

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

Date: January 27, 2025

To: Indian River County Board of County Commissioners

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

From: Howard G. Richards, PE, Capital Projects Manager, Utility Services

Subject: Work Order No. 4 to Tetra Tech, Inc. for Hobart Water Treatment Plan Post Filtration Improvements, Alternatives Analysis, IRCDUS Project ID 12.24.504

Background:

Indian River County Department of Utility Services (IRCDUS) owns and operates Oslo Water Treatment Plant (WTP) to the south and Hobart WTP to the north to provide potable water service to customers of Indian River County (IRC). The raw water source for the WTPs is groundwater from the Upper Floridan Aquifer, with a combined consumptive use permit (CUP) of 16.228 million gallons per day (MGD) annual average withdrawal. At the WTPs, raw water undergoes pretreatment, membrane treatment (nanofiltration), degasification and the addition of chemicals for stabilization, disinfection, remineralization, and pH and alkalinity control of the treated water.

The Hobart WTP is configured such that there are two (2) sets of process equipment that mirror each other ("north" and "south" systems). However, the transfer pumps are installed in the south clearwell. Due to this configuration, there is an operational bottleneck when maintenance or downtime of one of the clearwells is required. Another operational concern is that the north and south systems do not allow for individual operation without having to run the entire post treatment system.

IRCDUS Operations staff desire to combine the operation of the north and south systems at Hobart WTP into one integrated plant, including optimizing the efficiency of the existing scrubbers, and additional instrumentation and control improvements to the chemical feed systems. Benefits include, but are not limited to, regulatory compliance, simplifying maintenance, increase production throughput (debottleneck), and having the ability to control both systems from the Supervisory Control and Data Acquisition (SCADA) system.

Analysis:

Upon request by IRCDUS, Tetra Tech, Inc. provided Work Order (WO) No. 4, pursuant to the Continuing Contract Agreement for Consulting Engineering Services dated May 2, 2023, between Indian River County (IRC) and Tetra Tech, to provide engineering services related to alternatives analysis for integrating the Hobart WTP north and south systems, including other process and control systems improvements and

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upgrades. The alternatives analysis will include evaluations from different engineering disciplines including civil, process, structural, electrical, and instrumentation and controls.

The total fee for WO No. 4 is a lump sum of \$245,585.15, including expenses. At the conclusion of this phase of the project (the Study or Feasibility Phase), Tetra Tech will deliver a final Alternatives Analysis Technical Memorandum that summarizes recommendations for the different alternatives, including a recommendation of the most feasible alternative relative to cost, timeframe, operational flexibility, and feasibility. Results of the analysis will inform the subsequent design phase for the project.

Funding:

Funds, in the amount of \$245,585.15, for this project are derived from the Water Impact Fee/WIP/Hobart WTP Post Filter Improvements account, number 474-169000-24504. 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
Water Impact Fee/WIP/Hobart WTP Post Filter Improvements	474-169000-24504	\$245,585.15

Recommendation:

Staff recommends that the Indian River County Board of County Commissioners approve Work Order No. 4 to Tetra Tech, Inc. for Hobart Water Treatment Plan Post Filtration Improvements, Alternatives Analysis, for the lump sum amount of \$245,585.15 and authorize the Chair to execute the same. So long as there are no changes in the dollar amount under the work order and upon adequate completion of the services set forth in the work order, staff is directed to make final payment and release any retainage to Tetra Tech, Inc.

Attachments:

Tetra Tech WO 4