



## THE CITY OF KEY WEST

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MEMORANDUM

### EXECUTIVE SUMMARY

**TO:** Bogdan Vitas, City Manager  
E. David Fernandez, Asst. City Manager - Operations

**FROM:** Jay Gewin, Utilities Manager

**DATE:** January 22, 2013

**SUBJECT:** Replacement and Upgrade of the Odor Control Unit at Sewer Lift Station D in the Amount of \$48,235 from Heyward, Inc. on a Sole-Source Basis.

#### Action statement:

This resolution is seeking approval to replace and upgrade the odor control unit at sewer Lift Station D (located at the intersection of Thompson and Seminary Streets) in the amount of \$48,235 from Heyward, Inc. on a Sole Source Basis.

The agreement is executed according to City Code 2-797 (1) (b) pertaining to purchases done on a sole-source basis, as Heyward, Inc. is the only factory-authorized parts and service dealer for MARCAB products in the State of Florida.

#### Background:

Lift Station D is located at the intersection of Thompson St. and Seminary St., and is the largest sewer pump station in the city. The site currently has an odor control unit made by Bio-Cube, which has been in service over ten years and is need of replacement due to ultraviolet degradation on the plastic. In addition, staff has since found MARCAB systems to be a superior product, and subsequent odor control units at other lift stations have all been from MARCAB.

Lift Station D was the first lift station to be fitted with an odor control unit, and technology has improved since the original unit was installed. This older odor control unit coupled with the high volume of wastewater flow that goes through this station has resulted in a significant number of complaints from the neighbors living in the area. City Staff and OMI receive more odor complaints

*Key to the Caribbean – Average yearly temperature 77° F.*

from this lift station than any other in Key West.

### **Purpose & Justification:**

Lift Station D has a flow of 775,000 gallons of wastewater per day under normal operating conditions. During storm conditions or periodic high flows, the station can exceed 1.5 million gallons of wastewater per day and produces H<sub>2</sub> (sewer) gases in excess of 200 – 300 ppm (parts per million)

It is therefore critically important to the surrounding neighborhood that we obtain the equipment to control these odors with a new effective odor control system. City Staff and OMI have found that MARCAB equipment is the superior odor control system, and we have therefore equipped all other lift station odor control units with this product. City Staff and OMI recommend that Lift Station D be retrofitted to a similar MARCAB system so it can obtain a similar efficiency level, and so that replacement parts are easier to maintain. Heyward, Inc. is the only factory-authorized parts and service center for this MARCAB equipment in the State.

### **Options:**

1. Staff could replace the existing Bio-Cube unit which is complicated, prone to failure and made of plastic which is prone to UV and stress cracks. This option is not recommended.
2. Install a MARCAB iron sponge system to be sized properly and has been proven successfully for years at the four other units in place in the sewer collections system at lift stations “A” “B” “F” and “G”. This is the City and OMI’s recommended option.
3. Do nothing, which would leave this station with the old odor control unit which could fail and leave a critical station and neighborhood prone the excessive sewer gases, and would cause damaging corrosion to the equipment in the wet well.

### **Financial Impact:**

The City budgeted \$50,000 for these improvements in the approved FY 2013 sewer budget in line item 401-3504-535-46. The cost for these parts is \$48,235, which is below budget. OMI will install the equipment.

### **Recommendation:**

City Staff recommends option 2, the purchase of the odor control system from Heyward, Inc. on a sole source basis in the amount of \$48,235.00