

## ***Terms of Reference***

### ***For***

### ***An Independent Evaluator to Assess the Current design, bill of quantities, processes, current work progress, and the contractor's capacity for the New Redemption Hospital Construction***

#### ***I. Background***

In 2016, Liberia restructured its Ebola Emergency Response Project (EERP) financed by the World Bank to respond to the demands for supporting strengthening of resilient health systems and implementation of National “Investment Plan for Building a Resilient Health System: 2015 to 2021”. Activities financed under the restructuring included support to the health workforce program, engineering health infrastructure (Construction of the new Redemption Hospital, rehabilitation of health facilities with triage, staff housing for health workers in remote health facilities, and isolation functions), community health workforce program, county-based service delivery, and fleet management and ambulance services.

Under the subcomponent preparedness for potential future Ebola outbreaks, the Ministry of Health (MOH) has allocated funds for the construction of phase 1 of the new Redemption Hospital. The project was designed as admeasurement contract with a cost of 14,000,000.00 USD (fourteen million United States dollars) and a duration of twenty-four (24) months.

As part of the process to rationalize the existing contract within existing budgetary and time constraints, the MOH wishes to hire a hospital design, construction and project management firm to (i) review the current design and it's appropriateness for the Liberia context, (ii) determine if the design should be modified or built as is without compromising structural integrity and its impact on the environment and vice versa, (iii) validate the existing bill of quantities and provide opinion on cost estimates and variations to complete the project successfully.

#### **Scope of work**

- Review and comment on appropriateness of the technical design drawings including but not limited to structure, layout and design, and auxiliary systems like lighting, water, utility, power supply, HVAC, cost calculations, delivery program
- Review the MOH, the design and supervision firm, and the contractor's compliance with the construction agreement particularly in relation to project timelines, outputs, outcomes and impacts against the Design Monitoring Framework
- Identify any problem areas during project implementation occasioned by the design and supervision, the contractor and/or the MOH and compile a deficiency list.
- Review and comment on the social and biophysical environment and effectiveness of safeguard measures in place between live components in operation and components under construction
- Based on the report and recommendations, draw up a timetable for the MOH, supervision firm and contractors to remedy defects.

## **Deliverables**

Technical Design and Construction (TDC) Report containing the following thematic areas

- A. Executive summary of key issues, opinions, conclusions, and recommendations
- B. Tender and bid process

Review and comment on the appropriateness and completeness of the tender documents issued by the MOH and the bid submitted by the contractor including design, drawings, calculations, and legal documents received and signed by the parties.

- C. Progress with implementation
  - a. Progress and activities of the MOH, design/supervision firm and contractors relating to key deliverables including technical specificity, progress of construction versus original schedule.
  - b. Actual status of deliverables/works in percentages, changes in the scope of the Project and scope of services, including the list of issued change orders and anticipated changes, if any and their impact on the project including time and project value
  - c. Summary of main issues and challenges, including recommended corrective action; and feasibility of planned activities for the next 12 months to complete the project.
- D. Environmental and safeguards engineering

Review the appropriateness and completeness of the Environmental and Social Management Framework/Plan (ESMF/ESMPP) including the issues identified and the adequacy of the risk mitigation measures. The report should comment on the preparation, design, construction implementation, operation and compliance with (a) all applicable laws and regulations of Liberia relating to environment, health and safety; (b) the relevant World Bank Environmental and Social Safeguard Policies; (c) all measures and requirements set forth in the ESMF/P, and any corrective or preventive actions set forth in a safeguards monitoring report, and (d) status of implementation, and (e) any violation of environmental and social standards and measures taken or recommended to be taken under this Project.

- E. Contractor's capacity

Contractors' capacity in terms of (a) expected equipment to be deployed to site; (b) site office activities and works including human resource management; (c) list of invoices issued by the Contractor and their status; (d) Status of physical disbursements of payment to the contractors; (e) opinion of capacity challenges encountered by the construction firm and recommendations for improvement – minor and major

- F. Highlights of key issues, opinions, conclusions, and recommendations
- G. Annexes -plans, schedules, progress photographs etc.

## **II. Consultant staffing Team**

1. Architect
2. Structural Engineer
3. Civil Engineer
4. Quantity Surveyor
5. Electrical Engineer

6. Mechanical Engineer
7. Environmental and Social Safeguard Specialist

No.	Position	Professional experience	Educational Qualification	Specific Expertise
1.	Team Leader/Senior Architect	Minimum of 15 years Experience in infrastructure projects out of which minimum 10 years' experience in hospital construction.	Graduate degree in Architectural Engineering and a licensed & certified Architect.	He/She should have proven record of project management of infrastructure projects especially hospital construction. Experience in World Bank aided projects shall be given additional weight. He/ She should also have good overall knowledge of planning, contract management, the FIDIC Contract and aspects of infrastructure projects especially in health sector.
2.	Structural Engineer	Minimum 10 years of Experience on design and Structural analysis. Knowledge of various internationally accepted design codes & methodologies and familiarity of best practices is essential.	Graduate degree in Structural Engineering. A licensed & certified Structural Engineering.	He/She should have experience on design and construction of vertical structures. The candidate must have capability to design vertical structures with various alternative materials and structural arrangements.
3.	Civil Engineer	Minimum 10 years of Experience in building construction	A Graduate degree in Civil Engineering.	He/She should have worked as civil/construction engineer. Good knowledge of storm water control, sewers, and water reticulation.
4.	Quantity Surveyor	Minimum 10 years for degree holders / 12 years for diploma holders of Experience in quantity surveying, cost estimation and	A degree in Quantity Surveying / diploma in quantity surveying	He/she should have worked as quantity surveyor for at least 7 years for degree holders / 9 years for diploma holders

		specification of construction materials.		
5.	Electrical Engineer	Minimum 10 years of Experience in Electrical Engineering	Graduate degree in Electrical Engineering	He/She should have experience in industrial electrification
6	Mechanical Engineer	Minimum of 10 years of experience in each discipline	Graduate degree in Mechanical Engineering	He/She should have experience in: HVAC Plumbing and sanitary ware Water and fire reticulation Gas
7	Environmental & Social Safeguard Specialist	Minimum of 10 years of experience	Graduate degree in Environmental Science/Engineering	He/she should have knowledge and working experience with World Bank safeguards instruments

### ***III. Reports, deliverables, and timeline***

The Consultant will prepare and submit to the Ministry of Health through the PIU the following reports in required number of copies:

<b>Reports</b>	<b>Timeline</b>	<b>Number of copies</b>
Inception report containing method statement for audit/evaluation	Within 14 days after commencement of services	3 electronic and hard copies
Presentation of the draft final report (include findings from desk review and analysis of construction drawings, specifications, bill of quantities, contracts, construction schedule, request for information and responses, project reports, payment application and certificates, approve and pending change orders, claims for variations and time extension).	Within 45 days after commencement of services	3 electronic and hard copies
Consultancy final completion report as per the Expected Deliverables	Within 60 days after commencement of services.	5 electronic and copies

### ***IV. Contract type and duration***

The consultancy will be based on a lumpsum contract with a duration of 60 days after the effectiveness of contract.

### ***V. Qualification, competencies, and experience of Consultant/Firm***

- A registered and chartered architecture or engineering consultant/firm

- At least 20 years of experience in Architecture and Engineering (firm with expertise and experience in hospital design and construction is an added weight)
- Experience with World Bank/African Development Bank projects
- Schedule of similar type projects completed
- Proficiency in the English language