



Legislation Details (With Text)

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Title: Proposed Change Order No. 4
Contract No. GLWA-CON-197
Modifications to Incineration Sludge Feed Systems in Complex II at WRRF
CIP #213007/ BCE Score: 96.2

Sponsors: Navid Mehram

Indexes: Wastewater Operations

Code sections:

Attachments:

Date	Ver.	Action By	Action	Result
9/27/2023	1	Board of Directors	Approved	Pass

Proposed Change Order No. 4
Contract No. GLWA-CON-197
Modifications to Incineration Sludge Feed Systems in Complex II at WRRF
CIP #213007/ BCE Score: 96.2

Agenda of: September 27, 2023

Item No.: **2023-327**

Amount: Original Contract \$18,631,083.00

Change Order No. 1 905,731.00

Change Order No. 2 850,000.00

Change Order No. 3 0.00

Proposed Change Order No. 4 0.00

Total Revised Contract \$20,386,814.00

TO: The Honorable
Board of Directors
Great Lakes Water Authority

FROM: Suzanne R. Coffey, P.E.
Chief Executive Officer
Great Lakes Water Authority

DATE: September 1, 2023

RE: **Proposed Change Order No. 4**

**Contract No. GLWA-CON-197
Modifications to Incineration Sludge Feed Systems in Complex II
at 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 **enter into Contract No. GLWA-CON-197, Proposed Change Order No. 4, "Modifications to Incineration Sludge Feed Systems in Complex II at WRRF, with Weiss Construction Co., LLC, at no increase in cost for a total cost of \$20,386,814.00 and for an increased duration of 291 days, for a total duration of 2,298 days;** and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

This contract is composed of three packages: A, B and C with Weiss Construction Co., LLC as the Contractor.

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

Package "B" is the replacement of the EB-26-unit substation that serves as the primary electrical power distribution source for portions of the dewatered sludge cake conveyance equipment in Incineration Complex II.

Package "C" is the replacement of nine Motor Control Centers (MCC's) which provide electrical distribution for the incinerator combustion controls and various electrical systems within Complex II. Incineration Complex II is actively used to dispose of dewatered sludge cake generated from the wastewater treatment process at the Water Resource Recovery Facility (WRRF). There are eight operational incinerators which are used to incinerate sludge cake that is processed in Dewatering Complex II. A portion of liquid thickened sludge is pumped to the Biosolids Drying Facility (BDF) for processing.

The original substantial completion date of the project (all packages) was July 31, 2020, and the original required final completion of the project was January 30, 2021.

All new conveyors, strainers, unit substation and motor control centers have been installed, and the Contractor has completed rehabilitation of the sludge feed systems for all eight incinerators. Additionally, the Contractor has completed retrofits of all the screw feeders to prevent sludge bridging which could lead to port fires.

The remaining work under Package A includes final modifications and performance testing of the new

belt conveyors, strainers, and screw feeders, replacement of strainer backwash piping, and completion of any owner-requested changes to the contract. Package B and C work is complete, with punch list items remaining to be completed.

JUSTIFICATION

The backwash piping installed to serve the new strainers under CON-197 has experienced numerous leaks due to abrasive scouring of the pipe interior. The project designer, Black and Veatch, has provided a revised design to replace this piping with abrasion resistant High Density Polyethylene piping and valves. GLWA issued construction change directive CCD-AA to authorize the Contractor to complete this work. Replacement of this piping will delay final completion of the project.

Concurrently, the Contractor is also working to eliminate excessive sludge spillage and water drainage from the conveyors. The current spillage is unsustainable for long term operation and presents risk. To allow successful completion of the 30-day operational demonstration test, the Contractor must modify the conveyor chutes, plows, plow tables, and drip pan spray nozzles that it provided. The Contractor has scheduled completion of these modifications and subsequent 30-day testing by early January 2024, before completion of the backwash piping replacement. GLWA staff therefore recommends the extension of time for final completion date, to allow time for replacement of the backwash piping.

PROJECT MANAGEMENT STATUS

Original Final Contract Time	1,035 days (04/02/2018 - 01/30/2021)
Change Order No. 1	364 days (01/31/2021 - 01/29/2022)
Change Order No. 2	365 days (01/30/2022 - 01/29/2023)
Change Order No. 3	243 days (01/30/2023 - 09/29/2023)
Proposed Change Order No. 4	291 days (09/30/2023 - 07/16/2024)
New Contract Time	2,298 days (04/02/2018 - 07/16/2024)

PROJECT ESTIMATE

Original Contract Price	\$ 18,631,083.00
Change Order No. 1	905,731.00
Change Order No. 2	850,000.00
Change Order No. 3	00.00
Proposed Change Order No. 4	00.00
New Contract Total	\$ 20,386,814.00

FINANCIAL PLAN IMPACT

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

Funding Source: Sewer Construction Fund

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
Change Order No. 1:	905,731.00
Change Order No. 2:	850,000.00
Change Order No. 3:	0.00
Proposed Change Order No. 4:	<u>0.00</u>
New Contract Total:	\$20,386,814.00
Amended Financial Plan Estimate:	\$20,386,814.00
Estimating Variance:	\$0.00

The award of this change order creates no additional estimating variance.

COMMITTEE REVIEW

This item is being presented directly to the GLWA Board of Directors.

SHARED SERVICES IMPACT

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