



Detour Bridge From Acrow Carries Heavy Traffic During Parkway Construction in New Jersey

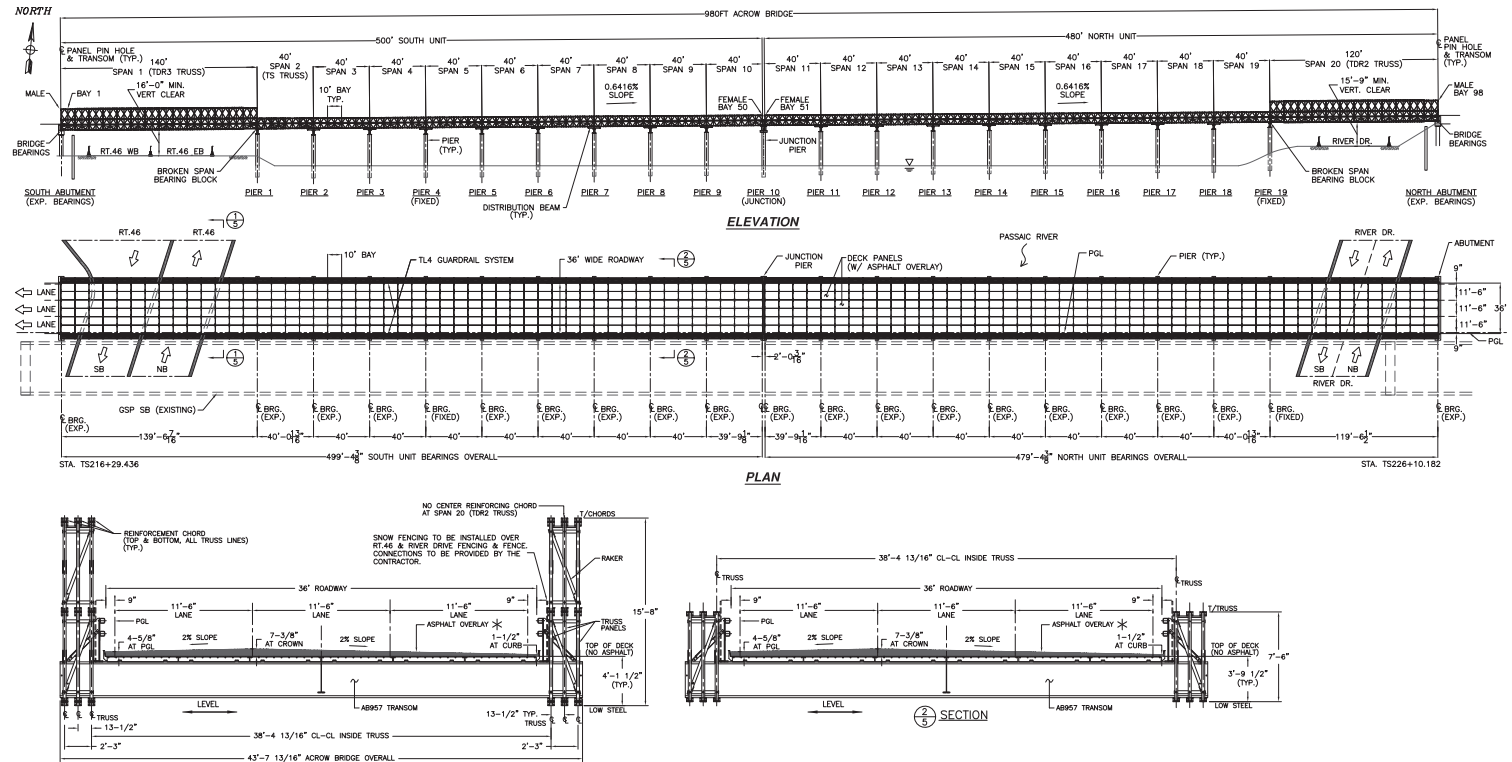
Durable three-lane structure considered critical to the success of the multiyear project

The Garden State Parkway bridge over the Passaic River, U.S. Route 46 and River Drive was completed in 1955 and carries three lanes each of bidirectional traffic. Nearing the end of its service life, the decision was made to replace the deteriorating bridge superstructure.

Because the route is so heavily traveled and a major link to the state's popular shore areas, a temporary bridge was considered necessary to the success of the multiyear project. An Acrow 700XS[®] bridge was selected for the project by contractor IEW Construction Group. It has an overall length of 980 feet (298.7m), which includes 18 spans of 40 feet (12.19m) each as well as north and south approach spans of 120 and 140 feet (36.58m and 42.67m), respectively. The structure is 36 feet (11m) wide to accommodate three lanes of traffic and has an asphalt surface with an AASHTO HL-93 load rating.

The materials for Acrow's modular bridge began arriving at the small, restricted site in early 2023, despite limited access for delivery trucks. Further challenging was the long length of the temporary structure, which necessitated building it from both sides then launching to join at the center pier. The bridge was successfully installed adjacent to the southbound lanes of the existing bridge in early October 2023.

Southbound traffic was switched to the temporary bridge in late October 2023. Once the new southbound bridge replacement is complete, IEW will put northbound traffic onto the new southbound bridge while maintaining southbound traffic on the temporary bridge. Acrow's structure will be in use until southbound traffic is shifted back to the new bridge.



Specifications

Bridge length:

980' (298.7m)

Roadway width:

36' (11m)

Guide Rails:

TL-4

Deck surface:

Asphalt overlay

Bridge erection method:

Cantilever launch

Design load:

HL-93 & NJTA Permit Truck

Standard Acrow bridge finish:

- All major components galvanized to AASHTO M111-ASTM A123
- All bolts are hot-dip galvanized
- All pins are electrogalvanized

Standard Acrow bridge specification:

- (A) Panel chords, diagonals, verticals, reinforcing chords, rakers to AASHTO M223 GD 65
- (B) Raker braces, transoms, top chord braces, swaybraces, transom braces, diagonal chord braces, decking to AASHTO M223 GD 50
- (C) Panel pins to ASTM A 193 GD B7
- (D) Bolts to AASHTO M164M - A325