



Project:

VDOT Culvert Rehabilitation, Spring Branch Road

Hampton Roads District, Franklin Residency, Spring Branch Rd (37°02'48.7"N 77°05'40.3"W)
(3ea) 52' of 6' round CMP running under Spring Branch Rd, structural pipe restoration

Engineered Structural System:

Nukote Metal Prime I @ 5 mils, Nukote PP300 @ min 1380 mils, Nukote ST-M @ 120 mils as a topcoat on Nukote PP300. applied to properly prepared substrate, in direct conjunction with the Project Specification. The installed system was certified to perform independently of the existing culvert, capable of carrying the roadway above independently.

Completion Date:

October 2020

Client:
VDOT (Virginia Department of Transportation)

Manufacturer:
Nukote Coating Systems

Contractor/ Applicator:
Atlantic Industrial Coatings

Area:
52' of 6' round CMP

Location:
Virginia



Project Profile

Description:

The project involved spraying a structural liner inside of a deteriorated, galvanized corrugated steel culvert. Due to corrosion, the structural bearing capacity of the culvert had been compromised and an engineered solution to carry the load of vehicular traffic was needed.

A solution which did not disrupt traffic and, simultaneously, minimized flow reduction was required. The chosen method of rehabilitation involved utilizing Nukote PP300 and Nukote ST-M to create a structural, composite liner.

Making ready was extensive due to swamp location and rip rap and debris needing to be removed. Host pipe was dewatered and cleaned. Some areas of the invert and walls were missing and required repair/filling. After repairs with foam and concrete were performed, the pipe was cleaned again, dried and the ends of the pipe were primed. The entire pipe was coated lightly with ST-M (~30 mils) using Ringtech 360 system. PP300 (1380mils) was then applied using the Ringtech 360 system. ST-M (120mils) topcoat was then applied with Ringtech 360.



Project Profile

