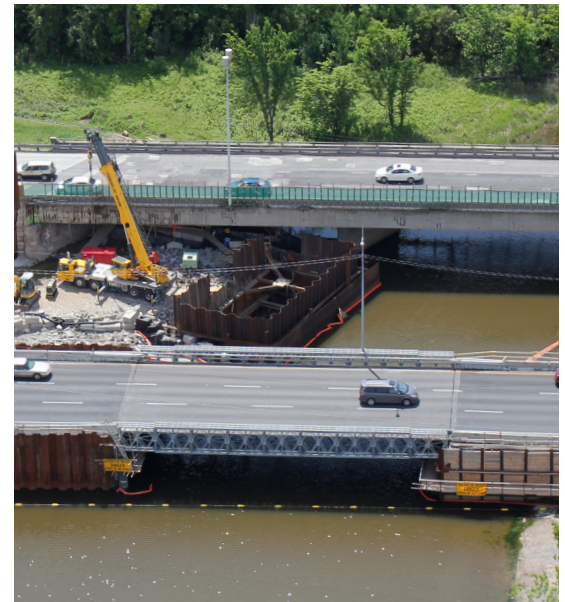


## Prefabricated Modular Steel Bridging Minimizes Work Zone Impact during Major Highway Construction

Acrow Bridge supplied Groupe Hexagone with a reusable detour bridge, offering a cost-effective solution for maintaining heavy traffic flow on Quebec's Autoroute 40, while protecting construction workers and motorists.



Autoroute 40 in Quebec serves as the main truck route between Montreal and all points west and carries some of the highest traffic volumes in Quebec, with truck loading typically as heavy as 63 metric tonnes. Two highway bridges on Autoroute 40 are currently under construction by Groupe Hexagone, a major Quebec-based contractor. Groupe Hexagone purchased an Acrow bridge to provide a detour during construction, the first Acrow detour bridge used on a major highway in Quebec. The bridge carries three lanes of Autoroute 40 traffic diverted from the two highway bridges that are under construction.

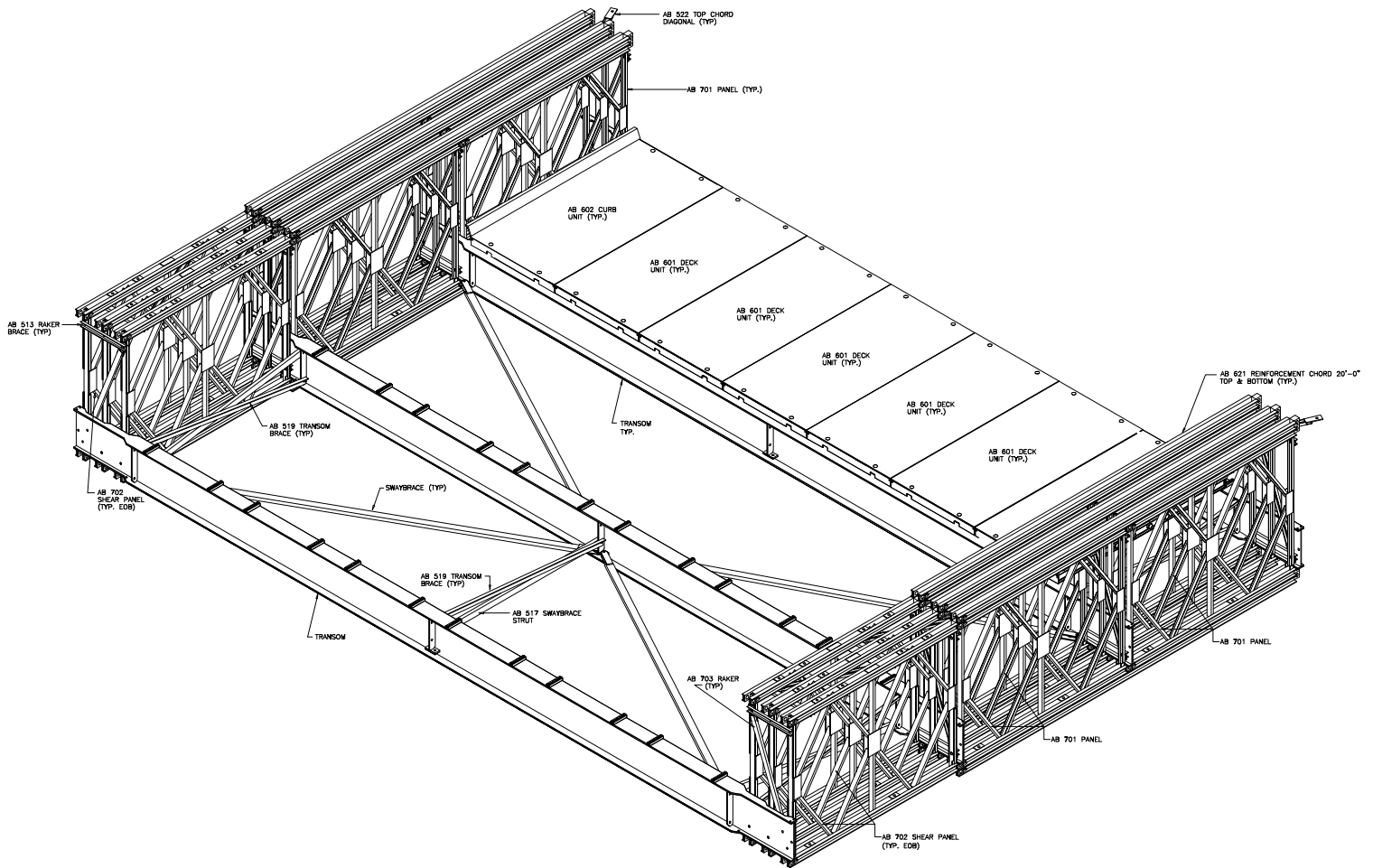
By purchasing Acrow's modular steel bridge over a traditional concrete and steel temporary detour bridge, the contractor will be able to re-use the Acrow bridge on future projects, achieving the desired length, width and strength by simply using more or less bridge components. The Acrow bridge can also be installed and removed in less time and at less cost, enabling projects to be completed faster and more profitably.

The Acrow bridge detour solution is helping to minimize work zone impact, maintaining traffic flow while protecting construction workers and motorists. It is situated beside the two bridges under construction that transport eastbound and westbound traffic, respectively.

At 90 feet (27M) in length with a roadway 42 feet (12.8M) in width, the bridge is one of the wider through type bridges that Acrow has produced in its 60+ year history. The detour features Acrow's standard steel decking overlaid with asphalt. More than 43,000 vehicles cross the bridge every day.

The use of detour bridges has grown significantly in recent years as more and more contractors use them to stay on or ahead of schedule and control costs, while providing a safe and dependable route for traffic. The Acrow detour bridge, which can be rented or purchased, is particularly popular because of its modular steel design. Durable and easy to assemble, disassemble, transport, store and customize for future use, many contractors purchase Acrow bridges, because they are a cost-effective investment and provide a proven competitive advantage.

Acrow bridges used as temporary detours address two major issues during highway and road construction. By providing a temporary roadway that is predictable and unchanging, traffic disruptions are significantly reduced while the safety of motorists and construction workers is greatly enhanced. This is a safer, faster and more economical alternative to "phased" construction in which lanes are moved as needed to divert traffic around work sites.



## Specifications

### Bridge length:

90 feet (27.4M) span

### Bridge width:

The Acrow bridge has a 42 foot (12.8M) clear travel way between the guide rails.

### Guide rails:

A PL-2 Guard rail was supplied by Acrow

### Deck surface:

Contract document required asphalt overlay

### Bridge erection:

Crane assisted launch

### Live load:

The bridge was designed in accordance with CL625 design loading as per CHBDC-2006 code.

### Bridge design:

- (A) Panel chords, diagonals, verticals, panel reinforcing chords, Rakers to AASHTO M223 GD 65
- (B) Decking, raker brace, transom, top chord brace, swaybrace, transom brace, diagonal chord brace to AASHTO GD 50
- (C) Panel pins to ASTM A 193 GD b7
- (D) Bolts to AASHTO M164M – A325

### Bridge finish:

- All major components galvanized to AASHTO M111 – ASTM A 123
- All bolts are hot dipped galvanized
- All pins are electro galvanized