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**ON STRENGTH CHARACTERISTICS
OF UNBOUND AGGREGATES**

BY

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SYNOPSIS

This study is limited to laboratory investigation of the strength and degradation characteristics of course aggregates. The testing carried out were the CBR and MBR tests, large shear box tests and compression test. The purpose of this study is to examine the influence of confinement pressure on the strength characteristics of the aggregates tested. In addition this study was also carried out to examine the influence of compaction on the shear strength value of the aggregates and its degradation characteristics .

Experimental work in determining the degradation and strength characteristics was carried out under dry condition using aggregates taken from the Damansara quarry . The aggregates were predominantly granite. Three different gradation namely, well graded, uniformly graded and gap graded were used .

TABLE OF CONTENTS	PAGE
ACKNOWLEDGEMENT	i
SYNOPSIS	ii
LIST OF FIGURES	iii
LIST OF TABLES	iii
LIST OF NOTATIONS	iv
TABLE OF CONTENTS	v
CHAPTER ONE : INTRODUCTION	
1.1 General	1
1.2 Problem Statement	3
1.3 Objective of Study	5
1.4 Scope of Study	5
CHAPTER TWO: LITERATURE REVIEW	
2.1 General	7
2.2 Unbound aggregates	8
2.3 In Situ Stress In Pavement Materials	10
2.4 Particles Breakdown During Compaction and Shearing	12

CHAPTER ONE : INTRODUCTION

1.1 GENERAL

The foundation to a flexible or rigid pavement comprises all those layers of material upon which the bound layers are placed. The foundation has to perform several quite well defined tasks, namely :

- (a) to carry site traffic without excessive deformation,
- (b) to provide a platform to allow satisfactory paving and compaction of the road base, and
- (c) to perform in a satisfactory way the long term environmental condition to accommodate traffic load.

The top layer of the road foundation, that is the sub-base, being nearer to the load, will need to be of a higher quality than the underlying subgrade (Dawson et al,1989) . For these layers, as further elaborated by Dawson et al,(1989),the requirements are progressively less rigorous .