



## THE CITY OF KEY WEST

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### **EXECUTIVE SUMMARY**

**Date:** August 3, 2022

**To:** Patti McLauchlin, City Manager

**CC:** Kelly Crowe, Utilities Director

**From:** Ian McDowell, Associate Engineer

**Subject:** Approve change order proposal from D.N. Higgins, Inc. for the install of the effluent pump no. 1 VFD at the Richard A. Heyman Environmental Protection Facility.

#### **Action Statement**

This resolution would approve a change order proposal from D.N. Higgins, Inc. for the install of an owner provided Variable Frequency Drive (VFD) at the Richard A. Heyman Environmental Protection Facility (RAHEPF) in the amount of \$40,446.34 and authorize the city manager to execute any necessary budget transfers/amendments.

#### **Background**

In March of 2020, Resolution 20-048 awarded a construction contract in the amount of \$246,611.32 to D.N. Higgins for a project to replace the VFD for effluent pump No. 1, VFD transformer, and programmable logic controller (PLC) for all effluent pumps. City staff procured a VFD for effluent pump No. 1 separately in early 2019, reducing costs by \$10,200. Due to lead times on certain materials, as well as the introduction of COVID-19, construction did not begin until October of 2020. Installation of the replacement PLC was finished in February.

As the ITB for the third effluent pump and HVAC system was advertised in February, staff decided to delay installation of the VFD for effluent pump No. 1 until the third effluent pump was operational for the purpose of redundancy. Effluent pump No. 3 became operational in March 2022. With effluent pump No. 3 operational, staff began coordinating with D.N. Higgins on scheduling on the installation of the VFD for effluent pump No. 1.

A site visit by the D.N. Higgins sub-contractor prior to the installation of the VFD for Effluent Pump No. 1 uncovered several issues that necessitate additional work. It

was discovered that the utility feeds running to the existing isolation transformer are too short for the new pulse transformer. Additionally, the existing wiring between the transformer and VFD cannot be reused, as the specifications for the new VFD are different. Lastly, the existing conduit arrangement is not compatible with the conduit window for the new VFD, requiring a portion of the conduit to be re-worked. These items were not addressed in the engineered drawings, so they were not included as part of D.N. Higgins' original proposal. D.N. Higgins is requesting a change order in the amount of \$40,446.34 for the additional work required to complete the installation of the VFD.

### **Purpose and Justification**

The additional work is needed to complete the installation of the VFD for effluent pump No. 1, which is a critical piece of the RAHEPF's equipment. Replacement is crucial to maintaining resiliency of the system. Staff has reviewed the change order request and finds the amount reasonable.

### **Financial**

The change order in the amount of \$40,446.34 will be funded through Account 401-3504-535-6500, Project SE35041902. The account currently has \$18,975.33 available and will need funds in the amount of \$21,471.01 transferred from reserve account 401-3501-535-9900 to cover the cost of the change order.

### **Recommendation**

City staff recommends approving the change order from D.N. Higgins, Inc. for the additional installation work for the effluent pump VFD pursuant to code of ordinances 2-797 4(b) in the amount of \$40,446.34.