

UNIVERSITI TEKNOLOGI MARA



ASSESSMENT OF SLOPES USING ROM SCALE IN
PENANG AND SELANGOR

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DECLARATION BY THE CANDIDATE

I Mohd Siddiq Bin Abdul Rahim, 2003479473 confirm that the work is my own and the appropriate credit has been given where references has been made to the work of others.

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ABSTRACT

Slopes failures are commonly occurring in Malaysia. The factor causing slope failure including soil properties, environment effect, rainfall effect and many more. ROM Scale is used to determine the landslide risk based on the soil physical properties to know the possibility of the landslide failure. In this study, there are sixteen landslide locations in Penang and Selangor that were chosen in this assessment of the slopes failures using ROM Scale. The slope failures in Penang were along Jalan Gertak Sanggul, Balik Pulau, Penang and Federal Route 6. In Selangor, the locations of slopes failures are at Wangsa Maju, Kg Bukit Sungai Putih, Ampang, and Taman Bukit Belimbing, Kajang. In order to obtain the results, laboratory tests were conducted and then the ROM Values were calculated and compared with ROM Scale to determine the landslide risk. From the results, low to moderate risk of landslide occurring when the clay content is higher. High to critical risk of landslides occur when the sand and silt content are high.

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