

Executive Summary

Kenmawr Bridge Replacement Category C

Situated in an urban setting just outside of downtown Pittsburgh in Allegheny County connecting Swissvale Borough to Rankin Borough and spanning a main line of the Norfolk Southern Railroad Company (NSRC), this challenging bridge replacement project required an innovative construction approach, significant utility relocations, and extensive coordination with numerous project stakeholders. This 12.5 million dollar construction project included a new two-span steel girder bridge which replaced a structural deficient steel through-truss constructed in the early 1900's by the Pennsylvania Railway Company. The new bridge was lengthened, and a second span added to accommodate the future expansion of the Martin Luther King East Busway to the eastern suburbs. Also required for this project was extensive approach work in both directions to accommodate the 3 to 4 feet vertical clearance increase required of the new bridge over the existing rail lines to accommodate the future needs of the railroad. To account for this grade increase, multiple wall systems were constructed to minimize to the extent possible impacts to adjacent businesses and residents. Due to the vital link the corridor has in the regional traffic network carrying over 17000 vehicles per day and no viable long-term detour alternatives, a temporary bridge was required throughout most of the construction. The project required determining an acceptable balance of both areas for access for the physical construction while minimizing any impacts to adjacent residents, businesses, the railway, and the adjacent Port Authority of Allegheny County Martin Luther King East Busway.