

Executive Summary

Island Avenue, Sr 0051, Section A97 - Stowe Township

Category J

The Pennsylvania Department of Transportation, District 11-0 and Pennoni Associates, Inc. worked together for the reconstruction of the Island Avenue roadway (SR 0051, Section A97) over abandoned Cole Row in Stowe Township, Allegheny County. The project is in an urban area adjacent to the intersection of SR0051/SR 3095/Neville Road (Fleming Park Bridge). The original scope included removing the existing concrete spandrel arch bridge and constructing a new retaining after further evaluation of the structure, it was decided to leave the existing spandrel arch and retaining wall in place and construct a geosynthetic reinforced soil (GRS) slope in front of the existing structures. A new caisson wall structure was constructed, which minimized the footprint of the project, to avoid disturbing an adjacent property impacted by a recent slide. The construction approach consisted of the removing the top cantilevered portion of the existing sidewalk; constructing a caisson wall, GRS slope, a doghouse manhole, and moment slab with a vertical barrier; repairing an 84" culvert; and backfilling the existing spandrel arch. The project also included full depth roadway reconstruction, side street milling and paving, utility relocations, drainage modifications, sidewalk and ADA Ramp reconstruction, and pavement marking application.