

**RETAINING WALL FOR LANDSLIDE MITIGATION, JAMBI
JAMBI, JAMBI, INDONESIA**

Reinforced Soil Walls and Slope Reinforcement

Problem

Due to the heavy rainfalls, a landslide occurred along the National Road in Jambi. The area affected by the landslide is approximately 8m high and 30m wide. According to Cone Penetration Test data, the foundation soil is sandy clay until 3 m depth. The foundation soil condition has been worsened due to the high water content.

Solution

The Public Works Department decided to build a reinforced soil wall as retaining structure using Maccaferri Terramesh System modular and flexible elements. Prior to carry out the installation of Terramesh, the contractor stripped 0.5 m of topsoil and subsequently installed timber piles with a diameter of 12cm and a length of 4 m. The spacing of the wooden piles was equal to 1 m. Timber driven mini-piles are a common method used in Indonesia to transfer the load to a deeper and stiffer foundation soil. The selected tail length of the Terramesh System is equal to 4 m.

The gabion elements placed at the bottom of the structure have a double function. In fact, they work both as drainage system and as pile capping elements. Static and seismic analysis have been performed, checking global stability, internal stability and stability as retaining wall (sliding, overturning and bearing capacity).

Client: MINISTRY OF PUBLIC WORKS

Designer / Consultant: N/A

Contractor: PT. ABUN SENDI

Products used (Qty.)

- Terramesh N/A

Date of construction: 04/2016 - 05/2016



Before Construction



During Construction



Finished Structure