



THE CITY OF KEY WEST

Post Office Box 1409 Key West, FL 33041-1409 (305) 809-3700

EXECUTIVE SUMMARY

Date: January 24th, 2020
To: Greg Veliz, City Manager
From: John Paul Castro, Director of Utilities
Cc: Patti McLaughlin, Assistant City Manager

Subject: Approve Task Order No. 6 from Black and Veatch Engineering for the design, bid, pre-award, and construction services for the aeration upgrades and electrical switchgear replacement at the Richard A. Heyman Environmental Facility.

Action Statement

This Resolution would approve task order no. 6 from Black and Veatch Engineering pursuant to resolution number 17-207 in the amount of \$228,650. Task order no. 6 is to design the replacement of the electrical switchgear at the WWTP and combine the bid documents and bid and construction phase services with the aeration blower project at the Richard A. Heyman Environmental Protection facility.

Background

The aeration blower project was designed by Black and Veatch in 2019. When combined with the new effluent pump project and HVAC required to cool the room that houses the variable frequency drives the load study results concluded the main switchgear would be near 95% design capacity.

Purpose and Justification

The City applied for plan review with KEYS for the aeration and HVAC project who noted the electrical potential was reaching the capacity of the 30-year-old transformer. KEYS is willing to upgrade their transformer and coordinate the switchgear replacement further reducing costs of running the main cables.

Adding all the new equipment into the electrical room with old switchgear and an old transformer only meant additional cost in the future to rewire those components when upgrading the main electrical system. Staff recognizes the need to reprioritize the projects to have the switchgear complete before additional VFD's

MEMORANDUM

and controllers are installed and tasked Black & Veatch to design the electrical system.

The aeration blower design has been shelved since late last year and will be added to the bid package for the switchgear. This will allow a single contractor to install the new electrical system, coordinate with KEYS for the treatment plants new transformers, and then install the aeration blower VFD's and turbo blowers in one project.

The new heat loads for the electrical gear will require cooling and the HVAC project for the electrical room was bid in December 2019 with expected install complete prior to the switchgear project bidding.

Staff has reviewed the labor mix and effort and considers the task order to be fair and reasonable.

Financial

Electrical switchgear upgrades project, SE35042002, was budgeted for \$1,620,000 in FY20 in account Sewer/Treatment Plant/CIP 401-3504-535-6500.

Recommendation

Approve task order no. 6 in the amount of \$228,650 from Black and Veatch Engineering pursuant to general engineering services contract, resolution 17-207, for the design of the electrical switchgear replacement at the WWTP and bid and construction phase services for the electrical switchgear upgrades and aeration system upgrades.