

## Annex A Terms Of References (ToRs)

### HCR/IRQER/2019/RFP-053

#### Development Of Designs Of Shelter And Infrastructure Related Projects – Unhcr Iraq

##### A. Background

1. Adequate shelter remains one of the most significant components for overall needs of people of concerns to UNHCR (refugees, IDPs, and returnees). As part of its efforts to provide and sustain long-term/permanent shelter solution, UNHCR will provide households with repair and rehabilitation of damaged houses. Shelter support in terms of providing and installing Refuge Housing Units (RHUs) as a transitional shelter for IDPs returnees will also be considered in 2019 and beyond. Further repair and maintenance of shelter and infrastructure in the current camps will continue. The strategy adopted by the shelter sector is to improve the living conditions of POCs in camps, with a gradual transition from emergency structures to more sustainable ones. On top of the assistance provided by humanitarian actors, some refugee families living in camps had also upgraded their shelters themselves.
2. The shelter interventions also provide technical support for Quick Impact Projects (QIPs) and Community Support Projects (CSPs) that entail construction and maintenance of community infrastructure such as public health centers, schools, irrigation canals, electricity projects, water projects and boreholes. These projects are implemented in close consultation with both communities and authorities.
3. Also, as the humanitarian situation is becoming protracted, further investment is needed to achieve longer-term sustainability and cost efficiency, as opposed to the emergency type of investment which requires frequent repairs. This is the reason why some camp infrastructures such as internal access roads, electricity networks, open channels, and sewage systems require upgrading and maintenance.
4. Technical Units of UNHCR offices in Iraq ensure the in-house engineering design and construction of the community infrastructure and facilities. The Units handle all the administrative tasks necessary to complete these projects including budgeting, coordinating with project stakeholders, design, and construction management.
5. The projects implemented vary and their identifications are based on the assessed needs of the persons of concern, coordination with the authorities and other humanitarian and development partners, within the UNHCR mandate, and supported by technical assessments by UNHCR teams. Examples of projects implemented so far include:

##### Camp infrastructure

- Construction/upgrading of shelter for refugees in camps;
- Construction, extension, or rehabilitation of water supply and sanitation and hygiene systems (WASH);
- Construction of open channels ;
- Construction, paving or double-dressing of roads;
- Upgrading or extension of electricity grid and installation of electrical systems, such as feeder lines, generator system, transformers, solar systems for domestic use and street lightening;

#### Non-comps infrastructure

- Construction/rehabilitation of buildings for public use including community centers, schools, primary health centers, outside camps;
  - Construction of boreholes, water treatment plants, installation of water pumps, etc.;
  - Improvement of public parks;
  - Installation of transformers;
  - Construction/Rehabilitation of irrigation canals.
6. Presently, and for the foreseeable future, some projects coming forward require either engineering expertise that may not be available in-house or a workload which goes beyond the capacity of the current staffing structure of the office. Therefore, UNHCR is intends to procure the services of a professional engineering company to undertake a detailed engineering design task of the shelter and infrastructure projects ensuring that works are carried to demonstrate results, technical quality, and integrity, and meet UNHCR, international and national standards. Basically, the design includes the project identification, schematic planning, technical assessment, social and environmental impact assessment, cost benefit analysis..
7. It is worth noting that all construction works implemented by UNHCR –Iraq are governed by the IRAQI General Technical Specifications (IGTS), and construction materials should be tested according to Construction Works Specification by NCCL (1981 edition) and (ASTM) specifications. Also, UNHCR policies and guidelines, which include but are not limited to the UNHCR WASH Manual For Refugee Setting and the UNHCR Shelter Design Catalog apply when required.

#### **B) Scope of works**

- The Scope of Work to be undertaken under this Request For Proposals (RFP) for a potential Design Company is to develop full designs for UNHCR shelter and infrastructure projects, based on a detailed Task Assignment (TA) provided by UNHCR, for each project. The TA will specify the type of project, location, duration, and the professionals needed. During the implementation of the Frame Agreement (FA) and for each project, the final quote shall be based on the Task Assignment of each particular project.
- The precise number, scope, and locations of projects vary and will be defined throughout the year. Purchase Order will be issued for each individual project specifying the scope and timelines. Accordingly, payment for the contract of the Design Company will be for actual services rendered under the Statement of Works. As a reference, in 2018, UNHCR Iraq implemented around 90 infrastructures projects in and outside camps in governorates where UNHCR operates throughout Iraq, out of which approximately 30 projects required a technical design.
- The Design Company will be given 10 calendar days from date of receipt of the ToRs to produce the first draft of the project. The rest of the process leading to the receipt of the final version of the project is described under the Point E) below.

#### **C) Statement of works**

- A design of a project implies the delivery of the following pieces: a description of the project and its Scope of Work, BoQs, drawings, surveying reports and variants as necessary. These documents should comprise all required specifications ready for UNHCR to launch tenders.

- When assigned a project to execute, the selected Design Company will be expected to be able to provide full engineering services to design the project. While not all of the services listed below may be required for every project, the Design Company must have such capabilities on staff to undertake the work.
- Duties of the selected Design Company include, but are not limited to:
  - Performing the engineering designs for UNHCR infrastructure sectors, including new constructions or renovations works in the following sub-sectors:
    - **Buildings** (Office and administrative buildings, Buildings for the use/support of People of Concern, Education facilities, Health facilities, Agricultural support infrastructure, Shelter in permanent materials, etc.).
    - **Transport Infrastructure** (Improvement of roads, double-lane roads, bridges, box culverts, etc.)
    - **Power Generation and Supply** (Power generation/non-renewable sources, Power generation/renewable sources, Electrical transmission/ distribution, Installation of solar systems, Waste to energy systems, etc.)
    - **Water and Sanitation systems** (Water resources conservation and management, Water supply, boreholes, distribution systems, pumping stations, waste water treatment plants, Waste management / disposal, open channel, landfills, etc.)
    - **Other construction works** (Improvement of public parks, football pitch, irrigation canals, etc.)
  - Surveying and Investigations to support the design and construction of each project including:
    - Performing topographical surveying tasks as needed for the preparation of civil engineering construction plans.
    - Carry out soil investigation for UNHCR (if required) to obtain the necessary data for designing foundations of large infrastructure. This might include sounding, core boring, and laboratory test, etc.
  - Provision relevant documents, including bill of quantities, cost estimates, and materials and specifications in line with UNHCR standard formats.
  - Any other items required for the successful execution of the project.

#### D) Operational Modality

The Design Company will work in close collaboration with UNHCR and the Technical Departments at Governorate level, District level and Municipal level, and when/where needed, together with UNHCR colleagues with the UNHCR partner agencies in the field, as well as village leaders and other local community mechanisms.

##### Activity 1 – Visit site, and Assess site conditions

- Visit sites, as applicable.
- Perform necessary surveying, soil investigations and plot the result of the survey in the drawing (if required).
- Find out the possible source of water supply, source of electricity, and sanitation requirements.

*Deliverables:* Report on site-specific matters, topographic survey and soil test report.

##### Activity 2 – Prepare Options for Building and Infrastructure Design and Type of Construction

- For facilities, develop modular designs flexible enough to adapt to the site conditions. Discuss with UNHCR, concerned public authorities, and the community on the design and modify, if necessary.
- Explore, identify and recommend the appropriate type of structure which is durable and gives value for money.
- Preliminary Project cost estimates, sourcing, availability of construction materials on site, logistics, etc., should be considered.

*Deliverables:* Report on design, drawings, preliminary cost estimate, sourcing of materials, advantages, and disadvantages of two to three options depending on the nature of the project.

### **Activity 3 – Prepare preliminary standard drawings and specifications for the selected type of structures and infrastructure**

*Deliverables:* Two sets of standard drawings and specifications for the selected option in hard copies and one (1) electronic version.

### **Activity 4 – Prepare Design, Cost Estimate, Bill of Quantity, and Specifications**

- Prepare site plan, architectural drawings including structural, sanitary, electrical and landscape drawings and submit to UNHCR for review and approval.
- Prepare a Bill of Quantities (BOQ) as a result of the detail design and Technical Specification. The Design Company shall prepare the cost estimation. For large projects, variants would be considered.
- Provide a cost benefit analysis of the variant which has been prioritized.
- For cost estimation, the Design Company shall follow the updated unit price released by the relevant authority (if there is any) and maintain updated market price list for use in case of unavailable items.
- Establish if Land Allocation permits or any other permit are necessary prior to construction being initiated. Prepare all documentation necessary to make submissions for the permit and assist UNHCR to acquire the permit.

*Deliverables:* Architectural, structural, sanitary, electrical, landscape drawings, Bill of Quantity, Abstract of Cost, technical specifications, tender document (UNHCR standard).

### **E) Format and Timeline for the Deliverables**

- For each project, the Design Company shall submit a draft version of the engineering design study including all components listed under the Activity 4 in electronic version, in the English language, for review by UNHCR.
- UNHCR will expect to receive the first draft within ten (10) calendar days from the date of reception of the ToRs by the Design Company. UNHCR will have seven (7) calendar days to send comments to the Design Company for review. The Design Company should send the final version of the design study seven (7) calendar days from the date of receipt of UNHCR's observations.
- The timeframe for the deliverable mentioned above is indicative and will be discussed at the start of each project to consider the size and complexity of the project.
- The final engineering design should be approved by UNHCR.

## **F) Profile of the Design Company**

- The company should make sure that it has the necessary authorizations to work in any Governorate in Iraq without any restriction. At the moment, UNHCR implements infrastructure projects in Iraq including the Kurdistan Region of Iraq (KR-I), Ninewa, and Kirkuk Governorates.
- The Design Company should have at least Five (5) years of experience in the design of civil engineering, architecture, water supply, electricity, community infrastructure facilities or similar expertise.
- The Design Company must provide a list and certified CVs of qualified personnel for the services to be performed, including the CV of the Company Manager and the below listed staff.
- The minimum required professionals are composed of a Project Manager, Architect, Civil Engineer, Mechanical Engineer, Electrical Engineer, CAD Technician (Computer-Aided Designer).

The same professional shall not cover two or more of the above positions, with the exception of the Project Manager. The contractor must have the organizational and technical capacity to deal with all the works as stipulated in the TOR.

Minimum experience and qualification for the above personnel are:

### **i. Project Manager**

Role and responsibilities:	S/he is the contractual interface with UNHCR representatives. Cost and time management of the A/E's performance for each PO through the contract expiration.  Supervision of the professional team (architects, engineers, cost estimators, specification writers, etc.).  Supervision of the Quality control functions, with special reference to deliverables.
Required education:	Master level or equivalent degree in Architectural or Engineering (any discipline).  Project management certification is desired.
Minimum required experience:	10 years in the construction business of which minimum 5 years in the role.
Language skills:	Fluent English, spoken and written. Knowledge of arabic is desired but not mandatory.

### **ii. Architect**

Role and responsibilities:	Technical supervision and time management of the Architectural team.  Quality control of the deliverables.
Required education:	B.Sc. level or equivalent degree in Architecture.
Minimum required experience:	10 years in Architecture, including construction supervision.
Language skills:	Fluent English, spoken and written.

### iii. Civil Engineer

Role and responsibilities:	Technical supervision and time management of the Civil Engineering team. Quality control of the deliverables.
Required education:	B.Sc level or equivalent degree in Civil Engineering.
Minimum required experience:	10 years in Civil Engineering, including construction supervision, with special regard to the installation of utility lines, sewerage lines, , and roads.
Language skills:	Fluent English, spoken and written.

### iv. Mechanical Engineer

Role and responsibilities:	Technical supervision and time management of the Mechanical Engineering team. Quality control of the deliverables.
Required education:	B. Sc. level or equivalent degree in Mechanical Engineering.
Minimum required experience:	10 years in Mechanical/Plumbing Engineering, including supervision to the installation of mechanical systems. Experience in water supply and waste water systems/plants. Experience in the maintenance of mechanical systems is desired, with special regard to HVAC systems.
Language skills:	Fluent English, spoken and written.

### v. Electrical Engineer

Role and responsibilities:	Technical supervision and time management of the Electrical Engineering team. Quality control of the deliverables.
Required education:	B. Sc level or equivalent degree in Electrical Engineering.
Minimum required experience:	10 years in Electrical Engineering, including supervision to the installation of electrical distribution and emergency power supply systems. Experience in the maintenance of electrical distribution and solar power supply systems is desired.
Language skills:	Fluent English, spoken and written.

**vi. CAD Technician(s)**

Role and responsibilities:	Specific to the assignment.
Required education:	Diploma / Certificate in Civil Engineering or other subject related to assignment.
Minimum required experience:	3 years of work experience relevant to the assignment.
Language skills:	Fluent English, spoken and written is desirable.

The staff structure is not fixed, and the number and profile of staff shall be adapted depending on Task Assignment (TA), based on prior discussions and agreement with UNHCR. However, the company will be paid based on the actual scope of the TA, which already includes the number and qualification of the professional required for the specific project.

Selected Design Company or its affiliates cannot participate in tenders advertised by UNHCR Iraq in connection to the products it delivers.

A Strict adherence to the UNHCR Policy on data sharing will be mandatory for the selected company.

**G) Equipment and Logistics**

The Design Company must have the required equipment (leased or owned) , relevant to the work assigned including vehicles, computers, technical equipment (topography, geotech) and appropriate design software and other technical working tools such as plotters.

UNHCR uses Autodesk, AutoCAD, and Civil 3D software to prepare projects and the Design Company should possess this software to allow compatibility and possibility of sharing the projects with UNHCR.

**H) Contract duration**

The Frame agreement with the Design Company will be contracted for two (2) years with the possibility to extend for a third year, subject to satisfactory performance of the design company, availability of funding and continuous need for the service to UNHCR.

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