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## Riley Purgatory Bluff Creek Watershed District Permit Application Review

**Permit No:** 2022-063

**Considered at Board of Managers Meeting:** September 14, 2022

**Received complete:** September 2, 2022

**Applicant:** Black Cherry Development, LLC, Tim Erhart

**Consultant:** Seth Loken, Alliant Engineering

**Project:** Erhart Farm Waterbody Crossing: The applicant is seeking an after-the-fact permit for the construction of a bridge spanning the watercourse connecting Wetland 2 and Wetland 3 within the Erhart Farm development.

**Location:** 775 West 96th Street, Chanhassen, MN 55317

**Reviewer:** Scott Sobiech, P.E., 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 September 14, 2022 meeting of the managers:

Resolved that the application for Permit 2022-063 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 2022-063 to the applicant on behalf of RPBCWD.

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

### Applicable Rule Conformance Summary

Rule	Issue	Conforms to RBPCWD Rules?	Comments
B	Floodplain Management and Drainage Alterations	Yes	
C	Erosion Control Plan	Yes	
D	Wetland and Creek Buffers	Yes	

Rule	Issue	Conforms to RBPCWD Rules?	Comments
G	Waterbody Crossing and Structures	See Comment	See rule specific condition G1 related to the recordation of a maintenance declaration.
L	Permit Fee	Yes.	\$3,000 received September 2, 2022
M	Financial Assurance	See comment.	Because the site is stabilized and this an after-the-fact permit, no financial assurance is necessary.

### **Background**

At the October 2021 meeting of the board of managers the managers conditionally approved permit 2021- 068 for the Erhart Farm redevelopment on a site totaling 118.2 acres in 24 single-family residential lots, two of which had existing single-family residences, and seven outlots. The applicant fulfilled the conditions of approval and permit was issued June 29, 2022. In April 2022, the city of Chanhasen informed RPBCWD that a bridge had been constructed spanning the watercourse connecting two onsite wetlands (Wetland 2 and Wetland 3). RPBCWD has been working with the applicant on an after-the-fact permit application since that time.

The water resources within the project site or downgradient of the activities are summarized in the following table. The table also provides a brief explanation of how each resource is implicated in the permit application review process. Under previously approved Permit 2020-072, which involved excavation of Type 1/2 wetland to create Type 4/5 wetland with no redevelopment activities, the applicant recorded the required wetland buffers maintenance declaration along Wetland 2 and Wetland 3, both of which are medium value wetlands.

#### **Water resource impacted by project**

Water Resource	Projected resource impacts
Wetland 2	An onsite Wetland Conservation Act (WCA) protected wetland upstream of the waterbody crossing.
Wetland 3	An onsite Wetland Conservation Act (WCA) protected wetland downgradient of the waterbody crossing.
Watercourse	A roughly 100-foot watercourse connects Wetland 2 to Wetland 3. Waterbody crossing spans this watercourse. Because the watercourse is not a public watercourse, creek buffers are not required.

The following materials were reviewed in support of the permit request:

1. Application received August 8, 2022 (Incomplete notice was sent on August 24, 2022, materials submitted to complete application on September 2, 2022)

2. Bridge Crossing Narrative received August 8, 2022
3. Project Plan Set (3 sheets) dated August 8, 2022
4. Wetland Delineation Report by Kjolhaug Environmental Services Company dated July 7, 2020, (August 30, 2021)
5. Minnesota Wetland Conservation Act Notice of Decision from Board of Water and Soil Resources dated August 7, 2020 (resubmitted September 15, 2021)
6. Hydraulics analysis memo dated August 8, 2022.
7. Electronic HydroCAD models received August 8, 2022

**Rule B: Floodplain Management and Drainage Alterations**

The construction of the waterbody crossing did not involve the placement of fill and other disturbance below the 100-year flood elevation of the watercourse, such as would trigger RPBCWD's Floodplain Management and Drainage Alterations rule (Rule B). As explained below, though the work triggered RPBCWD Rule G, and subsection 3.5 of that rule requires conformance with RPBCWD's Floodplain Management Rule.

Rule B, Subsections 3.1 is not relevant because no building was constructed or reconstructed as part of the project. Because the plans provided indicate there was no fill or land-disturbing activities in floodplain of Wetland 2, Wetland 3, or the watercourse, the project did not result in the loss of flood storage volume below the 100-year floodplain, the project conforms to Rule B, Subsection 3.2. Because the applicant has demonstrated that the project did not place fill in the floodplain, the engineer concurs that the project preserves the existing 100-year flood level and the project did not alter surface flows, complying with subsection 3.3. The RPBCWD engineer also concurs with the hydraulic analysis provided by the applicant documenting no changes in the anticipated 100-year flood elevations and flows in the watercourse. The plans also show that the low cord of the bridge is 2.22 feet above the 100-year elevation of the upstream wetland (Wetland 2), thus demonstrating the crossing does not alter surface flows.

Rule B, subsection 3.4 does not apply because the bridge is regulated under Rule G-Waterbody Crossings and Structures (subsection 3.4a). Because the work is done and RPBCWD's permit inspector observed no evidence of erosion or sedimentation of the watercourse, the subsection 3.5 requirement is no longer relevant to compliance with the rule, but the applicant must comply with the requirements noted below under the Rule C analysis.

The construction of the wooden bridge is in conformance with Rule B.

**Rule C: Erosion and Sediment Control**

While the project land-disturbing activities associated with the work were less and 50 cubic yards and 5,000 square feet, the project must conform to the requirements in the RPBCWD Erosion and Sediment Control rule (Rule C, Subsection 2.1) because the project requires compliance with Rule B, subsection 3.5.

Because the work is done and RPBCWD has no evidence of erosion or sedimentation of the watercourse, an erosion control plan would provide no relevant information for the analysis. Because RPBCWD’s permit inspector, Mat Nicklay, reviewed the site and determined the area was decompacted, adequate topsoil was placed, and the site was stabilized with vegetation, the construction activities conform to RPBCWD Rule C requirements. In addition, the following photographs provided by the applicant confirm the site is stabilized with vegetation.



**Rule D: Wetland and Creek Buffers**

Because the work triggered RPBCWD Rule G and there is wetland downgradient from the work for the bridge installation, , Rule D, Subsection 2.1a requires the applicant to establish buffer areas. Subsection 3.1b requires buffer on the edges of Wetland 3 downgradient from the land-disturbing activities. (The watercourse is not a public water of the state, so the RPBCWD buffer requirement does not apply to it.)

A Minnesota Wetland Conservation Act Notice of Decision for the wetland boundaries and types, dated August 7, 2021, was included with the submittal. The MnRAM analyses indicate that the Wetland 3 is a medium value wetland. Rule D, Subsection 3.2.a.iii requires wetland buffer with an average of 40 feet from the delineated edge of the wetland, minimum 20 feet for medium value wetlands. No buffer over 80 feet in width counts toward compliance and buffer averaging is used to achieve the required average buffer widths. The buffer widths are summarized in the table below.

Wetland ID	RPBCWD Wetland Value	Required Minimum Width (ft)	Required Average Width (ft)	Required Area (sq ft)	Provided Area (sq ft)	Provided Minimum Width (ft)	Provided Average Width (ft)
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Wetland 3	Medium	20	40	74,840	75,742 <sup>2</sup>	20	40.5 <sup>2</sup>
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<sup>2</sup> Under previously approved Permit 2020-072 the applicant recorded the required wetland buffers and associated maintenance declaration along downgradient Wetland 3.

Under existing conditions, the vegetation within the buffer areas is native and compliant with Rule D, Subsection 3.3. As shown in the above photos and observed by RPBCWD’s permit inspector, area disturbed within the buffer have been restored with vegetation. Under previously approved Permit 2020-072, which involved excavation of Type 1/2 wetland to create Type 4/5 wetland with no redevelopment activities, the applicant recorded the required wetland buffers maintenance declaration along downgradient Wetland 3 in accordance with Rule D, Subsection 3.5.

No new buffer areas under Rule D are required as a consequence of the construction of the bridge .

**Rule G: Waterbody Crossings and Structures**

Because the applicant installed a wooden bridge spanning the watercourse connecting Wetland 2 and Wetland 3, the project requires conformance with RPBCWD’s Waterbody Crossings and Structures Rule (Rule G). The work falls within the scope of Minnesota Department of Natural Resources General Permit #2015-1192. (Rule F: Stormwater and Streambank Stabilization is not triggered because no streambank stabilization work was conducted.)

This work meets a demonstrate specific need by providing the ability to connect the pervious trail associated with the Erhart Farm development to the existing City of Chanhassen trail network (Rule G, Subsection 3.1b)

The engineer concurs with the applicant submitted hydraulic analysis showing the crossing provides adequate hydraulic capacity to maintain the existing flood elevations, thus the design is in conformance with Rule G, Subsection 3.2a. The crossing was modeled in HydroCAD. The analysis shows that the 100-year frequency flood elevation upstream of the crossing (879.43 NGVD29) matches the existing elevation and the downstream flood elevation also matches the existing flood elevation of 877.05 NGVD29, thus confirming the project did not increase the flood stage of the existing water body conforming to Rule G, Subsection 3.2a.

This watercourse is not used for navigation, thus the requirement of Rule G, Subsection 3.2b does not impose requirements on this project. The plans show the wooden bridge low cord and abutments were place above the 100-year flood elevation and did not change the existing flow gradient. In addition, the project did not adversely affect water quality or cause increased scour or erosion because the crossing does not change the flow rates or velocities consistent with the criteria in Rule G, Subsection 3.2c.

Because this wooden bridge spans across the watercourse and maintains the existing channel cross section and the same surface overflow wildlife continues to be able to use watercourse as it is used under pre-project conditions, thus preserving wildlife passage consistent with Rule G, Subsection 3.2d.

A no-build option would not provide the desired trail connectivity. Installing the wooden bridge above the 100-year flood elevation and maintaining the existing watercourse cross section represents the minimal impact solution because, based on the information provided, the bridge spans the channel resulting in no adverse impact to flow conditions, water quality, erosion potential, or flood elevations which is consistent with Rule G, Subsection 3.2e and 3.5a.

Based on the RPBCWD engineer's review of the crossing construction stabilization methods, the culvert replacement structure is not reasonably likely to cause adverse effects to water quality and the physical or biological character of the waterbody because the applicant installed the bridge abutment and low cord above the 100-year flood elevation to maintain the existing watercourse dimensions, natural bottom, and flow characteristics, thus conforming to Rule G, Subsection 3.5d.

RPBCWD's permit inspector reviewed the site and confirmed the disturbed areas near and along the banks were stabilized after completion of the work (Rule G, Subsection 3.7b).

Rule G, Subsection 3.7d requires compliance with the applicable criteria in subsection 3.3 of Rule F. Because the crossing does not alter the flow conditions through the watercourse, the watercourse cross section, and the bridge abutments are above the 100-year elevation, the applicant did not install riprap and revegetated disturbed areas with native vegetation as shown in the above photos (Rule F, subsection 3.3a).

To conform to the RPBCWD Rule G the following revisions are needed:

- G1. Permit applicant must provide a draft maintenance declaration for the outfall structure for review and approval prior to recordation, in accordance with Rule G, Section 5.

**Rule L: Permit Fee Deposit:**

The RPBCWD permit fee schedule adopted in February 2020 requires permit applicants to deposit \$3,000 to be held in escrow and applied to cover the \$10 permit-processing fee and reimburse RPBCWD for permit review and inspection-related costs and when a permit application is approved, the deposit must be replenished to the applicable deposit amount by the applicant before the permit will be issued to cover actual costs incurred to monitor compliance with permit conditions and the RPBCWD Rules. A permit fee deposit of \$3,000 was received on September 2, 2022. The applicant must replenish the permit fee deposit to the original amount due before the permit will be issued. Subsequently, if the costs of review, administration, inspections and closeout-related or other regulatory activities exceed the fee deposit amount, the applicant will be required to replenish the deposit to the original amount or such lesser amount as the RPBCWD administrator deems sufficient within 30 days of receiving notice that such deposit is due. The administrator will close out the relevant application or permit and revoke prior approvals, if any, if the permit-fee deposit is not timely replenished.

**Rule M: Financial Assurance:**

Because the site is stabilized and this an after-the-fact permit, no financial assurance is necessary.

### **Applicable General Requirements:**

1. The grant of the permit does not relieve the permittee of any responsibility to obtain approval of any other regulatory body with authority.
2. The issuance of this permit does not convey any rights to either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.
3. In all cases where the doing by the permittee of anything authorized by this permit involves the taking, using or damaging of any property, rights or interests of any other person or persons, or of any publicly owned lands or improvements or interests, the permittee, before proceeding therewith, must acquire all necessary property rights and interest.
4. RPBCWD's determination to issue this permit was made in reliance on the information provided by the applicant. Any substantive change in the work affecting the nature and extent of applicability of RPBCWD regulatory requirements or substantive changes in the methods or means of compliance with RPBCWD regulatory requirements must be the subject of an application for a permit modification to the RPBCWD.
5. The applicant, by applying for the permit, grants access to the site of the work at all reasonable times during and after construction to authorized representatives of the RPBCWD for inspection of the work.

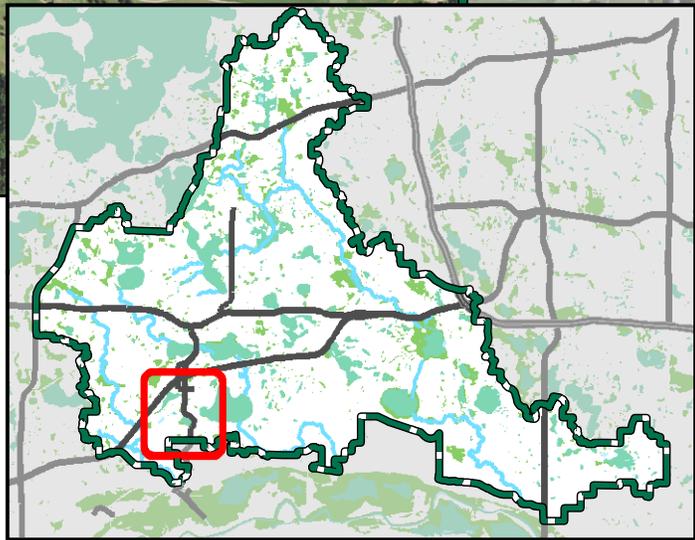
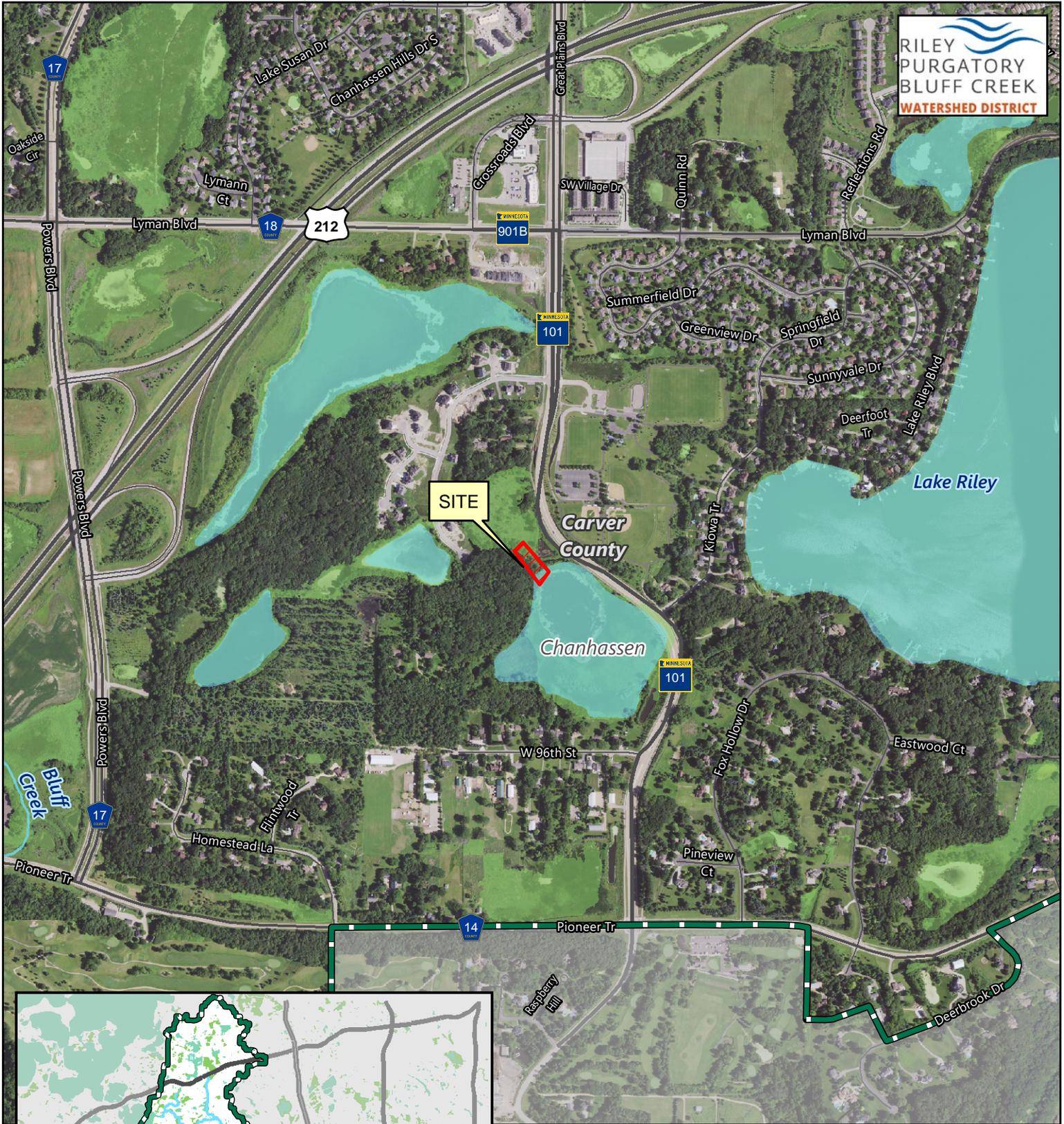
### **Findings**

1. The applicant is requesting after-the-fact approval for the installation of a waterbody crossing spanning the watercourse connecting Wetland 2 and Wetland 3 within the Erhart Farm development.
2. The project includes the information necessary, plan sheets and erosion control plan for review.
3. The project will conform to Rule D and will conform to Rule G if the Rule Specific Permit Conditions listed above are met.
4. Under Minnesota Department of Natural Resources General Permit 2015-1192 (attached to this report), approval of work under RPBCWD rule(s) G constitutes approval under applicable DNR work in waters rules. Compliance with conditions on approval and payment of applicable fees, if any, are necessary to benefit from general permit approval and are the responsibility of the applicants.

### **Recommendation:**

Approval, contingent upon:

1. Receipt by RPBCWD of documentation of recordation of a maintenance declaration for the waterbody crossing. A draft must be reviewed and approved by the District prior to recordation and proof of recordation must be provided to RPBCWD prior to issuance of the permit.



Permit Location Map



Feet



ERHART FARM  
WATERBODY CROSSING  
**Permit 2022-063**  
Riley Purgatory Bluff Creek  
Watershed District





