



## **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 First Amendment to the Services Agreement between the Town of Castle Rock and Consor Engineering for the Plum Creek Pipeline Central to PCWPF Project** *[Located parallel to Plum Creek through central Castle Rock, CO]*

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### **Executive Summary**

Castle Rock Water (CRW) staff requests approval of a Resolution (Attachment A) approving a First Amendment to the Services Agreement (***Exhibit 1***) with Consor Engineering (Consor) for the Plum Creek Central Pipeline to Plum Creek Water Purification Facility (PCWPF) engineering and design services. The proposed First Amendment is a contract addition of \$78,405 and a time extension of approximately nine (9) months.

Design services to upsize the existing Plum Creek Raw Water Return Pipeline from an existing 16-inch diameter to an equivalent 30-inch diameter to meet renewable water capacity needs to PCWPF are currently in progress. A routing study was conducted to identify possible alignments for a second, parallel pipeline to the existing 16-inch to achieve the total required capacity required. During this routing study, additional alignments outside of the existing raw water pipeline corridor were identified and evaluated as the most feasible considering utility congestion, impacts to recent developments, and impacts to proposed developments. As a result of this shift, additional field survey and coordination were required. Also, additional potholes are required due to the increased number of existing utilities within the area of the new pipeline alignment. Additional time is requested for the service agreement to accommodate the new project scope and extra time spent evaluating alternative pipeline alignments. The full scope of services to be completed by Consor is detailed in the proposal included in *Exhibit 1*.

Consor shall undertake the work upon execution of the amendment and shall complete the work by the extended completion date in September 2026. The routing study map for the Plum

Creek Pipeline Central to PCWPF Upsize project is provided in an attachment showing the selected alignment (***Attachment B***).

### **Notification and Outreach Efforts**

CRW Staff will evaluate the need for public outreach based on final design location and the level of impact to the public. At this time, no public meetings are included in the scope of work.

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

Castle Rock Water staff presented this item to the Castle Rock Water Commission at their meeting held on August 28, 2024, and the Castle Rock Water Commission voted to recommend Town Council approval of the Resolution as presented.

On September 3, 2024 Town Council approved the Resolution for the Service Agreement with Consor Engineering for the Plum Creek Pipeline Central to PCWPF Project.

Castle Rock Water staff presented this item to the Castle Rock Water Commission at their meeting held on December 10, 2025, and the Castle Rock Water Commission voted unanimously 7 to 0 to recommend Town Council approval of the Resolution as presented.

### **Discussion**

The Plum Creek Raw Water Return Pipeline brings water from the Plum Creek Diversion Structure and Castle Rock Reservoir No. 1 (CRR1) and Castle Rock Reservoir No. 2 (CRR2) in Sedalia and alluvial wells located north of PCWPF as a critical water supply to the treatment facility. This pipeline is currently a 30-inch diameter pipeline from Sedalia to the Central Well Field near North Meadows Drive, then continues as a 16-inch diameter pipeline from the Central Well Field to PCWPF.

Castle Rock Water is currently designing and implementing an expansion of PCWPF from 6 million gallons per day (MGD) capacity to 12 MGD. CRR1 and CRR2 upgrades will increase the local raw water storage capacity from 240 acre-feet to 1,340 acre-feet. The approximately 11,000 foot stretch of existing 16-inch Plum Creek Raw Water supply line creates a bottleneck that limits the delivery of stored renewable water from Sedalia to PCWPF if it is not upsized to an equivalent 30-inch to match current and future proposed upgrades to the Town's water treatment and supply systems.

Conсор has completed a routing study for a new pipeline to upsize the Plum Creek Raw Water supply line. During this routing study, additional alignments outside of the existing raw water pipeline corridor were identified and evaluated as the most feasible considering utility congestion, impacts to recent developments, and impacts to proposed developments. A preferred alignment was selected based on construction risk and impacts, system resiliency and redundancy, and overall project cost. The preferred alignment, Alignment B in cyan shown on *Attachment B*, includes shifting the railroad crossing nearly 4,000 feet to the north and maintaining the alignment on the west side of the railroad for the duration of the alignment. Construction costs for each alignment were considered and this alignment is anticipated to be the lowest cost of the six (6) alternate pipeline alignments that were evaluated. Cost savings

are anticipated to be between \$600,000 and \$3,800,000 by selecting this alternative over the others. Upsizing the existing 16-inch diameter pipeline to a single 30-inch diameter pipeline was also considered, however the idea was eliminated early in the study as the pipeline is critical to the raw water supply to the Town and cannot be shut down for the extensive duration required to remove or abandon the existing pipeline and replace with a larger one. Installing a parallel 24-inch diameter pipeline in the same corridor as the existing pipeline was also considered, but eliminated as an option as the corridor is now highly congested with other utilities and development resulting in much higher risk. Installing a second pipeline in an alternate corridor and keeping the existing 16-inch in service also has the benefits of improving reliability and redundancy.

The initial survey captured the existing pipeline alignment as well as the originally anticipated alignment alternatives. However, additional survey was required to capture the corridor on the west side of the railroad to accommodate the selected alignment shift. In addition to the increased survey, the number of existing utilities within the selected alignment also increased. The original scope included potholing 35 utilities based on a preliminary estimate of utility crossings on the existing pipeline alignment. With the selected alignment, this number has increased to 86 now that utility locates have been called in and the design team has been able to complete a full count of potential utility conflicts. Consor will also have additional coordination efforts to line out, manage, track and input the results of the extra potholes and survey data.

### **Budget Impact**

The Consor Service Agreement is for \$390,676 with an initially authorized \$39,068 in Town managed contingency. This First Amendment proposed fee is \$78,405. Staff requests an additional \$78,405 for First Amendment services and to maintain the existing \$39,068 contingency for a total project authorization of \$508,149. The project will be funded from the PC Central Well Field account 211-4375-443.76-63, CIP project number 250044. The following table summarizes the budget impacts for the project.

<b>Agreement</b>	<b>Contract \$</b>	<b>Contingency \$</b>	<b>Authorization \$</b>
Original Agreement (Approved 9/3/2024)	390,676	39,068	429,744
Current Totals	390,676	39,068	429,744
<i>Amendment 1 (under consideration)</i>	78,405	0	78,405
<b><i>Amended Totals</i></b>	<b>469,081</b>	<b>0</b>	<b>508,149</b>

### **Staff Recommendation**

Staff recommends Town Council approval of the resolution for the First Amendment to the Services Agreement for Plum Creek Pipeline Central to PCWPF design services to Consor Engineering in the amount of \$78,405 for a total authorization of \$508,149.

### **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**

Attachment A:	Resolution
Exhibit 1:	Agreement and Scope of Services
Attachment B:	Routing Study Map for Plum Creek Pipeline Central to PCWPF