## CASE ST/UDY

**Rockfall Protection** 

Project: Date: Client: Location: Meybille Bay Rockfall Protection June 2015 Geotech Limited West Coast, New Zealand



## **Maccaferri Hybrid Fence**

Meybille Bay is located along State Highway SH6 near Punakaiki on the West Coast of New Zealand. SH6 is the only route linking Greymouth and Westport along the coast. Furthermore, its scenic coastline attracts many international tourists to use this route.

The New Zealand Transportation Agency appointed Opus International Consultants to identify hazardous sites that are subject to rockfall risk along the state highway network in the South Island region. Under the current hazards rating system, Meybille Bay was identified as one of the locations scoring high in the rating system and in need of protection works.

After numerous field visits, identifying the most probable boulder size from the source area and rigorous detail trajectory analysis, Opus International identified the need for rockfall protection structure having an energy rating of up to 3000kJ. A Maccaferri Hybrid Fence having a 3000kJ energy rating with 5.0m post heights was selected for this site. To satisfy the site energy rating requirements the base of the fence was founded on an existing slope face at a distance of 10.0m from the road edge.

Unlike standard rockfall catch fences; a Hybrid Fence (or Attenuator Fence) does not stop the falling rocks but dissipates their kinetic energy by intercepting them in the panel suspended between the posts; and guides the rocks down to the toe of the drape for collection/maintenance. In the case of an Attenuator Fence, the rocks are allowed to continue through the drape panel to be stopped by other protection structures depending on site conditions.

Geofabrics together with the support from Maccaferri assisted with the preparation of the layout drawings for the engineer and supplied the fence kit system for this project. During the installation stage, the Geofabrics and Maccaferri team visited the project site and provided the installation tips and advice in addition to the installation drawings.

The installation took the contractor's 3 man team approximately 4 weeks to complete this 30m length of Hybrid Fence.

The information contained herein is general in nature. In particular, the content herein does not take account of specific conditions that may be present at your site. Site conditions may alter the performance and longevity of the product. Actual dimensions and performance may vary. This document should not be used for construction purposes and in all cases, we recommend that advice be obtained from a suitably qualified consulting engineer or industry specialist before proceeding with installation. © Copyright held by Geofabrics New Zealand Ltd. All rights are reserved and no part of this publication may be copied withhout prior permission.

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Installation of intercepting panels



Completed 3000kJ Hybrid Fence



Completed 3000kJ Hybrid Fence



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