# **Loxahatchee River District**

Water Reclamation | Environmental Education | River Restoration

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D. Albrey Arrington, Ph.D., Executive Director



### **MEMORANDUM**

TO: D. Albrey Arrington, Ph.D.

**Executive Director** 

FROM: Kris Dean, P.E.

**Director of Engineering Services** 

DATE: November 12, 2015

SUBJECT: Director's Report - Engineering Division

November 2015 Board Meeting

### **Developer Projects**

Staff were active on 11 Developer projects including the following activities.

<u>Plan Review</u>: Staff performed plan reviews and approvals and attended project coordination meetings for the following projects.

*Sonoma Isles Residential:* This project provides a gravity collection system and lift station to serve approximately 275 residential units and club facilities. This project was formerly known as Lakewood and Parcel 19.

*Barcelona Commercial*: The project provides development consisting of medical, office, retail and restaurant space with connection to the existing gravity system completed last year to service Barcelona.

<u>Construction</u>: Staff performed construction inspections, shop drawing review, RFI responses and/or attended preconstruction meetings for the following projects.

Jupiter Motor Coach Resort Onsite: This project provides a private lift station and collection system to serve approximately 100 recreational vehicle hook-ups and community facilities. It will ultimately connect to the District via a 6" force main being installed as part of a separate project.

Sonoma Isles Commercial: This project provides a gravity collection system to serve the new commercial development at Sonoma Isles (fka Lakewood).

Windsor Park North and West: Abandonment of services and installation of new services to accommodate revised development in the area.

<u>Final Completion</u>: Staff performed final completion activities to include final inspections, record drawings review and punch lists.

*Ocean Breeze:* This project provides a private gravity collection system and private lift station to serve 24 units on US 1 south of Marcinski Park.

*Trump National Golf Club:* The project provides a private pump station to serve Trump National Ball Room with seating for 500.

One Year Inspections: None

## **Capital Projects**

Staff were active on 13 Capital projects including the following activities.

Design/Bid: Staff are currently in the design or bidding phase for the following projects.

General Maintenance/Repair Services for Wastewater and Reclaimed Water: An inhouse project, staff are working on a general services contract to use for small gravity system repair projects, paving and restoration. This contract was awarded at the October Board Meeting.

Lift Statin Rehabilitations for 2016: Staff have completed the preliminary design for rehabilitation of lift stations 62, 151 and 157.

Merritt Way Low Pressure Service Upgrades: Staff have completed the design of low pressure service upgrades for Merritt Way.

## Consultant Projects:

Master Lift Station Rehabilitation Preliminary Engineering Report: Staff coordinated with the consultant for flow and pressure measurements. This project looks at the final phase of rehabilitation for the Master Lift Station located just east of Pennock Ln and Indiantown Rd. The project will include pump replacement, electrical system evaluation, piping modifications, bypass facilities, isolation valves and coatings.

Rolling Green Low Pressure System: Staff assisted in field inspections and resident coordination during construction activities. This project is a neighborhood sewering project for 24 properties located on Rolling Green Rd west off Ellison Wilson Rd, just south of Bert Winters Park.

Alternate A1A Subaqueous Crossing Preliminary Engineering Report: Staff coordinated with the consultant for pressure measurements. This project looks at the replacement options and emergency bypass pumping plan for the 24" wastewater force main crossing the Loxahatchee River at Alternate A1A.

Loxahatchee River Road IQ Main Replacement: Staff are coordinating with the consultant to resolve permitting requests from Palm Beach County Land Development. This project replaces the existing aerial crossing just north of the Eagles Nest development with a subaqueous directional drill.

Jupiter Inlet Colony Neighborhood Rehabilitation: This project provides a gravity collection system and lift station to serve the approximate 240 homes and town facilities located in Jupiter Inlet Colony. Please see Tab 6C for further details.

Little Oaks/River Oaks Gravity Collection System: Staff coordinated with the engineering consultant, attended progress meetings and provided periodic site inspections for progress, construction materials and dewatering sampling for this project that installs a gravity collection system and lift station to serve a combined 71 lots in the Little Oaks and River Oaks developments off of Roebuck Road.

Maplewood Drive Force Main: Staff performed plan, specification and permit reviews for this project that installs a new back up force main from LS 21 to the force main in Indian Creek Parkway.

Jupiter Plantation Force Main Replacement: Staff performed plan, specification and permit reviews for this project that replaces the existing force main from LS 13 in Jupiter Plantation to the gravity collection system in Center St.

<u>Construction</u>: Staff provided construction inspection and engineering oversight for the following projects.

2015 Lift Station Rehabilitations: This project provides rehabilitation and upgrades to 5 existing District lift stations that are deficient.

Riverside Improvement Area Gravity Sewer Rehabilitation: The project rehabilitates approximately 6,000 linear feet of 8 – 12" gravity mains and numerous services identified for repair.

Final Completion: None

One Year Inspections: Staff performed one year warranty inspections on the following projects.

*Island Way North Force Main:* This project installed an 8" transmission force main from along Island Way from the Moorings to the existing force main at Bridgewater.

## **Other Utility Projects**

These projects include plan review, coordination and inspections associated with other utilities such as the Town of Jupiter, Village of Tequesta, Town of Juno Beach, Palm Beach County and Martin Co.

Jupiter Town Site (Town of Jupiter): Staff reviewed plans and coordinated with the Town's consultant to resolve various conflicts between the District's sewer and the proposed drainage plans.

A1A Bike Lane Project (Town of Jupiter): A project that expands the A1A between US 1 and Indiantown Rd. Various modifications to District infrastructure are included to accommodate the project.

Jupiter North (Town of Jupiter): A project to replace existing water mains in portions of Jupiter north of the river. Staff are locating all sanitary service laterals and cleanouts in the area and coordinating with the Town to limit conflicts.

## **Construction**

Staff were involved in various projects including the following activities.

Jupiter North (Town of Jupiter): Staff are working to raise and repair buried and/or damaged cleanouts identified during investigations/locations for the Town of Jupiter.

*IQ Main Repair:* Staff repaired a leak on the 16" IQ Main along Loxahatchee River Road.

## **Standards Updates**

Lift Station Electrical and Control: Staff are currently working on final revisions to the lift station electrical and control standards to address changing FDEP rule requirements

#### Miscellaneous/Updates

Center Street Insitu Repair: During this project a major leak in the gravity system on Marlin Dr. was repaired. It has been six months since the repair and staff reviewed run time data from Lift Station 27 to determine what effect, if any, this repair had on the system. Preliminary projections show this leak repair reduced average flows into the lift station by 10 gallons per minute. This equates to 14,400 gallons per day (about the volume of a residential pool) and over 5 million gallons per year.

Signed,

Kris Dean, P.E. Director of Engineering Services

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