



Hazen and Sawyer  
629 Green Valley Road, Suite 200  
Greensboro, NC 27408 • 336.292.7490

August 20, 2019

Mr. Danny Briggs  
Senior Civil Project Engineer  
Department of Water Resources  
City of Greensboro  
2602 S Elm-Eugene Street  
Greensboro, NC 27406

**Re: Change Order No. 1**  
**T.Z. Osborne WRF BNR Upgrade Project - Package 4**  
**H&S Job No.: 31221-009**  
**COG Project No.: 2016-002A**

Dear Mr. Briggs:

Please find a digital copy of the backup documents for Change Order No. 1 for the City of Greensboro T.Z. Osborne WRF BNR Upgrade Project – Package 4 enclosed. This change order is for the replacement of Aeration Blower #2, including the purchase of a new, single stage centrifugal blower unit, motor, control panel, and accessories from Howden, and the mechanical and electrical installation of the blower to be performed by the Contractor. This change order also covers the construction of a new berm and haul road to the north of the plant that is needed to avoid conflicts with ATF federal offset requirements as required by the Greensboro Police Department and federal regulations and enforced by the ATF inspector. This change order also includes the interconnection of PLC-3-R2 to PLC-3-R4 and PLC-3-R3 to PLC-3-L1 and the painting of RAS Pump Station #2 and the steel air header pipe.

The total amount recommended for Change Order #1 is \$2,984,834.06 and 37 calendar days. A breakdown of the changes is presented in the table on the next page.

The original combined M/WBE goal for the contract was: 1.0%

Adams Robinson's original M/WBE commitment for the project was: 1.3%

MBE: 0%  
WBE: 1.3%

The M/WBE participation for this Change Order is: 14.3%

MBE: 2.2%  
WBE: 12.1%

The backup to the approved WCDs for Blower #2, the PLC interconnections, and the requested painting are attached. The backup documentation also includes the Engineer's Determination on the haul road proposal from the Contractor that shall be included in Change Order #1.

Please contact me at (336) 478-3378 if you shall have any questions or require additional information.

Regards,

A handwritten signature in blue ink, appearing to read 'A. Babson'.

Aaron Babson, PE  
Senior Associate

Enclosures

Cc: Danny Briggs, City of Greensboro, North Carolina

T.Z. Osborne Water Reclamation Facility  
City of Greensboro - BNR Upgrade Package 4  
City of Greensboro Proj # 2016-002-A

CO Summary

WCD No.	CO No.	Description	Approved Amount	Bonds + Insurance (2.5%)	Total Amount	Approved Time Extention	M/WBE Value	M/W Group	Vendor
013	1	Painting of RAS PS 2 and the Steel Air Header Piping	\$ 249,028.09	\$ 6,225.70	\$ 255,253.79	0	\$ 231,088.00	W	Southern Paint and Waterproofing
							\$ 1,500.00	W	Carolina Disposal
025a	1	PLC Interconnections Part A	\$ 187,777.95	\$ 4,694.45	\$ 192,472.40	0	\$ 150.00	M	F-T Trucking
							\$ 55.50	W	Canady's Erosion and Landscape
							\$ 45,023.17	M	CITI, LLC
Sum of Approved WCDs not Including Blower #2			\$ 436,806.04	\$ 10,920.15	\$ 447,726.19	0			

RFP No.	CO No.	Description	Approved Amount	Bonds + Insurance (2.5%)	Total Amount	Approved Time Extention	M/WBE Value	M/W Group	Vendor
038	1	Haul Road Berm	\$ 198,251.37	\$ 4,956.28	\$ 203,207.65	0	\$ 3,000.00	M	F-T Trucking
							\$ 2,500.00	M	JC Waller and Assoc.
							\$ 21,972.22	W	Canady's Erosion and Landscape
Sum of Recommended RFPs			\$ 198,251.37	\$ 4,956.28	\$ 203,207.65	0			

							\$ 890.00	W	Carolina Disposal
							\$ 14,481.00	M	CITI, LLC
							\$ 38,940.00	W	Industrial & Comm. Insulation
Blower #2 WCDs #029 and #036a/36b			\$ 2,333,900.21	\$ -	\$ 2,333,900.21	37	\$ 640.00	W	Piedmont Portables
							\$ 4,982.00	W	Southern Paint and Waterproofing
							\$ 26,769.00	W	Structural Steel of Carolina
							\$ 34,000.00	W	Mayer Electric Supply
Change Order #1 Total					\$ 2,984,834.06	37			

MBE	2.2%	\$	65,154.17
WBE	12.1%	\$	360,836.72
M/WBE	14.3%	\$	425,990.89

## WORK CHANGE DIRECTIVE

WORK CHANGE DIRECTIVE NO.: 029a DATE: December 7, 2018

Project: T.Z. Osborne WRF BNR Upgrade Project – Package 4 (2016-002A)

Contractor: Adams Robinson Enterprises, Inc

Engineer/Architect: Hazen and Sawyer (31221-009)

You are directed to proceed promptly with the following change (s):

Description: Blower #2 Replacements (Equipment Only)

Purpose of Work Change Directive: Adams Robinson's authorization to furnish and deliver one (1) single stage centrifugal blower unit, motor, control panel, and accessories from Howden.

Attachments (List documents supporting change): PCO-17025

If a claim is made that the above change(s) have affected the Contract Sum or Price or the Contract Time or Times, any claim for a Change Order based thereon will involve one or more of the following methods of determining the effect of the change(s).

Method in determining change in Contract:

Sum or Price:

<input type="checkbox"/>	Unit Price (s)
<input checked="" type="checkbox"/>	Lump Sum
<input type="checkbox"/>	Other: _____

Time or Times:

<input type="checkbox"/>	Contractor's records
<input type="checkbox"/>	Engineer's records
<input checked="" type="checkbox"/>	Other: None

Estimated increase/(decrease) in Contract Price:

\$ 1,194,170.23

Estimated increase/(decrease) in Contract Time:

Final Completion: 0 days;

***If the change involves an increase from estimated prices and times included herein work shall not proceed without further authorization.***

Work Change Directive will paid from:

<input checked="" type="checkbox"/>	General Contingency Allowance (Refer to attached GCA Summary Sheet)
<input type="checkbox"/>	Summary Change Order (Executed at a later date acceptable to both the Owner and Contractor)

**RECOMMENDED:**

By: [Signature]  
Engineer/Architect

Date: 12-06-18

**APPROVED:**

By: [Signature]  
Owner

Date: 12-7-18

**ACCEPTED:**

By: [Signature]  
Contractor

Date: 12/17/18

## WORK CHANGE DIRECTIVE

WORK CHANGE DIRECTIVE NO.: 036a DATE: June 20, 2019  
Project: T.Z. Osborne WRF BNR Upgrade Project – Package 4 (2016-002A)  
Contractor: Adams Robinson Enterprises, Inc  
Engineer/Architect: Hazen and Sawyer (31221-009)

You are directed to proceed promptly with the following change (s):

Description: Blower #2 Replacement (Mech. and Elect. Install) Excludes ARCO Labor (WCD #036b)

Purpose of Work Change Directive: Contractor shall demolish the existing Blower #2 and install a new blower that was purchased by the Contractor under WCD #029. This WCD includes the mechanical and electrical material associated with the blower replacement, but excludes ARCO labor.

Attachments (List documents supporting change): Proposal #17036REV, RFP #036, WCD #036a - 036b Breakdown

*WCD-036B SHALL BE ISSUED PRIOR TO BEGINNING INSTALLATION WORK -PTZ*

If a claim is made that the above change(s) have affected the Contract Sum or Price or the Contract Time or Times, any claim for a Change Order based thereon will involve one or more of the following methods of determining the effect of the change(s).

Method in determining change in Contract:

Sum or Price:

<input type="checkbox"/>	Unit Price (s)
<input checked="" type="checkbox"/>	Lump Sum
<input type="checkbox"/>	Other: _____

Time or Times:

<input type="checkbox"/>	Contractor's records
<input type="checkbox"/>	Engineer's records
<input checked="" type="checkbox"/>	Other: None

Estimated increase/(decrease) in Contract Price:  
\$ 960,241.90

Estimated increase/(decrease) in Contract Time:  
Final Completion: 37 days;

***If the change involves an increase from estimated prices and times included herein work shall not proceed without further authorization.***

Work Change Directive will paid from:

<input type="checkbox"/>	General Contingency Allowance (Refer to attached GCA Summary Sheet)
<input checked="" type="checkbox"/>	Summary Change Order (Executed at a later date acceptable to both the Owner and Contractor)

RECOMMENDED:

By: [Signature]  
Engineer/Architect

Date: 06/20/19

APPROVED:

By: [Signature]  
Owner

Date: 6/20/19

ACCEPTED:

By: [Signature]  
Contractor

Date: 6/20/19



Hazen and Sawyer  
629 Green Valley Road, Suite 200  
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July 18, 2019

Mr. Danny Briggs  
Senior Civil Project Engineer  
Department of Water Resources  
City of Greensboro  
2602 S Elm-Eugene Street  
Greensboro, NC 27406

**Re: T.Z. Osborne WRF Package 4**  
**H&S Job No.: 31221-009**  
**COG Project No.: 2016-002A**  
**Engineer's Response to RFP-036: Aeration Blower #2 Installation Labor and Equipment Proposal**

Dear Mr. Briggs:

Adams Robinson Enterprises, Inc. submitted a proposal on June 6, 2019 for the mechanical and electrical work required for the replacement and installation of Aeration Blower #2 (excluding the cost of the blower itself) for a total of \$1,139,729.98. The Howden Blower was purchased under a separate proposal and executed as WCD #029. The Engineer recommends approval of the proposal.

WCD #036a was executed on June 20, 2019 for a portion of the proposal and approved a contract price increase of \$960,241.90 paid out of the General Contingency Allowance. The remaining \$179,488.08 of the proposal shall be included in Change Order #1.

Thank you and please contact me with any questions concerning this price proposal.

Sincerely,

Christy Nelson, PE  
Principal Engineer

cc: (Electronic) Danny Briggs; Elijah Williams, PE;

## WORK CHANGE DIRECTIVE

WORK CHANGE DIRECTIVE NO.: 013 DATE: September 24, 2018  
Project: T.Z. Osborne WRF BNR Upgrade Project – Package 4 (2016-002A)  
Contractor: Adams Robinson Enterprises, Inc  
Engineer/Architect: Hazen and Sawyer (31221-009)

You are directed to proceed promptly with the following change (s):

Description: Repainting project for RAS PS 2 and the Air Header Piping

Purpose of Work Change Directive: Adams Robinson authorization of work

Attachments (List documents supporting change): Adams Robinson Quote

If a claim is made that the above change(s) have affected the Contract Sum or Price or the Contract Time or Times, any claim for a Change Order based thereon will involve one or more of the following methods of determining the effect of the change(s).

Method in determining change in Contract:

Sum or Price:

☐ Unit Price (s)  
☒ Lump Sum  
☐ Other: \_\_\_\_\_

Time or Times:

☐ Contractor's records  
☐ Engineer's records  
☒ Other: None

Estimated increase/(decrease) in Contract Price:

\$ 249,028.09

Estimated increase/(decrease) in Contract Time:


Final Completion: 0 days;

***If the change involves an increase from estimated prices and times included herein work shall not proceed without further authorization.***

Work Change Directive will paid from:

☒ General Contingency Allowance (Refer to attached GCA Summary Sheet)  
☐ Summary Change Order (Executed at a later date acceptable to both the Owner and Contractor)

**RECOMMENDED:**

By:   
Engineer/Architect

Date: 09/24/18

**APPROVED:**

By:   
Owner

Date: 9/25/18

**ACCEPTED:**

By:   
Contractor

Date: 9/25/18



## WORK CHANGE DIRECTIVE

WORK CHANGE DIRECTIVE NO.: 025 DATE: March 26, 2019  
Project: T.Z. Osborne WRF BNR Upgrade Project – Package 4 (2016-002A)  
Contractor: Adams Robinson Enterprises, Inc  
Engineer/Architect: Hazen and Sawyer (31221-009)

You are directed to proceed promptly with the following change (s):

Description: PLC Interconnections  
Purpose of Work Change Directive: Adams Robinson's authorization to install additional fiber provisions to interconnect PLC-3-R2 to PLC-3-R4 and to interconnect PLC-3-R3 to PLC-3-L1.  
Attachments (List documents supporting change): PCO-17032 Revised, RFP-025

If a claim is made that the above change(s) have affected the Contract Sum or Price or the Contract Time or Times, any claim for a Change Order based thereon will involve one or more of the following methods of determining the effect of the change(s).

Method in determining change in Contract:

Sum or Price:

<input type="checkbox"/>	Unit Price (s)
<input checked="" type="checkbox"/>	Lump Sum
<input type="checkbox"/>	Other: _____

Time or Times:

<input type="checkbox"/>	Contractor's records
<input type="checkbox"/>	Engineer's records
<input checked="" type="checkbox"/>	Other: None

Estimated increase/(decrease) in Contract Price:  
\$ 187,777.96

Estimated increase/(decrease) in Contract Time:  
Final Completion: 0 days;

***If the change involves an increase from estimated prices and times included herein work shall not proceed without further authorization.***

Work Change Directive will paid from:

<input checked="" type="checkbox"/>	General Contingency Allowance (Refer to attached GCA Summary Sheet)
<input type="checkbox"/>	Summary Change Order (Executed at a later date acceptable to both the Owner and Contractor)

RECOMMENDED:

By:   
Engineer/Architect

Date: 03/26/19

APPROVED:

By:   
Owner

Date: 3/26/19

ACCEPTED:

By:   
Contractor

Date: 3/26/19





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**Re: T.Z. Osborne WRF Package 4**  
**H&S Job No.: 31221-009**  
**COG Project No.: 2016-002A**  
**Engineer's Response to RFP-033 and RFP-038: Magazine Berm Protection and Road Proposal**

Dear Mr. Briggs:

Adams Robinson Enterprises, Inc. submitted a proposal on July 15, 2019 in response to Request for Proposal #033 and #038 for the construction of a berm to the northeast of the WRF to protect traffic from magazines holding explosives. The proposed lump sum cost for the work is \$198,251.37 and includes new road routing, removal of 6 existing trees in the cut area, removal of the existing fence, installing a new chain-link gated entry, and planting 6 new pine trees. The Engineer recommends approval of the proposal.

The proposal shall be included in Change Order #1.

Thank you and please contact me with any questions concerning this price proposal.

Sincerely,

Christy Nelson, PE  
Principal Engineer

cc: (Electronic) Danny Briggs; Elijah Williams, PE;