

## Raritan River Bridge Replacement

South Amboy, NJ to Perth Amboy, NJ

### Project Description

The existing “River Draw” swing-bridge has carried NJ Transit’s Jersey Coast Line over the Raritan River for the last 112 years. Its replacement structure will be a lift bridge adjacent to the namesake bridge, near the mouth of the Raritan Bay. The main feature of the new bridge is the 375’ long lift span suspended from 200’ tall steel towers. The lift span towers sit on massive 75’ x 94’ concrete waterline footings, supported by 8’ diameter drilled shafts. The flanking spans sit on similar footings, of a slightly smaller proportion. Both types of footings are 10’ thick. The approach spans make up the remaining 3,000 ft. of the crossing.

### Owner

NJ Transit

### Contractor

George Harms Construction Company, Inc.

### Designer

Hardesty & Hanover, Gannet Fleming

### Our Role

McB was responsible for the design of the precast soffit system used to construct the river pier footings. This task included the final soffit design with shop drawings, precast concrete rigging details, and footing construction procedures. McB designed temporary hanger support for synchronized lowering of the soffits.

### Total Contract Value

\$595 Million

### Timeline

2020-2026

### Construction Method and Specifications

The project includes all substructure construction, including but not limited to eighty-four 8’ diameter drilled shafts up to 225 feet deep with the associated pier work. The two Lift Piers, to be constructed to support the lift bridge, contain over 3,500 cubic yards of concrete. Approach span superstructure construction consists of 24 spans of six steel girders, per span, with a steel plate superstructure and ballast stone. Temporary trestles will facilitate construction from each river bank necessary for access to construct the sub and superstructure.

