### 1) CONSTRUCTION OF 2-STOREY TERRACE HOUSE IN BT. 8 , JALAN PAHANG LAMA,53100 GOMBAK SELANGOR DARUL EHSAN 2)PROJECT ISKANDARIAH TO BUILD UP THE INDUSTRIAL HUB WHICH NEAREST TO MERSING RIVER.

### FIFFA ENGINEERING SDN BHD

Final project submitted in fulfillment of the requirements for the diploma of **Civil Engineering** 

> Faculty of Civil Engineering March 2017





# UNIVERSITI TEKNOLOGI MARA

# FINAL REPORT FOR REINFORCE CONCRETE PROJECT

## CIVIL ENGINEERING DESIGN PROJECT ( ECS356 )

#### Lecturer : Madam Saleha Md Salleh

Class : J4EC1106R4

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#### Acknowledgment

Assalamualaikum, we are grateful to Allah S.W.T that we had finally manage to accomplish our project for our ECS 356 final year project this semester. The chosen structure that we had choose to do the analysis and design is the construction of a double storey terrace house in

Firstly, we would like to give the highest gratitude to our lecturer for this subject Madam Saleha bt. Md Salleh and Sir Mohd Firdaus B Mohd Akbar for the endless support and guidance in order for us to complete this project. They had provide us with great suggestions and help for every problem that we had encountered along the progress of this project. Without their help this project might not be as successful as now.

We are also thankful for all the hard work and cooperation from the lecturers and staffs of Civil Engineering Faculty for providing us help in the technical support, to let us utilize every available facility in this faculty and guidance in every step of this project.

Throughout the completion of this project, there a lot of useful and beneficial knowledge we had gained in order become a good engineer in the future. Hopefully all of these knowledge can be apply in the real working scenario.

#### Introduction

Civil engineering is a professional engineering discipline that deals with the design, construction, and maintenance of the physical and naturally built environment, including works like roads, bridges, canals, dams, and buildings

Structural analysis and designing of a structure is vital before any construction on site can be made. It is to make sure that the structure is strong enough to fulfil its proposed function. For our project, we had chosen to design and do structural analysis on a double storey terrace house. We had formed a group which consist of five members to do this analysis. Our group had made a company named FIFFA Engineering Sdn Bhd.

FIFFA Engineering Sdn Bhd has been established since 14<sup>th</sup> December of 2016. This group consist of 5 main engineers to operate. Our company had involved in various construction projects since our establishment. Our engineers have great experience in civil engineering and structural works. In future, our aim is to be the leading engineering specialist in Malaysia.

#### Group background

This company was started first after the idea of our leader, Muhammad Faizal to start our own firm. The name FIFFA was the combination of our group member itself which stands for Faizal, Izhar, Faris, Fais and Akmal.

FIFFA Egineering is a specialist in engineering and project management. This firm give consultancy services in structural, geotechnical and civil works. Our firm uses the latest engineering software and method in our job. Our engineers have a wide experience in the civil and construction works. This firm was established on 7 December 2016 with the strength of 5 well experienced members. Throughout our establishment, FIFFA Engineering had involved in various construction projects.

#### VISION

To develop FIFFA ENGINEERING SDN BHD as a regional leader in providing engineering & management consultancy services.

#### MISSION

FIFFA ENGINEERING SDN BHD. is committed to providing services that are professional, technologically advanced and of the highest standards to our clients.

#### STRATEGY

FIFFA ENGINEERING SDN BHD. keeps abreast of technological developments through the retained services of professional engineers. This is reflected in an approach to innovation and economy in methods, combined with a positive interest in the extended applications of new and existing construction techniques and materials.