

Case History:

A Tale of Two Transitions

Amtrak and LA Dept. of Public Works Use CIPP on Sections of Pipe Where Diameter Transitions Are Present



The Successful CIPP Relining of Sewer Pipe That Transitions From a Larger Diameter to a Smaller One.

Pipe Splitting

Cured-In-Place-Pipe

EcoCast™

CCTV Inspection

The Situation:

It is not uncommon to encounter a single pipe system possessing multiple diameters.

This is especially true when the line has been added or repaired in the past. However, when relining the pipes with Cured-In-Place Pipe (CIPP), it should be noted during the inspection so the new liner can be manufactured to fit the old pipe properly during the installation process. Recently, IPR ran across two situations where they were faced with this challenge.

The Solution:

Two completely different cases of pipe diameter fluctuations requiring the same CIPP Solution

Amtrak Maintenance Facility - Beech Grove, Indiana

IPR was in the middle of a major industrial sewer CIPP relining project at this historic locomotive and rail car facility. A CC/TV camera inspection revealed a section of the pipe, which happened to run beneath some tracks, that transitioned from 8 in. to 6 in. in diameter. After making the proper measurements for length and diameter, IPR manufactured the special liner for installation. The total length of the pipe section was 88 ft. and consisted of 59ft. of the new 8 in. liner, that transitioned down to 6 in. for the last 29 ft. of sewer pipe.

A post installation inspection revealed a smooth installation with no buckling at the transition point.

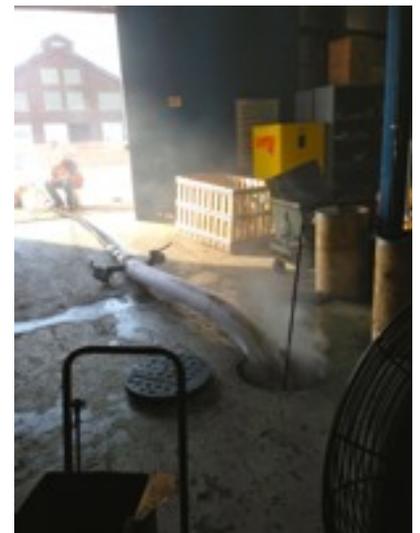
Department of Public Works - Los Angeles County, California

A 90 ft. section of storm drain, located beneath an easement, had been installed using both Corrugated Metal Pipe (CMP) and HDPE Pipe. The CMP had corroded at the invert and was allowing infiltration and causing undermining of the pipe; which would eventually lead to a collapse. The pipe also transitioned from 18 in. to 24 in. at this invert. Rather than go through the time and expense of digging up the old pipe, IPR recommended a custom manufactured CIPP liner that could be inserted and expanded against the inner wall of the storm drain. Careful installation and curing was required to ensure the liner diameters properly transitioned at the pipe's invert.

The IPR crew was able to install the liner in a day and save the City of Los Angeles the cost of complete replacement which would have taken 3-5 days to complete.



An Amtrak maintenance facility recently relined an 88 ft. section of industrial sewer pipe that transitioned from 8"-6".



It is not uncommon to discover different diameters of pipe on sewer lines that run beneath old industrial buildings, roads, and railroad tracks.

IPR Industrial ... Safe. Reliable. Permanent.

The *CIPP* Process:

1. Damaged, deteriorated and encrusted pipes are cleaned and televised
2. Liner and resin system (using the Dow Chemical Company's custom formulated resins) engineered to meet the pipe's performance requirements
3. The reinforced composite liners are inserted (by either pull-in or inversion method) into the existing pipe
4. Once in place, hot water or controlled steam is circulated inside the lined pipe and cures the line



A Typical set-up for CIPP pipe renewal. Small construction footprint and minimal surface disruption allow you to continue many of your daily operations above ground, while IPR relines your pipes below ground.

A CIPP liner installation typically eliminates the need for digging or the removal of existing infrastructure.



CIPP liners typically cure overnight and the old sewer lines become structurally restored and can be put back into service within 24 hours.



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