



Acrow's Detour Bridge Reconnects Flood-Damaged Route in New York State

Rapid response enables reopening of the critical roadway in Long Lake in just 18 days

Heavy rains in July 2023 damaged the bridge on State Route 28N over the Fishing Brook in Long Lake, New York, with subsequent inspection results concluding the 90-year-old structure could not be repaired. Because no detour route of reasonable length was available, restoring the route as quickly as possible was considered essential in this rural but heavily toured part of the Adirondack Mountain region of the state, and planning for the structure's replacement began immediately.

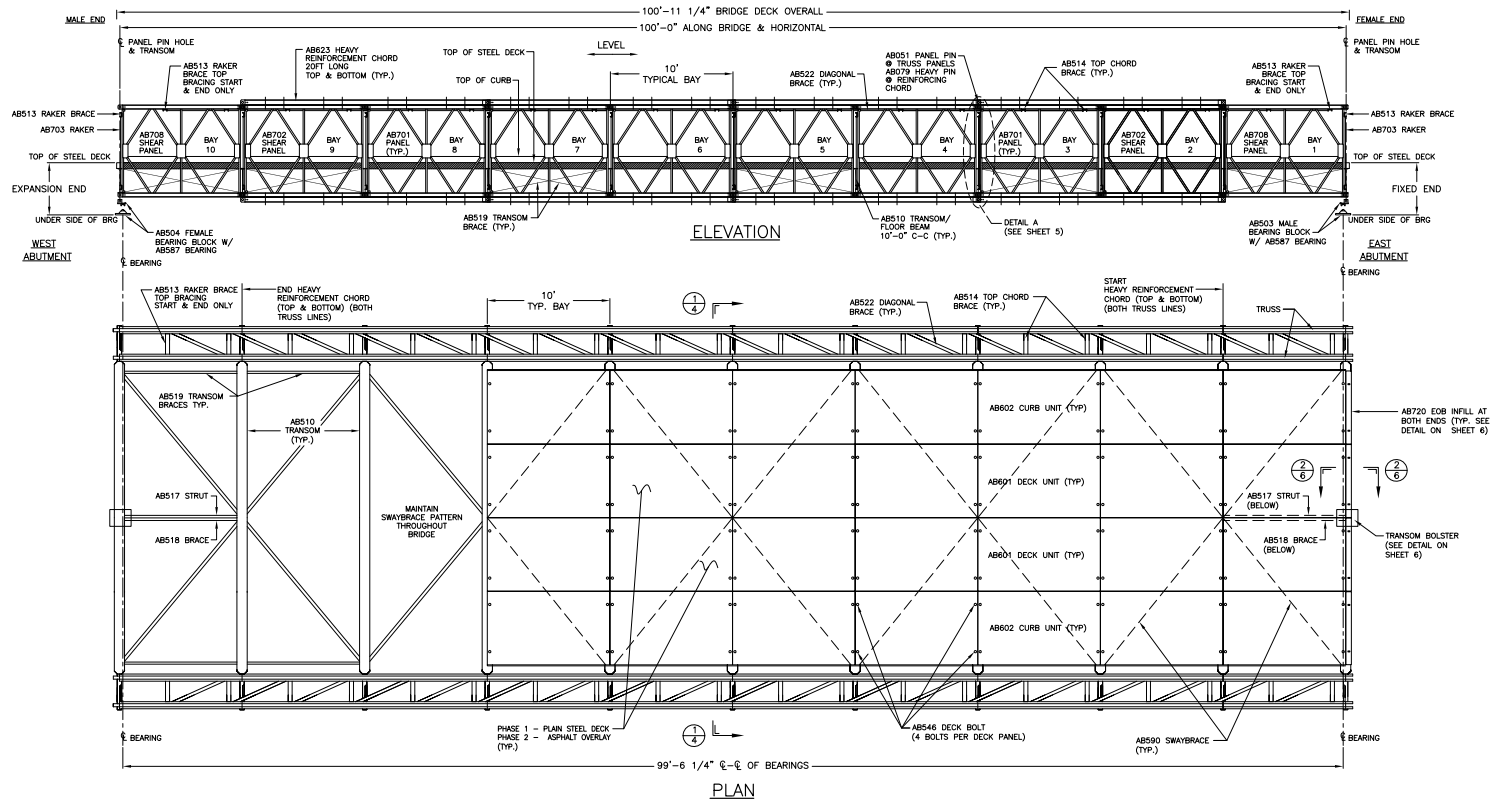
As an initial short-term solution, the New York State Department of Transportation (NYSDOT) decided a modular steel bridge from Acrow, installed over the damaged structure, would be the best solution to restoring a navigable roadway as quickly as possible, while plans were developed for a more long-term detour during construction of the new bridge.

Contacted by project contractor Tioga Construction, critical decisions followed between NYSDOT, the contractor and Acrow on the best option for the bridge design to meet the tight timeline.

Assisted by an Acrow FSR, construction of the 100-foot-long (30.48m), two-lane detour bridge began on July 19 and the structure was launched with a crane three days later. Following deck installation, completion of the earthen ramp approaches and load rating, the bridge was opened to traffic on July 28, only 18 days after the storm.

With traffic safely rerouted, a temporary roadway alignment was constructed just north of the damaged bridge, and on August 17, the deck was removed from the Acrow bridge, and the structure was moved to the new location. After reinstalling the decks and paving the approach roadway, the route was reopened that evening.

After the damaged bridge was demolished, the new permanent bridge was constructed and opened to traffic on October 27, 2023. Acrow's rapidly assembled and installed solution negated the need for a long-term 80-mile detour and helped ensure the completion of the project before the first snowfall of the season.



Specifications

Bridge length:

100' (30.48m)

Roadway width:

24' (7.35m)

Deck surface:

Epoxy aggregate

Bridge erection method:

Crane-assisted launch

Design load:

HS20-44

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