

Executive Summary

Route 13 Connector for the I-95/I-276 Interchange
Category H

The Pennsylvania Turnpike interchange with United States Route 13 (US 13) in Bucks County, Pennsylvania was originally constructed in the 1950s. This original interchange connector road included a bridge over Ellwood Avenue and another over US 13, and four ramps for the movements between the connector road and US 13. The interchange bridges reached the end of their service life creating a project need. During the project development process, it was determined that ramps between the connector road and US 13 wouldn't fit the vision for the US 13 corridor, so a conventional intersection design was developed. No replacement bridge over US 13 was needed, allowing for the removal of the four ramps.

Eliminating the bridge and ramps created an opportunity to provide stormwater solutions, highway operations infrastructure, and a pedestrian connection within the existing right-of-way. Stormwater infiltration basins were constructed where the old ramps were. A turnaround roadway was provided for agency maintenance and emergency vehicles. The pedestrian connection was provided on the southbound side of US 13 to complete a continuous pedestrian route between Haines Road to the north and Bath Road to the south.

Maintenance and protection of traffic during construction was complex. It was necessary to maintain movement between the PA Turnpike and US 13 for the duration. During the eight construction stages, techniques such as crossovers, temporary roadways, 15-minute nighttime stoppages, jack-and-bore drainage pipe, and half-width bridge construction were utilized.