

# ABSEIL ACCESS LTD

## Reference Project

### Geotechnical – Rock Fall Protection

Location: Johnsonville Rail Line, Wellington.

Date: December 2009

Client: Ontrack NZ

Consultant: Tonkin & Taylor

The Johnsonville line runs through a series of cuttings and tunnels between Wellington and Johnsonville. An upgrade of the line included rock fall protection measures between tunnels 1 and 2. The design was by Tonkin and Taylor, Wellington.

The greywacke rock is predominantly sandstone with some mudstone beds, highly to moderately weathered, closely fractured, dilated and loose. The work had to be completed without impeding the use of the track. This required working at night, weekends and during weekdays between travelling trains.

The project involved removal of vegetation and loose rock, installation of 14 top anchors (4m deep) and 77 face anchors (1.5m – 2.5m deep). A mixture of Reid bar and Ischebeck drill systems was utilised to cope with the variable nature of the ground.

The netting is Maccaferri galvanised PVC coated double twist covering an area of 1000m<sup>2</sup>. Additional 13mm galvanised mid face cables provide extra strength.



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