



REQUEST FOR COUNCIL ACTION

Title: Water Treatment Plant Raw Water Valve Replacement

Preferred Agenda: December 13, 2022

Submitted By: Steven Haney, Utilities Manager
Trish Rice, Engineering Technician
Greg Springman, Public Works Director

Reviewed By: Kelcey Young, City Manager

Type of Action: Resolution ____ Motion ____ Roll Call X Other ____

Relevant Code/Policy: n/a

Towards Council Goal: Goal 1.1c Develop specific steps for implementation of the adopted infrastructure master plans

Attachments: TAG quote

Purpose of this RCA:

Staff requests authorization to procure materials and services with the City's Integrator of Record to replace the failed raw water valve at the Water Treatment Plant.

Background/Context:

Staff tasked the Engineer of Record (West Yost) and the Integrator of Record (The Automation Group, aka TAG) with designing the replacement of the failed raw water valve and appurtenances at the Water Treatment Plant. This project was initiated in 2019 and was deferred due to budget and staff capacity. Site conditions have worsened to the point that it cannot be deferred any longer.

The City draws raw water from Foster Dam which is conveyed to the Water Treatment Plant property via a 30" pipe, where it then flows through a 24" valve which is supposed to control the flow rate. Raw water is then stored in an open-air concrete basin before being pumped by other systems into the WTP building for treatment. The 24" raw water valve has failed in multiple ways including failed seals, failed actuator, and outdated PLC controls, and can no longer regulate the incoming raw water. Consequently water flows unrestricted from the dam to the open-air basin where it then overflows to the stormwater system. The stormwater drainage system crosses neighboring property and the additional flow has attracted beaver activity and localized flooding.

Additionally, replacing like-for-like is undesirable. The 24" valve was sized for flow rates at full buildout (10 mgd), which the City is unlikely to reach for decades. It is excessively large for our current and projected use (2 mgd). This contributes to premature failure since the valve doesn't operate within its intended range. Vendors also do not typically keep replacement parts in stock, requiring special orders for all maintenance.

TAG has provided the attached quote detailing the scope of work. This project will replace the failed 24" valve with two smaller valves which will be easier to maintain. The new system will include an 8" electric valve with actuator and a 12" manual bypass valve. The installation also includes associated piping and updated instrumentation & controls.

TAG will provide the updated PLC and programming via their shop; and has solicited 3 quotes for the valves. The low bidder, Auma, also has the shortest lead times (estimated 16-18 weeks). Staff, TAG, and West Yost have reviewed the bids and recommend accepting Auma's low bid, which brings the project cost estimate to \$129,381.

There is \$150k budgeted for this project. As part of this RCA, staff requests authorization to use the remaining \$20,619 budget as contingency reserve subject to the City Manager's approval. The total project cost is not to exceed the budgeted \$150k.

The Challenge/Problem:

How do we make efficient use of limited funds to operate our water treatment system effectively?

Stakeholders:

- Sweet Home Residents – Residents deserve well-maintained City infrastructure that meets their needs and improves their quality of life.
- Adjacent Property Owner – The overflow of raw water from the WTP site is causing localized flooding on neighboring property.
- Sweet Home City Council – The City Council has a goal to provide viable and sustainable infrastructure that serves development and improves residents' quality of life.
- Sweet Home City Staff – City Staff have an interest in completing projects that empower them to meet the Council's goals and which reduce staff time spent on reactive maintenance.

Issues and Financial Impacts:

There is \$150k budgeted for this project. The estimate is \$129,381.

TAG's quote notes that "TAG's Labor Pricing is not affected by the National Supply Chain Shortages, but due to Vendors rapidly increasing material prices, we may need to reprice some materials at time of order."

Staff request authorization to use the remaining \$20,619 budget as contingency reserve to cover such potential material price changes, and potential field changes during construction. The total project cost is not to exceed the budgeted \$150k.

Elements of a Stable Solution:

A stable solution will provide efficient completion of needed optimizations such that the useful life of City infrastructure will be maximized and staff have needed operational controls to respond to customer demands.

Options:

1. Option 1 – Move to cancel the project. The project will remain in the CIP. The unspent capital funds will go into the ending fund balance and be available for re-budgeting. The excess flow of raw water will continue to overflow to the stormwater system on neighboring property.
2. Option 2 – Move to reject all bids and re-bid the project. The project will remain in the CIP. The delay is likely to result in cost increases due to industry inflation.
3. Option 3 – Move to execute the procurement and authorize use of budgeted funds as contingency. Staff will execute the task order with TAG and give notice to proceed.

Recommendation:

Staff recommends Option 3 – Move to execute the procurement and authorize use of budgeted funds as contingency.