

## **JIPSD Phase 1 PS-33 Force Main Capacity Upgrade/Bypass Project**

### **JIPSD CIP PN WW2024-2 | SCDES SRF PN 543-26**

Increasing peak period wastewater discharge from JIPSD Regional Pump Station-33 into the over four decades old receiving trunk sewers has increased the probability of periodic surcharging and raw sewage overflows due to the lack of adequate peak flow rate transmission capacity. The service area of PS-33 and the existing downstream trunk sewers currently accommodate wastewater from approximately 45% of the JIPSD service area including Sol Legare Island and the City of Folly Beach. This large area, located primarily south of Ft Johnson Road and Riverland Drive is experiencing continuous residential development, redevelopment, and densification as population growth continues unrelentingly within this only remaining low density, partially undeveloped portion of James Island. The future of expanded public sewer service on Folly Island, currently served predominately by aging on-site septic tank and tile field systems, is also anticipated to occur within the next decade due to increasing non-point bacterial contamination from stormwater runoff into adjacent tidal waters and marshes,

The previously cast-in-place-pipe (CIPP) lined 21" VCP and 24" DIP trunk sewers located on Ft. Johnson Road and Dills Bluff Road downstream of PS-33 ultimately discharge into the JIPSD Regional PS-11 on Dills Bluff Road. These fragile vitrified clay pipe (VCP) trunk sewers have reached their functional hydraulic capacity and, arguably, their design life cycle. The previous CIPP lining also reduced their functional full flow capacity by approximately 22% by reducing their cross-sectional area.

This proposed project will include the construction of approximately 7,343 ft, of 18" nominal Dis. (15.74" ID) HDPE force main installed in three separate HDD installations, approximately 50 ft. of C905 PVC installed by open-cut trenching, a junction connection with the 16" PS-33 Force main at the Ft. Johnson Rd/Secessionville Road intersection, a new force main discharge connection into the PS-11 receiving manhole, an emergency flow diversion cross-connection with the PS-16 existing 12" force main, 4 air release valve assemblies, associated roadway crossing repairs, and the acquisition of both temporary and permanent force main easements adjacent to and abutting SCDOR rights-of-way of Ft. Johnson and Dills Bluff Roads. The estimated total cost of this proposed project is \$7.87 million.

A Public Hearing to describe this proposed project and accept public comments will be held during the regular JIPSD Commission Meeting at 6:30 PM on Monday, April 28, 2025. The meeting will be held at James Island Fire Station 1, located at 1108 Folly Road Charleston, SC 29412.