شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد أعدت دون أية تغيرات

يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار

في درجة حرارة من ١٥-٢٥ مئوية ورطوبة نسبية من ٢٠-٤٠%

To be Kept away from Dust in Dry Cool place of 15-25- c and relative humidity 20-40%

بعض الوثائق الاصلية تالفة

بالرسالة صفحات لم ترد بالاصل

Ain Shams University

Faculty of Engineering
Structural Engineering Department

Effect of Compaction on Engineering Characteristics of Soil

By

Eng./ Medhat Abd El Rahman Mohamed Moustafa
B.S.C Civil Eng. Hon. (1990)

Thesis Submitted for the Degree of
Master of Science in Civil Engineering

Supervised By

Dr. Mona Moustafa Eid
Professor of Geotechnical engineering
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Dr. Ezzat Abd El Fattah Omira
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Cairo 2000

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بسم الله الرحمن الرحيم

قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا
مَا عَلَّمْتَنَا إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ

صدق الله العظيم

(سورة البقرة)

الآية ٣٢

EXAMINERS COMMITTEE

NAME: MEDHAT ABD EL RAHMAN MOHAMMED MUSTAFA

TITEL: EFFECT OF COMPACTION ON ENGINEERING CHARACTERISITICS OF SOIL

DEGREE: MASTER OF SCINCE IN CIVIL ENG.
(STRUCTURAL ENGINEERING DEPARTMENT)

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Date : 7 - 6 - 2000

Abstract

Effect of compaction on engineering Characteristics of soil

This work is dealing with the effect of percentage of inactive fines on the characteristics of coarse-grained soil. The soil used in this research are medium sand have a uniformity coefficient of 2.77 and the fine material used is classified as medium plastic silt haveing consistency limits : L.L =31.4% , P.L = 13.7%, Sh.L = 12.3%.

Laboratory testing program had been established to determine all the physical and mechanical properties of the sandy soil.

The variables investigated are Percentage of fine : (0 , 20 and 50%).,Initial water content : (dry and wet of the optimum), Initial density: (max dry density and 95% of the max. dry density), Flooding with water at certain specific stress .

The results are presented in the form of Compaction curves, Compressibility curves, Stress- displacement curves, Normal stress- shear strength relationships, Penetration resistance- water content relationships, Compaction field results (penetration resistance results) .

The maximum dry densities as well as the optimum water content were determined for the different fine content. The shear strength Parameters (C and ϕ) are determined according to Mohr-Coulomb failure criteria are calculated. The suitability of the cone penetrometer as a tool for quality control of compaction is examined .