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

SOIL EROSION STUDY AT TRAGIC AREAS OF HIGHLAND TOWER AND ULU LANGAT

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ABSTRACT

Recently soil erosion has become a very serious problem in Malaysia in recent times, and will continue to enhance the problem in the future, unless proper planning and adminstration of the utilization of land is adopted at the very early stage. There are indications, that this is so as direct result of an accelerated rate of development; both in the public and commercial sector. Timber extraction and consequently denudation of soil, highway construction and housing development, have all led to tremendous and severe movement of soil, such that it has resulted in the loss of good agriculture land, siltation and clogging up of surface waterways and damage to installations.

The prevention of soil erosion, which means reducing the rate of soil loss to approximately that which would occur under natural conditions, relies on selecting appropriate strategies for soil conservation and this, in turn, requires a thorough understanding of the processes of erosion. The factors which influence the rate of erosion are rainfall, runoff, wind,soil properties ,topography, slope vegetation and the presence or absence of conservation measures. The protection group focuses on factors relating to the slope vegetation. By intercepting rainfall and reducing the velocity of runoff and wind, a slope vegetation protects the soil from erosion. Different slope vegetation afford different degrees of protection so that, by knowing the land use,human, to a considerable degress, can control the rate of erosion.

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CHAPTER ONE

INTRODUCTION

1.0 GENERAL

1.1 Soil crosion issue was not given great and proper attention among the general public in our community before the end of last decade. On December 11, 1993 when the Block 1 of the Highland Towers Condominium suddenly toppled over and collapsed and brought about fourty eight dead bodies and damaged properties, everybody seems to be awaken by the disastrous situation that could be caused by soil erosion. Later, there were severe tragedies of landslide occurrences in the country of which the major cases are along the Karak Highway, Puchong, Sepang, Ulu Langat and the latest was at Gua Tempurung in Ipoh. These tragedies apparently have added more worries among the general public and became an hazardous as well as frightening issues for the country.

1.2 Presently, soil erosion is almost universally recognised as a serious threat to human's well being, and this is shown by the fact that most governments in the world today, including Malaysia give an active support to programmes of soil conservation to protect environment. There are many measure formulated to diminish soil erosion. Measurement like turfing, stormwater diversion drain, channel terrace, artificial watercourse, bench terrace and others are commonly practise in this country.