

Rev: 2, Issue Data 20.03.2020

FCF MINERALS ROM PAD QUEZON, NUEVA VIZCAYA, REGION II, PHILIPPINES

Reinforced Soil Walls and Slope Reinforcement

Problem

FCF Minerals Corporation operates gold and molybdenum minerals exploration in Runruno, Quezon, Nueva Vizcaya, Philippines.

A 29m-high retaining structure was needed for the construction of the run of mine (ROM) pad. The structure was required to have a wide bench mid-height for servicing of heavy equipment.

Solution

Based on the data provided by FCF Minerals engineers and with the supervision of the Project Consultant (PAIE), Maccaferri engineers recommended a 29m-high reinforced soil slope using Green Terramesh as facing units and MacGrid woven polyester geogrids as main reinforcements.

Green Terramesh units promote vegetation on the slope facing. The reinforced backfill of the structure has been required to be compacted to minimum 95% of MDD by Standard Proctor.

The height of the reinforced soil slope varied as it followed a safe angle for the ramp of heavy equipment located on its top. The design has been proven to be structurally sound and economical, and has met the tight construction schedule for the project.

The remaining slopes immediate and terminal to the ROM pad have been built by compacting the backfill materials according to required density and relaxing the facing angle to less than 45 degrees. Maccaferri's biodegradable geoblanket made of coconut fibers (BioMac C) was used together with Vetiver and peanut grasses to control erosion and expedite vegetation.

Client: FCF Minerals Corporation

Designer / Consultant: Plant & Infrastructure

Engineering (PAIE)

Contractor: FCF Minerals Corporation

Products used (Qty.)

- Green Terramesh N/A - MacGrid WG N/A - MacTex Non-woven Geotextile N/A - Biomac natural N/A Date of construction: 03/2014 - 08/2015





MACCAFERRI



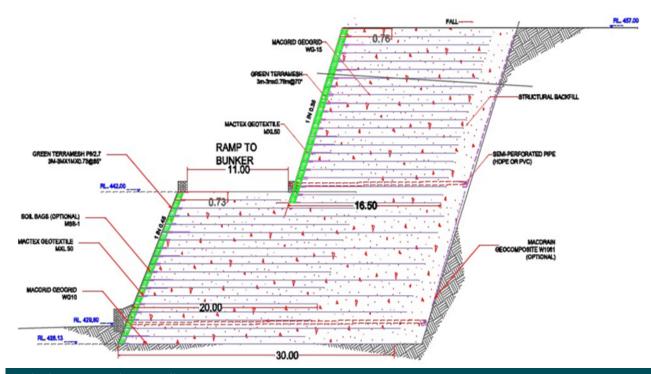
During Construction



During Construction



Natural Slope covered wih Maccaferri Biomac for Erosion Control



Typical Cross Section Detail

Maccaferri (Philippines), Inc.

11/F, Asian Star Building Alabang, 1781 Muntinlupa City - Philippines

Tel: +63-2 8889-0623

E-mail: info.ph@maccaferri.com