MEMORANDUM

TO: Albrey Arrington, Ph.D. / Loxahatchee River District

COPY: Clint Yerkes / Loxahatchee River District

Tom Vaughn / Loxahatchee River District John Koroshec / Hazen and Sawyer Felipe Martinez / Hazen and Sawyer

FROM: Albert Muniz / Hazen and Sawyer

DATE: March 10, 2016

FILE: 42009-012.3.1.3

SUBJECT: Loxahatchee River District

Engineer's Monthly Status Report through February 2016

The following is a summary of work performed by Hazen and Sawyer, P.C. (Hazen) on Loxahatchee River District (LRD) projects through the above referenced date.

General Operational Assistance – This project involves providing LRD with engineering assistance related to wastewater operations.

Monthly Progress

- LRD staff and Hazen personnel continue to communicate to discuss plant operations on an as needed basis. The wastewater treatment process continues to perform well
- Hazen continues to provide assistance on an as needed basis

Deep Bed Sand Filters – Final Design and Construction Management Services – The existing traveling bridge filters and filter structure have served the LRD wastewater treatment facility for over 20 years and are in need of significant rehabilitation and repair. In lieu of repair and replacement, it is the LRD staff's desire to replace the filters with deep bed sand filters. Deep bed filters offer additional benefits over traveling bridge filters including de-nitrification capabilities as well as proven performance during plant upset conditions. Design of the project is complete and the project has entered the construction phase.

Monthly Progress

- A pre-construction meeting was held on January 13, 2016 and Kirlin was issued a Notice to Proceed on January 18, 2016
- · Kirlin has secured all building and trailer permits and has been mobilizing on-site
- Construction trailers are on-site and are in final stages of water, sewer and electrical hook-ups
- Progress meetings are being held bi-monthly
- Shop drawings are being submitted by the contractor for engineering review
- · Geotechnical work (subsurface vibro-compaction) associated with the filter subgrade is schedule



to commence the week of March 7, 2016 and is anticipated to be completed within a three to four working day period.

 Installation of formwork and steel placement for the deep bed filter floor slab should commence in March 2016

Mechanical Integrity Testing for 2016 – Hazen was authorized to begin permitting for the 2016 standard 5-year Mechanical Integrity Test (MIT) as required by the injection well operating permit. Testing must be completed by May 31, 2016. Below is a summary of activities performed to date:

- Hazen submitted the MIT plan to FDEP on November 11, 2015
- FDEP reviewed the plan and approved it on November 13, 2015
- Hazen has finalized the technical specifications and will coordinate with LRD staff to determine if the project will be bid or piggy-backed with a publicly bid similar project in January 2016
- Hazen provided a copy of recent publicly bid project for conducting the MIT. LRD staff is coordinating contract arrangements and it appears that we will be able to use the piggy-back method to contract with a drilling contractor. The MIT will be scheduled for April or early May 2016

As always, please feel free to contact us should you have any questions or need to discuss the progress of any of the above projects in more detail.





LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT

ENGINEER'S MONTHLY STATUS REPORT THRU FEBRUARY 29, 2016

JUPITER INLET COLONY NEIGHBORHOOD REHABILITATION

- Pre (Pre) Construction meeting conducted on February 2nd between LRECD, VoT, JIC, Giannetti Construction, Kimley-Horn, and Arcadis.
- · Shop drawing submittal process ongoing.
- Jupiter Inlet Colony Rehabilitation Project Share Point site was developed.
- Pre (Pre) Construction meeting No.2 was conducted on February 23rd between LRECD, VoT, JIC, Giannetti Construction, Kimley-Horn, and Arcadis.
- Preconstruction video recording of JIC was conducted on February 29th and March 1.
- Modifications to construction plans to narrow the pavement width per JIC request has begun.
- Coordinating "official" Pre-Construction conference to be held March 22nd.

Sira Prinyavivatkul, PE

ARCADIS, Inc

Kimley-Horn and Associates, Inc.

Thomas C. Jensen, PE



HOLTZ CONSULTING ENGINEERS, INC.

50 South U.S. Highway One, Suite 206, Jupiter, FL 33477 (561) 575 2005

MEMORANDUM

To: Clint Yerkes, Deputy Director, Loxahatchee River Environmental Control District

From: Christine Miranda, PE

Holtz Consulting Engineers, Inc.

Date: March 10, 2016

Subject: Loxahatchee River Environmental Control District Monthly Status Report

The following is a summary of work performed by Holtz Consulting Engineers, Inc. (HCE) on Loxahatchee River District projects through March 10, 2016:

Loxahatchee River Road Reclaimed Water Main Replacement

• We are waiting for the Florida Department of Environmental Protection to issue the submerged land lease. This is the only outstanding permitting issue. Upon receipt of the submerged land lease the final plans and specifications will be submitted and the project can be advertised for bidding.

Jupiter Plantation Lift Station #13 Force Main Replacement

• The bid opening was held on March 3, 2016. Three bids were accepted for the project. Upon review of the bids, recommendation was made to award the project to B&B Underground Construction, Inc. the low responsive and responsible bidder in the amount of \$105,200.

Maplewood Lift Station #21 Force Main Extension

- The project was advertised for bidding on February 28, 2016.
- The pre-bid meeting is scheduled for March 22, 2016.
- Bids will be opened on April 7, 2016.

Turtle Creek Phase I

- The 30% design submittal and cost estimate for Subsystem 5 will be submitted to staff during the week on February 17, 2016.
- We are currently working on incorporating the 30% comments and working on the 90% design submittal. This will be submitted by the end of the month to staff for review and comment.



Loxahatchee River Environmental Control District Monthly Status Report March 10, 2016

Submitted To: Clinton Yerkes, Deputy Director

The following is a summary of work performed by Mathews Consulting, Inc. (MC) on District projects through March 10, 2016.

Little Oaks / River Oaks Neighborhood Sewering

The Construction Contract was awarded to Foster Marine Contractors in the amount of \$1,548,615. NTP was issued to the Contractor on 7-20-15. The Substantial Completion date was 2-19-16 and the final completion date is anticipated to be 4-24-16. MC attended the monthly meeting, reviewed shop drawings, responded to RFI's, coordinated construction activities with the District, Contractor and PBC, and provided resident inspection services.

Alternate A1A Subaqueous Forcemain Study

A kick-off meeting was held with the District on 9-18-15. MC completed preparing the Base Drawings; conducted a field reconnaissance of the pipeline corridor on both sides of the bridge; completed photographic log walk-thru of the project; and completed Utility coordination. The District provided MC with the requested downstream pressure readings on 10-23-15. MC completed the hydraulic modeling task now that we have this information. MC continued development of the Draft Preliminary Design Report. A coordination meeting was held with the District on 1-27-16 to discuss the alternatives to rehab/replace the Alt. A1A subaqueous forcemain.

The Draft Temporary / Emergency Bypass Pumping Plan was submitted to the District for review on 1-13-16. The District provided MC comments on the Draft Temporary / Emergency Bypass Pumping Plan on 2-10-16.

MC has been coordinating with Hazen regarding their project with the Town of Jupiter for a new water main to be attached to the A.1.A. Bridge. A force main will also be added to Hazen's project that will be the selected alternative for the Alternate A.1.A. FM Study.

Master Lift Station #1 Rehabilitation

MC completed the Preliminary Design Criteria to be incorporated into the Preliminary Design Report. MC prepared a Flow Analysis Technical Memorandum and submitted it to the District on 1-5-16 for review and comment. Final comments were received from the District on 2-3-16. MC is currently finalizing the Draft Preliminary Design Report.

Respectfully Submitted by:

MATHEWS CONSULTING, INC.

Rene L. Mathews, P.E.

President