



STAFF REPORT

To: Honorable Mayor and Members of Town Council

Through: David L. Corliss, Town Manager

From: Mark Marlowe, P.E., Director of Castle Rock Water
Roy Gallea, P.E., Engineering Manager
Erin Evans, P.E., Project Manager

Title: **Resolution Approving a Services Agreement with Dewberry Engineers, Inc. for the Plum Creek Diversion Upgrades Project** *[Located along Plum Creek west of Sedalia, CO]*

Executive Summary

Staff requests Town Council approval of a Resolution (***Attachment A***) approving a Services Agreement between the Town of Castle Rock and Dewberry Engineers for the Plum Creek Diversion Structure Upgrades Project. The Dewberry proposal cost is \$470,867. This cost includes engineering design and permitting services to both upgrade the existing diversion structure as well as navigate initial permitting and conceptual design of a new surface water diversion (CR-2) on Plum Creek. The scope of services to be completed by Dewberry is detailed in the proposal included as an exhibit to ***Attachment A***. Dewberry's rate and fee schedule is also an attachment to the agreement.

Dewberry shall undertake the work upon execution of the agreement and shall complete the design by quarter four (Q4) of 2026. Construction is planned for 2026 / 2027. A location map of the existing Plum Creek Diversion Structure and proposed location for CR-2 is provided (***Attachments B & C***).

Notification and Outreach Efforts

The project is located on Town owned property with no significant impacts to the public expected. The Castle Rock Reservoir 1 & 2 Project is currently ongoing near the Plum Creek Diversion in Sedalia, CO. Staff will continue to coordinate between the two projects for any notifications or outreach required.

History of Past Town Council, Boards & Commissions, or Other Discussions

On March 11th, 2024, Town Manger approved the service agreement with Verdantas LLC for \$150,429 with authorization of \$7,522 in staff-managed contingency to complete an alternatives analysis for the Plum Creek Diversion Structure Project.

Castle Rock Water staff presented this item to the Castle Rock Water Commission at their meeting held on May 28, 2025, and the Castle Rock Water Commission voted unanimously to recommend Town Council approval of the Resolution as presented.

Discussion

In 2017, Castle Rock Water purchased United Water and Sanitation District's infrastructure in Douglas County, which included the Plum Creek Diversion in Sedalia. The diversion structure is located downstream of the confluence of East Plum Creek and West Plum Creek and is a key element of the Town of Castle Rock's long-term water plan to maximize the use of our local renewable supplies. This project is also identified in the most recent Castle Rock Water Strategic Plan as Tactic 1.2.18 which is critical for ensuring long-term water for the Town. The Plum Creek Diversion Structure has a permitted capacity to capture up to 25.8 million gallons per day (MGD). However, the diversion has been unable to reliably reach this capacity due to heavy sediment transport experienced in Plum Creek. The largest amount of water captured to date is 6.883 MGD. Excessive amounts of sediment have caused maintenance and operational problems in the diversion structure as well as the Plum Creek Pump Station.

In March 2024, the Town approved a service agreement with Verdantas to evaluate potential upgrade alternative designs for the Plum Creek diversion structure and recommend a preferred alternative or combination of alternatives to mitigate the high sediment levels entering the diversion structure and to protect the structure from future flood debris during high water events. Verdantas came up with approximately nine (9) upgrade options or combinations of several options to CRW staff for input and selection. These options included channel modifications, structural modifications, alternative diversion methods, and operational recommendations.

Through this process, the Town has selected a final design concept for the Plum Creek Diversion that will be completed by Dewberry. The conceptual design generally consists of a new inclined wedge wire screen structure and an infiltration gallery and is included in **Attachment D**. The existing diversion structure will be removed and channel reconstruction consisting of narrowing East Plum Creek to assist with sediment transport and efficient function of the new inclined screen diversion are also included in the project scope. A natural resource assessment, United States Army Corps of Engineers (USACE) 404 permitting, Colorado Department of Public Health and Environment (CDPHE) permitting, and Conditional Letters of Map Revision (CLOMR/LOMR) through the Federal Emergency Management Administration (FEMA) coordination will also be completed by Dewberry.

Approximately 5 miles upstream from the Plum Creek Diversion, Castle Rock Water has identified a location for an additional diversion (CR-2) that will help the Town capture water rights owned along East Plum Creek. This location will also help the Town capture reclaimed water return flows available at the nearby Plum Creek Water Reclamation Authority (PCWRA)

Water Reclamation Facility (WRF). Conceptual design and initial permit coordination with USACE and CDPHE for planning CR-2 are also included in Dewberry's scope for this project. This new diversion location could provide a functional replacement for Direct Potable Reuse (DPR) which could save Castle Rock Water significant long term capital investments and operational costs.

The capacity of the existing Plum Creek Diversion is 40 cubic feet per second (cfs) and the Town has water rights exchange capacity of a combined 30 cfs at upstream diversions such as the proposed CR-2 structure. A major objective of this project is to allow the Town to maximize the use of these existing water rights.

A Request for Qualifications (RFQ) was advertised on Bidnet to procure qualified consultants for the 2025 on-call professional services for various Castle Rock Water Capital Improvement Projects. A project specific Request for Proposal (RFP) was then sent to five of the pre-qualified consultants for this project. The following table shows the fee proposals received from the consulting firms:

| Consulting Firm | Total Cost |
|---------------------------|--|
| Carollo | No Proposal |
| Burns & McDonnell | No Proposal |
| Dewberry Engineers | \$470,867 |
| Providence Infrastructure | No Proposal (Subconsultant to Verdantas) |
| Verdantas | \$740,998 |

Dewberry was chosen to perform the design services for this project and staff has determined the price provided is reasonable. Dewberry will be able to leverage previous experience from many Castle Rock Water projects including the Plum Creek Pump Station (located at the project site) to complete the engineering and design services for this project. Additionally, Dewberry has identified opportunities for efficiency such as combining permitting efforts on the Plum Creek Diversion, CR-2 and the Plum Creek Pump Station project which they are already contracted to perform. Some of the consultants that were invited to propose on this project could not fit this work into their current project loads.

Budget Impact

Dewberry's proposed fee is \$470,867. Staff requests an additional \$47,087 (Town-managed 10% contingency) be authorized for a total project authorization of \$517,954. The project will be funded from the accounts shown below.

| Account Name | Account Number | Amount Requested | Contingency Requested | 2025 Budget |
|----------------------------|-----------------------|-------------------------|------------------------------|--------------------|
| Plum Crk Diversion Strc | 211-4375-443.77-54 | \$470,867 | \$47,087 | \$2,105,000 |

Staff Recommendation

Staff recommends Town Council approval of the resolution awarding the Services Agreement for the Plum Creek Diversion Structure Upgrades design services to Dewberry Engineers in

the amount of \$470,867 plus a Town-managed 10% contingency in the amount of \$47,087, for a total authorization of \$517,954.

Proposed Motion

"I move to approve the Resolution as introduced by title."

Alternative Motions

"I move to approve the resolution as introduced by title, with the following conditions: (list conditions)."

"I move to continue this item to the Town Council meeting on _____ date to allow additional time to (list information needed)."

Attachments

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|---------------|--|
| Attachment A: | Resolution |
| Exhibit 1: | Agreement |
| Attachment B: | Location Map – Plum Creek Diversion |
| Attachment C: | Location Map – CR-2 |
| Attachment D: | Plum Creek Diversion Conceptual Design |