

THE ALFA BELGORE REHABILITATION PROJECT

THE EGBE AMANDA CONSULTANCY

EGBE AMANDA OGHOSA | 18/ENG08/005 | BIOMEDICAL ENGINEERING |ENG 284 | ENGINEER-IN-SOCIETY

1 THE SCOPE OF WORK

• **PROJECT DESCRIPTION:**

The Alfa Belgore Hall is located in Afe Babalola University Ado-Ekiti, Ekiti state. The hall is also surrounded by a Bookshop and an ICT center. It can be found directly opposite the College of Engineering and has existed in the institution for about 9 years.

However, due to the rapid increase in the population of the school, the board/management of the school have decided on the rehabilitation and expansion of the hall to enable them host the constantly increasing population (which includes students & staff).



• **INTERIOR OVERVIEW OF THE CENTER:**

• <u>AIM:</u>

Egbe Amanda Consultancy has been recruited to aid the expansion of the Alfa Belgore Hall to hold a population of 12,000-13,000 and also to upgrade and equip the hall with all necessary modern technology and infrastructure.

• **PROPERTY WALK-THROUGH:**

From a visit paid by EGBE AMANDA CONSULTANCY to the Alfa Belgore Hall exactly 7 days ago, a thorough assessment and evaluation was taken and essential steps where noted in order for the rehabilitation and upgrade to occur.

- The occupants of the Bookshop and ICT, along with their respective assets must be evacuated and removed.
- The doors, windows, bathrooms and burglary proofs will also need to be removed.
- Fragile appliances such as air conditioners and electrical fittings will also have to be removed.
- For the reason of precaution & privacy, the site will need to be sealed off with an aluminum fence.
- The removal of dilapidated roof and ceilings is also necessary along with floor tiles (if needed).
- The removal/breaking of the stage.

• **PROJECT TIMELINE:**

The project will take an estimate of 5 months and above. Therefore for this reason, we urge that all extracurricular activities that are usually held within or inside the Alfa Belgore hall be moved to a different location temporarily.

• INSTALLATIONS

- Installation of new roof, ceiling, automated doors, windows & wall and floor tiling.
- Installation necessary electrical fittings, wiring and piping.
- ✤ Re-plastering and repainting of the hall.
- Building of a new stage platform.
- Installation of security/surveillance cameras
- Installation of a fence
- Installation of electrical appliances such as air conditioners, projectors and speakers.



3 HUMAN RESOURCES/PROJECT TEAM

- ✓ THE SURVEYOR
- ✓ THE TOWN PLANNER
- ✓ THE ARCHITECT
- ✓ THE ENGINEERS (CIVIL, ELECTRICAL, STRUCTURAL, MECHANICAL)
- ✓ THE BUILDERS
- ✓ THE CARPENTERS
- ✓ THE PLASTERERS
- ✓ THE PAINTERS
- ✓ THE SITE ENGINEER
- ✓ THE ROOF TILLER
- ✓ THE PROJECT MANAGER
- ✓ THE MAIN & CO-CONSULTANTS

THE MAIN/LEAD CONSULTANT:

For this project, Meggison Oludayo is the lead consultant.

4 WHY IS THE SITE SECURED?

When construction work is being carried out, a portable or temporary fence is built. It is usually easy to configure, transport, and remove. This makes it ideal for short-term purposes.

The site is therefore secured for theft prevention, to manage accessibility, crowd control, and security. The good thing with

a portable fence is that you do not need to excavate or make many permanent changes to the construction site. Construction companies need a portable fence to prevent the site from vandalism and theft.

Apart from protection against these external forces, the site is also secured because it can be hazardous to individuals who are not part of the project team due to the heavy machines/equipment, overhead objects and other dangerous and fragile tools present on sight.

5 BEME FOR THE PROJECT

BILL OF ENGINEERING MEASUREMENT AND EVALUTION BY EGBE AMANDA CONSULTANCY

S/N	TASKS	MODULES	% ALLOCATED	AMOUNT (NAIRA)
1	MISCELLANEOUS	 SMALL PAYMENTS WORK FEEDING FENCING EXTRA WOOD 	10%	7,500,000.00
2	CONSULTANCY FEE	 CHIEF CONSULTANCY SURVEYOR GOVERNMENT ELECTRICAL TESTING 	15%	10,000,000.00
3	SITE PREPARATION & CLEARING AFTER CONSTRUCTION	 SWEEPING INTERLOCKING ASBESTOS FENCE PACKING OF SAND 	5%	4,000,000.00

		 FELLING OF TREES 		
4	TRANSPORT COST	 MOVEMENT OF TOOLS IMPORTATION OF TEC 	12%	8,900,000.00
5	PROFIT		20%	13,000,000.00
6	OTHER EXPENSES	TESTING & INSPECTION	38%	29,000,000.00
			TOTAL:	100,000,000.00

6 PAYMENT SCHEDULE

S/N	WORK DESCRIPTION	PERCENTAGE ALLOCATED	AMOUNT (NAIRA)
a	 TEC FOR MOBILIZATION ◆ THE COMMENCEMENT OF THE PROJECT ◆ ACQUISITION OF MACHINERY ◆ EMPLOYMENT OF WORKERS 	30%	6,000,000.00
b	TEC AT COMPLETION	30%-50%	9,000,000.00
С	FINAL PAYMENT OF TEC AT COMPLETION & HANDOVER	40%	12,000,000.00
d	RETAIN TEC FOR A 6 MONTHS DEFECT LIABILITY PERIOD	10%	3,000,000.00
		TOTAL:	30,000,000.00

DEME, DEFECT LIABILITY PERIOD, LEAD CONSULTANT, PROJECT LIFE CYCLE, ENVIRONMENTAL IMPACT ASSESSMENT (EIA) [DEFINITIONS]

I. <u>BEME [BILL OF ENGINEERING MEASUREMENT</u> <u>AND EVALUATION]:</u>

For all Engineering works, it is necessary to know the probable cost of construction known as estimated cost beforehand. Bill of Engineering Measurement and Evaluation (BEME) also referred to as 'Bill'; is a tool used before, during and postconstruction to assess and value the cost of construction works. This includes the cost of materials, labor, equipment and all/any other resources needed for the success of any construction endeavor based on a predetermined scope and specification.

II. DEFECT LIABILITY PERIOD:

A defects liability period 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. Depending on the form of contract you are reading, it may also be referred to as a rectification period or defects correction period.

A defects liability period is usually a period of around six or 12 months but it can vary depending on the contract used. Any defects or faults which arise during this period (for example -

due to defective materials or workmanship) must be put right by the contractor at its own expense.

III. <u>LEAD CONSULTANT:</u>

The lead consultant 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.

Lead consultants have hands-on roles which involve the dayto-day running of continuing client projects. They are team leaders, analyzing and reviewing proposals from the team, providing appropriate solutions to problems, and making decisions on the way forward by acting as liaisons between the client and the consultancy team. Their work involves directly dealing with the client to clearly understand its needs, and to provide possible solutions for the client's consideration. The team receives and works on the client's information from the lead consultant.

IV. <u>PROJECT LIFE CYCLE:</u>

A Project Life Cycle is the series of stages that a project passes through from its commencement to its closure. The number and sequence of the cycle are determined by the management and various other factors like needs of the organization involved in the project, the nature of the project, and its area of application. The phases have a definite start, end, and control point and are constrained by time. The project lifecycle can be defined and modified as per the needs and aspects of the organization. Even though every project has a definite start and end, the particular objectives, deliverables, and activities vary widely. The lifecycle provides the basic foundation of the actions that has to be performed in the project, irrespective of the specific work involved.

V. ENVIRONMENTAL IMPACT ASSESMENT [EIA]:

Environmental Impact Assessment (EIA) 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.

UNEP defines Environmental Impact Assessment (EIA) as a tool used to identify the environmental, social and economic impacts of a project prior to decision-making. It aims to predict environmental impacts at an early stage in project planning and design, find ways and means to reduce adverse impacts, shape projects to suit the local environment and present the predictions and options to decision-makers. By using EIA both environmental and economic benefits can be achieved, such as reduced cost and time of project implementation and design, avoided treatment/clean-up costs and impacts of laws and regulations.