Great Lakes Water Authority

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Legislation Text

File #: 2019-045, Version: 1

Proposed Amendment No. 1

GLWA-DB-150

Design-Build Repair for Portions of the Pennsylvania, Springwells and Northeast Raw Water Tunnels

(CIP# 116002)

Agenda of: February 27, 2019

Item No.: 2019-045

Amount: Original Contract \$10,702,047.28

Amendment No. 1 0.00 Total Contract Amount \$ 10,702,047.28

TO: The Honorable

Board of Directors

Great Lakes Water Authority

FROM: Sue F. McCormick

Chief Executive Officer

Great Lakes Water Authority

DATE: February 6, 2019

RE: Proposed Amendment No. 1

Contract No. GLWA-DB-150

Design-Build Repair for Portions of the Pennsylvania, Springwells and Northeast

Raw Water Tunnels

Vendor: Ballard Marine Construction, LLC

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-DB-150 Amendment No. 1 "Design-Build Repair for Portions of the Pennsylvania, Springwells and Northeast Raw Water Tunnels" with Ballard Marine Construction, LLC, at a cost not to exceed \$10,702,047.28 for an increased contract length of 276 days for a total duration of 676 days; and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

The Pennsylvania, Northeast, and Springwells tunnels all draw raw water from GLWA's Belle Isle intake in the Detroit River. The tunnels are approximately 100 feet below grade and were constructed as soft soil tunnels. The Pennsylvania and Springwells tunnels were constructed in the late 1920s and the Northeast tunnel was constructed in the early 1950s. The Pennsylvania tunnel is 14-feet in diameter and supplies raw water to both the Northeast and Springwells raw water tunnels. The Northeast tunnel is 10-feet in diameter and supplies raw water to the Northeast Water Treatment Plant (WTP). The Springwells tunnel is 12-feet in diameter and supplies raw water to the Springwells WTP.

A portion of the Northeast raw water tunnel experienced on-going soil settlement during the 1970s and was repaired in 1986-1987 after an in the "wet" inspection was conducted in 1985. The tunnel was dewatered and partially collapsed in 1986 and was repaired with shotcrete and ribbing.

In June 2015, an inspection was completed on the raw water conveyance tunnels beginning at Water Works Park WTP and supplying the Northeast and the Springwells WTPs under contract CS-1623 "Inspection, Condition Assessment and Engineering Evaluation of Raw Water Intakes, Tunnels and Related Facilities". Significant distress was observed in sections of these tunnels during underwater inspections. Repair of the tunnel sections where the distress was observed is required to assure structural integrity. The distress noted in a section of the Springwells tunnel is of particular concern due to the cracking severity and pattern of cracks.

JUSTIFICATION

During the execution of the work, GLWA operational needs during the high water production months (May to October), resulted in an overall delay to the project work. Based on the GLWA requested delay, an additional 95 days were requested by the contractor for substantial completion. This amendment also requests an additional 276 days for final completion, but this is solely for contingencies should issues arise during the Guaranteed Maximum Price (GMP) negotiations scheduled at the completion of the 30-percent design.

The project is approximately 75 percent complete. The investigation phases have been completed and three alternatives were developed. One alternative was selected by GLWA to form the basis of the thirty percent design and the subsequent guaranteed maximum price (GMP) discussion.

PROJECT MANAGEMENT STATUS

Original Contract Time 400 Days

Amendment No. 1 276 Days

New Contract Time 676 Days

PROJECT ESTIMATE

Original Contract Price \$ 10,702,047.28

Amendment No. 1 .. 0.00

New Contract Total \$ 10,702,047.28

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FINANCIAL PLAN IMPACT

This amendment is for extension in time only. Although it extends the project completion from ending in FY2019 to ending in FY2020, there is no substantive financial impact. The amount of planned spend moving into FY2020 is undeterminable at this time.

COMMITTEE REVIEW

This item was presented to the Operations and Resources Committee at its meeting on February 13, 2019. 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.