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REGIONAL OFFICE
 4485 Enterprise Ave
 Naples, FL 34104
 (239) 774-3130

PROPOSAL

General Services Contract

TO: City of Key West
 P.O. Box 1409
 Key West, FL 33040
 Attn. Ian McDowell

JOB NAME: VFD FP-3-1 KW Sewer Plant

DATE: July 28, 2022

Original Scope: Demo & remove existing VFD & Tranformer, install new VFD & Tranformer (owner supplied) and provide & install new FP-3-1 control panel
 * This proposal is comprised of additional material, labor and supervision due to unforeseen conditions. See attached for details

QUANTITY	UNIT	DESCRIPTION	PRICE	AMOUNT
Additional Work to Install Transformer & VFD				
10	HR	Superintendent	\$ 95.00	\$ 950.00
122	HR	Electrician Plus 5% markup	\$ 95.88	\$ 11,696.86
1	LS	Material, terminal block, wire, conduit, hanger, fasters etc. cost plus 15 %	\$ 14,503.42	\$ 14,530.42
1	LS	Travel time, room & board	\$ 10,661.94	\$ 10,661.94
Subtotal - Cost of Construction				\$ 37,839.22
Additional Scope of Work Due to Unforeseen Conditions				
Subtotal - Cost of Construction				\$ 38,520.33
GCs, Mobilization / Demobilization and MOT at 5%				\$ 1,926.02
TOTAL PRICE				\$ 40,446.34

July 15, 2022

Key West VFD Replacement

Additional Unforeseen Conditions

Douglas N. Higgins, Inc.
Attn. Mike LoBello

I have prepared a proposal to complete additional work needed to install the new VFD and Pulse Transformer. See attached documentation with explanation.

- 1) The existing feeders from the electric room to the existing iso transformer are not long enough. See pic#1
 - a. Advised solution would be to install a terminal block in the new pulse transformer. See pic#2
 - b. Note* If a terminal block is not acceptable then we will have to replace the feeders (very expensive).

- 2) We cannot reuse the wire from the existing iso. transformer to the existing VFD because the new pulse transformer feeds the new VFD through four high stranded 1000 volt DC cable. Factory cables are not long enough.
 - a. Solution, we are going to have to purchase new 1000v DC Cable. See pic#3

- 3) The conduit arrangement above the existing VFD will not fit in the new VFD window. See pic#4
 - a. Solution, cut the conduit close to the ceiling and install grounding bushing and free wire to the new VFD window. (as done previously) We will have to install "C" condilets to accommodate pulling wire back. See pic#5

\$12,635.15	Material
\$11,139.87	Labor
\$10,661.94	Travel Time, Room, & Board
\$34,436.96	TOTAL

Thank you for your time and consideration, please call me if you have any questions regarding this quotation.

Brad Hamm
Estimator/Project Manager
Gulf States Electric, Inc.
239-263-7137 x 201



Existing feeders from electric room to new Iso. Xformer are not long enough to land in the new Pulse Transformer

New Pulse Xformer

Install 9 new 500mcm XHHW Copper feeders

Install new Power Distribution block to land existing feeders, install new feeders from block to breaker

Run existing feeders to terminal block

24 hour support
1-888-162-1583

PARTS

PARTS

WARNING!
DISCONNECTED FROM
SERVICES...
NEVER RECONNECTED FOR
SERVICES...
NEVER RECONNECTED FOR
SERVICES...
NEVER RECONNECTED FOR
SERVICES...

Factory DC high voltage cable, intended to be installed from Pulse Xformer to New VFD, but it is not long enough.

SOUTHWIRE E57498 D 500 KMHIL (253.4mm)

9J AWN STYLE 3591 105C 1000V UW-1

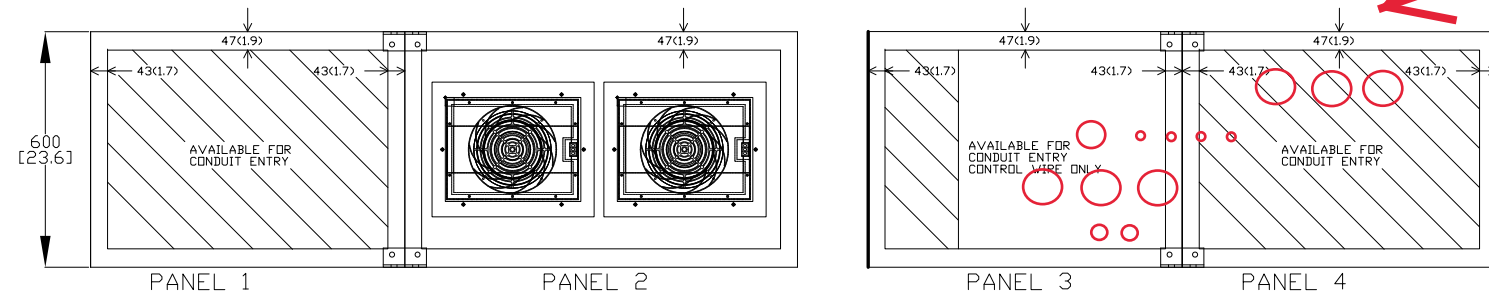
© LL90458 TYPE CL1053 600V FT1 ROHS

360.11

EFFLUENT PUMP P-6-2-1

Existing conduit layout will not fit into new conduit window

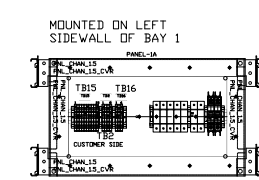
TOP VIEW



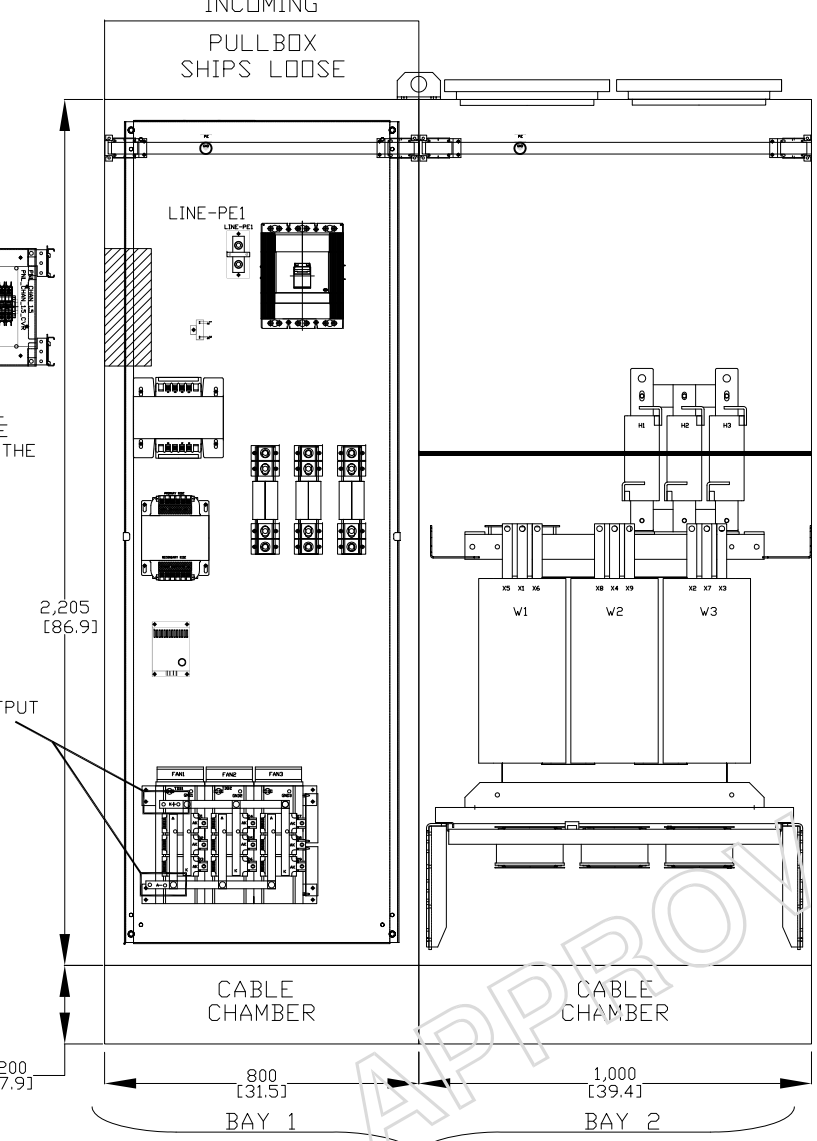
TB15, TB16, / TB4, TB25, TB26, TR, CR AND FUSE DETAIL

BAY 4

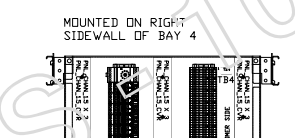
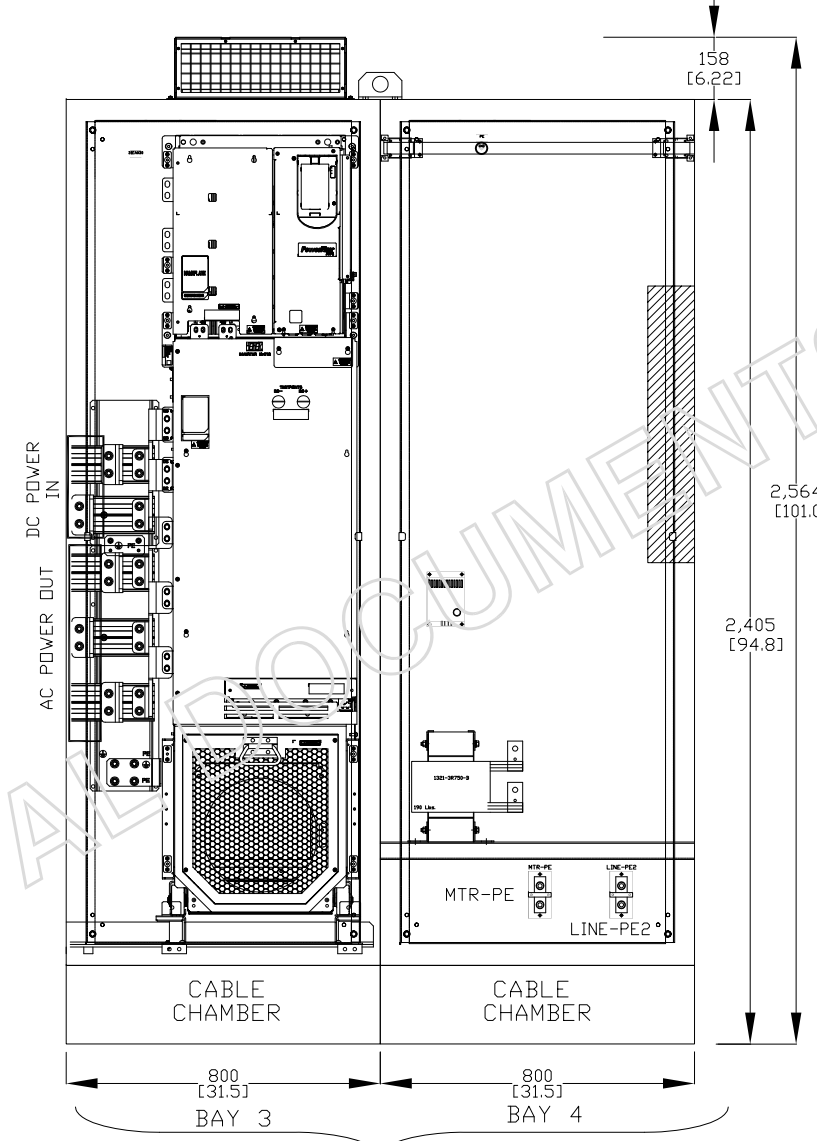
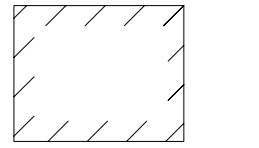
FRONT VIEW



NOTE-1: TB15 & TB16 WILL HANDLE INTERFACE WIRING BETWEEN THE 2 SPLITS.

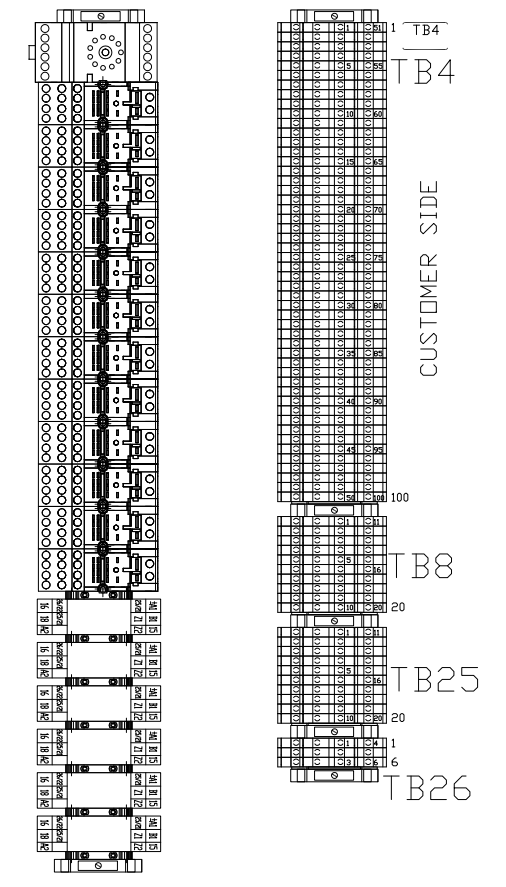
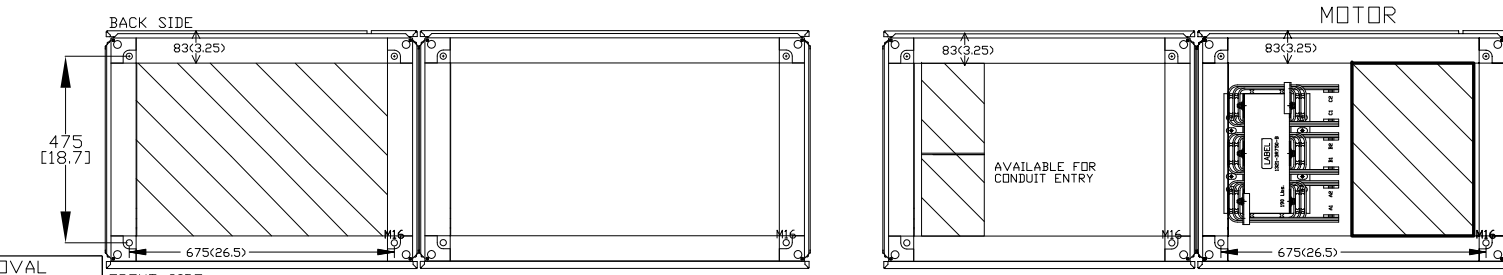


NOTE: INDICATION OF AREA AVAILABLE FOR CONDUIT.



NOTE-1: TB25 & TB26 WILL HANDLE INTERFACE WIRING BETWEEN THE 2 SPLITS.

BOTTOM VIEW



DATE	BY	APPROVAL
05/02/19	JN	DESIGN REVIEW
		FOR MANUFACTURING
		AS SHIPPED
		AS COMMISSIONED

REV.	DATE	BY	ECN/CR. NO.
A	05/02/19	JN	FOR APPROV.
B	09/27/19	JN	FOR APPROV.

Rockwell Automation

DIMENSION DRAWING
ITEM 0001
EFFLUENT PUMP P-6-2-1
Drawn by: PS Date: 4/4/19

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Sheet D0002 of D0003 Next Sh D0003
Size D DS-P1USXC0142-0001 Ver -

Cut existing conduit and install grnd bushing then free wire to new VFD, as done previously



Install "C"
Condilet

Install
Compression
Male Adapter

Mechanically
Cut Coupling



Job ID: JOB-0105
Project: Key West VFD Additions



IntelliBid

Bid Summary Report

Vendor: TRADE/3-COL **Labor Level:** LABOR 3 **15 Jul 2022 11:00:53**
Tax Rate status: Bid **Bid Name:** BASE BID **Bid Template:** GSE

Drawing	Phase	Quote \$	Material \$	Equip \$	SubCon \$	Labor Hrs
	HVAC & MOTORS	0.00	8,108.55	0.00	0.00	101.66
	CABLE TRAY	3,700.00	0.00	0.00	0.00	0.00
Sheet Totals:		3,700.00	8,108.55	0.00	0.00	101.66

Bid Notes:

Tax:	259.00	567.60	0.00	0.00
Sub Total (Quo/Mat/Equip/Sub):	11,808.55			
Sales Tax:	826.60			
Sub Total:	12,635.15	12,635.15		

TAX RATES

Material:	7.0000%
Quote:	7.0000%
Labor:	0.0000%
Equipment:	7.0000%
Subcontract:	0.0000%
Job:	0.0000%

Direct Labor \$:	8,009.24
Indirect Labor \$:	1,983.36
Labor Escalation:	0.00
Labor Tax:	0.00
Direct Job Costs (25.20%):	8,678.58

MISCELLANEOUS

Avg. Lbr. Rate (Cost):	78.78
Avg. Lbr. Rate (Bid):	86.66
Total Square Feet:	1.00
Cost Per Sq. Ft.:	34,436.97
Labor \$ Per Sq. Ft.:	8,009.24
Labor Hrs Per Sq. Ft.:	101.66
Quantity of Units:	1.00
Cost Per Unit:	34,436.97
Calc. Adjustment:	0.00%

Prime Cost:	31,306.34
Overhead (Avg. 0.00%):	0.00
Net Cost:	31,306.34
Profit (Avg. 10.00%):	3,130.63
Job Tax:	0.00
Bond (0.0000%):	0.00
Lump Sum:	0.00
Selling Price:	34,436.97

