

# Memorandum

**To:** Riley-Purgatory-Bluff Creek Watershed District Board of Managers and District Administrator  
**From:** Barr Engineering Co.  
**Subject:** Engineer's Report Summarizing December 2024 Activities for January 8, 2025 Board Meeting  
**Date:** January 2, 2025  
**Project:** 23270053.14 2024

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 December 2024.

## General Services

- a. Met with President Pedersen, Administrator Jeffery, and legal counsel on December 5 to discuss agenda for the December 11 meeting.
- b. Participated in the December 11 regular meeting of the Board of Managers.
- c. Participated in the December 11 workshop of the Board of Managers.
- d. Met virtually with Administrator Jeffery and Counsel Welch on December 30 to discuss actions on Upper Bluff Creek cooperative agreement, Phase 2 environmental site assessment for upper Bluff Creek project, potential permitting fee and financial assurance schedule revisions (likely at February 2025 meeting), upper Riley Creek draft cooperative agreement, private property access agreements and Chanhassen removal of decant facility, groundwater monitoring cooperative agreement, and permits.
- e. Prepared December 2024 engineering report
- f. Miscellaneous discussions with Administrator Jeffery about task order development, CIP projects, permits, regulatory program, and ongoing studies.

## Permitting Program

- a. *Permit 2020-051: BIOLYPH Parking* – This project is a 0.55-acre parking lot expansion at the BIOLYPH building in Chaska, MN. The permit triggers RPBCWD's Erosion Prevention and Sediment Control Rule (Rule C) and Stormwater Management Rule (Rule J). Stormwater management facilities include an underground storage system with hydrodynamic separators and a rainwater harvest and reuse system. Worked with applicant on condition fulfillment.
- b. *Permit 2024-049: 11609 Leona Rd Redevelopment* – The applicant is proposing to subdivide the existing 3.44 AC parcel into two separate lots to 1) develop a one story, approximately 2,447 square foot building with a drive through, patio, and associated utility, landscape, and parking improvements and 2) demo a portion of the existing retail building and develop an approximately 18,500 square foot building with associated utility, landscape, and parking improvements. The project triggers RPBCWD erosion prevention and sediment control (Rule C and stormwater management rule (Rule J). Informed applicant of conditional approval at

- the December 11, 2024 meeting.
- c. *Permit 2024-078 Avienda Master Plan* – The applicant is seeking approval of a regional stormwater master plan covering roughly 63 acres in Chanhassen near Lyman Boulevard and Powers Boulevard. The proposed stormwater management system includes regional detention pond, two rainwater harvest and reuse systems, biofiltration basins, a manufactured treatment device, and modifying two existing stormwater facilities on the site to provide runoff volume abstraction, water quality treatment, and rate control. The project triggers RPBCWD floodplain management rule, erosion prevention and sediment control rule, and the stormwater management rule. Reviewed December 11, 17 and 20 revised submittals and drafted permit report for consideration at the January 8, 2025 board meeting.
  - d. *Permit 2024-086: Eden Prairie Police Expansion* – The applicant proposes construction of a building addition, new and rehabilitated asphalt pavements, erection of a security fence around police parking, adjacent sidewalks, retaining walls, and an infiltration basin to provide volume control, water quality, and rate control. The permit triggers RPBCWD's Erosion Prevention and Sediment Control Rule (Rule C), Wetland and Creek Buffers (Rule D) and Stormwater Management Rule (Rule J). Informed applicant of conditional approval at the December 11, 2024 meeting.
  - e. *Permit 2024-091: Hwy 5 Business Center* –The applicant proposes construction of an office/warehouse building, parking, utilities, and an infiltration basin to provide volume control, water quality, and rate control on a 4.5-acre site in Eden Prairie. The permit triggers RPBCWD's Erosion Prevention and Sediment Control Rule (Rule C) and Stormwater Management Rule (Rule J). Informed applicant of conditional approval at the December 11, 2024 meeting.
  - f. *Permit 2024-093 Hidden Valley* - The project proposes to split the existing lot at 16515 Hidden Valley Rd in Minnetonka into two single family home lots. The proposed project triggers RPBCWD's floodplain management, erosion prevention and sediment control, and stormwater management rules. Reviewed November 27 submittal and provided review comments on December 18 informing the applicant the submittal remained incomplete because of missing permit fee deposit, wetland protection analysis, and engineers opinion of probable cost.
  - g. *Permit 2024-096 Fox Ridge Estates* - The project proposes to split the existing lot at 581 Fox Hill Dr. in Chanhassen into three single family home lots and an outlot. The project will also result in an additional outfall to Lotus Lake. The proposed project triggers RPBCWD's floodplain management, erosion prevention and sediment control, wetland and creek buffer, waterbody crossing and structures, and stormwater management rules. Reviewed December 4 submittal and provided review comments on December 18 informing the applicant the submittal remained incomplete because of missing permit fee deposit and engineers opinion of probable cost.
  - h. *Permit 2024-098 Pioneer Ridge* - The project proposes 60 residential townhomes with associated streets and utility infrastructure northeast intersection of Bluff Creek Drive and Pioneer Trail in Chanhassen. The proposed project triggers RPBCWD's erosion prevention and sediment control and stormwater management rules. Reviewed December 13 submittal and provided review comments on December 20 informing the applicant the submittal remained incomplete because of missing permit fee deposit, stormwater models in native

electronic format, and engineers opinion of probable cost.

- i. Miscellaneous preapplication calls, emails, and meetings with future applicants with questions about rule applicability and criteria. Also answering questions from existing permit applicants about how to address comments provided during the review process and conditions of approval.

#### **Data Management/Sampling/Equipment Assistance**

- a. Lake and stream Survey123 app updates per RPBCWD request
- b. Prepared, loaded, and verified 2 RMB Laboratory (RMB) reports to the database
- c. Processing of RPBCWD summer field data collected by RPBCWD.

#### **Task Order 6: WOMP Station Monitoring**

##### Purgatory Creek Monitoring Station at Pioneer Trail

- a. No activity.

##### Purgatory Creek Monitoring Station at Valley View Rd

- a. No activity.

#### **Task Order 24B: Silver Lake Water Quality Improvement Project**

- a. **Vegetation maintenance contract is underway through December 2025.**

#### **Task Order 28B: Rice Marsh Lake (RM\_12a) Water Quality Improvement Project**

- a. The three-year vegetation establishment period is in process and will continue through fall 2025.

#### **Task Order 29B: Middle Riley Creek (Reach R3) Stabilization Project Design**

- a. Stantec will replace live stakes during the dormant season next spring at the north site. Site inspections will resume in the spring prior to May 15th and continue until the end of the 2025 growing season or later, until vegetation establishment has reached final acceptance conditions.

#### **Task Order 30B: Pioneer Trail Wetland Restoration Project**

- a. Three-year vegetation establishment period is in process.

#### **Task Order 32B: Upper Riley Creek Ecological Enhancement Project**

- a. Working with Administrator Jeffery and RPBCWD legal on securing private property agreements and revisions to cooperative agreement given the city of Chanhassen decision to withdraw support of the decant facility.
- b. Submitted draft documents for the cooperative agreement with the city of Chanhassen.

- c. Coordinating with MCES on Encroachment Agreement, anticipate agreement to be finalized in December.
- d. Revising plans, specifications, and permits to remove the city requested decant facility.

**Task Order 36B: Upper Bluff Creek Reach 5 Design**

- a. Wetland outlet structure design will likely require excavation of compensatory flood storage.
- b. Change Order to execute the Phase II ESA to evaluate the extent of the potential contamination at the ravine dump sites was approved by the Board at the December meeting.
  - a. Approval of the Change Order is conditioned on development of a land-use agreement with the District and private property owners that requires the property owners to enroll in the MPCA voluntary cleanup program.
  - b. Barr is waiting to commence the Phase II ESA until the District has developed this agreement.
- c. 60% design of stream restoration elements is ongoing.

**Task Order 39B: Lotus Lake Water Quality Project – Park Concept**

- a. A Request for Qualifications for artists was distributed and in November, seven (7) qualifications packages were delivered to the District via Barr for consideration. Five (5) were selected for further review by District staff, with ultimate selection and contracting anticipated in January.

**Task Order 41: Chanhassen Decant Facility**

- a. Contract documents prepared for bid.
- b. Project being removed from bidding documents (under Task Order 32B) based on city of Chanhassen Council removing support for the facility at this time.
- c. Additional unbudgeted scope items incorporated into the Project include the following and have resulted in the design and permitting effort exceeding the authorized budget:
  - a. Relocating the Project site after 30% Design.
    - i. Revisions to design and reissuance of 30% Design.
    - ii. Additional survey and geotechnical investigation required for relocated site.
    - iii. More extensive Stormwater Management design and permitting coordination due to proximity of wetlands, flood plain, and MCES easement.
  - b. Addition of electrical and lighting design.

**Task Order 44: Lake Susan Park Pond Reuse Intake Modification**

- a. Process payment application #2.

**Task Order 47: Lucy, Ann and Susan Lake and Watershed Management Plans**

- a. Continued development of the P8 models.
- b. Continued organizing data for management plans.
- c. Began developing water quality plots.

**Task Order 48: Districtwide Shoreline and Aquatic Plant Management Plan**

- a. Established a meeting with District staff to discuss plan.

**Task Order 49: Districtwide Fisheries Management Plan**

- a. Continued working to schedule a kick-off meeting with District staff.

**Task Order 50: Mitchell and Red Rock Lake and Watershed Management Plans**

- a. Continued development of the P8 models. Continued organizing data for management plans.

Capital Project	Project Phase (% Complete)								Comments
	Regional Analysis	Feasibility Study	Project Ordering	Design	Permitting	Construction	Substantial Completion	Final Completion	
<b>Bluff Creek</b>									
Bluff Creek Tributary Restoration	100%	100%	100%	100%	100%	100%	100%	100%	Project Closed-out and Final payment in October 2023
Pioneer Wetland Restoration	100%	100%	100%	100%	100%	100%	100%	60%	3-year vegetation management underway
Bluff Creek Reach 5 Restoration	100%	100%	100%	35%	5%				Proposed wetland outlet design and stream restoration element design is underway, waiting for RPBCWD staff to coordinate access to conduct Phase II ESA within compensatory storage excavation within Bluff Creek.
BT3	100%								
B4	100%								
B3	100%								
<b>Riley Creek</b>									
Lake Riley - Alum Treatment	100%	100%	100%	100%	100%	100%	100%	100%	
Rice Marsh Lake in-lake phosphorus load	100%	100%	100%	100%	100%	33%	33%	33%	The first of three alum doses applied in 2018
Rice Marsh Lake Water Quality Improvement Phase 1	100%	100%	100%	100%	100%	100%	100%	60%	3-year vegetation management underway
Riley Creek Restoration (Reach E and D3) (aka Lower Riley Creek Restoration)	100%	100%	100%	100%	100%	100%	100%	100%	
Upper Riley Creek Stabilization (aka Upper Riley Creek Ecological Enhancement Project)	100%	100%	100%	100%	75%				DNR and USACE permit received. District permitting pending. Anticipate bidding in fall after the decant facility is incorporated into the project as directed by the Administrator. Assisting staff with property access agreements (private and public).
Middle Riley Creek Restoration	100%	100%	100%	100%	100%	100%	100%	60%	3-year vegetation management underway
St. Hubert Water Quality Project	100%	100%	100%	100%	100%	100%	100%	45%	3-year vegetation management underway
Lake Susan Park Pond	100%	100%	100%	100%	100%	100%	100%	100%	
Susan In-Lake	100%								
LU-A1.10c	100%								
LU-A3.4	100%								
Lake Susan Park Pond Reuse Inlet Enhancement				100%	100%	95%			Processed payment application #2. Anticipate start-up in spring 2025
Chanhassen Decant Facility				100%	75%				Contract documents are ready for bid. Project being removed from bidding documents (under Task Order 32B) because city council didn't want to move forward with the facility at this time.
<b>Purgatory Creek</b>									
Purgatory Creek Rec Area- Berm/retention area	100%			50%					
Lotus Lake in-lake phosphorus load control	100%	100%	100%	100%	100%	100%	100%	100%	Second alum application complete in October 2024
Silver Lake Water Quality BMP	100%	100%	100%	100%	100%	100%	100%	45%	3-year vegetation management underway
Scenic Heights Forest Restoration	100%	100%	100%	100%	100%	100%	100%	100%	
Hyland Lake in-lake phosphorus load control	100%	100%	100%	100%	100%	100%	100%	100%	Three Rivers Park took over project.
Duck Lake Watershed Load	100%	100%	100%	100%	100%	100%	100%	100%	
Duck Lake Road Partnership (aka bridge)			100%				100%	100%	Partnership project with Eden Prairie. RPBCWD limited to financial contribution. Construction is complete. RPBCWD has fulfilled 3 of 5 year financial contributions.
Lotus Lake Watershed Improvement Project (LL_1, LL_3, LL_7, LL_8)	100%	100%							Working with staff on artist engagement opportunities.
Staring Lake StL_21	100%								
Lotus Lake LL_9	100%								
Staring Lake StL_1	100%								
Red Rock Lake RRL_7	100%								
Staring Lake StL_17	100%								
Mitchell Lake ML_3	100%								
PC_1	100%								
PC_2	100%								
Kerber Ravine	100%	100%							Incorporated summary into Lotus Lake Water Quality project to assess impact with respect to other BMPs being considered.

<b>Ongoing Studies</b>									
Ecological Health Action Plan		100%							
Lotus Lake LVMP		100%						100%	
Eden Prairie Climate Resilience Modeling		100%						100%	
Wetland Assessment Phase 1		95%						95%	
Sediment Analysis - Riley, Rice Marsh, Susan		100%							
Development of Groundwater Monitoring Network		45%		50%					Location siting and selection underway. Specifications for bids ready to be sent once concurrence of property owners obtained for well locations.
Duck Lake Outlet Modification		100%							Finalized report, presented results at November 6 board meeting