

HIGHER TECHNICAL INSTITUTE

CIVIL ENGINEERING DEPARTMENT

DIPLOMA PROJECT

DESIGN OF AN UNDERGROUND
WATER TANK

C/874

TSAKRIS ANGELOS

JUNE 1999

DESIGN OF AN UNDERGROUND WATER TANK

BY
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Project Report

Submitted to the department of Civil Engineering

of the Higher Technical Institute

Nicosia Cyprus

in partial fulfillment of the requirements

of the diploma of

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in

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HIGHER TECHNICAL INSTITUTE	PROJECT NO. 2939
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Summary:

Design of an underground water tank

The present report deals with the stability analysis, structural analysis, bearing pressures analysis and design of the following members of the tank:

- a. Propped cantilever retaining walls
- b. Slabs
- c. Footings

Objectives:

To design the members for flexure as long as checking for crack widths to be between the limits

To prepare along with the calculations some structural drawings

To establish the conditions that the members are being subjected to

AKNOWLEDGEMENTS

This project is dedicated to all those that helped so that this project to become a reality with their assistance and encouragement

I would like to express my greatest and warmest thanks to mr Andreou for his guidance and patience with me

Terms of conditions:

The capacity that the tank has will be specified

The properties of the various materials will be stated

Ground water level and water level in the tank will be specified

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