Government of India Bhabha Atomic Research Centre **Atomic Fuels Division** Engineering Services & Automation Section

DUE DATE: 3/6/2022

Ref.: AFD/ESAS/TE/5/2022/ .T/22297	TENDER ENQUIRY	May 17,	2022
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Sub: Tender enquiry for "Fabrication, supply and erection of Mild Steel Handrail at AFD General workshop, removal and replacement of sliding windows, fixing of MS grill and miscellaneous work at AFD as per specifications"

Sealed offer is invited for and on behalf of The President of India for "Fabrication, supply and erection of Mild Steel Handrail at AFD General Workshop, removal and replacement of sliding windows, fixing of MS grill and miscellaneous work at AFD as per specifications".

The scope of work, technical specifications and general terms and conditions are as following:

A) Scope of Work and Specifications:-

The scope of work shall involve fabrication, supply and erection of Mild Steel Handrailing at new AFD General Workshop, removal and replacement of sliding windows, fixing of MS grill and miscellaneous work at AFD as per specifications.

Entire Supply of material is in the Supplier's scope only. Suppliers shall prepare its own design and fabrication drawings and get it approved. It is to be ensured by the supplier that the fabricated handrailing structure have sufficient rigidity, strength, stability and life to serve intended purpose. Hence, estimation of total quantity and weight of material for this fabrication work is the responsibility of supplier.

- 1) Fabrication, supply and erection of MS safety handrailing structure as per specifications: Qty: ~ 70 mtrs
 - i. MS handrailing structure shall be fabricated at rear side of new AFD general workshop.
- ii. Handrailing shall be fabricated from 2" NB (50mm) C class MS pipes which shall cover entire back side of workshop bldg.
- iii. Height of the handrailing shall be 1 m from floor level. Vertical pipes/columns shall be provided at 1.5 m pitch for entire 70 m L. Railing shall be rigidly supported by providing middle pipe supports along the length.
- iv. All vertical pipes shall be fixed and anchored 500 mm deep below floor level. Base plates of min. 150x150x10 mm thk shall be anchored by M16x6"L anchor fasteners.
- v. Existing concrete bund structure shall be localized cut removed at specified locations to construct concrete foundation for fixing of vertical pipe columns.
- vi. After locating and fixing vertical pipe columns in exact place, bund shall be filled up with concrete to level up with existing bund.
- vii. Entire piping handrailing structure shall be painted with min. one coat of red oxide primer and two coats of enamel paint of suggested color.
- viii. It is to be ensured that fabricated handrailing structure shall be heavy duty and shall have sufficient strength and rigidity to sustain lateral loads. Sufficient stiffening shall be provided wherever necessary.
- 2) Dismantling, removal and safe disposal of existing fixed glass windows:- Qty ~250 sq. ft
- i. Existing glass windows shall be dismantled, removed from its location ~ 05 nos. ~250 sq. ft.
- ii. These glass windows shall be safely disposed off at designated place
- iii. Window openings shall be cleaned properly. Remove all shutter let outs, hold fasts etc.
- iv. All removed glass/ concrete waste/scrap shall be safely disposed off at designated location only after getting clearance from health physicist.
- 3) Supply & Fixing of 6 mm thick plywood sheet:- Qty 450 sq. ft.
- i. Plywood sheet of min. 6 mm thick shall be fixed on all window openings under consideration. Qty ~450 sq. ft

- ii. Plywood sheets shall cover entire area of window openings and no gap is permitted.
- iii. Plywood sheets shall provide strong safety barrier at window opening. Sufficient strengthening for sheets shall be provided wherever necessary.
- 4) Repair and supply, fixing of moulded mirror polished granite marbels for window openings:- Qty ~140 qs. Ft.
- i. One side Moulded mirror polished black granite marbles of 15-17 mm thick machined cut shall be provided for windows sills. Qt ~140 sq. ft.
- ii. Granites shall be min. 15-17 mm thick x 12" wide and shall cover entire window opening area.
- iii. Bottom granites (two granites placed one above other) shall be fixed such that min. 5" space on outer granite shall be maintained for fixing of sliding track window frames.
- iv. Granites shall be fixed in 20 mm thick base cement mortar 1:4 using crushed sand.
- v. All joints shall be filled with white cement. Gaps shall be filled up properly.
- vi. Granites shall be one sided moulded and shall give high glossy finish.
- 5) Supply, fabrication and fixing of 3 track anodized aluminum sliding windows:- Qty ~250 sq. ft.
 - i. Anodized aluminum min. 16 Gauge, 3 track sliding window shall be provided and fixed at all window openings. Qty ~250 sq. ft.
- ii. Frames shall be firmly fixed and screwed to the granites and no gaps shall be visible.
- iii. Aluminum sections shall be smooth, rust fre, straight, mitred and jointed mechanically whrever required vleat angle, snap beading for glazing, fixing star locks with handle.
- iv. Sliding of the windows shall be smooth over the rollers.
- v. Glass shall be fixed in window frame with pvc, neoprene gaskets etc. such that it stays firmly in place.
- vi. It is to be ensured that movement of entire sliding windows shall be smooth on tracks without any jerks etc.
- vii. All window frames gaps shall be filled with silicon at the end of fixing.
- 6) Supply, fabrication & fixing of MS safety grills of 12 mm sq. rods for windows:-Qty. ~140 sq. ft.
 - MS safety grills from 12mm sq rods shall be fabricated for sliding windows. Qty. = ~140 sq. ft.
 - ii. The gap/opening shall be maintained 75-100 max.
 - iii. Grill shall be fixed and anchored firmly to the walls. Grills shall be flushed with the walls.
 - iv. Grills shall be bent, welded smoothly. No projections shall appear on surfaces. If any, it shall be ground
 - v. Entire grill structure shall be painted with min. one coat of red oxide primer and two coats of enamel paint of suggested color.

B) General technical requirements:-

- 1. Entire supply of material is in the scope of Supplier. Supplier shall utilize all relevant IS standard materials.
- 2. All structural material shall be tested for Mech, Chem tests as per relevant test standards. Tests shall be performed at standard, NABL accredited labs only. Supplier shall bear the charges of material testing. Material identification, testing shall be witnessed by departmental concerned person.
- 3. Supplier shall carry out actual measurements at site and suggest deviations/corrections/modifications if any to make necessary changes if required.
- 4. In case of any technical doubts, supplier shall contact concerned authority for clarifications.
- 5. Supplier shall have to arrange for arc/tig welding m/c along with all consumables (welding electrodes etc) required for this work.
- 6. All welding shall be carried out by SMAW technique.
- 7. Cutting, arc welding, grinding work etc. shall be carried out with utmost care. Supplier shall follow all safety measures while carrying out such work. Department shall provide gas cylinders for gas cutting purpose depending upon availability of gas cylinders in stores, otherwise supplier shall apply other safe metal cutting methods.
- 8. Burrs, sharp edges, projections etc. caused as a result of cutting, welding etc shall be removed to maintain smooth surface. Workmanship of best quality should be maintained.
- 9. Supplier shall use its manpower to shift, move or clear off any material lying at site to make the work site available before commencement of the fabrication work at its own cost.
- 10. Supplier shall clear off all left out/unwanted material at the end of the work and ensure clean work area before handing over it for departmental use.
- 11. Supplier should have previous experience in metal fabrication and erection work or similar site work along with quality assurance plan and should provide documentary evidence of the same for site visit clearance.

-2-

- 12. Suppliers having knowledge and experiences of preparing documentations, BARC procedures, standard welding procedures, safety procedures, material testing and inspection facilities, calibrated equipments etc. shall be preferred for the work contract.
- 13. Supplier shall obtain Medical Fitness certificates for all his workers involved in this work.
- 14. The required safety gears i.e. safety shoes, helmet, welding gears, soap & undergarments etc. shall be provided by the supplier to their employees engaged in this work
- 15. QAP (Quality Assurance Plan):-

Supplier shall submit a documented procedure for Quality Assurance Plan for fabrication of MS grids and SS chequred plate assembly as mentioned against this work.

QAP should include:-

- 16. Raw material Testing, (iii) Fabrication Steps, (iv) In-process Inspection Stages, (v) Final testing methods, (vi) Welding procedures, Weld sequencing and Cleaning procedures,
- 17. Welding requirements:
 - i) Welding procedures and welder shall be qualified as per ASME section IX proper to production weld.
 - ii) All the welding if any on MS to MS shall be done by SMAW using E6018/E7018 welding electrodes.
 - iii) All weld joints shall be ground flushed and finished smooth.
- 18. Inspection and final acceptance:
 - i) Physical verification of all items as per technical specifications.
 - ii) All weld surfaces shall have a smooth finish for easy decontamination.

C) Terms and Conditions:-

- Offer evaluation procedure: Only Valid Technical bids will be opened first and evaluated. Commercial bids of only technically qualified vendors' will be opened and the lowest quoted offer shall be recommended for placing the work order.
- 2. Supplier should clearly and separately mention the basic cost of supply, GST etc. in the offer
- 3. Quotations/offers shall be valid for min. 90 days.
- 4. Supplier shall quote lumpsum for the entire work specified and not for each item individually.
- 5. Work completion period is 90 days from the date of issue of the work order.
- 6. Any delay which is attributable to the contractor is liable for penalty @ ½ % per week (max. 10%) to be imposed on the contractor.
- 7. In case of delay in work completion, supplier may send request letter to concerned authority for extension in work completion period with proper justification for delay in work. Concerned authority may or may not give extension with or without penalty depending on the justification for delay.
- 8. Income tax @2% and GST TDS @2% will be deducted from the Suppliers bill.
- 9. Supplier should give guarantee for a minimum period of One Year for the workmanship.
- 10. Contractor must furnish their PAN no. & GST Registration Certificate.
- 11. 100% payment will be arranged after satisfactory completion of work at AFD and on submission of:
 - (a) Bills in triplicate, (b) Advanced stamped receipt,
- (c) Delivery Challan,
- (d) Guarantee Certificate

- (e) Site Clearance Certificate, (f) GST Undertaking,
- (g) Work Completion certificate, (h) ITR undertaking
- 12. Min. two workers & a supervisor shall be present at site during the work. During execution, all safety measures such as safety shoes, hand gloves, headgear for welding, certified machines for electrical jobs etc. are to be followed. The supervisor shall be experienced enough for safety (fire & personal) to oversee the site activities.
- 13. The upkeep of area is the responsibility of contractor. Any unwanted or extra materials shall be kept at designated area shown by departmental supervisor. For elevated jobs proper Safety Belts shall be used by all workers.
- 14. Contractor shall obtain police verification certificate (PVC) for all his employees including his supervisors and workers engaged in the work.
- 15. **Site Visit:-** The contractor shall have to visit the site to comprehend the scope of work and equipment conditions. The same will be arranged by the undersigned. The site can be visited on 25/5/2022 between 10.00 hrs to 14.00 hrs. only. However, for site visit, prior intimation of at least three working days is necessary for arranging the entry permits.

The quotations submitted without site visit will NOT be considered.

Contractor shall have to carry valid Photo identity card (Driving licence, passport, adhaar card) while visiting the premises. Failing to bring valid identity cards, vendors will not get access into our premises. Further, entry permits will not be arranged for next dates if vendors unable to visit the site on permitted dates for any reasons. Contractor should not carry any type of electronic items such as mobile, pen drive, camera etc with him/her at the time of visit. For preparing entry permit, you can contact the undersigned on ph. No. 25594869 or can mail to (pipatil@barc.gov.in) giving complete details of firm, name of visitors, occupation/designation, identity proof, PVC details, probable date of visit etc.

D) Confidentiality clause:-

I. Confidentiality:-

No party shall disclose any information to any third party concerning the matters under this contract generally. In particular, any conformation identified as "Proprietary" in nature by the disclosing party shall be kept strictly confidentiality by the receiving party and shall not be disclosed to any third party without the prior written consent of the original disclosing party. This clause shall apply to the sub-contractors, consultants, advisers or the employees engaged by a party with equal force.

II. "Restricted information" categories under Section 18 of the Atomic Energy Act 1962 and "Official Secrets" under Section 5 of the Official Secrets Act 1923. :-

Any contravention of the above-mentioned provisions by any contractor, sub-contractor, consultant adviser or the employees of a contractor will invite penal consequences under the aforesaid legislation

III. Prohibition against use of BARC's name without permission for publicity purposes. :-

The contractor of sub-contractor, consultant, adviser or the employees engaged by the contractor shall not use BARC's name for any publicity purpose through any public media like Press, T.V. or Internet without the prior written approval of BARC.

> Your offer in sealed envelope bearing "Tender Enquiry No. & Due Date" should be sent to the following address, so as to reach on or before 03/06/2022 by Registered/Speed post only.

To,
Shri P.J. Patil,
SA/F, ESAS,
Atomic Fuels Division
Bhabha Atomic Research Centre, Mumbai -400085

> Offer received through courier or person or after Due Date will be treated as Invalid.

(P. J. Patil)

SA/F, ESAS, AFD

Head, ESAS, AFD

(For & on behalf of The President of India)