

شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلو

# بسم الله الرحمن الرحيم





MONA MAGHRABY



شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلو



شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



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شبكة المعلومات الجامعية التوثيق الإلكترونى والميكروفيلم

# 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



MONA MAGHRABY



# Ain Shams University Faculty of Engineering Structural Engineering Department

## Performance of Passive Loaded Pile Group in Multilayer Subsoil

A Thesis submitted in partial fulfillment of the requirements of the degree of Master of Science in Civil Engineering (Structural Engineering)

By/ Eng. Abdullah Salah Mohamed Abo-Yousef

Bachelor of Science in Civil Engineering

(Structural Engineering)

Faculty of Engineering, Ain Shams University, 2017

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Cairo - (2021)



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Thesis : Performance of Passive Loaded Pile Group in Multilayer

Subsoil

Degree : Master of science in civil engineering (Structural)

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Thesis Performance of Passive Loaded Pile Group in Multilayer Subsoil Degree Master of science in civil engineering (Structural) SUPERVISORS COMMITTEE **Prof. Yasser Moghazy El-Mossallamy** Professor of Geotechnical & Foundation Engineering Faculty of Engineering – Ain Shams University Prof. Ashraf Abdel-Haee El-Ashal Professor of Geotechnical & Foundation Engineering Construction Research Institute – National Water Research Center Dr. Mohamed Salah AbdelAziz Morsv . Assistant Professor of Geotechnical & Foundation Engineering – Structural Engineering Department Faculty of Engineering – Ain Shams University Date: 27 / 02 /2021 Postgraduate Studies Authorization stamp: The thesis is authorized at / 2021 College Board Approval University Board Approval / 2021 / 2021

### **Statement**

This thesis is submitted as a partial fulfilment of Master of Science in Civil Engineering (Structural Engineering), Faculty of Engineering, Ain Shams University.

The author carried out the work included in this thesis, and no part of it has been submitted for a degree or a qualification at any other scientific entity.

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