

A PROJECT REPORT ON THE WORK CARRIED OUT ON THE MEDICAL CLINIC AT
NYABIKONI CAMPUS KABALE UNIVERSITY

BY

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2018/CEK/1300/F

DEPARTMENT: CIVIL ENGINEERING

PROGRAM OF STUDY: DIPLOMA IN CIVIL ENGINEERING

COURSE CODE: DCE 2206

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A REPORT SUBMITTED TO KABALE UNIVERSITY FACULTY OF ENGINEERING AS
REQUIREMENT IN PARTIAL FULFILLMENT FOR THE AWARD
OF DIPLOMA IN CIVIL ENGINEERING

DECEMBER, 2020

DEDICATION

I KEMIGISHA GLORIA declare that I personally wrote this report on my own and it is from my own practice, research findings and experience that I gained through my education.

I therefore strongly confirm without any doubt that this is my original work.

Signature:

Name: KEMIGISHA GLORIA

APPROVAL

I hereby undersigned certify that KEMIGISHA GLORIA carried project and this report is under my guidance and supervisor.

This report has been submitted for examination with my approval as his supervisor.

DEPARTMENT SUPERVISOR

Signature

Date:

MR.MUHANGI BRUNO

DEDICATION

I dedicate this project report to almighty God, to Mr Muhangi Bruno and Mr. Tibenderana Philip my supervisor, my group members and planners of Kabale University to my parents who have supported me fully in my academic struggle until and still continue to support me with my endeavors through their un ending advice and all forms of encouraging even at times I have felt that I have been a failure.

I also extend my appreciation to the board of Kabale University, may the almighty God richly bless you and continue to provide for you outstanding financial, moral and emotional support and above all for their love and guidance.

PREFERENCE

Project training program organized by faculty of engineering technology at Kabale University is an opportunity for under graduate students for the application of theoretical knowledge gained while at the University into world of real and technical application.

The objectives of such program are to enhance participant's skills and to enhance their industrial knowledge by keeping them up dated with latest technologies in the engineering world and more so, to help them understand acceptable engineering standards.

This opportunity has extremely helped me to acquire different and important skills in design and increased my exposure of taking on decisions not only as a student but be also as a problem identifier and silver as it is a major goal of engineering.

ACKNOWLEDGEMENT

I am so grateful to the staff and board of Kabale University in different sections as well as my fellow group members for giving me the wonderful opportunity and guided through the entire period to do project with them.

This was due to the kindness of Mr Musaazi Pascal Senkindu faculty of engineering and technology Dean.

Allow me send my heartfelt thank you Mr Muhangi Bruno who worked so hard in my absence to ensure that I could get a chance of project.

Most importantly, I thank God, for keeping us a live and supporting me physically, mentally and psychologically during this time of project.

I would like to express my sincere gratitude to administration of Kabale University most especially to the leaders of Nyabikoni campus; they release to students and contribution to the achievements of this project with the Heads of departments.

ABSTRACT

The information contained in this report is based on the work I physically did as a project, my personal research using the many available resources and interactions I had with different experts on our faculty of engineering and technology.

My field of study was to design a medical clinic which encompassed the different activities involved in designing a faculty medical clinic right from inception to completion of my project period.

I was basically involved in fixing mounting boards, ply wood, applying Novico wood glue among others.

However, this did not limit me to my project, I was also involved in developing drawing a with auto cad 2017 and arch cad 2019.

Generally, the project was a big success because of the broad information and practical knowledge received.

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CHAPTER ONE

INTRODUCTION

1.0 INTRODUCTION

The project was done at the faculty of engineering which is located in Kekubo cell, Kirigime ward. The faculty covers about one hectare of land and has four departments of engineering i.e. civil, electrical, and mechanical and design and fine art. Through research, we found out that every year, it registers over 210 new students in all the four departments. Considering this big number of students, the faculty is expected to meet problems related to healthy of students since it is not having a clinic.

For that matter therefore, we managed to come up with a project of designing a medical clinic at the faculty such that if it so happens and the university puts it in practice, students will be relieved from healthy problems. This one also will increase the number of students admitted per year as they will be sure about safety of their lives. Also the university will create employment opportunities to the community through employing nurses and doctors. The neighbors of the faculty will be able to get medical services if at all conditions to go to other clinics are not favorable. This will act as one way of giving back to the community.

The actual work of the project is expected to cover about 400square meters and this area is not a problem since the faculty is having enough land.The project was done in a group of six people since it is a group project. The project was a bout designing a medical clinic at Kabale university faculty of Engineering.

It involved activities like:

- Benchmarking where we visited many medical clinics around the campus to see all the requirements of a medical clinic.

- Drawings. We developed detailed drawings showing all necessary features of a medical clinic.
- Data collection where we calculated the number of people to use the medical clinic and found out whether they are transient or not.
- Bill of quantities. We estimated the quantities and the costs of the materials for the design.

The materials that were consumed are:

- Material resources like drawing pencils, papers for drawing sketches of plans, and ply wood, novical glue, mounting boards for making a proto type.
- Money for buying materials for project and for transport while carrying out research on project.
- Labor. Though we did not hire anyone to come and help us in project, we put much of our own labor and something was achieved.

It took us a period of one month to go through all the tasks above.



Figure 1 showing the area where the project is expected to be put in case it is considered



Figure 2 showing the model being designed

1.1 PROBLEM STATEMENT

The medical clinics and hospitals around faculty of engineering are very far and also students normally face inconveniences like high charges, poor medical services, hence the need for a medical clinic at faculty of engineering.

1.2 JUSTIFICATION OF THE PROBLEM:

It is justified by low number of patients that are students of kabale University in admitted to medical clinics outside engineering faculty.

Most of the students use different in places around faculty and others normally get treatments from the clinic at kigungiri campus. This is due to dear of high charges and long distances for outside medical clinics.

1.3 MAIN OBJECTIVE:

To design a medical clinic at faculty of engineering

1.4 SPECIFIC OBJECTIVES:

- To research and correct data on healthy facilities and get familiar with such related design activities.
- To find out requirements for the design of a medical clinic.
- To promote teamwork and learn more from each other.
- To create a well-designed model that will act as a case study to other students when they are dealing with project works.
- To correct information and pieces of advice from engineers who are already in the field that will continue to help us even when we are done with the course like standard dimensions of rooms of structures like clinics.
- To create new Ideas in the field of Engineering.

1.5 SIGNIFICANCE OF THE PROJECT

- This project helps us gain additional skills to the theory studied in class. These skills are: critical thinking, time management and other skills related to designing structures.
- It also helps us to examine ourselves and see how far we have gone in as far as practical work is concerned.
- Provides us with opportunity to express what we know using information we have learnt and this boosts our creativity and confidence.
- Our model will act as a case study to other students most especially when they are dealing with design of structures.
- Our interaction with engineers helps us get knowledge about the standards and specifications of institutional structures like hospitals, schools, banks and others.

1.6 METHODOLOGY

- Literature review.
- Benchmarking.
- Drawings.
- Data collection.

1.7 EXPECTED RESULTS:

- We expected to know whether the people who are going to be using the clinic are transient or not.
- We expected to come up with detailed drawings and plans for a medical clinic.
- We expected to come up with all the requirements of a medical facility.
- We expected to know the total number of people who are going to using the clinic.
- We expected to know how the situation has been before for both students and staff without a medical clinic at the faculty.
- We expected to develop a very well designed prototype for the clinic.

- We expected to come up with new ideas about designing of structures in engineering field.
- We expected to correct basic information that is essential to us even after course from Engineers already in the field.
- We expected to see our perfectness mostly in practical works.

CHAPTER TWO

LITERATURE REVIEW

2.0 INTRODUCTION

Consulting from the student network, we found out that, Kabale University has been having one clinic for all faculties yet the students are many, and in this case the faculty of Engineering which is our main focus point is located about 1.5km away from the main campus. Therefore the students are not able to access the medical facility at the main campus.

2.1 THEORY AND PRINCIPLES OF THE BACK GROUND AND THE SCOPE OF THE PROJECT

2.1.1 THEORY AND PRINCIPLES OF BACKGROUND.

- The composed of tasks like benchmarking, literature review, developing drawings, data collection and developing bill of quantities.
- These tasks helped us come up with the following.
- Data collection helped us obtain the total number of people who are going to use the clinic.
- Benchmarking helped us obtain the requirements of a medical clinic.
- Bill of quantities helped us estimate the total quantities and cost for the project.
- Literature review helped know how the situation has been before without a clinic at the faculty.
- Drawings helped show all the necessary features of a medical clinic.

2.1.2 SCOPE OF THE PROJECT

- The project was started on 20th November 2020 and it will end on 4th December 2020 when we are submitting reports.
- This period is for all the tasks above (in the background) including presentations and writing reports.

CHAPTER THREE

METHODOLOGY

3.1 METHODOLOGY USED TO OBTAIN RESULTS

Data collection

Data collection is the process of gathering and measuring information on variables of interest, in an established systematic fashion that enables one to answer stated research questions, test hypotheses, and evaluate outcomes.

Bench marking

There are permanent reference marks or points the reduced levels of which have been accurately determined by leveling.

Engineering drawings

This is a type of technical drawing that is used to convey information about a project. A common use is to specify the geometry necessary for the construction of a component of Auto cad and Arch card drawing.

3.2 RESULTS AND OUTCOME FROM METHODOLOGIES

- We found out that the numbers of people who are going to use the clinic are transient using data collection.
- Through literature review, we found out that students have been suffering problems like high charges and long distances due to lack of a clinic at engineering faculty.
- Through benchmarking, we found out that to design a medical clinic, we needed the following; Drawing boards, pencils, papers and computer to assist in drawing plans.
- Also we needed enough transport to assist in visiting other clinics while doing research.
- We also came out with detailed drawing and plans.

CHAPTER FOUR

4.1 DISCUSSION OF THE RESULTS AND OUTCOME FROM CHAPTER 3

However much the people to use the clinic are transient, the clinic should be big enough to cater even for unexpected like visitors.

The transport costs of visiting other clinics was found high, so some activities were researched about using internet and consultations with engineer who are already have experience in design.

By use of a drawing technique, we were able to come up with a detailed drawing and plans. We used the following to come up with detailed drawings and plans; Drawing boards, pencils, papers and computers.

Data on each outcome were collected at the unit level according to standardized protocols.

4.2 JUSTIFICATION AND EDUCATION OF RESULTS AND METHODS USED

- The drawings are justified by the detailed plans in this report.
- The clinic users being transient is justified by daily observation of the students and the staff where they normally come at the campus, do only what has brought them and go. No specific dates for them that they should be at campus.
- The clinic which is near faculty of engineering is almost 2km away. This distance is too big for a patient to travel most especially when he or she is in critical conditions.
- Most of the clinics are privately owned and therefore are able to charge patients any amount of money the way they want.
- Some clinics have employees who are un professional. This justifies poor medical services rendered to patients.

CHAPTER FIVE

5.1 FUTURE WORKS

- I prospect this project to be considered by the university and hence the clinic will be set out at the engineering faculty.
- The design professionals will be hired to check through our design plans and recommend them.
- Also, the university shall announce bids and the interested engineering companies will have to apply for the vacancy.
- Then the construction phases will commence until the project is done.

5.2 RECOMMENDATION

- I recommend that incase the university decides to construct this clinic, it should give the first priority its own students to take up the job.
- Also the university should award the one who came up with this idea designing a medical clinic at the faculty as a project.
- I also recommend that before starting projects, the university should always give enough training to students such that they come up with satisfying projects.
- In case of any financial support needed by students in these projects, the university should always be there to help. This is because, some students normally come up with good ideas but because they are not able financially; they end up quieting the ideas.

5.3 PROBLEMS FACED DURING THE PROJECT PRACTICE

- Insufficient funds for buying enough materials and to use while making research.
- Lack of tools like computer for drawing plans.
- Limited time due to corona virus where we were doing it concurrently with exams.

- Lack of enough training about project i.e. information would reach us late and it would be very hectic for us to do a very organized work in the shortest time that would be there. This was common during days of presentation.
- Since it was a group project, sometimes we would fail to agree on some occasions and at times we would leave the work hanging hence more time would be wasted.
- Also coordination was poor where some people would be having time to discuss about project and others would not show up.

5.4 CONCLUSION

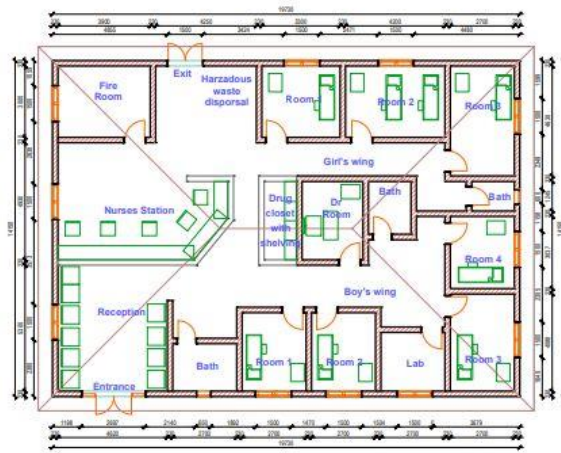
This project is good and helpful most especially to Engineering faculty where the numbers of students are increasing every year. Therefore, if the university considers this project, to me it will have made the right choice of the project to begin with, because it is the most important.

REFERENCES

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- Wikipedia construction surveying
- 2nd Edition, Design and Construction of Concrete Floor
- Elsevier, 4th Edition, Civil Engineers Reference Book

APPENDIX

PROPOSED PLAN AND ELEVATIONS OF A MEDICAL CLINIC AT FACULTY OF ENGINEERING KABALE UNIVERSITY



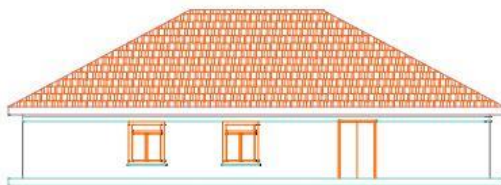
GROUND PLAN



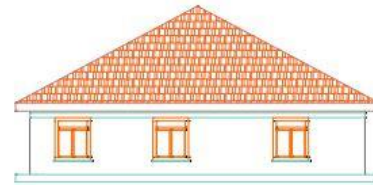
FRONT ELEVATION



EAST ELEVATION



REAR ELEVATION



WEST ELEVATION



Figure 3 showing the proto type of the project



Figure 4 showing a complete medical clinic

BILLS OF QUANTITIES

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
1	MODEL MATERIALS				
1.1	PLYWOOD	SQUARE METER	4	2,500	10,000
1.2	MOUNTING BOARDS	SQUARE METER	2	2,000	4,000
1.3	NOVICO WOODGLUE	TINS	1	3,000	3,000
2	DRAWINGS MATERIALS				
2.1	A5 PAPERS	NO	2	200	400
2.2	DRAWING MATERIALS	NO	3	1,000	3,000
3	TRANSPORT	SHS			20,000
TOTAL					40,400/=