Indian River County, Florida Department of Utility Services Board Memorandum

Date: August 30, 2024

To: Indian River County Board of County Commissioners

Through: John A. Titkanich, County Administrator

Sean C. Lieske, Director of Utility Services

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

Subject: Kimley-Horn and Associates, Inc. Work Order 8 Amendment 1 for Floridan Aquifer Well

S-1 Replacement, IRCDUS Project ID 11.22.503

Background:

Indian River County Department of Utility Services (IRCDUS) owns and operates the South County wellfield that consists of seven (7) Floridan Aquifer water wells that provide source water to the Oslo water treatment plant (WTP). This wellfield is the only water resource for the Oslo WTP and ensuring "availability" is critical to the sustainability of the water system.

The South County wellfield well S-1 was selected for deepening due to age and deteriorating water quality. During the initial phase of drilling to deepen S-1, the well collapsed with sand filling the well from behind the casing. Upon investigation of the collapse, it was determined that the well was not salvageable and would be replaced by a new Well S-1 Replacement (S1R).

On February 15, 2022, the Indian River County Board of County Commissioners (BCC) approved Work Order (WO) 8 to Kimley-Horn and Associates, Inc. (KHA) pursuant to Agreement for Professional Services for Water Plant and Water Resources Engineering Services (RFQ 2019070), dated November 5, 2019, to provide design, permitting, bid, and construction phase services for the S1R project (IRCDUS Project ID 11.22.503). The original amount of WO 8 was \$222,511.00.

Implementation of the S1R project comprises three performance areas: 1) drill new well, 2) construct wellhead, and 3) construct new raw water main (RWM) to Oslo WTP. KHA's WO 8 was originally scoped for the construction of S1R to be completed under a single construction contract for the well, wellhead, and RWM. During the design phase of the project, it was decided that two (2) construction contracts would be needed, one for the well drilling, and a second for construction of the wellhead and RWM.

On January 23, 2024, the BCC approved and awarded for the well drilling to Florida Design Drilling, Inc. (FDD). Construction for the wellhead and RWM have not yet been advertised for public bidding.

Analysis:

As a result of separating the construction of S1R into separate contracts for well drilling, and wellhead and RWM, KHA will be required to provide additional bid phase and construction phase services associated with administering two (2) separate contracts. Construction phase services are primarily driven by the extended time duration.

The well drilling work required clearing that would impact on-site vegetation. Since the area was known to be inhabited by gopher tortoises, KHA conducted a wildlife site survey that found one (1) burrow, then subsequently prepared an application to Florida Fish and Wildlife to have the tortoise relocated. KHA performed this out-of-scope service to avoid delaying the contractor mobilization.

To improve construction schedule performance, FDD was approved to work 24 hours per day, five (5) days per week. This requires the KHA hydrogeologist subconsultant, JLA Geosciences, Inc. (JLA), to be present for key aspects of the well construction including pilot hole drilling, geophysical logging, casing installation, and grouting activities. JLA's efforts require amendment for additional time, as the original scope of services assumed construction hours limited to 12 hours per day.

Additionally, IRCDUS has instituted new consultants' final deliverables for capital projects, including record drawings in AutoCAD (.dwg) format, and updates to the Utilities' Asset Management Information Records (also referred to as Asset Change List [ACL]) required to updated IRCDUS computerized maintenance management system (CMMS).

In response to the above-described changes, KHA provided the attached WO 8 Amendment 1 for \$98,949.00. Upon approval of WO 8 Amendment 1, the total budget for WO 8 increases to \$321,460.00. Staff have reviewed WO 8 Amendment 1 and found it to be reasonable.

Funding:

Expenses, in the amount of \$98,949.00, for this project will be recorded in the Utilities/WIP/South WTP Well S1 account, number 471-169000-22503. Since this is an operating capital project, the funds will come from fund balance. Operating funds are derived from water and sewer sales.

ACCOUNT NAME	ACCOUNT NUMBER	AMOUNT
Utilities/WIP/South WTP Well S1	471-169000-22503	\$98,949.00

Recommendation:

Staff recommends that the Indian River County Board of County Commissioners approve Work Order 8 Amendment 1 to Kimley-Horn and Associates, Inc., in the amount of \$98,949.00, for Floridan Aquifer Well S-1 Replacement project, for additional engineering services for bid and construction phase services, wildlife site survey, extended hydrogeologist work hours, and final deliverables, and authorize the Chairman to sign it on their behalf. Upon approval of Amendment 1, the total budget for Work Order 8 will increase to \$321,460.00.

Attachments:

Kimley-Horn Work Order 8 Amendment 1