W.H. STREIT COMPLETES
PHILADELPHIA SEWER PIPE REPAIR

Firm Sliplines Dual Siphon Under Schuylkill River

This past summer, W.H. Streit completed sliplining operation of a dual siphon which crosses under the Schuylkill River. All underwater work was completed by divers working in raw sewage since the sewage could not be bypassed because of a breach between the two horizontal siphons. W.H. Streit was hired by the Philadelphia Water Department during late 1998 to correct this problem.

The horizontal siphons are an important component of the city's 50-year old sewer system, working in conjunction with the pump station and collectors. The Central Schuylkill Pumping Station conveys material from the east side and west side collectors to the Southwest Treatment Plant. Upper and lower east side collectors merge at a shaft across the river from the station. The flow travels under the Schuylkill River through the 50 inch diameter siphons into a shaft adjacent to the station. Philadelphia's west side collector also flows into this shaft, and the combined flow is pumped into the treatment plant.

During the Christmas period of 1998, divers inspected the pipe to determine its existing condition. In February 1999, workers cut openings in the pipe where obstructions existed and removed the steel lining which had caused these obstructions. The divers then installed and assembled the horizontal slipliner in three foot sections. Each section was lowered into the shaft and connected with a rubber gasket joint. This process was continued until a 600 feet run of sliplining was completed in both pipelines. Beetle Florida manufactured 1500 feet of 42 inch diameter fiber glass pipe for the sliplining tasks. Each end of the pipelines were then sealed by Edwin Brady Construction.

The last step in the work involved pumping low density grout into the space between the original pipe and the slipliner.

This was completed by Pacific International. Gregg Sparks, vice president of operations, and Pete McCarthy, project manager, led the W.H. Streit management team at the site. Anthony Kopicki, project engineer, and Stan Niemczak, design engineer, represented the Philadelphia Water Department on the project.