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## Memorandum

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**To: The Honorable Board of Directors, Great Lakes Water Authority**

**From: Cheryl Porter, Chief Operating Officer**

**CC: GLWA Executive Leadership Team**

**Date: March 19, 2019**

**RE: Cover Memo for Contract No. CS-1671 Proposed Amendment No. 1  
Clarification Items**

This cover memo accompanies a memorandum from Grant Gartrell, Water Engineering Director, dated March 19, 2019, which clarifies items raised during the March 13, 2019 Operations and Resources Committee meeting regarding Contract No. CS-1671 Proposed Amendment No. 1 “Professional Engineering Services for Steam, Condensate Return and Compressed Air Piping Improvement at Springwells Treatment Plant” (CIP# 1248).

Two primary questions were raised – “What happened?” and “What will we do differently?”

Details of what happened regarding this proposed amendment requesting an increase in time and money are contained within the attached memorandum.

As we look at what we can do differently, the current process is that the designer on record is responsible during construction. Our current methodology for determining the timeframe will be reevaluated with recommendations to follow as it will require an organizational change to ensure a process improvement, whereas, time is needed to properly vet options in partnership with the GLWA Team.

Attachment: Memorandum, *Proposed Amendment No. 1 for Contract No. CS-1671 Clarification Items*,  
March 19, 2019



## Memorandum

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**To:** The Honorable Board of Directors, Great Lakes Water Authority  
**From:** Grant Gartrell, Director of Engineering  
**Thru:** Cheryl Porter, COO Water & Field Services  
**Date:** March 19, 2019  
**Subject:** Proposed Amendment No. 1 for Contract No. CS-1671  
Clarification Items

The purpose of this memorandum is to clarify certain items regarding the subject proposed amendment that were raised during the March 13, 2019 GLWA Operations and Resources Committee meeting.

**Item 1** – Who is responsible for the construction duration going from 24 to 42 months?

**Answer** - The GLWA Water Engineering group is responsible for estimating the construction duration to be 24 months at the time it prepared the request for proposals (RFP) for engineering services related to the steam, condensate and compressed air piping improvements at the Springwells Water Treatment Plant. Therefore, the CS-1671 consultant's (i.e. Metco) fee for engineering services during construction was based on 24 months. The estimated 24 months of construction was based on a conceptual estimate of the work involved with no study or design related information. As the size, complexity and availability of local construction resources to perform the work became more defined, it became clear that 42 months was a realistic duration for a contractor to complete the associated construction work.

**Item 2** – Which tasks are associated with the additional fees proposed in this amendment?

**Answer** -The only costs that will increase because of the change in construction duration going from 24 to 42 months relate to the consultant's construction-related services. These services include construction administration, resident project representation, and project management and meetings during the construction phase. Refer to Table 1 herein.

**Item 3** – Why are we proposing to add 6 months for the contract closeout period?

**Answer** - The contract end date for CS-1671 was originally planned to end concurrent with the associated construction contract (CON-252). Although the work of contract CS-1671 may still finish within the same period as the 42-month construction contract, the

additional 6 months is requested to assure enough time to complete all CS-1671 related work and closeout the contract without another change order.

<b>Table 1</b>				
<b>CS-1671 Task</b>	<b>Current Contract Duration</b>	<b>Amendment 1 Proposed Duration</b>	<b>Fee Impact</b>	<b>Responsible Party</b>
Preliminary design	4	6	None	Metco
Final design	6	17	None	Metco
Bidding	3	10	None	GLWA
Construction Services	24	42	\$605,759.22	GLWA
Contract closeout	0	6	None	GLWA
<b>Total</b>	<b>37</b>	<b>81</b>	<b>\$605,759.22</b>	<b>-</b>

### **Final Remarks**

Please consider the following additional points in consideration of this proposed amendment:

1. The scope of engineering services for Contract No. CS-1671 was completed in March 2015 during a transitional time for the organization. Staff levels and skill sets were not as mature as they are now under GLWA. Today, the GLWA Water Engineering group has all its positions filled except two. Also, several projects have been performed since March 2015 and we better understand internal constraints and outside contractor project delivery capabilities.
2. Currently, the total engineering fee (\$926,363.22) as a percent of construction is approximately 3.9% of the construction cost (\$23,601,341). The total engineering fee as a percent of construction would be 6.5% by adding \$605,759.22 to the CS-1671 contract through proposed Amendment No. 1. This engineering fee as a percent of construction is very reasonable as engineering fees are normally between 15% to 25% of construction value for complex facilities projects with full-time engineering services during construction.
3. The final design prepared by the consultant was technically sound and comprehensive. It contained over 300 detailed drawings showing the detailed nature and extent of construction. Three responsive bids were received with the following prices: \$23,601,341; \$24,949,000; and \$27,331,128. We consider these bid prices to be competitive with one another considering the size and complexity of this construction project; which is indicative of a well-prepared work product.
4. The cost associated with this amendment request would have been substantially included in the original contract amount if the scope were written using 42 months instead of 24 months as the duration for the construction period.