Legislation Text

File #: 2018-731, **Version:** 1

GLWA-CON-260
CSO Outfalls Rehabilitation Phase I

Agenda of: May 23, 2018
Item No.: **2018-731**
Amount: $3,534,275.00

TO: The Honorable
Board of Directors
Great Lakes Water Authority

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

DATE: **May 1, 2018**

RE: **Contract No. GLWA-CON-260**
CSO Outfalls Rehabilitation Phase I
Vendor: Marra Services, Inc.

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-260 "CSO Outfalls Rehabilitation Phase I" with Marra Services, Inc. at a cost not to exceed $3,534,275.00 for a duration of 270 days;** and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

Closed Circuit Televised Video (CCTV) Pipeline Assessment and Certification (PACP) inspections for portions of conveyance system outfalls B-003, B-005, B-007, and B-010 were completed in January 2015. In combination with combined sewer overflow (CSO) frequency data, these outfalls raised concerns with GLWA regarding their long-term structural integrity.

In November 2017, manual entry inspections, remote-operated vehicle (ROV) inspections, and additional CCTV inspections were completed. Based on the inspections, a repair plan was formulated that includes rehabilitation of these outfalls. Rehabilitation of these outfalls include cleaning, structural repairs, regulator gate rehabilitation, and access hatch replacement.

Outfalls B-003, B-005, B-007, and B-010 generally work in a similar fashion, with dry weather flow diverted to the Detroit River Interceptor (DRI), and wet weather flow allowed to outfall to the Detroit River. Outfalls B-003, B-005, and B-007

have diversion dams which redirect dry weather flow to their respective regulator chamber where the flow is then routed to the DRI. In a wet weather event of sufficient size, the dams are overtopped and a CSO occurs. Outfall B-010 has backwater gates which redirect dry weather flow to the regulator chamber and then to the DRI, whereas, in a wet weather event of sufficient size, wet weather flow builds up against the backwater gates until a sufficient differential between the river level and sewer level allows the gate to open and a CSO occurs.

JUSTIFICATION

Recent inspections of the conveyance system outfalls by Inland Waters Pollution Control, Inc. revealed structural deficiencies (i.e. fractures), missing mortar from bricks, and sediment deposits in many of them. Upon further evaluation of inspection reports, rehabilitation designs and construction documents were developed for CSO outfalls

B-003, B-005, B-007, and B-010 under contract GLWA-CS-168 “Rehabilitation of Conveyance System Interceptors and Truck Sewers.” Rehabilitation of these identified outfalls include cleaning, structural repairs, regulator gate rehabilitation, and access hatch replacement, and is essential to properly discharge the uncontrollable combined sewer overflows to the receiving waters and to prevent sewer back up into the conveyance system.

FINANCIAL PLAN IMPACT

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

Funding Source: Sewage Disposal Construction Bond

Cost Center: Systems Operations Control

Expense Type: Construction (5421-882301.000-616900-260500)

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

Fiscal Year	Amount
FY 2019 Plan	$ 507,000.00
FY 2020 Plan	3,826,000.00
FY 2021 Plan	10,001,000.00
FY 2022 Plan	10,001,000.00
FY 2023 Plan	10,001,000.00
FY 2024 Plan	10,001,000.00
Financial Plan Estimate	$ 44,337,000.00
Maximum Contract	3,535,000.00
Future Phase CIP Estimate Value	$ 40,802,000.00

SAVINGS, COST OPTIMIZATION, AND REVENUE ENHANCEMENT IMPACT

This award of this contract provides a variance of $465,725.00 ($4,000,000.00 project estimate less $

3,534,275.00 actual).

Project estimate	$ 4,000,000.00
Actual costs	$ 3,534,275.00
Cost variance	$ 465,725.00

COMMITTEE REVIEW

This item was presented to the Operations and Resources Committee at its meeting on May 9, 2018. 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.