Legislation Details (With Text)

File #:	2019-369	**Version:**	1	**Name:**	
Type:	Resolution			**Status:**	Passed
File created:	9/30/2019			**In control:**	Board of Directors
On agenda:	10/31/2019			**Final action:**	10/31/2019
Title:	Proposed Change Order No. 2 Contract No. GLWA-CS-171 Raw Sludge Clarifiers and Raw Sludge Pumping System Improvements - Lake Huron Water Treatment Plant				
Sponsors:	Cheryl Porter, Grant Gartrell				
Indexes:	Water Operations				
Code sections:					
Attachments:					

Date	Ver.	Action By	Action	Result
10/31/2019	1	Board of Directors	Approved	Pass
10/9/2019	1	Operations and Resources Committee	Recommended for Approval	Pass

Proposed Change Order No. 2

Contract No. GLWA-CS-171

Raw Sludge Clarifiers and Raw Sludge Pumping System Improvements - Lake Huron Water Treatment Plant

Agenda of: October 31, 2019
Item No.: **2019-369**

Amount:		
	Original Contract	$ 939,440.00
	Change Order No. 1	35,000.00
	Proposed Changed Order No. 2	581,344.00
	Total Revised Contract	$1,555,784.00

TO: The Honorable
Board of Directors
Great Lakes Water Authority

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

DATE: October 2, 2019

RE: **Proposed Change Order No. 2**

Contract No. GLWA-CS-171
Raw Sludge Clarifiers and Raw Sludge Pumping System Improvements - Lake Huron Water Treatment Plant
Vendor: Brown and Caldwell, 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-CS-171 Change Order No. 2 "Raw Sludge Clarifiers and Raw Sludge Pumping System Improvements - Lake Huron Water Treatment Plant" with Brown and Caldwell, LLC., at an increased amount of $581,344.00 for a total cost not to exceed $1,555,784.00, for an increased duration of nine (9) months for a total contract duration of fifty-one (51) months;** and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

BACKGROUND

Contract No. CS-171 is a professional engineering services contract that involves the design, construction administration and resident project representation services related to the construction of capital improvements at the Lake Huron Water Treatment Plant (WTP) under construction Contract No. GLWA-1803823 "Lake Huron Water Treatment Plant Raw Sludge Clarifier and Raw Sludge Pumping Improvements." The capital improvements include: demolish existing clarifiers and sludge pumping station, construct new cast-in-place reinforced concrete waste wash water retention basin, construct new cast-in-place reinforced concrete sludge pumping station equipped with new pump lifting mechanisms, install new diversion gate structures between sludge drying lagoons, install new junction structures between existing and new waste wash water retention basins, and install new yard lighting around the wash water retention basin and clarifiers.

The professional engineering firm providing services under CS-171 was awarded to Brown and Caldwell, LLC on August 24, 2017, and the notice to proceed was issued on September 1, 2017. The contract is currently set to end on March 1, 2021. The associated construction contract, No. 1803823, started on June 12, 2019 and ends July 31, 2021. Based on the alignment of the two contracts, CS-171 needs to be extended by five (5) months to cover the entire construction duration. Also, an additional four (4) months after construction closeout needs to be added to allow time for closeout activities under CS-171. The new contract end date for CS-171 will be December 1, 2021 through this proposed Amendment No. 2. Based on time extensions, the cost impact requires the project management budget to be increased by $8,331.00.

The CS-171 task involving resident project representation (RPR) was established based on part-time RPR services during negotiation and execution of the contract. It is in GLWA's best interest, however, to engage full-time RPR services to thoroughly monitor the progress and quality of construction work on this project. Therefore, this proposed amendment increases the RPR services budget by $523,013.00 so that full-time RPR is provided during the construction on the project. This task will be paid as time and material, and unused funds will be credited back to GLWA at project closure.

A $50,000.00 provisional allowance is included in this proposed amendment if unforeseen or differing

site conditions require additional engineering services.

JUSTIFICATION

The professional engineering service contract needs to be extended to align with the associated construction contract and include adequate time for closeout. The executed construction duration increased from the CS-171 contract duration due to the construction closeout period being increased at GLWA's request. The additional closeout time for construction and O&M updates as requested by GLWA through this proposed amendment would make the closeout periods consistent with recent experiences on similar project closeouts.

Increased RPR coverage will improve construction oversight which is in GLWA's best interest since it results in better quality work, more accurate progress reports, provides lifecycle documentation, and minimizes surprises. Full-time RPR coverage was GLWA's request based on lessons learned from other projects.

A provisional allowance to this contract is advisable because of the inherent risks associated with encountering unforeseen and differing site conditions during construction.

PROJECT MANAGEMENT STATUS

Original Contract Duration	42 months (09/01/2017 to 03/01/2021)
Change Order No. 1	0 months (no change)
Proposed Change Order No. 2	9 months added (extend 03/01/2021 to 12/01/2021)
New Contract Length	51 months total (09/01/2017 to 12/01/2021)

PROJECT ESTIMATE

Original Contract Price	$ 939,440.00
Change Order No. 1	35,000.00
Proposed Change Order No. 2	581,344.00
New Contract Total	$1,555,784.00

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 (5519-882111.000-617950-111007)

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

Original Contract Price	$ 939,440.00
Change Order No. 1	35,000.00
Current Contract Total	$ 974,440.00
Proposed Change Order No. 2	581,344.00
New Contract Total	1,555,784.00
Amended Financial Plan Estimate	974,440.00
Negative Estimating Variance	$ (581,344.00)

The award of this change order to the vendor creates a negative estimating variance of $581,344.00. This variance will be funded from capital reserves.

COMMITTEE REVIEW

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