HOBAS[®] Pipe Sliplined Under Highway and Railroad in the US

Like most municipalities, the Texan City of Conroe has maintenance tasks within its water and wastewater system that need to be addressed. One such project, the Interstate 45 Sanitary Sewer project rehabilitated an existing DN 1400 trunk line. The solution consisted of sliplining with 163 meters of 1200 mm diameter HOBAS Centrifugally Cast Glassfiber Reinforced (CC-GRP) Pipe.

Trenchless methods were preferred for this project due to the cover depth, which ranged from 6 to 7 meters, and the amount of surface traffic: The existing line ran underneath a heavily traveled interstate and in one location directly under a popular rail line. HOBAS Pipe USA supplied 6-meter sections of DN 1200, SN 5000 pipe. The pipe designed for this installation utilized a low profile bell and spigot joint. This joint facilitates an easy, quick installation and requires less joining force.

At the railroad crossing "the pipe was sliplined through an existing line that was in place and there was no disturbance to the railroad right-of-way," explained Matt Lewis, project manager with Lewis Contractors. The entire 163 meters of pipe was installed in 14 hours.

The City obtained a permit from the Texas Department of Transportation (TxDOT) to slipline the pipe under Interstate 45. In addition to the sliplining directly under the TxDOT road "we were abandoning manholes along the frontage road so that we could install new ones out of the pavement, allowing us future access without having to shut down a lane and interrupt traffic," explained Erwin Burden, assistant public works director, City of Conroe. "The new manholes that were installed were also manufactured of fiberglass material and were located at the launch pit and one receiving pit. An additional manhole was installed on an existing 500 mm line, which redirected flow into one of the new manholes. There were two existing manholes that were plugged and filled with flowable fill and abandoned," explained Lewis. The high-strength fiberglass composite used for sliplining pipes is designed to withstand the E-80 (rail load) and HS-20 (vehicular) loads.

The completion of this project will ensure that the line remains operational for the City of Conroe. "The City has been proactive in upgrading our sewer system to corrosion-resistant materials," concluded Burden.



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Year of construction 2011 Total length of pipe 136 m Specifications DN 1200, SN 5000 Installation Sliplining Application Sewer Contractor **Lewis Contractors** Investor **City of Conroe** Advantages **Corrosion resistant; easy** and quick installation