



Permanent Modular Bridge Preserves Access for Residents, Tourists and Snowmobilers in Ontario

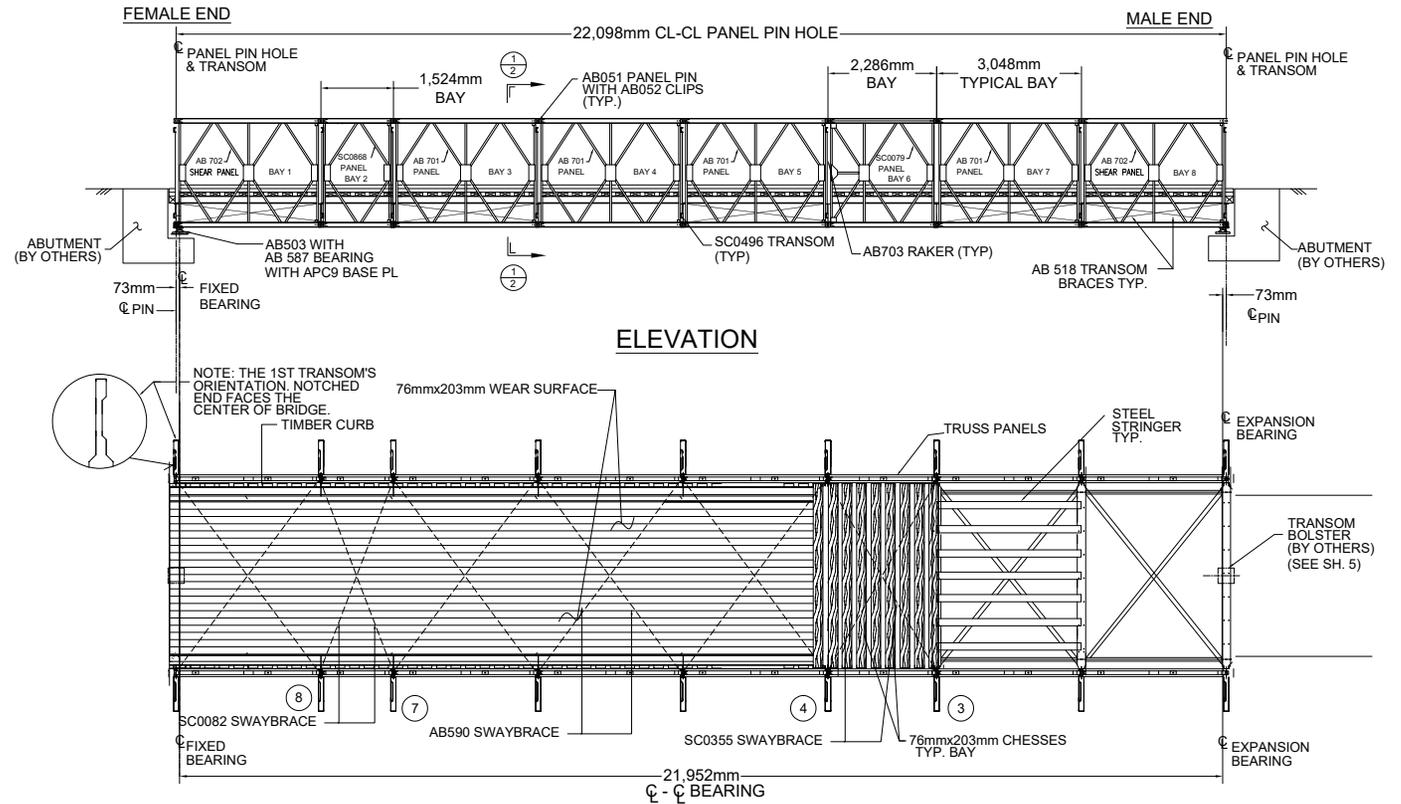
Acrow replacement proves more cost-effective than rehabilitating a structurally deficient bridge

Located 90 minutes east of Toronto, the aging Burnt Dam Bridge in the township of Havelock-Belmont-Methuen in Southern Ontario, was found structurally deficient during a 2017 inventory evaluation by owner Peterborough County. In addition to maintaining the route for residents and summer tourism traffic, the bridge also provides a critical link to an economically important regional network of snowmobile trails to the north. Since rehabilitating the structure would be a lengthy and expensive project, a cost-effective, modular steel solution from Acrow was selected as the best option for a permanent replacement.

Acrow's single-lane 700XS® bridge is 72.5 feet (22.1m) long, with a width of 12 feet (3.67m). The non-standard span size, customized by Acrow for this permanent application, was necessary to accommodate the reuse of the existing foundations of the old bridge. The bridge was supplied to the installation contractor McPherson-Andrews Contracting Ltd., a firm with considerable experience with panel bridges.

Assembly of the bridge components began in early August 2023, and the structure was successfully and safely lifted into place with a crane, opening to traffic two months later. The new Acrow structure will provide access for residents and tourists throughout the year and is expected to attract significantly more snowmobilers to the area during the winter months.

The project was funded by Ontario's Rural Economic Development (RED) program and the Regional Tourism Organization 8 (RTO8) and delivered through a collaboration between Peterborough County, Havelock-Belmont-Methuen Township, the Ontario Federation of Snowmobile Clubs, and Havelock & District Snowmobile Club, working in partnership with engineering consultant DM Wills. The new permanent Burnt Dam Bridge was officially opened during a ribbon-cutting ceremony, with ownership of the bridge formally transferred from the county to the township during the event.



Specifications

Bridge length:

72.5' (22.10m)

Roadway width:

12' (3.67m)

Guide rails:

Contractor supplied standard flex beam guiderails and Acrow supplied backer angles to connect them to the panel bridge

Deck surface:

Timber running surface with steel stringers underneath

Bridge erection method:

Crane lift in

Design load:

CHBDC maintenance vehicle load + 2.00kPa Ground Snow Load (GSL) + 0.4kPa Rain Snow Load (RSL)

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