



شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم



شبكة المعلومات الجامعية
@ ASUNET



شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكرو فيلم

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 الأصلية تالفة

بالرسالة صفحات لم ترد بالاصل

Minufiya University
Faculty of Engineering
Civil Engineering Department
Shebin El-Kom, Egypt

627

STUDY OF LOCAL SCOUR AROUND BRIDGE PIERS

BY

Moustafa Mohamed El-Sayeed El-Berkawy

B.Sc. Civil Engineering
Al-Azhar University (1983)
Cairo, Egypt.

A Thesis Submitted In Partial Fulfillment For
The Requirements of the Degree Of
Master of Science In Engineering
(Irrigation and Hydraulics)

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Minufiya, Egypt
2002

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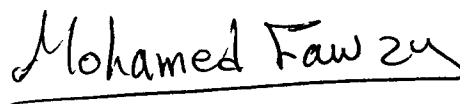
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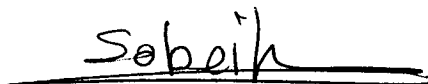
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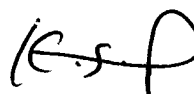
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Minuifya-Egypt
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STATEMENT

This thesis is submitted to the department of Civil Engineering, Faculty of Engineering, Minufiya University, for the M.sc. degree

Thesis title: **"STUDY OF LOCAL SCOUR AROUND BRIDGE PIERS"**

The work in this thesis has been carried out by the writer in Hydraulics Research Institute (HRI) and Water Resources Research Institute (WRRI), National Water Research Center (NWRC), Ministry of Water Resources and Irrigation (MWRI)

No part of this thesis has been submitted to any other university or institute for the award of a degree or qualification.

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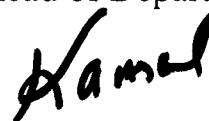
Signature: 

Date:

The Thesis writer Has Signed the Above Statement.

Supervisor

Head of Department



Minufiya-Egypt
2002

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا عَلَّمْتَنَا

إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ

(الآية ٣٢ سورة البقرة)

Dedication

It Is A Great Pleasure to Dedicate My **M.S.** Thesis
To those who are Love in My Life.

My Beloved Father, Father-In-Law.

My Beloved Mother, Mother-In-Law.

Brothers, Sisters and Brother-In-Law.

To My Soul Who Shared With Me all Times.

My wife Architecture Eng., MONA

To My Sweetheart Who Encourage Me All Time.

My be Loved My Sons

Khaled El - Berkawy and Tarek El - Berkawy

To All Of Them My Deepest Gratitude.

