

Reference Project

Bridge Construction

Design and Build of a 36m long suspension bridge as part of the Te Anau cycle trail.

Location	Upukerora River, Te Anau, Southland
Date	April 2021
Client	Waka Kotahi NZTA
Consultant	Abseil Access design team

The Te Anau Cycle Trail is another addition to the network of cycle trails throughout Otago and Southland. NZTA invited Abseil Access to design and build this bridge for the Fiordland Trail Trust in Te Anau. Its location adjacent to the road bridge enables cyclists and pedestrians a safer route than SH94

The work included:

- Design and engineering of the 36m bridge with a load capacity of 10 persons with a 3-x safety factor.
- High flood clearance
- A deck width of 1500mm enables cyclists to pass in both directions and meet the NZ Cycle Trail code grade 2.
- Aesthetic design and integration into the environment by using timber
- Steel angle hanger frames providing a lightweight, stable deck.
- H4 tandalized timber for a 50-year life

Main cable anchors and tower foundations are mass blocks 30mPa concrete. The 20mm IWRC main cables support 5 tons of deck as well as a 24kN live load. Abseil Access achieved deck stability using a unique continuously laminated kickboard and under deck catenary cables.

"It was a pleasure working with the Abseil Access bridge team. They looked after every aspect of the design, engineering, consenting and build and our bridge was completed and signed off within budget and on time. I would recommend them to anyone"

John O'Neill
Network Manager Project Co-Ordinator
Waka Kotahi NZ Transport Agency

