

## GEOTECHNICAL SERVICES

### Stabilising cliffs and steep ground

We are specialists in using rope access systems for stabilisation work on hazardous and difficult-to-access sites.

We have successfully completed projects on some of the most dangerous sections of highway throughout New Zealand. These include the Manawatu Gorge, the Otira Viaduct and Gorge, Nevis Bluff, Rocks Road and the Lindis Pass highway.

We are a preferred contractor to Kiwirail and have stabilised escarpments, cuttings and tunnel portals nationwide.

We have carried out several projects in National Parks, including the Hooker Valley Track in Mount Cook National Park and the access track to Westland's Fox Glacier. We also have worked on many other sites to stabilise the ground behind buildings, hydrostations, switchyards and above minor roads.

Our comprehensive knowledge of materials and systems means we can design the best and most cost-effective solution for any situation.



### Services we offer include:

- Site investigations
- Scaling cliffs and batters using hand tools and airbags
- Drilling: pneumatic and hydraulic cliff face drill rigs; DTH and top hammer systems
- Self-drilling anchors: Ischebeck and Weldgrip
- Grouting: rock anchors and soil nails
- Installing active and passive wire mesh systems: Maccaferri PVC-coated double twist mesh, MacMatR, HEA panels and PVC-coated, cable reinforced HR netting
- Installing catch and attenuation fences capable of impact energies from 500kJ to 5000kJ
- Use of explosives: high explosive and low-velocity explosives
- Shotcreting with synthetic fibre reinforcing
- Testing of rock anchors up to 600kN

● GEOTECHNICAL  
● BRIDGES  
● DESIGN & BUILD  
● INSPECTIONS  
● CONSERVATION  
STRUCTURES  
AND SITES  
NATIONWIDE

