

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

**PHYSICAL PROPERTIES AND COMPRESSIBILITY
OF
MALAYSIAN MARINE CLAY**

By :

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NOVEMBER 1995**

ACKNOWLEDGEMENT

The author wishes to express a grateful acknowledgement to the first advisor, En Suhaimi Abd Talib, who is now undertaking further study in the United Kingdom.

The author would also like to convey his heartfelt thanks to his second advisor En Abd Rahman **Mahamood**, Senior Lecturer in the Department of Civil Engineering, MARA Institute of Technology for his advice, guidance and constructive criticisms in completing this thesis.

Lastly the author would also like to express his appreciation to all the laboratory staffs En Mohd Yusop bin Shaarani, En Shamsudin bin Awang, En Ahamad Razman bin Arshad, En Mohd Hapiz bin Zakaria, En Mohd Yusnal bin Sarmean for providing the necessary assistance throughout project.

Last but not least to those who have help and contribute directly or indirectly during the course of this project. May Allah bless you all.

Mohd Ashaari Ab Wahab

(NOVEMBER 1995)

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ABSTRACT

A comprehensive study of the geotechnical characteristics of marine clays from the coastal region of the Peninsular Malaysia is very important today. In recent years these areas are attracting numerous civil engineering activities due to implementation of projects like land reclamation, coastal embankments, roads, highways and housing. Because of that it is important to establish a database on the physical properties and the compressibility of the Malaysian marine clays. The general study on the marine clay throughout Peninsular Malaysia has been published by Ramli Mohamad. This study limits itself at a location in Jeram Selangor. Samples taken were tested in the laboratory and duly compared with other marine clays in Malaysia.

CHAPTER 1

INTRODUCTION

1.1 Introduction

The Peninsular Malaysia coastal region is mostly made up of soft clay, possibly marine clay. The general distribution is shown in Figure 1.1. Most of these areas, especially the western coastal areas, have undergone continuing extensive developments. The major transportation link i.e. the North South Expressway constructed on the west coast goes through some of these marine silt deposits. The routes taken by North South Expressway which was completed in 1994 is shown in Figure 1.2.

Development such as Marine Structures, Coastal Land Reclamation and the Sepang International Airport involves coastal area with soft clay. All these developments require proper understanding of clay and marine silt behaviour.

The geotechnical characteristics and field performance of most clays are influenced considerably by genesis, degree of weathering, morphological characteristic, chemical and mineral composition, topography and drainage and age as well as by environmental conditions

1.2 Problem Statement

The geotechnical characteristics of marine clay varied from one place or location to another. Up to date there is still not comprehensive study on the geotechnical characteristics of this type of clay.