



Town of Castle Rock

Agenda Memorandum

Agenda Date: 3/5/2019

Item #: File #: TMP 2019-111

To: Honorable Mayor and Members of Town Council

From: Mark Marlowe, P.E., Director of Castle Rock Water

Resolution Approving a Construction Contract with Global Underground, Inc. for the Lanterns Raw Water Transmission Pipeline, Phase 2 [Crystal Valley Ranch]

Executive Summary

The purpose of this memorandum is to request Town Council's approval of a Resolution (**Attachment A**) of a construction contract with Global Underground, Inc. (Global) for the construction of a new raw water transmission pipeline, under the Union Pacific Railroad and East Plum Creek, for the Lanterns Well project. The Lanterns Well project includes the construction of three new Denver Basin wells that will supply water to the Plum Creek Water Purification Facility (PCWPF), well metering and control facilities, and a transmission pipeline. The new wells will help to firm the supplies from the existing Denver Basin infrastructure. Staff recommends approving a construction contract with Global Underground, Inc. in the amount of \$256,551. In addition, Castle Rock Water staff requests a ten percent Town-managed contingency in the amount of \$25,655, for a total authorization of \$282,206. The construction contract is included (**Exhibit 1**).

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 February 27, 2019 and the Castle Rock Water Commission voted _____.

Discussion

Based on the Water Resources Supply Demand Model, the high population growth trend, the last two summer water demand seasons, and aging well infrastructure, additional water supply is needed to keep pace with increased water demands and to firm supplies. The new well infrastructure will help firm and increase current supplies.

The new Lanterns Well Facility will be located south of Crystal Valley Parkway, on a parcel that is to be dedicated to the Town for the purpose of developing a well facility. A project site map has been provided (**Attachment B**). The overall project includes three new Denver Basin Aquifer wells (currently under construction), controls and metering facilities at the site, and a transmission pipeline to convey the water to the Plum Creek Water Purification Facility. Staff anticipates that this facility will produce an estimated range between 1 million gallons per day (MGD) to 1.5 MGD, with an average

of 1.2 MGD of raw water supply for the Town.

The raw water transmission pipeline from the new Lanterns Well Facility will connect to an existing raw water transmission main located on the west side of East Plum Creek. Phase 1 of the raw water transmission main construction was awarded to Hudick Excavating, Inc. (Hudick) in January of 2019. Hudick was also awarded a construction contract for the East Plum Creek Trail Phase 5, for the Parks and Recreation Department. The first 650 feet of the transmission main will be located under the new trail. The construction of the two projects will occur in the same timeframe. Hudick was selected to construct Phase 1 of the raw water transmission main to streamline the coordination of both projects.

This memorandum is to request approval of a construction contract with Global Underground for Phase 2 of the raw water transmission pipeline. Phase 2 of the transmission main has some unique challenges associated with the pipeline construction. The new pipeline will cross the Union Pacific Railroad (UPRR) and East Plum Creek. The creek and railroad are within 100-feet of each other, but have an elevation difference of about thirty feet. A Horizontal Directionally Drilled (HDD) pipe installation was identified as the only reasonable method to cross these obstructions. The UPRR regulations require that the new pipeline be installed within a steel casing pipe under their right-of-way. For this project, the casing pipe and carrier pipe will be assembled above ground and installed together in a single pull. Global Underground is the only local construction contractor that has the experience to install the HDD portion of the transmission pipeline as designed. A sole source document has been provided (***Attachment C***). Staff requested and received approval for a sole source contract with Global Underground, due to the very unique nature and expertise required to install a pipeline within a casing pipe under a railroad, and a creek, by HDD methods. Staff is finalizing the licensing for the HDD portion of the pipeline under the railroad with UPRR and expects to have the license by March 11, 2019. In order to keep the project on schedule, with the goal of having additional source water available in June 2019, this work must be completed by May 17, 2019.

Budget Impact

Funds for this project are available in the 2019 budget under the “New Water Supply Well” (Account No. 210-4275-442.75-39) account. Global’s bid is \$256,551. The unit cost for this project is \$363 per foot. A typical HDD installation with pipe this size is about \$220 per foot without the casing, and a typical bore and jack under the railroad is about \$460 per foot. This project is unique since it has the casing pipe under the railroad like the bore and jack, but it will be installed by HDD. Staff requests a Town-managed contingency in the amount of \$25,655, for a total project authorization of \$282,206.

<u>Project</u>	<u>Amount</u>	<u>Contingency</u>	<u>Total</u>
New Water Supply Well	\$256,551	\$25,655	\$282,206

A summary of project expenditures to-date are shown below. Additional expenses will incur for construction of the well facilities, which are currently under design by Dewberry Engineering. The estimated cost of the well facilities is \$750,000, based on the Castlewood Ranch Well facilities, which were similar in design and constructed in 2018.

<u>Contractor</u>	<u>Expenditure</u>
Hydro Resources	\$3,891,138
Leonard Rice	\$217,822
Dewberry	\$180,674
Hudick	\$131,147
Global (pre-purchase of pipe)	\$15,810
<u>Global</u>	<u>\$282,206</u>
Total	\$4,718,797
 <u>Facility Estimate</u>	 <u>\$750,000</u>
Project Total	\$5,468,797

Staff Recommendation

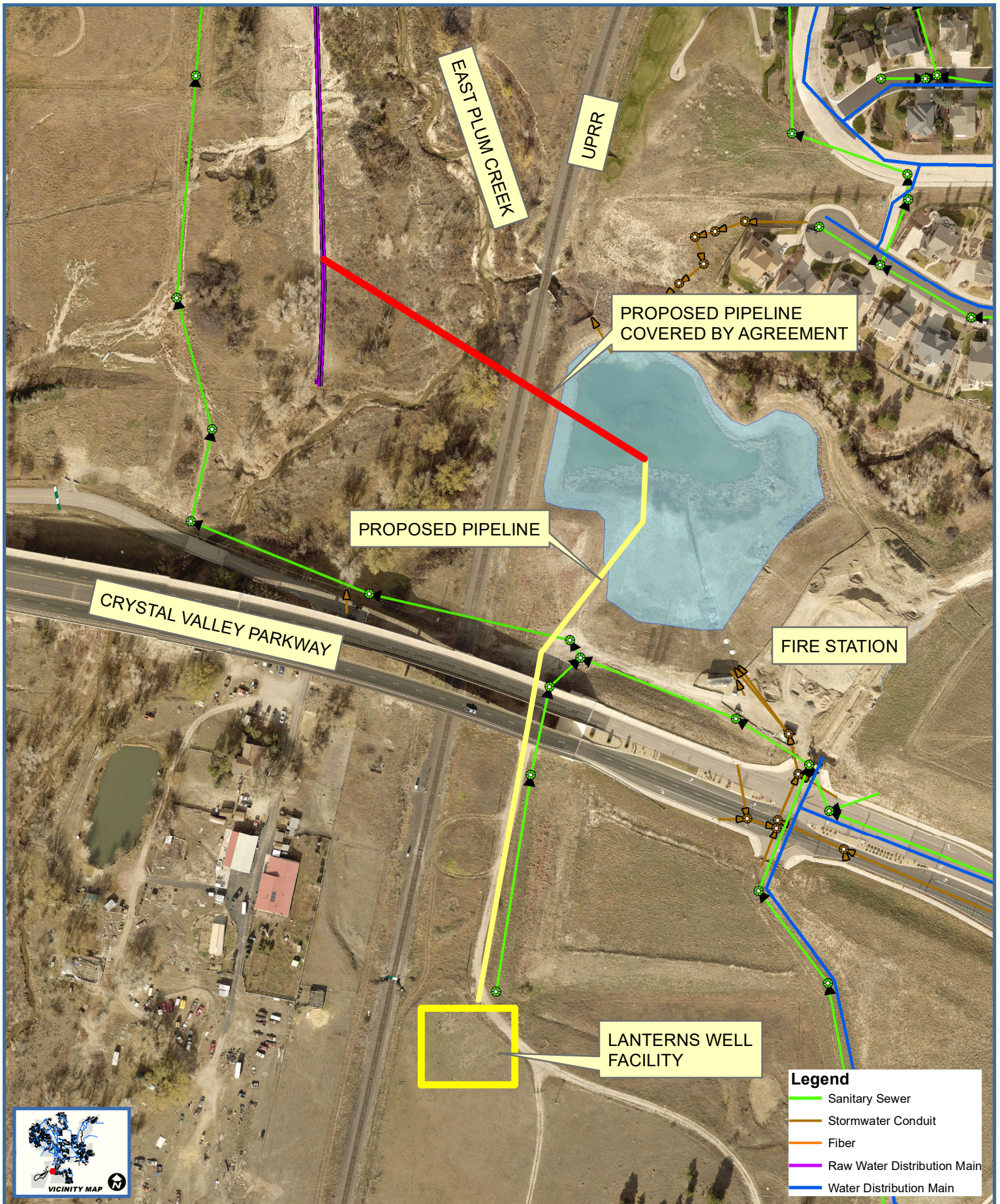
Staff recommends Town Council's approval of a Resolution approving a construction contract between the Town of Castle Rock and Global Underground, Inc. for construction of the raw water transmission main in the amount of \$256,551, plus a ten percent Town-managed contingency of \$25,655, for a total authorization of \$282,206.


Proposed Motion

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

Attachments

Attachment A: Resolution
Exhibit 1: Contract
Attachment B: Map
Attachment C: Sole Source



	SUBJECT: APPENDIX J – SOLE SOURCE JUSTIFICATION FORM	Approval Date 1/1/2018
	DIVISION AND POLICY NUMBER PURCHASING	Revision Date N/A

COMMODITY OR SERVICE _____

VENDOR _____

AMOUNT OF PURCHASE \$ _____

REQUESTORS NAME _____

DEPARTMENT _____

DEPARTMENT DIRECTOR's Approval _____

FINANCE DEPARTMENT's Approval _____

TOWN MANAGER's (or Designee) Approval _____

PURCHASING POLICY EXCEPTION ITEM	CHECK ONE
1. Item(s) or service has been formally awarded to a vendor by the State of Colorado, MAPO, or other cooperative purchasing group and the product meets the needs of the Town of Castle Rock.	<input type="checkbox"/>
2. The product or service is of a unique nature, or allows for standardization with existing equipment and will provide exceptional value to the Town of Castle Rock.	<input type="checkbox"/>
3. Emergency purchases where the well-being of the citizens, employees or Town property may be endangered if the purchase is delayed.	<input type="checkbox"/>
4. Town of Castle Rock currently has a contract in place with a vendor for like products or services and the compatibility and/or continuity of those products or services are paramount to the success of the department or Town function.	<input type="checkbox"/>

Per Municipal Code 3.02.060:

Purchases over \$1,000 and up to \$5,000 require three (3) verbal bids unless approved by the Town Manager on the basis of sole source, emergency or unresponsive bidder.

Purchases over \$5,000 and up to \$75,000 require three (3) informal written bids unless approved by the Town Manager on the basis of sole source, emergency or unresponsive bidders.

Purchases over \$75,000 require formal written sealed bids unless waived by the Town Council on the basis of sole source, emergency or unresponsive bidders.

The requesting department must provide written justification in addition to the one bid/quote to the Finance Department for review and forward it to the Accounting Manager. **Attach additional sheets as necessary.**