Great Lakes Water Authority

735 Randolph Street Detroit, Michigan 48226 glwater.legistar.com



Legislation Text

File #: 2019-370, Version: 1

Proposed Change Order No. 2

GLWA-CON-234

Conner Creek CSO Basin Emergency Rehabilitation

CIP# 260603 / BCE Score: N/A

Agenda of: October 31, 2019

Item No.: 2019-370

Amount: Original Contract \$5,058,000.00

Change Order No. 1 \$938,662.00 Proposed Change Order No. 2 \$1,268,212.00 Total Revised Contract \$7,264,874.00

TO: The Honorable

Board of Directors

Great Lakes Water Authority

FROM: Sue F. McCormick

Chief Executive Officer

Great Lakes Water Authority

DATE: October 4, 2019

RE: Proposed Change Order No. 2

Contract No.: GLWA-CON-234

Conner Creek CSO Basin Emergency Rehabilitation

Vendor: Weiss Construction Co., LLC

MOTION

Upon recommendation of Navid Mehram, Chief Operating Officer - Wastewater, 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-234 Change Order No. 2, "Conner Creek CSO Basin Emergency Rehabilitation" with Weiss Construction Co., LLC, at an increased amount of \$1,268,212.00 for a total cost not to exceed \$7,264,874.00 for an increased duration of 3 months for a total contract length of 30 months; and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

The Conner Creek Combined Sewer Overflow (CSO) Retention Treatment Basin (RTB) is the largest of the nine GLWA CSO facilities. It is located on the east side of the City of Detroit along the Detroit River and is immediately downstream of the Conner Creek Sewage Pump Station and Freud Sewage Pump Station along with the Conner gravity sewer. There are presently five (5) Accusonic Multi-path Transit-time flow meters upstream of the RTB that provide information to Conner Creek operators about the flow they are receiving for purposes of chemical dosing and reporting of discharge. The current flow meters are original to the facility construction (approaching 20-years old) and are no longer supported by the manufacturer. The unreliability of these meters introduces several operational inefficiencies that require more manual calculations.

Prior to this change order, the original scope of GLWA-CON-234 contract required replacement of only the five failed Emergency Relief Gates (ERG) seals and seats. Via Change Order No. 1 Weiss Construction Co. was authorized to replace the remaining 11 ERG seals and seats for an additional \$938,662.00 and an additional 9 months contract time.

JUSTIFICATION

The Conner Creek CSO facility has five (5) flowmeters which are intended to be used for the total influent flow rate into and through this facility, chemical disinfection dosing, and reporting. Three (3) of these meters are installed in the triple barrel sewer of Conner Creek upstream of this CSO facility, and two (2) meters are installed upstream of Freud Pump Station, one (1) in Ashland Relief Sewer and one (1) in Fox Creek Relief Sewer.

The unreliability of these meters introduces several operational inefficiencies as it relates to real time flow data and require more manual calculations. The meters are past their useful life and no longer are supported by the manufacturer. Given the specialized nature of these parts, we have performed an initial look into availability and were not able to find any spare parts other than if we decommission other existing Accusonic meters owned by GLWA. However, this alternative was found undesirable since the re-installation of the refurbished equipment may present similar reliability and performance issues. The existing condition of these meters as well as recommendation for future efforts were provided by Applied Science, Inc. (ASI), dated May 18, 2018. The recommendations provided by ASI included design modifications to the existing condition to optimize the configuration of the meters which will improve long term operational and maintenance efficiencies. Since CON-234 contractor was already mobilized on-site to perform rehabilitation work for this CSO facility, GLWA CSO Design Group recommended to get the design and replacement for these meters within the CON-234 contract to save costs for mobilization and demobilization among other economies of scale for electrical and instrumentation/controls work. This will minimize the time that the facility is operated without the proper information required to reliably operate the facility. It was also recognized that the existing configuration of the meters was leading to expensive maintenance and repair, and this was subsequently designed to decrease future maintenance costs by eliminating one of the five meters and using SCADA to calculate flow through the third Conner Barrel, and also modifying the system design to help reduce future maintenance costs.

Weiss submitted a change proposal dated August 21, 2019 for a total amount not to exceed

File #: 2019-370, Version: 1

\$1,527,978.35. Weiss and GLWA met a few times and reviewed the scope of work and the submitted cost in detail and negotiated the cost for a lump sum amount of \$1,268,212.00. Also, the cost for the recently installed flow meters at other facilities, Baby Creek and Hubbell-Southfield CSO basins, were also reviewed/compared with the price submitted by Weiss Construction. GLWA CSO Design Group and Construction Engineering Group believe that the negotiated price of \$1,268,212 is a fair and reasonable price for the scope of work.

The final completion date of CON-234 contract was revised to September 7, 2020 via Change Order No. 1. The contractor believes that they can complete the flow meter replacement work indicated in this change order before the revised final completion date of September 7, 2020. However, we are requesting an additional 90 calendar days extension to the final completion date to address any punch list items. That is, this Change Order No. 2 proposes to extend the final completion date from September 7, 2020 to December 6, 2020.

PROJECT MANAGEMENT STATUS

Original Contract Time 18 Months

Change Order No. 1 9 Months (270 calendar days)

Change Order No. 2 3 months (90 calendar days)

New Contract Time 30 Months

PROJECT ESTIMATE

Original Contract Price \$5,058,000.00

Change Order No. 1 \$938,662.00

Change Order No. 2 \$1,268,212.00

New Contract Total \$7,264,874.00

FINANCIAL PLAN IMPACT

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

File #: 2019-370, Version: 1

Funding Source: Sewer Construction Bond

Cost Center: Wastewater Engineering

Expense Type: Construction (5421-892211.000-616900-260603)

Award of this proposed Change Order No. 2 to vendor will be funded in full by budget amendment from CSO Facilities Improvement Program - 260600.

RETURN ON INVESTMENT

Replacing the flowmeters will provide reliable readings for the proper and efficient operation of the CSO facility.

COMMITTEE REVIEW

This item was presented to the Operations and Resources Committee at its meeting on October 9, 2019. The Operations and Resources Committee unanimously recommended that the GLWA Board adopt the resolution as presented.

SHARED SERVICES IMPACT

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