## "Pouring the Future, Preserving the Past." © QUINN CONSTRUCTION, INC.®

PaDot Bridge — Ramp "B" over I-95 Pier Repair using Carbon Fiber Reinforcing Philadelphia, PA

OWNER: Pennsylvania Department of Transportation

ENGINEER: HDR, Inc.

GENERAL CONTRACTOR: Loftus Construction, Inc.

## PROJECT DESCRIPTION

Quinn Construction, Inc. provided all labor, material and equipment to complete the following Scope of Work:

Saw cut perimeter of spalled area, remove deteriorated concrete, sandblast patch area and reinforcing, form and pour concrete to original line and grade. Clean pier surface and wrap pier with carbon fiber reinforcing for structural strengthening.

- ♦ Repair spalled concrete areas under the beam bearing using high strength concrete.
- ♦ Structurally strengthen the pier by installation of two layers of carbon fiber reinforced polymer laminate bonded with high strength epoxy impregnating resin.

**Project completed in 2012** 



## **CHALLENGES**

PaDot bridge maintenance project included extensive substructure concrete repairs to piers and abutments on numerous bridges on the I-95 corridor through Philadelphia.

## **SOLUTIONS**

To repair and structurally strengthen badly deteriorated bridge pier.





610.586.1332 • 1017 4th Avenue, Suite 100, Essington, PA 19029