

December 2, 2021

Mr. Alex Damien, P.E.
Interim Director of Public Works

City of Waukesha 130 Delafield Street Waukesha, WI 53188-3616

Re: Change Order No. 1

Return Flow Pump Station and Advanced Phosphorus Treatment with Facilities Enhancement for

Clean Water Plant.

City of Waukesha, Wisconsin

Dear Mr. Damien:

Enclosed are three copies of Change Order No. 1 and documentation for the change order items for your review and approval. If these items are acceptable, please sign and return all copies to Jacobs. This letter also summarizes the included Change Order. There are three Clean Water Fund Loans related to the project:

Total Contract Amount: \$17,129,076

Clean Water Fund Loan: CWFL #4062-05 & 4062-11 — Return Flow Pump Station — Contract Value: \$8,218,710.92.

Total Contingency: \$410,935.00.

- Built-in 5% of loan application of \$293,935
- Built-in to contract amount of \$117,000.

Clean Water Fund Loan: CWFL #4062-07 – Advanced Phosphorus Treatment and Facilities Enhancements – Contract Value: \$8,910,365.07.

Total Contingency: \$445,520.

- Built-in 5% of loan application of \$382,520
- Built-in to contract amount of \$63,000.



Below itemizes the change order for the Return Flow Pump Station and Advanced Phosphorus Treatment and Facilities Enhancement loan applications.

#### 1.1 Return Flow Pump Station - CWFL #4062-05 & #4062-11

#### Item 1.1A:

This item includes the cost to provide a 25kV VFI SF6 insulated outdoor switchgear unit. The VFI SF6 insulation matches the other units onsite and provides a more robust unit. Add: \$10,738.

There is no increase beyond what would have been included in the bid had the electrical work been shown on the bidding documents.

#### Item 1.1B:

This item is a credit for deletion of two 45 degree 30-inch ductile iron (DI) elbows on the discharge line of the return flow pumps. The contractor made alignment adjustments and the elbows were no longer required. Deduct: 8,547

#### Item 1.1C:

This item is a credit for elimination of UL listed tiebreaker for building 325 MCC. The UL listed tiebreaker is not required and consistent with other existing MCCs onsite. Deduct: \$5,250.

There is no increase beyond what would have been included in the bid had the electrical work been shown on the bidding documents.

#### Item 1.1D

This item includes the cost for an additional concrete pilaster support for the bridge crane. The bridge crane required the additional support. Add: \$1,558.

There is no increase beyond what would have been included in the bid had the structural work been shown on the bidding documents.

#### Item 1.1E:

This item includes the cost for two additional generator supports. The additional supports were required due to the generator manufacturer delivered the generator with two additional support locations. Add: 3,236.



There is no increase beyond what would have been included in the bid had the generator supports work been shown on the bidding documents.

#### Item 1.1F:

This item included the cost for providing insulation on the footing of the retaining wall east of the new building. The insulation was required to protect the footing from frost due to the minimal cover based on the new grading in the area. Add: \$407.

There is no increase beyond what would have been included in the bid had the insulation work been shown on the bidding documents

CWFL #4062-05 & #4062-11 Total Return Flow Pump Station – Change Order Items: \$2,143.09

This component is a zero-cost change order to the CWFL #4062-05 & #4062-11. This change order does reduce the amount of the built-in contingency by \$2,143.09.

Built in Contingency balance \$117,000 - \$2,143.09 = \$114,856.91 remaining with a zero-cost increase to the contract.

#### 2.1 Advanced Phosphorus Treatment and Facilities Enhancement – CWFL #4062-07

#### Item 2.1A:

This item is a credit for deletion of the oxygen transfer efficiency test for the aeration tank diffusers. The test is not required due to extensive historical data by the manufacturer. Deduct: \$3,255.

#### Item 2.1B:

This item includes the cost to provide two additional starters for air scour blowers. Add: \$1,748.

There is no increase beyond what would have been included in the bid had the electrical work been shown on the bidding documents.

#### Item 2.1C:

This item is a credit for deletion of a polymer pump starter and associated AFD. The starter and AFD were not required. Deduct: \$2,022.



#### Item 2.1D:

This item is a credit for allowing the contractor to cut off aeration tank dowels in lieu of coring each dowels as specified. Cutting the dowels is an acceptable method. Deduct: \$9,435.

#### Item 2.1E:

This item includes the cost for rerouting power to the polymer system from 500LP-1 to 250-LP-1. The distance and corresponding voltage drop from 500LP-1 was too great and running the power from 250-LP-1 was closer. Add: \$1,514.

There is no increase beyond what would have been included in the bid had the electrical work been shown on the bidding documents.

#### Item 2.1F:

This item includes the cost for demolition of existing control wire in building 110 and building 140 MCCs. The demolition of existing wire was necessary to allow maintenance of new drive wiring. Add: \$4,004.

There is no increase beyond what would have been included in the bid had the electrical work been shown on the bidding documents.

#### Item 2.1G:

This item includes the cost for installing individual breakers and relays for five pumps in building 110 and four pumps in building 140. The individual breakers/relays will provide protection of pump operation when maintenance is required on one of the pump controls. Add: \$3,463.

There is no increase beyond what would have been included in the bid had the electrical work been shown on the bidding documents.

#### Item 2.1H:

This item includes the cost for providing a 15 hp starter for the backup air compressor in building 150. The plans had called out a 5 hp starter. If the correct starter was identified in the documents, the corresponding cost would have been included in the bid. Add: \$4,348.

There is no increase beyond what would have been included in the bid had the electrical work been shown on the bidding documents.

CWFL #4062-07 Total Advanced Phosphorus Treatment and Facilities Enhancement Change Order Items: \$364.51



Built in Contingency balance \$63,000 - \$364.51 = \$62,635.49 remaining with a zero-cost increase to the contract.

### 3.1 Aeration Basin Airline Replacement

This item includes the cost of replacing airline replacement not included in the original scope of the project. The airline failed and had an emergency repair performed. This is the long-term solution to maintain critical process air flow. DNR has approved the inclusion and financing of this critical piece of infrastructure in this project. Add: \$295,037.20

The cost is no more than if it had been included in the original contract scope.

#### Item 3.1A:

This component (3.1A) is a change order to the \$8,910,365.07 total under CWFL #4062-07.

This change order increases the amount of the overall CD Smith contract total of \$17,129,076 by \$295,037.20 with a revised contract price of \$17,424,113.20.

The loan total financed under CWFL #4062-07 will also be increased by the same \$295,037.20.

Overall loan #4062-07 contingency of \$445,520 is reduced by \$295,037.20.

Available contingency for loan #4062-07 is \$382,520 - \$295,037.20 = \$87,482.80 remaining.

#### 4.1 Contractual Schedule

#### Item 4.1A:

Milestone No. 1 is for completion of the advanced phosphorus treatment portion of the project. The original substantial completion date is December 12, 2021. This item will add 50 days to the completion of this work but will not negatively impact the WPDES requirement to meet lower phosphorus limit of June 30, 2022. The new substantial completion date for Milestone No. 1 is January 31, 2022.

#### Item 4.1B:

Milestone No. 2 is for the completion of the return flow pump station related work and other facility enhancements. The original substantial completion date is April 1, 2022. This item will add 50 days to the completion of this work. The additional time will be utilized to properly install replacement of aeration basin airline (new scope of work to the project). The new substantial completion date for Milestone No. 2 is May 21, 2022.

#### Item 4.1C:



Final Completion is completion of the entire project including project close out and any punch list items. The original final completion date is June 12, 2022. This item will add 50 days to the final completion similar to milestones No. 1 and No. 2. The new Final Completion date is August 1, 2022.

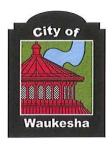
Please call Andrew Schrank (920-912-7530) with any questions.

Sincerely,
Jacobs Engineering Group

Andrew Schrank, P.E.

Enclosure: Change Order No. 1





### **CONTRACT CHANGE ORDER (CCO)**

CHANGE ORDER		WRITTEN AMENDME	WRITTEN AMENDMENT		CHANGE NO: 001	
TO CONTRAC	CTOR:					
PROJECT:	PHOSPHORUS TRE	MP STATION AND ADVANCE EATMENT WITH FACILITIES FOR CLEAN WATER PLANT	ED PROJECT	D3165200		
OWNER:	CITY OF WAUKESH					
ENGINEER:	JACOBS ENGINEER	RING GROUP				
The following	modification(s) to t	he Contract are hereby orde	ared (use additional pas	oo if roquired):		
The following	inounication(s) to the	ne contract are nereby orde	reu (use auditional pag	es ii requireu).		
See attached	summary					
Reason for M	lodification(s):					
Reason for modification(s).						
See attached	summany					
See attached	Summary					
	//:					
Attachments	(List Supporting Doc	cuments):				
Contract Amount or Price						
Original Tota	l Contact Value	\$17,129,076.00				
Previous Cont	ract Modification(s)	\$0.00				

Contract Amoun	t or Price			
Original Total Contact Value	\$17,129,076.00			
Previous Contract Modification(s) (Add/Deduct)	\$0.00			
This Contract Modification (Add/Deduct)	\$295,037.20			
Revised Contract Amount	\$17,424,113.20			
Phosphorus Total Contract Value	\$8,910,365.07	RFPS Total Contract Value	\$8.218,710.93	
Previous Phosphorus Contract Modification(s) (Add/Deduct)	\$0.00	Previous RFPS Contract Modification(s) (Add/Deduct)	\$0.00	
This Phosphorus Contract Modification (Add/Deduct)	\$295,037.20	This RFPS Contract Modification (Add/Deduct)	\$0.00	
2Revised Phosphorus Contract Amount	\$9,205,402.27	Revised RFPS Contract Amount	\$8,218,710.93	

ES-P3-03 (REV 04.08.2008) PROJECT No. 709364

### CONTRACT CHANGE ORDER (CCO) - Milestone Changes

х	CHANGE ORDER	WRITTEN AMENDMENT
		 CHANGE NO: 001

The Revised Contract Milestone Date is January 31, 2022

### **Substantial Completion**

Milestone 1-Advanced Phosphorus Treatment	Contract Times (Calendar Days)	)	
Original Duration		550	Days
Previous Contract Modification(s)	(Add/Deduct)	50	Days
This Contract Modification	(Add/Deduct)	0	Days
Revised Contract Time		600	Days
The Original Contract Milestone Date is December 12, 2	2021 (based on NTP of June 12, 2020)		

### **Substantial Completion**

Milestone 2 - RFPS Completion	Contract Times (Calendar Days)		
Original Duration		660	Days
Previous Contract Modification(s)	(Add/Deduct)	0	Days
This Contract Modification	(Add/Deduct)	50	Days
Revised Contract Time		710	Days
The Original Contract Milestone Date is April 1, The Revised Contract Milestone Date is May 2 <sup>o</sup>	, ,		

### Final Completion

	Contract Times (Calendar Days)		
Original Duration		720	Days
Previous Contract Modification(s)	(Add/Deduct)	0	Days
This Contract Modification	(Add/Deduct)	50	Days
Revised Contract Time		770	Days

The Original Contract Milestone Date is June 12, 2022 (based on NTP of June 12, 2020)

The Revised Contract Milestone Date is August 1, 2022

Owner	Contractor	Engineer Recommendation <sup>1</sup>	
Ву:	Ву:	Ву:	Andrew Schrank
Date:	Date:	Date:	December 2, 2021

<sup>&</sup>lt;sup>1</sup> Recommendation necessary for Change Orders.