

# KARAPIRO EROSION PROTECTION SH1 KARAPIRO, NORTH ISLAND

## EROSION PROTECTION

**Product:** Enkamat, Rockfall Netting

### Problem

The site required a solution to protect the steep erodable face of unstable stratified alluvial pumice and soft rock. Continual erosion causing blockage of the concrete edge drains and partial obstruction of the left hand passing lane requiring regular maintenance.

### Solution

Design support and product recommendation were provided by Maccaferri. Enkamat and Rockfall Netting were selected to provide a reinforced erosion control system designed to hold a vegetative cover on this very steep slope, up to 70 degrees.

The construction involved removal of existing vegetation, trimming and smoothing the batter to a constant slope. Enkamat 7018 was pinned to the prepared face with standard ground staples. Maccaferri Galmac/PVC coated Rockfall netting was then laid down the face and adjacent panels laced together using the pneumatic lacing tool and high strength stainless steel rings.

Both Enkamat and Rockfall netting were secured at the top of the slope by extending a lap of 1m over the top edge and pinning with reinforcing steel rods. The final securing of the Rockfall netting to ensure the netting conformed to the contours was achieved with custom-made pins of varying length according to the soil type encountered.

The slope was hydroseeded in July achieving an excellent strike and resulting in complete vegetated face 4 months from installation.



Placement of Enkamat

Date: July 2000



Enkamat and Rockfall netting in place

Date: July 2000

Client name:

TRANSIT NZ

Main contractor name:

DAVIES CONSTRUCTION

Consultant:

OPUS INTERNATIONAL CONSULTANTS

Product used:

ENKAMAT 7018, GALMAC/PVC ROCKFALL NETTING

Construction date:

JULY 2000



After 4 months

Date: November 2000

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