

Pennsylvania Society of Professional Engineers Philadelphia Chapter

Presents

DVGI 2022 Project of The Year: uCity Development

Thursday March 2, 2023

5:00 PM to 6:00 PM

Presented by

Eli Brinker & Elisabetta Iannetti, EIT

Pennoni has provided Geotechnical, Environmental, Construction Inspection, and Surveying Services for four new buildings on the 36th to 38th and Filbert Street blocks. The projects consist of the flagship uCity Square Life Sciences Building, the Powel Elementary Science and Leadership Academy (PSLAM), the Drexel Academic Tower (DAT), and 3700 Lancaster Avenue. All four buildings were under construction at the same time. The foundation systems for the buildings consisted of a combination of drilled shafts (commonly called caissons) and a mat foundation below the core of the building for the DAT and uCity square projects, while PSLAM and 3700 Lancaster were supported on aggregated piers and rigid inclusions, respectively.

These projects faced many geotechnical challenges such as the complexity of the subsurface conditions over a relatively short distance, in particularly the variability of the Wissahickon Formation. Locally the formation disclosed deep pockets of weathered rock and significant variations of rock. Evidence of the varying conditions became a challenge during caisson construction and ground modification installation. The presentation outlines the subsurface conditions, foundation design alternatives for the structures, and foundation installation challenges that were overcome. The presentation will outline the design of the foundation systems and provide a summary of the geotechnical investigation, laboratory testing of soil and rock samples, engineering analysis, and observations made by the geotechnical consultant who was involved in the project throughout the investigation and construction process. The importance of keeping the geotechnical engineer of record involved throughout the investigation and construction will be examined and discussed.

The Courses will be accredited for 1.0 Professional Development Hour each by the Pennsylvania Society of Professional Engineers through PIE to meet continuing education license requirements in New York State. PSPE believes that both courses will be accepted for credit in PA, NJ and other National Model states where courses do not require pre-approval.

Price using Paypal

\$10.00 for Course

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