

Executive Summary

Brandywine Creek Road Slope Stabilization

Category F

The Brandywine Slope Stabilization project was a collaborative effort between HNTB and various Units within PennDOT District 6-0 including Bridge, Geotechnical, Environmental and Construction. HNTB Corporation worked closely with the Pennsylvania Department of Transportation Geotechnical Unit to identify a solution to the constantly eroding slope adjacent to Brandywine Creek Road. HNTB designed a retaining wall and slope stabilization features that solved the stabilized the slopes and restored two-way traffic along Brandywine Creek Road.

The project is located in Newlin Township, Chester County, approximately 0.75 miles west of Embreeville. The project is approximately 1265 feet-long, beginning 800 feet south of Harvey's Bridge Road.

This project provides a link between some of the rural and suburban neighborhoods as well environmental and natural areas in Chester County. It is also a popular route for many cyclists and is adjacent to the Brandywine Creek, which is used for recreational purposes by kayak and canoe clubs. In addition to the construction of a new-soldier pile retaining wall, this project also upgraded the roadway geometry, pavement, guiderail, and drainage features to meet current safety standards. Furthermore, the project incorporated in-stream wildlife measures including rock vanes and root wad deflectors to create and restore fish habitat.