

Terms of Reference

Detailed Designing & Construction Supervision

Background

Punjab Municipal Services Improvement Project (PMSIP) is a World Bank assisted project to be implemented in various TMAs of Punjab. The sub-projects for which, this Expression of Interest (EOI) is being issued, will be in municipal sectors like solid waste management, roads, water supply and parks.

2. Objectives

The Objectives of the Consultancy Services are to prepare detail designs and to assist Tehsil Municipal Administration in carrying out implementation of infrastructure sub-projects according to approved design, drawings, standard specifications and within the envelop of provisions of conditions of the contract.

3. Scope of the Services

The consultants will be required to carry out Detailed Designing and Resident Supervision of Construction Activities of the upto 08 sub-projects costing around PKR 500 million.

Details of the Scope of Services are as follows;

3.1. Detailed designing of sub-projects.

The Field Appraisal Reports (FARs) prepared by PMDFC for these sub-projects will be available for information to the selected Consultants. The Consultants shall carry out Detailed Designing and cover the following:

- a) General description of the project area.
- b) Study of existing facilities
- c) Preparation of descriptive maps
- d) Preparation data base of existing services
- e) Service delivery analysis
- f) Preparation of feasibility studies
- g) Financial – economical and sensitivity analysis
- h) Existing operation & maintenance stream during last three years
- i) Sustainability of the scheme in keeping with TMA resources
- j) Suggestion / recommendations in order to meet sustainability requirements
- k) Environmental and social impact assessment in line with Environmental and Social Framework as appeared on PMDFC website
- l) Documentation required to obtain Environmental Approvals from EPA Punjab
- m) Engineer's cost estimates
- n) Preparation of PC-I and its presentation to DDSC/PDWP
- o) Finalization of PC-1 in light of comments (if any)
- p) Preparation of bidding documents
- q) Post Qualification of contractors and bid evaluation
- r) Assist in sub-project award

3.2. Resident supervision of construction activities.

- a) The Chief Resident Engineer (CRE) shall exercise the delegated powers of Project Manager.
- b) The Consultants shall be responsible for resident supervision of the work by a qualified graduate engineer in the respective discipline with sufficient experience who shall perform his duties with due diligence, efficiency and in accordance with the best engineering profession and consulting standard.
- c) The Consultant shall be responsible for design revisions required as per site conditions during the currency of the project in the minimum possible time.
- d) The Consultant shall ensure the detailed designing of additional design work relating to the sub-project on rates in line with the agreed design consultancy charges in the contract.
- e) The Consultants shall certify that works are executed as per approved design, drawings, standards, specifications and within the provisions of contract agreement/documents.
- f) The Consultants shall certify that the works are executed in accordance with the established standards, criteria and procedures.
- g) The Consultants shall supervise the contractors in all matters concerning safety and care of work and to advise concerned Project Manager on any problem arising in construction work during its execution.
- h) The Consultants shall certify that construction material brought at site by the contractor for use in construction is in accordance with the specification and is got tested as per standard practices laid down in specifications.
- i) The Consultants shall check systematically by using CPM based program monitoring, the progress of work according to the construction methodology and schedule of the contractor, fully certifying allocation of resources by the contractor, and apply Contractual Control Mechanisms for pre-emption and mitigation of possible sub-project delays, inline with Contract Management SOPs.
- j) The Consultant shall submit fortnightly progress report to the concerned Project Manager and client on monitoring of works, environmental, social, occupational health and safety management plans, pointing out the deficiencies in the work and suggestions for its remedial measures.
- k) The Consultants shall certify under his seal, the contractor's running payments and final payment already indicating that the quality of work executed is according to specifications, design, and drawings, approved bill of quantities and contract agreement and make recommendation for payment to the contractor along with test reports from nearest Government Laboratory (C&W, NLC, FWO, PCSIR, PITAC, UET Lahore and UET Taxila etc.
- l) The Consultants shall keep the record of daily inspection report and hand them over to the concerned Project Manager on fortnightly basis. One copy of this record shall be retained by the consultants for record at site offices and the summary of such notes shall become part of monthly progress reports to be submitted to the Client.
- m) The Consultants shall recommend and execute corrective measures through contractors in case of sub-project delays.
- n) All the decisions shall be made at site by Assistant Resident Engineers under intimation to Project Manager and Chief Resident Engineer (CRE). Decisions with major change in scope of work liable to change in cost etc. would only be sent to CRE.

- o) One month prior to the expiry of the maintenance period of the work, the consultant shall carryout a detailed final inspection of the work and submit a report to the concerned Project Manager pointing out the defects if any in the works.
- p) The Consultant shall recommend any variation necessary to execute the work. The consultant shall ensure that any such change would be assessed in advance if possible to avoid any loss of time. The recommendations shall be made after intimation from any quarter not more than 7 days after its submission to them under intimation to the Client and Employer and would take all appropriate steps to avoid any delay.
- q) The Consultants shall submit revised cost estimate and draft completion report with 30 days and 45 days respectively, after the issuance of completion certificate.
- r) If subsequently at any stage after the expiry of the maintenance period and during the service life of the work, the quality of any item of work passed by the consultant is found sub standard or defective, the consultant shall also be liable to pay the compensation to the concerned TMAs for the defective work. The liability shall be to the extent of two times the fee charged.
- s) The client will be at liberty to increase or decrease the quantum of work at mutually agreed terms and conditions.

Specific Tasks

- The staff (Assistant Resident Engineers, Inspectors etc.) prior to mobilization at site shall be got approved from the Client if it is being substituted or not named at the time of negotiations. The consultant will mobilize the approved staff under intimation to the Client to fulfil the requirement.

4. Reports and Time Schedule

The following reports are required:

4.1 Detailed Designing

Sr. No.	Description	Proposed Time	Hard Copies	Soft Copies
1	Inception Report	07 Days	03	01
2	Draft Feasibility Report	21 Days	03	01
3	Final Feasibility Report	07 Days	03	01
4	Detailed Designing	30 Days	03	01
5	Engineer's Cost Estimates	07 Days	03	01
6	Draft PC – I	07 Days	03	01
7	Final PC – I	03 Days	15	01
8	Draft Bidding Documents	03 Days	02	01
9	Final Bidding Documents	05 Days	10	01
10	Bid Evaluation Report		03	01
11	Fortnightly Progress Report		03	01

4.2 Construction Supervision

Sr. No.	Description	Hard Copies	Soft Copies
1	Fortnightly Progress Reports	03	01
2	Revised Cost Estimate	03	01
3	Final Completion Report	03	01

