



## INDIAN RIVER COUNTY, FLORIDA DEPARTMENT OF UTILITY SERVICES

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**Date:** April 12, 2019  
**To:** Jason E. Brown, County Administrator  
**From:** Vincent Burke, P.E., Director of Utility Services  
**Prepared By:** John M. Boyer, P.E., Utilities Engineer  
Arjuna Weragoda, P.E., Capital Projects Manager  
**Subject:** John's Island Water Management Reclaimed Water Project - Permitting Status

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### **DESCRIPTIONS AND CONDITIONS:**

John's Island Water Management (JIWM), Inc., is a Florida not-for-profit corporation whose address is 1 Turtle Beach Road, Vero Beach, Florida 32963. JIWM has provided, and continues to provide, irrigation supply to the residents and golf courses within the Town of Indian River Shores (IRS). JIWM, in looking to diversify its fresh water irrigation supply, approached the Indian River County Department of Utility Services (IRCDUS) in 2016 to inquire about the possibility of providing 1 million gallons per day (1 MGD) of reclaimed water (a.k.a. "reuse water") for irrigation purposes. As part of the signed agreement on December 5, 2017, JIWM submitted a Utilities Construction Permit (UCP) application to IRCDUS on or about January 19, 2018, through their engineering consultant, Knight McGuire Associates (KMA) for the construction of a 16-inch reclaimed water transmission main.

### **ANALYSIS:**

The permit documents depict approximately 21,000 linear feet (lf) of 16-inch diameter reuse water main, including approximately 5,200 lf of horizontal directional drill (HDD) below the Indian River Lagoon. The proposed 16-inch reclaimed water main will connect to an existing 16-inch reclaimed water main at the intersection of 77<sup>th</sup> Street and Old Dixie Highway, run south along Old Dixie Highway to 69<sup>th</sup> Street, and east under US Highway 1 along 69<sup>th</sup> Street to the Indian River Lagoon. The subaqueous alignment of the proposed HDD runs between the east end of 69<sup>th</sup> Street, below Hole in the Wall Island and Pine Island, to the Old Winter Beach Bridgehead Park at the west end of Old Winter Beach Road (OWBR). The proposed reuse main then continues on to John's Island via Old Winter Beach Road and south along Highway A1A. Note the OWBR portion of the reuse main has already been installed.

Out of an abundance of caution, and due to the technically complex and environmentally sensitive nature of the subaqueous portion of this project, IRCDUS reached out to engineering firm Brierley Associates for a peer review of the proposed subaqueous bore design. Brierley Associates has extensive knowledge and experience in large-diameter, long-distance horizontal directional drilling. In the time since, KMA has retained the services of an HDD expert and has worked to address the comments issued by both Brierley Associates and IRCDUS staff. As of this agenda, there are still pending items that need to be addressed before IRCDUS can issue the UCP.

On February 15, 2019, IRCDUS staff issued a request for additional information to KMA, including comments from both Brierley Associates and IRCDUS staff. To date, KMA has not submitted a response.

**FUNDING:**

Funds for the John’s Island Water Management Reclaimed Water Project Permit Review are derived from the Other Professional Services account in the operating fund. Operating fund revenues are generated from water and sewer sales. Note these funds have already been encumbered.

<b>Description</b>	<b>Account Number</b>	<b>Amount</b>
Other Professional Services	471-23536-033190	\$15,347.43

If the BCC decides to move forward with this project, then staff will bring an agenda item back to the Board for approval for additional funding for IRCDUS infrastructure upgrades required for the reclaimed water requested by JIWM and Construction Engineering Inspection (CEI) assistance.

**RECOMMENDATION:**

This is only an update of the status of the Utility Construction Permit to the Indian River County Board of County Commissioners, and no decision is requested of this item.