NAME: CHIEZE CHINOMSO FAITH

MATRIC NO: 18/ENG01/006

DEPT: AERO/ASTRO ENG

ENGINEERING IN THE SOCIETY

# SCOPE OF WORK

The problem statement of renovating the Alfa Belgore hall is LACK OF SPACE; when a program like convocation or matriculation is been held, the maximum amount of people that can fill the building is five thousand (5000) which is not enough for everyone.

**GOALS/OBJECTIVES**

The aim of renovating the building is to get a bigger and more comfortable space for the convenience of students, staff, non-teaching staff, parents, etc. So the building is going to be elevated to a one story building so that they would be much space up.

To create more entrance for students to leave the building and come into the building at once without anyone struggling or pushing; the entrances should be bigger and much.

**PROCESSES/TASKS**

* Surveying the surrounding of the building
* New plan development
* Approval of new plan
* Clearing up/ evacuate the hall ( taking all the chairs and other properties away)
* Removal of Electrical appliances and toilets
* Removal of the windows and doors
* Creating a Temporary fence
* Uprooting / Removal of the Roof
* Demolishment of unrequired parts of the building
* Reconstruction/ elevation of the building with respect to the plan
* Construction of the roof
* Reconnecting the building to electricity
* Fixing the electrical appliances and toilets
* Patching of broken parts in t6hye building due to the previous tasks
* Painting of the building
* Cleaning the construction site
* Rearranging the hall

**PEOPLE INVOLVED**

* Architects
* Civil engineers
* Consulting engineers
* Specialists
* Carpenters
* Blacksmith
* Structural engineer
* Building engineer
* Electricians

TIMELINE

The duration to complete the task will take up to one year.

**COST**

The estimated cost for the building renovation would be 30 million

# GNAT CHAT

# HUMAN RESOURCES

* Architects: they plan, design and oversee the constructions of the building.
* Civil engineers: they deal with the design, construction, and maintenance of the physical and natural components of buildings.
* Consulting engineers: they plan, design and construction of both public and private infrastructures.
* Specialists: they are responsible to oversee the various stages of product development and provide expert leadership during the process.
* Carpenters: they construct and repair building frameworks and structures.
* Blacksmith:
* Structural engineer: they design the ‘bones and muscles’ that create the form and shape of manmade structures.
* Building engineer: they expert in the uses of technology for the design, construction, assessment and maintenance of the built environment.
* Electricians: they specialize in electrical wiring of buildings, transmission lines, stationary machines, and related equipment.

***The lead consultant is the architect***

# A site is secured because:

* They are a lot of harmful equipment that can harm other non-workers: when a demolition is going on, someone who has no idea about demolition can be around there; a roof or a wall can fall on them.
* To also prevent theft of construction equipment:

# BEME (BILL OF ENGINEERING MEASUREMENT AND EVALUATION)

Total Estimated Cost (TEC) = Thirty million naira (N30, 000,000)

Miscellaneous (10% of TEC)

$\frac{10}{100} $ X 30,000,000

= N3, 000,000

Consultancy Fees (15% of TEC);

$\frac{15}{100}$ X 30,000,000

= N 4,500,000

Site Preparations and Clearing after Completion (5% of TEC);

$\frac{5}{100}$ X 30,000,000

= N 1,500,000

Transport Cost (12% of TEC);

$\frac{12}{100}$ X 30,000,000

= N 3,600,000

Profit (20% of TEC);

$\frac{20}{100}$ X 30,000,000

= N 6,000,000

# PAYMENT SCHEDULE

Total Estimated Cost (TEC) = Thirty Million Naira (N30, 000,000) 30% TEC for Mobilization

This will be a deposit at the beginning of the Project

$\frac{30}{100}$ X 30,000,000

= N 9,000,000

30% TEC at 50% Completion

This will be released at fifty percent completion of the project

$$\frac{30}{100} X 30,000,000$$

= N 9,000,000

30% TEC at full Completion

This will be given at the total and full completion of the project

$$\frac{30}{100} X 30,000,000$$

= N 9,000,000

10% TEC Retain for Defect Liability

This will be deposited after the duration of 6 months after the completion of the project

$$\frac{10}{100} X 30,000,000$$

= N 3,000,000

# BEME (Bill of Engineering Measurement and Evaluation)

Bill of Engineering Measurement and Evaluation (BEME) also referred to as ‘Bill’; is a tool used before, during and post construction to assess and value the cost of construction works.

# Defects Liability Period

This is a period of time following practical completion during which a contractor remains liable under the building contract for dealing with any defects which become apparent.

# The Lead Consultant

This is the consultant that directs the work of the consultant team and is the main point of contact for communication between the client and the consultant team, except for on significant design issues where the lead designer may become the main point of contact.

# Project Life Cycle

This is the sequence of phases that a project goes through from its initiation to its closure.

Environmental Impact Assessment (EIA)

This is a process of evaluating the likely environmental impacts of a proposed project or development, taking into account inter-related socio-economic, cultural and human health impacts, both beneficial and adverse.