



**CIVIL ENGINEERING DESIGN PROJECT**  
**REPORT**  
**(ECS 356)**

**NFNS ENGINEERS SDN. BHD.**

**NURFARHANA BT. HUSSIN**

**2013454782**

**NURUL NABILAH BINTI MAZELAN**

**2013431044**

**NIK AMEERUL DARWISH B. TAJUDDIN**

**2013819106**

**SHAMIR FARHAN B. LAILISAN**

**2013278532**

**TABLE OF CONTENT**

| <b>ITEMS</b>   | <b>PAGES</b> |
|--|--------------|
| ACKNOWLEDGMENT                                       | 1            |
| 1.0 INTRODUCTION                                     | 2            |
| 1.1 BACKGROUND OF COMPANY                            |              |
| 1.2 COMPANY OBJECTIVE                                |              |
| 1.3 MISSION  |              |
| 1.4 VISSION  |              |
| 1.5 ORGANIZATION CHART                               |              |
| 1.6 BACKGROUND OF PROJECT                            |              |
| 1.7 SOIL INVESTIGATION<br>RESULT                     |              |
| 2.0 ARCHITECTURE DRAWING &<br>STRUCTURAL LAYOUT PLAN | 8            |
| 3.0 DESIGN OF REINFORCED<br>CONCRETE STRUCTURE       | 9            |
| 4.0 MANUAL CALCULATION REPORT                        | 10           |
| 5.0 ESTEEM RESULT REPORT                             | 11           |
| 6.0 DESIGN OF STEEL STRUCTURE                        | 12           |
| 7.0 MANUAL CALCULATION REPORT                        | 13           |
| 8.0 DISCUSSION                                       | 14           |
| 9.0 CONCLUSION                                       | 15           |
| 10. REFERENCES                                       | 16           |
| 11. APPENDICES                                       | 17           |

## **ACKNOWLEDGEMENT**

We would like to express a deepest appreciation to all those who support and give commitment to complete this final year project “Civil Engineering Design Project (ECS 356)”. However, it would not have been possible without the kind support and help of many individuals and organizations. A special gratitude we give to our final year project lecturers, Madam Siti Saleha and Miss Izzyantie for contributed in stimulating suggestions and encouragement, helped to coordinate project especially in calculation task. We would like to extend sincere thanks to all of them because from their encouragement and supports that keep we drive toward to fully finish our final year project.

Furthermore, I would also like to acknowledge with much appreciation to our team members for their kind cooperation and encouragement in completion of this project. The teamwork build among us helped us a lot in completing our project. From the teamwork, our project were done systematically according to the task need. Last but not least, we would like to express a major of gratitude towards our parents for their advice and friends that help us to go through this project smoothly.

## **1.0 INTRODUCTION**

Cadangan Membina 22 unit Rumah teres 2 Tingkat (24'x 86') will be constructed based on the provided architectural drawing. As a consultant to this project, our company are interested to do the appraisal of existing structures drawing and potential development sites. The parties involved are:

Parties involved:

- i. Consultant - NFNS Engineers Sdn Bhd.
- ii. Client - Yukong Development (PTE) Limited
- iii. Contractor - Perkasa Bina
- iv. Architect - Regional Development Consortium

### **1.1 BACKGROUND OF COMPANY**

NFNS Engineers Sdn Bhd is a full service multidiscipline local consultant engineering firm that is fast emerging as a leading firm in Malaysia. Establish on 15<sup>th</sup> January 2016, it was formed to expand its business activities and enhance corporate culture. NFNS employs approximately 130 employees comprises of high skilled and qualified engineers and professionals who posses practical knowledge gained from more than 15 years experiences in the engineering consultancy. NFNS posses the capability, diversity and expertise to meet customer's specific needs for almost 20 years. NFNS, over this long period, successfully transform ideas into reality and solutions together with consulting services that deliver trusted insight and real impact. NFNS headquarter is located in Negeri Sembilan, Malaysia. However, to ensure NFNS can efficiently deal with clients best interest throughout Malaysia, the firm had set up branch offices in a number of states which include Pahang, Terengganu, Pulau Pinang, Johor and Kuala Lumpur. NFNS has a broad client based ranging from Federal, State, and governmental organizations to various private sector organizations in Malaysia, as well as in the Southeast Asian region and Asian Region.

## **1.2 COMPANY OBJECTIVE**

To become a key player in the field of engineering technology and management consultancy on the by focusing on the application of the latest technology and management thinking and practices.

## **1.3 COMPANY MISSION**

NFNS Engineers Sdn Bhd is a full service multidiscipline local consultant engineering. We are a team of highly motivated managers and staff, dedicated to providing the best products and services available in the industry. Our strength is generated from our commitment to our clients, our industry, our employees, our company and our shareholders.

## **1.4 COMPANY VISSION**

- i. To provide excellent and quality services to the full satisfaction to the client by providing world class professional engineering practice ultimate goal of Zero-Defect delivery.
- ii. To offer a comprehensive range of technical, engineering and project management services from pre-feasibility study stage to implementation of project. These includes feasibility studies, site investigations and survey, project planning and optimization, architectural to structural concepts, engineering design, documentation of tendering, pre-qualification of bidders and calling bids, contract administration, construction supervision, project commissioning and management.