

Snap-Tite® Chosen as a Quick, Cost-Effective Solution for Denver's Southeast Metro Stormwater Authority

South Metro Denver, Colorado

The Problem

The Southeast Metro Stormwater Authority (SEMSWA), located in the south metro Denver, Colorado area, is responsible for several culverts located throughout many residential neighborhoods. After evaluating the culverts, SEMSWA determined that multiple culverts were damaged and needed to be replaced. Besides being located in a residential neighborhood, the area containing the culverts was also considered a protected wetland and residential park. Therefore, this area could not be disrupted and care had to be taken not to affect the water quality.

Since digging and replacing the damaged corrugated metal pipe (CMP) culverts would severely inconvenience the local residents, potentially harm the wetland area, and cripple the already small SEMSWA budget, a solution was needed to quickly and cost-efficiently replace the pipe.



SEMSWA crews join the Snap-Tite pipe sections using a come-along and chains.



The Snap-Tite pipe is moved in place to line the old CMP using a mini excavator.

The Solution

Snap-Tite representative Russ Wosk approached SEMSWA with the Snap-Tite culvert lining system as a potential solution. SEMSWA decided to use Snap-Tite pipe and purchased 80 linear feet of 30-inch Snap-Tite pipe for three scheduled projects to reline the old culverts.

Snap-Tite is made of high-density polyethylene (HDPE) pipe. Snap-Tite's patented male/female machining at each end of the HDPE allows the pipe ends to be 'snapped' together, piece-by-piece, and pushed into the full length of the existing pipe. The pipe liner is available in lengths from two feet to 50 feet, and is available for culverts with diameters from eight inches to 84 inches. However larger diameters are available on special request. Snap-Tite is also available in both round and oval diameters.

The Installation

The first relining project served as a Snap-Tite demonstration where other government agencies were invited to watch. Attendees included representatives from the Colorado DOT as well as some local contractors.

The SEMSWA crews were able to quickly move the 30-inch Snap-Tite pipe in place for lining the CMPs using a mini excavator. For each of the culverts, one section of Snap-Tite pipe was slid inside the old culvert. Then the next section was snapped on using a come-along and chains. This process was repeated for each culvert until the liner was in place from end-to-end. Finally, grout was used to fill in any annular space between the old wood culverts and the new pipe liner.

The SEMSWA maintenance supervisor Bob Winzent commented that the Snap-Tite installation made it easy for them to fix their culverts on short notice.

The Snap-Tite culver lining system was a no-dig solution that rehabilitated the culvert without shutting down the road and disturbing either the residential traffic or the protected wetland area.



Demonstration attendees view the first installation of the Snap-Tite pipe liner.

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 or watch Snap-Tite installation videos on YouTube at www.youtube.com/user/SnapTiteChannel.



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

SnapTite®

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