

Ronald Wastewater District

Lift Station Nos. 1 and 2 Force Main Replacement

The Force Main (pressure line) between Lift Station Nos. 1 & 2 has been in place since 1970. It is constructed of approximately 900 feet of asbestos cement pipe. Lift Station No. 1 pumps from its location on 17th Place NW & 16th Ave NW through the force main that travels east along Storm Creek and discharges to Lift Station No. 2 located on the west end of NW 185th St off 15th Ave NW. Lift Station No. 2 pumps to a King County Wastewater manhole located at the intersection of 15th Ave NW and Ridgefield Rd. Lift Station Nos. 1 & 2 serve the local Innis Arden neighborhoods. Once the sewage is delivered to the King County Wastewater manhole, it flows north to the Richmond Beach Pump Station located on Richmond Beach Dr. and is then pumped to the City of Edmonds Wastewater Treatment Plant where it is processed and then discharged to Puget Sound.

The District looked at 2 alternatives; replacing the pipe in its present location or relocating it to the street right of ways on 17th Pl, 16th Ave and 185th St. The street alternative would have still required a stream crossing on 17th Pl, cost \$150,000 more and would have been all open cut excavation (very disruptive). The District chose the “pipe bursting method” to replace the existing pipe in its present location.

Ronald Wastewater District’s proposed force main replacement project will replace the aging 6-inch diameter force main pipe by “pipe bursting” a new high density polyethylene pipe (HDPE) in its place. Excavation will be required at bends, pipe crossings, approximately every 300 feet, and across Storm Creek. The majority of the pipe is pulled into place underground through the existing force main. The new HDPE pipe will only have 2 to 4 joints compared to about 80 joints in the existing pipe. High density polyethylene pipe is tough, flexible, and long lasting.

Permits for the project have been secured from the Department of Fish and Wildlife and the City of Shoreline.

There is a standby generator located at the Lift Station No. 1 site. This generator provides power to Lift Station Nos. 1 & 2 during power outages. Conduits housing electrical wire for power and telemetry parallel the existing force main.

The permit from the Department of Fish and Wildlife has a construction window from June 15, 2015 to October 15, 2015. The force main replacement project is scheduled to begin construction in late June or early July and physical work in the field should last about 6 weeks. The schedule relies on the public bidding process and the contractor’s schedule, so it could change to later in the permit window.

The purpose of this replacement project is to provide a secure force main that is not subject to brittle failure and will keep sewage where it belongs, in the pipe and not in Storm Creek or Puget Sound. The construction cost is approximately \$300,000.

Thank you for your interest in this force main replacement project.

If you have questions please call George Dicks, Maintenance Manager at Ronald Wastewater District 206-546-2494 or Scott Christensen, Project Engineer at CHS Engineers 425-637-3693.