

RESOLUTION NO. 20-048

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF KEY WEST, FLORIDA, APPROVING A PROPOSAL FROM DN HIGGINS, INC. FOR THE PURCHASE AND INSTALLATION OF ONE FP-3-1 EFFLUENT PUMP CONTROL AND TO INSTALL PE PUMP 2 VFD AT THE RICHARD A. HEYMAN ENVIRONMENTAL PROTECTION FACILITY IN AN AMOUNT NOT TO EXCEED \$246,611.32, PURSUANT TO SECTION 2-797(4)(b) OF THE CODE OF ORDINANCES, BEST INTERESTS OF THE CITY; AUTHORIZING ANY NECESSARY BUDGET ADJUSTMENTS; PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, in 2018 DN Higgins was the sole bidder on a project that would have included installation of an FP-3-1 Pump and other tasks, however the bid exceeded the project budget, and the bid was rejected; and

WHEREAS, the City ordered the VFD from a sole-source provider in early 2019 to reduce costs and lead time to prepare for the project, and after nearly two years of design, bid process and order approvals the project has become dire; and

WHEREAS, DN Higgins, Inc., with Nearshore Electric as a subcontractor, provided a new proposal at the City's request, that represents a lower cost than the 2018 bid, and City staff recommends approval of the proposal pursuant to Section 2-797(4)(b), best interests of the City; and

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF KEY WEST, FLORIDA, AS FOLLOWS:

Section 1: That the attached proposal from DN Higgins, Inc. for the purchase and installation of the FP-3-1 Effluent Pump Control and to install PE Pump 2 VFD at the Richard A. Heyman Environmental Protection Facility in an amount not to exceed \$246,611.32 is hereby approved, pursuant to Section 2-797(4) of the code of ordinances.

Section 2: That this project will be funded from Sewer/WWTP/CIP account 401-3504-535-6500, and any necessary budget adjustments are hereby authorized.

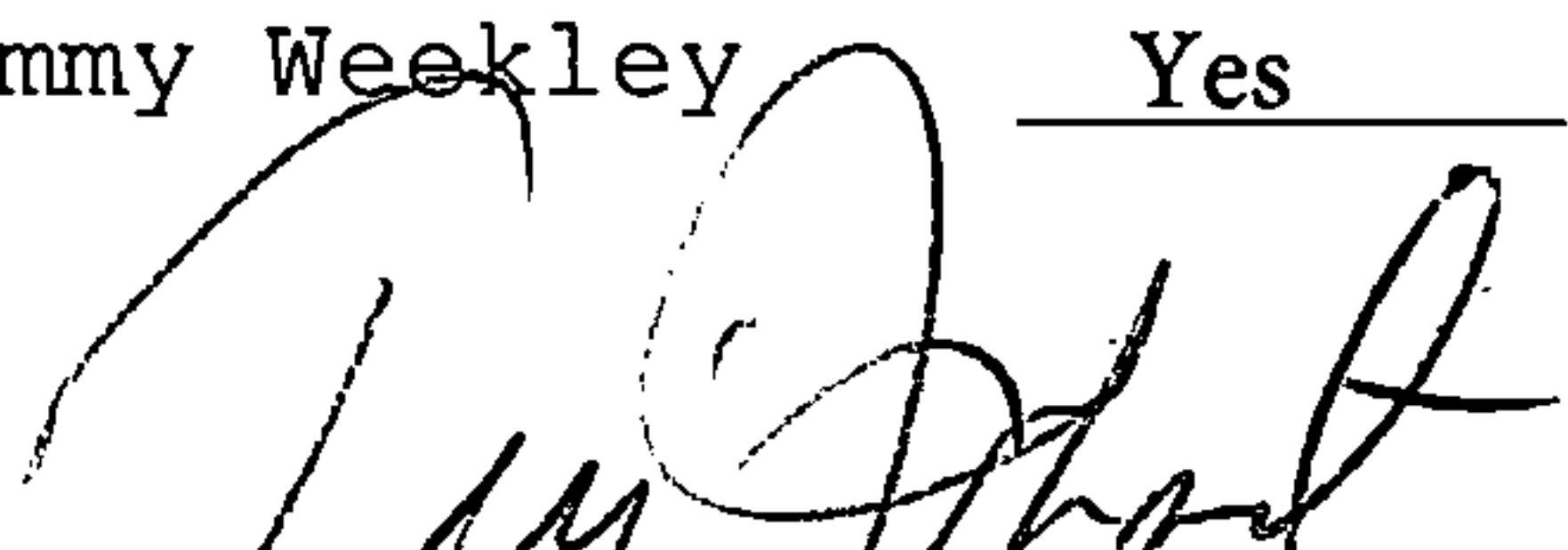
Section 3: That this Resolution shall go into effect immediately upon its passage and adoption and authentication by the signature of the Presiding Officer and the Clerk of the Commission.

Passed and adopted by the City Commission at a meeting held
this 3rd day of March, 2020.

Authenticated by the Presiding Officer and Clerk of the
Commission on 4th day of March, 2020.

Filed with the Clerk on March 4, 2020.

Mayor Teri Johnston	<u>Yes</u>
Vice Mayor Sam Kaufman	<u>Yes</u>
Commissioner Gregory Davila	<u>Yes</u>
Commissioner Mary Lou Hoover	<u>Yes</u>
Commissioner Clayton Lopez	<u>Yes</u>
Commissioner Billy Wardlow	<u>Yes</u>
Commissioner Jimmy Weekley	<u>Yes</u>



TERI JOHNSTON, MAYOR

ATTEST:



CHERYL SMITH, CITY CLERK



THE CITY OF KEY WEST

Post Office Box 1409, Key West, FL 33041-1409, (305) 809-3700

EXECUTIVE SUMMARY

Date: February 3rd, 2020
To: Greg Veliz, City Manager
From: John Paul Castro, Director of Utilities
Cc: Patti McLaughlin, Assistant City Manager

Subject: Approve a proposal from D.N. Higgins, Inc. for the purchase and install of the FP-3-1 Effluent Pump Control and install PE Pump 2 VFD at the Richard A. Heyman Environmental Protection Facility.

Action Statement

This resolution would approve a proposal from D.N. Higgins, Inc. for the purchase and install of a FP-3-1 effluent pump control and install of an owner provided variable frequency drive (VFD) pursuant to code of ordinances 2-797 4(b) in the amount of \$246,611.32.

Background

In 2016 PE pump 1 VFD reached the end of its useful life and the replacement was purchased by the City and installed by OMI and Nearshore Electric. PE pump 2 VFD and the FP-3-1 main control for effluent pumping at the plant began to cause problems with operations. Jacobs Engineering was tasked with designing a bid package for the new control and 2nd VFD replacement.

In 2018 the FP-3-1 and VFD project was budgeted for \$150,000.00 and was advertised for bids. The City received only one bid from D.N. Higgins, Inc. in the amount of \$314,000.00. The budgeted amount was based on the past VFD cost and install which was \$63,000.00. The new design and control were significantly more complex and required a new transformer and cabinet for the VFD due to the new more advanced control system. The bid was rejected due to budget constraints.

City staff ordered the VFD in early 2019 to reduce cost and lead time to prepare for the project.

MEMORANDUM

Purpose and Justification

The FP-3-1 control has become antiquated and needs to be controlled by an early 2000's laptop with a Windows operating system that is nearly 20 years old. Spare parts for the control are no longer made. Staff is currently bidding the install and has purchased a 3rd effluent pump that will need to run off the new control system. The FP-3-1 is the weak link the most important operation at the plant. The submittal process for the electrical drawings and control system took nearly 6 months by the sole source provider, Rexel, and the City's engineer Jacobs. After nearly 2 years of bid process and order approvals the project has become dire.

D.N. Higgins, Inc. with Nearshore Electric as a subcontractor gave the City another proposal upon request to install the new FP-3-1 control and owner supplied VFD. The owner supplied VFD saved the City \$10,200.00 in taxes and the new proposal is \$67,388.68 lower in the City's favor. D.N. Higgins and Nearshore electric are the only contractors to bid the project previously and have intimate knowledge of the design and control that needs to be ordered and installed. Nearshore Electric installed the VFD for PE pump 1 in 2016.

The city manager believes that exceptional circumstances exist to award the project in the best interest of the city pursuant to code of ordinances 2-797(4). Staff considers the price fair and reasonable. The contractor has adequate experience with the equipment and its function. Formally bidding the project again is not likely to be advantageous to the city financially and will cost approximately 3 months' time.

Financial

The VFD was budgeted and purchased by the City in FY19. Staff was analyzing possible scenarios to combine the project with other larger projects at the WWTP. The 3rd Effluent pump project budgeted for \$1,200,000 in FY20 considered the inclusion of the FP-3-1 control and install. The 3rd effluent pump, project SE35041902, has a design cost of \$49,733.00 and the pump was owner direct purchased for \$331,000. The project budget is \$1,200,000.00. The 3rd effluent pump install is estimated at \$430,000.00 leaving an approximate balance of \$389,267 to attribute to the FP-3-1 Control and VFD project. The funds are in account Sewer/WWTP/CIP, 401-3504-535-6500.

Recommendation

City staff recommends approving the proposal from D.N. Higgins, Inc. for the purchase and install of FP-3-1 control and install of the effluent VFD pursuant to code of ordinances 2-797 4(b) in the amount of \$246,611.32



Nearshore Electric, Inc.

State Certified Electrical Contractor

#EC13001186

Owner: City Of Key West
Project: Install Owner Provided VFD
Project Address: Fleming Key WWTP

Job #191034
Confidential

Scope of Work

January 15, 2020

To all concerned,
We are pleased to offer you our proposal for the electrical work required at the Fleming Key WWTP in Key West Florida. All work performed by Nearshore Electric, Inc. shall conform to current codes, regulations, and project specifications. All work performed by Nearshore Electric, Inc. shall be warranted for a period of one year. The following breakdown describes the items and services that Nearshore Electric, Inc. shall provide as well as any exclusion from our scope of work.

INCLUDED IN BID:

Owner Furnished VFD

- ◆ Remove existing 1336 Plus Allen Bradley VFD
- ◆ Re-route existing controls to distribution side of existing VFD
- ◆ Install new owner provided Allen Bradley Power Flex 755 VFD
- ◆ Remove existing isolation transformer and conduits
- ◆ Extend house-keeping slab
- ◆ Install new owner provided transformer and disconnect
- ◆ Install new conduit/wire from transformer to VFD
- ◆ Program parameters and assist in VFD commissioning
- ◆ Workers Comp/General Liability Insurance
- ◆ Taxes
- ◆ Warranty

New FP3-1 PLC Cabinet

- ◆ Install house-keeping slab for new PLC cabinet
- ◆ Install new PLC cabinet next to existing PLC cabinet
- ◆ Install conduit/wire from new PLC to existing VFD
- ◆ Install conduit/wire from new PLC to new VFD
- ◆ Install conduit/wire from new PLC to existing FP12-1 control cabinet
- ◆ Install conduit/wire from new PLC to existing panel LE for power
- ◆ Install conduit/wire from new PLC to existing FP2-1 for communication and network
- ◆ Install wire in existing conduit and duct bank to FP13-1 and FP13-2 to new PLC

EXCLUDED FROM BID:

- ◆ Permit fees
- ◆ FP3-1 control panel
- ◆ VFD equipment (supplied by owner)
- ◆ Any Scope of work not clearly shown on drawings or within the bid documents and/or specifications is not included in this proposal.

Bid Summary

Labor Man Hours.....	617hrs
Labor Cost	\$56,301.00
Material Cost	\$30,385.00
Submittals Review	\$1,700.00

91.25
4.56 5.70
95.81

We propose to furnish material and labor, complete in accordance with the above specifications, for the lump sum of: **Eighty Eight Thousand three Hundred Eighty Six Dollars and No Cents \$88,386.00**

Authorized Signature

Jeffery L Kirk ~ President

Date 1/15/2020



C. C. CONTROL CORP.

5760 CORPORATE WAY SUITE 100
WEST PALM BEACH, FLORIDA 33407

PHONE: 561-293-3975
FAX: 561-293-3976

CUSTOMER: DOUGLAS N. HIGGINS, INC.

ATTN: PAUL WATERS

PROJECT: EFF PUMP FP-3-1 CONTROL & VFD REPLACEMENT
CITY OF KEY WEST

DATE: 1/8/2020

DESCRIPTION

QUAN

C. C. CONTROL CORP. PROPOSES TO FURNISH THE FOLLOWING SECTIONS COMPLETE WITH EXCEPTIONS AS LISTED:

SECTION 40 90 01 - INSTRUMENTATION AND CONTROL FOR PROCESS SYSTEMS

EXCEPTIONS:

- A) QUOTE DOES NOT INCLUDE CONDUIT SYSTEM.
- B) QUOTE DOES NOT INCLUDE WIRE/CABLE.
- C) QUOTE DOES NOT INCLUDE INSTALLATION
- D) QUOTE DOES NOT INCLUDE FIELD TERMINATIONS.
- E) QUOTE DOES NOT INCLUDE ANY PANEL MTG. RACKS
- F) QUOTE DOES NOT INCLUDE ANY ELEC. OR PNEUMATIC OP. VALVES.
- G) QUOTE DOES NOT INCLUDE SOLENOIDS.
- H) QUOTE DOES NOT INCLUDE ANY PIPE TAPS OR PIPE SADDLES.
- I) QUOTE DOES NOT INCLUDE ANY PANEL OR J-BOX MOUNTING HARDWARE
- J) QUOTE DOES NOT INCLUDE JUNCTION OR TERMINATION BOXES
- K) QUOTE DOES NOT INCLUDE VFD INSTALLATION, TESTING OR START-UP

ITEM NO. 1

EFFLUENT PUMP PLC CONTROL PANEL FP-3-1

SCHAEFER'S SPN12D-726024 NEMA 12 STEEL FREESTANDING DOUBLE DOOR ENCLOSURE 1

WITH THE FOLLOWING:

- A) SIZE: 72"H X 60"W X 24"D
- B) REMOVABLE LIFTING EYES
- C) 3PT. KEYLOCKING HANDLE
- D) INTERNAL LIGHT BRACKET
- E) SUBPANEL: SP-72P60F1 1
- F) STUDS FOR DOOR SWITCH
- G) PRINT POCKET
- H) INTERNAL FOLDING SHELF

HOFFMAN AHCI10E CORROSION INHIBITOR 2

SQD 9007 AP221 DOOR SWITCH 1

EDCO HSP-121A 15A 120VAC LINE SURGE ARRESTER 1

PROGRESS ENERGY P7008-30 36" FLUORESCENT FIXTURE 1

HUBBELL CS120-I SINGLE 20A TOGGLE SWITCH 1

HUBBELL SS1 S.S.SINGLE TOGGLE SW. PLATE 1

HUBBELL GF15ILA GFI DUPLEX 15A RECEPT. 1

HUBBELL SS26 S.S. DUPLEX GFI PLATE 1

SQD QOU130 120V 30A 1P CIRCUIT BREAKERS 2

SQD QOU115 120V 15A 1P CIRCUIT BREAKERS 4

HUBBELL HBL2610 L5-30R 30A RECEPTACLE 2

ALLEN BRADLEY 1783-SFP100FX 100BASE SFP FIBER MODULE	2
ALLEN-BRADLEY 1606-XLP15E 24VDC POWER SUPPLY	1
ALLEN-BRADLEY 1606-XLS240-UPS 240W UPS	1
ALLEN-BRADLEY 1606-XLSBATASSY1 7.5AH BATTERY ASSEMBLY WITH MOUNTING BKRT	1
WIRE, DUCT & NAMEPLATES	LOT

ITEM NO. 3

CATEGORY 6 ETHERNET COPPER CABLE AND CONNECTORS

CAT6 SHIELDED RISER RATED BULK CABLE	500
BLACK BOX EZ-RJ45 MODULAR PLUGS	1

ITEM NO. 4

SPARE PARTS

FALCON BA04315 UPS REPLACEMENT BATTERY, (8) REQUIRED PER UPS	32
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ITEM NO.5

PROJECT SERVICES

ENGINEERING	LOT
SUBMITTALS	LOT
EFFLUENT PUMP PLC CONTROL PANEL PROGRAMMING	LOT
MODIFICATIONS TO EXISTING FACTORY TALK SE HMI	LOT
MODIFICATIONS TO EXISTING HISTORIAN	LOT
CONFIGURATION OF NEW NETWORK SWITCH IN TBJ-1	LOT
PREPARATION AND ATTENDANCE OF HMI AND PLC DESIGN MEETINGS	LOT
START-UP	LOT
TRAINING	LOT
O & M MANUALS	LOT
WARRANTY, 1-YEAR	LOT

SELL:

\$109,000.00 + TAX

IF APPLICABLE

FOB: JOB SITE
TERMS: NET 30 DAYS
 (SUBJECT TO CREDIT APPROVAL)

6540.00 6% TAX
75.00 Monroe Co TAX
115,615.00

WARRANTY: ALL WARRANTIES SHALL EXPIRE ONE (1) YEAR FROM DATE OF START-UP FROM SELLER TO BUYER UNLESS SPECIALLY INDICATED OTHERWISE AND WILL BE NULL AND VOID UNLESS MATERIALS ARE STORED UNDER PROPER CONDITIONS DETERMINED BY C.C. CONTROL CORP.

J.P. MAHIEU

17,342.25 0% 15 Mark UP

132,957.25