



Temporary Acrow Bridge Minimizes Work Zone Impact During Highway Construction in New Jersey

Cost-effective solution maintains local traffic flow and utility services during a bridge replacement project

New Jersey's I-295 Direct Connect project aims to increase safety and lower congestion at the intersection of I-295 with I-76 and Route 42 in Camden County. Because the project includes widening the roadway below the Browning Road Bridge, a safe, reliable temporary detour structure was critical until the installation of a longer permanent replacement bridge.

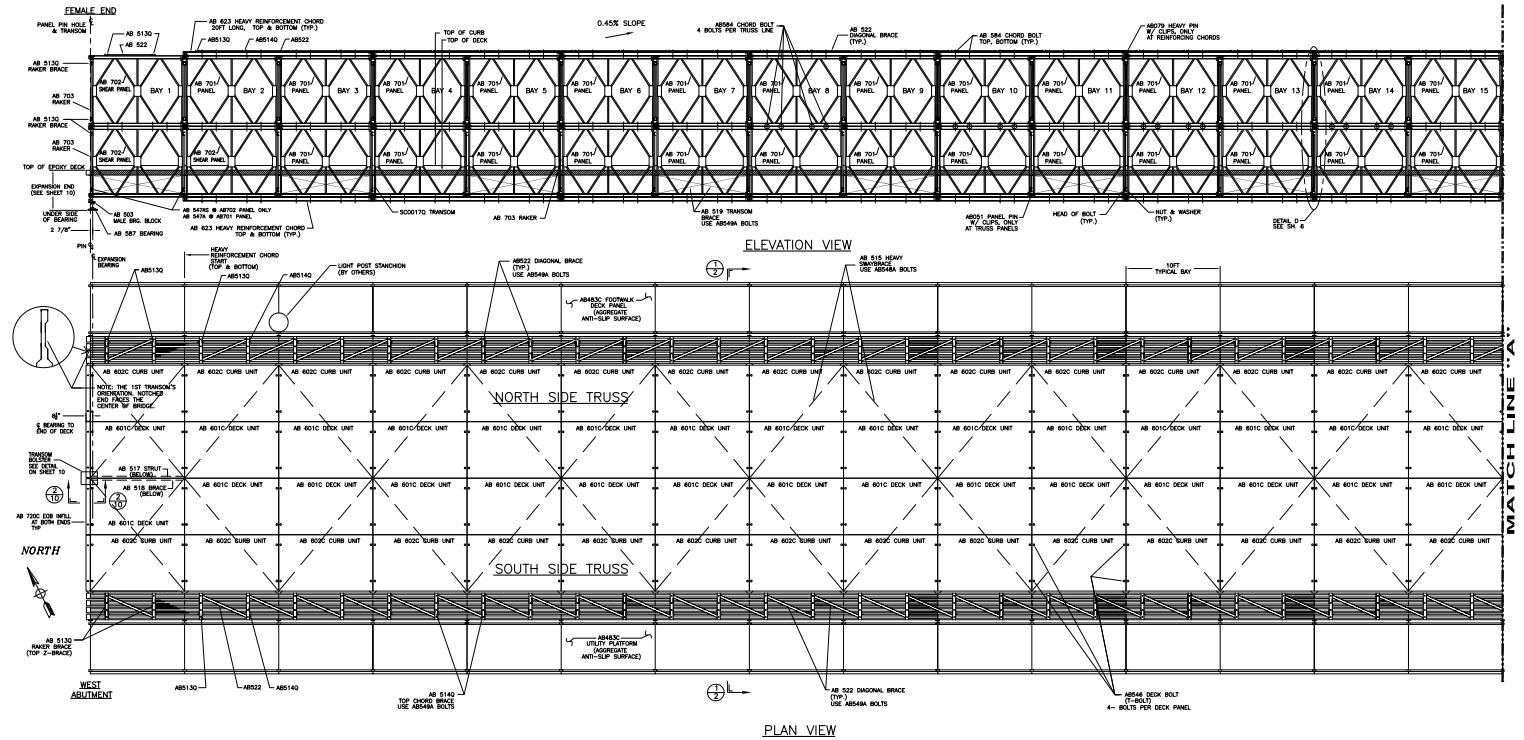
In addition to heavy local vehicular traffic, the route provides access to a local school and serves as the main coastal evacuation route for the region. Utilities carried by the old bridge also needed to be safely and reliably supported by an interim solution to avoid interruption to critical services such as electricity, gas, telecommunications and water.

The two-lane bridge provided by Acrow is 450 feet long (137.16m) in two spans of 240 feet (73.15m) and

210 feet (64m), with a roadway width of 24 feet (7.35m) to maintain two-way traffic. There are cantilevered footwalks on each side of the structure, one for pedestrians and one to carry utilities. Spanning two main highways, the bridge was assembled in sections and installed with a full cantilever launch, assisted by a large D8 pushing dozer.

The contractor for this phase of the Direct Connect program is South State, Inc., with Dewberry serving as the design engineer. Opened to traffic in October 2021, the temporary bridge is expected to remain in place for four years.

Acrow's modular steel bridges are available for rent or purchase and provide an excellent solution for DOTs and contractors needing reliable, cost-effective detour solutions to keep projects on or ahead of schedule.



Specifications

Bridge length:

450' (137.16m) with span lengths of 240' (73.15m) and 210' (64m)

Roadway width:

24' (7.35m) - 2 lanes to maintain two way traffic

Deck surface:

Epoxy aggregate

Bridge erection method:

Full cantilever launch with large D8 pushing machine

Design load:

HL-93 plus pedestrian and utility loads

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