

EXECUTIVE SUMMARY

Date:	February 3rd,	2020
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- 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 it's 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.

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Key to the Caribbean - average yearly temperature 77 ° Fahrenheit.

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