Legislation Text

File #: 2020-036, **Version:** 1

Proposed Change Order No. 1
Contract No. GLWA-CON-197
Modifications to Incineration Sludge Feed Systems in Complex II at the Water Resource Recovery Facility (WRRF)
CIP #213007

Agenda of:	February 26, 2020	
Item No.:	**2020-036**	
Amount:	Original Contract	$18,631,083.00
	Change Order No.1	$905,731.00
	Total Revised Contract	$19,536,814.00

TO: The Honorable
Board of Directors
Great Lakes Water Authority

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

DATE: February 26, 2020

RE: **Proposed Change Order No. 1**
Contract No.: GLWA-CON-197
Modifications to Incineration Sludge Feed Systems in Complex II at the Water Resource Recovery Facility (WRRF)
Vendor: Weiss Construction Co., LLC

MOTION

Upon recommendation of Navid Mehram, Chief Operating Officer - Wastewater Operating Services, the Board of Directors (Board) of the Great Lakes Water Authority (GLWA), authorizes the Chief Executive Officer (CEO) to **amend the existing Contract GLWA-CON-197, "Modifications to Incineration Sludge Feed Systems in Complex II at the Water Resource Recovery Facility (WRRF) with Weiss Construction Co., LLC, at an increased cost of $905,731 for a total cost of $19,536,814 and at an increased duration of 364 calendar days for a total contract duration of 1216 days**, and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

On April 2, 2018, Great Lakes Water Authority awarded the Contract GLWA-CON-197 (Modifications to Incinerator Sludge Feed Systems in Complex II at WRRF), to Weiss Construction Co., LLC. This Contract is composed of three packages: A,

B and C as follows:

Package “A” includes the replacement of belt conveyors, screw conveyors, strainers, lighting, and installation of process controls equipment and supporting equipment that replaces belt conveyors destroyed in the fire event of March 2016. The scope of this Package A also includes repainting the interior spaces of Dewatering Complex II and Incineration Complex II.

Package “B” includes the complete replacement of unit substation in the 6th floor Electrical Room (EB-26), which serves as the primary electrical power distribution source for portions of the dewatered sludge cake conveyance equipment in Incineration Complex II.

Package “C” includes the replacement of nine Motor Control Centers, which provide electrical distribution for the incinerator combustion controls and various electrical systems within Complex II.

Under the GLWA-CON-197 contract, new belt conveyors and screw conveyors are being installed in Dewatering and Incineration Complex II to replace the equipment that was destroyed during the March 2016 fire event. Sixteen (16) existing hydraulic single-auger screw conveyors are being replaced with electric VFD controlled dual-shaft screw conveyors with larger sludge cake hoppers under this Contract. To accommodate the sixteen (16) larger heavier screw conveyors, an additional wide-flanged steel support beam was needed to be placed under each screw conveyor.

The new steel beams, which were placed under this contract, bridge across the fifth-floor structural framing of Incineration Complex II. The new wide-flanged beams rest on top of the fifth-floor structural plating, which serves as the main walking surface for GLWA staff operating and maintaining the screw conveyor and cross-conveyor equipment.

JUSTIFICATION

After the Contractor installed the 8 steel beams per the contract documents, GLWA has requested the design consultant to enhance the design by relocating the steel beams for the following reasons:

1. More efficient access to the circular sand seal which is located at the interface between the center incinerator drive shaft and the main body of the Incinerator.

2. Facilitate removal of the screw conveyor augers, which move sludge cake from the upstream cross conveyor belts to each of the sixteen incinerator feed ports.

3. Improve working efficiency by allowing easier access for toolboxes, hand trucks, and wheelbarrows around existing Incinerators.

4. Improve the ability for GLWA operations staff to remove dewatered sludge cake, which has spilled onto the fifth floor from the overhead northside and southside conveyor belts.

GLWA requested Weiss Construction to submit a change proposal for the reconfigured structural support steel based on the Black & Veatch design enhancement for the structural support hangers under the fifth-floor steel plate.

GLWA also requested Weiss Construction to submit a change proposal to rework two screw conveyors which were fabricated, installed and found to be too close to the emergency main stack dampers of Incinerators #9 and #10. The

lack of space prevents GLWA maintenance staff from being able to remove and replace the tail bearing assembly, which supports the back end of the dual screw augers.

Weiss Construction submitted a change proposal dated January 5, 2020 in the amount of $1,811,560 and an additional 341 calendar days for relocating the structural steel and associated electrical and controls conduits, and to rework the two screw conveyors. GLWA and Weiss have reviewed the above change proposal and negotiated the cost for the above work for $1,161,370.

Additionally, GLWA has decided not to replace the existing belt Conveyor A in Dewatering Complex ll, since the belt conveyor is no longer needed due to the recently decommissioned centrifuges. GLWA requested Weiss Construction to submit a credit proposal for deleting the Conveyor A replacement work from the base contract scope. The Contractor has submitted the credit proposal for deleting the Conveyor A replacement in the amount of $255,639. The credit proposal was reviewed and found fair and reasonable. Therefore, the net additional money requested via this change order is $905,731 ($1,161,370-$255,639).

As of January 14, 2020, a total of $637,189.77 has been spent from the original Provisionary Allowance of $1,000,000.00 on other project items. The remaining balance from the provisionary allowance of $362,810.23 is needed to undertake any future unforeseen conditions for the remainder of the contact time.

GLWA and the Contractor discussed the contract time and determined that a 364 calendar days' time extension to Substantial and Final Completion dates are needed to complete the project. This additional time request is needed to undertake the additional work described in this change order, and to overcome the delays already incurred to the project as a result of owner requested changes to the project.

PROJECT MANAGEMENT STATUS

Original Notice to Proceed:	April 2, 2018
Original Contract Time:	852 days
Original Required Substantial Completion Date:	July 31, 2020
Original Required Final Completion Date:	January 31, 2021
Revised Substantial Completion Date:	July 30, 2021
Revised Final Completion Date:	January 31, 2022
New Contract Time	1216 days

PROJECT ESTIMATE

Original Contract Price	$ 18,631,083.00
Change Order No. 1	$ 905,731.00
New Contract Total	$ 19,536,814.00

FINANCIAL PLAN IMPACT

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

Funding Source: Wastewater Construction Bond

Cost Center: Wastewater

Expense Type: Construction (5421-892211.000-616900-213007)

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

Original Contract Price	$18,631,083.00
Proposed Change Order No. 1	905,731.00
New Contract Total	19,536,814.00
Amended Financial Plan Estimate	18,632,000.00
Negative Estimating Variance	($904,814.00)

The award of this change order to the vendor creates a negative estimating variance of $904,814.00. This variance will be funded from capital reserves. Please note that the GLWA FY 2021-2025 CIP has $18,632,000.00 budgeted for contract CON-197.

COMMITTEE REVIEW

This item was presented to the Operations and Resources Committee at its meeting on February 12, 2020. The Operations and Resources Committee unanimously recommended that the GLWA Board adopt the resolution as presented, subject to receiving a status update.

SHARED SERVICES IMPACT

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