



July 18, 2018

MTQ to inventory two large Algonquin Modular Panel Bridge Systems in emergency replacement bridge preparedness plan

To help Quebec be better prepared for future emergency replacements, Algonquin Bridge is supplying two of the longest single-span Algonquin Modular Panel Bridges in Canada to the Ministère des Transports Quebec (MTQ).

Heavy-duty modular panel bridge system customized to offer clear spans of up to 100 m

Heavy-duty Algonquin Bridge Systems are sold all over the world, but these are the first to be sold directly to MTQ by Algonquin



Project at a glance:

Project Name: Ponts Modulaires

Location: One stored in Montreal, one stored near Quebec City

Owner: Ministère des Transports Quebec (MTQ)

Engineer: Direction des Structures MTQ

Product: Heavy-Duty Algonquin Modular Panel Bridges

Application: Stored Emergency Bridges

Sector: Emergency Solutions

Dimensions: Length 100 m, Width 7.35 m

Bridge. They required a containerized, fully bolted system with no overhead top chord bracing that would be capable of spanning 40 m to 100 m in increments of 10 m or less. This was all a perfect fit for the large Algonquin Modular Panel Bridge System, except we added reinforcement to the members to extend Algonquin's span capability from the usual 91.5 m to 100 m.

The Heavy-Duty Algonquin Modular Panel Bridge System is a pre-cambered truss system with a friction-grip, pre-tensioned bolting system for temporary or permanent applications. It uses the innovative 4.5 m long Algonquin connectable panels that are bolted to top and bottom chord members to form the side trusses that carry the applied loads between abutments and/or intermediate piers. Algonquin trusses are provided with a positive pre-camber to counter the effects of dead load deflection.

Pre-cambered modular panel bridge segment compatible with every span configuration

For this order, we supplied special pre-cambered arc-shaped (instead of parabolic) segments that would work with the bridges regardless of their spans. MTQ officials were surprised that we could do this.

These re-deployable Algonquin Modular Panel Bridge Systems install quickly with local crews and equipment. They have a design service life of 75 years in Class A highway use and feature crash-tested TL-4 barriers along with orthotropic steel decking.

Normally provided as rental components, we also included all of the launching and erecting components so MTQ could remain self-sufficient. This included the 64 m launch nose segments.

Face-to-face meetings and working closely with MTQ every step of the way helped ensure the successful outcome of this order. One containerized bridge system will be stored in the Montreal area, while the other will be kept near Quebec City until needs arise. MTQ is planning to do a trial assembly of the bridges and Algonquin Representatives will be available for on-site technical support.



2015 Algonquin detour bridge project for Ministère des Transports Quebec on Autoroute 40, near Berthierville