

**CENTRE OF STUDIES FOR BUILDING SURVEYING
FACULTY OF ARCHITECTURE, PLANNING AND SURVEYING
UNIVERSITI TEKNOLOGI MARA**

**A STUDY ON CONSTRUCTION USING COFFERDAM METHOD IN
COASTAL AREA**

CASE STUDY: KOTA KINABALU CITY

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Academic Project submitted in partial fulfilment of the requirements

For the degree of

Bachelor of Building Surveying (Hons)

Centre of Studies for Building Surveying

Faculty of Architecture, Planning & Surveying

JANUARY 2015

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**“I hereby declare that this academic project is the result of my own
research except for the quotation and summary which have been
acknowledge”**

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ACKNOWLEDGEMENT

I am using this opportunity to express my gratitude to everyone who supported me throughout this final project. I am thankful for their aspiring guidance, invaluable constructive criticism and friendly advice during the project work. I am sincerely grateful to them for sharing their truthful and illuminating views on a number of issues related to the project.

Firstly and foremost, I would like to express my special gratitude to my supervisor, Sr. Mazlan Abu Bakar, for his guidance, co-operation, advices and encouragement throughout the whole semester in order to complete this research.

Last but not least, my sincere appreciation also extends to all my lecturers and colleagues who have provided assistance at various occasions throughout the completion of this task. Their views and tips are useful indeed. I am also grateful to all my family members, especially my mom and father for their love and moral support throughout my studies in Universiti Teknologi Mara. I also would like to express my gratitude to the parties from the case studies for the permission to carry out investigation on their sites. Thank you again to all who have contributed in this study either directly involve through the completion of this research.

Thank you.

ABSTRACT

This paper presents an overview of the present state of construction of cofferdam techniques with special emphasis and a brief on other techniques developed world over for mitigating hydraulic forces on the temporary structures.

A cofferdam is a temporary structure designed to keep water and soil out of the excavation in which a bridge pier or other structure is built. When construction must take place below the water level, a cofferdam is built to give workers a dry work environment. Sheet piling is driven around the work site, seal concrete is placed into the bottom to prevent water from seeping in from underneath the sheet piling, and the water is pumped out. There are different types of cofferdam, some are used to support excavation operation and some are enclosed type box placed in the water.

The present case study deals with step by step procedure adopted at Sabah International Convention Centre and Jesselton Residence which is both located at Kota Kinabalu Sabah. It depicts the intricacy of the management of the work at site and gives lot of insights to such similar works involving details of bentonite slurry, rock bund, planning and execution of interlocking sheet piles, reinforcement, concreting, plants and equipment, safety procedures to be adopted for the construction of cofferdam.

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