

SOIL NAILING FOR SLOPE STABILITY

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ABSTRACT

In the geotechnical engineering world today, there are many possible solutions to prevent landslides to occur. Soil nailing has started to be chosen currently as one of the popular techniques for tackling slope stability problems in Malaysia.

Soil nailing technique gains its popularity as one of the alternative slope reinforcement techniques where it can be applied at both in situ cut slopes and manmade fill slopes. This technique has more advantages compared to other conventional reinforced structures such as anchored walls and mechanically stabilized earth walls due to ease of construction, maintenance free and effective in terms of stability. However, detailed researches are required in order to make a possible real life design and construction.

This report describes comprehensive soil nailing information in terms of properties, design and construction of soil nailing. Furthermore, a real study case is proposed as well where the appropriate application of soil nailing is introduced. Geostudio: Slope/W 2007 as a slope stability analysis program will be used to propose a solution to enhance the stability of the slope failure. A detailed methodology will be provided as well to describe meticulous steps to achieve final design of slope stability analysis.