



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
Shantanu Tiwari, E.I., Project Manager

Date: March 22, 2023

Title: **A Resolution Approving a Professional Services Agreement between the Town of Castle Rock and Burns & McDonnell for the Pinery Water Pipeline Project** *[Along Castle Oaks Drive in the northeast part of the Castle Rock]*

Executive Summary

Castle Rock Water staff is seeking approval of a Resolution (**Attachment A**) for the Professional Services Agreement (**Exhibit 1**) with Burns & McDonnell to provide design services for the Pinery Water Pipeline Project along Castle Oaks Drive between The Pinery and the Town of Castle Rock. This project is an important part of our long term renewable water plan as identified in the 2021 Water Resources Strategic Master Plan. Castle Rock Water is working towards 75 percent renewable water supply by 2050 and this project contributes to that goal.

Burns & McDonnell proposed a fee of \$805,043 for the work. Additionally, staff also requests approval for a 10% town-managed contingency of \$80,504, for a total authorization of \$885,547. This cost includes topographic and property boundary survey plan sheets, geotechnical investigation report, design report, materials lists, and construction bid schedules for one well facility, approximately 11,594 linear feet of pipeline and one pump station. The design of two new wells will be contracted separately. The Town intends to use the Pinery Water Pipeline to convey potable water from the Pinery to the Ray Waterman Regional Water Treatment Center (RWRWTC) for treatment and distribution throughout the Town. In addition, the Pinery Water Pipeline will also connect existing and future well sites to the Town's water infrastructure.

Burns & McDonnell conducted the Pinery Treatment Evaluation Report dated January 11, 2023 in which three alternatives were considered along with their costs for addressing water quality concerns from receiving Pinery water. The Town selected the alternative to treat Pinery water at the RWRWTC based on the recommendations from this evaluation. The total project cost as identified in this report is estimated to be \$9.7 million (excluding well drilling).

Burns and McDonnell shall undertake the work upon execution of the agreement and shall complete work no later than Dec 31, 2023. A site map for the project is provided with this memorandum (**Attachment B**).

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 March 22, 2023, and the Castle Rock Water Commission voted 5 to 0 to 1 (Kathryn Gienger abstained) to recommend Town Council approval of the Resolution as presented.

Discussion

The Town of Castle Rock (Town) has contracted with the Pinery Water and Wastewater District (Pinery) to receive between 0.25 and 1.0 Million Gallons per Day (MGD) of water for use in the Town's distribution system. The origin of this water is the Cherry Creek Project Water Authority (CCPWA), of which, Castle Rock is a member. This water comprises approximately 250 acre feet of renewable water supplies in an average year as well as access to considerable non-renewable groundwater. The interconnect will be located off Mentha Drive in the Cobblestone Ranch neighborhood. A map of the interconnect location is included in **Attachment B**. The Pinery has shallow groundwater not under the direct influence of surface water (non-GWUDI) wells that have been chloraminated and sequestered with blended phosphate to sequester iron and manganese. The Town area that will be serviced by Pinery water currently receives water primarily from the Plum Creek Water Purification Facility (PCWPF) in the winter and from Ray Waterman Regional Water Treatment Center (RWRWTC) during the summer. The Cobblestone Ranch neighborhood may use Pinery water as their only water source during certain times of the year and may use a blend of Town and Pinery water at other times. The Town seeks to achieve multiple objectives through the construction of this project.

- **Pinery Water Supply** - The Town intends to send the Pinery water to the RWRWTC for treatment and better distribution throughout the Town. Treatment of this water will ensure that it has consistent palatability with the Town's other treated waters.
- **Future and Existing Well Sites** - Connect existing and future wells (**Attachment A**) to the Pinery waterline. These two well sites in Cobblestone are expected to produce an average of 1.44 MGD (0.72 MGD per site; 2 wells per site).

Design services will include topographic and property boundary survey plan sheets, geotechnical investigation report, design report, materials list, and construction bid schedules.

A Request for Proposal (RFP) was published on Bidnet on January 26, 2023, requesting proposals for the design of the Pinery Water Pipeline. As a result, two engineering consulting firms provided proposals and fee schedules for the project. The following table shows the proposed design services fee received from engineering consulting firms. TRC's proposal was not considered at this time because their lack of

consideration for the proposed pump station design fee and additional scope of work items (Pre-proposal meeting, Feb 13, 2023 and Addendum II, Feb 21, 2023) as well as their lack of experience in relevant, local projects.

Engineering Consultant	Proposed Fee
TRC	\$435,000
Burns & McDonnell	\$805,043

Burns & McDonnell provided a comprehensive proposal and has been working with the Town since 2011 in designing several facilities, including the Ray Waterman Regional Water Treatment Facility, the Plum Creek Water Purification Facility, Chatfield Pump Back Project, and Parker Mid-Section Pipeline Project, among others. In addition, their fee schedule is on par with relevant pipeline design projects (e.g. East Plum Creek Open Space Well Facility using Dewberry Engineers, Inc.). Staff is confident of Burns & McDonnell's capabilities to provide quality design services, and recommends the award of the design project to Burns & McDonnell.

Budget Impact

Available funding exists for this project in the 2023 budget. The account currently has a balance of \$2,169,964.25

Account Name	Account Number	Amount Requested	Contingency Requested	Total Budget Amount
CC Basin Infrastructure	211-4375-443.79-17	\$805,043	\$80,504	\$885,547

Staff Recommendation

Staff recommends approval of the professional services agreement with Burns & McDonnell to provide design services for the Pinery Water Pipeline Project in the amount of \$808,043 plus a 10% town-managed contingency in the amount of \$80,504 for a total authorization of \$885,547.

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: Professional Services Agreement
Attachment B: Location Map