

# CITY OF HIGH POINT

## AGENDA ITEM



**Title:** Ward Water Treatment Plant Upgrades – Change Order # 08  
Wharton & Smith, Inc.

**From:** Terry Houk – Public Services Director  
Derrick Boone – Asst. Public Services Director  
Nawfal Shujaa- Projects Engineer

**Meeting Date:** July 19, 2021

**Public Hearing:** No

**Advertising Date:** June 8, 2018  
**Advertised By:** Purchasing

**Attachments:** Attachment A- Change Order #8 Documents

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### PURPOSE:

To approve Change Order #8 to Wharton and Smith for additional work that was performed as part of the Ward Water Treatment Plant Upgrade Project.

### BACKGROUND:

The contract for electrical and HVAC upgrades to the Ward Water Treatment Plant was awarded to Wharton & Smith Inc. on September 18, 2018. The project is estimated to be complete by September 2021. Below is a summary of the additional work items that are to be covered under Change Order #8:

- Additional installation of steel grating and supports to close the opening through existing mechanical shaft associated with demolition of Air Handling Unit the opening represents a serious safety issue.
- Additional electrical provisions to the replacement of the old existing starters for Transfer Pumps #5 and #6, as well as to facilitate the installation of the new Adjustable Frequency Drives for Transfer Pumps #2 and #3.

There have now been eight change orders since the award of the contract to Wharton and Smith. City Council approved Change Order # 4 on November 2, 2020. The Public Services Department is requesting approval for Change Order #8 because the cumulative amount of change orders 5 through 8 is greater than \$90,000. The original contract amount is \$ 12,737,000.00, and the new contract amount is \$ 13,404,448.00 upon approval of Change Order #8.

### BUDGET IMPACT:

Funds for this are available in the FY 2021-2022 budget.

### RECOMMENDATION:

The Public Services Department recommends the approval of Change Order #8 to Wharton Smith, Inc in the amount of \$39,002.



The shaft is open from 2<sup>nd</sup> floor to the basement



Floor opening covered with Plywood



New TP#2 AFD.





# Change Order No. 008

Date of Issuance: 8 JUNE 2021

Effective Date: 8 JUNE 2021

Project: Ward WTP Upgrades	Owner: The City of High Point	Owner's Contract No.: Bid #56-082218
Contract: Ward Water Plant Upgrades		Date of Contract: 18-SEP-2018
Contractor: Wharton Smith Inc.		Engineer's Project No.: 190221

## The Contract Documents are modified as follows upon execution of this Change Order:

Description: Site conditions changes are listed in Attachment A.

**Attachments (list documents supporting change):** Attachment A contains a descriptive list of every change to be incorporated into the project via this Change Order.

### CHANGE IN CONTRACT PRICE:

### CHANGE IN CONTRACT TIMES:

Original Contract Price:

\$ 12,737,000.00

Increase or Decrease from previously approved Change Orders:

\$ 628,446.00

Contract Price prior to this Change Order:

\$ 13,365,446.00

Increase of this Change Order:

\$ 39,002.00

Contract Price incorporating this Change Order:

\$ 13,404,448.00

Original Contract Times: ☐ Work days ☒ Calendar days

Final Completion of the Work (days): 930

Ready for final payment (date): 31-MAY-2021

Increase or Decrease from previously approved Change Orders:

Final Completion of the Work (days): 131

Ready for final payment (date): 9-OCT-2021

Contract Times prior to this Change Order:

Final Completion of the Work (days): 1064

Ready for final payment (date): 9-OCT-2021

Increase of this Change Order:

Final Completion of the Work (days): 0

Ready for final payment (date): 12-OCT-2021

Contract Times with all approved Change Orders:

Final Completion of the Work (days): 1064

Ready for final payment (date): 12-OCT-2021

RECOMMENDED:

By:   
Engineer (Authorized Signature)

Date: 8 JUNE 2021

ACCEPTED:

By: \_\_\_\_\_  
Owner (Authorized Signature)

Date: \_\_\_\_\_

ACCEPTED:

By:   
Contractor (Authorized Signature)

Date: 6/9/21

## Change Order No. 008

Date of Issuance: 8-JUN-2021

Effective Date: 8-JUN-2021

Project: Ward WTP Upgrades	Owner: The City of High Point	Owner's Contract No.: Bid #56-082218
Contract: Ward Water Plant Upgrades		Date of Contract: 18-SEP-2018
Contractor: Wharton Smith Inc.		Engineer's Project No.: 190221

### ATTACHMENT A

**Item #1 – Additional installation of steel grating and supports to close up opening through existing mechanical shaft associated with demolition of AHU-1 and around new DOAS-1 outdoor air duct for \$16,361.00 and no time extension.**

The scope of work contracted for this project included the demolition of Air Handling Unit #1 (AHU-1) and its associated ductwork, as well as the installation of a new Dedicated Outside Air Unit (DOAS-1).

During the process of mechanical demolition and new construction associated with these two HVAC units, as well as ancillary equipment and ductwork materials, the Contractor noticed that numerous voids would remain open, in addition to adjacent areas found to be covered by plywood inside an existing mechanical shaft at Rooms 121 and 224. In order to permanently cover these floor slab openings, additional A36 hot deep galvanized steel grating sections with their respective angle supports are to be mechanically fastened, and all necessary stainless steel wall anchorage is required to be installed as prescribed within Request for Information #111.

**Item #2 – Additional electrical provisions to resequencing the replacement of the existing starters with soft starters for Transfer Pumps #5 and #6, as well as to facilitate the installation of the new Adjustable Frequency Drives for Transfer Pumps 2 and 3 for an additional cost of \$22,641.00 with no time extension.**

The scope of work contracted for this project included a strict sequential replacement of the existing starters with soft starters for Transfer Pumps #5 and #6, as well as to facilitate the installation of the new Adjustable Frequency Drives (AFD) for Transfer Pumps 2 and 3 at Electrical Room #114 and as prescribed by Sequence #4 within Contract Specification 01310. Such sequential replacement was intended to maintain plant operations.

During the course of demolition of Motor Control Center #1 (MCC-1) as part of the above referenced work, the Contractor found that all existing power feeders to MCC-1 were internally routed in an opposite orientation than what was anticipated. This unforeseen condition presented construction constraints to maintain continuous plant operation and redundancy of service, which required the implementation of an alternate sequence of replacement for all the Transfer Pumps, additional temporary provisions to protect expose electrical components that would remain energized during said work, as well as additional trips from AFD Equipment Manufacturer, Control System Supplier and Control System Programmer to perform discrete startup and commissioning of the new equipment in conformance to the alternate sequence of replacement above described.

**Total Contract Price adjustment by Change Order #8 is \$39,002.00, including no time adjustment to the date of Final Completion of the Work.**

# ATTACHMENT "B"

WARD Change Orders Log					
COD #	Dated	Amount	Executed	City Council	Notes
1	10/18/2019	\$154,124.00	Yes	Yes	5-8 valves, main gate power, & electrical transformers layout
2	3/1/2020	\$209,817.00	Yes	Yes	Lead abatement, EB AC unit, MCC#3 water line re-rout
3	6/2/2020	\$28,212.00	Yes	No	Covid 19 acceleration and stop order
4	9/17/2020	\$103,626.00	Yes	Yes	controls addition for pumps operation, generator addition, TP1& infills deletion, programming, lab fan motors
Subtotal A		\$495,779.00			
5	12/17/2020	\$13,280.00	Yes	No	T1 - T4 disposal, AC code violations, structural corrections, and programming
6	1/27/2021	\$70,104.00	Yes	No	MCC2 waterline relocation, restrooms ceiling, roof openings & tank infills, AFD additional programing & pressure control
7	4/23/2021	\$49,283.00	Yes	No	Fiber optic patch panel I74 tank, Cedraw valve, architectural finishes, chemical system, addition Scada, fire dampers addition, Fan #3 switch
8	6/8/2021	\$39,002.00	No	On going	Grates at the mechanical rooms and TP's MCC1 Changes
Subtotal B		\$ 171,669.00			
Total Change Orders to date		\$ 667,448.00			
Original contract amount		\$ 12,737,000.00			
Amount to date		\$ 13,404,448.00			

June 8<sup>th</sup>, 2021

Terry Houk  
Public Services Director  
City of High Point (CHP)  
211 South Hamilton Street  
High Point, NC 27260

Ward Water Plant Upgrades  
B&V Project 190221  
B&V File 81.1750

**Subject: Ward Water Treatment Plant Upgrades Project  
Change Order #8 Descriptive Narrative**

Dear Mr. Houk:

This communication serves the objective to document and summarize an amendment to the Contract Documents in terms of changes to the Contract Price by means of Change Order #8. This contractual amendment is being recommended in conformance with Article 11 "*Amending the Contract Documents; Changes in the Work*" as stipulated in the EJCDC C-700 Standard General Conditions of the Construction Contract between Wharton Smith Inc. (Contractor) and The City of High Point (Owner).

The scope of changes to be incorporated into the Contract Documents via Change Order #8 are as follows:

**Item #1 – Additional installation of steel grating and supports to close up opening through existing mechanical shaft associated with demolition of AHU-1 and around new DOAS-1 outdoor air duct for \$16,361.00 and no time extension.**

The scope of work contracted for this project included the demolition of Air Handling Unit #1 (AHU-1) and its associated ductwork, as well as the installation of a new Dedicated Outside Air Unit (DOAS-1).

During the process of mechanical demolition and new construction associated with these two HVAC units, as well as ancillary equipment and ductwork materials, the Contractor noticed that numerous voids would remain open, in addition to adjacent areas found to be covered by plywood inside an existing mechanical shaft at Rooms 121 and 224. In order to permanently cover these floor slab openings, additional A36 hot deep galvanized steel grating sections with their respective angle supports are to be mechanically fastened, and all necessary stainless-steel wall anchorage is required to be installed as prescribed within Request for Information #111.

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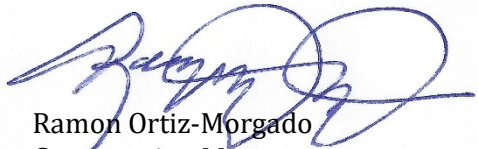
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**Total Contract Price adjustment by Change Order #8 is \$39,002.00, including no time adjustment to the date of Final Completion of the Work.**

Respectfully,

**BLACK & VEATCH INTERNATIONAL COMPANY**



Ramon Ortiz-Morgado  
Construction Manager

CC D. Boone, N. Shujaa, M. Osborne, D. Modi, M. Galin, D. Cashwell