

**HOMI BHABHA CENTRE FOR SCIENCE EDUCATION (TIFR)**

V. N. Purav Marg, Mankhurd, Mumbai 400 088.

Tel: 022-25072117/25072177

Email: [purchase@hbcse.tifr.res.in](mailto:purchase@hbcse.tifr.res.in), Website: [www.hbcse.tifr.res.in](http://www.hbcse.tifr.res.in).

Ref: HBC/PUR/CONS/190027-CF19-3/

August 06, 2019

Notice Inviting Tender cum Tender Document (One Part Limited Tender) for the following works:

**Main Building Over-Head Tank Repairing Work**

Tender No.	HBC/PUR/CONS/4179
Estimated Cost	Rs. 5,50,000/-
EMD	Rs. 11,000/- by way of Demand Draft in favour of Homi Bhabha Centre for Science Education, payable at Mumbai”
Type of Tender	One Part Limited Tender
Contact Person	Shri V. C. Jacob (Tel: 25072406/9969555571)
Last Date for Submission of Tender	26 <sup>th</sup> August, 2019 on or before 17:30 hrs.
Date of Opening	27 <sup>th</sup> August, 2019 at 15:00 hrs.

Tender should be submitted in One sealed envelope duly superscribed with the Tender No., Due Date in Bold Letters.

All prospective bidders are requested to visit our website regularly for any such updated/corrigendum's.

Please see attached sheet for conditions of tender.

**Head, Administration**

## **GENERAL INSTRUCTIONS TO BIDDERS**

1. On behalf of T.I.F.R.'s Homi Bhabha Centre for Science Education (hereinafter referred to as the OWNER) bids are invited for Main Building Over-Head Tank Repairing Work at Homi Bhabha Centre for Science Education, V. N. Purav Marg, Mankhurd, Mumbai – 400 088.
2. No deviation of the specifications shall be entertained by the owner.
3. The owner will not defray any expenses whatsoever incurred by the Bidders for the preparation of bids.
4. In case Bidder finds discrepancies or omissions from the specifications or other documents or has any doubt as to their meaning, he shall at once request in writing to the Head, Administration (HBCSE) who will issue interpretation and clarifications as he may consider necessary in writing as an addendum. Copies of such addenda, if issued, shall be signed by the Bidder and shall form a part of his bid. Verbal clarifications given shall not be binding on the Owner.
5. The Owner does not bind itself to accept the lowest or any bid/all bids or a portion hereof. The owner is competent to reject any or all offers without assigning any reason whatsoever or to split the contract or to eliminate the portion of contract during the progress of work due to Unsatisfactory work. The Owner will not entertain any claim from the contractor as a result of such action on the part of the owner.
6. The Owner reserves to itself the right of altering the drawings and nature of the work By adding to or omitting any items of work or having portions of the same carried out without prejudice to this Contract.
7. During execution of work all air conditioned outer unit to protect by making inverted plywood boxes to the required size and to cover window glass with 6mm plywood. To provide horizontal safety net of 10 ft. long length and to provide well stitched, completely closed curtain on scaffolding.

## **INSTRUCTIONS TO BIDDERS AND SPECIFIC NON-TECHNICAL REQUIREMENTS**

1. The details in respect of Security Deposit are as under:

a) **Earnest money deposit:**

a. Every bidder should submit EMD of Rs. 11,000/- by Demand Draft in favour of 'Homi Bhabha Centre for Science Education' along with their bids. Bids shall be rejected otherwise.

b. Bidders will be refunded the EMD submitted by them immediately after the quotations are opened.

c. In case the successful bidder fails to undertake the said work, his EMD amount will be forfeited.

b) **Performance Guarantee:** The tenderer, whose tender is accepted, will be required to furnish a performance guarantee of 5% of the tendered amount within 7 (seven) working days from the date of intimation. This guarantee shall be in the form Demand Draft/Pay Order/Banker's cheque issued by a Scheduled Bank.

The performance guarantee shall be returned to the contractor, without any interest, after recording of the completion certificate for the work by the competent authority and submission of final bill by the contractor as per the joint measurement.

c) **Security Deposit:** The tenderer, whose tender is accepted will also be required to furnish by way of Security Deposit for fulfillment of his contract, an amount equal to 5% of the tendered value of the work. For successful tenderer the EMD shall be returned to the contractor, without any interest, after receiving of Performance Guarantee and for unsuccessful Tenderers EMD will be refunded after placing the order on successful tenderer. The successful tenderer shall permit HBCSE at the time of making any payment to him work done under the contract to deduct a sum at the rate of 5% of the gross amount of each running bill. The Security Deposit shall be released after the defect liability period.

d) **Defect Liability Period:**

6 (six) calendar months from the date of satisfactory completion of work as certified by the Engineer Incharge will be taken as the Defect Liability Period.

2. Before submitting the bids, the Bidders shall make themselves fully conversant with the technical specifications and other documents as attached so that no ambiguity arises at a later date in this respect.

3. The Owner reserves the right to postpone the date of submission and opening of Bids.

4. The Bidders shall quote in English their rates/prices both in figures, as well as, in words against each item of work as detailed in the enclosed bills of quantities. In the event of any

discrepancy between the quoted rates/prices in words and that quoted in figures, the rates/prices quoted in words shall govern.

5. The bidders must return the complete set of Bid document. Each page of the Bid document must be signed and dated by the bidder. Any bid not so signed and dated is likely to be rejected. All writings shall be in ink only. Any corrections in the entries in the 'Bills of Quantities' (BOQ) of this Bid document shall be initialled and dated by the Bidder before submission of the Bid. No parts of the Bid document shall be altered, overwritten or amended by the Bidder.
6. No interest will be payable on the deductions towards Security deposit/Earnest Money.
7. **Income Tax and GST Registration Number:**  
The Bidder shall submit copies of last three years' Income Tax Returns filed and bidder will also submit the proof of GST registration number.
8. Prices and rates quoted shall include cost of all materials, labour, plant, equipment, temporary work, tools, setting out, supervision, transport, taxes, and any local tax or levy payable on all transactions, insurance and everything necessary for due performance of work under this contract.
9. The contract is a Fixed Rate contract. No escalation in prices of the materials during the contract will be paid. However any statutory variations like change in excise duty, taxes etc. if levied after award of the work shall be paid on production of proof of such changes.
10. The invitation to Bid with all enclosures shall be returned to the Owner by every party to whom it is issued irrespective of whether he wishes to submit the completed Bid or otherwise.
11. a) **Site visit:**  
The Bidders may like to visit the work site before submitting their Bids to get conversant with site conditions which may affect the work. For this site visit, the Bidder should contact the Head, Administration (HBCSE)/Engineer. No extra claim for any additional compensation, extension of completion period shall be entertained.  
  
b) **Location of Site:**  
Homi Bhabha Centre for Science Education  
Tata Institute of Fundamental Research  
V.N. Purav Marg, Mankhurd  
Mumbai 400 088.
12. All necessary access to working areas will have to be made and maintained by the Contractor at his cost.
13. **Time of Completion:**
  - a) The work should be completed within 60 (sixty) days from the date of issue of the letter of intent/work order.
  - b) Work should commence at site within one week from the date of issue of letter of intent/work order.

- c) If the contractor fails to complete the work within the specified time, he shall be liable to pay liquidate damage. Liquidate damage shall be 1% (one percent) of the total value of work for each week's delay up to a maximum of 5% of total value.

15. **Supply of Materials:**

All the materials will have to be transported to site of work by the contractor at his cost. No handling, transportation charges shall be paid on this account.

The contractor at his cost should make his own arrangements for this storage of materials at the work site as required and as directed by the Owner. However, water and electricity shall be supplied by the Owner, as available at work site, free of cost. Electricity and Water to be used cautiously.

All the materials required for completion of the said work shall be arranged by the contractor unless specified otherwise.

All scaffolding, working platforms, ladders, etc. required, if any, to carry out all the civil works shall be used as recommended by Indian Standard Safety Code and all necessary precautions shall be taken by the contractor to avoid any accident during the progress of work.

16. The Contractor should plan and give his daily programme for execution of work in advance so that no disturbance is created in the routine working of the Centre.

17. **Suspension of work :**

The contractor shall, on receipt of the order in writing of the competent authority, (whose decision shall be final and binding on the contractor) suspend the progress of the works or any part thereof for such time and in such manner as the competent authority may consider necessary so as not to cause any damage or injury to the work already done or endanger the safety thereof for any of the following reasons:

- a. on account of any default on the part of the contractor or;
- b. for proper execution of the works or part thereof for reasons other than the default of the contractor; or
- c. for safety of the works or part thereof.

The contractor shall, during such suspension, properly protect and secure the works to the extent necessary and carry out the instructions given in that behalf by the competent authority.

## **NOTES AND TECHNICAL CONDITIONS**

1. The schedule of quantities and rates shall be read in conjunction with the specification, tender drawings, other tender documents, relevant IS codes, Engineering hand-books, etc. The contractor shall not rely merely on the description given in the schedule of quantities.
2. Quantities of work indicated in the schedule of quantities are only approximate and are given to provide a common basis for tendering. No claim shall be entertained from the contractor if the actual quantities or items of work differ from those indicated herein.
3. The quantity of work actually carried out at site of work against each item will be measured and paid at the rates quoted in the bills of Quantities.
4. All dimensions shall be remeasured at site before work is taken up.
5. Full time technically qualified and experienced supervisor/Engineer shall be kept at work site from commencement to completion of the said work.
6. The centre shall also not to be responsible for any mishap to your personnel while discharging their duties and you will keep us indemnified against all such liabilities.
7. Work site shall be maintained clean and clear by the Contractor all the time; and materials (belonging to Owner) shall be brought and handed over to the Sr. Admin. Officer, HBCSE, TIFR, Mankhurd, Mumbai 400088. All unwanted materials/excavated earth and debris shall be disposed off by the contractor at his cost to the nearest MCGM/MES authorized dumping yard. Bidder shall have to take all these points into account while quoting his Bid. No extra payment shall be made for the same.

Sr. No	Description	Qty.	Rate. Rs.	Unit	Amount Rs
1	<p><b>Scaffolding:</b> - Providing &amp; erecting Double stage bamboo scaffolding in true vertical position with necessary staging at regular intervals as per site requirement with all necessary accessories. The scaffolding to be jointed with coir stings etc. complete.</p> <p>Note:-</p> <p>a) Scaffolding shall remain erected till all items a procedure including final finishing is completed.</p> <p>b) No holes to be made in wall.</p>	1100		Sq. ft	
2	<p><b>Removing of plaster:-</b></p> <p>Breaking/ chipping out old cement plaster of any thickness internal/external carefully by mechanical chipper to avoid any damage to RCC/brick wall, including cleaning the surface with wire brush and washing the surface and stacking &amp; disposing of debris outside the HBCSE campus. Complete as directed.</p>	1900		Sq. ft	
3	<p><b>Removing of Concrete:-</b></p> <p>Breaking the damaged concrete which includes beam, column, brickbat Coba/ IPS flayer, canopy, pardi and stacking and disposing debris outside HBCSE campus.</p>	350		Sq. ft	
4	<p><b>Polymer Modified Mortar:-</b> Providing and repairing the damaged concrete using polymer modified cementations mortar, for strengthening the existing RCC structural members using polymer modified mortar in layers not exceeding 20mm in a day ( proportion of 5 kg. Fresh Cement: 15 kg. Silica Sand:1 kg, Polymer) including Polymer base Bond coat, Removing rust using Feovert, applying anti rust epoxy coating using IP net etc. complete</p>	750		Sq. ft	

<p><b>5</b></p>	<p>Providing injection/grouting with polymer shall be low viscosity high molecular weight thermoses monomer for concrete impregnating &amp; strengthening the concrete matrix with cement slurry wherever required.</p> <p><b>1)</b> Drilling and fixing PVC nozzle in RCC members including, drilling holes 12mm dia, 50 to 75 mm deep holes in structural members in staggered manner or as directed. Inserting 12 mm dia. PVC nozzles in cleaned holes and fix it inside the holes by applying cement putty to ensure complete sealed, cut the nozzles by chisel after completion of grouting without damaging structural element.</p> <p><b>2)</b> Cleaning &amp; pre-soaking the surface to be grouted by injecting water under pressure through the nipples before 24 hrs. Prior to actual grouting.</p> <p><b>3)</b> Grouting the RCC members with ready to use non-shrink free flow cementitious grout through the spouts at a pressure of minimum 3-5 kg/cm<sup>2</sup> and repeating the process till the voids are filled. Base: Cement Polymer Property: Non-shrinking/Non-bleeding</p>	<p>25</p>		<p>No's</p>	
<p><b>6</b></p>	<p><b>Micro Concrete:-</b> Providing and laying Super fluid Microconcrete-Roffe Crete repairs (or equivalent as specified in the list of Brand names) in beam bottoms, columns, slabs etc. including mixing with 5mm to 10mm size aggregates, waterproof ply wood/ steel plate shuttering, pouring, temping, consolidating, curing etc. complete as per Manufacturers specification and consultants instructions. The item shall be paid on actual consumption of Micro concrete. Complete.</p>	<p>150</p>		<p>Kg.</p>	
<p><b>7</b></p>	<p>Providing and applying 20/25 mm thick. plaster to wall, ceiling, concrete members, brick work etc. of external wall surface using approved screened and pre washed river sand including base coat of 12-18mm thick in C.M.</p>	<p>1100</p>		<p>Sq. ft</p>	



	1:4 and curing the same for not less than three days and keeping the surface of base coat rough to receive the sand face treatment 6 to 8 mm thick of final coat C.M 1:4 finishing the surface by taking out grains and curing for 7 days, providing and mixing approved waterproofing compound @ 160ml per bag of cement and glass fibers @ 85 gm per bag of cement. Complete.				
<b>8</b>	Tank bottom side 1 layer of IPS finished smooth 40mm. thick Cement sand mortar 1:4, admixed with a water proofing compound as per manufacturer specification. All liquid ad mixers should be mixed with the mixing water. Curing is to be done by pounding. Complete and as directed.	450		Sq. ft.	
<b>9</b>	Providing & applying two coats of Monopol 456 or its equivalent to new and old plastered surface for waterproofing and anti-carbonation. Which includes cleaning of surface before applying coats. (External surface of water tank and above chajja's)	2600		Sq. ft	
<b>10</b>	Providing & applying three coats of polymer base waterproof coating EL monobond or Polyalk-WP as per manufacturer's recommendation	1000		Sq. ft	
<b>11</b>	Providing alternative arrangement of overhead water tank with required capacity (5000liters x 2) of Sintex overhead water tank, lifting it on the terrace, removing again from terrace to the ground level after completion of work, loading, unloading, transportation etc. complete. (Tank can be take it back.)	02		No's.	
<b>12</b>	Providing and doing temporary plumbing connections to the Sintex tank with required plumbing material, labour, etc.	Job		Job	
<b>13</b>	Supplying & fixing following Stainless Steel (grade 304) spool pieces of required diameter having flange on one / both sides (Table-A) with flange hole, 450 mm or standard available length, providing 3D x 3D and 4 mm thick stainless steel puddle plate (minimum	150		Kg	

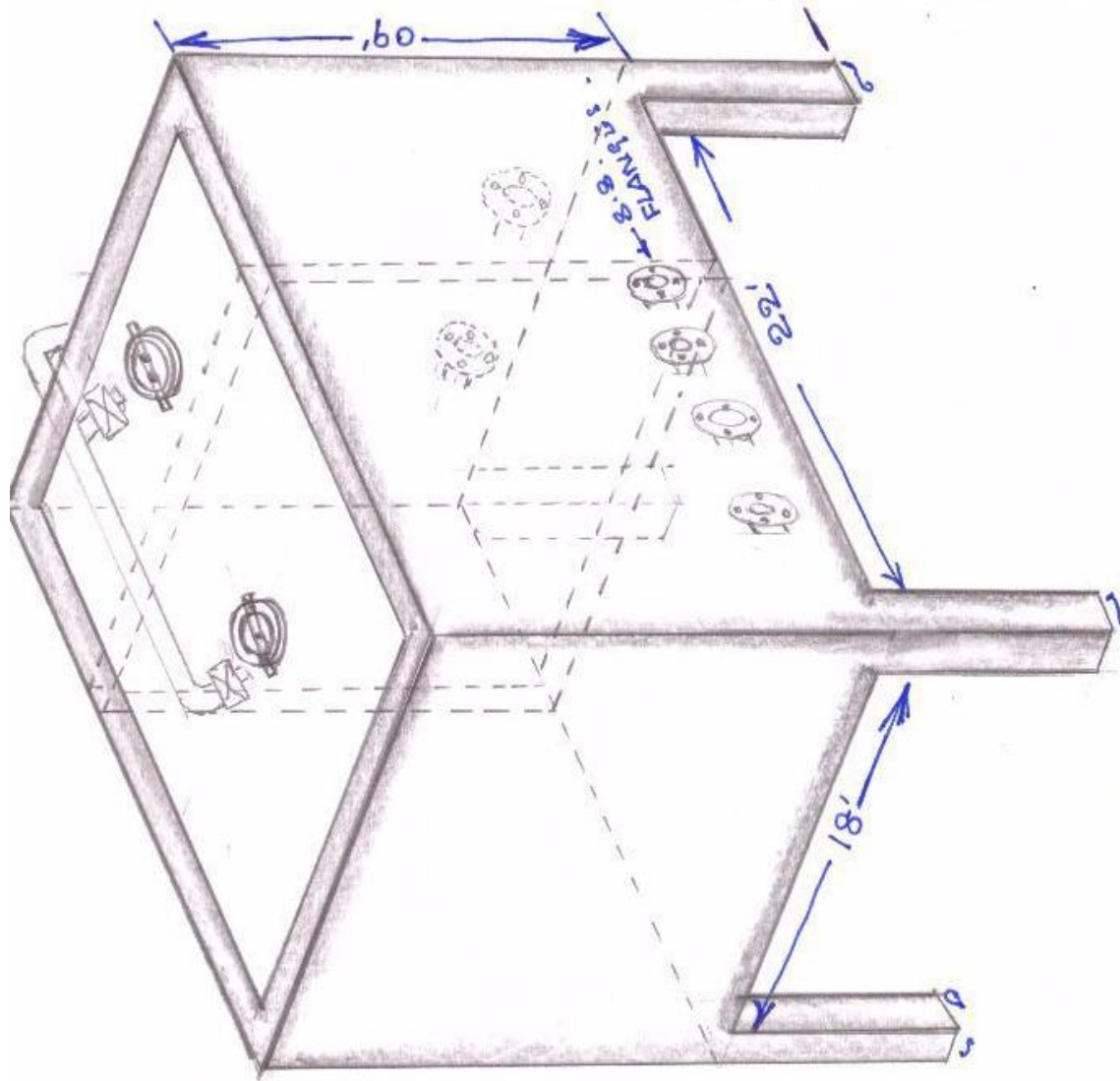
	150mm x 150mm) welded to it where D is the outer diameter of pipe including cutting the plate to required shape and fixing in the reinforcement at the centre of RCC wall/slab including cutting the form work provided for concrete and sealing the opening by waterproofing material around spool piece pipe at required level, height etc. Complete all as per specifications and as directed by Engineer-in-Charge.  <b>Up to 300 mm dia.</b>				
<b>14</b>	Disposing of debris out of the HBCSE premises, including loading, unloading, transportation etc. complete.	1		Truck load	
	<b>Sub Total Part - A</b>			<b>Total</b>	
	<b>GST @12%</b>				
	<b>Total Part - A including GST @12%</b>				

**Note:** a) All safety measures should be followed by the contractors during execution of work, if failed necessary action will be taken by the Centre.

**Note:** 1) GST @12% is applicable to TIFR as per GST Notification No. 20/2017-Central Tax (Rate) dt. 22/08/2017. The Vendors require to submit this bid with GST @12% Only.

2) TDS on GST will be deducted as per Notification No. 50/2018 - Central Tax dt. 13/09/2018

Name & Signature of Contractor's \_\_\_\_\_



Proposed water tank (RCC) structural repairing.

