



INDIAN RIVER COUNTY, FLORIDA
AGENDA ITEM
Parks, Recreation & Conservation Department
Aquatics Division

Date: January 13, 2025
To: The Honorable Board of County Commissioners
Thru: John A. Titkanich, Jr., County Administrator
Michael C. Zito, Deputy County Administrator
Beth Powell, Parks, Recreation & Conservation Director
From: Gustavo Vergara, Assistant Director - Parks, Recreation & Conservation
Subject: North County Aquatic Center Source Phase II Well Replacement

BACKGROUND:

On November 5, 2024, the Board of County Commissioners “BOCC” approved up to \$223,146 for exploratory and remedial work to be completed on the existing source well that provides water to the geothermal heating/chilling system at the North County Aquatic Center. On November 22, 2024, JLA Geosciences Inc. Hydrological Consultants “JLA”, oversaw Centerline Drilling performed the needed video scope of the well to assess the current condition. The Staff Report from the Board meeting held on November 5, 2024, is attached for reference (Attachment 1).

A technical memorandum of the findings is outlined in Attachment 2 and it concluded the following:

- Existing supply well is damaged beyond repair and needs to be abandoned by a Florida certified water well driller.
- Based on observations made during the supply well video it is recommended IRC perform a similar downhole well video investigation on the existing UFA return well to determine condition of casing.
- Siting, permitting, design and construction of a replacement UFA supply well and return well if necessary, should begin immediately.

A performance test of the well was also completed and because of the complete collapse of the casing of the well, the Gallons Per Minute “GPM” coming out of the well was measured at 195 GPM, which was 105 GPM short of the needed 300 GPM needed to effectively operate the heating/cooling system. The system was sucking so much sand and rocks that it had obstructed the pump impeller which assists the well in pumping the necessary GPM to the system.

JLA submitted a proposal to oversee the capping/abandonment of the well for \$14,772 (Attachment 3). Staff was able to apply to the St. John’s River Water Management District’s “SJRWMD” abandoned artesian well plugging program, where they will cap the well at no cost to the County. On December 11, 2024, Gary Foster, Senior Hydrologist with SJRWMD communicated that the work could be performed through their program this winter. On January 13, 2025, staff confirmed that the

well is on the list to be capped when they conduct work in Indian River County in late February – early March.

DESCRIPTION AND CONDITIONS:

Staff received a proposal from Centerline Drilling, referencing the Town of Jupiter Surficial Rehabilitation Program for replacement of the well, which includes all work needed to provide a clean source of water for the system. The proposal amount provided on January 7, 2025 (Attachment 4) is \$164,920. Staff received a subsequent quote from JLA (Attachment 5) to provide the associated work to properly design, sit the well, oversee construction and provide reporting on the well for a cost of \$38,405. The total cost of providing a Floridan well for the source of water to operate the geothermal heating/chilling system at the North County Aquatic Center is quoted at \$203,325. This closed loop system requires that water drawn from the source must be returned to the aquafer unchanged. Per JLA's recommendation, Staff will work to budget for exploratory work into the return well next fiscal year. The quote provided does not include construction bond or additional unanticipated site related expenses associated with completing the project. It is recommended that a 10% contingency, in the amount of \$20,333, also be allocated to expedite completion of the project. This brings the total authorization amount to \$223,658.

FUNDING:

Funding, in the amount of \$223,658 (\$203,325 plus 10% contingency), will be funded in MSTU Fund/North County Aquatic Center/Other Improvements Except Building/North County Aquatic Well Rehab account, number 00410472-066390-25002 via budget amendment.

Account Description	Account Number	Amount
MSTU Fund/North County Aquatic Center/Other Improvements Except Building/North County Aquatic Well Rehab	00410472-066390-25002	\$223,658

RECOMMENDATION:

Staff respectfully requests that the Board of County Commissioners approve issuance of a purchase orders for the construction of a new Floridan well to replace the irreparable source well of the geothermal heating/chilling system at the North County Aquatic Center of \$203,325 to JLA Geosciences Inc. Hydrological Consultants and Centerline Drilling. Staff also recommends authorization for the Purchasing Manager to approve increases to the purchase order for the actual face costs associated with the permitting, public construction bond, and up to 10% in adjustments necessary to expedite the installation and completion of the project.

ATTACHMENTS:

Attachment 1 – Technical Memorandum from JLA
Attachment 2 – Well abandonment proposal from JLA
Attachment 3 – Proposal from Centerline Drilling
Attachment 4 – Proposal from JLA

APPROVED AGENDA ITEM FOR JANUARY 28, 2025