



Detour Rental in New York State Keeps Traffic Moving During Major Interstate Reconstruction

Acrow's six-span modular steel bridge accelerates project delivery in Binghamton

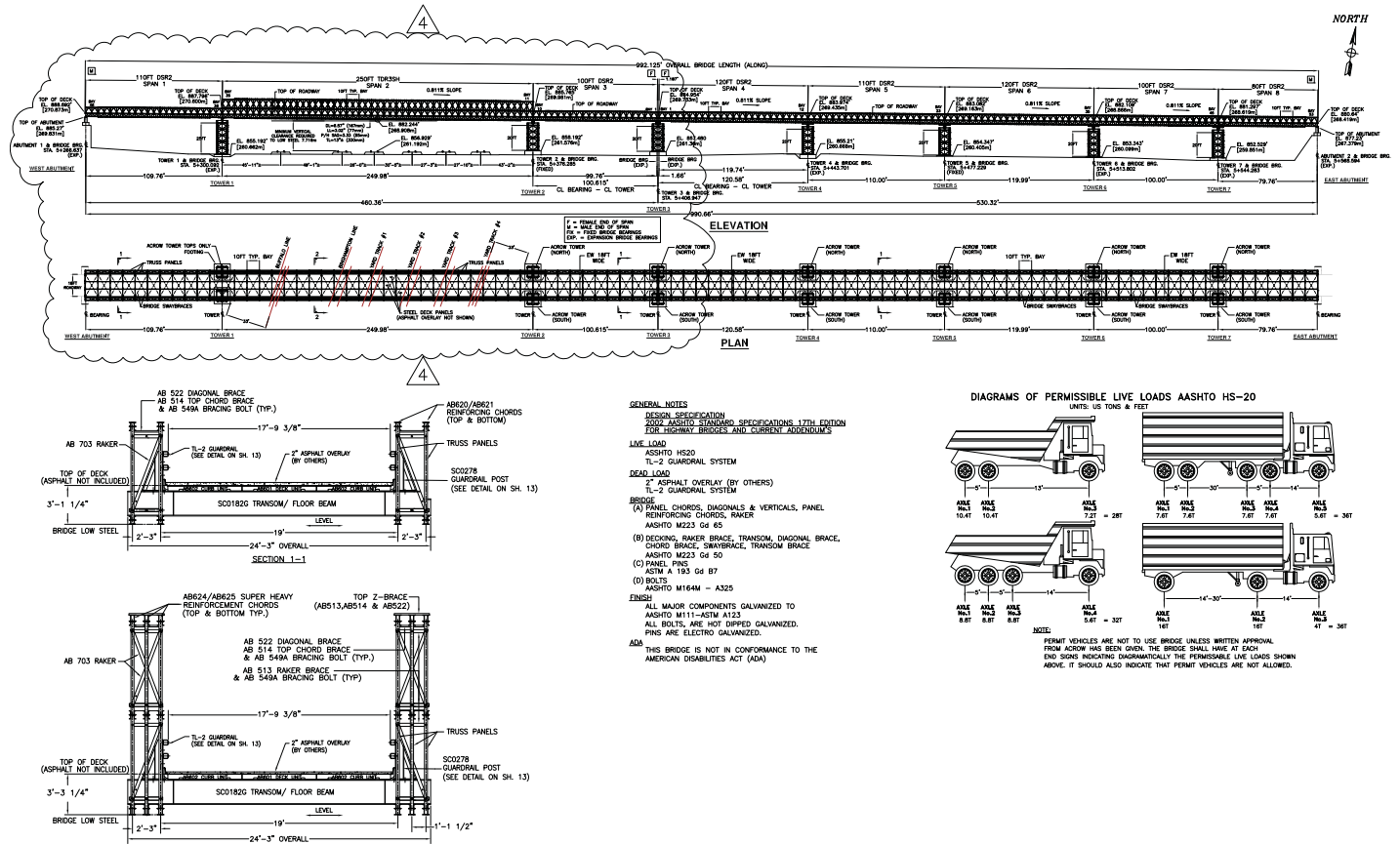
A temporary detour bridge from Acrow was successfully used to keep traffic flowing in the final phase of a complex yearslong project to reconstruct Interstate 81 and NY Route 17 in the city of Binghamton, NY. Acrow's structure was erected at the interchange of the two heavily trafficked routes, over several active CSX railroad tracks, during construction of four bridge replacements, two new bridge installations and reconfiguration of the interchange. The project addressed critical safety, operational and structural deficiencies on one of the region's busiest travel and commerce corridors.

Acrow rented the six-span modular steel structure to project contractor L & T Construction, LLC (a joint venture of Lancaster Development and Tully Construction). Selection of a rapidly installed modular bridge was a perfect option for the project, given the limited accessibility at the site and the short build window (required by CSX) to install the central 230-foot (70.1m) span. With many years of experience designing

bridges for installation above active freight and passenger rail lines, Acrow has a thorough understanding of the unique challenges of these projects and the close coordination required among stakeholders.

The limited build area required launching the spans from both sides, with the final 100-foot (30.48m) span craned into place. Six sets of Acrow shoring towers were installed to support the 980 foot-long (298.7m) by 18 foot-wide (5.5m) structure. The superstructure was installed in early 2017 and carried detoured traffic until late 2018.

The Acrow bridge allowed the New York State Department of Transportation to maintain the traffic flow in both directions during the overhaul of the main highway. Using the temporary bridge allowed commerce to continue uninterrupted, decreased the timeline of the overall construction program, and made the project site safer for workers and the traveling public.



Specifications

Bridge length:

980' (298.7m) in six spans
of various lengths

Roadway width:

18' (5.5m)

Deck surface:

Steel deck with a tack coat and asphalt
overlay

Bridge erection method:

Crane-assisted launch

Design load:

HS-20

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