

Ratcliff Constructors, LP 4200 Beltway Drive Addison, Texas 75001 Phone: (972) 432-9969 Fax: (972) 432-9943

Project: 21-501 - Collin County Adult Detention Facility, Phase 1 Addition 4300 Community Avenue McKinney, Texas 75071

Prime Contract Potential Change Order #116: Add 3-Way Control Valves & AHU Dehumidification

то:	Collin County 4600 Community Avenue McKinney Texas, 75071	FROM:	Ratcliff Constructors, LP 4200 Beltway Drive Addison Texas, 75001
PCO NUMBER/REVISION:	116 / 1	CONTRACT:	1 - Collin County Adult Detention Facility, Phase 1 Addition Prime Contract
REQUEST RECEIVED FROM:		CREATED BY:	CJ Perry (Ratcliff Constructors, LP)
STATUS:	Pending - In Review	CREATED DATE:	9/18 /2024
REFERENCE:		PRIME CONTRACT CHANGE ORDER:	
FIELD CHANGE:	Yes		
LOCATION:		ACCOUNTING METHOD:	Amount Based
SCHEDULE IMPACT:	10 days	PAID IN FULL:	No
		TOTAL AMOUNT:	\$25,836.14

POTENTIAL CHANGE ORDER TITLE: Add 3-Way Control Valves & AHU Dehumidification

CHANGE REASON: Allowance

POTENTIAL CHANGE ORDER DESCRIPTION: (The Contract Is Changed As Follows)

Add 3-Way Control Valves & AHU Dehumidification

Provide for additional materials, labor, and equipment required to install 3-way values per RFI #316 and AHU dehumidification per EAB T&B report item 200. See backup.

10/3/24 - PCO revised to remove remobilization for additional work.

ATTACHMENTS:

#	Cost Code	Description	Туре	Amount		
1	23-100 - HVAC		Subcontractor	\$ 23,197.44		
2		Ratcliff Bonds (1.25%)		\$ 289.96		
3		Ratcliff Fee (10.00%)		\$ 2,348.74		
	Subtotal:			\$25,836.14		
	Grand Total:			\$25,836.14		

Michael Woods (Brinkley Sargent Wiginton Architects)

5000 Quorum Drive, Suite 600 Dallas Texas 75254

Collin County

Ratcliff Constructors, LP 4200 Beltway Drive

4600 Community Avenue McKinney Texas 75071

Addison Texas 75001

SIGNATURE

DATE

SIGNATURE

DATE



September 6, 2024

Quote #: 1327955

Bill To: Ratcliff Constructors, LP

4200 Beltway Drive Addison, TX 75001

WO #:

Servicing: Collin County Adult Detention

Facility

Dear Ratcliff Constructors, LP

We are pleased to provide the following proposal. We appreciate the opportunity to provide you with a quote.

SCOPE:

Change Order 1: AHU Dehumidification:

Implement and test the dehumidification sequence for the following units:

- · AHU-L-4
- · AHU-L-6
- AHU-L-7
- AHU-L-8
- · AHU-L-9

Four Thousand Seven Hundred Nineteen Dollars

\$4,719.00

If you have any questions, please do not hesitate to call me.

Sincerely,

Tod McElduff HVAC Manager - Texas 903-736-5623

Please Sign for Acceptance

Signature:

Date:

\$ 4,290° (QBS later) \$ 429° (10% OHAP)

Standard Terms, Conditions of Sale, and Warranty

Payment Terms:



License:

Change Order

Order#: 2

Order Date: 08/15/2024

To: Climate Pros LLC 55 N. Brandon Drive Glendale Heights IL 60139 **Project:** 230024

CC ADF Ph1

4300 Community Ave McKinney TX 75071

The contractor agrees to perform and the owner apay for the following changes to this contract.	agrees to	Plans Attached
Ordered By:	Customer Order:	Specifications Attached
Description of Work		Amount
AHU Dehumidifcation		4,290.00
Notes Implement and test the dehumidifcation sequence	ce for the following units:	
• AHU-L-4		
• AHU-L-6		
• AHU-L-7		
• AHU-L-8		
• AHU-L-9		
Full AHU sequence with dehumidification is on a	attached page.	
Negative changes will lower the overall contract	Requested Amount of Change	4,290.00
price requiring no additional payment by owner.	Requested Amount of Change	4,230.00
The original Contract Sum was		
Net change by previous Change Orders		
The Contract Sum prior to this Change C	Order	
The Contract Sum will be changed by the	is Change Order	
	ange Order will be	
9		
Owner:	Date:	_
Contractor:	Date:	

Job No. 1210677 Job Name Collin County – Adult Detention Facility Ph1 Location Collin County

DEFICIENCY RESOLUTION LOG LOG #26

Updated as of: September 11, 2024

Description

Equipment Tag

Initiator

Date

Item #

1	
alance Co., Inc. 3309 Matrix Dr. dson, Tx 75082 : 972-818-9000	EAB Date Back
Engineered Air Balance Co., Inc. 3309 Matrix Dr. Richardson, Tx 75082 Office: 972-818-9000	R.P. Response / Resolution Status
	R.P. Date Complete
	Responsible Party (R.P.)

Checked

	8-22-24		
	Complete		
MD Engineering		MD Engineering	
During our MEP meeting on 7-25-24 it was brought to our attention that the boiler room did not have fresh air and was extremely hot. The concern is that the equipment will not be reliable in these warm conditions. Note once the three way is installed and we can get the boilers running in control we will monitor the room temperature 8-22-24		The following air handler units are configured in a manner that dehumidification mode could be utilized. Per the County a RFI is requested to consider adding a dehumidification mode to these units. • AHU-L-4 • AHU-L-7 • AHU-L-8 • AHU-L-8 • AHU-L-9 Note: Awaiting the CO to be approved for QBS to start rewriting the sequence of operations 8.22.24	
Boiler Room		Dehum	
72		22	3
7-25-24		7-25-24	
198		§ N	

Page 40 of 47



C	4 4	2024
September	11.	20124

Quote #: 1328614

WO #:

Bill To: Ratcliff Constructors, LP

Servicing: Collin County Adult Detention

4200 Beltway Drive

Facility

Addison, TX 75001

Dear Chris Perry,

We are pleased to provide the following proposal. We appreciate the opportunity to provide you with a quote.

Scope:

- Per the valve schedule there was not a 3-way valve listed.
- The three-way valve was discussed in EAB meeting and listed on 02/07/2024.
- Please see attached SI to leave the 3-way valve out on Feb 13, 2024.
- We now need to re-mobilize and add in the valve, wiring, and insulation per RFI 316 please see attached email.

TDR - Material	\$392.99
TDR - Labor - \$90 x 52 Hours (2 men)	\$4,680.00
QBS - Material	\$2,300.00
QBS - Labor - \$ 86.57 X 80 hours (2 men)	\$6,925.60
Insulation - Labor - \$90 X 24 hours(3 men)	\$2,160.00
Insulation -Material	\$840.00
Removal of Re-mobilization	-\$500.00

Sub Total \$16,798.59 Markup 10% - \$1,679.85

Eighteen Thousand Four Hundred Seventy Eight Dollars and Forty Four Cents

\$18,478.44

If you have any questions, please do not hesitate to call me.

Sincerely,

Tod McElduff HVAC Manager - Texas 903-736-5623

Please Sign for Acceptance

Date:			
_			

Signature:



Ratcliff Constructors, LP 4200 Beltway Drive Addison, Texas 75001 P: (972) 432-9969 F: (972) 432-9943

Project: 21-501 Collin County Adult Detention Facility, Phase 1 Addition 4300 Community Avenue McKinney, Texas 75071

RFI #316: DRL Item #192

Status

Open

To

Michael Woods (Brinkley Sargent Wiginton

Jason Mansur (MD Engineering, LLP - MEP

From

CJ Perry (Ratcliff Constructors, LP)

4200 Beltway Drive Addison, Texas 75001

Engineer)

Date Initiated

Jul 31, 2024

Due Date

Aug 2, 2024

Location

Project Stage

Cost Impact

Schedule Impact

Spec Section

Cost Code

Drawing Number

Reference

Linked Drawings

Received From

George Teasdale (Engineered Air Balance Co., Inc.)

Copies To

Brad Harris (Collin County), CJ Perry (Ratcliff Constructors, LP), Shane Worley (Ratcliff

Constructors, LP)

Activity

Question

Question from CJ Perry Ratcliff Constructors, LP on Wednesday, Jul 31, 2024 at 07:55 PM CDT

See RFI below as requested by EAB

The HW boilers are tripping off on low flow when all the two way valves at the AHU's modulate closed when there is a low heating demand in the building. There is currently no bypass installed in the HW system to allow minimum flowrate through the boilers. We suggest consideration be given to:

- 1. Confirm the minimum flowrate through one boiler from the manufacturer. (Submittal indicates 25 GPM)
- Two options to achieve minimum flowrate:

- 1. Install three way control valves at the AHU-6 and AHU-10. (AHU-6 is equipped with a 21 GPM autoflow and AHU-10 is equipped with a 13 GPM autoflow. Total available bypass flow = 34 GPM)
- 2. Install a two way control valve and balancing valve in the 2" piping (contractors to confirm size) that is currently capped at the end of the main header. The balancing valve would need to be sized for 30 GPM. Additionally, direction would need to be provided for a control sequence that would indicate when the control valve would open. A system flowmeter may be considered to determine when the control valve should be opened.

It is also noted that the CHW valves are all two way control valves at the AHU's. During periods of low cooling demand, there is no bypass installed in the system to keep the pumps from dead-heading. We suggest consideration be given to installing a three way control valve at AHU-6 (AHU-6 is equipped with a 45 GPM autoflow) to prevent the pumps from dead-heading during low demand and always keeping a low volume of CHW supply water circulating through the piping.

Official Response

Response from Jason Mansur MD Engineering, LLP - MEP Engineer on Monday, Aug 12, 2024 at 02:15 PM CDT

See attached drawing for 3 way valve add.

Chill side: Install Honeywell VBN3BK.

Fail open

22.2 GPM

3/4 valve size 1-1/2" line size

Close off pressure 50

ACT.CV 8

For hot water side flow rate shall be 25 GPM

Attachments

M321 - TIER LEVEL EAST FLOOR PLAN - HVAC PIPING.pdf

Official Response

Response from Jason Mansur MD Engineering, LLP - MEP Engineer on Monday, Aug 5, 2024 at 02:47 PM CDT

MD recommends installing the 3-way valve as indicated in the recommendation.

Install on both the boiler and chilled water lines.

Printed On: Sep 18, 2024 04:29 PM CDT