



To: Gabriel Bowden

From: Michael S. Demko, PE

Date: 8 May 2025

Subject: SRWRF – CO#8 Justification

In order to resolve several issues that arose during construction, Wade Trim recommends the following change orders to the construction contract. Wade Trim also recommends a change order to the City’s Owner Direct Purchase agreement with Kubota as described below.

PCO#	Title	Value
51	Odor Control Duct Revisions at Covers	\$ 65,551.99
52	Additional Downspouts	\$ 1,117.28
53	Additional FRP Covers	\$ 17,317.07
54	Additional Work on Force Main at Osmosis Dr	\$ 31,205.19
55	Automatic Transfer Switch Trough	\$ 23,711.47
57	Air Mass Flow Meter Relocation	\$ 14,743.29
N/A	Kubota – ODP Change Order	\$ 0.01
Total		\$ 153,646.30

PCO#51 – Odor Control Duct Revisions at Covers [Increase of \$65,551.99 & 0 days]
Additional ductwork was required to route around obstacles and allow operator access.

PCO#52 – Additional Downspouts [Increase of \$1,117.28 & 0 days]
Two additional downspouts were required off the process building to meet drainage requirements and splash blocks were added.

PCO#53 – Additional Material for FRP Covers [Increase of \$17,317.07 & 0 days]
Additional hatches and lifting handles were added to the channel covers to improve operator access.

PCO#54 – Additional Work on Force Main at Osmosis Dr [Increase of \$31,205.19 and 0 days]
Additional work was required to validate a pressure test due to a leaking existing City valve. The City also requested the addition of an additional sleeve for assembly.

PCO#55 – Automatic Transfer Switch Trough [Increase of \$23,711.47 & 0 days]
An additional cover was required to adapt an automatic transfer switch to allow it to meet code as installed.

PCO#57 – Air Mass Flow Meter Relocation [Increase of \$14,743.29 & 0 days]
The air flow meter was relocated at the manufacturer’s suggestion to provide more accurate air flow readings.

Kubota – ODP Change Order [Increase of \$0.01 & 0 days]

A \$0.01 change order has been included to capture the contractor's responsibility to manage a change order to Kubota's Owner's Direct Purchase order.

Six changes to Kubota's scope of supply, resulting in a deduction of \$476,162, are being processed at the same time. Removal of aeration control valves (\$17,750 deduction), removal of VFDs and MCCs (\$544,942 deduction), removal of permeate degas valves (\$2,000 deduction), addition of ultrasonic level sensors (\$4,710 addition), revised plant reuse pump duty points (\$7,920 addition), transition to VTScada for City's standard (\$75,900 addition).

MSD
PBU215501L

**South Regional Water Reclamation Facility
PCO #051 - Odor Control Duct Revisions at Covers**

Labor & Materials

Superintendent	\$140/MH	\$	-
Foreman	16 MH @ \$100/MH	\$	1,600.00
Laborer	48 MH @ \$75/MH	\$	3,600.00
Materials (See Attached List)		\$	28,397.01
Subtotal:			\$ 33,597.01
5% Contractor's Fee:			\$ 1,679.85
(Agreement, Article 14.4.1.1)			
Contractor Total:			\$ 35,276.86

Field Services

GB Welding		\$	6,256.85
Subtotal:			\$ 6,256.85
5% Contractor's Fee:			\$ 312.84
(Agreement, Article 14.4.1.1)			
Subcontractor Total:			\$ 6,569.69

Supplemental

Equipment		\$	-
Tax on Materials (7.0%)		\$	1,987.79
Additional Bond & Insurance		\$	21,717.65
Subtotal:			\$ 23,705.44
0% Contractor's Fee:			\$ -
(Agreement, Article 14.4.1.2)			
Other Total:			\$ 23,705.44

Credits

Superintendent	\$140/MH	\$	-
Foreman	\$100/MH	\$	-
Laborer	\$75/MH	\$	-
Material Credit (See Attached List)		\$	-
Subtotal:			\$ -
5% Contractor's Fee:			\$ -
(Agreement, Article 14.4.1.3 & 14.4.1.4)			
Credits Total:			\$ -

PCO #051 Total: \$ 65,551.99
Additional Contract Time Required: 91 days

Additional Materials

Supplier	Quantity	Item	Unit	Total
Bioair	1	Lot of Duct Fittings and Accessories	\$ 17,300.00	\$ 17,300.00
Bioair	4	20" 45° Elbows	\$ 775.00	\$ 3,100.00
Empire Industries	1	Pipe Supports	\$ 6,123.53	\$ 6,123.53
ThunderStud	1	Anchors	\$ 1,873.48	\$ 1,873.48
			Total:	\$ 28,397.01



CHANGE ORDER REQUEST

Date:	26 February 2025	From:	Justin Aboloff
To:	Mickey Bartlett	Title:	Senior Project Engineer
Company:	R.J. Sullivan Corp.	Email:	jaboloff@bioairsolutions.com
Email:	mbartlett@rjsullivancorp.com	Doc#:	COR-005 (R0)
Cc:		Project:	P20123 – Palm Bay, FL
Subject:	COR-005 (R0) – Additional Upstream Fittings		

Dear Mickey,

Please find below the pricing for BioAir to supply the additional FRP duct fittings and accessories as requested. BioAir requires approval of this change order COR-005 (R0) and receipt of a Purchase Order before any design or fabrication can commence. Upon the release to fabricate the approved fabrication drawings, BioAir requires approximately 9 - 12 weeks to manufacture and deliver the equipment to the job site.

		Description	QTY	Total Price
1		LOT OF DUCT FITTINGS	---	\$ 17,300.00
	1.1	Ø14", 90° ELBOW (per the attachment)	2	
	1.2	Ø4", 90° ELBOW (per the attachment)	4	
	1.3	Ø6", 45° ELBOW (stub, no flanges, 12" legs)	4	
	1.4	Ø6" STUB FLANGE + MATCHING BLIND+HARDWARE (6" length stub)	2	
	1.5	Ø6" STUB FLANGE (6" length stub)	2	
	1.6	LAMINATION KITS	10	
	1.7	FR VINYLESTER RESIN (GAL)	10	
2		SHIPPING (DUCT PIECES)	---	INCL
3		SHIPPING (RESIN – HAZMAT)	---	INCL
		TOTAL		\$ 17,300.00

Terms and Conditions:

- Payment: 100% of COR-005 (R0) shall be due upon receipt of a purchase order.
- No taxes are included in the Price above.
- The above is only per the requested change; any additional requirements that are not included in the original scope of supply and this change order will not be supplied. All additional costs and engineering time will be at the owner's responsibility.
- Approval of COR-005 (R0) will be a revision to the contract Purchase Order subject to the terms included here.
- **The above pricing offered is valid for 30 days.**
- All other existing contract conditions (including project warranty) remain unchanged.

Exclusions:

- Field installation of the FRP duct is outside of BioAir's scope of supply.
- All hardware/gaskets aside from the flange+blind connections are noted in line item 1.4 above.

Feel free to let me know should you have any questions.

Best Regards,
BioAir Solutions, LLC

Justin Aboloff - Senior Project Engineer



CHANGE ORDER REQUEST

Date:	30 October 2024	From:	Justin Aboloff
To:	Mickey Bartlett	Title:	Senior Project Engineer
Company:	R.J. Sullivan Corp.	Email:	jaboloff@bioairsolutions.com
Email:	mbartlett@rjsullivancorp.com	Doc#:	COR-004 (R0)
cc:		Project:	P20123 – Palm Bay, FL
Subject:	COR-004 (R0) – Upstream Ductwork Elbows		

Dear Mickey,

Below please find pricing for BioAir to supply the additional Ø20", 45° elbows as requested. The quotation below is for four (4) Fire-Retardant Vinylester FRP duct elbows that you requested on 24 October. BioAir requires approval of this change order COR-004 (R0) and receipt of a Purchase Order before any design or fabrication can commence. Upon the release to fabricate the approved fabrication drawings, BioAir requires approximately **2 - 3 weeks** to manufacture and deliver the equipment to the job site.

Description	Total Price
QTY (4) – Ø20", PS15-69, 45° ELBOW, FRP	\$ 3,100.00
SHIPPING	INCL
TOTAL	\$ 3,100.00

Terms and Conditions:

- R.J. Sullivan must issue a PO for this variation order by **5 November** in order to include these with the main scope of the upstream ductwork shipment.
- The main scope of the upstream ductwork will be shipped the week of **18 November**, regardless of approval of COR-004 (R0). If COR-004 (R0) is not approved by **5 November**, additional freight costs will be applied to ship these items separately.
- Payment: 100% of COR-004 (R0) shall be due upon receipt of a purchase order.
- No taxes are included in the Price above
- The above is only per the requested change; any additional requirements that are not included in the original scope of supply and this change order will not be supplied. All additional costs and engineering time will be at the owner's responsibility.
- Approval of COR-004 (R0) will be a revision to the contract Purchase Order subject to the terms included here.
- **Above pricing offered is valid for 7 days.**
- All other existing contract conditions (including project warranty) remain unchanged.

Exclusions:

- Field installation of FRP duct is outside of BioAir's scope of supply.

Feel free to let me know should you have any questions.

Best Regards,
BioAir Solutions, LLC

Justin Aboloff - Senior Project Engineer

CART

Save Order



3 Items

Condensed View

Remove All



Empire Industries

6' Adjustable Saddle Support w/ U-Bolt Kit T-316 Stainless Steel

MFG #429KTSX0600

QTY

3



\$2,302.88

PRICE

\$767.63

Add to List



Add Line Notes



Empire Industries

14" Adjustable Saddle Support w/ U-Bolt Kit Hot Dip Galvanized

MFG #429KTUHDG1400

QTY

1



\$529.17

PRICE

\$529.17

Add to List



Add Line Notes



Empire Industries

20" Stainless Steel U-Bolt With Hex Nuts T-316 - Ductile Iron Pipe size

MFG #137DIP SX2000

QTY

6



\$3,291.48

PRICE

\$548.58

Add to List



Add Line Notes

Subtotal	\$6,123.53
Shipping & Handling	\$0.00
Tax	\$0.00
Total	\$6,123.53

Checkout

Submit for Quote

Save Order

Your Cart (3 items)

ITEM	PRICE	QUANTITY	TOTAL
 American Made ThunderStud® 1/2" x 4-1/4" 316 Stainless Steel U.S. Made ThunderStud Anchor, 25/Box SKU: WAS-31612414;T	\$463.32	<input type="text" value="2"/>	\$926.64
 American Made ThunderStud® 3/4" x 5-1/2" 316 Stainless Steel U.S. Made ThunderStud Anchor, 20/Box SKU: WAS-31634512;T	\$946.84	<input type="text" value="1"/>	\$946.84

Subtotal: \$1,873.48

Shipping: [Add Info](#)

Coupon Code: [Add Coupon](#)

Grand total: **\$1,873.48**



G B Welding and Fabrication LLC
 2397 College Ave.
 Davie, FL 33317

Invoice

Date	Invoice #
1/20/2025	25037

Bill To
R J Sullivan 2001 NW 22nd St. Pompano Beach, FL 33069

Job Site
390 PALM BAY -- Six new pipe supports

P.O. Number	Terms	Ship
390 PALM BAY		1/20/2025

Quantity	Item C...	Description	Price Ea...	Amount
1	Miscella...	SIX 316 SS ANGLE BRACKETS	975.92	5,855.52T
		Sales Tax for tax paid on material	50.00 6.00%	50.00 351.33

We now accept credit cards - MC, Visa, American Express and Discover.

Finance charges of 1.5% per month will be added to all invoices not paid within terms and may be subject to accrual thereafter.

Return check fee \$25.00.

Phone #	Fax #
954-967-2573	954-967-2574

Total	\$6,256.85
Payments/Credits	\$0.00
Balance Due	\$6,256.85

**South Regional Water Reclamation Facility
PCO #052 - Additional Downspouts**

Labor & Materials

Superintendent	\$140/MH	\$	-
Foreman	\$100/MH	\$	-
Laborer	\$75/MH	\$	-
Materials (See Attached List)		\$	-
Subtotal:			\$ -
5% Contractor's Fee:			\$ -
(Agreement, Article 14.4.1.1)			
Contractor Total:			\$ -

Field Services

Atlantic Roofing II		\$	1,052.00
Subtotal:			\$ 1,052.00
5% Contractor's Fee:			\$ 52.60
(Agreement, Article 14.4.1.1)			
Subcontractor Total:			\$ 1,104.60

Supplemental

Equipment		\$	-
Tax on Materials (7.0%)		\$	-
Additional Bond & Insurance		\$	12.68
Subtotal:			\$ 12.68
0% Contractor's Fee:			\$ -
(Agreement, Article 14.4.1.2)			
Other Total:			\$ 12.68

Credits

Superintendent	\$140/MH	\$	-
Foreman	\$100/MH	\$	-
Laborer	\$75/MH	\$	-
Material Credit (See Attached List)		\$	-
Subtotal:			\$ -
5% Contractor's Fee:			\$ -
(Agreement, Article 14.4.1.3 & 14.4.1.4)			
Credits Total:			\$ -

PCO #052 Total:	\$ 1,117.28
Additional Contract Time Required: 0 days	

ATLANTIC ROOFING II

OF VERO BEACH, INC.
Lic. # CCC1326188

4310 45th Ave
Vero Beach, FL 32967

Ph: 772-492-8493 Fax: 772-257-5740 E-Mail: lertok@bellsouth.net

CHANGE ORDER ADDITIONAL DOWNSPOUTS AND SPLASH BLOCKS

Date: 8/15/2024

To: RJ Sullivan
Attn: Estimating
Re: Palm Bay South Regional Water Reclamation Facility
Palm Bay FL

SLOPED ROOF AREA:

- ** Supply and Install 2 additional downspouts on the north and south side of the Control Bldg.
- ** Supply and Install 6 concrete splash blocks at bottom of downspouts.

Total for these additional items: \$1,052.00

Accepted:  Date: 9/13/2024

Thank you,
Steven Cottrell
lertok@bellsouth.net
772-492-8493

**South Regional Water Reclamation Facility
PCO #053 - Additional Material for FRP Covers**

Labor & Materials

Superintendent	\$140/MH	\$	-
Foreman	24 MH @ \$100/MH	\$	2,400.00
Laborer	72 MH @ \$75/MH	\$	5,400.00
Materials (Strongwell)		\$	7,973.74
Subtotal:			\$ 15,773.74
5% Contractor's Fee:			\$ 788.69
(Agreement, Article 14.4.1.1)			
Contractor Total:			\$ 16,562.43

Field Services

None		\$	-
Subtotal:			\$ -
5% Contractor's Fee:			\$ -
(Agreement, Article 14.4.1.1)			
Subcontractor Total:			\$ -

Supplemental

Equipment		\$	-
Tax on Materials (7.0%)		\$	558.16
Additional Bond & Insurance		\$	196.48
Subtotal:			\$ 754.64
0% Contractor's Fee:			\$ -
(Agreement, Article 14.4.1.2)			
Other Total:			\$ 754.64

Credits

Superintendent	\$140/MH	\$	-
Foreman	\$100/MH	\$	-
Laborer	\$75/MH	\$	-
Material Credit (See Attached List)		\$	-
Subtotal:			\$ -
5% Contractor's Fee:			\$ -
(Agreement, Article 14.4.1.3 & 14.4.1.4)			
Credits Total:			\$ -

PCO #053 Total: \$ 17,317.07
Additional Contract Time Required: 0 days

To: RJ Sullivan Corp
2001 N W 22nd St
POMPANO BEACH, FL 33069

Attn: Mickey Bartlett
Tel: 1 (954) 975-0388
Email: mbartlett@rjsullivancorp.com

Date: December 04, 2024
Inquiry: Palm Bay SRWRF Change Order
Freight Terms: FOB Bristol, VA
Payment Terms: NET 30
Quoted by: Samuel Schallock
+1 276-645-8382
sschallock@strongwell.com

Scope - CHANGE ORDER #1

R. J. Sullivan Corp

10 - (20') COMPOSOLITE® cap channel
1 - (W, 8 x 3/8") FRP Beam for hatch location change
36 - SS lift handles for COMPOSOLITE® panels
24 LF of (14" x 1/4") FRP plate

Change Order #1 Total = \$7,973.74

Original Order Total = \$199,504.82

New Order Total = \$207,478.56

Material

Material for the COMPOSOLITE® panels and related parts are fire retardant polyester resin, gray color.

Material for the structural shapes is EXTREN® 625 fire retardant vinyl ester resin, beige color.

Notes

Pricing is based off the information as provided by R. J. Sullivan.

Strongwell is providing the following below at no charge

1 - (W, 8 x 3/8") FRP beam missing from the order
250 - Nylon Rivets
2 - (1M2) COMPOSOLITE® panels
8 - (1P3) 1/4" thick FRP plates
8 - 5/8" Bolts
1 - Gallon of touch up paint (gray color)

EXCLUSIONS: <ul style="list-style-type: none">● Anchorage● Design Engineering● Field Measurements● Freight● Installation● Paint/Coating● Taxes● Onsite Supervision	DISPATCH: 0 to 0 weeks after receipt of approved shop or customer drawings. Current drawing lead times are 0 to 0 weeks. However, upon request, every effort will be made to meet your specific need.	Prices quoted are firm for 30 days from date of quotation for delivery within 6 months, unless specifically delineated elsewhere on this quotation. A minimum of 15% will be charged due to cancellation of order. Prices are quoted based on current material costs and are subject to change to reflect any price increases which may occur prior to shipment of base material from our suppliers. The above prices are quoted based on parts being produced in accordance with Strongwell's standard fabrication tolerances and standard tolerances as outlined in our Design Manual. Delivery dates are estimated and are subject to change in the event of receipt of other orders by us prior to your acceptance of this quotation. A credit application must be completed by your company before entry of order. Terms of payment are predicated on approval of credit data submitted by you. This quotation is subject to all of the provisions of the "Strongwell Terms and Conditions" which are applicable to all purchases from Strongwell Corporation and which are hereby incorporated by reference. A copy of Strongwell Corporation's Terms & Conditions is found at https://www.strongwell.com/standardterms or is available from your sales representative or customer service manager.
--	--	--

*** Approval drawings, if required, will be submitted in .pdf format***

Quote Value (USD)	\$7,973.74
Total Weight (lbs)	546.39

**South Regional Water Reclamation Facility
PCO #054 - Additional Work on Force Main at Osmosis Dr.**

Labor & Materials

Superintendent	\$140/MH	\$	-
Foreman	56 MH @ \$100/MH	\$	5,600.00
Laborer	168 MH @ \$75/MH	\$	12,600.00
Materials (See Attached List)		\$	6,220.13
Subtotal:			\$ 24,420.13
5% Contractor's Fee:			\$ 1,221.01
(Agreement, Article 14.4.1.1)			
Contractor Total:			\$ 25,641.14

Field Services

KSM (Densities)		\$	200.00
Subtotal:			\$ 200.00
5% Contractor's Fee:			\$ 10.00
(Agreement, Article 14.4.1.1)			
Subcontractor Total:			\$ 210.00

Supplemental

Equipment (Excavator 1 Week @ \$2,500/Week & Loader 1 Week @ \$2,500/Week)		\$	5,000.00
Tax on Materials (7.0%)			Included Above
Additional Bond & Insurance		\$	354.05
Subtotal:			\$ 5,354.05
0% Contractor's Fee:			\$ -
(Agreement, Article 14.4.1.2)			
Other Total:			\$ 5,354.05

Credits

Superintendent	\$140/MH	\$	-
Foreman	\$100/MH	\$	-
Laborer	\$75/MH	\$	-
Material Credit		\$	-
Subtotal:			\$ -
5% Contractor's Fee:			\$ -
(Agreement, Article 14.4.1.3 & 14.4.1.4)			
Credits Total:			\$ -

PCO #054 Total:	\$ 31,205.19
Additional Contract Time Required: 0 days	

Additional Materials

Supplier	Quantity	Item	Unit	Total
McDade Waterworks, Inc.	1	20" Sleeve & Megalugs	\$ 5,020.13	\$ 5,020.13
R.J. Sullivan Corp.	1	3 Pallets of Sod	\$ 600.00	\$ 600.00
R.J. Sullivan Corp.	1	Formwork, Accessories, & Concrete for 20 feet of sidewalk	\$ 600.00	\$ 600.00
			Total: \$	6,220.13



MCDADE WATERWORKS INC
 PO BOX 16039
 TAMPA, FL 33687-6039

Voice: (813) 740-1144
 Fax: (813) 627-9387

INVOICE

Invoice Number: 120606

Invoice Date: Jun 19, 2024
 Page: 1
 Sales Order #: 63718

Bill To:
RJ SULLIVAN CORPORATION 2001 N.W. 22ND STREET POMPANO BEACH, FL 33069

Ship to:
RJ SULLIVAN CORP @ SOUTHERN REGION WATER PLANT 250 OSMOSIS DR PALM BAY, FL 32909 JOB# 390-07

Customer ID	Customer PO	Payment Terms	
RJ SULLIVAN	390-07 (CO)	Net 60 Days	
Sales Rep ID	Shipping Method	Ship Date	Due Date
CHRIS STRATTON	STAR-SEFL-PPA	6/13/24	8/18/24

Quantity	Item	Description	Backorder Qty	Unit Price	Amount
		CONTACT: MICKEY BARTLETT @ 561-262-2515			
		*** HOT! MATERIAL REQUEST 6-11-24 ***			
1.00	1.2DCMJSLP20	20" C153 MJ L/P SLEEVE L/ACCYS, 401 LINED (AIS/DOMESTIC)		3,230.75	3,230.75
2.00		20" STARGRIP FOR PVC W/ACCYS, #PVC4020 (AIS/DOMESTIC)		611.10	1,222.20

Subtotal	4,452.95
Sales Tax	267.18
Freight	300.00
Total Invoice Amount	5,020.13
Payment/Credit Applied	
TOTAL	5,020.13

Thank you for your business!

Note: Please be aware a late fee of 1.5% per month will be applied to past due invoices.

**South Regional Water Reclamation Facility
PCO #055 - Automatic Transfer Switch Trough**

Labor & Materials

Superintendent	\$140/MH	\$	-
Foreman	\$100/MH	\$	-
Laborer	\$75/MH	\$	-
Materials (See Attached List)		\$	-
Subtotal:			\$ -
5% Contractor's Fee:			\$ -
(Agreement, Article 14.4.1.1)			
Contractor Total:			\$ -

Field Services

Chinchor Electric, Inc.		\$	15,678.91
Subtotal:			\$ 15,678.91
5% Contractor's Fee:			\$ 783.95
(Agreement, Article 14.4.1.1)			
Subcontractor Total:			\$ 16,462.86

Supplemental

Equipment		\$	-
Tax on Materials (7.0%)		\$	-
Additional Bond & Insurance		\$	7,248.61
Subtotal:			\$ 7,248.61
0% Contractor's Fee:			\$ -
(Agreement, Article 14.4.1.2)			
Other Total:			\$ 7,248.61

Credits

Superintendent	\$140/MH	\$	-
Foreman	\$100/MH	\$	-
Laborer	\$75/MH	\$	-
Material Credit (See Attached List)		\$	-
Subtotal:			\$ -
5% Contractor's Fee:			\$ -
(Agreement, Article 14.4.1.3 & 14.4.1.4)			
Credits Total:			\$ -

PCO #055 Total: \$ 23,711.47
Additional Contract Time Required: 30 days

**South Regional Water Reclamation Facility
PCO #057 - Air Mass Flow Meter Relocation**

Labor & Materials

Superintendent	\$140/MH	\$	-
Foreman	\$100/MH	\$	-
Laborer	\$75/MH	\$	-
Materials (See Attached List)		\$	-
Subtotal:			\$ -
5% Contractor's Fee:			\$ -
(Agreement, Article 14.4.1.1)			
Contractor Total:			\$ -

Field Services

Chinchor Electric, Inc.		\$	13,881.91
Subtotal:			\$ 13,881.91
5% Contractor's Fee:			\$ 694.10
(Agreement, Article 14.4.1.1)			
Subcontractor Total:			\$ 14,576.01

Supplemental

Equipment		\$	-
Tax on Materials (7.0%)		\$	-
Additional Bond & Insurance		\$	167.28
Subtotal:			\$ 167.28
0% Contractor's Fee:			\$ -
(Agreement, Article 14.4.1.2)			
Other Total:			\$ 167.28

Credits

Superintendent	\$140/MH	\$	-
Foreman	\$100/MH	\$	-
Laborer	\$75/MH	\$	-
Material Credit (See Attached List)		\$	-
Subtotal:			\$ -
5% Contractor's Fee:			\$ -
(Agreement, Article 14.4.1.3 & 14.4.1.4)			
Credits Total:			\$ -

PCO #057 Total: \$ 14,743.29
Additional Contract Time Required: 0 days

To: City of Palm Bay Utilities
 120 Malabar Rd,
 Palm Bay, FL 32907
 T: 321-952-3420

PROJECT NAME	Palm Bay South Regional WRF
Customer PO#	390-01
KMU PROJECT NO.	KMU20132S
DATE	October 16, 2024

Prepared by: Tiffany Chien
 KUBOTA Membrane USA Corporation

Title: Kubota Change Order Proposal #1 (Rev 1) for Palm Bay South Regional WRF Project

This change order proposal has been prepared to reflect design and/or scope changes implemented after Kubota’s finalized contract with the City of Palm Bay (Purchase Order No. 221164, dated 3/9/2022). Updates to the Change Order Proposal #1 (Rev 0) dated August 5, 2024 are in red.

The changes and their associated prices are itemized in the table below.

Item #	Item	Price Change
1	Aeration Flow Control Valve	(\$17,750)
2	VFDs/MCCs	(\$544,942)
3	Permeate Degas Valves	(\$2,000)
4	Ultrasonic Level Sensors	\$4,710
5	Plant Reuse Pumps	\$7,920
6	VTScada	\$75,900
	Total	(\$476,162)

1. Pre-Aeration Flow Control Valves

Per the Engineer’s response to RFI#049 dated 9/6/2022, the Aeration Flow Control Valve (FCV-100104A) will be removed from design and from Kubota’s scope of supply. The speed of the Aeration Blowers will be controlled solely by the reading from the lead DO Sensor (as selected by the operator), and the flow of air to each individual Aeration Basin will not be controlled.

2. VFDs/MCCs

Per the Engineer’s responses to SD 16050-10 and SD 16050-11 and discussion with the Contractor, the Variable Frequency Drives (VFD) and Motor Control Centers (MCC) will be removed from Kubota’s scope of supply.

3. Permeate Degas Valves

Per the Engineer's response to RFI#043 dated 7/13/2022 and the Engineer's comment #2 on SD 11500-04.3, the Permeate Degas Valves (XV-080001A, XV-080002A, XV-080003A, XV-080004A) will be removed from design and from Kubota's scope of supply. Because the permeate header is not submerged, air will be introduced into the system, rather than purged from the system, with the previous design. Per RFI#061 dated 4/28/2023, the Permeate Pump will run at a higher speed if air entrained in the permeate header is detected by the Level Switch in order to increase the velocity through the permeate header and to flush out the entrained air.

4. Ultrasonic Level Sensors

Per the Engineer's request, the Submersible Level Sensors for the Chlorine Contact Tank and Ground Storage Tank (LE/LT-180201A, LE/LT-250101A) will be replaced with Ultrasonic Level Sensors. The Siemens EchoMax XPS-10 ultrasonic level transducer and Siemens HydroRanger 200 ultrasonic level transducer, as approved by the Engineer in SD 13451-08.1, will be supplied by Kubota.

5. Plant Reuse Pumps

Per the Engineer's request, the duty point of the Plant Reuse Pumps will be revised from 300 gpm @ 185 ft TDH to meet two different duty points: 380 gpm @ 85 psi and 100 gpm @ 110 psi. The Sulzer CPE 21-1.5 horizontal centrifugal pump will be supplied by Kubota.

6. VTScada

Per the Owner's request, the SCADA software licensing and programming will be changed from GE iFix to Trihedral VTScada. The Owner must provide all server hardware equipment and remote access to Control Engineers for software installation and development purposes. The following software licenses and services will be provided:

1. VTScada 5K Dual Server Premium Package, licensed to the City of Palm Bay, which includes:
 - Qty = 2, VTScada 5K – Development Runtime
 - Qty = 2, VTScada 5K – Alarm Notification
 - Qty = 1, VTScada 5K – Thin Client – Unlimited
 - Bundle SupportPlus
 - Bundle 24/7 Emergency Support
 - VTScada Training Course Credit - \$1,000
2. Qty = 2, OFS V3.60 Large – data server software – single station (driver software for VTScada to communicate with Schneider Electric PLCs)
3. Credit for iFix runtime software licenses
4. Additional services, which includes:

- Software installation on City of Palm Bay-provided servers
- Extra coordination meetings as needed
- Development of new system architecture diagram incorporating all new SCADA system elements
- Additional HMI programming time to accommodate standards development in VTScada with Schneider PLCs
- Three (3) additional one-day trips for software installation and coordination