

TEMPORARY SUPPORT OF EXCAVATION



PENNDOT S.R. 0095 SEC. GR1 • Philadelphia, PA

PennDOT's \$91.3 million I-95, Section GR1 construction project in Philadelphia included the realignment and reconstruction of Richmond Street and reconstruction of four Conrail bridges. Acting as a consultant to the general contractor and excavation support contractor, engineers from Peirce Engineering, Inc. designed multiple excavation support systems: battered and cantilevered soldier beam and timber lagging, tiedback soldier beam and timber lagging, and tiedback steel sheet pile walls required for the staged bridge construction from Lehigh Avenue to Somerset Street. Wall heights ranged up to 27 feet. Designs were complicated by the tight clearances between the shoring, existing railroad tracks, and proposed structures, multiple constructions stages, and Cooper E80 railroad surcharge loads.

OWNER:

Pennsylvania Dept. of Transportation
District 6-0

GENERAL CONTRACTOR:

James J. Anderson Constr. Co., Inc.
Philadelphia, PA

EXCAVATION SUPPORT CONTRACTOR:

Terry Foundation, Inc.
Exton, PA

TIEBACK ANCHOR SUBCONTRACTOR:

JPC Group, Inc.
Blackwood, NJ



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1220 Valley Forge Road, Suite 14
Phoenixville, PA 19460

Ph: (610)933-8353

Fax: (610)933-8359

mail@peirceengineering.com