



THE CITY OF KEY WEST

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TO: Jim Scholl, City Manager
FROM: Doug Bradshaw, Senior Project Manager
DATE: November 22, 2010

SUBJECT: Approval of the additional \$22,009.22 to original task order of the Utility Design By Highway Contractor Agreement with FDOT for the design of the 24 inch force main to be extended to 14th Street during the North Roosevelt Construction project and Approval for Expenditure of Funds and necessary budget transfers

ACTION STATEMENT:

This resolution will approve an additional \$22,009.22 to the Utility Design By Highway Contractor Agreement (also referred to as a Joint Participation Agreement or JPA) with the Florida Department of Transportation (FDOT) for the design of the 24 inch force main to be extended to 14th Street in the North Roosevelt Blvd project, authorize the City Manager to execute the task order, and authorize the expenditure of funds for the project and make necessary budget transfers.

The increase cost is due to the additional design required to extend the sewer force from Kennedy Drive to 14th Street.

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.

Resolution 09-102, passed and adopted by the City Commission on May 5, 2009, approved and authorized the execution of a Utility Design by FDOT Consultant Agreement in an amount not to exceed \$175,264.15 for the design 24 inch sewer force main from Georgia Street to Kennedy Drive. The project limit was extended past Kennedy Drive to 14th Street in order to connect to the new 14th Street force main. The cost of designing the project to extend to 14th Street is estimated at \$22,009.22.

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 additional cost to the Utility Design By Highway Contractor Agreement with FDOT for the design of the 24 inch force main to be extended to 14th Street. 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 \$22,009.22 and requires a budget transfer to account number 401-3503-535-65/SE0901 from the unappropriated fund balance account #401-3501-535-99.

The City currently has a remaining fund balance of \$1,698,641.91 from an ACOE \$10.3 million grant. The project is eligible for the ACOE funding at a rate of 65%. However, the Headworks Modifications Project that the City is currently fast tracking is also eligible for the remaining grant dollars and is most likely going to exhaust those funds.

RECOMMENDATION:

City Staff recommends approving the additional \$22,009.22 to the original task order of the Utility Design By Highway Contractor Agreement with FDOT for the design of the 24 inch force main to be extended to 14th Street during the North Roosevelt Construction project and approval for expenditure of funds and necessary budget transfers

DB/cds