

COMBINATION OF MSE WALL & EROSION CONTROL FOR LANDSLIDE MANAGEMENT CIANJUR, WEST JAVA, INDONESIA

Reinforced Soil Walls and Slope Reinforcement

Problem

The earthquake that occurred in November 2022 with a magnitude of 5.6 on the Richter scale, which struck the city of Cianjur and its surrounding areas, resulted in landslides in several regions. As a result of these landslides, several road access points were severed, leading to hundreds of casualties. Immediate action is needed to address the impacts of this issue. The solution of the MSE Wall and erosion control from Maccaferri Indonesia was chosen to address the landslide problem as well as the erosion control in an area covering 43,920 square meters.

Solution

Maccaferri Indonesia recommends a combination of solutions involving MSE Wall and erosion control using Terramesh as a reinforcement and MacMat that functions as a cover for the landslide area to promote vegetation growth. To address erosion in the area affected by the landslide, a combination of HDPE geomat and double-twisted wire mesh panels with high tensile strength longitudinal steel wires, known as Macmat HS, is used. A series of seed-containing mulch is then applied to Macmat HS to promote vegetation growth. Vegetation will restore the environment as part of the rehabilitation process. Available in roll form, Macmat HS is easy to install with T-shaped deformable stakes to secure the mesh on sloped surfaces. Maccaferri's Erosion Control System offers several advantages, such as easy and fast installation, surface drainage, vegetation support for rehabilitation, compatibility with Soil Nailing, and suitability for steep slopes.

Client: BRANTAS ABIPRAYA

Designer / Consultant: PT BUANA ENJINIRING KONSULTAN

Contractor: BRANTAS ABIPRAYA

Products used (Qty.)

- Terramesh	500 units
- Gabions	300 units
- Macmat	33540 sqm
- Macmat HS	10380 sqm

Date of construction: 02/2023 - 08/2023

[Google Maps](#)

[Google Earth](#)



Before Construction



Before Construction



Installation of Terramesh



Installation of MacMat HS



After Construction



After Construction



Conditions in August 2023

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