



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

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**Date:** October 23, 2024  
**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:** Approval of Work Order for Exploratory and Remedial Work for  
Floridan (Artesian) Well and Repairs at North County Aquatic Center

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**BACKGROUND:**

The well at the North County Aquatic Center supplies water to a set of chillers that regulate water temperature to a desired 79-83 degrees. This range is ideal for the many activities that take place at the facility. High school, college and private high-level swimmers need the cooler water for the safety of the swimmers, while participants of aqua aerobic classes and recreational swimmers appreciate the higher range for the comfort of their activity. The chilling/cooling system is called a closed loop heat exchange system, whereby water from the well, which is always at a constant temperature, is pumped through a set of coils inside six “chiller” units at 300 gallons per minute. These coils are adjacent to a set of coils inside the same chiller units recirculating the water in the pool. These two coils work concurrently inside the units to either heat or cool the temperature of the water to a set number. The key factors in these chiller units that affect their performance are the source of water and flow rate. The source must meet certain criteria in both sediment and flow to prevent clogging or infecting the coils with sand or bacteria which affects functionality. The system requires a set gallon per minute rate of 300 gpm. The County subcontracts a company to maintain the chillers and in the last service call they performed on September 12, 2024, two of the six chiller units were completely clogged with sand. The technician stated they could not service the chillers until the issue with the well (source of water) was addressed as sand in the coils is a clear indication of something not being right with the source. Further, sand can cause harm to the units and could create a bigger issue rendering the whole system inoperable. Since that time the chillers/heaters-coils have been shut off and the temperature of the pool cannot be controlled resulting in higher-than-normal operating temperatures and additional chemicals necessary to maintain water quality. Staff consulted with staff from the Utilities Department for advice and direction to remedy the issues experienced. Utilities recommended that we consult with JLA Geosciences, Inc. who performs specialty hydrogeology work. Staff met with JLA Geosciences Inc (JLA) to investigate the issue and propose solutions to the problem.

**DESCRIPTION AND CONDITIONS:**

JLA submitted the attached proposal (Exhibit A) for exploratory work on the well. This Phase I of the project will include reconfiguring the wellhead to allow access for a video camera system which

would help determine the reason sand is being sucked up into the cooling/heat exchange system. They will collect data on the performance of the well and once all the investigative work is complete, provide a report with recommendations. The cost of this work is \$23,146. Per JLA, some of the worst-case scenarios, like having to drill a new well due to a collapse in the existing well, could cost up to \$200,000. When the Phase I assessment is completed, a plan of action with concrete costs will be obtained and a new agenda item will be presented for approval and notice. We included the total potential costs to ensure the Board is aware of possibilities ahead of time and staff may prepare accordingly. Since this issue was discovered late in September of 2024, there was no opportunity to budget appropriately for this investigative or remedial work.

**FUNDING:**

Funding, up to \$223,146, will come from the MSTU Fund/North County Aquatic Center/Maintenance – Other Equipment/North County Aquatic Well Rehab account, number 00410472-034690-25002. Funds will be appropriated via budget amendment.

Account Description	Account Number	Amount
MSTU Fund/North County Aquatic Center/Maintenance – Other Equipment/North County Aquatic Well Rehab	00410472-034690-25002	\$223,146

**RECOMMENDATION:**

Staff respectfully requests that the Board of County Commissioners approve funding for investigative and remedial work to be performed on the well at North County Aquatic Center not to exceed \$223,146.

**ATTACHMENTS:**

Proposal from JLA

**APPROVED AGENDA ITEM FOR November 5, 2024**