ECS358

CIVIL ENGINEERING DESIGN PROJECT

TECHNICAL REPORT

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SEMESTER   : OCT 2024 – FEB 2025

ACKNOWLEDGEMENT

For his helpful advice and support during this research, I would like to sincerely thank my lecturer, Encik Hazizi. His knowledge in civil engineering has greatly influenced my perspective and methodology.

I am appreciative of teammates Nurmasturina and Fatin Najiha for their commitment and attitude of cooperation, which were essential to finishing this report. Their observations during our conversations significantly improved the quality of the study we were conducting.

I want to express my sincere gratitude to each and every participant for kindly sharing their experiences and insight, which enhanced and deepened the significance of this study. We sincerely appreciate your contributions.

Finally, I want to thank my family for their unwavering love and support. I want to thank my parents for always believing in my aspirations and for fostering in me a love of study.

This report is a gratitude to the amazing support system that has been there for me, in addition to reflecting my own efforts. I appreciate everyone's participation in this adventure.

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      2.0   Submission of plans for approval.

(1)   All plans for buildings submitted to the local authority for approval in addition to the requirements of section 70 of the Act shall--

(a)   be deposited at the office of the local authority together with the fees prescribed for the submission of such plans in accordance with the First Schedule to these B-laws;

(b)   bear upon them a statement showing for what purpose the building for which the plans are submitted is to be erected and used;

(c)   bear the certification of the qualified persons on these plans together with Form A as set out in the Second Schedule to these By-laws for which they are respectively responsible; and

(d)   have attached thereto a stamped copy of the relevant site plan approved by the competent planning authority and certified within twelve calendar months preceding the date on which the building plans are deposited unless otherwise exempted under any law relating to planning.

(2)   Every plan, drawing or calculation in respect of any building shall be submitted by a qualified person.

      3.0   PART II : SUBMISSION OF PLANS FOR APPROVAL

Plans to be signed.

(1)   All plans submitted shall be signed by qualified person and by the owner or his agent and shall bear the full address of the owner.

(2)   The local authority may, is satisfied that the owner of the premises has refused to or has failed to execute any work which is required under the Act to be executed by him, direct the owner of the premises in writing to execute such work.

5.   Withdrawal or change of qualified person.

5.1. SUMMARY OF DESIGN WORKS

The goal of this project is for students to learn how to perform manual calculations for reinforced concrete structure designs. Students also learn how to use software to design the reinforced building using Esteem, with the assistance of lecturers and other group members. While performing the manual calculations, students learned in details about the load transferred from other parts and how to determine the reinforcement provided in a building structure. In addition to doing the calculation, the student communicates effectively with other learners and lecturers, thereby improving communication skills.

Despite various flaws, the student was able to understand the project's aim. Students also redo the manual calculation when they discovered certain errors in calculating the reinforced concrete construction. Additionally, students worked hard to find materials before beginning the project. Students contacted a few people, including contractors, engineers, and architects, to request architectural drawings and site investigations.

There were also certain limitations encountered by students, such as a lack of knowledge about software Esteem, which made it difficult for students to understand the software. Students often find it difficult to interpret the summary and comprehensive reports offered by Esteem when compared to manual calculations.

However, with the assistance and guidance of lecturers, students were able to get some understanding of the software. Students were also advised by lecturers to complete manual calculations when they had free time rather than hurrying when the deadline approached. The lecturer also provided some resources for students to study and use as a guide for manual computation.

In conclusion, students were successful in developing the reinforced design framework in their last semester, which is part 5 before embarking on internship. During the internship, the student can use the information learned from this assignment.