

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

Date: October 26, 2023

To: Indian River County Board of County Commissioners

Through: John A. Titkanich, Jr., County Administrator
Sean C. Lieske, Director of Utility Services

From: Howard G. Richards, PE, Manager - Capital Projects

Subject: Kimley-Horn and Associates, Inc. Work Order 6 Amendment 1, Oslo Water Treatment Plant Improvements, Construction Phase Services

Descriptions and Conditions:

The Indian River County Department of Utility Services (IRCDUS) operates two water treatment plants (WTP), Hobart WTP and Oslo WTP, to provide potable water service to its customers. Both plants have a combined rated capacity of 25.7 million gallons per day (MGD) and an average daily flow of approximately 12 MGD. The treatment facilities obtain raw water from the upper Floridan aquifer and treat it with nanofiltration. Pretreatment for the membranes includes addition of sulfuric acid and a scale inhibitor. The permeate from the nanofiltration process is blended with raw water and the blended water has chlorine added for disinfection. In addition, fluoride is added for fluoridation and lime, carbon dioxide and sodium hydroxide are added for remineralization, pH and alkalinity control as well as calcium carbonate stability.

An evaluation of the membrane system and associated equipment at the Oslo WTP, determined they needed rehabilitation and replacement. The condition assessment evaluated the reliability of the existing mechanical equipment, including the membrane booster pumps; reverse osmosis (RO) trains; feedwater, permeate, and concentrate piping; pipe trenches; membrane skids; small piping systems; and high service pump distribution piping systems.

On November 5, 2019, the Board of County Commissioners (BCC) awarded Request for Quotation (RFQ) 2019070 for Professional Services for Water Plant and Water Resources Engineering Services to Kimley-Horn and Associates (KHA) to assist IRCDUS with the planning, engineering, design, permitting, and construction phase services for water treatment plants.

On December 17, 2019, the BCC awarded Work Order 1 to KHA to provide design, permitting, and bidding phase services for the Oslo WTP improvements project, in the amount of \$568,249.00.

On October 6, 2020, the BCC approved Amendment 1 to Work Order 1, which addressed further items in the project, in the amount of \$127,252.00, increasing the total amount for KHA services to \$695,501.00.

On June 15, 2021, the BCC approved WO 6 to KHA to provide professional services to oversee the construction phase of the project, in the amount of \$1,222,545.00. WO 6 increased the total amount of KHA services for the project to \$1,918,046.00.

Consent Item

On June 15, 2021, the BCC awarded Bid #2021026 to TLC Diversified, Inc. (TLC) for the construction of the Oslo WTP improvements project. Construction phase of the project commenced on August 4, 2021, with the issuance of a Notice to Proceed (NTP) to TLC. Based on this original NTP date, the forecast date of completion for construction was estimated to be November 2, 2023.

Subsequent to the start of construction, it was discovered that the sand separators were offline due to intermittent operation and inability to obtain repair parts. It was determined to replace the existing sand separators as part of the project. On May 16, 2023, the BCC approved WO 10 to KHA to provide professional engineering services for design, permitting, and construction phase services for replacement of the sand separators, in the amount of \$52,427.00, increasing the total approved amount for KHA services for the project to \$1,970,473.00.

Analysis:

Since the commencement of construction, there were major events that led to construction delays and/or additional time to complete various aspects of the work, requiring a change in the TLC contract duration. On August 9, 2023, IRCDUS approved Work Change Directive No.2 to TLC authorizing a time extension, which extends the final completion date of the project by 197 days from November 2, 2023, to May 17, 2024.

The extension of the project construction schedule will result in KHA expending additional time to assist with project delivery. KHA was also requested to provide additional services, including asset management and record drawings development. The additional time and services are proposed in the attached Scope of Services for Amendment 1 to WO 6 for the Oslo WTP improvements project, in the amount of \$263,133.00. Upon approval of WO 6 Amendment 1 by the BCC, the total amount for KHA services for the project will increase to \$2,233,606.00, including WO 1, WO 1 Amendment 1, WO 6, and WO 10.

Funding:

Expenses, in the amount of \$263,133.00, for Amendment 1 to WO 6 will be recorded in the operating capital account, Utilities/WIP/South R/O Membranes & Retrofit, number 471-169000-19503. Since this is an operating capital project, the funds will come from fund balance. Operating funds are derived from water and sewer sales.

Description	Account Number	Amount
Utilities/WIP/South R/O Membranes & Retrofit	471-169000-19503	\$263,133.00

Recommendation:

Staff recommends that the Board of County Commissioners approve Work Order 6 Amendment 1 with Kimley-Horn and Associates, Inc. in the amount of \$263,133.00, for additional time to assist with project delivery and provide additional services including asset management and record drawings development for the Oslo Water Treatment Plant improvements project, and authorize the Chair to execute the same. So long as there are no changes in the dollar amount under the work orders, upon adequate completion of the work set forth in the work orders, staff is directed to make final payments to Kimley-Horn and Associates, Inc., after review and approval by the Purchasing Manager and the County Attorney's Office.

Attachments:

- Kimley-Horn Scope of Service for Work Order 6 Amendment 1