

Reference Project

Bridge Construction

This 189m long swing bridge across the Hooker River on the Hooker Valley Track, Mt Cook National Park

Location	Hooker Valley Track, Mt Cook.
Date	May 2026
Client	Department of Conservation
Consultant	DC Structures Studio

This significant unlimited load structure crosses the turbulent Hooker River and provides access to the mountain trails and the Hooker Valley. At 800m elevation and set in heavy glacial moraine it required a unique design and a challenging construction project. DC Structures provided the unlimited load and high wind capacity design. Abseil Access won the tender for the build of New Zealand's longest swing bridge.

The work included:

- Installation of 20 load tensioned rock anchors up to 20m deep by Speight Drilling
- All materials flown in by helicopter including mast sections at 1000kg, all hanger frames and decking.
- Triple sets of Redaelli 32mm Fully Locked Coil galfan spiral strand 100T MBL main cables for 50 year life.
- FRP decking for alpine environment
- 28mm Redaelli FLC spiral strand wind catenary cables tensioned to 65kN
- 60m³ of alpine grade concrete poured by helicopter
- 4 artistic stainless steel laser cut art panels featuring the native alpine Kea.

Our highly skilled construction team lived in Mt Cook village for the 12 months of construction. The rigging and drill teams had to cope with extreme weather events and regular high winds. Close collaboration with Department of Conservation, DC structures, Canterbury Metal Works, Southern Lakes helicopters and Arcus wire ropes was required to successfully execute the project safely and efficiently.

