



Legislation Text

File #: 2018-892, Version: 1

GLWA-CON-270

Isolation Gate Valves for Line Pumps for West Service Center Pumping Station

Agenda of: September 26, 2018

Item No.: **2018-892**

Amount: \$1,447,744.00

TO: The Honorable
Board of Directors
Great Lakes Water Authority

FROM: Sue F. McCormick
Chief Executive Officer
Great Lakes Water Authority

DATE: September 6, 2018

RE: **Contract No. GLWA-CON-270**
Isolation Gate Valves for Line Pumps for West Service Center Pumping Station
Vendor: Weiss Construction Co., LLC

MOTION

Upon recommendation of Cheryl Porter, Chief Operating Officer - Water and Field Services, the Board of Directors (Board) of the Great Lakes Water Authority (GLWA), authorizes the Chief Executive Officer (CEO) to **enter into Contract No. GLWA-CON-270 "Isolation Gate Valves for Line Pumps for West Service Center Pumping Station" with Weiss Construction Co., LLC, at a cost not to exceed \$1,447,744.00 for a duration of 280 days;** and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

GLWA's West Service Center (WSC) booster pumping station and reservoir facility was constructed in 1962. The purpose of the WSC is to increase pressure in the 54-inch diameter water transmission main running along 8 Mile Road from the Northeast and Springwells Water Treatment Plants.

The WSC consists of one main pump house, two reservoir pump houses, and two reservoirs. There are six-line pumps (designated L1 - L6) in the main pump house. Three of these line pumps supply high pressure water to the Franklin Station and other upstream communities while the other three-line pumps supply the intermediate pressure main that serves the Newburgh Station, Farmington Station, and other upstream communities.

In the main pump house, the line pumps L1 through L3 have isolation valves installed on their discharge side but not on their suction side. Line pumps L4 through L6 have isolation valves installed on both the suction and discharge sides. These existing isolation valves are original to the station and are butterfly valves that leak and, as a result, makes maintenance of line pumps L4 through L6 difficult and time consuming. Moreover, maintenance that requires removal of line pumps L1 through L3 requires shutdown of the entire WSC because there are no isolation valves on the suction side of these three pumps.

The scope of the project is to replace the existing butterfly valves with new double-disc gate valves and install new gate valves on the suction side of line pumps L1 through L3. Gate valves will provide a superior seal as compared to the butterfly valves and will therefore improve maintainability of the six-line pumps at the main pump house of the WSC.

JUSTIFICATION

Pump maintenance, repair or rehabilitation that requires removal of the pumps is very difficult on the line pumps in the main pump house at WSC because the existing isolation valves are old and leak excessively. Furthermore, whenever line pumps L1 through L3 need to be removed for maintenance or repair, the entire station must be shut down because there are no suction side valves installed on these pumps. In total, these conditions slow down and can hamper major maintenance and repair work on the line pumps at WSC. Installation of new isolation valves of the gate valve type on the suction and discharge side of the six-line pumps at the WSC will improve the maintainability of these pumps at WSC.

FINANCIAL PLAN IMPACT

Summary: Sufficient funds are provided in the financial plan for this project.

Funding Source: Water Construction Bond

Cost Center: Water Engineering

Expense Type: Construction (5519-882111.000-616900-132003)

Estimated Cost by Year and Related Estimating Variance: See table below.

Fiscal Year

FY 2019 Budget	\$ 1,056,000.00
FY2020 Budget	<u>44,000.00</u>
Financial Plan Estimate	\$ 1,100,000.00
Proposed Contract Award	<u>1,447,744.00</u>
Negative Estimating Variance	\$ (347,744.00)

SAVINGS, COST OPTIMIZATION, AND REVENUE ENHANCEMENT IMPACT

This project is replacing existing, non-functioning isolation valves. Cost savings are not determinable at the time of this award.

The award of this contract to the lowest, qualified bidder creates a negative estimating variance of \$347,744.00. This

variance will be funded from capital reserves.

Project estimate	\$ 1,100,000.00
Proposed award	<u>1,447,744.00</u>
Capital reserve adjustment	\$ (347,744.00)

COMMITTEE REVIEW

This item is being presented directly to the full Board of Directors for consideration.

SHARED SERVICES IMPACT

This item does not impact the shared services agreement between GLWA and DWSD.