

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

Date: June 1, 2021

To: Jason E. Brown, County Administrator

From: Vincent Burke, PE, Director of Utility Services

Subject: Well Field Feasibility Expansion Study by All Webbs Enterprises, Inc.

Background:

On July 12, 2016, All Webbs Enterprises, Inc., (AWE) was awarded Bid 2016031 to construct a new 16-inch diameter Upper Floridan Aquifer production well, in addition to the rehabilitation of production wells 3, 4, 5, and 6. Water produced by the wells is transported by mains to the South County Reverse Osmosis (RO) Water Treatment Plant (WTP). A brief timeline of events for this project is as follows:

- Tuesday, April 4, 2017 – Change Order No. 1 executed, adding 250 days to the contract time, putting substantial completion at November 28, 2017, and final completion at January 27, 2018. This work was valued at \$1,051,783.57 to install a replacement well #4 (S-4R).
- Tuesday, July 3, 2018 – Change Order No. 2 executed, adding 380 additional days to the contract time, putting substantial completion at December 13, 2018, and final completion at February 11, 2019. This work added \$551,160 to the contract for deepening wells S-2, S-3, S-5, and S-6 for better water quantity and quality.

On February 16, 2021, the Board of County Commissioners (BCC) approved the final pay to AWE as noted in the table below

Initial Contract	\$ 1,477,360.00
Change Order #1	1,051,783.57
Change Order #2	551,160.00
Total Contract	\$ 3,080,303.57
Adjustments to Contract	(24,167.00)
Total Completed and Stored to Date (through final completion)	\$ 3,056,136.57
Less Liquidated Damages to be Held	(100,080.00)
Total to be Paid to All Webbs	\$ 2,956,056.57

Payments to Date	\$ 2,749,432.59
Pay Application 25	153,897.15
Retainage to be Paid	52,726.83
Total to be Paid to All Webbs – Final Pay	\$ 206,623.98

Analysis:

The Indian River County Department of Utility Services (IRCDUS) is being tasked to explore other water uses so as to not impact existing legal users (ELUs), as required by the St. Johns River Water Management District (SJRWMD) regulations. Therefore, IRCDUS is seeking services to explore the feasibility of potentially using sources of water that may or may not be available in sufficient quality or quantity from the Lower Floridan Aquifer (LFA). The LFA resides below the Upper Floridan Aquifer, can potentially be less permeable than the Upper Floridan, and can be generally more saline. Such investigations are necessary at the existing county well fields located at both drinking water plants; specifically, at the Oslo Road (South County Reverse Osmosis -SCRO) plant and the Hobart (North County Reverse Osmosis-NCRO) plant.

Unit cost pricing was obtained from AWE similar to the schedule of values included in Bid 2016031. Note, however, that the scope and scale of the work is different from what was originally submitted. IRCDUS solicited a proposal from another well firm, but that firm did not have the proper well drilling equipment to go to the depth needed for the LFA water source. Thus, AWE was solicited based on their previous work with IRCDUS, and the fact that they have the necessary equipment and personnel to perform the investigative well work. IRCDUS' hydrogeologist, JLA Geosciences (JLA), having provided previous well rehabilitation supervision work on behalf of the county, supplied AWE with the following scope (Attachment 1) and was given a schedule of values (Attachment 3). The scope summary for AWE is noted to be:

Furnish all labor, equipment and materials necessary to deepen and test two (2) existing Upper Floridan Aquifer wells (Well N7 and Well S1) for Indian River County Utilities Department (OWNER). Well N7 located at the North County (Hobart Park) reverse osmosis treatment facility and S1 is located at the South County (Oslo Road) reverse osmosis treatment facility. The scope of work for each well will include: mobilization; removal of portions of the existing wellhead, removal of the column pipe, pump, and appurtenances; preliminary downhole video logging; deepening of the existing borehole; formation water disposal system (including temporary piping and pumps, and compliance with discharge permit requirements); performance of a full geophysical logging suite; installation of a straddle packer and performance of a packer test to evaluate the confining unit; installation of an off bottom packer and performance of a 24-hour constant rate aquifer performance test (APT) of the Avon Park Permeable Zone (AAPZ); performance of a 24-hour constant rate APT of the Upper Floridan Aquifer (UFA); optional back-plugging of the borehole with neat cement; optional well acidization; pump development; step-drawdown testing; re-installation of the permanent well pump, column pipe, and wellhead; well facility disinfection; purging and bacteriological clearance; demobilization and restoration of the well sites as described herein.

JLA Geosciences did a comparison of AWE's Avon Park permeable zone (APPZ) exploration and testing bid costs with either AWE's previous IRCDUS project costs or with other more recent competitively bid projects with similar work items. A few things to note based on this comparison:

- Overall proposal total is ~9% higher than the comparison estimate.
- Bid Item #2, unforeseen conditions allowance to drill out a bit cemented into place in the bottom of the S1 borehole has no good comparison.
- Bid Items #11 and #12 pumping tests do not have a good comparison item. When looking at the amount of time for each pumping test, including background, pumping, and recovery, the hourly cost is \$417/hour, which is less than the previously bid step rate test rate of \$500/hour from the original 2017 AWE South Plan Well Rehabilitation Bid.

Departmental Item

- AWE's current bid pricing for bid Items #8, #16, #21, #23, and #24 are substantially higher than AWE's previously bid prices for IRC projects, but are in line with more recent bid pricing on other similar projects.
- AWE's current pricing for bid Items #10 and #15 are notably higher than recent bid pricing on other similar projects.
- AWE's current bid pricing for bid Items #13, #18, and #20 are lower than AWE's previously bid prices for IRC projects or recent bid pricing on other similar projects.

In general AWE's 9-10% increase in overall pricing does not seem to be out of line with current bid price increases, especially considering how long ago AWE's previous IRC bids were generated.

Due to the need to perform this well field investigation now, there presents an opportunity to work with an existing contractor that has provided similar services to the County in the past. We are told that the few well contractors that are in the area are very busy with existing workloads and the time required to issue and award a request for proposals (RFP) would extend the time required to do this investigative work. AWE has provided responsible work to IRCDUS, and so staff recommends that the BCC waive the requirement for bids for the well field work at S-1 and N-7 for \$992,100. Staff recommends awarding a contract to AWE, after review and approval of the terms and conditions by the Purchasing Manager, obtaining the necessary insurance coverage, and upon review and approval by the County Attorney as to the legal form and sufficiency.

Funding:

Funds of \$992,100 for this project are derived from Utilities capital funding. Utilities capital fund revenues are generated from impact fees. Furthermore, new growth has created the need for the expansion or construction of the facilities, and that new growth will benefit from the expansion or construction of the facilities.

Account Name	Account Number	Amount
Utilities Impact Fees/Well Field Expansion	472-169000-21550	\$992,100

Recommendation:

Staff recommends that the Indian River County Board of County Commissioners waive the requirement for bids, approve the sample agreement with All Webbs Enterprises, Inc., for the well field feasibility investigation work at wells S-1 and N-7, and authorize the Chairman to execute said agreement after approval by the County Attorney as to form and legal sufficiency.

Attachments:

1. Section 01000 Summary of Work
2. Section 01200 Measurement and payment
3. Schedule of Values for Investigation for S1 and N7 wells
4. Sample Agreement