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MAT NO: 18/ENG06/035

DEPT: MECHANICAL

DATE: 16<sup>th</sup> April 2020

## PROJECT TITLE

### ALFA BELGORE REHABILITATION PROJECT

The management of Afe Babalola university, Ado-Ekiti, Ekiti State have set plans in motion for for the rehabilitation of the Alfa Belgore hall located in the school's environs.

The rehabilitation (or remodelling) of the Alpha Belgore is due to the following reasons;

- The need for more space to accommodate more people there
- Safety concerns due to age of the building and fear of the integrity of the building
- The need to improve the hall and provide it with modern days facilities as it is a centre piece in the school

So the project shall commence on the 31<sup>st</sup> of January, 2020. The procedure of the rehabilitation would be done in stages and the following staged are stated and explained below;

The Management and the Consultancy Firm (Katey Consultancy Ltd.) concluded the focus would be made on the existing Hall and that further investigation was required regarding the improvement of operations in the existing Hall. This investigation would involve the rehabilitation of the Alfa Belgore infrastructure, a greatly increased hall space, and road accessibility to the Belgore hall.

Katey Consulting Ltd. has signed an agreement with the School Management for the rehabilitation of the Hall and Katey Consulting Ltd. It has agreed with the Management to implement early construction and procurement activities as a means to expedite completion of the overall project.

This agreement will be an effective instrument to facilitate a flexible funding mechanism that will reduce significantly implementation costs, time for construction and related services in support of the project. Key aspects of this Cooperative Agreement will be initial site investigations and a simplified project design process, followed by the cost efficient delivery of a varied array of activities to be implemented at the request of Katey Consultancy Ltd.. A core management team will be provided with project specific resources allocated to the activities defined in the Scope of Construction activities of this Cooperative Agreement within the agreement time frame.

### **Project Objectives**

ABUAD desires to contract with an experienced Consultant for the services as described in this Schedule of Requirement (SOR) at Afe Babalola University, Ado-Ekiti, and Ekiti State, Nigeria.

The objective of this Schedule of Requirement (SOR) is to select an Engineering Consulting Firm that will review the pertinent documents, visit the site and provide a drawing and specifications (D&S), so that ABUAD may prepare a Drawings & Specifications to solicit a Contractor to carry out the demolition work and the container yard reconstruction.

The D&S shall be specific on the following point:

- Health and Safety as per ABUAD requirements and international standards;
- Respect of environmental standards;
- The contractor has to haul out the demolition products and dispose of it in accordance with local regulations;
- There shall be no sale of salvaged material within the Hall's property limits.

### **Description of Consultant Services**

The successful Consultant will perform the work set out in this SOR, and is also expected to be ABUAD's advisor throughout the build. ABUAD will assume the site supervision during the build. Accordingly, the Consultant may not be associated in any way, including an overlap of principal subcontractors as determined by ABUAD, with any entity or team that submits an offer/proposal on the execution of the work. By making a submitting an offer/proposal, a Consultant agrees to this separation.

Tasks to be performed or arranged by the Consultant include but are not limited to:

- ❖ Provide a complete review and assessment of the required elements based on the recent studies;
- ❖ Execute a detailed topographical survey, compile the data, update the existing topographical plan and calculate the offset from WSP's topographical survey;
- ❖ Review of relevant available information to characterize the anticipated subsurface conditions.  
(A geotechnical study is currently under way and the result will be made available to the Consultant);
- ❖ Provide detailed Drawings & Specifications to allow ABUAD to initiate the tendering process for the actual reconstruction works;
- ❖ Provide a Bill of Quantity (BOQ) as well as a Class "B" estimate;
- ❖ The Consultant is to generate a detailed project schedule in conjunction with ABUAD that will be incorporated into the SOR. The schedule will include key milestones for the complete project delivery;
- ❖ Coordination and the cooperation of the Consultant with ABUAD will be paramount for the implementation of this project;
- ❖ The SOR document will clearly identify ABUAD and the Consultant's responsibilities, i.e. communication protocols and expectations, defined project teams, etc. ;
- ❖ The SOR documents will include criteria to ensure that the design and construction will meet and exceed applicable codes and standards, as well all ABUAD specific technical standards, health & safety and environmental requirements;

- ❖ The Consultant will work with ABUAD procurement professionals in preparing the non-technical aspects of the SOR;
- ❖ The SOR documents prepared by the Consultant will be in publishable form.

Below are the important and summary of the required rehabilitation works;

(I) Demolishing, dismantling and Preparation Works.

(II) Concrete, Block and Plastering Works.

(III) Painting and Coating works.

(IV) Doors, Windows and Metal Works.

(V) Plumbing and Sanitary Works.

(VI) Electrical Works.

(VII) Air Conditioning Works.

**Schedule:** Project Allocation      January 31, 2020.

1.	Project Start	March 1-6
2.	On site Visit and Document Review	March 7-21
3.	Submission of Draft D&S (50%)	March 22-28.
4.	Submission of Draft D&S (90%)	March 29 - May 5
5.	Submission of D&S Final	April 6-15

The lead consultant for this Project would be Engr. Katey Godwin. The Human Resources provided by our agency that are involved and the professionals that constitute the Project team are;

I      (I) **Structural Engineers:** They will design, assess and inspect the structures to ensure that that are efficient and stable.

I      (II) **Building Services Engineer:** They will plan, design, monitor and inspect the systems to make buildings comfortable, functional, efficient and safe.

(III) **Consultant team:** They will provide tasks such as;

- • Providing advice on setting up and defining the project.
- • Developing and coordinating the design.
- • Preparing production Information and Tender Documentation.
- • Inspecting the work of contractors.

- • They provide *Contract Administration*.

The members of the consultant team include:

- Architect
- **Cost Consultant**
- Services Engineer

**(IV) Sub-Contractors(Labourers)**

**(V) Civil Engineer:** Perform engineering duties in planning, designing, and overseeing construction and maintenance of building structures and facilities. Under the civil Engineer we have;

- • Water Engineer.
- • Transport Engineer.
- • Sanitary engineer.
- • Geotechnical Engineer.

**(VI) Electrical Engineer:** They will design, develop, and test electrical devices and equipment and deal with the complete wiring of the building.

❖ The Site was secured because it helps prevent vandalism along with the theft of tools, copper, building materials and machines. Construction site theft costs the industry perhaps billions of dollars each year that is why we can protect the site by the use of intruder detection, lighting, CCTV, Fences, gates, barriers and bollards.

**SECURING THE SITE**

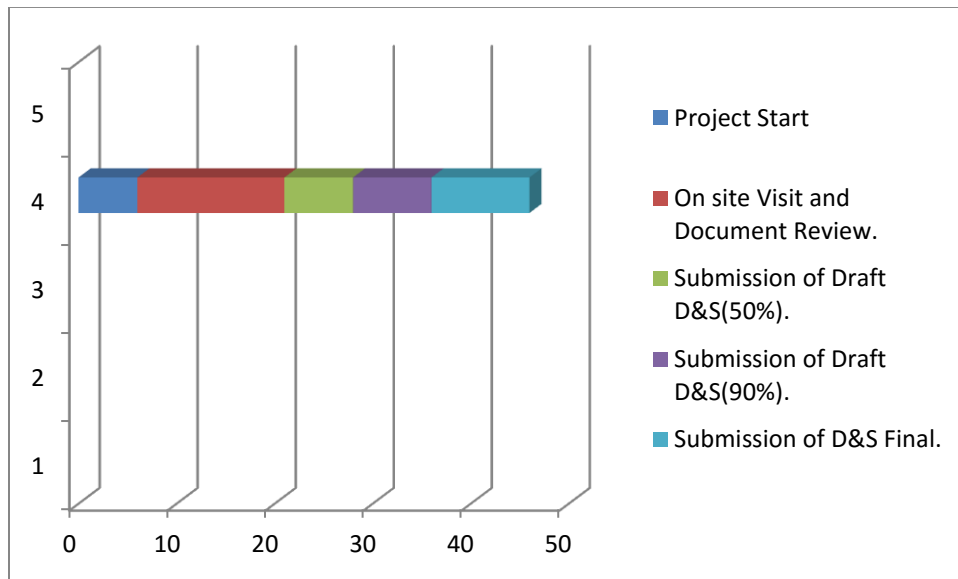
At this stage a barrier made of roofing sheets would be used to secure the site. This is necessary so as to ensure no one would be able to enter and leave the site at will. The only set of people with access to the site would be authorised personnel, official personnel, workers and official members of the school board (owners of the project) to inspect. This would restrict access to the site for students and those who are not mentioned above. This would be in order to prevent unnecessary accidents and limit to movement on site and also secure the equipments used on site as no one would be allowed access once the gate is locked and work for the day has finished.

It would take an estimated number of 2 weeks to complete.

ITEM	DESCRIPTION	QTY	UNIT	RATE	N K
	<b><u>BILL OF ENGINEERING MEASUREMENT AND EVALUATION (BEME) FOR THE REHABILITATION OF UST ALFA BELGORE HALL FOR AFE BABALOLA UNIVERSITY, ADO-EKITI, EKITI STATE</u></b>				
1	PRELIMINARY WORKS(SITE PREPARATION AND CLEARING)	LS			7,500,000
	-				
2	CONSULTANCY FEE			15%.	22,500,000
	-				
3	TRANSPORTATION			12%.	18,000,000
4	PROVISION OF ROOFING SHEETS AND ROOFING EQUIPMENT	LS			15,000,000
5	PROVISION OF BLOCKS AND PAVING STONES (DAMP-PROOFING AND GROUTING INCLUSIVE	LS			17,500,000
6	PROVISION OF CRANES, TRUCKS AND CONSTRUCTION MACHINES	LS			17,000,000
7	PROFIT			20%.	30,000,000
	-				
8	MISCELLANEOUS			10%.	15,000,000
9	<u>SUM OF WORKS</u>				142,000,000
10	VAT			5%.	7,500,000
	-				
	TOTAL				150,000,000



## Gantt chart



## PAYMENT SCHEDULE

- 30% of Total Estimated cost for Mobilisation
- 30 % of Total Estimated cost
- 50% of Total Estimated cost for completion
- Finally payment of 40% of Total Estimated cost at completion and hand over
- Retain 10% of Total Estimated cost for a 6 months defect liability period.

### Bill of Engineering Measurement and Evaluation (BEME)

For all engineering works, it is required to know beforehand the probable cost of construction known as estimated cost. 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. This includes the cost of materials, labor, equipment and all/any other resource(s) required for the success of any construction endeavor based on a pre-determined scope and specification.

### Defect Liability Period

The defects liability period (or 'DLP') is a fixed period of time, starting from the date of practical completion, during which the contractor has an express contractual right to return to the site to rectify defects.

### Lead Consultant

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.

### Project Life Cycle

A project life cycle is the sequence of phases that a project goes through from its initiation 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.

### Environment Impact Assessment (EIA)

The term "environmental impact assessment" (EIA) is usually used when applied to actual projects by individuals or companies and the term "strategic environmental assessment" (SEA) applies to policies, plans and programmes most often proposed by organs of state .It is a tool of environmental management forming a part of project approval and decision-making. Environmental assessments may be governed by rules of

administrative procedure regarding public participation and documentation of decision making, and may be subject to judicial review.