



U.S. Department of State
Bureau of Overseas Buildings Operations

CONSTRUCTION MANAGEMENT (OBO/CFSM/CM)

REQUEST FOR PROPOSAL

FOR

**MECHANICAL/ELECTRICAL/PLUMBING (MEP) and
STRUCTURAL STEEL CONSULTATION SERVICES**

U.S. CONSULATE CHENNAI RENOVATION PROJECT, INDIA

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Prepared by:

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1. Introduction

- a. The licensed Consulting Company shall provide complete MEP and structural steel framing inspections, coordination, supervision, and documentation necessary to meet the specification of this project and the work performed by the General Contractor (GC) during the work hours listed below.
- b. The selected Consultant through this Request for Proposal (RFP) process will enter into an agreement with the U.S. Consulate Chennai to provide the inspection/consultation services related to Consulate renovation project at various phases from pre-construction to post-construction. The inspections shall be performed during the GC workhours listed below.

2. Project Description

- a. Renovations and remodeling of the Consular offices area, basement and two floor levels, and replacement of Applicant windows including installation of additional windows as shown in the drawings..
- b. Demolition of existing infill in the courtyard within the building: replacement with an expanded infill with an accessible roof with steel framing per the drawings and specifications.
- c. Demolition of existing HVAC ducts, outdoor air intake, and associated HVAC appurtenances, domestic water distribution and plumbing, storm and sanitary lines and connections, electrical cables and systems, duct bank, lighting fixtures, point to point wiring and receptacles, telecom, and fire alarm system, to be replaced with new installations, including a new outside air AHU, relocation of existing condensing units, and 12 new fan coils units.
- d. HVAC Sequence of Operations, Instrumentation and Controls of FCUs and AHUs (one new and two existing) per the drawings and specifications.
- e. New electrical demarcation building with an 11kV switchgear and connections with local Tamil Nadu Electricity Board (TNEB) requirements.
- f. Extend and connect TNEB service to existing 11kV system.
- g. Installation and testing of a new medium voltage Ring Main Unit (RMU).
- h. Power distribution and electrical panels per schedules.
- i. Grounding and lightening protection per plan.
- j. Telecom demolition and new installation per schedules.
- k. Technical security pathways, infrastructure, conduit and devices.
- l. All of the remodeled area will have the electrical, voice and data cabling removed and replaced as part of this upgrade.
- m. Installation of Government Furnished furniture and accessories. Limited remodeling of the existing Applicant Consular Access Control (ACAC).



3. Period of Performance

- a. Provide an hourly rate proposal for approximately 1500 hours of onsite inspections and related activities – exclusive of transportation time. The general contractor workhours are as follows:


Tuesday-Friday: 1:00 PM to 11:00 PM
Saturday-Sunday: 9:00 AM to 7:00 PM
Monday: Day off

Some holiday and weekend work may be required.

Tentative consultation contract start date: February 01, 2020
Expected consultation contract end date: May 31, 2021

- b. Proposals will be evaluated on the basis of the detailed responses to each of the requirements as listed in the Scope of Work-General Requirements and other sections.

4. Scope of Work - General Requirements:

- a. Comply with OBO's MEP and structural steel Quality Assurance program (QA) used during the project construction phases to ensure that the facility meets the contract design, quality and functional standards. To this end, the Consultant is required to implement and maintain OBO's effective Construction Quality Assurance program. The program shall cover all construction operations both onsite and offsite, and shall be keyed to the proposed construction sequence (definable features of work).
- b. The Consultant /staff shall not conduct any work that is beyond this Statement of Work and the specifications unless directed in writing by the Project Director/COR.
- c. The consultation company shall be responsible for the professional quality, technical accuracy, coordination of MEP, structural steel framing work, and other services furnished under this contract. The consultation company shall, without additional compensation, correct or revise any errors or deficiencies in its inspections and related services rendered. 
- d. The consultation company/staff is responsible for safety and shall comply with all U.S. Government and local labor laws, regulations, customs and practices pertaining to labor, safety and similar matters. Refer to EM 385-1-1. U.S. Army Corps of Engineers Safety and Health Guidelines.



- e. The Construction Quality Assurance Services shall include, as a minimum, verification of quality control processes performed by the contractor, subcontractors, fabricators, suppliers, and purchasing agents as needed.
 - f. The Government will schedule regular performance reviews during the various construction phases to assess the Consultant's performance against contract requirements and Quality Assurance including inspections. The Project Director/COR shall use the review results to evaluate the completed work and progress made against the relevant specification and project schedule when reviewing Consultant's requests for progress payments.
 - g. In order to maintain continued operations and security of the existing Consular offices, the work requires sequencing of the construction and inspection work. Night and weekend work is required. Work will be performed in six phases starting February 01, 2020 and ending approximately on May 31, 2021.
 - h. The MEP and structural steel inspections and coordination process shall be implemented and coordinated by the Consulting Company's field engineering staff and the Quality Assurance Manager.
 - i. The Consultant's Quality Assurance Manager shall be a registered professional engineer who will report his/her findings directly to the Project Director. The Consulting Company shall notify the Government who will be responsible for these inspections and coordination and name an alternate as well.
5. **Submittals:** The Consultant shall submit the following:
- a. The name, qualifications (in resume format), duties, responsibilities and authorities of each person assigned to a Quality Assurance function shall be submitted to the Government for review. The Government will reject personnel who are not qualified for the positions for which they have been proposed. Changes to QA staffing shall only be made after acceptance by the Government of the proposed changes.
 - b. The Quality Assurance Manager shall submit a Quality Assurance Report to the Project Director daily. Reporting shall begin on the first day the Consulting Company's inspectors arrive on site and shall continue until the general contractor's forces have completely demobilized. Daily reports shall be submitted by 10:00 AM the following morning and shall include, at a minimum, the information discussed in this section. The report format shall be reviewed and accepted by the Project Director prior to use.
6. **Qualifications of Quality Assurance Personnel**
- a. The Consultant Quality Assurance Manager shall have experience implementing Construction Quality Assurance Programs for similar projects. Quality control is



the responsibility of the General Contractor. The Quality Assurance Manager and the Quality Assurance Staff shall be on site as directed by the Project Director on "As Needed" basis during construction, shall be employed directly by the Consulting Company. In the event the Manager must be away from the site, the consulting company shall provide a suitable substitute, acceptable to the Government, who is familiar with the project and the QC/QA program. His/her autonomy in managing and enforcing the quality assurance program is critical and shall be reviewed and tested periodically by the Government.

- b. QA Inspection and Testing shall be performed by person/s qualified in accordance with the following:
 1. Current certifications as determined by the individual's employment specialties from National or International standards organizations (IBC, AWS D1.1, AISC, ASME, National Electrical Code (NEC), The National Fire Protection Association (NFPA, 13, 24, and 70), Telecom (BICSI), The Sheet Metal and Air Conditioning Contractors' National Association (SMACNA), International Plumbing Code, IEEE, ISO, ACI, AWWA, etc.) and the following:
 - i. College degree in engineering or that is relevant to the individuals' employment specialty. In addition, experience shall include a minimum of 8 years implementing construction quality control programs for similar projects, or;
 - ii. High School education with 15 years of construction experience and successful completion of a company sponsored training program in the discipline to be inspected. In addition, experience shall include a minimum of 10 years as a tradesman including 5 years in the performance of QA/QC inspection activities.
 - iii. Field Testing and Inspection of Electrical Systems shall be performed by person/s currently certified by the International Electrical Testing Association (NETA) or the National Institute for Certification in Engineering Technologies (NICET) or equal.
 - iv. Inspection of telecom (voice and data) installation shall be performed by a BICSI Registered Technician or equal.
 - v. Structural Steel Framing Inspector Qualifications: A qualified installer/inspector who has participated in the AISC Quality Certification Program and is designated an AISC-Certified Erector, Category CSE or equal.

7. Quality Control Meetings.

- a. The Consultant shall participate in weekly coordination meetings as scheduled with the Government and the General Contractor to discuss the project progress,



inspections, deficiencies, related issues, and their resolution. During the meeting, a mutual understanding of the detail plans shall be developed, including the forms for recording the QA/QC inspections, deficiencies, control activities, testing, and administration of the system for both onsite and offsite work, and the interrelationship of the Consultant's management and control with the Government. Meeting minutes shall be prepared by the Consultant and signed by both the Consultant's QA/QC Manager and the Project Director. The minutes shall become a part of the contract record. There may be occasions when subsequent conferences will be called by either party to reconfirm mutual understandings and/or address deficiencies in the QA/QC system or procedures that may require corrective action by the General Contractor.

- b. At a minimum, the following topics shall be discussed and documented at QA/QC meetings:
 - i. Status of all on-going Quality Control and Assurance-related matters.
 - ii. Deficiencies identified or rectified since previous meetings.
 - iii. Work planned for the following two weeks and supporting QA actions.
 - iv. The Consultant QA Manager shall prepare and distribute detailed minutes of all QA meetings for signature by the General Contractor's Project Manager and the Project Director.

8. Three Phase Approach to Quality Assurance and Control

- a. The three phases of control shall be jointly conducted by the General Contractor's QC and OBO's QA Managers for each definable feature of work as follows:
 - i. Preparatory Phase: This phase shall be performed prior to beginning work on each definable feature of work; after all required plans, documents, materials are accepted. A preparatory meeting shall be called by the General Contractor's QC Manager to demonstrate that the General Contractor has all the necessary materials, equipment and personnel to start a definable feature of work. Agenda items shall include:
 - Review of the applicable specifications.
 - Review of the contract drawings.
 - Confirmation that all materials and/or equipment have been tested and submittals have been received and accepted.
 - Review of provisions that have been made to provide required control inspection and testing.
 - Examination of the work area to ensure that all required preliminary work has been completed and is in compliance with the contract.
 - Physical examination of required materials, equipment, and sample work to ensure that they are on hand, conform to accepted shop drawings or submitted data, and are properly stored.



- Review of the applicable safety requirements to ensure they are met.
 - Discussion of procedures for controlling quality of the work, including repetitive deficiencies.
- ii. Initial Phase: This phase shall be accomplished at the beginning of field construction of a definable feature of work. This phase shall be held at the work site with a demonstration of how the work is to be performed in order to meet the contract requirements.
- Review safety requirements to include compliance with and possible revision of the safety plan and activity hazard analysis.
 - Review the activity hazard analysis with all workers. Ensure that the safety control barriers and/or signs have been correctly installed.
 - The initial phase should be repeated anytime a new crew begins work on a definable feature of work or any time acceptable quality standards are not being met.
- iii. Follow-up Phase: Daily checks shall be performed to ensure that the activities, including testing, are providing continued compliance with contract requirements until completion of the particular feature of work. The checks shall be made a matter of record in the QA documentation. Final follow-up checks shall be conducted and all deficiencies corrected prior to starting additional features of work which may be affected by the deficient work. The General Contractor shall not be allowed to build upon nor conceal deficient work.

9. Completion Inspection

a. Punch-List Inspection:

- i. At completion of all work or any increment thereof, the QA consultant/staff shall conduct joint inspections of the work with the general contractor and/or with the Project Director. The Consultant/staff shall record all deficiencies and work identified as not conforming to the plans and specifications, and a list of the findings, by location, shall be submitted to the Project Director within 24 hours after each joint inspection. The list of these findings shall constitute the punch-list. At completion of all punch-list work or any increment thereof, the Consultant /staff shall conduct a joint re-inspection with the Project Director to verify completion of the punch-list work. Both the general contractor, QA inspector, and the Project Director shall confirm mutual agreement of completion by signing the punch-list and indicating that each item on the punch-list is complete.
- ii. The General contractor shall submit two hardcopies of the signed punch-list and an electronic copy of the signed list in xxx.pdf format.



b. Final Acceptance Inspection:

- i. No later than two (2) weeks after substantial completion the Consultant shall conduct the joint, final acceptance inspection with the Government. The general contractor shall provide a minimum of 5 work-days advance written notice to the Government and certify the work shall be complete prior to commencing the final acceptance inspection.
- ii. During the joint, final acceptance inspection the Consultant/staff shall record all deficiencies and all work identified as not conforming to the plans and specifications. A list of the findings, by location, shall be submitted to the Government within 24 hours after the inspection. The list of these findings shall constitute the list of final acceptance defects. The general contractor shall immediately complete all work on the list of final acceptance defects. At completion of all items on the list of final acceptance defects, the contractor shall conduct a joint re-inspection with the Government to verify completion. Both the general contractor, Consultant, and the Government shall confirm mutual agreement of completion by signing the list of final acceptance defects and indicating that each item is complete. The general contractor shall submit two hardcopies of the signed list of final acceptance defects and an electronic copy of the signed list in xxx.pdf format.

10. Records.

- a. The Consultant/staff shall maintain a complete record of QA Plan actions, ready for Governments examination at any time. Defects, deficiencies, and non-compliance shall be highlighted along with corrective actions and any reconstruction completed, to be completed, or recommended for acceptance by the Government.

11. References:

- a. The potential bidders will be invited to a pre-bid meeting to be held at the U.S. Consulate, Chennai. Date/time TBD. Contact OBO site office/Project Director to review the Consulate renovation drawings, specifications, and project schedule for bidding purpose only. Offsite access, scanning, photocopying, use of electronic media of any kind is prohibited.
- b. Once the contract is awarded and the company has been vetted, the Consultant/staff will be granted access to project drawings, submittals, specifications, and RFIs at the OBO site office.

END OF STATEMENT OF WORK