

## Mullica River Bridge Widening

Port Republic, New Jersey

Keller's success using drilled shafts in the sand formations of Southern NJ allowed the engineer and owner to see that this is a viable option in the area for future projects.



### The project

The New Jersey Turnpike Authority's GSP Interchange 30 to 80 widening program between Somers Point and Toms River was intended to improve the roadway to meet current and projected capacity and allow travelers an easier commute. The project included the construction of a new bridge over the Mullica River in Bass River Township and the Port Republic.

## The challenge

Managing the slurry operation with limited access and laydown area while installing shafts at five separate pier locations proved difficult. Another concern was ensuring the slurry would perform properly given the brackish water conditions and the requirement to maintain an open shaft for up to a week without collapse.

## The solution

Keller installed 16 drilled shafts, each with a diameter of 8 feet with original depths of 205 feet. Afterload test results, shaft lengths were shortened to 175 feet. The slurry was piped to each pier location using the existing bridge pier and centralizing the slurry tank farm. To ensure slurry performance, freshwater wells were installed to draw water away from each location and initial monitoring of the slurry was conducted during off-shift hours.

## Project facts

### Owner(s)

New Jersey Turnpike Authority

### Keller business unit(s)

Keller

### Main contractor(s)

Agate Construction Company

### Engineer(s)

PB Americas, Inc.

### Solutions

Deep foundations

### Markets

Infrastructure  
Transportation

### Techniques

Drilled shafts

### Email address

[info@keller-na.com](mailto:info@keller-na.com)

### Phone number

1 (800) 456-6548