Great Lakes Water Authority

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Legislation Text

File #: 2020-008, Version: 1

Contract No. 1900741

Professional Engineering Services for the 96-Inch Water Transmission Main Relocation

CIP# 122004 / BCE 65.2

Agenda of: January 22, 2020

Item No.: 2020-008

Amount: \$26,634,516.37

TO: The Honorable

Board of Directors

Great Lakes Water Authority

FROM: Sue F. McCormick

Chief Executive Officer

Great Lakes Water Authority

DATE: January 6, 2020

RE: Contract No. 1900741

Professional Engineering Services for the 96-Inch Water

Transmission Main Relocation Vendor: Jacobs Consultants, 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. 1900741 "Professional Engineering Services for the 96-Inch Water Transmission Main Relocation" with Jacobs Consultants, Inc., at a cost not to exceed \$26,634,516.37 for a duration of 2,700 days; and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

Contract No. 1900741 is a professional engineering services contract related to relocating a portion (approximately 2.5 miles) of GLWA's 96-inch diameter water transmission main. Overall, the 96-inch water transmission main is about 32 miles long and connects the Imlay Pump Station to the North Service Center Pump Station. The 96-inch main was constructed in the early 1960s and placed into service in 1965. It transmits drinking water from GLWA's Lake Huron Water Treatment Plant to a service population of over 1-million people in northern Oakland and Macomb counties.

Relocation of this main will generally involve constructing 2.5 miles of new 96-inch diameter main, installing new isolation

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valve stations equipped with large bypasses, decommissioning the existing 96-inch main located between Hamlin Road and 24 Mile Road, and rehabilitating pipeline appurtenances generally between 20 Mile and 32 Mile Roads. The construction work will be performed under separate construction contract(s). The professional engineering services consultant retained under this proposed Contract No. 1900741 will design the entire project and manage the associated construction contract(s) necessary to relocate the 96-inch transmission main in its entirety.

A portion of the existing 96-inch water transmission main is in the closed G&H Industrial Landfill site, which is a U.S. Environmental Protection Agency (EPA) Superfund Site of contamination. The main purpose of this project is to construct new 96-inch transmission main, place it into satisfactory service, and then disconnect that portion of the existing 96-inch main that is inside the closed landfill. In addition, there is only one functioning isolation valve installed on the entire 96-inch transmission main between Imlay City and the North Service Center water pumping station, a distance of about 32 miles. This project, therefore, also involves installing new isolation valve stations at 4 locations generally between 20 Mile and 32 Mile Roads. These new isolation valve stations will be strategically located to improve water service reliability to member partners directly served off the 96-inch main.

The scope of engineering services under proposed Contract No.1900741 generally includes project management, preliminary design, detailed design, construction bidding assistance, construction administration, resident project representation, and construction materials testing for the implementation of the 96-inch water transmission main relocation, valve station installations, pipeline appurtenance rehabilitations, abandonment of the existing pipeline, and construction and operation and temporary facilities during the construction phase.

JUSTIFICATION

This proposed engineering services contract will provide the detailed design necessary to remove the existing 96-inch water transmission main from service that is located inside the closed landfill site, and place into service new transmission main that will not be in a former landfill. Moreover, member partners currently served directly from the 96-inch main are susceptible to potential long duration water service disruptions because there is only one isolation valve installed and operational on the 96-inch main. This project will provide additional isolation valves with large bypasses connected to member partner feeds, which will improve water service reliability when breaks occur on the transmission main or its appurtenances.

FINANCIAL PLAN IMPACT

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

Funding Source: Water Construction Bond

Cost Center: Water Engineering

Expense Type: Construction (5519-882411.000-617950-122004)

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

Fiscal Year

FY 2019 Budget	\$ 413,000.00
FY 2020 Budget	2,422,000.00
FY 2021 Budget	5,140,000.00
FY 2022 Budget	5,617,000.00
FY 2023 Budget	2,150,000.00

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 FY 2024 Budget
 2,135,000.00

 FY 2025 Budget
 2,135,000.00

 FY 2026 Budget
 6,458,000.00

 Financial Plan Estimate:
 \$ 26,470,000.00

Proposed Contract Award: __26,634,516.37

Negative Estimating Variance \$ (164,516.37)

The award of this contract creates a negative estimating variance of \$164,516.37. This variance will be funded from capital reserves. Please note that the amounts above are per the Draft 2021 - 2025 CIP.

SAVINGS, COST OPTIMIZATION, AND REVENUE ENHANCEMENT IMPACT

The cost savings are not determinable at the time of award.

COMMITTEE REVIEW

This item was presented to the Operations and Resources Committee at its meeting on January 8, 2020. 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.