



March 13, 2024

Algonquin Modular Bridge System cantilever launches onto existing piers in BC MoTI replacement project

Quick is a village off the Yellowhead Highway (Hwy 16) in Northern British Columbia. To keep the community connected, the BC Ministry of Transportation and Infrastructure (BC MoTI) needed to replace a failing 100-year-old truss bridge over the Bulkley River. An Algonquin Modular Bridge System was chosen for the project.



Project at a glance:

Project Name: Quick Station Road Replacement Bridge

Location: Quick, British Columbia

Owner: BC Ministry of Transportation and Infrastructure

General Contractor: Luxton Construction

Bridge Assembly Subcontractor: Neelco Builders Ltd.

Sector: Transportation

Application: Stream Crossing

Product: Algonquin Modular Bridge System

Dimensions: Span 93.6 m (two spans of 46.8 m), Width 4.2 m

The new two-span bridge was to re-use the existing piers and abutments, so BC MoTI's bid requirement was based on the bridge load and weight meeting the existing pier capacities: 188,930 kgs overall weight, Class D ADT, BC CL 625 loading. In addition, the weight of a single span, including all components and attachments, could not exceed 900 kilonewtons (kN). Our bridge was selected because it met the structure weight limit.

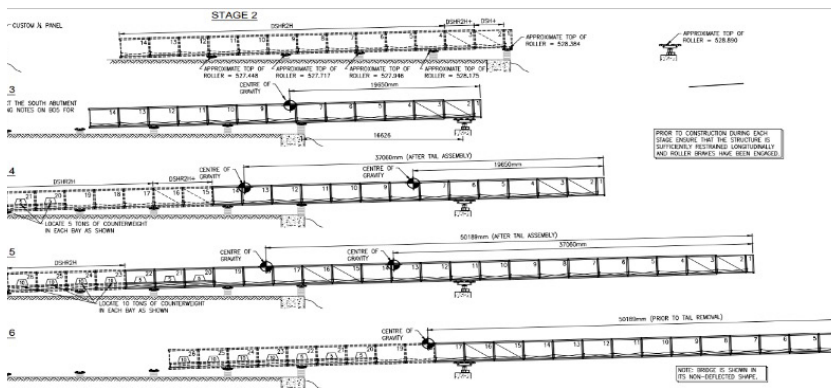
Bridge sections cantilever launched from each side of the river

The tender for the bridge was issued in 2021, with the system being delivered directly to BC MoTI in 2022. The demolition and construction were tendered separately in the summer of 2022. Luxton Construction was awarded the project and Luxton subcontracted the old bridge demolition and the new bridge assembly to Neelco Builders.

Items later added to the tender requirements were the north and south approach spans and their timber decks using galvanized wide flange girders. Luxton purchased the approach spans directly from Algonquin.

Bridge sections cantilever launched from each side of the river

We designed the bridge launch with a tail section so the spans could be built on either side of the river and pushed out on roller systems to meet at the middle and then lowered onto the bearings on the centre pier.



The new bridge officially opened to traffic on June 7, 2023, and will benefit the community by improving safety and access for local residents.

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Algonquin Bridge maintains an inventory of these popular bridge systems, ready to be shipped anywhere in Canada for permanent or temporary applications like detour bridges or emergency bridge washout replacements. All components are hot-dip-galvanized for maximum durability. They are easy to assemble with local crews and are completely reusable. Assembled bridges can be cantilever launched from one side or they can be crane-lifted into place.