

## UNIVERSITI TEKNOLOGI MARA

FCS 356 CIVIL ENGINEERING DESIGN PROJECT

PROJECT 1: CADANGAN MEMBINA DAN MENYJAPKAN SEBUAH RUMAH MURAH KOS SEDERHANA DUA TINGKAT, NO: 4126 PTD: 65440, JALAN JATES, BANDAR PUTRA, 81000, KULAI, JOHOR.

PROJECT 2: CADANGAN MEMBINA SEBUAH KILANG DUA TINGKAT UNTUK MEMPROSES DAN MEMBOTOL AIR MEMBAL DIATAS LOT 1308, MUKIM CHENGKAU, JALAN HARAPAT 3, KAMPUNG BONGEK, NEGERI SEMBILAN

MEGA BUILD SDN. BHD.

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DIPLOMA

DECEMBER 2018

## **ACKNOWLEDGEMENT**

In the process of producing the professional civil worker under the subject ECS 356 (Civil Engineering Design), the students required to complete the task of final year projects which are reinforced concrete and steel project. Throughout the entire process of design and analysis of the building, there are may parties involved in order to gain the knowledge of related civil work.

First and foremost, we would like to express our deepest appreciation to all those who provided us the possibility to complete this report. A special gratitude give to our final year project lecturer, Sir Syed Muhammad bin Syed Yahya for providing his valuable guidance constantly motivating us to work harder. He is very responsible to help and guide the student for the entire process to complete this project.

Besides, a special thanks goes to our teammates for the full commitment and the valuable suggestions which are very helpful in various phases to complete the final year project. Last but not least, we would like to give a massive appreciation to all parties who help and commit the entire project.

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## 1.1 OVERALL INTRODUCTION

For our course ECS356, we are required to do a project work by grouping to design a double-storey house. So for our first project which reinforced concrete project we had decided to design a project of 'Cadangan Membina dan Menyiapkan Sebuah Rumah Murah Kos Sederhana 2 Tingkat, No: 4126 PTD: 65440, Jalan Jati 8, Bandar Putr 81000, Kulai, Johor'. This project is estimated to cost about 500 thousand Ringgit Malaysia. In this report, we had included all the details that are required to design the proposed house.

Besides for our project 2 (steel), we have to design a project of 'Cadangan Membina Sebuah Kilang Dua Tingkat Untuk Memproses Dan Membotol Air Mineral Diatas Lot 1398, Mukim Chengkau, Jalan Harapan 3, Kampung Bongek, Rembau, egeri Sembilan'.

This project work is a part of our carry marks for this subject. So it is important for us to do our best in analyzing and delivering the design calculation in the manner required. Throughout the design stages, we need to obtain the reliable values to compare with the esteem results. During the progression of this project work, students can learn many things especially in designing the structural elements.

Basically, this report is all about the introduction for civil engineering like us to gain a favorable knowledge about designing RC and steel members as a fundamental conservancy to design a more complex building in the future.