Study of Stability of a Slope by the Soil Nailed Technique

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Abstract : Using the limit equilibrium method in geotechnical field is very important for large projects. This work contributes to the understanding and analysis of the building unstable slopes by the technique of soil nailed with the used of software called GEO-SLOPE calculation based on limit equilibrium method. To achieve our objective, we began a review of the literature on landslides, and techniques of slope stability. Then, we presented a real case slope likely to slip through the realization of the EastWest Highway (M5 stretch between Khemis Miliana and Hoceinia). We also process the application of reinforcement technique nailed soil. The analysis is followed by a parametric study, which shows the impact of parameters given or chosen on various outcomes. Another method of reinforcement (use of micro-piles) has been suggested for improving the stability of the slope

Keywords: slope stability, strengthening, slip, soil nail, GEO-SLOPE

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