



HDPE Culvert Rehab Solutions

Fast "No-Dig" Renewal for Roadway, Rail, Levee, and Drainage Culverts



The No-Dig Advantage

A Faster, Low-Impact Fix for Failing Culverts

40–60%

of installed culverts are beyond their design life — with corrosion, cracking, joint failure, and soil loss driving sinkholes, flooding, and road closures.

ISC Insight:

Slip-lining restores culvert structure without digging. HDPE liners provide watertight, corrosion-proof renewal with faster installs, lower cost, and almost no traffic disruption.



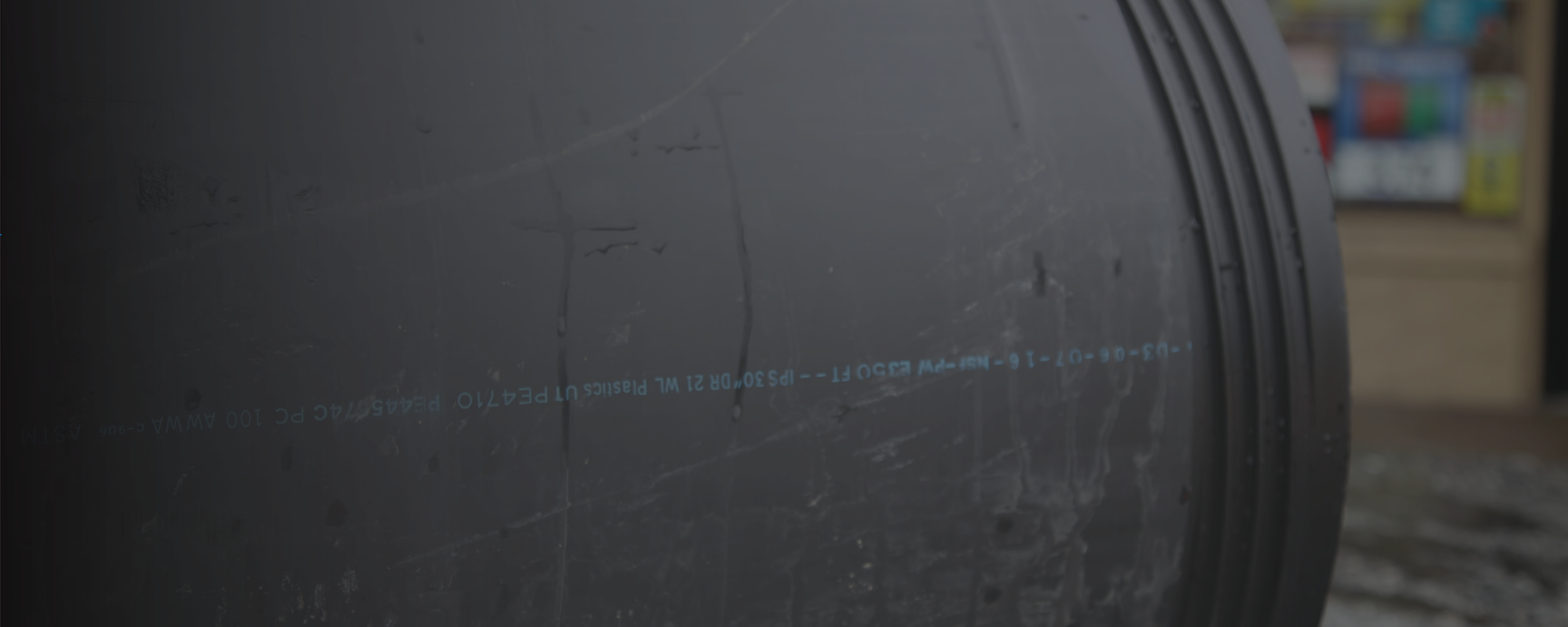
WHY CULVERTS FAIL

- Corrosion and cracking degrade CMP/RCP, separate joints, and undermine soil support
- Dig-and-replace is disruptive, expensive, shuts down roads, rail, and communities



WHY TRENCHLESS REHAB WORKS

- Faster, easier structural rehab is completed from inside the existing culvert
- Long-life, corrosion-resistant, minimal environmental impact



WHEN CULVERTS FAIL, EXPERIENCE MATTERS

ISCO brings decades of no-dig culvert rehab expertise to every project. Our HDPE liners, technical guidance, and on-site support help restore flow, stabilize structures, and finish work faster—without shutting down roads, rails, or waterways.



WHERE NO-DIG REHAB DELIVERS

Roadways
Railroads
Levees
Floodwalls

Ponds
Dams
Spillway risers
Aquatic crossings

Confined spaces
Arched/elliptical
culverts



Slip-lining Solutions for Culvert Rehab

One Method. Two Solutions.

SNAP-TITE® HDPE CULVERT RELINING

- Trenchless culvert renewal
- Lower cost, less disruption
- Faster, easier install
- Patented watertight joint system
- Cementitious grout fills voids
- Up to 63" diameter
- Meets AASHTO M326 and ASTM D3212



SPIROLITE® SPIRALLY WOUND HDPE

- Durable, lighter weight
- Increased hydraulic (flow) capacity
- High chemical/corrosion/abrasion resistance
- Ideal for big-flow or structural rehab
- Up to 120" diameter
- Meets ASTM F894

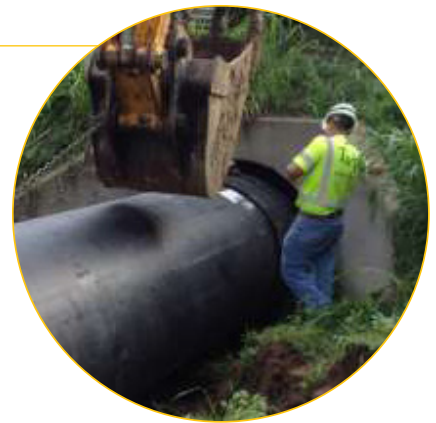
SLIP-LINING INSTALLATION OVERVIEW

Snap-Tite® and Spirolite® install using the same proven HDPE slip-lining method — providing reliable, long-life, no-dig culvert rehabilitation.



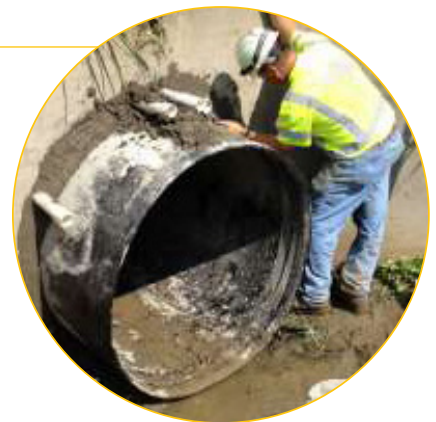
1. CONNECT

Join liner sections per product method—Snap-Tite® uses its patented snap-joint; Spirolite® uses a gasketed bell and spigot joint. Insert connected liner sections into the host pipe and continue till the liner extends from the inlet to outlet.



2. SEAL

Once the entire culvert is lined, seal the annular space at both ends. Bulkheads are the best way to seal the annular space and prevent grout from escaping. Bulkheads should be about one to two feet in distance at both ends to ensure sufficient strength to sustain hydrostatic pressure during annular grout placement. The end seal in the annulus can be made by using various materials. A relatively dry cement grout is used in most situations.



3. GROUT

It is recommended that the annular space between the existing culvert and the liner be grouted. This will help fill the voids created by previous washouts, provide additional structural support, maintain grade/alignment, and secure the liner from movement and flotation. Annular space grouting is discussed in greater detail in Chapter 7 of the Snap-Tite Culvert Rehab Technical Guide & Design Manual.



Slip-Lining Enhancements

Targeted solutions for unique challenges.

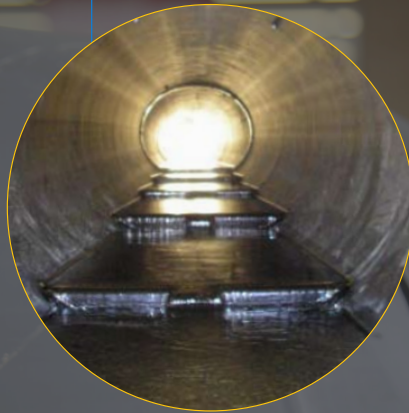
OVAL PIPE FOR ARCHED CULVERTS

Designed to match existing arched or elliptical culverts where round liners won't fit.



HYDRO-BELL™: IMPROVED INLET HYDRAULICS

Flared inlet enhancement boosts flow while reducing headwater and overtopping potential.



AQUATIC LIFE PASSAGE (A.L.P) STREAM-FRIENDLY CULVERT RENEWAL

HDPE pipes with baffles and corrugations let fish migrate more easily by slowing flow, forming pools, and allowing stream bed material to collect at the culvert bottom.



THREAD-LINER™: SEGMENTED LINER FOR LIMITED ACCESS

Short threaded HDPE sections install through manholes or catch basins where restricted access limits the use of standard length structural pipe liners.





Your No-Dig Culvert Rehab Partner.

We have the largest HDPE slip-lining inventory in North America—and the expertise to match it.

Talk to us. Ask questions. Tell us what you're up against.

From design guidance to on-site installation support, our people, and 30+ years of culvert rehab experience are here to help you get it right.

We're ready when you are.

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