



## THE CITY OF KEY WEST

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# M U N I C I P A L M E M O R A N D U M

**TO:** Jim Scholl, City Manager

**FROM:** Doug Bradshaw, Senior Project Manager

**CC:** E. David Fernandez, Asst. City Manager – Operations

**DATE:** July 14, 2010

**SUBJECT:** **Approval of a Utility Work By Highway Contractor Agreement with FDOT for Installation of Sewer Force Main during North Roosevelt Construction and Approval for Expenditure of Funds**

### **ACTION STATEMENT:**

This resolution will approve the Utility Work By Highway Contractor Agreement (also referred to as a Joint Participation Agreement or JPA) with the Florida Department of Transportation (FDOT) for the installation of 12 and 24 inch sewer force mains by FDOT during the reconstruction of the North Roosevelt Blvd project, authorize the City Manager to enter into the Utility Work by Highway Contractor Agreement, and authorize the expenditure of funds for the project.

### **BACKGROUND:**

The Florida Department of Transportation (FDOT) is planning road improvements to North Roosevelt Boulevard as part their 5 year capital improvement plan. The City of Key West is planning on utilizing this opportunity to potentially increase conveyance capacity to the Richard A. Heyman Environmental Protection Facility (WWTP) by increasing the size of the Sigsbee (North Roosevelt) sewer force main. Once the Sigsbee force main work is complete, the City plans on installing new pumps, a generator, control panel, and a force main from Pump Station F connecting with the new Sigsbee force main.

### **PURPOSE & JUSTIFICATION:**

The City's current wastewater collection system routes sewage flow through an extended chain of pump stations and pipes stretching from the Airport, all the way around the island eventually passing to the WWTP. If flooding or severe rains results in an overflow at a sewer pump station at a lower elevation, it can impact the lift stations and piping in the chain behind it, thereby potentially backing up the sewer system throughout the island and causing a health risk to our residents.

With the increased capacity of the new Sigsbee Force Main and utilization of a previous

abandoned 30” outfall pipe, flow from the force main and its linked pump stations will be able to pass directly to the WWTP. This flow would no longer have to be pumped through Pump Stations D and DA. This will therefore significantly lessen the chances of one flooded pump station bottleneck negatively impacting the entire City. Many more non-flooded areas under this plan would now have the ability to pump directly into the WWTP without having to pass through a flooded location. This will also improve a flooded pump station’s ability to process sewage flow since the volume of material from the other pump stations currently pumping into it will be lessened.

**OPTIONS:**

The City could elect to leave the current Sigsbee force main in place as is; however, this leaves the City more vulnerable to surcharging of the wastewater system during large storm events.

The City could approve the Utility Work By Highway Contractor Agreement with FDOT for the installation of a new sewer force main. By upsizing the Sigsbee force main, the City has the option to re-route flow more directly to the treatment plant and eliminate the present operation which again is vulnerable to flooding.

**FINANCIAL IMPACT:**

The cost is not to exceed \$1,931,672.06 and is budgeted in account number 401-3503-535-65/SE0901. The Utility Work By Highway Contractor Agreement with FDOT requires payment of the full amount of \$1,931,672.06 due at least seven (7) calendar days prior to the date on which FDOT advertises the project for bids. FDOT may advertise the project as early as February 2011.

Amendment No. 2 to the Project Cooperation Agreement (PCA) between the City and the Department of the Army added projects which will provide additional system conveyance capacity to the wastewater treatment plant (including the Sigsbee force main project) to the scope of work in the grant making this project eligible for the funding as described in the PCA. As such, 65% of the total project cost is reimbursable with Army Corps funding as the construction progresses. The remaining 35% is the non-Federal share or local match. Amendment No. 2 was approved by the City Commission via Resolution No. 10-154 at the May 4, 2010 meeting.

Here is the funding breakdown for the Sigsbee force main project:

Army Corps grant (65% Federal share).....	\$1,255,586.84
City Sewer Utility Funds (35% non-Federal share).....	\$ 676,085.22
<b>Total</b>	<b>\$1,931,672.06</b>

**RECOMMENDATION:**

City Staff recommends approving the Utility Work By Highway Contractor Agreement with the Florida Department of Transportation (FDOT) for the installation of 12 and 24 inch sewer force mains by FDOT during the reconstruction of the North Roosevelt Blvd project, authorization for the City Manager to enter into the Utility Work By Highway Contractor Agreement and authorization for the expenditure of funds for the project.