

DESIGN AND CONSTRUCTION OF AN UNDERWATER RESTAURANT

Prepared by: Koh Yih Hon

ABSTRACT

The main objective of this project is to apply everything learned throughout DCE course and extra things not included in the course into the design and construction of a realistic Underwater Restaurant. This design ranges from cylindrical roof design under hydrostatic pressure, to slab designing in accordance to BS codes, to the design of underwater foundation in tension.

Many types of materials were researched and by comparing all the options, one best material was selected for the construction of the transparent roof. Availability of the suggested material was found. Factor of safety were also considered in the design of the structure.

Besides designing, this project also includes various ideas on methods of construction of the structure. By using the problem solution approach towards the comparison of various methods of construction, one best method was produced and will be introduced in the project.

This project has a few assumptions to limit the scope. The assumptions are listed I this project report. This project is aiming at a technical challenge towards a diploma student on constructing a realistic structure as a civil engineer.