



Knollridge South and West Pump Station Replacements

Location: Central

Number: 26-2015-0094, 26-2019-0077

GL Number: 407-000-189-00-01-40, 407-000-189-00-01-62

Phase: Construction

Project Manager: Jerry Barnett

GSP Basin: Knoll Ridge - 2-1001

Capital Improvement Project

General Facilities

District Installed Infrastructure

Septic Elimination Program

Developer Reimbursement Program

Fleet & Facilities

Restoration & Replacement Project

Restoration & Replacement – Gravity

Restoration & Replacement – PS & FM

Restoration & Replacement – Fleet & Facilities

Project Definition:

Background. The current pump stations are silo stations with pumps, and valves in the same structure. This configuration requires confined space entry procedures for any maintenance or inspection of the mechanical components of the pump station.

A pump station risk assessment was completed in 2022, assigning risk profile scores of 2.1 and 2.0, making these the highest ranking pump stations. Based on the condition of the pump stations, risk profile scores, and safety concerns, the pump stations are being replaced. The sewer basin served by the pump stations are already built out, so no capacity upgrades are required.

Objective. Replace the existing pump stations to meet current District standards to increase safety and reliability, while decreasing maintenance risks/costs.

Scope of Work. Abandon existing silo pump stations. Relocate new stations with new wetwells, pumps, valve vaults, electrical and control panels, piping, and other appurtenances. Install gravity sewer and force main to accommodate new pump station locations.

Project Statistics. Gravity Sewer – 125 feet of 8-inch gravity sewer. Force main – 150 feet of 4-inch force main.

Pump Stations – 5 hp duplex submersible pumps for 130 gpm capacity; 14.8 hp duplex submersible pumps for 220 gpm capacity; wetwells; single phase electrical service; control panels; valve vaults.

Photos: (Map of area on the reverse side)

Budget Information:

Project Cost Estimate:

Total Project Cost:	\$2,375,750
Construction Cost:	\$2,000,000
Basis of Estimate:	Bid Award
Date of Estimate:	Sept. 2023

Schedule Information:

<u>Activity</u>	<u>Year</u>
Predesign	2020
Permitting	2020
Real Property/ROW	2020
Design	2020-2022
Bid	2023
Construction	2023-2024

