

2015 ACEC/PA Diamond Award for Engineering Excellence

ACEC/PA

Freeport Bridge and Roadway Project Executive Summary

The Freeport Bridge superstructure carrying S.R. 0356 over the Allegheny River was severely deteriorated requiring reconstruction to avoid weight limit postings. The S.R. 0356/S.R. 2019/S.R. 0128 interchange at the north end of the bridge was constructed in 1965 as part of a larger project which was never fully developed. The interchange resulted in circuitous and confusing traffic patterns that contained thirteen (13) intersections and three (3) weave areas in a relatively confined area. The project area included multiple bike and hiking trails, pedestrian generators, an active railroad line, on-street parking and business access.

SP&K Engineering, Inc. (SPK) provided the client, The Pennsylvania Department of Transportation (PennDOT) with a project design which replaced the old confusing configuration with a streamlined two signalized intersections and three non-signalized intersections. The new design incorporated a redesign of the Freeport Bridge structure and a new bridge to carry S.R. 0128 across Buffalo Creek. Shared bike paths, sidewalks, new on-street and public parking, decorative lighting and plantings were all incorporated into the new design. Traffic was maintained during construction utilizing phasing and reconfigured traffic patterns to build the project without utilizing long detour routes. Extensive public coordination with residents, business owners, government officials and trails groups was utilized to provide information on the new configuration and to incorporate

The project was an extensive collaboration between PennDOT and SP&K and other team members to provide an innovative solution to construct a safer and more efficient transportation system for the region.