

Snap-Tite Pipe Relines Culvert in Oklahoma, Keeps Residential Street Traffic Moving During Installation

McAlester, Oklahoma

Corrugated metal pipe (CMP) culverts are failing at an alarming rate throughout the U.S. These culverts were installed 40 to 50 years ago and have exceeded their design life. The City of McAlester, Oklahoma needed to fix a rusted and oval (49 inches by 33 inches) CMP culvert that was also partially missing its bottom. This CMP was located on a residential street, which was the only road leading into a subdivision. Digging up the road would have prevented access for many homeowners.

Snap-Tite's Regional Sales Manager Trevor Cone spoke with the City of McAlester's Field Engineer Inspector Cliff Pitner about the benefits of rehabilitating the culvert with a Snap-Tite high-density polyethylene (HDPE) pipe liner. The HDPE Snap-Tite culvert-lining system has a patented male/female machining at each end of the HDPE, which allows it to be 'snapped' together, piece-by-piece, and pushed into the full length of an existing pipe. Snap-Tite also meets American Association of State Highway and Transportation Officials (AASHTO)



The machined Snap-Tite male end is about to be 'snapped' to the female end of the pipe.



The oval-shaped Snap-Tite is slid inside the old damaged CMP.

Standard M326 for rehabilitating culverts. In order to fit inside the misshaped CMP, Snap-Tite supplied 32-inch Snap-Tite pipe that was compressed down into a 37 by 27 inch oval liner using an "ovalling" machine at a Snap-Tite plant. This pipe liner gave the city an opportunity to repair the culvert without having to disrupt the essential residential road and allowed the city's maintenance workers to handle the installation without having to hire outside contractors.

"Snap-Tite provided our community a unique opportunity to solve a culvert crossing that had only one entrance and exit for a sizable housing subdivision, and very limited easement access for the restoration process," said Pitner. "We were able to restore the crossing without any inconvenience to the citizens within a matter of hours in lieu of the conventional two weeks of tear out and put back."

As part of the installation, Snap-Tite and the city also held a demonstration. Attendees who viewed the demonstration included city and Department

of Transportation officials as well as engineering firms. During installation, one end of the Snap-Tite pipe liner was slipped into the CMP culvert and then snapped on to the next Snap-Tite end. Once the liner was in place, the space between the old pipe and the liner was filled in with grout. The installation was an overall success.

“The help from the company representative and the factory was exceptional,” added Pitner. “All problems and needs were addressed quickly and professionally. We plan on this process being in our tool box of solutions for a long time.”

About Snap-Tite

- Meets AASHTO Standard M326 for rehabilitating culverts.
- Offers flexibility for insertion into misaligned concrete or rusted deteriorated corrugated metal pipe.
- Offers a safe method for installers and doesn't require traffic control.
- Tough but lightweight, the Snap-Tite joint makes a solid water-tight mechanical connection that can be pushed or pulled.

Due to the Snap-Tite system's installation flexibility and cost-effectiveness, it continues to provide successful results for many projects throughout the U.S. and internationally.

For more information on Snap-Tite® please visit www.culvert-rehab.com.



Any space between the old CMP and the new Snap-Tite liner is filled in with grout.



Before: the damaged CMP before it is relined.



After: the culvert newly relined with Snap-Tite.

SnapTite®

1-800-CULVERT
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