

Oneonta, New York

Culvert Reline with Weholite



Installation of 72"
Weholite HDPE Pipe

In 2007, NYDOT Region 9 turned to Weholite for assistance with an emergency culvert slipline under deep fill. Based on success of that project, Region 9 once again turned to Weholite for a long lasting, economical solution to some deteriorating culverts under deep fill.

In 2009 they were not emergency situations, instead the culverts were part of a planned culvert management program. As many DOT's are experiencing across the US, the aging highways systems and associated culverts and bridges are providing for some challenging maintenance issues. The best way to address aging culverts in these difficult economic times is to have a proactive culvert maintenance program that includes inspection and solutions.

The most advantageous solution is to slipline existing culverts before they get so deteriorated they have to be replaced. Sliplining culverts with Weholite HDPE provides the DOT with the most long lasting, economical solution without any digging or traffic disruption. When Region 9 finds culverts with large perforations that allow the migration of fines and high water tables that bring the rust line up the sides of the existing pipe, their first consideration is sliplining.

Each culvert is approximately 35 years old and cross the 4 lanes and median of the high traffic Route 88. The 3 key features that Region 9 likes about Weholite are the welded joints, ease of installation and hydraulic capacity. The welded joints provide leak tight joints that will not allow for the passage of grout during the grouting process, a problem Region 9 has encountered with other sliplining materials. The ease of installation allows the contractor to quickly install the pipe without digging or disrupting traffic. For example the 254' of 60" was installed in a day and a half. The hydraulic capacity of Weholite with a Mannings "n" of 0.01 allows of DOT to slipline with a smaller pipe while maintaining or increasing the flow when compared to the existing CMP or concrete culvert.

Project:
Route 88 Culvert
Rehabilitation

Owner:
New York Department of
Transportation

Application:
384' & 254' of 60" Weholite,
230' of 42" Weholite and
238' of 54" Weholite.

Contractor:
Vacri Construction Corp.