

Terms of Reference

TOR

Capital Development Authority wants to undertake construction of the project. The consultants are required to perform the following minimum services during Supervision phases of the project to ensure timely and successful completion of assigned task: -

SUPERVISION PHASE

The Consultant shall provide the under mentioned services during the Construction supervision phase. It is his duty to include all the services required for him/his staff for successful completion of the project by providing additional services, as he may consider appropriate at no additional cost to the Client. The cost of such additional services shall be deemed to be included in the bid price quoted fees for the resident construction supervision phase.

Responsibility of supervision shall rest with the Consultants who shall issue instructions in writing to the contractor from time to time for the execution of Works as per standards and specifications. As per Contract, Consultants shall carry out a revision in the plans and specifications, as required, and prepare all change orders instantly thereto and shall further assist the Client in negotiations necessary for execution of the changes. Only such revisions shall be encouraged which result in improved project performance.

The Consultant shall check in detail, overall quality of the work at the time of handing over of the project to the Client & subsequently at end of defect liability period and shall certify/issue satisfactory report to the Client:

- a. The Consultant shall ensure that all CDA By laws as well as local and international standards applicable to the Works are followed. The Consultants shall issue necessary instructions to this effect to the Contractor on behalf of the Client.
- b. Validation of joint topographic Surveys with the contractor and validation of geo-technical investigations, where carried out by the Contractor.
- c. To take action so that the Contractor(s) fulfill their obligations as per the contract agreement generally and particularly in respect of proper implementation of time schedule agreed upon between the Client, Consultant and Contractor(s).
- d. To certify the bills of the Contractor(s) and to certify in writing to the effect that the work done for which payment is being made is in accordance with drawings, design and specifications and that the works have been actually executed.
- e. To evaluate variations resulting from revised requirements / designs, adjustments, substitutions of materials etc. and issue formal variations orders after approval of the Engineer to the Contractor(s) with a copy to the Client as per approved provisions of contract documents. No varied/additional work will be under taken till such time the variation order is approved by the Engineer.
- f. To scrutinize the Contractor's claims, if any, under the relevant provisions of the Construction Contract and give their recommendations to the Client with all supporting justification.
- g. Before the substantial completion certificate is issued to the Contractor(s), the project or part thereof will be inspected by the Consultant. A list Balance /defective works will be prepared by the Consultant which would be got completed/ rectified by the Contractor(s).
- h. To inspect the said project during defect liability period from the certified date of completion and get the noticed defects removed/rectified through the Contractor(s) as per provisions of the agreements.

- i. At the time of final handing/taking over of the project, as built drawings will be prepared by the contractors along with project completion report which will be reviewed and approved by the consultants to which the Project or part thereof will be taken over by the client.

The Consultant shall be fully responsible that the works are executed in accordance with the drawing, design and specifications. The Consultant shall carry out the supervision ensuring the following:

- (1) That all construction materials are properly tested in accordance with standards/specifications.
- (2) That all the construction works/activities are carried out in conformance with the final approved drawings, specifications and performance standards.
- (3) To check / correct marking on the ground of the designed components of the project.
- (4) That all the Works completed are inspected by the Engineer's representative.
- (5) That Works comply with the approved Specifications, Work Methodology, good engineering practices and in accordance with the provisions of the contract documents.
- (6) That Contractor complies with the Conditions of Contract with reference to fulfillment of all its obligations & responsibilities.
- (7) That quantity measurements and quality management are in full compliance with the stipulations of the Contract.
- (8) That the laboratory equipment of the contractor is in working condition at all times.
- (9) Ensure that necessary services are provided corresponding to the Contractor's Schedule of Work without any delays caused on the part of the Consultants.
- (10) Timely assistance and directions are provided to the Contractor in all matters relating to ground survey controls, quality control, testing and other matters relating to the performance and progress of the project.
- (11) Assure quality of the works during construction; continuously inspect the soils and materials, construction operations and the works with regard to workman ship and compliance with the specifications.
- (12) Evaluate construction materials based on the test reports provided by the Contractor, as and when asked to do and recommend the appropriateness of material to be used and further suggest measures required to be taken to manage the quality of materials.
- (13) Approval of shop drawings provided by the contractor.
- (14) Approval of all submittals and materials.
- (15) Pre-shipment inspections with CDA if any.

CHECKING AND INSPECTIONS

- (1) Assess maintain and regularly update list of Contractor's construction equipment and ensure that the same complies with the list of equipment submitted by the Contractor with his bid or as per subsequent commitments.
- (2) Jointly inspect the Works with the Client and/or the Engineer and assist in formal handing over and provide a report certifying satisfactory completion of the Works.
- (3) Inspect and evaluate all installation, equipment and other facilities of the Contractor to ensure compliance to the terms and conditions of the Contract and works under the contract.
- (4) Consultant shall ensure that necessary arrangements for inspection of sites and site facilities under special provisions of the contract have been arranged by the contractor and ensure that all relevant information is available and detailed progress report discussed before site inspections are undertaken.
- (5) Where the maintenance period of the Construction contract is completed within the period covering the Consultants Contract, the Supervisory Consultants shall support the supervision of maintenance Works. This shall be done by nominated staff of the Consultants.

- (6) Assist in early maintenance inspection of those Works completed at the end of the Supervisory Consultants assignment and assist with planning of any remedial works under his supervision after completion of the Works by remaining within the specified man months.
- (7) Ensure submission and advice on the, adequacy of the Contractors' insurance policies, performance bonds and advance payment guarantees.
- (8) Carry out continuous inspections at the locations where construction activity is in progress.

Reviews, Verification and Records

- (1) Ensure the receipt of and maintain permanent record under terms and conditions of the Contract Documents for materials including their source and equipment accepted and incorporated in the project.
- (2) Review the time program submitted by the contractor as per CPM. Maintain up-to-date progress schedules in the form of bar charts and other appropriate systems indicating the major items of work being performed according to the Work Program/Schedule approved by the Client.
- (3) Review the Contractor's proposed Work Schedule and issue acceptance or rejection of the same as the case may be.
- (4) Verify the quality of work performed by the Contractor and submit the report thereto including certificates for release or otherwise of the Performance Guarantee.

Establish

- (a) Comprehensive system of maintaining site records including site correspondence, site investigation data, survey data, inspection records, test data, site diaries, records of meetings, financial records, progress records etc.
- (b) Making Presentations on the Project during Client and other VIP Visits.

Progress and Other Reports

- (1) Report and submit Monthly Progress Reports to the Client on a standard format. The progress report format includes various chapters and contains guidelines of the contents to be included in the Monthly Progress Report, which shall be adhered to strictly.
- (2) The Consultants shall also prepare, as the part of the progress report, Monthly Contract Administration Report. A copy of Monthly Contract Administration Report shall be submitted to the Client's representative of CDA.
- (3) The Consultants shall produce, as necessary, technical reports and position papers dealing with technical matters arising during the project.
- (4) The Consultants shall prepare an Interim Completion Report for the Contract, which reach the stage of substantial completion. These reports must be submitted immediately after the "Taking Over" of the project.
- (5) In case of a technical problem in the execution, the Consultant shall hire and send Expert to the field to study and suggest remedial measures for due performance of the structure and its cost shall be deemed to have been included in his Overheads.
- (6) The Consultant shall seek the approval of independent experts enclosing his full credentials from the Client before fore mentioned study will be carried out.

Payment Certificate

- (1) Prepare monthly contract payment estimates and certifications for payment for approval of the authority including up to date cost estimates projected for construction supervision till completion of the project and contractor's program.
- (2) Verify and certify work done for each Interim Payment Certificate in the form designed by the Client as Standard and IPC Processing Performa in addition to the existing practice under the provisions of the contract.

Cooperation, Assistance and Joint Measurement

- (1) Assist Client /Engineer with interpretation of Drawing & Contract Documents more particularly with respect to any disputes with the Contract or other affected parties.
- (2) Inform Client/Engineer of problems or potential foreseen problems which may arise in connection with the construction contract and recommend appropriate solution (s) to overcome the same.
- (3) Evaluate and make recommendations for the Engineer's actions with respect to claims and disputes. The Consultant shall give necessary recommendations to the Client with detailed justification for extension of time and other changes outside the scope of work of the Contractor. The recommendations must be supported by necessary provisions of the contract and irrespective of acceptance or rejection of the Claim by Client. Further in case of extension of time clear recommendations based on the actual site conditions and unambiguous appraisal of the extension of time with further recommendations of making it conditional or otherwise must be submitted.
- (4) Respond to the requests made by the Client for application of special attention to any area/activity or in other matter, which is deemed important by the Client.
- (5) Recommend interim request and carry out joint measurements with the Contractor for preparing a payment certificate which clearly and accurately describes the work done and payments due.
- (6) Participate in accepting the completed Works and prepare a Final Report Testifying and certifying the acceptability of the completed Works.
- (7) Cooperate with the Client, the Engineer and the Contractor in the use where required or project-wide standardized or computerized methods, formats or programs of reporting physical or financial progress or forecasts.
- (8) Advise CDA on the need for effective liaison with local authorities, police, utility owners and other Public Sector organizations affected by the Works in order to minimize or avoid necessary delays or disputes. Ensure that the Contractors comply with all the necessary requirements contained in Environmental Mitigation Plan (EMP) and co-ordinate with EPA and other concerned agencies related to the implementation of the environmental mitigation measures.

iii. POST CONTRACT SERVICES FOR PROJECT CLOSE

The Consultants shall continue their contractual obligations and perform services with the minimum staff as approved by the Client on the recommendation of the Engineer after completion of the project for successful close of the project in order to finalize the accounts and other outstanding issues of the project during the post construction stage. The consultants shall manage the man months of minimum proposed staff during the project close period efficiently in such a manner so that proper inspection of the works is carried out and any defect(s) observed to be got remedied from the contractor within that period.

iv. REPLIES OF AUDIT PARAS

The Supervisory Consultants shall be responsible for providing all technical support, assistance and preparing necessary replies to the Audit Paras pertaining to the project without any time restriction such as completion of the project and without any additional remuneration to be made separately on this account.

The cooperation of the Consultants with respect to this aspect shall be adjudged for significant contribution toward his future prequalification.

