



HDPE PIPE CHOSEN FOR DURABILITY AND PERFORMANCE



Case Study

WL PLASTICS COMPLETES THREE MILE LONG DUAL 42-INCH SANITARY SEWER MAIN IN SALT LAKE COUNTY, UTAH

THE PROJECT: South Valley Sewer District in Salt Lake County Utah has constructed a new 3 mile long, dual 42-inch HDPE sanitary sewer force main that is capable of pumping 50 million gallons per day (mgd) of untreated sewage. For decades the South Valley Sewer District has been a part of the South Valley Water Reclamation group. Salt Lake County determined that they would need a new sewage treatment facility to handle the estimated



population growth. To design the project, South Valley Sewer District hired Bowen Collins & Associates Engineering Group of Draper Utah. Planning for the project began in 2002 for construction beginning in 2009. HDPE pipe was the clear choice right from the start. Steven Meyer with Bowen Collins and Associates said, "HDPE pipe is the only pipe option specified for this project. It can take a beating and still perform well."

WL

POLYETHYLENE PIPE

PLASTICS

The Ideal Piping Solution

THE SPECIFICATIONS:

The new pipeline begins at the recently constructed South Jordan Pump Station. From there the twin 42-inch DR17 sewer force main runs over 3 miles to the Jordan Basin Water Reclamation

Facility. Whitaker Construction of Brigham City Utah was awarded the \$10.1 million dollar contract and began work in early summer 2009. There were many obstacles to overcome including river crossings and two under road jack and bore crossings in the UDOT right-of-way. Restoration of wetlands, a golf course, and the Jordan River Trail was also required. Clyde Brown, Project Supervisor for Whitaker Construction stated, "Directional drilling was not an option because the soil conditions were unsuitable. There was just too much water and the bore kept collapsing in on its self. The only way we could cross the Jordan River was to divert it." The average depth of installation was 15ft in an area with extremely high groundwater. "During the project we had a 15 month extreme dewatering program to make installation possible," said Clyde Brown.

ISCO Industries of West Jordan Utah supplied fittings and extra fusion equipment. WL Plastics in Cedar City Utah manufactured the almost seven miles of 42-inch DR17 pipe. Green stripes were extruded into the OD

of the pipe for identification as a sewer line. Michael Forester with South Valley Sewer District said, "It is a requirement (for SVSD) that all sewer force mains be HDPE pipe. We like it because once joined, it is one monolithic, self restrained piece with leak free joints. We've been using HDPE pipe for over 10 years. We couldn't afford to have sewer force mains with joints that leak. It could let raw sewage out into the surrounding wetlands or let water into the pipe which would increase our treatment costs. HDPE pipe performs great so we keep using it." Installation of the twin 42-inch DR17 line was completed in July 2010. South Valley Sewer District is now awaiting completion of the Jordan Basin Water Reclamation facility which is due in the spring of 2012.

