

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

Date: November 26, 2019

To: Jason E. Brown, County Administrator

From: Vincent Burke, PE, Director of Utility Services

Prepared By: Arjuna Weragoda, PE, Capital Projects Manager

Subject: South RO Plant Improvements with Kimley-Horn and Associates

Descriptions and Conditions:

On September 17, 2019, the Indian River County Board of County Commissioners (BCC) approved the final ranking for Request for Qualifications (RFQ) 2019070 to assist the Indian River County Department of Utility Services (IRCDUS) with the planning, engineering, design, permitting and construction phase services anticipated with two water treatment plants and directed staff to start negotiations with the top ranked firm, Kimley-Horn and Associates, Inc (KHA). On November 5, 2019, the BCC Chairman signed the agreement for professional services.

IRCDUS owns and operates two (2) regional potable water treatment plants (WTP). The South County Reverse Osmosis (SCRO) WTP is rated for 8.57 million gallons per day (mgd). The existing membrane system and associated equipment at the Oslo Road WTP was evaluated and is in need of rehabilitation and replacement. The condition assessment evaluated the reliability of the existing mechanical equipment, including the membrane booster pumps, RO trains, feedwater, permeate, and concentrate piping; pipe trenches; membrane skids; small piping systems; and high service pump distribution piping systems.

Analysis:

Staff requested KHA prepare a proposal to provide professional services to address the following improvements based on the assessment at SCRO:

- Replace existing 1.5 MGD RO Trains (upgrade to 1.8 MGD)
- Replace/upgrade associated RO train remote Programmable Logic Control (PLC) and instrumentation
- Replace process piping to stainless steel
- Modify feedwater pump configuration to dedicated operation
- Upgrade finish water supply piping to provide redundancy/resiliency
- Replace/upgrade high service pump piping and finish flow meter
- Replace/upgrade main plant PLC and associated PLC/Human-Machine Interface (HMI) programming
- Rehabilitate and upgrade cleaning system
- Rehabilitation of lab space and equipment
- Generator upgrades and restoration of load shedding capability with FPL

The work order will be provided in accordance with the Agreement for Professional Services for Water Plant and Water Resources Engineering Services-RFQ 2019070 dated November 5, 2019. The scope is more specifically described in the attached Work Order No. 1. The total negotiated cost for the SCRO WTP improvements in Work Order No. 1 is a lump sum amount of \$568,249, broken into four (4) tasks.

Funding:

Funds for this project are derived from the other professional services account in the Utilities operating fund. Utilities operating funds are generated from water and sewer sales.

Description	Account Number	Amount
S RO Membranes & Retrofit	47121936-044699-19503	\$568,249

Recommendation:

Staff recommends approval of the Agreement for Professional Services for Water Plant and Water Resources Engineering Services Request for Qualifications 2019070, Work Order No. 1, and requests that the Board of County Commissioners authorize the Chairman to execute the Work Order on their behalf to engage the services of Kimley-Horn and Associates, Inc., for a sum amount of \$568,249.

Attachment:

Work Order No.1 with KHA. (10 Pages)