



Legislation Text

File #: 2022-333, Version: 1

Contract No. 1902908

Baby Creek CSO Effluent Conduit Access and Sedimentation Mitigation

Vendor: Jay Dee Contractors, Inc.

Agenda of: August 24, 2022

Item No.: **2022-333**

Amount: \$13,130,686.00

TO: The Honorable
Board of Directors
Great Lakes Water Authority

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

DATE: July 29, 2022

RE: **Contract No. 1902908**
Baby Creek CSO Effluent Conduit Access and Sedimentation Mitigation
Vendor: Jay Dee Contractors, 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. 1902908, “Baby Creek CSO Effluent Conduit Access and Sedimentation” with Jay Dee Contractors, Inc., at a cost not to exceed \$13,130,686.00 for a duration of 1,095 days;** and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

The Baby Creek Combined Sewage Overflow (CSO) Screening and Disinfection Facility (SDF) was

originally commissioned in 2006 to provide wet weather screening and disinfection to flows from the Elmer Ternes Sewer, Baby Creek Sewer, Woodmere Pump Station, and the City of Dearborn. During dry weather, sanitary flow is conveyed through the SDF to the Towards Treatment Sewer (TTS) and then to the Water Resource Recovery Facility. When flow begins to increase due to rainfall in the upstream system, it overflows to the SDF, which provides treatment during wet weather events for overflows prior to discharge to the Rouge River through the Baby Creek Triple Barrel Outfall. The “Triple Barrel Outfall” consists of an underground triple (3) barrel box culvert, approximately 1 mile long, with each of the three barrels measuring approximately 14.5 feet wide by 17.5 feet tall (inside dimension). Sediment has accumulated in the outfall prior to and since the SDF was constructed. Based on a survey completed in the fall of 2020, it is anticipated that there are approximately 6,500 cubic yards of sediment accumulated in the conduit that is needed to be removed to allow structural inspection and structural repairs/improvements to be made to the outfall to ensure proper levels of service. Prior to this project, we repaired a sinkhole near the sampling facility and have also repaired and secured the TTS Pipe within the eastern barrel of the triple barrel. Furthermore, the debris in the outfall can contribute to the re-growth of bacteria that could result to a water quality NPDES permit violation for the effluent from the outfall.

JUSTIFICATION

An access location to the outfall is required to ensure reliable means of operating and maintaining the outfall. This access is necessary to provide the needed maintenance of sedimentation removal and to perform structural repair/improvements services on the outfall conduit of the facility. For example, one of the improvements will be to remove a flap gate between the barrels that will result in less accumulation of sediment in the future by allowing better drainage of the outfall. Sediment accumulation has been an ongoing problem in the outfall before the original construction of the SDF facility. The configuration of the outfall does not allow for adequate flushing of the outfall barrels and manual cleaning is necessary. Having sediment accumulation in the outfall prevents GLWA from inspecting the outfall and performing structural repairs, and structural or other improvements. Lastly, removal of sediment in the outfall will prevent potential re-growth of bacteria during wet-weather events and reduce the likelihood of violation of the NPDES permit due to the presence of bacteria above-permitted levels.

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: Design (5421-892211.000-617950-277001)

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

Fiscal Year

FY 2023 Plan	\$1,143,000.00
FY 2024 Plan	2,555,000.00
FY 2025 Plan	2,556,000.00
FY 2026 Plan	2,556,000.00
FY 2027 Plan	2,339,000.00
<u>FY 2028+ Plan</u>	<u>529,000.00</u>
Financial Plan Estimate	\$11,678,000.00
Proposed Contract Award	<u>12,995,286.00</u>
Estimating Variance	(\$1,317,286.00)

The amounts above are per the FY2023-2027 CIP Plan. The award of this contract creates a negative estimating variance of (\$1,317,286.00). This variance will be funded from Capital Reserves.

COMMITTEE REVIEW

This item was presented to the Operations and Resources Committee at its meeting on August 10, 2022. 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.