

**ASSESSMENT OF SLOPES STABILITY USING ROM SCALE
ALONG JALAN GERTAK SANGGUL, BALIK PULAU,
PULAU PINANG**

By


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DECLARATION BY THE CANDIDATE

I Hapsa Binti Husen, 2002330145 confirm that the work is my own and the appropriate credit has been given where reference has been made to the work of others.

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Assalamualaikum w.b.t.,

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ABSTRACT

Slope stability is a complicated and broad subject that still does not have a well establish design slope standard. Thus extensive researches and studies need to be carried out. The stability of the slope mainly depends on many factors and one of the factors is the soil strength properties which are related to soil characteristics. This study is more focus on the soil characteristics that can affect the slope stability.

Jalan Gertak Sanggul is one of the main roads in Balik Pulau that is used frequently by the public. In this study, assessment on unfailed slope along Jalan Gertak Sanggul is made where the soil samples were taken and tested in laboratory. The results that obtained is then used to predict the stability of the slope by using ROM Scale (after the name of researchers ROSLAN & MAZIDAH). The results obtained which is % of sand, % of silt and % of clay are used in ROM equation to predict the stability of the unfailed slope. Statistical method also used in addition to results analyses.

The results from the assessment, majority of the unfailed slopes along Jalan Gertak Sanggul are under critical risk category. The slopes are still standing due to suction of unsaturated soil and vegetation on the slope, but the slopes still have high possible chances to failure any time in the future due to climatic changes.

The main objective of this study is to predict of slope failure of unfailed slope using ROM Scale. ROM Scale is a simple method in determining the likelihood of slope failure. It is hoped Rom Scale can be adopted especially as guidelines to predict future slope failure in the country.

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