



## Case No. Three: Bridge Over Broad Thoroughfare

*New Jersey Route 152*

*Somers Point to Longport*



### Type of Construction:

Substructure is reinforced concrete cap on pressurized concrete piles. The superstructure will consist of twenty-five spans using both continuous and simple span construction for a total length of 2,858 feet.

DCI® Corrosion Inhibitor was used in the concrete for prestressed cylindrical piles ranging in depth from 78 to 123 ft to protect against rebar and strand corrosion caused by the marine environment. These structural units were constructed by

the centrifugal casting process whereby concrete is pumped into spinning forms. Centrifugal action forces the mix against the form walls creating less permeable concrete with a specified compressive strength of 7,000 psi. The project contains 11,100 total linear feet of 54 in. diameter spun piles with 6½ in. thick walls.

Concrete for the piles contains type II portland cement and DCI Corrosion Inhibitor at the rate of 5.4 gal/yd<sup>3</sup> of concrete.

### Project Credits:

Specifier: New Jersey Department of Transportation  
Concrete Supplier: Bayshore Concrete Products, Cape Charles, VA  
Consultant: Pavlo Engineering, New York, NY  
Contractor: S.J. Groves & Co., St. Louis, MO

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