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ENG 284

ENGINEERS IN SOCIETY

Title : ENGINEERING CONSULTANCY ASSIGNMENT

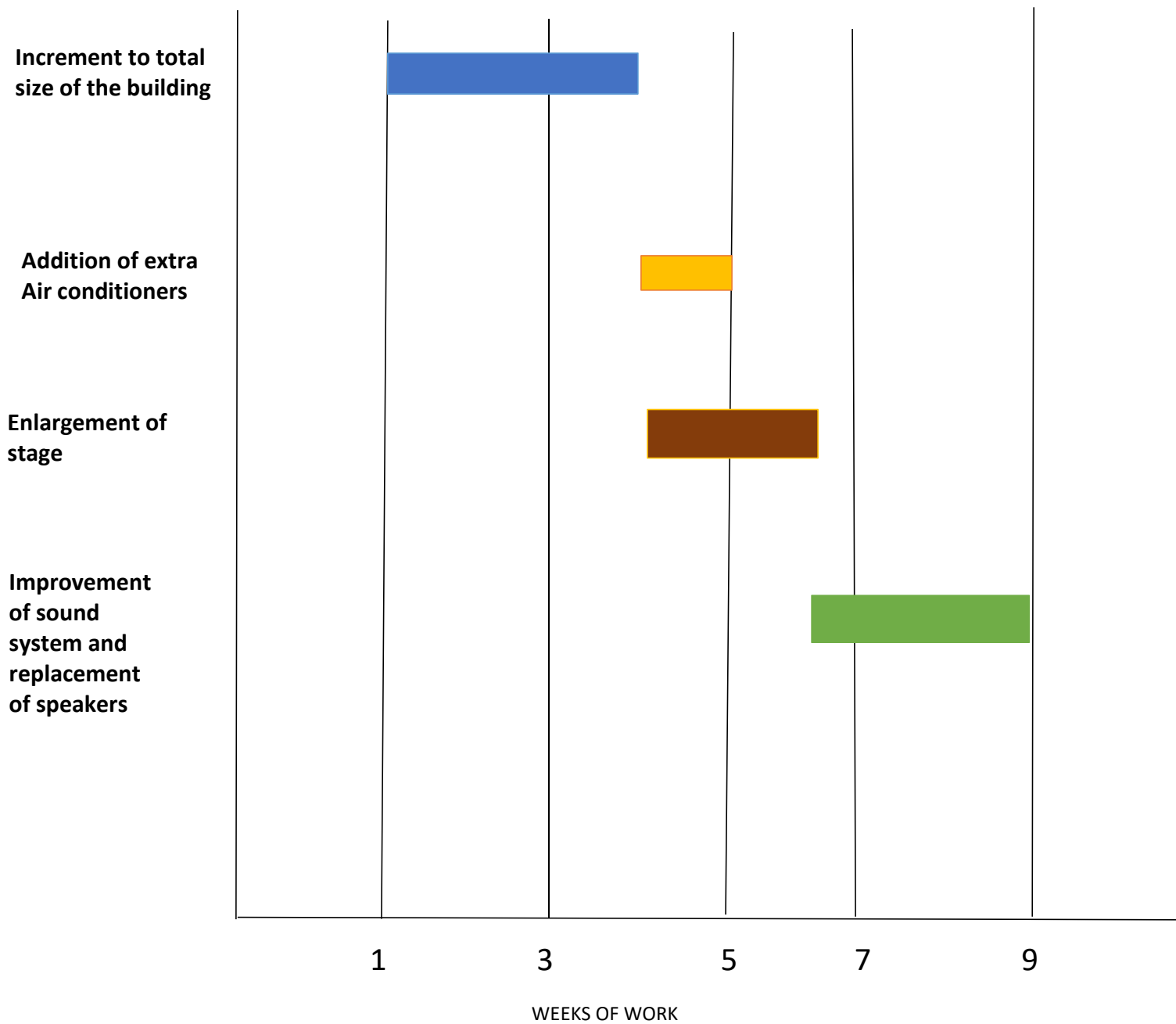
SCOPE OF WORK

The project will commence effectively on June 3rd and will be completed exactly two months after on August 3rd .

Upon completion the building will feature the following ;

1. Increment to the total size of the building
2. There will be thirteen extra Air conditioners added to the building as stated in the contract
3. The Stage/Alter will be enlarged to accommodate more
4. The Sound system present will be improved with complete replacement of all speakers present.

GANTT CHART



The human resources present will be top of the line considering the amount of experience they have.

Human resources needed are as follows;

- A. Workforce planning.
- B. Performance management
- C. Managing employee payroll
- D. Making sure staff facilities are suitable and well maintained
- E. Skilled and unskilled labour

Project Team

- Accountant - Lead consultant
- Quantity Surveyor
- Mechanical Engineer
- Civil Engineer
- Manual laborers.

The site was secured to make sure non of the property brought in for the project purpose was vandalized in any way or stolen

BEME

S.N	Description of work	Quantity of work	Rate/ Cost	Total in naira
1	Increment of total size of building	98	8000	784,000
2	Installation of thirteen air conditioners	45	2348	105,660
3	Enlargement of stage	30	1955	58,650
4	Improvement of sound system and complete replacement of speakers	60	1137	68,220
5	Miscellaneous			60,000
6	Profit			200,000
7	Transportation			130,000
8	Consultancy fee			120,000
				Total Estimated amount =1,526,530

Payment Schedule

Commencement of project: June 3rd

Instruction	Fee effective
Payment of 30% of total estimated cost	At mobilization
Next payment of 30%	Halfway through the project (July 3 rd)
Final payment of 40% of TEC	At completion and handover
Retain 10%	Until 6 months after completion

BEME ;

A bill of quantities is a document used in tendering in the construction industry in which materials , parts, and labor and their costs are itemized . It assists in the calculation costs for the tender and it provides a fair and accurate system for measurements.

Bill of quantities are prepared by quantity surveyors and building estimators .

Defect Liability Period;

The defects liability period (now called rectification period) begins upon certification of practical completion and typically lasts six to twelve months

During thus period , the client reports any defects that arise due to the contract administrator who decides whether they are defects ,or whether they are in fact maintenance issues.If the contract administrator considers they are defects then they may issue instructions to the contractor to make them good within a reasonable time .

Project Life Cycle;

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 , and its area of application.The project lifecycle can be defined and modified as per the needs and aspects of the organization.

Project life cycles can range from predictive or plan-driven approaches to adaptive or change-driven approaches .In a predictive life cycle, the specifics are defined at the start of the

project, and any alterations to scope are carefully addressed. In an adaptive life cycle, the product is developed over multiple iterations , and detailed scope is defined for iteration only as the iteration begins .

Characteristics of the project life cycle

1. **The initiation phase** : Starting of the project
2. **The Planning Phase** : Organizing and preparing
3. **The Execution Phase** : Carrying out the project
4. **The Termination Phase** : Closing the project

Environmental Impact Assessment;

Environmental impact Assessment(EIA) is a process of evaluating the likely environmental impacts of 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 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

