Nigliq River Bridge

Colville River Delta, AK

Project Description

On Alaska's North Slope, conventional crane construction requires the use of ice roads to provide bearing capacity and protect the tundra. This limits the construction season to the middle of winter, January through March. In order to extend the construction season, PCL proposed to incrementally launch the bridge from one abutment. McNary Bergeron provided the engineering services to analyze and strengthen the bridge for launch loads and design the temporary works for launched construction. This method allowed the contractor to have the bridge in place before ice roads would have been completed and ensure the completion date of the project.

Owner
ConocoPhillips

Contractor
PCL Construction

Designer
PND Engineers, Inc.

Our Role
McNary Bergeron & Associates performed launch analysis and strengthening design for the bridge as well as the design of the roller system, nose, launch track, and ancillary equipment.

Total Contract Value
Not Available

Timeline
2013 - 2014

Construction Method and Specifications

- 1421 ft Twin Steel Box Girder Bridge
- Incremental Launch
- Assembled, launched, and lowered onto bearings in approximately 3 months