



## Legislation Text

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File #: 2019-221, Version: 1

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### **Proposed Change Order No. 1**

**GLWA-CON-288**

**Electrical Tunnel Rehabilitation Lake Huron Water Treatment Plant**

**CIP# 111004 / BCE Score: 38.6**

Agenda of: June 26, 2019

Item No.: **2019-221**

Amount:	Original Contract:	\$3,888,000.00
	Change Order No. 1:	0.00
	Total Contract Amount:	\$3,888,000.00

**TO:** The Honorable  
Board of Directors  
Great Lakes Water Authority

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

**DATE:** June 4, 2019

**RE: Proposed Change Order No. 1  
Contract No. GLWA-CON-288  
Electrical Tunnel Rehabilitation at Lake Huron Water Treatment Plant  
Vendor: Clark Construction Company**

### **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-288 Change Order No. 1 "Electrical Tunnel Rehabilitation at Lake Huron Water Treatment Plant" with Clark Construction Company, at a cost not to exceed \$3,888,000.00 for an increased duration of 157 days for a total contract duration of 522 days**; and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

## BACKGROUND

The primary power feed to the Lake Huron Water Treatment Plant (LHWTP) is provided through two redundant transformers referred to as Transformer Nos. T-1 and T-2. The first primary power feed is conveyed through a set of five existing medium-voltage cables that directly connect Transformer No. T-2 to the plant switchgear building. The second primary power feed is similarly conveyed through another set of five existing medium-voltage cables that connect Transformer No. T-1 to the standby generators and the plant switchgear building. This routing configuration assures that in the event of total primary power loss to both transformers, that the standby generators are automatically activated, and the local switchgear is triggered to switchover the power feed from Transformer No. T-1 to the standby generators. This configuration provides for the uninterrupted power supply to the plant if both primary power feeds to the plant are lost.

The successful replacement and tie-in of the first of five medium-voltage feeder cables from Transformer-T2 to the plant switchgear room was completed in February 2019. The medium-voltage cable replacement work for Transformer No. T1 was planned to commence on April 1, 2019. However, it was discovered in March 2019 that the Transformer No. T-2 had deficiencies with its grounding system that need to be corrected prior to commencing the cable replacement work for Transformer No. T-1. The grounding system corrections to Transformer No. T-2 will be completed prior to September 2019. At this point, the cable replacement work related to Transformer No. T-1 can proceed.

As a result, additional contract time is therefore needed to accommodate completing the medium-voltage cable replacement work between Transformer No. T-1 and the plant switchgear room. Specifically, an additional 155 days are needed to substantially complete the project while an additional 157 days are needed to finally complete the project. The current dates for substantial and final contract completion for Contract No. GLWA-CON-288 are June 27 and September 25, 2019, respectively. The new dates for substantial and final contract completion will be November 29, 2019 and February 28, 2020 by execution of this proposed Change Order No. 1.

## JUSTIFICATION

Postponing the replacement of the medium-voltage electrical cables between Transformer No. T-1 and the plant switchgear room until mid-September 2019 maintains two primary power feeds to the plant during the peak-demand season (i.e. now through the end of the summer). Likewise, it is prudent to take the medium-voltage electrical cabling downstream of Transformer No. T-1 out of service for its replacement only when the grounding system is corrected at Transformer No. T-2. This corrective work will be completed by late-September 2019.

## PROJECT MANAGEMENT STATUS

Original Contract Time 365 Calendar Days

Proposed Change Order No. 1 157 Calendar Days

New Contract Time 522 Calendar Days

## PROJECT ESTIMATE

Original Contract Price	\$3,888,000.00
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Proposed Change Order No. 1	0.00
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