



A Chapter of the  
Precast/Prestressed Concrete Institute



## Project Profile

# PennDOT: I-78 Under Clearance Project, Berks County

**By using the Accelerated Bridge Construction method, this project took 40 days instead of the original estimated 8 months!** Capturing the essence of FHWA's "Every Day Counts" initiative, Pennsylvania Department of Transportation's District 5-0 hit a grand slam, initiating, awarding and successfully completing a landmark project containing six (6) large bridges over I-78. All encompassed the innovative precast bridge element system (PBES) accelerated bridge construction practices. These bridges were totally



## AT-A-GLANCE

**Owner:** Pennsylvania Dept. of Transportation, District 5-0

**Design Team:** Benesh, JMT, AECOM, Erdman Anthony, AWK and Susquehanna Civil, Inc.

**Contractor:** HRI, Inc.

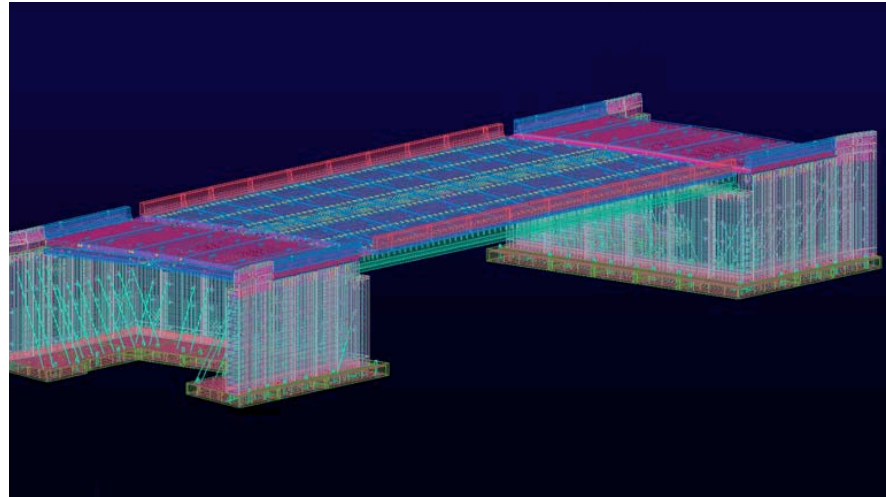
**Precast Producer:** PENNSTRESS

**Erector:** High Steel Erectors

**Total Precast Used:** 540 prestressed and precast components contained in 687 linear feet of bridge, averaging a 115 FT span length



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*PENNSTRESS utilized 3D BIM (Building Information Modelling, TEKLA Structures, by Trimble) for all of the engineering/detailing on the project.*

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designed and constructed from footings to decks with prestressed and precast concrete members.

The bridge showcased in the video is SR 0183 (Bernville Road) and was the final erected structure of the six total.

These bridges, which normally may take up to eight or so months each to complete, were completed, on average, in 43 days each, roadway closure to open for traffic.

To put this six bridge project duration into perspective, District 5-0 reduced the duration of construction impact from approximately 48 months to 259 days, or 8.5 months. The six bridges cumulatively totaled 540 prestressed and precast concrete components contained in 687 linear feet of bridge, averaging a 115 FT span length.

Go to [www.pci-ma.org](http://www.pci-ma.org) to view a time-lapse video of the bridge being built.



*Dry fitting bridge components at PENNSTRESS' plant ensured a smooth operation on site.*