**TERMS OF REFERENCE (TOR)**

**Scope of services**

**Name of Scheme: Improvement of Sheikh Maltoon Town, Mardan**

The scope of services for the project to be furnished by the consultant includes, but not limited to the following:

1. **Data collection, survey & investigation phase.**
	1. Prepare and submit satellite images of the site and adjoining areas with GPS coordinates.
	2. Determination of shifting of utilities in the areas such as electric poles, Sui Gas, Telephone and water supply lines to a suitable place wherever required.
	3. Environmental impact assessment (EIA) of sites and approval from competent authority.
	4. Soil investigation, bedding, and chemical analysis of Effluent of sewerage system.
2. **Preliminary Design Phase**.

2.1 Evaluating the client’s requirement analytically while designing and planning various components of the project.

2.2 Preparation of site plan, describing and illustrating preliminary design/outline proposal including cross sections and long sections of the proposals where required.

2.3 Evaluating the feedback of the client for further improvement in the design.

2.4 Making final presentation after incorporating the feedback from the client.

2.5 Carry out all type of laboratory tests required for the various components of the project.

 **3.** **Master Planning Phase.**

3.1 Preparing, describing and illustrating preliminary Master Plan showing proposals for various components included in the project i.e Roads, Sewerage system, Street Lights/external electrification, Parks & Miscellaneous.

3.2 Preparation of phase wise development plan as mentioned in 3.1 above.

3.3 Preparation and submitting preliminary master plan report of the project.

3.4 Preparation and submission of final master plan of scheme with allied accommodation along with outline utilities plans.

**4. Design Development Phase**

4.1 Preparation of detailed design of all the components included in the project and allied structures as per prevailing Engineering codes.

4.2 Preparation of detailed working/construction drawings of each and every component of proposed schemes.

4.3 Preparation of modified drawings without additional charges if required by the client.

4.4 Preparation of details layout plan.

4.5 Preparation of design/drawings/specifications complete in all respect.

4.6 Prepare detailed architectural & structural design incorporating electrical, mechanical and other internal and external services including landscaping, roads/paths, street lights, drainage works.

**5**. **Preparation of PC-I and detailed cost estimate after approval of master plan by the competent forum as per prevailing formats**.

5.1 Defending PC-I at appropriate forum.

5.2 Preparation of revised PC-I/Technical Sanction (TS) estimate if required.

5.3 Submission of detail estimate for accord of technical sanction by the competent forum.

5.4 Preparation and submission of work plan based on M/S project or primavera.

5.5 Submission of detailed structural design calculation (Soft & Hard copies).

5.6 Submission of detail working drawings for construction work/ structural members etc.

(Soft & Hard Copies).

5.7 The consultants will be accountable for any defects or losses or damages as a result of proven faults,

Errors or omissions on the part of the consultants during or after the completion of the work being the Engineer in charge.

5.8 The consultant will not claim extra payment/bill against variation.

6. **Tender Documents, BOQ & Cost Estimates Phase:**

6.1 Preparing specifications or such particulars as may be necessary for the

 preparation of bills of Quantities.

6.2 Preparing bills of Quantities and conditions of contract.

6.3 Preparation of complete tender documents/cost estimate/variation order/Bill

 of Quantity (BOQ).

6.4 Preparing Tender documents.

**7. Supervision Stage:**

7.1 The quality and quantity assurance shall be the sole responsibility of the consultants being the Engineer in charge of the project.

7.2 Full time supervision of the scheme since start of the work till final satisfactory completion of all components as mentioned in the scope of the work.

7.3 Developing and ensuring quality assurance mechanism as per Engineering

 standards.

7.4 Expediting progress at the sites as per work plan for timely completion of the

 project.

7.5 Preparation and presentation of monthly progress report or any review/report requested by the client of the project.

7.6 Taking measurement of work done carried out by the contractor, preparation, submissions and verification of interim payment certificates (IPC) including final bill security and any other advances extended to the contractors/subcontractor (if any) as per Government rules.

7.7 If the work is delayed due to the fault of Contractor then the consultant fee during the extended period will be charged to the Contractor **AND** if the work is delayed due to the fault of the Consultant then the Consultant will provide the services free of cost during the extended period.