

## ROCKFALL PROTECTION AT NORTH SOUTH EXPRESSWAY, IPOH, PERAK IPOH, PERAK, MALAYSIA

### Simple Drapery

#### Problem

There was potential detachment of unstable rocks from the granitic rock slope at KM263.85 (North-bound) of the North-South Expressway. The rock slope is adjacent to the expressway separated only by an existing toe ditch of about 3m in width. The slope's height is about 40m with near vertical surface.

Due to limited buffer detention zone, there is high risk that falling rocks would reach road users, thereby causing danger and hazards. Hence, an active slope surficial stabilizing system is needed to prevent detachment of shallow surface rock.

#### Solution

Maccaferri's Rockfall Protection System - HEA (High Energy Absorption) netting is manufactured from high tensile steel ropes with high resistance wire "knots" at all the mesh junctions. The fixed connection at all the mesh junctions provide high stiffness for the HEA netting and it require less strain mobilization in the load transfer mechanism. Together with rock bolts, this system enables surficial reinforcement and stabilize the rock mass surface layer. The installation of about 2,000m<sup>2</sup> HEA netting for this project started in May 2011 and completed within 6 months.

**Client:** PROJEK LEBUHRAYA UTARA SELATAN (PLUS)

**Designer / Consultant:** MOHD ASBI ASSOCIATE

**Contractor:** PROPEL BHD

**Products used (Qty.)**

- HEA Panels 2160 M2

**Date of construction:** 05/2011 - 11/2011



before construction



During Construction

