

Trenchless TECHNOLOGY
**REHAB
SHOWCASE**

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Rehab Road Show
Next Stop: Williamsburg!

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City of Texas City, Texas,
Successfully Replaces Sanitary
Sewer Trunk Main



Products & Innovations for the Rehabilitation of Pipelines Using Trenchless Technology

Kenny Construction Renews Downtown Chicago Sewer

By Michelle Sinning

Contractor uses Inliner Technologies method of CIPP to renew 105-year-old sewer

For Kenny Construction Co., a licensee of Inliner Technologies, installing cured-in-place pipe (CIPP) to renew large-diameter sewers is a familiar task. Since the inception of the Inliner division in 1993, Kenny Construction has lined more than 250,000 ft of pipe ranging from 36 to 84 in.

So when Kenny Construction was tasked with rehabilitating nearly 6,000 ft of combined gravity sewer up to 7 ft in diameter, the company was confident that even though the sewer ran under a major Chicago artery lined with residential high-rises the project would present few surprises.

We have enough confidence in our people and Inliner's technology to know that we could bring this project to fruition, said Ralph Bonanotte, general manager of Kenny Inliner.

The Bigger Picture

When a large diameter brick sewer collapsed during the cleaning stage of

a rehabilitation project in 2002, the Department of Water Management (DWM) decided it was time to get proactive. With most of the City's wastewater infrastructure being more than 100 years old, the mortar that held together the three-ring brick sewers was in terminal condition.

This particular incident brought to light the potential for catastrophe.

The soil surrounding the sewer lines has a high sand content, said Wallace Davis III, DWM general superintendent. Many of the City's sewer lines are located in proximity to water mains. If a sewer line failed, the flow could easily wash supporting soil away from the water mains, leaving them unsupported.

Story Continues on Page 6

Product Announcements

New Static Bursting System from TT Technologies

The Grundoburst 30TX and 50TX static pipe bursting systems from TT Technologies provide 30 tons and 50 tons of bursting power, respectively. The 30TX is designed for bursting pipe up to 6 in. in diameter and the 50TX is designed for bursting pipe up to 10 in. in diameter. Both systems are capable of bursting steel pipe and are ideal for gas, water and sewer applications.

In addition to steel pipe, several cutter head configurations are available for splitting VCP, PVC, ACP, cast iron and more. The systems are compact, portable and easy to use.

TT Technologies

RS #101



Thompson Pump's Innovative Modular Silent Knight Canopy

Thompson Pump introduces the industry's first fully modular, sound-attenuated, drop-on canopy, called the Silent Knight.

The Silent Knight is able to reduce noise levels to at or below 70 decibels at 7 m making it perfect for applications in residential areas. The Silent Knight also features the Enviroprime system, which prevents sewage, debris and chemicals from discharging onto the ground, keeping the surrounding environment clean, safe and quiet.

The Silent Knight has proven itself to be more than capable of handling bypass pumping, trench dewatering, wellpoint operation, flood drainage, emergency pumping and other dewatering applications.

Visit us at APWA, booth #2239.

Thompson Pump

RS #102



Pipe Ranger

CUES Inc., the leading manufacturer of pipeline inspection equipment, recently announced the introduction of the newly developed, all-wheel-drive transporter Pipe Ranger. Specially developed for the traversal of storm drains and pipe with large amounts of debris and silt, Pipe Ranger features a two-speed transmission, producing superior pulling power in lines ranging from relined 8 through 48 in. With the larger diameter tires installed, this unique transmission can double the torque of the unit. Three wheel sizes are provided for maximum performance. At a mere 31 in. in length, assembled with a pan-and-tilt camera, Pipe Ranger can negotiate the most difficult of entry conditions. Pipe Ranger sets the new standard of the industry for wheeled transporters.

CUES Inc.

RS #103



The Pipe Plug

The Pipe Plug is a non-pressure plug that ranges from 6 to 60 in. These plugs fit all types of pipe. Each plug has a watertight friction gasket that keeps the pipe free of contaminants. The plugs are made of high-density polyethylene, which makes them lightweight. The plugs are very durable and can be re-used. The Pipe Plug can be used as a temporary or even a permanent plug. The main function of the plug is to keep debris, water, mud or even animals out of the pipe, thus saving the contractor time in cleaning out the pipe. Call us at 800-928-1218 or visit our Web Site: www.thepipeplug.com

Taylor Made Plastics Inc.

RS #104



Complete contact information for all product announcements can be found in the Contact Directory on page 22.

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Kenny Construction Renews Large Diameter Sewer Near Downtown Chicago

Contractor uses Inliner Technologies method of CIPP to renew 105-year-old sewer

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The Project

One of the areas being evaluated a home with a combined gravity sewer line that runs under Sheridan Road between Thorndale Avenue and Devon Avenue adjacent to the Loyola University campus was of particular concern because the street is a major artery connecting Chicago's northern suburbs to its downtown. The area is home to 15,000 residents and, with commuter traffic, sees a daily count of approximately 55,000 vehicles.

And not only could a sewer collapse cause soil to be washed away from a nearby water main, but there were additional concerns about it being loosened from the foundations of area residential high-rises, explained Davis.

Since replacement would have cost more than \$15 million and require that the streets be completely closed for two years, the city decided its most viable option was trenchless rehabilitation.

Kenny Construction was awarded the \$2.8 million contract to install Inliner Technologies method of CIPP to restore the 105-year-old sewer. The project called for lining 5,700 ft of pipe ranging from 60 to 84 in. in diameter.

The project, begun in March 2003, also required the rehabilitation of forty, 8-in. catch basin laterals. The four-lane Sheridan Road was restricted to two lanes, as the work required large pieces of construction equipment to be situated in the roadway.

During the cleaning phase, Kenny Construction built four new access shafts, then lowered a skid steer loader into the sewer. Workers used the loader to push debris to a point where vacuum trucks could be used to remove the debris from the pipe.

While wet-out, or resin impregnation of the liner bags, traditionally occurs in a controlled facility environment, because the pipe was so large, the resin-impregnated bags would have been too heavy to feasibly haul to the installation site. So Kenny Construction set up large conveyor equipment and boiler trucks, performing the wet-out as the liner was fed into the sewer.

Crews worked around-the-clock to install the CIPP, which was divided into 700-foot stretches for each inversion, said Bonanotte. The installation process itself went along flawlessly.

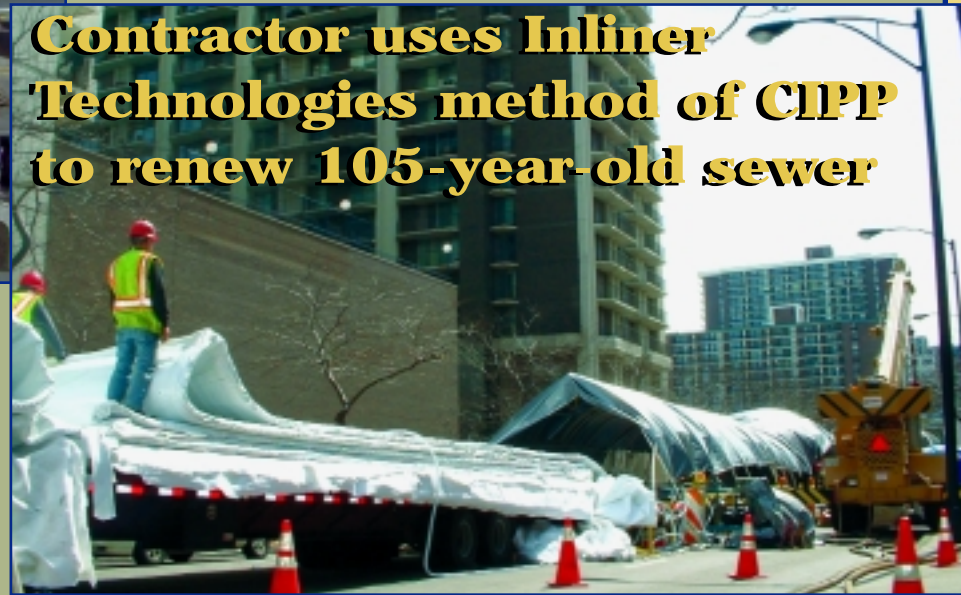


The Real Work

By far the most difficult part of this project was the public outreach aspect. Tom LaPorte, DWM assistant commissioner, served in the capacity of public information officer for this project.

We treated this effort as a political campaign, said LaPorte. We saw the possibility for a lot of confusion, and we decided that we needed to really go all out to prevent rumors from overtaking the project.

The campaign was structured on a policy of complete candor. Area residents and the northern suburban commuter communities were told first



through public meetings so residents would be knowledgeable about the project prior to it being covered in the media.

We held the press conference just shortly before the start of the project, so we could use alternative means to build community comfort with the project before the TV stations sought reactions, explained LaPorte. By the time reporters were asking people about it, area residents understood the project, knew us and gave favorable comments.

City officials explained how the cured-in-place pipe process worked and brought Kenny Construction representatives in to meet with condominium associations so they could talk directly to the contractor. We had meetings every night for months sometimes even two or three meetings per night and distributed thousands of our 14-page information kits, said LaPorte.

We told people that the sewer had been in use since the Spanish-American War, and this technology was our least-intrusive option, LaPorte added.

The City developed a PowerPoint presentation to show the entire process and put the emphasis on the impact to the neighborhood and the City's partnership with community leaders. We took graphics from the Inliner Web site to illustrate the inversion process, and it was very effective, LaPorte said.

In addition to communicating through the media and public meetings, the City also used shopping bag and bank statement stuffers, e-mail notifications and a project Web site.

City officials got far better results than they imagined. We even gave out our direct phone numbers, and we did not get a single abusive phone call, he added.

Another challenge the City faced was a major consolidation within the department. In January, the City's Department of Water merged with the Department of Sewers forming the Department of Water Management, said John Waller, DWM's assistant commissioner in charge of sewers. Even through a serious reorganization of roles and responsibilities, this was by far one of the best projects we've ever done further proof that Chicago is the city that works.

The Finished Product

With the public outreach effort going so well, there was little to slow down Kenny Construction's work. The project, which was originally slated for completion July 3, finished a month ahead of schedule.

And the community was left with complete confidence that its system was safe for another 50 or more years. It was all about educating the taxpayers, said LaPorte.

And the fact that Kenny Construction was so accommodating to the community went a long way, LaPorte added, noting that Kenny Construction even built decorative bridges to help senior citizens navigate over the hoses from the control manholes.

They said it looked like a Japanese garden, he concluded.

Michelle Sinning is a technical writer in Bloomington, Ind.