

FRP Bridge Drain Pipe Case History

Pulaski Skyway: Jersey City - Newark, NJ 2012



Service

To provide a retrofit drainage system for the series of historical landmark bridges carrying the traffic of US Route 1/9 a total of 3.5 miles through northeast New Jersey linking the towns of Jersey City and Newark by crossing over the Passaic River, Hackensack River and Kearny Point peninsula. A large portion of the system came in prefabricated sections including runs of pipe and joint connections to minimize field assembly for the installation crews.

Features & Benefits

When the Pulaski Skyway repair project started engineers wanted to preserve the historic features of the skyway, ensure safety for users and secure a plan that would give an increased longevity to the structure itself. By implementing the design of a custom fiberglass drainage system all three goals could be accomplished. With the use of custom color pigmentations for the drain pipe and troughs the new system blended in seamlessly with the bridge's present rustic appearance. Roadway flooding that can lead to hydroplaning along with corrosion caused by water and chemicals seeping through porous concrete will now be kept to a minimum by the pipes design to quickly and efficiently remove water from the bridge deck surface even during the heaviest downpours.

Pipe System

- 35,000' of 12" Prefabricated Piping Assemblies
- 28,000' of 'J' Troughs
- 1,900' of Transverse Troughs & Splash Guards