



STAFF REPORT

CITY OF GREEN COVE SPRINGS, FLORIDA

TO: City Council Regular Meeting **MEETING DATE:** March 18, 2025

FROM: Scott Schultz, Asst. Water Utilities Director

SUBJECT: City Council approval of the modification of Sawcross (Tender Contractor) Change Order #2 (approved 3/4/2025), which becomes SRF Project Contract Modification #4 in order to include the cost in the SRF loan, in the modified amount of \$64,411.13 (originally \$30,578.23) for sludge processing improvements, modified motor thermal protection systems and enhanced electrical protection for variable frequency drives, for the Florida Department of Environmental Protection (FDEP), State Revolving Fund (SRF), Harbor Road Water Reclamation Facility (WRF) Expansion, Phase 2, SRF Agreement No. WW1000420.

BACKGROUND

Task 1: During the Phase I construction (2021) of the Harbor Road WWTF modifications were performed on the sludge processing system which allowed flexibility in the use of the four aerobic digesters. Several plug valves were installed as a part of this process. There appears to have been a manufacturers defect in the valves as over time they have become almost impossible to operate (open / close). Additional modifications to the sludge processing systems are currently taking place as part of the Phase II construction. Excavations will be taking place near the faulty valves. Task 1 of this change order is to replace all of the plug valves with gate valves. Since work is taking place around the faulty valves, the majority of the cost is the valves themselves.

Task 2: Every two months an external vendor brings a mobile centrifuge onto the facility to process sludge (the byproducts removed during the sewage treatment process). The centrifuge has to be staged very close to the digester tanks. In addition, a very large portable generator has to be used to power the centrifuge which requires a significant amount of power (amperage). The designed staging location as part of the plant expansion requires the tractor trailer to “jackknife” in order to back into a very tight staging spot. During the summer this will ultimately result in scarring of the newly placed asphalt. Staff have created a different spot on the plant site that will be much easier to stage the tractor trailer. Task 2 of this change order is to relocate the suction piping and the electrical feed to the new location. The electric feed will eliminate the need for a generator to power the centrifuge.

Modification to CO#2 Approved by Council 3/4/2025:

Task 2: Sawcross did not include the \$11,046.33 cost of relocating the electrical panel in the original estimate

Task 3: The variable frequency drives have “tripped out” during the testing / recirculation of reclaimed water due to storm conditions. It has been determined that the inclusion of DV/DT filters in the electrical wiring will eliminate the sensitivity in the drives.

Task 4: The thermostatic protections for the electric motors that power the return activated sludge pumps were designed to be terminated in the programmable logic controller (PLC). The most effective location to terminate these devices is directly to the variable frequency drives (VFD).

Staff plans on this being the last change order / contract modification and should carry us to closure of the project.

FISCAL IMPACT

\$64,411.13 to the Wastewater CIP Budget. Staff will attempt to add this change to the SRF loan associated with the project.

RECOMMENDATION

Approve the modification of Sawcross (Tender Contractor) Change Order #2 (approved 3/4/2025) and approve the inclusion of these costs in SRF Project Contract Modification #4.