MACCAFERRI

CASE HISTORY

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PARAMESH SYSTEM FOR THE AIM PROJECT - PT MERDEKA TSINGSHAN INDONES

MOROWALI, CENTRAL SULAWESI, INDONESIA

Reinforced Soil Walls and Slope Reinforcement

Problem

PT Merdeka Tsingshan Indonesia, located in the Morowali industrial area, Central Sulawesi, is a company operating in the nickel industry, focusing on mining and processing nickel ore. The company utilizes its strategic location to operate mining facilities and processing plants, including smelters, which support local and national economic development. PT Merdeka Tsingshan Indonesia in Morowali also aligns with the government's efforts to increase the added value of natural resources through domestic processing.
To support its growing operations, PT Merdeka Tsingshan Indonesia is currently developing infrastructure for the AIM (Acid, Iron, Metal) project. This project aims to process residual mineral ore into various value-added products such as sulfuric acid, iron ore pellets, hot steam, sponge copper, and pyrite as raw materials for the battery industry. A crucial part of this project is the construction of the pond and operational buildings which must have optimal elevations, requiring the use of appropriate soil fill to support the building structure safely and effectively.

Solution

After in-depth discussions and careful calculation analysis, PT Merdeka Tshingshan Indonesia has decided to use Maccaferri's Paramesh System solution to meet this need. Paramesh System uses a combination of modern technology, including Terramesh System as facing, ParaLink 300 as the main reinforcement element, and MacTex as separator and filtration. The Paramesh System retaining wall is planned to have an area of up to 700 m² with a height of up to 12 meters, specifically designed to provide the strength, durability, and stability needed in this project.
The decision to use tParamesh System as a retaining wall solution was chosen for some strategic reasons. In addition to its high mechanical strength and ability to stabilize soil effectively, Paramesh System is also known for its flexibility in adapting to diverse soil conditions. Additionally, this system is considered more environmentally friendly and cost-efficient compared to conventional retaining wall solutions. Adopting this technology, not only increases efficiency in the implementation of infra

Client: PT Merdeka Tsingshan Indonesia
Designer / Consultant: Maccaferri Indonesia
Contractor: PT Merdeka Tsingshan Indonesia
Products used (Qty.)

- Gabions	2358 unit
- Nonwoven Geotextiles	1800 sqm
- MonoAxial GeoGrids	145800 sqm
- PP/PE Woven Geotextiles	2808

Date of construction: 09/2022 - 03/2023
Google Maps Google Earth



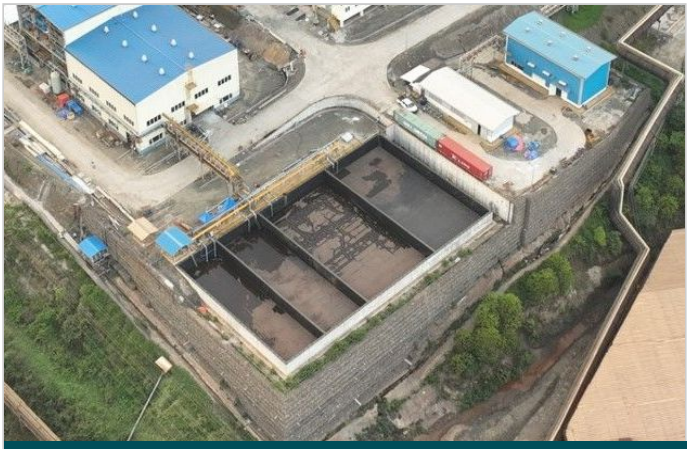
Construction Work



Construction Work



Finish Construction



Finish Construction

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