

**LAYAN GARDEN
PHUKET, PHUKET PROVINCE, THAILAND**

Mass Gravity Retaining Walls

Problem

Due to heavy rain, the area under consideration was characterized by erosion. The consultant was looking for an environmental friendly solution.

Solution

Maccaferri Gabion gravity retaining wall was recognized as the best solution for the slope protection. This is due to Gabion's peculiar characteristics, namely:

- Reinforcement - Gabions are homogeneous monolithic structures designed to resist all forces exerted.
- Flexibility - Gabions can resist unexpected or localized stresses due to large settlements.
- Permeability - Gabions are filled with stones. Their structure can naturally drain water thereby reducing the risk of building of pore water pressure behind/underneath.

GawacWin, Maccaferri house software, was used to conduct the stability analysis of the Gabion retaining wall. The program allows the check under many different situations (geometry, surcharge loads, etc.) which may occur during the design process.

Zinc Gabions 2x1x1m were used. The maximum wall height is 3m.

Client: Layan Garden

Designer / Consultant: NA

Contractor: Dufor Development

Products used (Qty.)

- Gabion 50 m3

Date of construction: 05/2007 - 05/2007



Gabion wall (1)



Gabion wall (2)



Gabion wall (3)



Gabion wall (4)



Gabion wall (5)