

# McGillivray Bridge K162

Design, Manufacture, & Installation



## Client:

British Columbia Ministry of  
Forestry, Lands and Natural  
Resources Operation

## Project:

7052

## Contact:

Brian Chow

250-514-5079

Brian.Chow@gov.bc.ca

## Total Cost:

\$496,000.00

Upon winning a tender bid, Timber Restoration Services (TRS) was contracted by the BC Ministry of Forestry, Lands and Natural Resources to replace a forestry bridge located in the remote area of McGillivray Lake, BC, south of Sun Peaks ski resort. The bridge is a 21 metre, (70 FT) heavily skewed bridge consisting of five FiRP® fiber-reinforced glulam girders, a transverse glulam deck and is supported by glulam frame bents. Wood Research and Development (WRD) was the design team for this bridge and TRS manufactured and installed the structure. Once the bridge was designed, the Canadian team of IAS Accredited, Certified Level II Advanced Timber Technicians arrived in Jefferson, Oregon at our state-of-the-art manufacturing plant to complete the construction of this bridge. Thanks to the Q/A of our laboratory, issues were found with the delamination of the glulam beams and TRS was able to obtain new material to replace them. This unfortunately caused a delay in the manufacturing process. Once the bridge was manufactured, the timber elements were sent for preservation with Pentachlorophenol, and the raw steel connectors were sent away for hot dip galvanization. This process assures that there is no bright wood once the structure arrives at the project site. K162 is constructed solely out of timber, including the abutment and has a design life of one hundred years. With a short window for installation, TRS sent two of their top Technicians – Rodney Rosecrans and Matt Cole to British Columbia for the installation of this bridge. A local company, Celtic Contracting completed the civil work. This bridge was installed in eighteen days and trucks were able to start hauling loads across the bridge in a timely manner.



# McGillivray Bridge K162

Design, Manufacture, & Installation

## **Design Dates:**

October 01, 2017 to January 14, 2018

## **Design Team:**

Engineers: Dan Tingley, Ross White

CAD: Martha Hunter, Chris Legg

## **Construction Dates:**

September 04, 2018 to October 12, 2018

## **Construction Team:**

Scott Scott, Rodney Rosecrans, Matt Cole, Randy Lewis, Louis Noddin, Luke Tingley

## **Installation Dates**

June 17, 2019 to July 04, 2019

## **Installation Team:**

Rodney Rosecrans, Matt Cole

Design work was completed by **Wood Research and Development**

Construction and Installation of the bridge was completed by **Timber Restoration Services**

Civil Work was sub-contracted to **Celtic Construction** out of British Columbia.

**Project 100% complete**

**Warranty Period - 1 year from date of completion**

Scheduled Completion Deadline Engineering: N/A

Completion of Engineering: **January 14, 2018**

Scheduled Completion Deadline for Construction: **September 21, 2018**

Completion of Construction: **October 12, 2018**

Scheduled Completion of Installation: **October 31, 2018**

Completion of Installation: **July 04, 2019**

## ***Reasons for completing the project in advance of or later than the completion deadline:***

In our quality assurance process through our accredited testing laboratory we found delamination in the glulams from our supplier. Due to our diligence through our Q/A this the client extended the date for installation to the following summer. This area is a high snow area and impassible in the late fall, winter and spring.