



Acrow's Prefabricated Modular Steel Bridge with Protective Roof Maintains Local Commerce in Toronto

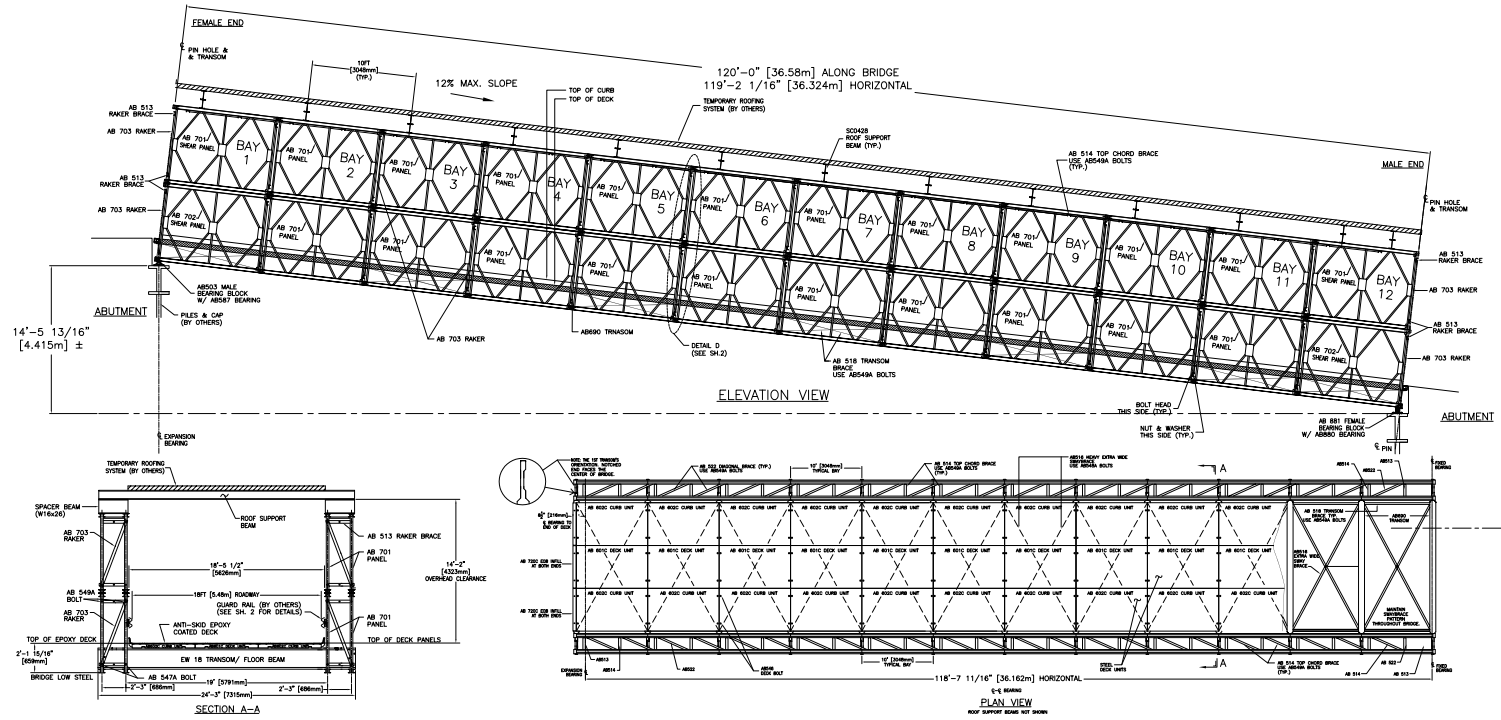
Solution provides critical access to local businesses during building construction

The 100 Adelaide Street West development project in downtown Toronto had the potential to cause significant traffic disruption to nearby businesses. To minimize this, Acrow provided a 120 foot (36.58m) prefabricated modular steel bridge to serve as a temporary ramp across an excavation site, enabling secure vehicular access to loading docks serving buildings in the vicinity.

The roadway solution was designed to be transported through one of the busiest sections of the city and installed quickly and securely on a 12% slope. It was

supplied with roof beams to accommodate a protective roof, eliminating the need for a costly deck heating system.

The Adelaide Street ramp was modeled after the heavy haul bridge that Acrow developed for the World Trade Center in New York City, which was used as a ramp for construction crews at Ground Zero. Acrow's easy-to-assemble modular steel bridges are engineered to support heavy loads and constant traffic year in and year out, making them ideal for use on heavy industrial and building construction sites.



Specifications

Bridge length:

120' (36.58m)

Roadway width:

18' (5.5m) clear travel way between the guide rails

Guide rails:

Designed by contractor

Deck surface:

Epoxy aggregate

Bridge erection method:

The bridge was erected in sections and lifted in place by crane.

Design load:

The bridge was designed in accordance with CHBDC ULS bridge design specifications 2010 edition to:

- Class B vehicle 116kN (26,000 lbs.) GVW
- 2.4kPa (50psf.) roof loading

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