

**Indian River County, Florida  
Department of Utility Services  
Board Memorandum**

**Date:** February 7, 2020

**To:** Jason E. Brown, County Administrator

**From:** Vincent Burke, PE, Director of Utility Services

**Subject:** CR-510 Utility Design Agreement a.k.a. Utility Design by FDOT Consultant Agreement

**Background/Analysis:**

The Florida Department of Transportation (FDOT) has plans to widen County Road 510 (CR-510) beginning at CR-512 to 58<sup>th</sup> Avenue. The approximately 5.22 miles of existing two lane roadway will be widened to a four-lane roadway divided with curb and gutter. The proposed roadway improvements will include drainage structures in the form of curb inlets approximately every 500 linear feet. The Indian River County Department of Utility Services (IRCDUS) owns and operates two large water and wastewater mains within the existing CR-510 right-of-way (ROW). Specifically, there is a 12-inch PVC force main along the south side and a 16-inch water main along the north side of CR-510. The force main conveys domestic wastewater from multiple locations including Sebastian River High School, Treasure Coast Elementary, parts of Sebastian and flows generated within the City of Fellsmere. The water main provides potable water to these same locations including Vero Lake Estates, provides looped water service and is a major transmission main used for fire flow purposes.

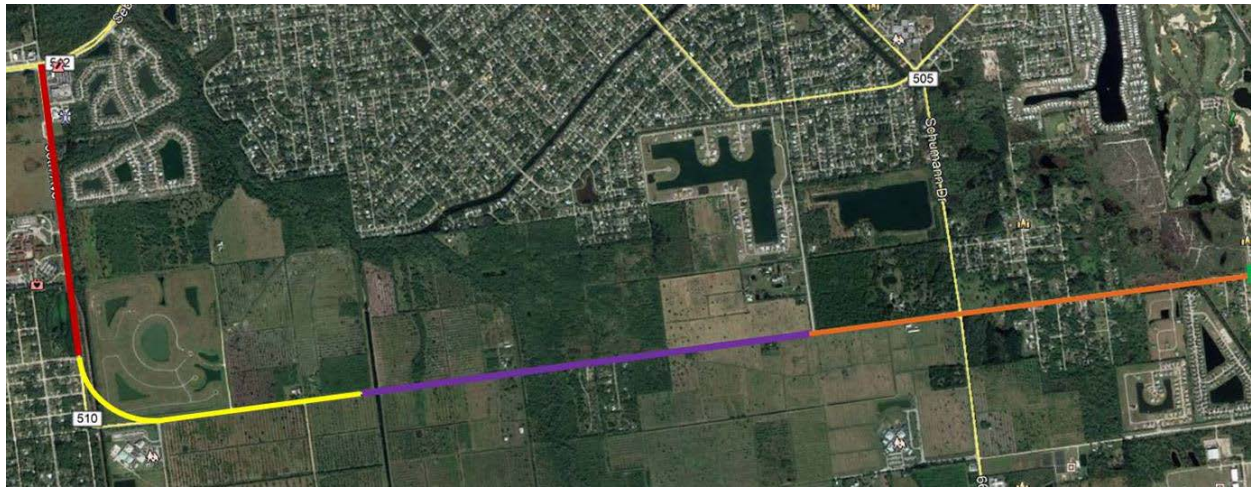
Initially, staff considered offsetting portions of the force main and water main to avoid the proposed drainage structures needed for the four-lane roadway improvements. However, the 56 proposed offsets of 12" and 16" lines highlighted the fact that the time and effort needed to provide the infrastructure offsets was not cost effective. Secondly, due to the new roadway alignment, the existing water and force mains, which are now in the ROW, would be under the new pavement sections. Getting to any future repairs could be costly and arduous if staff had to open-cut new sections of the roadway. Third, the water main and force main are 28 and 19 years old, respectively. While not past their useful life, the lines are not as new as would be expected, and potential breaks under new roadway sections could be a liability for IRCDUS. Having multiple offsets to accommodate drainage pipe led staff to consider the cost effectiveness of keeping the existing pipe, and whether we would be comfortable with these main lines under asphalt. Lastly, keeping the existing lines in service during a major roadway project presents its own challenges.

For the reasons mentioned above, staff began negotiations with FDOT and their utility design consultant, Snubbs Consulting, Inc. (Snubbs), in 2019. IRCDUS initially thought it would be most cost effective to hire a professional engineering services firm under our continuing consultant agreement. However, keep in mind that, per Florida Statute 287.055, the firm's design fees cannot exceed \$200,000, or the cost of construction cannot exceed \$2 million. This project would exceed both of these thresholds.

Next, a Request for Qualification (RFQ) process was contemplated, but the four to six months needed to obtain a firm would put IRCDUS in a tight timeline with FDOT's project schedule. They would need fully

designed plans for the initial segment on or before December 2020. Due to the accelerated schedule and the fact that Snubbs was the drainage engineer for the roadway design and had qualifications to perform utility design work, IRCDUS requested a scope of work from Snubbs.

The proposal submitted by Snubbs is broken into segments. The design is broken into two segments, and the construction is broken into four segments. Although Consor and Metric are the roadway design consultants for FDOT, Snubbs is providing drainage design services to both consultants. The below outlines the breakdown:



- = Construction from CR 512 to 87<sup>th</sup> Place - **FM# 405606.7**
- = Construction from 87<sup>th</sup> Place to west of 82<sup>nd</sup> AVE. - **FM# 405606.8**
- = Design (*Consor*) from CR 512 to west of 82<sup>nd</sup> AVE - **FM# 405606.4**
- = Construction from west of 82<sup>nd</sup> AVE. to Powerline Road - **FM# 405606.5**
- = Construction from Powerline Road to 58<sup>th</sup> AVE. - **FM# 405606.6**
- = Design (*Metric*) from west of 82<sup>nd</sup> AVE to 58<sup>th</sup> AVE - **FM# 405606.3**

The utility relocation design cost and the estimated relocation construction cost for each segment are outlined in the below table:

**Table 1**

	16" WM, 12" FM & 12" Reuse WM (\$000K)	
	Construction	Design
405606.7	3,840	272
405606.8	4,320	300
<b>405606.4 (Subtotal):</b>	<b>8,160</b>	<b>572</b>
405606.5	7,370	392
405606.6	6,290	363
<b>405606.3 (Subtotal):</b>	<b>13,660</b>	<b>755</b>
<b>Total</b>	<b>\$21,820</b>	<b>\$1,327</b>

## Departmental Item

For the following reasons, IRCDUS staff decided to recommend to its Board of County Commissioners (BCC) to enter into a Locally Funded Agreement (LFA) with FDOT's design consultant:

- **Timing:** Given the size and fees of the project, County would have had to request for qualifications. This process can take up to four to six months.
- **Coordination:** Since FDOT's design consultant (Snubbs) is the drainage designer for both segments of CR-510, any changes/revisions to the drainage design will reflect in the utility relocation design.
- **Responsibility:** Any delays due to design changes, design errors, and/or other items will be the responsibility of FDOT and their consultant.
- **Delay Claims:** There will be no delay claims against IRCDUS due to design errors. Those will be the responsibility of FDOT and their design consultant.
- **Delay Claims or Change Orders:** Any delay claims or change orders during construction due to design errors will be the responsibility of FDOT and their consultant.

Attached for review and approval are two utility design agreements with FDOT and their design consultant, Snubbs. All payments must be made up front before work can begin. All funds provided by IRCDUS will be deposited into a third party escrow account. The following payment schedule is as follows:

Payment	Date	Amount	Notes
1	6/2020	\$ 755,000	On or before the date noted
2	11/2020	572,000	
<i>Total</i>		<i>\$ 1,327,000</i>	

The design work is within the IRCDUS Capital Improvement Element (CIE), which was approved by the BCC in December 2019. Staff is looking for approval of both agreements with the understanding that \$755,000 is to be paid within this fiscal year for the first design segment (405606-3), and, if approved for FY20/21, the \$572,000 second design segment (405606-4) will be paid by November 1, 2020.

### Funding:

Funds for this project are derived from the Utilities Operating fund. Utilities operating funds are generated from water and sewer sales.

Description	Account Number	Amount
CR-510 Utility Main Relocation	471-169000-20510	\$755,000

### Recommendation:

The staff of Indian River County Department of Utility Services recommends that the Board of County Commissioners approve the Utility Design Agreements 405606-3 and 405606-4, and authorize the Chairman to execute the agreements after final review and approval by the County Attorney's office.

## Departmental Item

### Attachments:

1. Utility Design Agreement 405606-3-36-1
2. Utility Design Agreement 405606-4-36-1