

HIGHER TECHNICAL INSTITUTE

CIVIL ENGINEERING DEPARTMENT

Diploma Project

THE RELATIONSHIP BETWEEN DENSITY
AND STRENGTH OF SOILS

C/930

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**THE RELATIONSHIP BETWEEN THE
MOISTURE CONTENT, THE DENSITY
AND THE STRENGTH OF SOILS**

(Experimental)

by

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and

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Project Report

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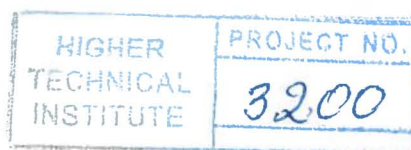
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CONTENTS

ACKNOWLEDGEMENTS

SUMMARY

CHAPTER ONE

PAGE

STABILIZATION OF SOILS

1

CHAPTER TWO

MECHANICAL STABILIZATION AND DENSIFICATION

3

- General
- Usage

3

3

FACTORS AFFECTING MECHANICAL STABILIZATION

4

- Mechanical strength of the aggregate
- Mineral composition of the materials
- Particle-size distribution (grading)

4

4

5

COMPACTION

6

- How compaction is affected by dry density and moisture content

6

MATERIALS

7

- Course particles – Grading
- Fine particles – Plasticity

7

8

DURABILITY

8

DESIGN OF FLEXIBLE PAVEMENTS

9

- Terminology
- Elements of a flexible pavement

9

9

SURFACE COURSE

10

ROADBASE

10

SUBBASE

10

CAUSES OF STRUCTURAL FAILURE

11

STANDARD COMPACTION TEST PROCEDURES	12
- Types of test	12
- "Ordinary" Compaction test – Proctor test	12
- Test procedure	12
- Proctor test results	14
- Dry Density against water content graph	16

CHAPTER THREE

CALIFORNIA BEARING RATIO (C.B.R.) TEST	17
- Purpose and scope	17
- Principle	17
- Basis of test	17
- Compaction method	18
- Limitations	18
- Relationship between CBR, dry density and moisture content	19
- Calculation of C.B.R. (Example)	19

CHAPTER FOUR

LABORATORY INVESTIGATION	21
- CBR results	
- Graphs	

CHAPTER FIVE

CONCLUSIONS

APPENDIX

REFERENCES

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SUMMARY:

The object of this project was to determine the relationship between the moisture content, the dry density and the strength of soils. The soil tested was the crusher run and for the determination of the above, the California Bearing Ratio (C.B.R.) test and the Proctor test were carried out.

The project is divided in five chapters and a brief description of each chapter is given below:

The first chapter gives an account on the soil stabilization and mentions the properties of soil.

The second is referred to mechanical stabilization and densification (general).

The third chapter deals with the C.B.R. test in detail.

It mentions the purpose, scope and the basis of this test and also how the C.B.R. value is calculated.

In the fourth chapter we can see an experimental study in order to examine the influence of dry density and moisture content of a soil on its strength.

In the last chapter there is a presentation of the project's results and graphs. Furthermore the conclusions are present in chapter five, with the references and appendixes.