or materials provided by or at the request of Grantee; (b) injury or death to persons arising out of Grantee acts or omissions pursuant to this easement; (c) property damage to third parties arising out of Grantee acts or omissions pursuant to this easement. "Grantee acts or omissions" in this paragraph means acts or omissions of Grantee, its employees, officials, contractors, subcontractors and agents.

Binding Effect

11. The terms and conditions of this instrument shall run with the land and be binding on the Grantor and the successors and assigns of Grantor.

IN WITNESS WHEREOF, said Grantor has caused this instrument to be executed the day and year first above written.

Dated this _____ day of _____, 2020.

Grantor:
Riley-Purgatory-Bluff Creek Watershed District

By: _____

Its: _____

ACKNOWLEDGMENT

STATE OF MINNESOTA }
ss
COUNTY OF ___ }

The foregoing instrument was acknowledged before me this _____ day of _____, 2020 by _____ as the _____ of the Riley-Purgatory-Bluff Creek Watershed District, a political subdivision of the State of Minnesota, on its behalf.

_____
Notary Public
My Commission expires _____

This Instrument Was Drafted By:

Kennedy & Graven, Chartered (SJS)
470 U.S. Bank Plaza
200 South 6th Street
Minneapolis, MN 55402

And by (with return to):
City of Chanhassen
Attn. City Engineer
P. O. Box 147
Chanhassen, MN 55317-0147

(3" Top Margin for Recording)

TEMPORARY CONSTRUCTION EASEMENT (PARCEL 4B)

County Highway 101 Reconstruction-Parcel 4B
PID Number: _____

Riley-Purgatory-Bluff Creek Watershed District, a political subdivision of the State of Minnesota, "Grantor," being the owner, in fee simple, of the real estate hereinafter described, grants to the **City of Chanhassen, a Minnesota municipal corporation**, "Grantee," its successors and assigns, the hereinafter described temporary construction easement.

Legal Description of Property

1. Grantor is the owner in fee simple of the following described real estate located in Carver County, Minnesota (the "Property"):

> **Parcel 4B, as shown on CARVER COUNTY RIGHT OF WAY PLAT No. 29, on file and of record in the office of the County Recorder, Carver County, Minnesota**

Grant of Easement

2. For good and valuable consideration, the receipt and sufficiency of which are acknowledged by Grantor, Grantor bargains, sells, grants, and conveys to Grantee, its successors and assigns, a temporary construction easement over, under, across and upon that portion of the Property delineated on Attachment A hereto ("Easement Area").

Rights Within Easement Area

3. Said temporary construction easement shall include, but not be limited to, the right of the Grantee, its contractors, employees, agents and invitees to enter upon the Easement Area for the purpose of constructing highway, utility and drainage improvements, and all purposes in furtherance thereof, or related thereto, including inspecting, surveying, grading, sloping,

excavating, restoring, depositing earthen materials, moving and storing equipment, supplies, and materials, and removing pavement, sidewalks, bushes, trees, undergrowth and other buildings, improvements and obstructions as, in the judgment of Grantee, may interfere with Grantee's construction of such highway, utility and drainage improvements in accordance with its plans for its public project. Further, it is understood and agreed that the aforesaid consideration includes payment of damages for and permits removal or destruction of the trees, grass or other herbage; fences and other structures or other appurtenances within the Easement Area. Grantor agrees that all earth and other material necessarily excavated and removed from the Easement Area shall become the property of Grantee, and shall be used in the construction of Grantee's project, or be hauled away and disposed as Grantee may deem fit. Grantee agrees to replace topsoil and reestablish grass cover on exposed soil areas within the Easement Area where excavation and embankment construction takes place, and where clay or other poor soil is exposed.

4. Grantor and Grantee agree that the plan for said County Highway 101 Reconstruction Project which is on file in the office of the City Engineer for the City of Chanhassen, Minnesota, is, by reference, hereby made a part of this easement. In the event disputes arise, said plans shall control.

5. Notwithstanding any term of paragraphs 3 and 4, above, all of Grantee's activity under this temporary easement will conform to the following:

a. Grantee will not place any permanent improvement within the Easement Area. Grantee may alter grades and contours within the Easement Area in conformance with approved plans incorporated into Permit 2019-042 issued by Grantor. All Grantee work within the Easement Area will conform to Permit 2019-042.

b. Within the Easement Area, Grantee may not store hazardous or petroleum substances, and may not conduct refueling or vehicle/equipment maintenance or repair that involves the transfer or open storage of any hazardous substance or petroleum.

c. Grantor makes no representation or warranty as to the existence, location or nature of subsurface structures. Grantee is responsible for Gopher One compliance, for exercising care with respect to potential subsurface structures, and for any damage caused thereto by its activity.

d. Grantee accepts the condition of the Easement Area as-is, with no warranty or representation of Grantor as to its condition or the existence of any hazard, obvious or non-obvious, known or unknown. On behalf of itself, its employees, officials, contractors, subcontractors and agents, Grantee releases Grantor from any liability arising from the condition of the Easement Area.

Term of Temporary Easement

6. The temporary easement granted herein shall commence on **March 1, 2020** and shall terminate on **December 31, 2021.**

Transfer of Title

7. Grantor agrees to notify the City Engineer of the City of Chanhassen of any conveyance of its ownership interest in the Property. This notification shall be in writing to the address listed below at least 30 days in advance of the conveyance.

Environmental Matters

8. Grantee shall not be responsible for any costs, expenses, damages, demands, obligations, including penalties and attorneys' fees, costs, disbursements, or losses resulting from any claims, actions, suits or proceedings relating to a release or threatened release of any hazardous substances, pollutants, or contaminants existing on the Property prior to the date of this instrument, except to the extent the actions of Grantee cause or contribute to a release of any such material within the meaning of applicable law.

Restoration of Property

9. Prior to the expiration of the temporary easement term, Grantee shall restore disturbed surfaces within the Easement Area in accordance with Grantee's restoration plan.

Indemnification.

10. Grantee will indemnify, defend and hold harmless Grantor from and against any liens, claims, losses, liability, or damage resulting from: (a) any liens which may be attached to the Property for labor or materials provided by or at the request of Grantee; (b) injury or death to persons arising out of Grantee acts or omissions pursuant to this easement; (c) property damage to third parties arising out of Grantee acts or omissions pursuant to this easement. "Grantee acts or omissions" in this paragraph means acts or omissions of Grantee, its employees, officials, contractors, subcontractors and agents.

Binding Effect

11. The terms and conditions of this instrument shall run with the land and be binding on the Grantor and the successors and assigns of Grantor.

IN WITNESS WHEREOF, said Grantor has caused this instrument to be executed the day and year first above written.

Dated this _____ day of _____, 2020.

Grantor:
Riley-Purgatory-Bluff Creek Watershed District

By: _____

Its: _____

ACKNOWLEDGMENT

STATE OF MINNESOTA }
ss
COUNTY OF ___ }

The foregoing instrument was acknowledged before me this _____ day of _____, 2020, by _____ as the _____ of the Riley-Purgatory-Bluff Creek Watershed District, a political subdivision of the State of Minnesota, on its behalf.

_____
Notary Public
My Commission expires _____

This Instrument Was Drafted By:

Kennedy & Graven, Chartered (SJS)
470 U.S. Bank Plaza
200 South 6th Street
Minneapolis, MN 55402

And by (with return to):
City of Chanhassen
Attn. City Engineer
P. O. Box 147
Chanhassen, MN 55317-0147

EXCHANGE AGREEMENT

THIS EXCHANGE AGREEMENT (this "Agreement") is made this _____ day of_____ 2020, by City of Chanhassen, a municipal corporation under Minnesota law, whose address is 7700 Market Blvd., P.O. Box 147, Chanhassen, MN 55317 ("**The City**"); and Riley-Purgatory-Bluff Creek Watershed District, a political subdivision of the State of Minnesota, whose address is 18681 Lake Drive, Chanhassen, MN 55317 ("**The District**"). The City and District are referred to collectively herein as the "**Parties**."

RECITALS

A. The City owns the land which is legally described in Exhibit A attached hereto and incorporated herein (the **"City Parcel").** The City Parcel is depicted on Exhibit A-1 attached hereto and incorporated herein.

B. The District owns the land which is legally described in Exhibit B attached hereto and incorporated herein (the "**District Parcel**").

C. The City is planning to reconstruct and expand County State Aid Highway 101, between Pioneer Trail and Flying Cloud Drive, adjacent to the District Parcel, in accordance with a construction plan which requires the City to acquire the real estate interests shown in Carver County Right of Way Plat No. 29, including a portion of the District Parcel. The City is in the process of acquiring those interests, including commencement of eminent domain proceedings to acquire all outstanding parcels, except that portion of the District Parcel as defined as the New District Parcel in this Agreement.

D. The District agrees to convey a portion of the District Parcel to the City for the City Project, as depicted on Exhibit B-2 attached hereto (the **"New District Parcel"**) in exchange for the City's conveyance of the City Parcel to the District, in accordance with this Agreement.

E. The City agrees to convey the City Parcel to the District, in exchange for the District's conveyance to the City of the New District Parcel, in accordance with this Agreement.

F. The Parties wish to exchange and convey the properties described in this Agreement, subject to the terms and conditions contained in this Agreement.

AGREEMENT

In consideration for the mutual covenants contained in this Agreement, and other good and valuable consideration, the receipt and sufficiency of which the Parties acknowledge, the Parties agree as follows:

1. **Recitals.** The recitals stated above constitute and form an integral part of this Agreement and are incorporated herein by reference as if set forth herein in their entirety.

2. **City Conveyance of the City Parcel.** As part of the exchange contemplated by this Agreement, the City will convey the City Parcel to the District by quitclaim deed, free and clear

of any mortgages, liens, or encumbrances other than matters created by or acceptable to the District, pursuant to paragraph 4.C, below.

3. **District Conveyance of the New District Parcel and Temporary Construction Easements.** As part of the exchange contemplated by this Agreement, the District will convey the New District Parcel to the City by quitclaim deed, free and clear of any mortgages, liens, or encumbrances other than matters created by or acceptable to the City pursuant to paragraph 4.C, below. The District also agrees to convey to the City at Closing a temporary construction easement over the City Parcel, in a form substantively equivalent to that attached hereto as Exhibit C. The District will also convey to the City at Closing a temporary construction easement over the portion of the District Parcel that the District will retain, in a form substantively equivalent to that attached hereto as Exhibit D.

4. **Contingencies.** The obligations of the Parties to perform their respective obligations hereunder are expressly conditioned upon the following contingencies:

A. The City having obtained all appropriate approvals necessary for the City's use of the New District Parcel, including, but not limited to, subdivision of the District Parcel at the City's cost.

B. Each party having determined that it is satisfied with the result of and matters disclosed by its investigations, surveys, soil tests, engineering inspections, and environmental reviews of the parcel that it is acquiring pursuant to this Agreement, including, but not limited to, the District's satisfaction with the results of the Phase I environmental site assessment (ESA) to be performed by the City with respect to the City Parcel at the expense of the City. The City will ensure that the representations and warranties of the environmental consultant performing the ESA will explicitly run to both the City and the District.

C. Each party having determined that it is satisfied with the title evidence in the title commitment referenced in section 7, below.

Each party will deliver written objections to the form and/or contents of the title commitment or ESA on or before the fifth (5th) business day following that party's receipt of the last of the title commitment and ESA. If a party fails to make objections within such five (5) day period, then it is deemed to have waived its right to make objections.

The parties will cooperate to resolve any objections, provided the City bears the cost of doing so, other than the District's administrative costs. If the contingencies above are satisfied in a timely manner, then the parties shall proceed to close the transaction as contemplated herein. If, however, any of the contingencies listed above are not satisfied on or before the Closing, this Agreement shall thereupon be void, and the parties shall execute and deliver to each other a termination of this Agreement.

5. **Closing.** Closing of the transactions contemplated under this Agreement shall occur within thirty (30) days after the contingencies set forth in Section 4 have been satisfied or waived by City and the District, and, in any event will occur on or before [***insert new date***], 2020, unless: (i) mutually extended for purposes of satisfying a contingency set forth in Section 4, or

(ii) the Parties otherwise mutually agree. The Parties agree to promptly execute and deliver any other instruments or documents necessary to carry out the purposes of this Agreement before, at, or following Closing. The following representations and warranties are attendant to closing:

(a) The representations and warranties of the City set forth herein will be true on the date the City completes its obligations herein with the same force and effect as if such representations and warranties were made on and as of such date.

(b) The representations and warranties of the District set forth herein will be true on the date the District completes its obligations herein with the same force and effect as if such representations and warranties were made on and as of such date.

(c) There have been no material changes to the City Parcel between the date of this Agreement and the date of conveyance of the City Parcel to the District.

(d) There have been no material changes to the District Parcel between the date of this Agreement and the date of conveyance of the District Parcel to the City.

6. **Warranty of Title.**

(a) The City represents there are no recorded or unrecorded liens, encumbrances or leases, mortgages, security interests or other exceptions (collectively, the "**Liens**") to the City's fee title ownership of the City Parcel. The City warrants that: (i) the City is the fee simple owner of the City Parcel; (ii) the City has the right to enter into this Agreement and to make the promises, covenants, and representations contained in this Agreement; (iii) this Agreement does not violate any mortgage or other interest held by any third party regarding the City Parcel, or any portions of that parcel; (iv) there are no outstanding unpaid bills incurred for labor, materials, or services regarding the City Parcel, or any portions thereof; and (v) as of Closing, there will be no recorded or unrecorded liens, security interests, or any outstanding, pending, or threatened suits, judgments, executions, bankruptcies, or other proceedings pending or of record that would in any manner impact title to the City Parcel, or any portion thereof. The City will not grant, sell, convey, or in any way encumber the City Parcel prior to the Parties' Closing. The City shall fully cooperate and assist the District in obtaining consents to this Agreement from each party that holds rights (recorded or unrecorded) that might interfere with the District's or the City's rights under this Agreement.

(b) The District represents that it has no actual knowledge of liens, encumbrances or leases, mortgages, security interests or other exceptions to the District's fee title ownership of the New District Parcel not evidenced on the title commitment produced pursuant to section 7, below. The District warrants that the District is the fee simple owner of the New District Parcel; that the District has the right to enter into this Agreement and to make the promises, covenants, and representations contained in this Agreement; and that to its actual knowledge: (a) this Agreement does not violate any mortgage or other interest held by any third party regarding the New District Parcel, or any portions of that parcel; (b) there are no outstanding unpaid bills incurred for labor, materials, or services regarding the New District Parcel, or any portions thereof; and (c)

as of Closing, there will be no recorded or unrecorded liens, security interests, or any outstanding, pending, or threatened suits, judgments, executions, bankruptcies, or other proceedings pending or of record that would in any manner impact title to the New District Parcel, or any portion thereof. The District will not grant, sell, convey, or in any way encumber the New District Parcel prior to the Parties' Closing. The District shall fully cooperate and assist the City in obtaining consent to this Agreement from each party that holds rights (recorded or unrecorded) that might interfere with the District's or the City's rights under this Agreement, provided the City bears the cost of doing so, other than the District's administrative costs.

7. **Title Examination.** (a) Within 14 days following both parties' execution of this Agreement, the City will procure a title commitment for the City Parcel. If the title to the City Parcel, or any portion thereof, is unmarketable, the City will cooperate with the District to clear any title defects and to render title of the City Parcel to be marketable to allow the transactions contemplated herein to proceed in accordance with the terms and conditions of this Agreement.

(b) Within 14 days following the District's execution of this Agreement, the City will procure a title commitment for the New District Parcel. If the title to the New District Parcel, or any portion thereof, is unmarketable, the District will cooperate with the City to clear any title defects and to render title of the New District Parcel to be marketable, provided the City bears the cost of doing so, to allow the transactions contemplated herein to proceed in accordance with the terms and conditions of this Agreement.

8. **Taxes**

(a) All real estate taxes and special assessments or assessments for special improvements due, levied or assessed against the City Parcel for years prior to the year of Closing shall be paid by the City prior to Closing. Real estate taxes due and payable in the year of Closing will be prorated as of the Closing date.

(b) All real estate taxes and special assessments or assessments for special improvements due, levied or assessed against the New District Parcel for years prior to the year of Closing shall be paid by the District prior to Closing. Real estate taxes due and payable in the year of Closing will be prorated as of the Closing date.

9. **Closing Costs**.

The City will pay: (i) the costs of title commitment preparation and updating regarding the City Parcel; (ii) the costs of title commitment preparation and updating and the title insurance policy regarding the New District Parcel; (iii) title examination fees with respect to the City Parcel; (iv) title examination fees with respect to the District Parcel; (v) fees for the preparation of the deeds relating to both the City Parcel and the District Parcel; (vi) fees for the preparation of this Agreement; (vii) fees for the preparation and expenses of any survey, (viii) the costs of preparing and recording all releases, satisfactions, and title corrective documents with respect to the City or New District Parcel, and (ix) the cost of performing a Phase I environmental site assessment on the

City Parcel. The City will pay all other customary closing costs and attorney costs of the District related to closing. Each party will bear its own administrative costs.

10. **Forbearance or Waiver**. The failure or delay of either party to insist on the timely performance of any of the terms of this Agreement, or the waiver of any particular breach of any of the terms of this Agreement, at any time, will not be construed as a continuing waiver of those terms or any subsequent breach, and all terms will continue and remain in full force and effect as if no forbearance or waiver had occurred.

11. **Survival**. The terms of this Agreement will survive Closing.

12. **Assignment**. The City will not transfer or assign this Agreement or any rights or obligations under this Agreement without the express written consent of the District. The District will not transfer or assign this Agreement or any rights or obligations under this Agreement without the express written consent of the City.

13. **Governing Law**. This Agreement will be construed and enforced in accordance with Minnesota law. The Parties agree that any litigation arising out of this Agreement will be venued in State District Court in Carver County, Minnesota, and the Parties waive any objection to venue or personal jurisdiction.

14. **Severability.** If any court of competent jurisdiction finds any provision or part of this Agreement to be invalid, illegal, or unenforceable, that portion will be deemed severed from this Agreement, and all remaining terms and provisions of this Agreement will remain binding and enforceable; however, the Parties will reconvene negotiations and will reform or replace any invalid, illegal, or unenforceable provision or portion of this Agreement with an alternative provision that is enforceable and bears as close resemblance as possible to any provision determined invalid, illegal, or unenforceable.

15. **Entire Agreement.** This Agreement supersedes any previous oral or written agreements between the Parties.

16. **Modifications.** Any modifications or amendments of this Agreement must be in writing and signed by both Parties to this Agreement.

17. **Binding Effect.** The covenants, terms, conditions, provisions, and undertakings in this Agreement, or in any amendment, will be binding upon the Parties' successors and assigns.

18. **Cooperation.** The Parties agree to cooperate fully, to execute any and all additional documents, and to take any and all additional actions that may be necessary or appropriate to give full force and effect to the basic terms and intent of this Agreement and to accomplish the purposes of this Agreement.

19. **Representation.** The Parties, having been represented by counsel or having waived the right to counsel, have carefully read and understand the contents of this Agreement, and agree they have not been influenced by any representations or statements made by any other parties.

20. **Headings.** Headings in this Agreement are for convenience only and will not be used to interpret or construe its provisions.

City of Chanhassen

By _____
Elise Ryan
Its: Mayor

By _____
Todd Gerhardt
Its: City Manager

Riley-Purgatory-Bluff Creek Watershed District

By: _____
Dick Ward
Its: President, Board of Managers

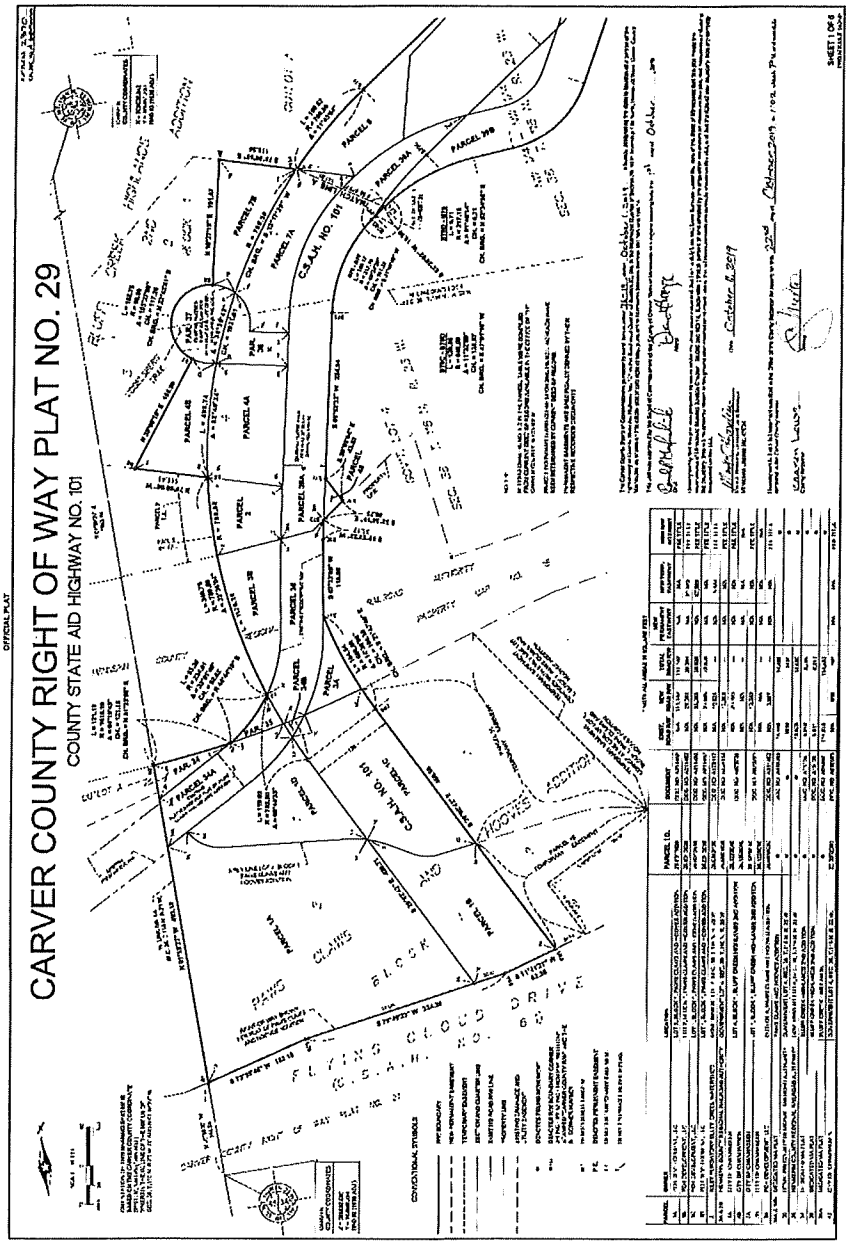
EXHIBIT A

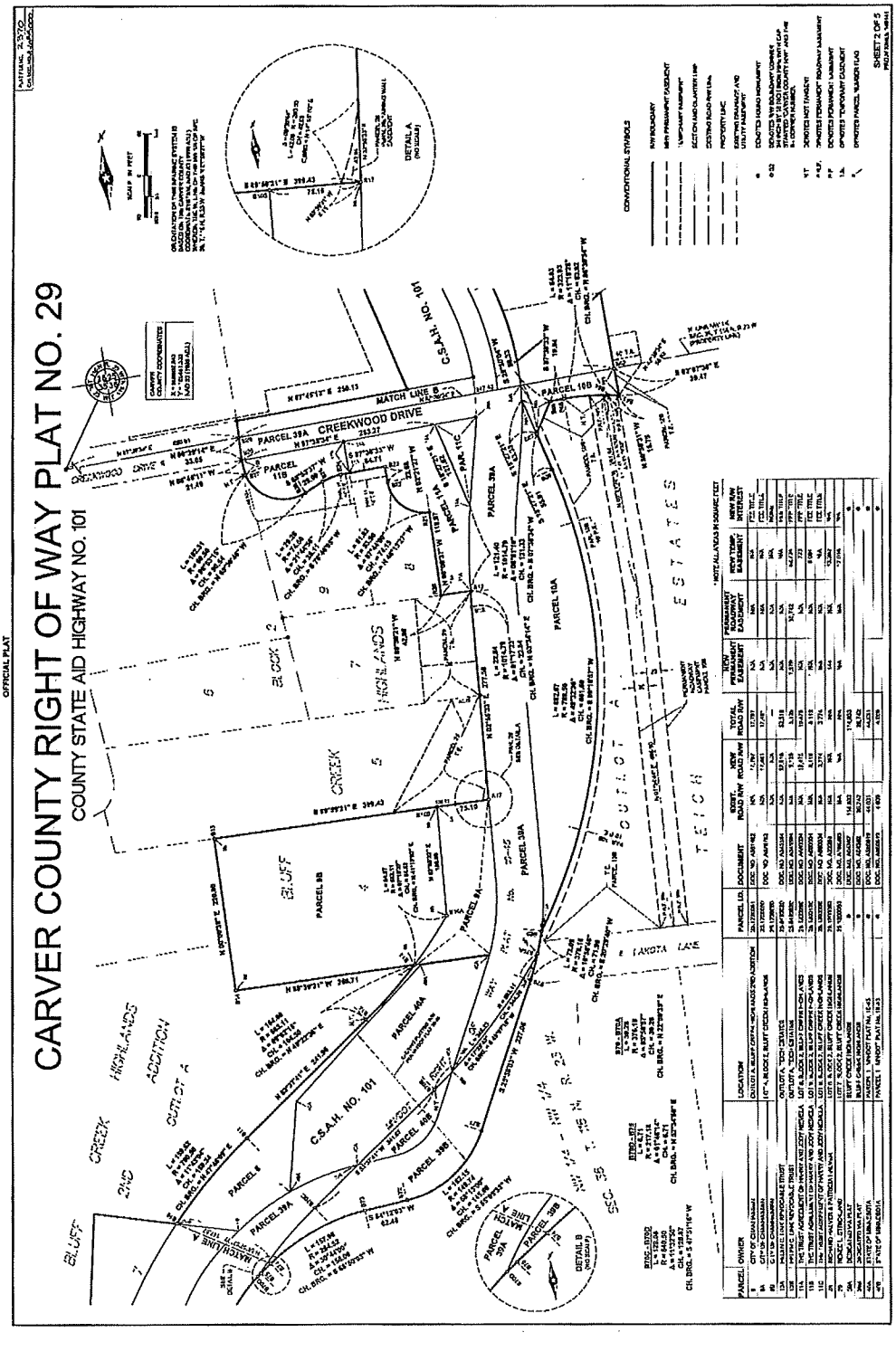
LEGAL DESCRIPTION OF CITY PARCEL

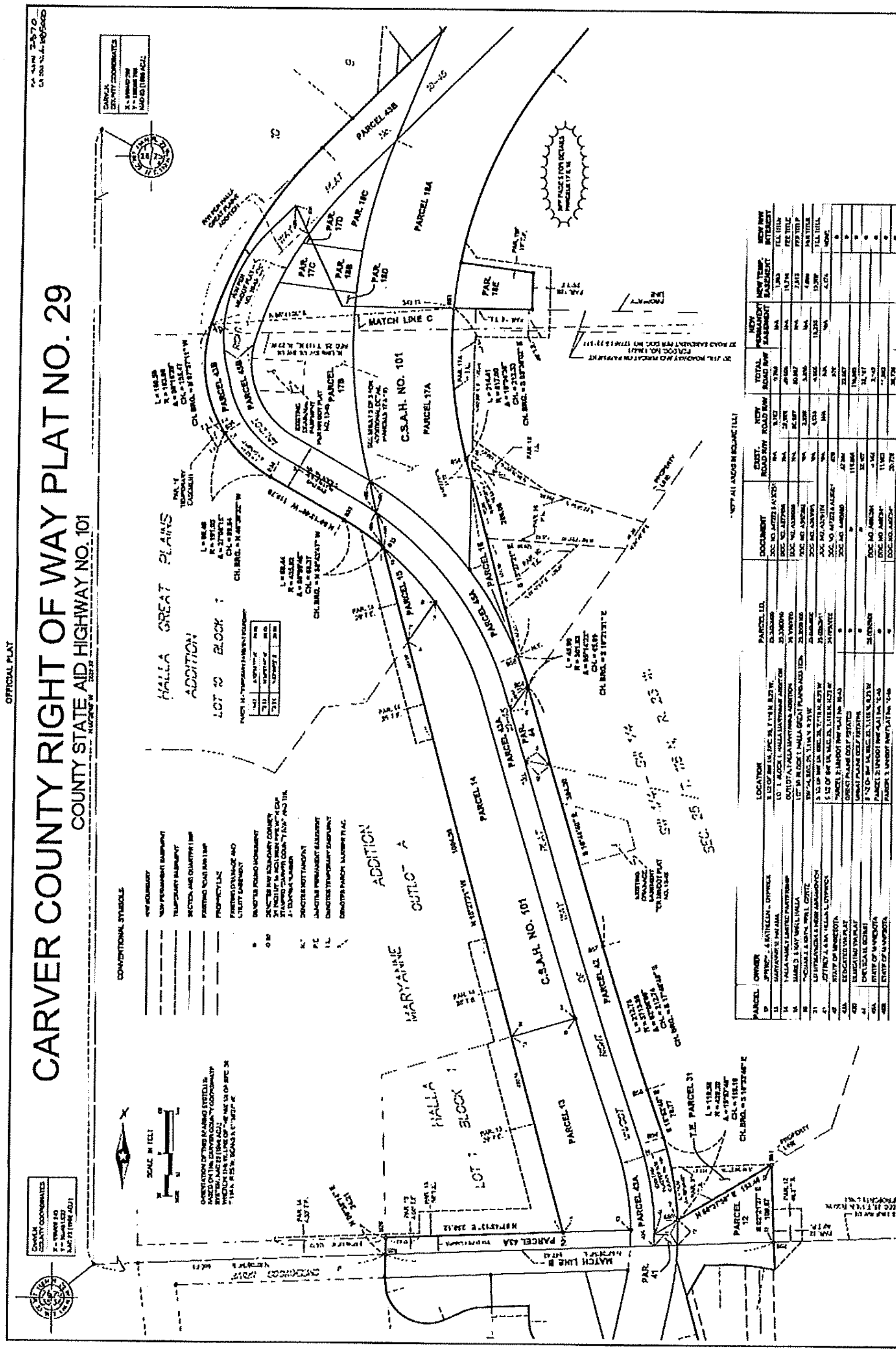
Parcel 4B, as shown on CARVER COUNTY RIGHT OF WAY PLAT No. 29, on file and of record in the office of the County Recorder, Carver County, Minnesota

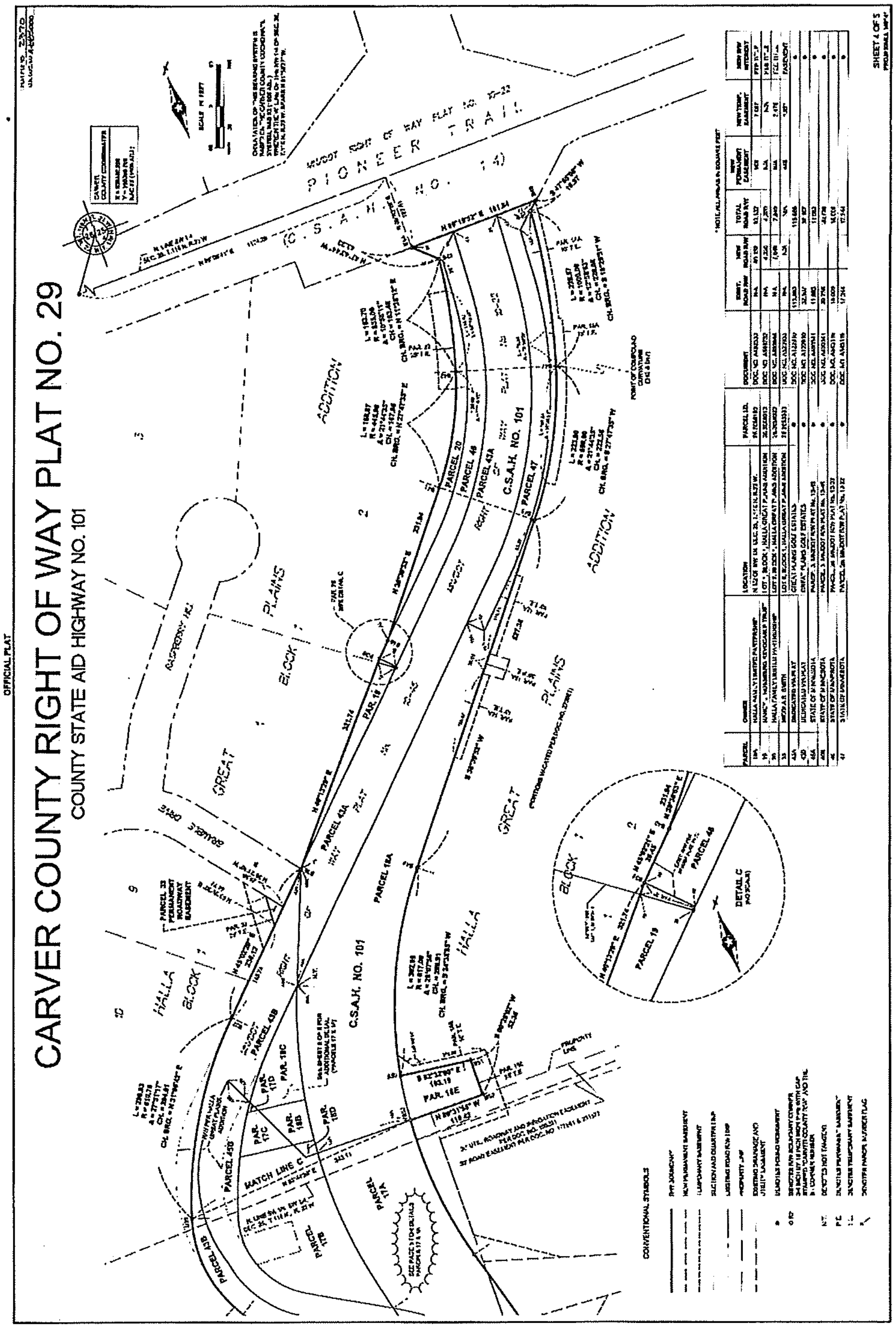
EXHIBIT A-1

CARVER COUNTY RIGHT OF WAY PLAT NO. 29 (showing CITY PARCEL, as Parcel 4B)




CARVER COUNTY RIGHT OF WAY PLAT NO. 29
COUNTY STATE AID HIGHWAY NO. 101
OFFICIAL PLAT
CREEKWOOD DRIVE
PARCEL 39A
PARCEL 11B
PARCEL 11C
PARCEL 10B
PARCEL 10A
PARCEL 39
PARCEL 40A
PARCEL 40B
PARCEL 8
C.S.A.H. NO. 101
BLUFF CREEK 2ND ADDITION
OUTLOT A
BLUFF CREEK HIGHLANDS
TAKOTA LANE
DETAIL A
DETAIL B
SHEET 2 OF 5


OFFICIAL PLAT
CARVER COUNTY RIGHT OF WAY PLAT NO. 29
COUNTY STATE AID HIGHWAY NO. 101
C.S.A.H. NO. 101
MATCH LINE C
PARCEL 13
PARCEL 14
PARCEL 15
PARCEL 16
PARCEL 17A
PARCEL 18A
PARCEL 43B
HALLA GREAT PLAINS ADDITION
MARYANNE ADDITION


OFFICIAL PLAT
CARVER COUNTY RIGHT OF WAY PLAT NO. 29
COUNTY STATE AID HIGHWAY NO. 101
SHEET 4 OF 5

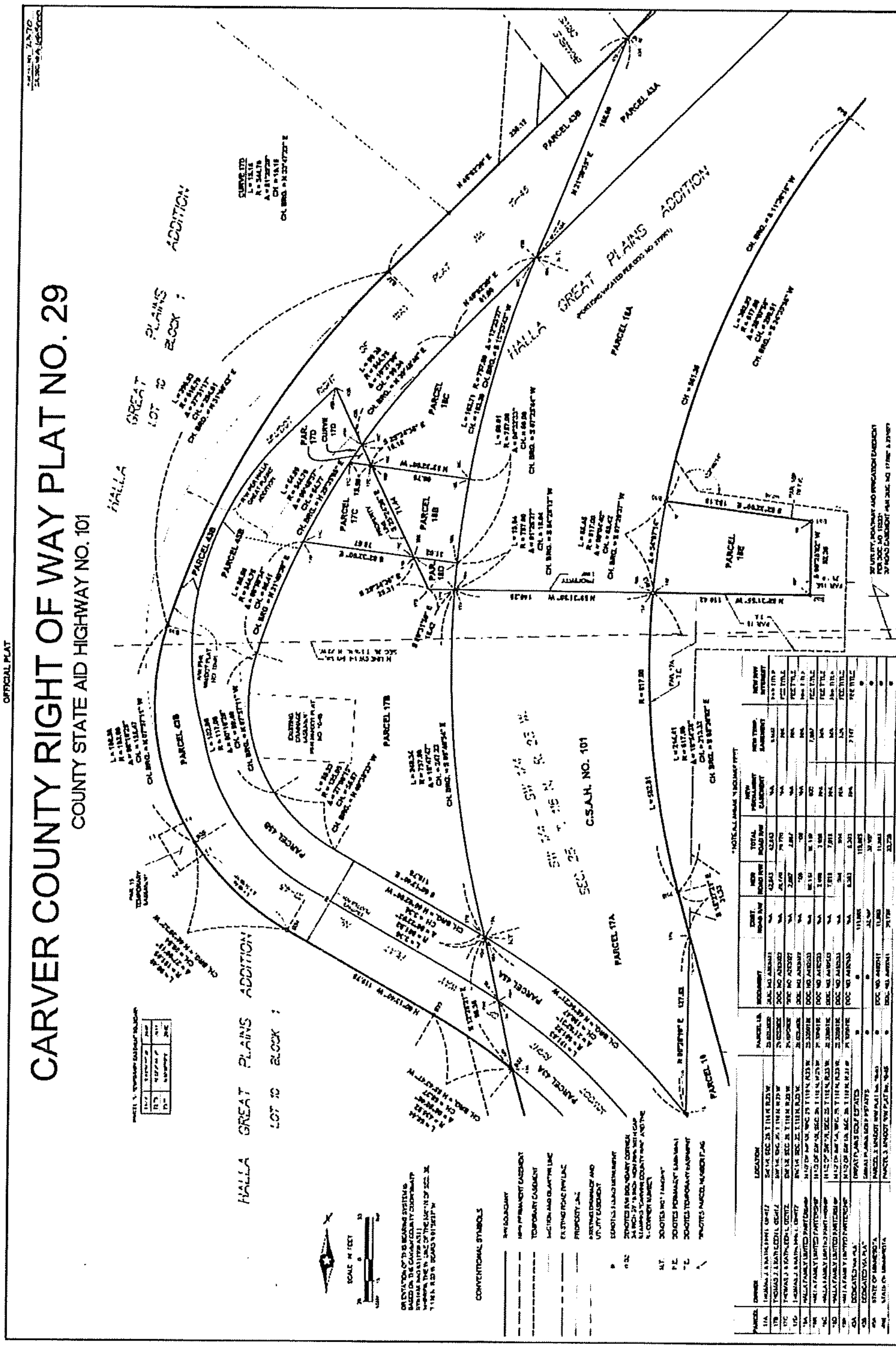

CARVER COUNTY RIGHT OF WAY PLAT NO. 29
COUNTY STATE AID HIGHWAY NO. 101
OFFICIAL PLAT
HALLA GREAT PLAINS ADDITION
C.S.A.H. NO. 101
CONVENTIONAL SYMBOLS

EXHIBIT B

LEGAL DESCRIPTION OF DISTRICT PARCEL

Parcel 2, as shown on CARVER COUNTY RIGHT OF WAY PLAT No. 29, on file and of record in the office of the County Recorder, Carver County, Minnesota

EXHIBIT B-2

PARCEL SKETCH DEPICTING NEW DISTRICT PARCEL

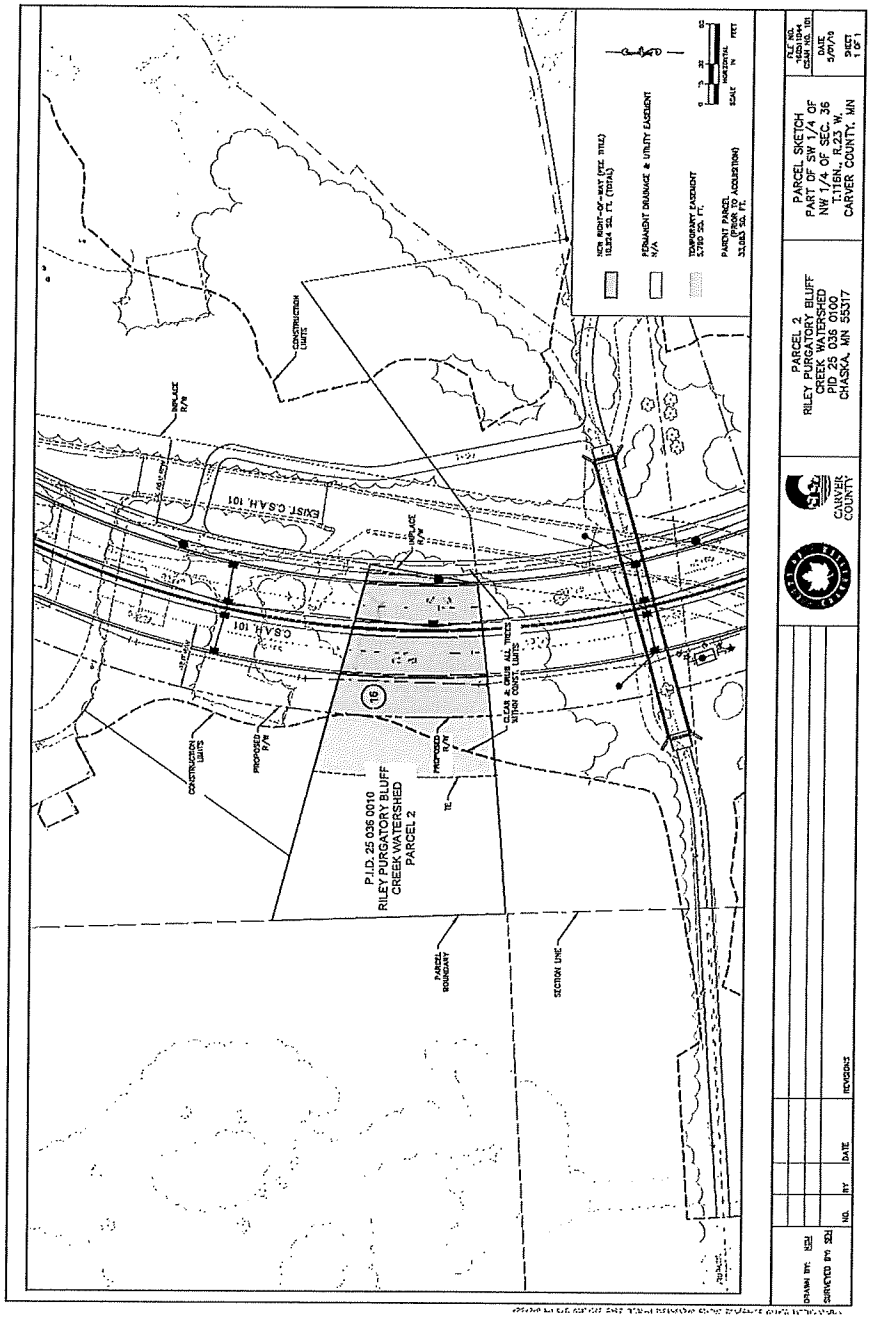


EXHIBIT C

FORM OF TEMPORARY CONSTRUCTION EASEMENT OVER CITY PARCEL

[to be added]

EXHIBIT D

FORM OF TEMPORARY CONSTRUCTION EASEMENT OVER PORTION OF DISTRICT PARCEL TO BE RETAINED BY THE DISTRICT

[to be added]

MEMORANDUM

DATE: December 23, 2019

TO: Managers and Administrator
Riley Purgatory Bluff Creek Watershed District (RPBCWD)

FROM: Larry A. Koch, manager RPBCWD

RE: IT systems review and engagement of IT Consultant

I hereby renew my recommendation regarding a review of the District's IT systems in the engagement of an IT consultant.

As I previously stated, given the importance of IT systems in the District's operations and the heightened awareness of the need for security of IT systems in order to protect confidential information of managers, employees, contractors and other who entrust their information to the District, I recommend the district engage an IT consultant to review the District's IT systems and processes, including but not limited to disaster recovery and security.

My concern is heightened by the stated computer glitch that prevented the district administrator from providing, me with the Excel Version of the District's 2020 budget. The district administrator has yet to provide me with an Excel version of the 2020 budget, be at the final or an earlier draft. I cannot help but believe that a proper backup system would have avoided this issue. In any event, the District's systems need to be reviewed.

Therefor, I moved the adoption of the following resolutions: BE IT RESOLVED

1. That the district Administrator of the Riley Purgatory Bluff Creek Watershed District's (the "District") inquire of other watershed districts, MAWD, BSWR and other organizations regarding their IT policies and procedures, and consultants and provide the results of such inquiry to the managers.

2. That the district administrator solicit proposals from not less than three notable and recognized ITCs to (a) review the District's IT systems and processes including but not limited to disaster recovery and security and (b) prepare and present not later than 60 days after their engagement, a report to the managers, of results of its review to the managers which report shall at a minimum set forth, (i) a summary of the District's IT systems and process, (ii) recommendations for improvement to the District's IT systems and processes necessary for the District to comply will all applicable laws, rules and best management practices regarding IT systems and processes, and (iii) such other observations and recommendations as they seem necessary or appropriate such that the managers and the District can comply with all applicable laws and best management practices, including but not limited to, recommendations regarding training, evaluations, reviews and equipment.

3. That the district administrator provide the managers with a detailed report of the status of the District's IT systems, the extent to which the District process IT systems comply or fail to comply with applicable state and federal laws and the steps and processes used to protect the District's IT system for discussion and at a closed session of a meeting of the managers.

MEMORANDUM

DATE: December 27, 2019

TO: Managers and Administrator
Riley Purgatory Bluff Creek Watershed District (RPBCWD)

FROM: Larry A. Koch, manager RPBCWD

RE: Credit cards-purchasing cards

It is my understanding that currently the district uses a credit card to make certain purchases. In addition, the staff makes purchases. They submit reimbursements to the district. It is my understanding that such credit card purchases are recorded in the various accounts as visa purchases or reimbursements to staff and that the vendor or item is not recorded in the accounts. Whether or not this is proper accounting practice, it is not a best management practice.

Rather than using credit cards, the district could use what I refer to as "purchasing cards," which tracked the vendor and items purchased and allows the data to be downloaded directly into the district's accounting system. Such cars can provide that each employee be issued card and various controls can be placed on the uses of the card to a limit the possibilities of abuse. Information can be found on the NAPCP website (https://www.napcp.org/).

Therefore, I recommend that staff investigate the use of purchasing cards by all staff for payment of purchases of equipment and services for the district.

Therefore, I moved the adoption of the following resolutions: BE IT RESOLVED

1. That the district Administrator of the Riley Purgatory Bluff Creek Watershed District's (the "District") is hereby authorized and directed to inquire into the use of purchasing cards by the district and to prepare and provide to the managers, a report of the results of such inquiry.

MEMORANDUM

DATE: December 27, 2019

TO: Managers and Administrator
Riley Purgatory Bluff Creek Watershed District (RPBCWD)

FROM: Larry A. Koch, manager RPBCWD

RE: Journal of votes

While attending a seminar put on by the Department of Administration of the state of Minnesota, was brought to my attention that MS Section 13D.01 Subd. 4 states that "[the] votes of the members of the state agency, board, commission, or department; or of the governing body, committee, subcommittee, board, department, or commission on an action taken in a meeting by this section to be open to the public must be recorded in a journal kept for that purpose."

I then inquired of the district's administrator and legal counsel as to whether or not the district had a journal of votes. I was told no and that the minutes of the meeting sufficed.

It was my recollection that at the seminar, the presenters stated that minutes were insufficient substitute for the required Journal of votes. I then emailed the Department of Administration regarding my recollection. In an email, copy of which is attached, it appears that it is the position of the Department of Administration that minutes are insufficient substitute for the Journal of votes and that watershed District is required to maintain a journal of votes.

Therefore, I recommend that the secretary the district with the assist the legal counsel and staff commence the maintenance of the Journal of votes as required by Minnesota law.

Therefore, I moved the adoption of the following resolutions: BE IT RESOLVED

1. That the secretary of the Riley Purgatory Bluff Creek Watershed District's (the "District") with the assistance of the district's Administrator and legal counsel create and maintain a journal of votes as required by Minnesota law, MS Section 13D.01 Subd. 4. beginning immediately with this meeting and all future meetings and all past meetings.

MEMORANDUM

DATE: December 27, 2019

TO: Managers and Administrator
Riley Purgatory Bluff Creek Watershed District (RPBCWD)

FROM: Larry A. Koch, manager RPBCWD

RE: Proposal for survey of erosion of Lakeshore and wetlands

It has come to my attention that there appears to have been a significant increase in the erosion to shorelines and lake bottoms as well as wetlands as a result of certain activities on the lakes within the district. I have been in contact with two residents on Lotus Lake, Donna Burt and Joanne Syverson and, regarding erosion of their shoreline due to enhanced wakes caused by watercraft, including watercraft, which are known as “wake boats.”. I have also been informed that such damage may well be occurring on Lake Riley as well.

Therefore, I recommend that staff investigate whether a route erosion to the shorelines and lake bottoms of the lakes within the district.

Therefore, I moved the adoption of the following resolution: BE IT RESOLVED

1. That the district Administrator of the Riley Purgatory Bluff Creek Watershed District’s (the “District”) is hereby authorized and directed to develop a plan for determining the amount and cause of erosion occurring to the shorelines and the lake bottoms of the lakes within the district and to prepare and provide such a plan to the managers for its review.

MEMORANDUM

DATE: December 27, 2019

TO: Managers and Administrator
Riley Purgatory Bluff Creek Watershed District (RPBCWD)

FROM: Larry A. Koch, manager RPBCWD

RE: Form of resolutions approving permit application

It is been my experience that the managers often spend unnecessary amount of time fumbling over the wording of resolutions approving a permit application. In order to avoid wasting time fumbling over the recitation of resolutions for approving a permit application, I recommended that the district adopt the form of resolutions set forth below, and that the staff and its consultants use such form of resolutions for each and every permit application.

Therefore, I moved the adoption of the following resolutions: BE IT RESOLVED

1. That the district Administrator of the Riley Purgatory Bluff Creek Watershed District's (the "District"), and all consultants assisting in the preparation of staff reports pertaining to the approval of permit applications are hereby directed to use the following form of resolutions in preparing the resolutions for inclusion in the staff report on a permit application.

    1.1 Resolved, that after review of and based upon the staff report presented to the managers regarding the application for the issuance of Permit _____ pursuant to the District's rules, said application is hereby approved subject to the terms and conditions set forth in the Recommendations section of the staff report;

    1.2 Resolved, that the District Administrator is hereby authorized and directed to prepare a permit pursuant to the District's Rules consistent with the foregoing resolution;

    1.3 Resolved that the President of the board of managers and the district's administrator are hereby authorized to execute said permit for and on behalf of the District, and

    1.4 Resolved that the District administrator is hereby authorized and directed to release said permit upon the administrator's determination that the applicant has satisfied all conditions to the release of said permit.

2. That the Secretary with the assistance of the district administrator assign a number to such resolutions as adopted for inclusion in the District's Journal of Votes.

3. That the Secretary with the assistance of the district administrator include a copy of the adopted resolutions in the District's Journal of Votes.

4. That the Journal of Votes include language to the effect that "Manager [_____] moved the adoption of the [following resolutions/the proposed Resolutions set forth in the Staff Report for Permit Application [____], which motion was seconded by Manager [_____] On voice vote, the motion carried [___] to [____] [Manager(s) _____ voted no/nay."

MEMORANDUM

DATE: December 27, 2019

TO: Managers and Administrator
Riley Purgatory Bluff Creek Watershed District (RPBCWD)

FROM: Larry A. Koch, manager RPBCWD

RE: Form of resolutions approving variance

It is been my experience that the managers often spend unnecessary amount of time fumbling over the wording of resolutions approving a variance. In order to avoid wasting time fumbling over the recitation of resolutions for approving a variance, I recommend that the district adopt the form of resolutions set forth below, and that the staff and its consultants use such form of resolutions for each and every permit application.

Therefore, I moved the adoption of the following resolutions: BE IT RESOLVED

1. That the district Administrator of the Riley Purgatory Bluff Creek Watershed District's (the "District"), and all consultants assisting in the preparation of staff reports pertaining to the approval of a request for a variance form the District's rules are hereby directed to use the following form of resolutions in preparing the resolutions for inclusion in the staff report on a request for a variance from the application of the District's rules.

    1.1 "Pursuant to Rule K, in order for the district to grant a variance from strict compliance with the requirement of a District Rule, the Board of Managers must finds that, based on demonstration by the applicant, that because of unique conditions inherent to the subject property, which do not apply generally to other land or structures in the Riley-Purgatory-Bluff Creek watershed, strict application of rule provision will impose a practical difficulty on the applicant, not a mere inconvenience.

    1.2 For purposes of the Board of Managers' determination of whether a practical difficulty exists, the following factors will be considered:

        1.2.1 1.1 how substantial the variation is from the rule provision;

        1.2.2 1.2 the effect of the variance on government services;

        1.2.3 1.3 whether the variance will substantially change the character of or cause material adverse effect to water resources, flood levels, drainage or the general welfare in the District, or be a substantial detriment to neighboring properties;

        1.2.4 1.4 whether the practical difficulty can be alleviated by a technically and economically feasible method other than a variance.

1.3 Economic hardship alone may not serve as grounds for issuing a variance if any reasonable use of the property exists under the terms of the District rules;

1.4 1.5 how the practical difficulty occurred, including whether the landowner, the landowner's agent or representative, or a contractor, created the need for the variance; and

1.5 1.6 in light of all of the above factors, whether allowing the variance will serve the interests of justice

1.6 NOW THEREFORE, BE IT RESOLVED, THAT THE BOARD, HAVING CONSIDERED THE INFORMATION PROVIDED BY THE APPLICANT, [APPLICANT] AND THE FACTORS TO BE CONSIDERED IN DETERMINING WHETHER A PRACTICAL DIFFICULTY, AS WELL AS THE STAFF REPORT REGARDING THE APPLICATION FOR A VARIANCE, HEREBY GRANTS THE VARIANCES SET FORTH IN THE APPLICATION."

2. That the Secretary with the assistance of the district administrator assign a number to such resolutions as adopted for inclusion in the District's Journal of Votes.

3. That the Secretary with the assistance of the district administrator include a copy of the adopted resolutions in the District's Journal of Votes.

4. That the Journal of Votes include language to the effect that "Manager [_____] moved the adoption of the [following resolutions/the proposed Resolutions set forth in the Staff Report for Permit Application [____], which motion was seconded by Manager [_____] On voice vote, the motion carried [___] to [____] [Manager(s) _____ voted no/nay."

MEMORANDUM

DATE: December 27, 2019

TO: Managers and Administrator
Riley Purgatory Bluff Creek Watershed District (RPBCWD)

FROM: Larry A. Koch, manager RPBCWD

RE: Internal Calendar

I believe that it is a best management practice to maintain an internal calendar of matters that need to be addressed during the year so as to avoid hurried or rushed deliberations of important matters and special meetings.

Therefore, I recommend that the staff with input from the managers create a calendar of important matters so as to avoid hurried or rushed deliberations of important matters and also avoid special meetings. I have attached a proposed calendar of important events which I believe need to be scheduled well in advance so as to avoid hurried or rushed deliberations of important matters as well as avoiding special meetings.

Therefore, I moved the adoption of the following resolutions: BE IT RESOLVED

1. That the district Administrator of the Riley Purgatory Bluff Creek Watershed District's (the "District"), with input from the managers develop a calendar of important matters to be dealt with by the managers during the year and that such calendar include the items set forth in the calendar presented by Manager Koch.

MEMORANDUM

DATE: December 26, 2019

TO: Managers and Administrator
Riley Purgatory Bluff Creek Watershed District (RPBCWD)

FROM: Larry A. Koch, manager RPBCWD

RE: multiyear project report

The current report for multiyear projects included in the treasurer's report does not indicate the districts remaining obligation for funding the project, rather it indicates only the total remaining funding obligation for the project. Without knowing what the District's remaining obligation for funding the project is, it is not possible to determine whether or not the district has sufficient funds either on hand to meet its funding obligation.

Therefore, I recommend that staff investigate the use of purchasing cards by all staff for payment of purchases of equipment and services for the district.

Therefor, I moved the adoption of the following resolutions: BE IT RESOLVED

1. That the district Administrator of the Riley Purgatory Bluff Creek Watershed District's (the "District") and the district's Treasurer are hereby authorized and directed to inquire into adding the following information to the district's monthly multiyear expenditure table and to prepare and provide to the managers, a report of the results of such inquiry.

		Funding									
Project	Total Lifetime Budget	District	Partner	Grants	Current year budget	Costs Month Ended	Costs Year To Date	Total Costs To Date	Remaining costs	District's share current year	Districts share future years