Jenkintown Flood Mitigation Project
SEPTA Resiliency Program

The Jenkintown-Wyncote station, built in 1872 by the North Pennsylvania Railroad and replaced in 1932 by the Reading Railroad, has been impacted by numerous flood events in recent years. This key SEPTA hub is served by the Warminster, West Trenton, and Lansdale/Doylestown Lines, making the station sixth-busiest in SEPTA's Regional Rail system and the busiest outside of Philadelphia. The Jenkintown Flood Mitigation Project will relieve SEPTA's acute vulnerability to flood events at this key railroad hub by providing a comprehensive flood mitigation strategy.

Johnson, Mirrigan & Thompson (JMT) has performed a comprehensive flood mitigation and infrastructure protection study along a 2-mile segment of Tacony Creek and Baeder Run. During this study, JMT performed an exhaustive watershed investigation, detailed geomorphic assessment, and H&H analysis for over 9,500 linear feet of stream channel. A two-dimensional unsteady flow model using the TUFLOW software was developed to more robustly analyze, visualize, and ultimately understand the complex flow distribution and split-flow patterns associated with flood flows throughout the corridor.

JMT performed drainage and stormwater investigations, structural inspections, cultural resources clearances, natural resource inventories, stakeholder coordination, and public outreach support, coordinated topographical surveys and geotechnical investigations, and prepared a prioritized “menu of options” at each point of vulnerability. Improvements implemented from this study are solely intended to make SEPTA infrastructure more resilient to flooding, with no impact to upstream or downstream areas.

Owner:
Southeastern Pennsylvania Transportation Authority (SEPTA), Philadelphia, PA

Submitting Firm:
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