

Pilot Tube Microtunneling in the City of Omaha, Neb.

Laura Anderson — Sep 01, 2010

During the past two years, the City of Omaha, Neb.'s sewer network received 13,000 ft of new pipelines — all installed by pilot tube microtunneling (PTMT). Two of the four projects are the separation of combined sewers where all linear footage was completed with this method. With two projects completed and one currently



under way, PTMT is exceeding expectations for the City of Omaha.

In order to comply with the federal Clean Water Act, the City is investing millions of dollars over the next 15 years in the separation of combined sewers, named the Clean Solutions for Omaha Program. There are a total of 510 miles of combined sewer pipelines and 345 miles of sanitary sewers that discharge into the CSOs in Douglas and Sarpay counties. Omaha's two wastewater treatment facilities filter wastewater and discharge it into the Papillion Creek and Missouri River. The federal mandate states that Omaha must reduce the number of combined sewer overflow occurrences from 58 to four per year. Improvements are funded through incremental user rate increases. Aside from reduced backups and water quality improvement, additional criterion outlined in the City of Omaha's long-term plan includes minimized community disruption, infrastructure improvements, reduction of street flooding, simplified solutions, compatibility with the community and green opportunities.

In summer 2008, a short amount of pilot tube microtunneling work was completed where 100 ft of 15-in., vitrified clay jacking pipe was tunneled under a high-traffic road and a World War II memorial to ultimately tie into a manhole. This short drive, performed by NorthCore of Fargo, N.D., had to be completed without disturbance.

In July 2008, the OPW 50762 26th & Grant Area Sewer Separation project commenced to create 7,087 ft of 8- to 15-in., vitrified No-Dig clay pipe in residential and business streets. PTMT accounted for \$4.1 million or almost half of the \$8.3 million total. Drive