# FINAL YEAR PROJECT REPORT ADVANCED DIPLOMA IN CIVIL ENGINEERING SCHOOL OF ENGINEERING MARA INSTITUTE OF TECHNOLOGY SHAH ALAM, SELANGOR

# SOIL ERODIBILITY STUDY AT SEPANG, BATU DAM AND PUCHONG AREAS

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# ABSTRACT

Soil erosion has become a very serious problem in Malaysia in recent times, and with the accelerated rate of land development both in the public and commercial sectors, this problem will certainly enhance and worsen unless proper planning and management of the utilisation of land is adopted at the very early stage of any proposal of land use. Severe soil erosion is among the major cause of landslide and hence, this issue should be addressed seriously by all and at any cost since the development of land and land usage seem to be the prime activities of the general public now and forever.

Soil erosion is the function of erosivity of rainfall and the erodibility of soil. Erosivity is defined as the potential ability of the rainfall to cause erosion, whilst, erodibility is defined as the vulnerability of the soil to erosion. Every soil on this planet has its own erodibility factor and this factor will dictate its erodibility potentials in relation to other environmental factors. Erodibility potential of a soil would determine the risk or degree of erosion potential of that particular soil, hence, one would be able to predict the sustainability of the soil in respect to erosion in which constructions will be erected on it. This form of early information would enable one to take essential precaution measures to uphold the condition of the soil or to take some other alternatives in preventing any erosion risk to occur at the project area to be developed.

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### CHAPTER ONE

#### INTRODUCTION

#### 1.0 AN OVERVIEW

1.1 Our country, Malaysia is undergoing a very tremendous land development especially in the development of infrastructures. This development is inevitable as it is a prime activity in the progress of the nation towards vision 2020. Vast areas of virgin rain-forest, especially in Penínsular Malaysia are being cleared rapidly to cope with the immense for land in all sector of development especially in construction of highways, opening up of new industrial and residential areas as well as for the agricultural activities. Although land development schemes for both infrastructural and agricultural purposes form an integral part of the whole spectrum of socio-economic advancement in this country, its success is indeed be limited. if insufficient attention is paid to the adverse effects of land development, particularly on soil erosion issues. If appropriate soil conservation measures are not taken simultaneously with development, it will leads to an increase in soil erosion and therefore, siltation of streams and rivers will occurs. This will be the beginning of others related problems such as flooding and landslide.

1.2 Instances of severe soil erosion which is among the major cause of landslide has marked many black chronicle to the nation. The collapsed of

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