

U.S Consulate General, Peshawar

Peshawar, Pakistan
January 22, 2019

To: Offerer

From: Contracting Officer
General Service Office
U.S. Consulate General
11 General Hospital Road,
Peshawar Cantt

Peshawarprocurement@state.gov; kamala@state.gov

1 Subject: PR8953535 Booster pump SS assembly with VFD

PROJECT DESCRIPTION

1.1 This project work is to provide all engineering, material, and labor to build, ship, install and commission a Triplex Water Booster Pump Skid for the U.S. Consulate Peshawar, Pakistan.

1.2 **LOCATION:** The work location is US Consulate General, Peshawar

1.3 GENERAL REQUIREMENTS

1.3.1 The work shall be executed in a diligent manner in accordance with a fixed performance period of forty-five (45) working days.

1.3.2 Contractor shall perform the job in accordance with U.S. Codes and standards and local host country codes.

1.3.3 The Facilities Section U.S. Consulate General Peshawar will provide technical direction to the Contractor.

1.3.4 The project work includes

1.3.5 Removal of existing water pipe connected to pump station and existing water pumps.

1.3.6 Provide and install electrical, mechanical and water pipe services to the water pump skid to include tie-ins with existing water supply and water storage tank, and installation of new electrical service per U.S. National Electric Code (NEC).

1.3.7 Conduct thorough training for in-house technicians.

1.3.8 GRUNDFOS HYDRO MULTI-E triplex prefabricated water booster pump skid, includes three (3) in-line booster pumps with variable speed motor controls mounted and prewired to prefabricated steel base assembly. System includes breakers, PLC controller with touchscreen interface and capability for Ethernet

connection, vacuum priming system with proof of prime detection on each pump, one (1) bladder tank. Each of the pumps are rated for 165' of pressure assuming 15' of loss on the supply side for a total discharge pressure of 150' at the discharge flange. The design shall have a minimum pressure 20 psi applicable for the highest fixture of the distribution system.

- 1.3.9 Piping from inside the water storage tank to pump skid and from pump skid to building entrance is already laid and installed. If in case a small portion of the piping has to be replaced due to the modification required for the new pump skid, it shall be HDPE or PP-P fusion pipe construction on site. A new foot valve shall be installed at the lowest point on pipe inside water storage tank.

2 GENERAL CONDITIONS

- 2.1 Prior to bid, Contractor must make an ON-SITE visit with qualified engineers and electricians to determine exact site conditions.
- 2.2 A Qualified Person must be on-site at all times during this scope of work.
- 2.3 All electrical work must be performed by U.S. certified and licensed Electricians or Electricians with National Certification from an acceptable certifying organization.
- 2.4 All mechanical work must be performed by certified and licensed Pipe-Fitters.
- 2.5 All equipment installed shall be commissioned on-site using factory recommended procedures and by factory certified representatives.
- 2.6 All labor, tools, and materials must be provided by Contractor. Contractor will not be allowed to use USG equipment.
- 2.7 Packaging and Marking of Equipment shipped to Consulate:
U.S. Consulate Peshawar
11, Hospital Road
Peshawar, Pakistan
- 2.8 Direction for changes in the Scope or Cost of this Work can only come from the Contracting Officer (CO). Additional costs will not be accepted if a contract change order has not been given by the Contracting Officer. Any work performed on this project outside of the Scope of Work provided by the Contracting Officer shall be deemed not reimbursable by the U.S. Government.
- 2.9 All scheduling, submittals, and installation will be coordinated through the Contracting Officer's Representative (COR).

3 PERSONNEL REQUIREMENTS

- 3.1 Contractor Supplied Personnel Technical Qualifications

3.1.1 Qualified Electrical Labor

- 3.1.1.1 All personnel used in the performance of the electrical work shall be licensed and qualified electricians or electrical professionals as recognized by at least one U.S. State or local national jurisdiction.
- 3.1.1.2 At least one team member must have 10 or more years of applicable electrical experience in commercial electrical work.
- 3.1.1.3 Resumes for all proposed supervisors and licensed team personnel detailing their experience MUST be submitted with the Cost Proposal or it will not be considered.
- 3.1.1.4 Similar installation experience must be clearly shown on all resumes submitted.
- 3.1.1.5 Equipment manufacturer technicians (factory representatives) are exempt from this requirement and may supplement but not replace the licensed electrical staff.

3.1.2 Installation Labor

- 3.1.2.1 All contractor-provided installation labor furnished under this task order and the construction/installation tasks to be completed there to shall be executed only by journeyman and master level tradespersons, licensed to the trade which he/she practices.
- 3.1.2.2 Equipment manufacturer technicians (factory representatives) are exempt from this requirement and may supplement but not replace the licensed journeyman staff and must be under constant direction and supervision from licensed personnel.

3.1.3 Trade Licenses

- 3.1.3.1 All professional tradesmen licenses for Contractor personnel shall be current and valid at the time of COR review and shall be maintained and remain current and valid for the complete duration of the project execution.

3.1.4 Use of Non-Licensed Labor

- 3.1.4.1 Contractor use of non-licensed electrical and mechanical laborers, helpers, etc. to execute, plan, lay out, or otherwise direct the execution of the work activities under this task order is not allowed.
- 3.1.4.2 Non-licensed hired labor shall not perform functions beyond manual labor such as debris removal and must be directly managed and supervised by the contractor.

4 SAFETY

- 4.1 Contractor must submit with the bid, a Company Safety Plan including a specific Safety Plan tailored to this project to include an Activity Hazard Analysis (AHA).
- 4.2 All safety plans must conform to USACE (Army Corps of Engineers) Safety and Health Manual EM-385.

- 4.3 General. The contractor shall provide and maintain work environments and procedures which will safeguard the public and Government personnel, property, materials, supplies, and equipment exposed to contractor operations and activities; avoid interruptions of Government operations and delays in project completion dates; and, control costs in the performance of this contract. For these purposes, the contractor shall:
- 4.3.1 Provide appropriate safety barricades, signs and signal lights;
 - 4.3.2 Comply with the standards issued by any local government authority having jurisdiction over occupational health and safety issues; and,
 - 4.3.3 Ensure that any additional measures the contracting officer determines to be reasonably necessary for this purpose are taken.
 - 4.3.4 For overseas construction projects, the contracting officer shall specify in writing additional requirements regarding safety if the work involves:
 - 4.3.4.1 Scaffolding;
 - 4.3.4.2 Work at heights above two (2) meters;
 - 4.3.4.3 Trenching or other excavation greater than one (1) meter in depth;
 - 4.3.4.4 Earth moving equipment;
 - 4.3.4.5 Temporary wiring, use of portable electric tools, or other recognized electrical hazards. Temporary wiring and portable electric tools require the use of a ground fault circuit interrupter (GFCI) in the affected circuits; other electrical hazards may also require the use of a GFCI;
 - 4.3.4.6 Work in confined spaces (limited exits, potential for oxygen less than 19.5 percent or combustible atmosphere, potential for solid or liquid engulfment, or other hazards considered to be immediately dangerous to life or health such as water tanks, transformer vaults, sewers, cisterns, etc.);
 - 4.3.4.7 Hazardous materials—a material with a physical or health hazard including but not limited to, flammable, explosive, corrosive, toxic, reactive or unstable, or any operations which creates any kind of contamination inside an occupied building such as dust from demolition activities, paints, solvents, etc.; or
 - 4.3.4.8 Hazardous noise levels.
 - 4.3.5 Records. The contractor shall maintain an accurate record of exposure data on all accidents incident to work performed under this contract resulting in death, traumatic injury, occupational disease, or damage to or theft of

property, materials, supplies, or equipment. The contractor shall report this data in the manner prescribed by the contracting officer.

4.4 Subcontracts. The contractor shall be responsible for its subcontractors' compliance with this clause.

4.5 Written program. Before commencing work, the contractor shall:

4.5.1 Submit a written plan to the contracting officer for implementing this clause. The plan shall include specific management or technical procedures for effectively controlling hazards associated with the project; and,

4.5.2 Meet with the contracting officer to discuss and develop a mutual understanding relative to administration of the overall safety program.

4.6 Notification. The contracting officer shall notify the contractor of any non-compliance with these requirements and the corrective actions required. This notice, when delivered to the contractor or the contractor's representative on site, shall be deemed sufficient notice of the non-compliance and corrective action required. After receiving the notice, the contractor shall immediately take corrective action. If the contractor fails or refuses to promptly take corrective action, the contracting officer may issue an order suspending all or part of the work until satisfactory corrective action has been taken. The contractor shall not be entitled to any equitable adjustment of the contract price or extension of the performance schedule on any suspension of work order issued under this clause

SCOPE OF WORK

4.7 PRIOR TO IMPLEMENTATION

4.7.1 Submit to the CO and/or COR within 30 days of Notice to Proceed, document submittal package that includes:

4.7.1.1 Single-line electrical schematic with wire sizes and expected loads

4.7.1.2 Single-line piping layouts with pipe sizes,

4.7.1.3 Electrical components to include:

4.7.1.3.1 Wire (THHN REQUIRED)

4.7.1.3.2 Breaker sizes (must match existing panel manufacturer and model type)

4.7.1.3.3 Conduit

4.7.1.3.3.1 Galvanized Rigid Conduit (GRC),

4.7.1.3.3.2 Intermediate Metal Conduit (IMC)

4.7.1.3.3.3 Electrical Metallic Tubing (EMT)

4.7.1.3.3.4 Schedule 80 PVC Conduit

4.7.1.3.3.5 Conduit fittings (compression only)

4.7.1.4 Water piping components to include:

- 4.7.1.4.1 Valves – 3” and smaller must be full port ball valves
 - 4.7.1.4.2 Welded HDPE fusion or PP-P fusion pipe and fusion fittings constructed on site
 - 4.7.1.4.3 Supports (galvanized or epoxy coated only)
 - 4.7.1.5 Water piping installation drawings based on AutoCAD drawings provided by the U.S. Consulate.
 - 4.7.1.6 Complete finalized Work Plan including Critical Path Method (CPM) schedule
 - 4.7.1.7 The Work Plan shall clearly show planned outages and detail cooperation and assistance requested from Post to accomplish the work.
- 4.7.2 The submittal package shall be complete in all aspects and shall include existing and proposed electrical one-line diagrams, equipment details and cut sheets, a complete materials list.

4.8 IMPLEMENTATION

4.8.1 WATER PIPING INSTALLATION

- 4.8.1.1 The water piping IN and OUT from the pumping station is already in place. If due to the newer design of the pump skid, a portion of the piping has to be replaced, then the Contractor shall perform the job in accordance with the approved design drawings.
- 4.8.1.2 If required, the trench width at pipe grade must be a minimum of 300mm (12”) plus the diameter of the pipe.
- 4.8.1.3 Backfill: (If Required)
 - 4.8.1.3.1 All backfill will be placed in no more than 6” lifts
 - 4.8.1.3.2 All underground water piping must be bedded in sand with no entrained aggregate. Coverage must be a minimum of 150mm (6”) in all directions.
 - 4.8.1.3.3 Compact all backfill and embed material to at least 85 percent Standard Proctor density as defined in ASTM D698, Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort, (12 400 ft-lbf/ft³ (600 kN-m/m³)).”
 - 4.8.1.3.4 Under parking lots and roads, increase compaction to 95 percent Standard Proctor density.
- 4.8.1.4 The trench depth will be a minimum of 1 meter. (If Required)

- 4.8.1.5 Transitions from PVC/PE piping to copper piping must be independently supported.
- 4.8.1.6 All piping penetrations through concrete must be sleeved so that piping does not come in direct contact with concrete material.
- 4.8.1.7 Replace subgrade and asphalt paving material to match existing after excavation.
- 4.8.1.8 Contractor will core through concrete wall and fence foundations at a minimum of 600mm (24") below grade when routing piping through obstructions. (If Required)
- 4.8.1.9 PIPING AND VALVES
 - 4.8.1.9.1 Underground piping and fittings shall be HDPE or PP-P fusion pipe construction on site.
 - 4.8.1.9.2 Above ground piping and fittings shall be HDPE or PP-P fusion pipe construction on site.
 - 4.8.1.9.3 All isolation valves shall be quarter-turn ball valves rated for 300 psi and potable water service.
 - 4.8.1.9.4 All hangers and pipe support must be galvanized or epoxy coated type.
- 4.8.1.10 Contractor shall flush and chlorinate all piping prior to making final connections and prior to final acceptance.
- 4.8.1.11 Contractor shall coordinate tie-in of the new water service with the COR. The existing water service must remain operational until the new system is on-line.
- 4.8.1.12 All materials will be supplied by the contractor.

4.8.2 ELECTRICAL SYSTEM

- 4.8.2.1 All electrical wiring shall be THHN, 90degC rated.
- 4.8.2.2 All conduit installed inside of the electrical switchgear room shall be galvanized rigid conduit (RGC), galvanized intermediate metal conduit (IMC), or liquid-tight flexible conduit with appropriate fittings.
- 4.8.2.3 All above-ground conduit installed outside of the electrical switchgear room shall be galvanized rigid conduit (RGC) or liquid-tight flexible conduit with appropriate fittings.
- 4.8.2.4 Contractor shall provide and install required panelboard, breakers for this project to match the existing panel manufacturer and model type.
- 4.8.2.5 Contractor shall make all panel and PWPP terminations.
- 4.8.2.6 All piping penetrations through concrete must be sleeved so that piping does not come in direct contact with concrete material.

4.8.2.7 All materials will be supplied by the contractor.

4.8.3 INSTALLATION OF THE TRIPLEX WATER PUMP SKID

- 4.8.3.1 Install the skid following the final design and instructions of the manufacturer and on-site Factory Representative, and in accordance with the As Built Drawings (see Attachment 1). The preliminary skid design includes a pre-piped, and pre-wired GRUNDFOS HYDRO MULTI-E triplex prefabricated water booster pump skid, includes three (3) in-line booster pumps with variable speed motor controls mounted and prewired to prefabricated steel base assembly. System includes breakers, PLC controller with touchscreen interface and capability for Ethernet connection, vacuum priming system with proof of prime detection on each pump, one (1) bladder tank. Each of the pumps are rated for 165' of pressure assuming 15' of loss on the supply side for a total discharge pressure of 150' at the discharge flange. The design shall have a minimum pressure 20 psi applicable for the highest fixture of the distribution system.
- 4.8.3.2 A new foot valve shall be installed at the lowest point on pipe inside water storage tank (see Attachment 2).
- 4.8.3.3 Anchor the skid to the Concrete Pad using anchoring concrete type HDI anchors with 3/8" threaded bar. Install an epoxy glue to seal all holes on the concrete floor.
- 4.8.3.4 All materials for connection of the skid to existing piping and electrical systems will be supplied by the contractor.

4.8.4 IMPLEMENTATION AND SERVICE INTERRUPTION

- 4.8.4.1 The contractor shall notify the COR in writing three (3) work days prior to any planned electrical or water outages.
- 4.8.4.2 The contractor must schedule work to maintain flexibility since interruptions may not be granted on the date(s) requested.
- 4.8.4.3 Electrical shutdowns and operation of electrical breakers and switches shall be accomplished only by qualified personnel and upon advance approval of the COR.
- 4.8.4.4 Proper lock out/tag out procedures shall be followed; the contractor shall supply lock out/tag out materials.
- 4.8.4.5 Power shall be maintained to all operational loads (as determined by the COR) during normal working hours.

4.8.5 LABELING.

- 4.8.5.1 All equipment and circuits installed or altered as part of the SOW shall be correctly labeled.
- 4.8.5.2 Hand written labels or labels deemed by the COR to peel off too easily will not be accepted.
- 4.8.5.3 Circuit and panel numbers shall be labeled on service feed and lighting.

4.9 AFTER IMPLEMENTATION

4.9.1 START-UP AND COMMISSIONING

- 4.9.1.1 Contractor will be available during start-up and commissioning of the skid to assist Factory Representative and Post Facilities staff with any issues related to utility water supply and electrical service.

5 WARRANTY

- 5.1.1 The installing contractor shall provide a one-year installation warranty that includes all materials, labor, and miscellaneous costs.
- 5.1.2 The contractor may seek reimbursement from the manufacturer or any other entity providing warranties for the equipment installed, but the contractor must be the responsible party for warranty repairs.
- 5.1.3 The contractor shall provide, at his cost, for onsite repairs within 72 hours of notification of an operational problem or failure within the warranty period for the electrical or water service systems installed under this Scope of Work.

6 POINTS OF CONTACT

- 6.1 CONTRACTING OFFICER: The Contracting Officer (CO) shall be the Consulate General Services Officer.
- 6.2 CONTRACTING OFFICER REPRESENTATIVE (COR) shall be the Consulate Facility Manager.

7 TERMS & CONDITIONS

Inspection & Acceptance:

A Government representative will inspect the work, to determine the quality and acceptability. Substandard work shall be rejected/returned at vendor's expense.

Payment Terms:

Payment will be made within 30 days through Electronic Funds Transfer (EFT) upon submission of legitimate invoice to Finance Office after delivery.

Submission of Invoice:

Each invoice shall include vendor invoice number, purchase order number, date issued, brief description of supplies/services provided, quantities, unit and total price and signed by the signing authority.

Original invoice should be submitted to Finance Office, at address given below.

Finance Office
US Consulate General, Peshawar
11 General Bakht Khan Road, Peshawar Cantonment
Or e-mail to: peshawarfinance@state.gov
CC: peshawarprocurement@state.gov

Although email is the preferred method, invoices may also be submitted by mail
Note: Vendor must write bank account detail on invoice when submitting to Finance Office.

For payment related queries please contact peshawarfinance@state.gov
Contracting Officer takes no responsibility for payment and/or associated queries.

Offer Due Date:

Pre-solicitation visit will be arranged on **January 30, 2020, interested parties/companies/contractors wishes to visit the location, must submit the detail of their representative/s but not more than 02 persons i.e. Complete name, CNIC #, Vehicle make, model, color & number) to procurement office @ Peshawarprocurement@state.gov by **January 28, 2019** to get access approval.**

After the site visit the interest parties/companies/contractors must submit their itemized proposal and quotation on or before **February 07 , 2020** to Procurement Office, U.S. Consulate General, Peshawar via Email to the following email address: Peshawarprocurement@state.gov or through courier to:-

Attention: Procurement Section
US Consulate General, Peshawar
11 General Bakht Khan Road, Peshawar Cantonment

1. Quotation must be prepared on company letter head in accordance with the requested details of RFQ.