

**THE EFFECT OF PARTIAL SKIRT ON THE BEARING CAPACITY OF
SQUARE FOOTING ON SAND**



To fulfill most of the requirements
to achieve the Bachelor degree of S - 1 Civil Engineering

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ENGINEERING FACULTY
UNIVERSITAS MUHAMMADIYAH SURAKARTA
2018

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The effect of partial skirt on the bearing capacity of square footing on sand

Final Project

Filed and maintained for the final Exam front of Examiners board

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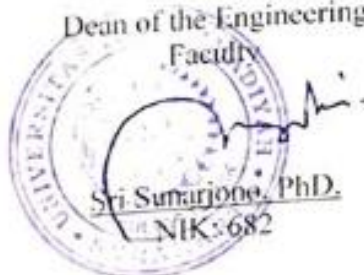
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Stating the fact that the thesis that I made and submitted, is the result of my own work, except quotations - citations and summary - a summary of everything I have explained the source. If later or can be proved that this thesis traced, then I am willing to accept any sanction from the Department of Civil Engineering, Faculty of Engineering and degrees and diplomas are awarded by the Universitas Muhammadiyah Surakarta void I received.

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Surakarta, July 8, 2018



MOHAMMAD ADNAN MAHMOUD OWEIDAT

MOTTO

"Education is the best equipment for the old days"

(Aristoteles)

"You cannot change other people, you must be the changing you expect from others"

(Mahatma Gandhi)

"Live Like a tree, lush fruit, lives on the edge of the road and pelted the stones, but rewarded with fruit"

(Abu Bakr Sibli)

"Our greatest pride is not never fail, but bounced back every time we fall"

"(Confucius)

PREFACE

Assalamu alaikum Wr Wb

Praise to Allah SWT for His grace and His mercy so the author could finish the Final Task Report well

The preparation of Final Task with the title the design of footing foundation using program geo 5 in (h) sudalmiya rais ums mosque, surakarta)

The Final Task arranged for fulfil the requirements of a achieving SI graduate degree of Civil Engineering Department, Engineering Faculty of Universitas Muhammadiyah Surakarta

The Final Task can be finished with supports of several parties Therefore in this occasion, the author would like to say thank you to

Mr Ir Sn Sunarjono, MT, Ph D as a Dean of Engineering Faculty of Universitas Muhammadiyah Surakarta

Mr. Mochamad Solikin, ST, M. T. Ph.D as a Head Program of Civil

Mr Anto Budi Listyawan, S. T. M. Sc as an Academic Counselor and as the first examiner

Mrs .Yenny Nurchasanah, ST, MT as the first Examiner

Mrs. Ir. Renaningsih, M. T as the second Examiner

All lecturers of Civil Engineering Department who has provide knowledge

To my brother and sister and my entire family, thank you for the support

To all my friends in Civil Engineering Department of Universitas and love support Muhammadiyah Surakarta thanks for the help

To CESA, my civil's family, keep going guys

To all parties who cannot be mentioned one by one, thanks for the help

The author realizes that this report is far from perfect, so with humility and constructive criticism that authors hopes for the perfection of the Final Task Report. The final word from the auhor, hopefully the Final Task Report a dvartegeous for us Amin

Wassalamu alaikn Wr. Wh

Surakarta

2018

The Author

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Bearing capacity of partial skirted footing clay upper sand

Abstract

Capacity bearing considered as the main factor for foundation design, it is a mandatory to reach an effort to enhance the bearing capacity, Attached skirts that linked to the bellow it is an alternative of it, it could be used to enhancement capacity bearing of shallow footing on soil sand, the research testing twelve lab experiments on steel square footing with different width with different formulation of water content and compaction method, from the test it could conclude skirts are very effective to enhance the ultimate capacity, it increases the length as well as it reduce the settlement , settlement decreases when it observed on the same value of load, the longest skirted has the best situation of settlement. The settlement generally decreases, when it is observed on the same value of load, 5.00 KN. Skirted square footing with the longest skirt has the best condition of settlement.

Keywords: *bearing capacity, square footing, foundation, sand, partial skirt.*