

DESIGN OF A SEASIDE BOATHOUSE

Project Report Submitted by

YIANNAKIS N. KOUIS

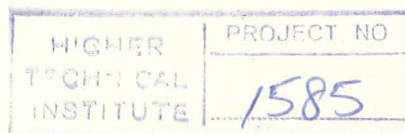
in part of satisfaction of the award of
Diploma of Technician Engineer in
Civil Engineering of the Higher Technical
Institute, Nicosia, Cyprus.

Project Supervisor: Mr. M. Poullaides
Lecturer in
Civil Engineering, H.T.I.

External Assessor : Mr. G. Polychronis
Civil Engineer

Type of project : Individual
Group

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HIGHER TECHNICAL INSTITUTE

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CIVIL ENGINEERING DEPARTMENT

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Diploma Project Number: **C547**

Title: R.C. Design and Detailing of a Seaside Boathouse

Objectives:-

1. To design the reinforced concrete framework of a seaside boathouse.
2. To detail typical slabs, beams, columns and foundations and prepare their respective bending schedules.

Terms and conditions:-

1. Dimensions of the boathouse will be given by the supervisor.
2. Use concrete grade 25 for slabs, beams and foundations and grade 30 for columns.
3. Design according to BS 8110.
4. The soil pressure on the foundations is not to exceed 150KN/m^2 .

Student : YIANNAKIS N. KOUIS

Supervisor : M. POULLAIDES

External Assessor : G. POLYCHRONIS

Abstract

The objective and purpose of this project was the design of a seaside boathouse.

An investigation of the existing boathouses in Cyprus was carried out.

Architectural presentation of the building was made.

Limit state design according to BS8110 was followed for the structural detailed drawings were based.

A presentation of equipment that can be used for this project is made.

A presentation of information for sulphate resistance cement and for waterproofing is made.

Finally different considerations of possible improvements or other solutions to this problem are stated.

Considerations were also made for transferring the boat into the building.

A machine that pulls a boat with the boat on it can be placed in the building and by means of pulleys and wire rope the boats can be pulled into the building from any door (see drawings of front and side views).

This boathouse provides a very safe shelter to the boat exposed on weathering conditions and the fact that people can work having all facilities required for their work and in addition to all these, people can live in this building, what makes it much more attractive than any other boathouse of the same type.

For the solution of this problem I have researched materials that can be used for the construction of this building.

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