

Gravity Pipeline Project

Owner:

Silicon Valley Clean Water (SVCW)
San Francisco Bay Area, CA

Client:

Tanner Pacific

Role:

Construction Management –
Technical, Procurement & On-Site
Advisory Services

Key Characteristics:

- 3.3-miles of 16-ft outside excavated dia. w/ finished 12-ft inside dia. FRP pipe
- EPB Herrenknecht TBM w/ fiber reinforced concrete segments
- 25 to 70-ft deep Conveyance and Storage Wastewater Sewer Tunnel
- Three shafts:
 - AAS: 50-ft deep, 58-ft dia. slurry wall
 - WWTP: 70-ft deep, 36-ft dia. slurry wall
 - Bair Island: 40-ft deep, 35-ft W x 60-ft L sheet pile
- Progressive Design-Build Project Delivery

Professional Services:

From: August 2017
To: Present

Silicon Valley Clean Water (SVCW) is undertaking the Regional Environmental Sewer Conveyance Upgrade (RESCU) program to replace and rehabilitate its existing facilities in Redwood City, California. As an important part of RESCU, the Gravity Pipeline project will convey, and equalize wastewater flows traveling to its Wastewater Treatment Plant (WWTP). The project includes 3.3-

miles of 16-foot outside excavated diameter with a finished 12-foot inside diameter Fiberglass Reinforced Plastic (FRP) pipeline that extends from Bair Island to the WWTP. The project also includes shafts, drop facilities, ventilation, and odor control facilities. Once put into service, the pipeline will normally function to convey wastewater to the WWTP and will also be able to store peak flows for up to two days, mitigating the need for additional capacity upgrades at the plant.

As part of the Construction Management team, JCK Underground is providing technical, procurement and construction inspection advisory services. The project is being built using the Progressive Design-Build contracting method. Our personnel have supported SVCW throughout the procurement process including technical, commercial, and constructability review of the Request for Qualification, and Request for Proposal documents. During the shortlisting, interviewing, selection, and negotiating phases, we provided technical assistance related to means and methods, schedule, and risk. The design phase saw over the shoulder reviews for the shafts, and tunnel, the EPBM design, protection of structures, geotechnical instrumentation, and monitoring systems. Since construction commenced, JCK Underground has continued to provide onsite inspection, monitoring, review of submittal documents, and technical support with work scheduled to be complete by 2022.

Link: <https://svcw-rescu.org/>



“...JCK Underground has provided us with sound, expert advice during procurement and design development and into the construction phase of the program. Their input has been invaluable...” Teresa Herrera, PE, SVCW Manager