



Legislation Details (With Text)

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On agenda: 2/22/2023 **Final action:** 2/22/2023
Title: Proposed Amendment No. 1
Contract No. 1803709
Conveyance System Infrastructure Improvements
CIP #260701 / BCE Score: 60.10
Sponsors: Navid Mehram, Todd King
Indexes: Wastewater Operations
Code sections:
Attachments:

Date	Ver.	Action By	Action	Result
2/22/2023	1	Board of Directors	Approved	Pass
2/8/2023	1	Operations and Resources Committee	Recommended for Approval	Pass

Proposed Amendment No. 1
Contract No. 1803709
Conveyance System Infrastructure Improvements
CIP #260701 / BCE Score: 60.10

Agenda of: February 22, 2023

Item No.: **2023-034**

Amount:	Original Contract	\$4,575,838.00
	Proposed Amendment No. 1	577,989.00
	Total Revised Contract	\$5,153,827.00

TO: The Honorable
Board of Directors
Great Lakes Water Authority

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

DATE: January 27, 2023

RE: **Proposed Amendment No. 1**
Contract No. 1803709
Conveyance System Infrastructure Improvements

Vendor: Applied Science, Inc

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. 1803709, Proposed Amendment No. 1 “Conveyance System Infrastructure Improvements” with Applied Science, Inc., at an increased cost of \$577,989.00 for a total cost not to exceed \$5,153,827.00 and an increased duration of 978 days for a total contract duration of 2,347 days;** and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

The GLWA Wastewater Conveyance System consists of over 180 miles of interceptor and trunk sewers that includes 56 combined sewage overflow (CSO) outfalls on the Detroit and Rouge Rivers, as well as 16 in-system storage devices (ISDs) and 20 valve remote (VR) sites that control flow throughout the system. These assets are critical wastewater infrastructure that require periodic inspection, assessment, improvements, and replacement of technology and equipment to operate as intended.

The ISDs are comprised of inflatable dams that are normally deflated but are inflated during smaller wet weather events to utilize GLWA's in-system storage capacity to reduce the number and volume of CSO events. ISD sites are comprised of a control vault or a building that houses blower pumps, vacuum pumps, and valve actuators for inflating and deflating the dams, as well as instrumentation equipment for monitoring wastewater levels and the air pressure of the dam itself. The VR sites consist of remotely operated gates that are used to divert flows and balance hydraulic loading of the system to improve overall system effectiveness and for flow control to perform inspection and maintenance activities. The VR sites are comprised of vaults, buildings, or control panels, and include electric actuators to control the sluice gates. The gates are operated to route flow from trunk sewers to various interceptors, relief sewers, or CSO facilities to reduce the stress on the system during wet weather. The VR gates can also be used to divert flow for inspection and maintenance purposes.

Under Contract No. 1803709, Applied Science, Inc. (ASI) was awarded to inspect, assess, and design improvements for these assets. The results of the inspection and assessment resulted in the production of two design packages which have been awarded as Contract No. 2102859 for \$36,863,000 to Jay Dee Contractors and Contract No. 2201142 for \$15,943,539.92 to Lakeshore Global Corporation. These contracts have final completion dates of December 9, 2025, and November 24, 2024, respectively. Contract No. 1803709 originally had a total contract time of approximately 46 months with an end date of July 13, 2023. GLWA staff is recommending an extension of this contract by 978 additional days to extend the final completion date to March 17, 2026. This will allow the engineer of record to complete engineering oversight and services during construction until both projects are complete, all work has been placed into service, and to ensure sufficient time to complete close out.

JUSTIFICATION

This amendment is being recommended to the Board for approval to provide continuity of services from the engineer of record for completion of the two associated construction projects. The work is required to improve the overall performance and reliability of the above referenced wastewater infrastructure assets. The requested costs are based on associated increases to project management and construction administration tasks as described below.

The baseline contract originally had 46 Months for Project Management and 24 months of Construction Administration. This amendment will support the need for additional project management and construction administration and 14 additional months of full-time onsite inspection.

The significant factor contributing to the extended construction period was the addition of 20 CSO outfalls that were not considered in the initial scope. These outfalls were added to incorporate backwater gates to minimize inflow of the Rouge

and Detroit rivers during high river levels. The design of this additional work was completed within the original budget, but the construction of these additional gates has extended the overall construction period and is the basis for this amendment.

PROJECT MANAGEMENT STATUS

Original Contract Time	1,369 days	(10/14/2019 - 07/13/2023)
Proposed Amendment No. 1	978 days	(07/14/2023 - 03/17/2026)
New Contract Time	2,347 days	(10/14/2019 - 03/17/2026)

PROJECT ESTIMATE

Original Contract Price	\$ 4,575,838.00
Proposed Amendment No. 1	577,989.00
New Contract Total	\$ 5,153,827.00

FINANCIAL PLAN IMPACT

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

Funding Source: Wastewater Construction Fund

Cost Center: Wastewater Field Engineering

Expense Type: Construction (5421-892411.000-617950-260701)

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

Original Contract Price	\$ 4,575,838.00
Proposed Amendment No. 1	<u>577,989.00</u>
New Contract Total	5,153,827.00
Amended Financial Plan Estimate	<u>4,576,000.00</u>
Estimating Variance	(\$ 577,827.00)

The award of this amendment provides a negative estimating variance of \$577,827.00 to be funded from Capital Reserves. Also, please note the amended financial plan estimate above is per Draft 1 of

the FY 2024 - 2028 CIP Plan.

COMMITTEE REVIEW

This item was presented to the Operations and Resources Committee at its meeting on February 8, 2023. 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.