

**ASSESSMENT OF SLOPE FAILURES USING ROM SCALE
ALONG JALAN TUN SARDON, BALIK PULAU,
PULAU PINANG**

By

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ABSTRACT

Slope failures common occur in Malaysia. The slope failure is effect by several factors and one of them is soil characteristic or soil type. ROM Scale that is used in this study is using the soil characteristic as the main criteria to predict the possibility of the slope failure risk.

In this study, the slope failures already occurred along Jalan Tun Sardon are chosen and assessments of the slope failures were done using ROM Scale. Jalan Tun Sardon is the main road and also the busiest road in Balik Pulau where the public use it every day. Based on JKR Barat Daya report, many slope failures occurred along this road. The main objective of his research is to confirm that at slope failure location the ROM value is in the high and critical risk category. To determine the ROM value, sieve and hydrometer test were conducted and it was then compare with the ROM scale.

From the results, at slope failure locations the ROM values are in the category of high and critical risk.

CHAPTER 1

INTRODUCTION

1.1 Background

Recently, slope failure occurrence in Malaysia is becoming one of the major environment disasters in line with its factors especially due to heavy rainfall that is also related to the soil characteristic of the slope. ROM Scale is a new method that is used in assessment of slope failure with reference to the soil characterization.

In this study, the road along Jalan Tun Sardon is chosen and the assessment of the slope failures using ROM Scale is carry out. The results will show the relationship between the soil characteristics and the slope failure risk.

1.2 Problem Statement

The problem statement of this study is to find the relationship between the soil characteristics and the slope failure risk and also to confirm that the ROM Scale with regard to slope failure tragedies is true.

1.3 Objectives

- a) To confirm that the ROM Scale (after the name of researchers ROSLAN & MAZIDAH) With Regards to Slope Failure Tragedies are true.
- b) Analysis on the physical properties of soil sample for each slope failure tragedy along Jalan Tun Sardon and to apply the ROM Equation in analyzed the site of soil erosion tragedy.