



Legislation Text

File #: R-2020-189, **Version:** 1

A Resolution Of The City Commission Of The City Of Hollywood, Florida, Approving And Authorizing The Appropriate City Officials To Execute An Authorization To Proceed For Work Order Number ARC 20-04 With Arcadis US, Inc. To Provide Professional Engineering Services For The Steel Vessel Filters And Spiractors Evaluation, In A Lump Sum Amount Of \$72,850.00.

Infrastructure & Facilities

Staff Recommends: Approval of the attached Resolution.

Explanation:

The City of Hollywood's Water Treatment Plant ("WTP") is a 60 million gallons per day (MGD) plant that not only provides high quality water to the residents of the City but also serves approximately 300 acres in the Town of Davie, 50 acres in the City of Dania Beach, and 100 acres in the Seminole Tribe of Florida reservation. WTP also provides wholesale water to Broward County's Water and Wastewater Services Districts 3A and 3B/C. In addition to retail and wholesale water services, the City has an emergency connection with the City of Dania Beach, which withdraws water from the City's system to maintain its system pressure.

WTP treats raw water from wellfields in the Biscayne and Floridan aquifers using three major treatment processes: lime softening ("LS"), membrane softening ("MS"), and reverse osmosis ("RO"). The water treated by each process is blended, disinfected, and pumped into the service area. The LS system was originally constructed in 1967 with treatment capacity expanded in phases. The major equipment/structures included in this system are lime silos, spiractors and filters.

The LS system treats water using a process known as fluidized bed crystallization which softens raw water in treatment units referred to as spiractors. After the water is softened in the spiractors, it is filtered by sand/anthracite steel vessel filters or by six traditional dual media (open) filters. The LS plant has provided reliable, high-quality water treatment for over 50 years. However, in recent years, several of the steel vessel filters have experienced increased repair due to ongoing steel corrosion.

On June 19, 2019, the City Commission approved Resolution No. R-2019-178, to conduct the

Water Infrastructure Risk and Resilience Assessment mandated by the Environmental Protection Agency (“EPA”). This assessment identified the need for improvement of the steel spiractors’ structural supports.

On September 20, 2017, City Commission approved Resolution No. R-2017-283 authorizing continuing consulting engineering contract to provide professional consulting engineering services related to water treatment plant and wastewater treatment plant projects.

This agenda item seeks approval of Authorization to Proceed (“ATP”) for professional engineering services with Arcadis US, Inc. for the Steel Vessel Filters and Spiractors Evaluation in a lump sum amount of \$72,850.00.

Upon authorization from the City Commission, the project will be completed in approximately three (3) months from the date of ATP.

Fiscal Impact

Funding for this project was included in the FY 2020 Adopted Capital Improvements Plan that was approved via Resolution R-2019-284, and is available in account number 442.409901.53600.531300.000744.000.000.

The Department of Public Utilities staff will manage this project. No additional staff is needed as a result of this project.

Recommended for inclusion on the agenda by:

Clece Aurelus, Interim Assistant Director, Department of Public Utilities

Vivek Galav, Director, Department of Public Utilities

Gus Zambrano, Assistant City Manager/Sustainable Development

Attachments

01 Resolution - ARC 20-04 Steel Vessel Filters and Spiractors Evaluation

02 ATP - ARC 20-04 Steel Vessel Filters and Spiractors Evaluation

03 Proposal - ARC 20-04 Steel Vessel Filters and Spiractors Evaluation

04 R-2017-283 Agreement (Executed) - ARC 20-04 Steel Vessel Filters and Spiractors Evaluation

05 R-2019-178 (Executed) - ARC 20-04 Steel Vessel Filters and Spiractors Evaluation