

سامية محمد مصطفى



شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم



سامية محمد مصطفى



شبكة المعلومات الجامعية



شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



سامية محمد مصطفى



شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

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



يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار



سامية محمد مصطفى



شبكة المعلومات الجامعية



بعض الوثائق الأصلية تالفة



سامية محمد مصطفى



شبكة المعلومات الجامعية



بالرسالة صفحات لم ترد بالأصل





Mansoura University

Faculty of Engineering

Public Works Eng. Department

**The Use of Geotextiles and Related Materials in Reducing Stresses
on a Pipe Embedded in a weak Soil Under a Roadway Loads**

By

Eng./ Islam Mahmoud Mohammed Abou El-Naga

B.Sc. Civil Engineering - Mansoura, 1993

M.Sc Public Works Engineering - Mansoura, 1998

A Thesis

**Submitted in Partial Fulfillment for the
Requirement of the Degree of Doctor of Philosophy**

Supervisors

Prof. Dr./Amr Mohammed Radwan
Professor of Geotechnical Engineering
Faculty of Engineering, Mataraia
Helwan University

Prof. Dr./ Mohammed El-Shabrawy Aly
Professor and Vice-Dean of Post Graduate
Studies and Research -Faculty of Engineering
Mansoura University

Dr./ Magdy Abd-El-Haleem Zayed
Lecturer, Public Works Department
Faculty of Engineering
Mansoura University

2004

B

12/12/15

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

"وَقُلْ أَعْمَلُوا فَسِيرَی اللَّهِ عَمَلَكُمْ وَرَسُولُهُ وَالْمُؤْمِنُونَ"

صَدَقَ اللَّهُ الْعَظِيمُ

Supervisors

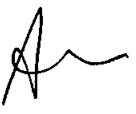
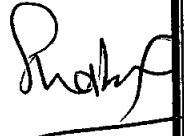
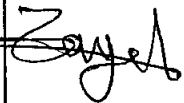
Thesis Title:

**The Use of Geotextiles and Related Materials in Reducing Stresses on a
Pipe Embedded in a weak Soil Under a Roadway Loads**

Researcher:

Eng./ Islam Mahmoud Mohammed Abou El-Naga

Supervisors:

No.	Name	Position	Signature
1	Prof. Dr. Amr Mohammed Radwan	Professor of Geotechnical Engineering Faculty of Engineering, Mataraia Helwan University	
2	Prof. Dr. Mohammed El-Shabrawy Aly	Professor and Vice-Dean of Post Graduate Studies and Research Faculty of Engineering Mansoura University	
3	Dr. Magdy Abd-El-Haleem Zayed	Lecturer, Public Works Department Faculty of Engineering Mansoura University	

Department Head

Prof. Dr. A. Fadel

(A. fadel)

Vice Dean

Prof. Dr. M. El-Shabrawy

(M. El-Shabrawy)

Dean

Prof. Dr. I. Rashed

()

Examination Committee

Thesis Title:

The Use of Geotextiles and Related Materials in Reducing Stresses on a
Pipe Embedded in a weak Soil Under a Roadway Loads

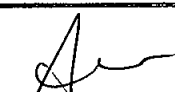
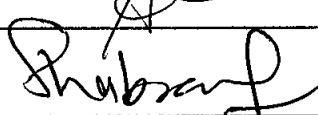
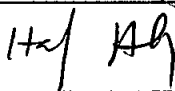
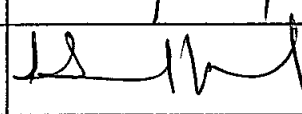
Researcher:

Eng./ Islam Mahmoud Mohammed Abou El-Naga

Examination Committee

No.	Name	Position
1	Prof. Dr. Amr Mohammed Radwan	Professor of Geotechnical Engineering Faculty of Engineering, Matareia Helwan University
2	Prof. Dr. Mohammed El-Shabrawy Aly	Professor and Vice-Dean of Post Graduate Studies and Research, Faculty of Engineering Mansoura University
3	Prof. Dr. Mohammed Hafez Fahmy	Professor in Faculty of Engineering Alexandria University
4	Dr. Humood Fahed Al-Mudhaf	Director General, Public Authority for Applied Education and Training (PAAET), Kuwait

Signatures

No.	Name	Signature
1	Prof. Dr. Amr Mohammed Radwan	
2	Prof. Dr. Mohammed El-Shabrawy Aly	
3	Prof. Dr. Mohammed Hafez Fahmy	
3	Dr. Humood Fahed Al-Mudhaf	

Department Head

Prof. Dr. A. Fadel

(A-fadel)

Vice Dean

Prof. Dr. M. El-Shabrawy

(Shabrawy)

Dean

Prof. Dr. I. Rashed

()

ACKNOWLEDGEMENTS

I wish to express my gratitude to Allah, the main source of knowledge and wisdom. Really, I have no words to express our gratitude to everyone shares in this work, I deeply thank my parents and teachers for what they give me from their knowledge, time and effort.

Special thanks for **Professor Dr. Amr Mohammed Radwan**, Professor of Geotechnical Engineering, Faculty of Engineering at Mataraia, Helwan University, whose efforts and continuous advice are behind the preparation of this work in its final form.

I specially thank **Professor Dr. Mohammed El-Shabrawy Aly**, Vice-Dean of Post Graduate Studies and Research, Faculty of Engineering, Mansoura University, for his valuable assistance, followed the work step by step, conducted repeated revisions of the work through out the research preparation and moral support.

As I thank **Dr. Magdy Abd-El-Haleem Zayed**, Public Works Department, Faculty of Engineering, Mansoura University, followed the work step by step and conducted repeated revisions of the work through out the research preparation and their constructive discussions.

Special thanks for **Eng. Ashraf Abd El-Wanis**, for his help.

My deepest gratitude goes to **my wife** whose love and support are vital to my work and life. To her, my son **Mohammed** and my daughter **Sandy**, I dedicate this thesis.

Islam Mahmoud Abou El-Naga

