

**TITLE- Replacement and repairing
of overhead PVC water tank
i/c shifting of GI pipes at
FSI, ER Office building
during the year 2024-25.**

Name of Work: Replacement and repairing of overhead PVC water tank i/c shifting of GI pipes at FSI, ER Office building during the year 2024-25.

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This NIT contains 1 to 49 pages including this page.

Assistant Engineer (P)
CED-IV, CCU, MoEF&CC, KOLKATA

NIT No. **05/EE/CED-IV/CCU/Kol/2024-25**. approved for Rs. **13,86,349.00/-**
(Rupees Thirteen Lakh Eighty-Six Thousand Three Hundred Forty-Nine Rupees Only.)
(Civil work) and containing page No. 1 to 49

Executive Engineer
CED-IV, CCU, MoEF&CC, KOLKATA

PART-A

**(Form CPWD-6 & 7,
Schedule A to F)**

INFORMATION AND INSTRUCTIONS FOR BIDDERS FOR E-TENDERING FORMING PART OF BID DOCUMENT AND TO BE POSTED ON WEBSITE

The Executive Engineer, CED-IV, Civil Construction Unit (CCU), Ministry of Environment, Forest & Climate Change (MoEF&CC), AJCB Indian Botanic Garden, CNH Building, Shibpur, Howrah (email- eeced4ccu-mef@gov.in/eeced4ccu.mef@gmail.com, Mo. 9433581744) on behalf of President of India invites online Percentage rate bids from CPWD enlisted contractors of appropriate class in Buildings & Roads (erstwhile composite /Building/ Infrastructure) category and firms/contractors of repute in single bid system for the following work:

NIT No.	Name of work and location	Estimated cost put to bid	Earnest Money	Period of Completion	Last date & time of submission of bid, and other Documents as specified in the bid document	Time & date of opening of bid
2	3	4	5	6	7	8
05/EE/CED-IV/CCU/KoI/2024-25.	Replacement and repairing of overhead PVC water tank i/c shifting of GI pipes at FSI, ER Office building during the year 2024-25.	Rs. 13,86,349.00/- (Civil)	Rs. 27,727.00/-	04 (Four) Months	Upto-3PM on 27/03/2025	At 3:30PM on 27/03/2025

1) The CPWD registered contractors who fulfill the following requirements shall be eligible to apply.

a) Eligibility Criteria for Waterproofing works:

(i) Agency should have satisfactory complete the similar works as mentioned below during the last 7 years ending last day of the month previous to the one in which tenders are invited.

Three similar work each costing not less than Rs. 3,36,343/-

OR

Two similar work each costing not less than Rs. 5,04,515/-

OR

One similar work each costing not less than Rs. 6,72,686/-

- a) Similar work means “Waterproofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound with Fibre glass cloth.
- b) The cost of similar work shall be certified not below the rank of Executive Engineer or equivalent (only from Central /State Govt. Officer).

The contractor submitting the tender should read the schedule of quantities, additional conditions, additional specifications, particular specifications, CPWD-6 and other terms and conditions given in the NIT and drawings. The bidder should also read the General Conditions of Contract for CPWD Works 2023 for Maintenance work with up to date correction slips. The Tender is available as Government of India Publications and on CPWD website at <https://etender.cpwd.gov.in> however, provisions included in the tender document shall prevail over the provisions contained in the standard form. The sets of drawings and NIT shall be available in the office of **Executive Engineer, CED-IV, CCU, MoEF&CC, Kolkata**. The contractor should also visit the site of work and acquaint himself with the site conditions before tendering. He should only submit his tender if he considers himself eligible and he is in possession of all the required documents. The following conditions, which already form part of the tender conditions, are specially brought to his notice for compliance while submitting the tender online. They are requested to comply following instructions.

- a) Tenders with any condition including that of conditional rebates shall be rejected forth with.
 - b) GST and Labour-Cess etc. as applicable shall be borne by the contractor himself. The contractor shall quote his rates considering all such taxes and hence their quoted rates should be inclusive of all the tax components.
 - c) It will be obligatory on part of the Contractor/ Bidder to tender for and sign the tender documents for all the component parts. The department reserves right to accept tender in full or in part without assigning any reasons.
- 2) The intending bidder must read the terms and conditions of CPWD-6 carefully. He should only submit his bid if he considers himself eligible and he is in possession of all the documents required.
 - 3) Information and Instructions for bidders posted on websites all form part of bid document.
 - 4) The enlistment of the contractors should be valid on the last date of submission of bids. In case the last date of opening of bid is extended, the enlistment of contractor should be valid on the original date of opening of tender.
 - 5) The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen in the office of **Executive Engineer, CED-IV, CCU, MoEF&CC, Kolkata** on all working days between 11 AM to 4 PM except Sunday and public holidays and downloaded from website <https://etender.cpwd.gov.in> free of cost.
 - 6) The bid can only be submitted after deposition of original EMD either in the office of Executive Engineer inviting bids or division office of any Executive Engineer, CPWD/CCU, MoEF&CC within the period of bid submission and uploading the mandatory scanned documents as mentioned in the NIT such as Insurance Surety Bond or Demand Draft or Pay order or Banker's Cheque or Deposit at call Receipt or Fixed Deposit Receipts and Bank Guarantee of any Scheduled Bank towards EMD in favour of "**Executive Engineer, CED-I, CCU, MoEF&CC, New Delhi**" receipt of deposition of original EMD to any division office of CCU, MoEF&CC/CPWD or office of Executive Engineer, CED-II, CCU, New Delhi and all other documents as mentioned in NIT.
 - 7) The online bids will be submitted upto 3 PM on **27/03/2025**. The online bid shall be opened at 3:30 PM on **27/03/2025**
 - 8) Those contractors not registered on the website mentioned above, are required to get registered before hand. If needed they can be imparted training on online bidding process as per details available on the website.
 - 9) The intending bidder must have valid class-III digital signature to submit the bid.
 - 10) The Executive Engineer of any division of CCU, MoEF&CC/CPWD shall receive the original EMD for tender of other division/ Divisions.

- 11) Copy of Enlistment Order and certificate of work experience and other documents as specified in the bid document shall be scanned and uploaded to the e-tendering website within the period of bid submission. However certified copy of all the scanned and uploaded documents as specified in the bid document shall have to be submitted by the lowest bidder only physically in the office of tender opening authority as and when directed by Engineer- in-charge. Online bid documents submitted by intending bidders shall be opened only of those bidders, whose all documents scanned and uploaded are found in order including scanned copy of EMD & receipt of Deposition of EMD.
- 12) On opening date, the contractor can login and see the bid opening process. After opening of bids he will receive the competitor bid sheets.
- 13) Contractor can upload documents in the form of **JPG** format and **PDF** format.
- 14) In addition to this, while selecting any of the cells a warning appears that if any cell is left blank, the same shall be treated as "0".
- 15) Therefore, if any cell is left blank and no rate is quoted by the bidder, rate of such item shall be treated as "0" (ZERO).
- 16) The required documents meeting the criteria to qualify as "approved and eligible contractors of CPWD" along with other documents as mentioned under para "List of Documents to be scanned and uploaded within the period of bid submission" below, as uploaded by the agency and hard copies received subsequently shall be checked. The financial bid of only those agencies shall be opened who are found to be eligible agencies, as per this NIT.
- 17) The department reserves the right to reject any prospective bid without assigning any reason.
- 18) After submission of the bid, the contractor can re-submit revised bid any number of times but before last time and date of submission of bid as notified.
- 19) While submitting the revised bid, contractor can revise the rate any number of times but before last time and date of submission of bid as notified.
- 20) In case of composite tenders, the contractor submitting the tender should read all the three Parts of the tenderviz.Part-A,B & C, which are containing schedule of quantities ,additional & special conditions, additional specifications, particular specification and other terms and conditions given in the NIT and drawings for Major as well as Minor component of work. Details of these parts are summarized as under:
 - **Part A :- CPWD-6, CPWD-7 including schedule A to F for major and minor component of the work, Standard General Conditions of Contract for CPWD Works 2023 for Maintenance work with up to date correction slips**
 - **Part B :-Conditions& specifications and schedule of quantities applicable to major component of the work.**

- **Part C :-** Conditions and specifications and schedule of quantities applicable to minor component of the work.
- **PartD:-** Performa for quoting the rates by bidder.

The Major Component of work is Civil Work

The bidders should also read the General Conditions of Contract for CPWD Works 2023 for Maintenance work with up to date correction slips, which is available as Govt. of India Publications; however, provisions included in the tender document shall prevail over the provisions contained in this standard form. The set of drawings and NIT shall be available with the Executive Engineer.

- 21) This work is of urgent nature, the contractor should also visit the site of work and acquaint himself with the limited working space available at site and soil conditions before tendering. The contractor is required to arrange separate Storage and working space away from site for the execution of work.
- 22) The main contractor shall execute the minor component(s) also .He should be either an eligible contractor himself for associate with himself an eligible agency(s) for execution of electrical work as per CPWD-6 for e-tendering. The contractor shall indicate the names of upto three such agencies within prescribed time as "Minor component agencies". In case the details of electrical agency are not submitted by the bidder or are not proper then these shall be submitted before acceptance of the bid.
- 23) After acceptance of the tender by competent authority, the EE-in-charge of major component of the work shall issue letter of award on behalf of the President of India. After the work is awarded, the main contractor will have to enter into one agreement with EE-in-charge of major component and has also to sign two/or more copies of agreement depending upon number of EE's in-charge of minor components. One such signed set of agreement shall be handed over to EE incharge of minor component. EE incharge of major component will operate part A, B and D (Annexure A) of the agreement. EE in charge of minor component(s) shall operate Part A, C and D (Annexure-B) of the agreement.
- 24) The main contractor has to enter into agreement with the contractor(s) associated by him for execution of minor component(s). Copy of such agreement shall be submitted to EE in charge of minor component as well as to EE in charge of major component. In case of change of associate contractor, the main contractor has to enter into agreement with the new contractor associated by him.
- 25) Tenders with any condition including that of conditional rebates in the tender document shall be rejected forthwith.
- 26) The online percentage rate(s) must be quoted in decimal coinage. Amount shall be calculated and rounded in full rupees by ignoring fifty paise and considering more than fifty paise as rupee one.

The successful bidder shall be required to submit a Performance Guarantee of 5%(Five percent) of the composite contract amount within a period of issue of letter of acceptance as specified in schedule 'F'.
- 27) The contractor shall have to execute guarantee bonds in respect of Stone work, water supply, sanitary installation & drainage works, water proofing works, CPVC and Aluminum Works .
- 28) GST on materials as applicable shall be paid by the contractor himself. The contractor shall quote his rates considering all such taxes.
- 29) Attention is also drawn to Clauses 6 and 7 of General Condition of Contract for CPWD works 2020 for Maintenance works, which prescribes the procedure for computerized recording of measurement and preparation of bill by contractor.

- 30) Intending bidder may submit physical mile stone on the basis of their resources and methodology at the time of tendering as indicated in the "Schedule F", otherwise it will be assumed that agency is agreeable to physical milestones mentioned in the table.
- 31) Intending bidder may give detailed activities /programme for each milestone fixed in the Tender documentwith in 15 days after award is work.
- 32) Payment for the items with less use of materials beyond permissible limits as mentioned in Schedule 'F' of Part-A & C shall not be made to contractor
- 33) Payment for the items with less use of materials beyond permissible limits as mentioned in Schedule 'F' of Part-A & C shall not be made to contractor
- 34) Payment for the items with less use of materials beyond permissible limits as mentioned in Schedule 'F' of Part-A & C shall not be made to contractor.
- 35) List of Documents to be scanned and uploaded within the period of bid submission:**
- a) Scanned copy of original Insurance Surety Bond / Treasury Challan/ Demand Draft/ Pay Order or Banker's Cheque/Deposit at Call Receipt /FDR/ BankGuarantee of any Scheduled Bank against EMD.
 - b) Valid Enlistment Order of the CPWD registered Contractor in appropriate class of composite/B&R category.
 - c) Receipt of deposition of original EMD to division office of any Executive Engineer, CPWD (including NIT issuing EE).
 - d) PAN Card issued by Income Tax Department.
 - e) GST registration Certificate of the state in which the work is to be taken up, if already obtained by the bidder.

i)If the bidder has not obtained GST registration in the state in which the work is to be taken up, or asrequired by GST authorities, then in such a case the bidder s hall scan and upload following undertaking along with other bid documents.

"If work is awarded to me, I/we shall obtain GST registration certificate, as applicable, within one month from the date of receipt of award letter or before release of any payment by CCU, whichever is earlier, failing which I/we shall be responsible for any delay in payments which will be due towards me/us on account of the work executed and/or for anyaction taken by CCU or GST department in this regard".

f) Any other Document as specified in the NIT.

Executive Engineer, CED-IV, CCU
(For and on behalf of the President of India)

**PROFORMA FOR THE RECEIPT TO BE ISSUED BY THE EXECUTIVE ENGINEER
RECEIVING THE EMD.**

Receipt of deposition of original EMD
(drawn in favour of **Executive Engineer, CED-I, CCU, MoEF&CC, New Delhi**)

(Receipt No..... / date.....)

Name of work : **Replacement and repairing of overhead PVC water tank i/c shifting of GI pipes at FSI, ER Office building during the year 2024-25.**

NIT No : **05/EE/CED-IV/CCU/Kol/2024-25**

Estimated Cost : **Rs.13,86,349.00/-**

Amount of Earnest Money Deposit (EMD) : **Rs.27,727.00/-**

Last date of submission of bid :

To be filled by EMD receiving Executive Engineer

Name of contractor :

Form of EMD :

Amount of Earnest Money Deposit :

Date of Submission of EMD :

(Signature)

Name and Designation of EMD receiving officer
(EE/AE(P)/AO/AAO) along with office stamp

CPWD 6 FOR E- TENDERING

1. Percentage rate bids are invited on behalf of President of India from approved and eligible CPWD registered contractors in building & roads for the work of **“Replacement and repairing of overhead PVC water tank i/c shifting of GI pipes at FSI, ER Office building during the year 2024-25..”**

The enlistment of the contractors should be valid on the last date of submission of bids.

In case the last date of submission of bid is extended, the enlistment of contractor should be valid on the original date of submission of bids.

The work is estimated to cost **Rs. 13,86,349.00/-**This estimate, however, is given merely as a rough guide. The financial bid shall be opened at **03:30 PM on 27/03/2025.**

2. Agreement shall be drawn with the successful bidders on prescribed Form No. CPWD 7 which is available as a Govt. of India Publication and also available on website www.cpwd.gov.in. Bidders shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.
3. The time allowed for carrying out the work will be 04 (Four) months from the date of start as defined in schedule 'F' or from the first date of handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in the bid documents.
4. The site for the work is available on as it is where it is basis. The architectural drawings shall be made available in phased manner, as per requirement of the same and as per approved programme of completion submitted by the contractor after award of work.
5. The bid document consisting of Plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents except Standard General Conditions of Contract (GCC) Form can be seen on website <https://etender.cpwd.gov.in> or www.cpwd.gov.in free of cost.
6. After submission of the bid the contractor can re-submit revised bid any number of times but before last time and date of submission of bid as notified.
7. While submitting the revised bid, contractor can revise the rate of one or more item(s) any number of times (he need not re-enter rate of all the items) but before last time and date of submission of bid as notified.
8. Details of Earnest Money in the form of Insurance Surety Bond or Treasury Challan or Demand Draft or Pay order or Banker`s Cheque or Deposit at Call Receipt or Fixed Deposit Receipt (drawn in favour **of Executive Engineer, CED-I, CCU, MoEF&CC, NewDelhi**) shall be scanned and uploaded to the e-tendering website within the period of bid submission. The original EMD should be deposited either in the office of Executive Engineer inviting bids or division office of any Executive Engineer, CPWD/CCU,MoEF&CC within the period of bid submission. (The EMD documents shall only be issued from the place in which the office of receiving division office is situated). The EMD receiving Executive Engineer (including NIT issuing EE) shall issue a receipt of deposit of earnest money deposit to the bidder in a prescribed format (enclosed) uploaded by tender inviting EE in the NIT.

A part of earnest money is acceptable in the form of bank guarantee also. In such case minimum 50% of earnest money or Rs. 20 lac, whichever is less, shall have to be deposited through online mode, and balance may be deposited in shape of Bank Guarantee including e-Bank Guarantee any Commercial bank having validity for a period of 90 days for single bid works and 180 days for two bid system or more from the last date of receipt of bids which is to be scanned and uploaded by the intending bidders.

The earnest money given by all the tenderers except the lowest tenderer shall be refunded immediately after the expiry of stipulated bid validity period or immediately after acceptance of the successful bidder, whichever is earlier. However, in case of two/ three bid system, earnest money deposit of bidders unsuccessful during technical bid evaluation etc. should be returned within 30 days of declaration of result of technical bid evaluation.

Copy of Enlistment Order and certificate of work experience and other documents as specified in the notice inviting e- tender shall be scanned and uploaded on the e-Tendering website within the period of bid submission. However, certified copy of all the scanned and uploaded documents as specified in e- tender notice shall have to be submitted by the lowest bidder within a week physically in the office of tender opening authority. Online bid documents submitted by intending bidders shall be opened only of those bidders, who has deposited EMD online through CPWD e-tendering portal and Bank Guarantee including e- Bank Guarantee (for balance amount as prescribed) from a Commercial Bank on CPWD e-tendering platform and other documents scanned and uploaded are found in order.

9. The bid submitted shall become invalid and e-Tender processing fee (if applicable) shall not be refunded if:
 - (i) The bidder is found ineligible.
 - (ii) The bidder does not deposit original EMD with division office of any Executive Engineer, CPWD/CCU, MoEF&CC.
 - (iii) The bidder does not upload scanned copies of all the documents stipulated in the bid document.
 - (iv) If any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted physically by the lowest bidder in the office of bid opening authority.
 - (v) If a tenderer quotes nil rates against each item in item rate tender or does not quote any percentage above/below on the total amount of the tender or any section / sub head in percentage rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer
10. The contractor whose bid is accepted will be required to furnish performance guarantee at specified percentage of the tendered amount as mentioned in schedule E and within the period specified in Schedule F. This guarantee shall be in the form of Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt or Bank Guarantee from any of the Commercial Banks in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule 'F', including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor. The earnest money deposited along with bid shall be returned after receiving the aforesaid performance guarantee. The contractor whose bid is accepted will also be required to furnish either copy of applicable licenses/ registrations or proof of applying for obtaining labour licenses, registration with EPFO, ESIC and BOCW Welfare Board including Provident Fund Code No. If applicable and also ensure the compliance of aforesaid provisions by the subcontractors, if any engaged by the contractor for the said work within the period specified in Schedule F.
11. The description of the work is as follows: **“Replacement and repairing of overhead PVC water tank i/c shifting of GI pipes at FSI, ER Office building during the year 2024-25.”**

- 12.** Intending Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their bids as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidder shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by a bidder implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work.
- 13.** The competent authority on behalf of the President of India does not bind itself to accept the lowest or any other bid and reserves to itself the authority to reject any or all the bids received without the assignment of any reason. All bids in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidder shall be summarily rejected.
- 14.** Canvassing whether directly or indirectly, in connection with bidders is strictly prohibited and the bids submitted by the contractors who resort to canvassing will be liable for rejection.
- 15.** The competent authority on behalf of President of India reserves to himself the right of accepting the whole or any part of the bid and the bidder shall be bound to perform the same at the rate quoted.
- 16.** If relative working in CPWD then the contractor is not allowed to participate in the tendering process. The contractor (enlisted or non-enlisted in CPWD) shall not be allowed to participate in the tender for work(s) in the CPWD Zonal/Circle /Division/Sub-division responsible for award and/or execution of contract(s) in which his near relative is posted as Divisional Accountant or as an officer in any capacity between the grades of the Chief Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working or are subsequently employed by him and who are near relatives to any Officer working in the CPWD. Any breach of this condition by the contractor would render him liable to be debarred for a period up to two years from tendering in CPWD as decided by the accepting authority mentioned in Schedule F and his decision will be excepted from clause 25.
- 17.** No Engineer of Gazetted Rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from Government service, without the prior permission of the Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India as aforesaid before submission of the bid or engagement in the contractor's service.
- 18.** The bid for the work shall remain open for acceptance for a period of 30 (Thirty) days from the date of opening of tenders.

- i) If any tenderer withdraws his tender or makes any modification in the terms & conditions of the tender which is not acceptable to the department within 7 days after last date of submission of bids, then the Government shall without prejudice to any other right or remedy, be at liberty to forfeit 50% of the earnest money absolutely irrespective of letter of acceptance for the work is issued or not.
 - ii) If any tenderer withdraws his tender or makes any modification in the terms & conditions of the tender which is not acceptable to the department after expiry of 7 days after last date of submission of bids, then the Government shall without prejudice to any other right or remedy, be at liberty to forfeit 100% of the earnest money absolutely irrespective of letter of acceptance for the work is issued or not.
 - iii) In case of forfeiture of earnest money as prescribed in para (i) and (ii) above, the bidders shall not be allowed to participate in the rebidding process of the same work.
- 19.** This notice inviting Bid shall form a part of the contract document. The successful bidders/contractor, on acceptance of his bid by the Accepting Authority shall within 15 days from the stipulated date of start of the work, sign the contract consisting of: -
- i) The Notice Inviting Bid, all the documents including additional conditions, specifications and drawings, if any, forming part of the bid as uploaded at the time of invitation of bid and the rates quoted online at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.
 - ii) Standard C.P.W.D. Form 7 or other Standard C.P.W.D. Form as applicable.
 - iii) General Conditions of Contract 2023 for Maintenance works, Central Public Works Department, as corrected up to last date of submission of bids.
- 20.** The main contractor has to associate agencies for specialized component(s) conforming to eligibility criteria as defined in the bid document and has to submit detail of such agency(s) to Engineer-in-Charge of relevant component(s) within prescribed time. Name of the agency(s) to be associated shall be approved by Engineer-in-Charge.
- 21.** In case the main contractor intends to change any of the above agency/agencies during the operation of the contract, he shall obtain prior approval of Engineer-in- Charge. The new agency/agencies shall also have to satisfy the laid down eligibility criteria. In case Engineer-in-Charge is not satisfied with the performance of any agency, he can direct the contractor to change the agency executing such items of work and this shall be binding on the contractor.
- 22.** The main contractor has to enter into MoU with agency(s) associated by him/ Copy of such MoU shall be submitted to Engineer in charge. In case of change of associate contractor, the main agency(s) has to enter into MoU/agreement with the new contractor associated by him.

Executive Engineer, CED-IV
(For and on behalf of the President of India)

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FORESTS & CLIMATE CHANGE

PERCENTAGE RATE BID AND CONTRACT FOR WORKS

Tender for the work of **Replacement and repairing of overhead PVC water tank i/c shifting of GI pipes at FSI, ER Office building during the year 2024-25.**

- i) The bid to be submitted online by 3 PM on 27/03/2025
- ii) To be opened in presence of tenderers who may be present at 3:30 PM on 27/03/2025 in the office of in the office of the Executive Engineer, CED-IV, Civil Construction Unit (CCU), Ministry of Environment, Forest & Climate Change (MoEF&CC), AJCB Indian Botanic Garden, CNH Building, Shibpur, Howrah.

TENDER

I/We have read and examined the notice inviting tender, schedule, A, B, C, D, E & F Specifications applicable, Drawings & Designs, General Rules and Directions, Conditions of Contract, clauses of contract, Special conditions, Schedule of Rate & other documents and Rules referred to in the conditions of contract and all other contents in the tender document for the work.

I/We hereby tender for the execution of the work specified for the President of India within the time specified in Schedule 'F' viz., schedule of quantities and in accordance in all respect with the specifications, designs, drawing and instructions in writing referred to in Rule-1 of General Rules and Directions and in Clause 11 of the Conditions of contract and with such materials as are provided for, by, and in respect of accordance with, such conditions so far as applicable.

We agree to keep the tender open for acceptance for **Thirty (30)** days from the due date of its opening of bid and not to make any modifications in its terms and conditions.

A copy of earnest money deposit receipt of prescribed amount deposited in the form of Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee (as prescribed) issued by a Commercial Bank, is scanned and uploaded. If I/We, fail to furnish the prescribed performance guarantee within prescribed period, I/We agree that the said President of India or his successors, in office shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely. Further, if I/We fail to commence work as specified, I/ We agree that President of India or the successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said performance guarantee absolutely. The said Performance Guarantee shall be a guarantee to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause 12.2 and 12.3 of the tender form. I/We hereby declare that I/we shall treat the tender documents drawings and other records connected with the work as secret/confidential documents and shall not communicate information derived there from to any person other than a person to whom I/we am/are authorized to communicate the same or use the information in any manner prejudicial to the safety and integrity of the State.

Further, I/We agree that in case of forfeiture of Earnest Money or Performance Guarantee as aforesaid, I/We shall be debarred for participation in the re-tendering process of the work.

I/We undertake and confirm that eligible similar work(s) has/have not been got executed through another contractor on back-to-back basis. Further that, if such a violation comes to the notice of Department, then I/We shall be debarred for tendering in CCU, MoEF&CC in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee.

I/We hereby declare that I/We shall treat the tender documents drawings and other records connected with the work as secret/confidential documents and shall not communicate information/derived there from to any person other than a person to whom I/We am/are authorized to communicate the same or use the information in any manner prejudicial to the safety & integrity of the State.

Signature of contractor
 Postal Address-----**
 Telephone No. -----**
 Fax -----**
 E-MAIL -----**

Witness: Address:
 Occupation:

** To be filled by Bidder

ACCEPTANCE

The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by me for and on behalf of the President of India for a sum of Rs.....
 (Rupees.....
)

The letters referred to below shall form part of this contract agreement: -

- (a).....*
- (b).....*
- (c).....*

For & on behalf of President of India

Signature.....*

Dated: -----*

Designation

SCHEDULE – ‘A’, ‘B’, ‘C’, ‘D’, ‘E’ & ‘F’ FOR THE WORK

SCHEDULE ‘A’

Schedule of Quantities -

As per separate sheets attached

SCHEDULE ‘B’

Schedule of materials to be issued to the contractor:

S. No.	Description of item	Quantity	Rates in figures & words at which the material will be charged to the contractor	Place of issue
1	2	3	4	5
.....NIL				

SCHEDULE ‘C’

Schedule of Tools and Plants to be hired to the contractor:

S. No.	Description	Hire charges per day	Place of issue
1	2	3	4
.....NIL			

SCHEDULE ‘D’

Extra schedule for specific requirements/document for the work, if any:	As per tender documents
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SCHEDULE ‘E’

Reference to General Conditions of contract	General Conditions of Contract 2023 for Maintenance works, Central Public Works Department, as amended up to last date of submission of bids.
Name of Work	Replacement and repairing of overhead PVC water tank i/c shifting of GI pipes at FSI, ER Office building during the year 2024-25.
Estimated cost of the work	Rs.13,86,349.00/-
Earnest money	Rs.27,727.00/-
Performance Guarantee	5.00% of tendered amount
Security Deposit	2.50% of tendered amount.

SCHEDULE 'F'

GENERAL RULES AND DIRECTION

Officer inviting tender	The Executive Engineer, CED-IV, Civil Construction Unit (CCU), Ministry of Environment, Forest & Climate Change (MoEF&CC), AJCB Indian Botanic Garden, CNH Building, Shibpur, Howrah.
Maximum percentage of quantity of items of work to be executed beyond which rates are to be determined in accordance with Clause 12.2 & 12.3	See at appropriate clause

Definitions:

2(v)	Engineer-in-Charge	Executive Engineer, CED-IV, CCU, MoEF&CC or his or his legal successor or Assignee thereof.
2(viii)	Accepting Authority	Executive Engineer, CED-IV, CCU, MoEF&CC or his or his legal successor or Assignee thereof
2(x)	Percentage on cost of materials and labour to cover alloverheads and profits	15% .
2(xi)	Standard Schedule of Rates	
	Civil Works	DSR-2023 with correction slips issued upto last date of submission of bids.
2(xii)	Department:	Civil Construction Unit, MoEF&CC
9(ii)	Standard CPWD Contract Form	CPWD Form 7 of General Conditions of Contract 2023 for Maintenance works, Central Public Works Department, as modified and corrected up to last date of submission of bids.

Clause 1		
i)	Time allowed for submission of Performance Guarantee, Programme Chart (Time and Progress) and applicable labour licenses, registration with EPFO, ESIC and BOCW Welfare Board or proof of applying thereof from the date of issue of letter of acceptance	7 Days
ii)	Maximum allowable extension with late fee @0.1% per day of Performance Guarantee amount beyond the period as provided in i) above	3 Days
Clause 2	Authority for fixing Compensation under Clause 2	Superintending Engineer, CCU, MoEF&CC or his legal successor or Assignee thereof

Clause 5	Number of days from the date of issue of letter of acceptance for reckoning date of start	7 days or date of handing over of site whichever is later.
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Mile stones as per table given below

Sl. No.	Description of mile stone (s)	Time allowed (From date of start)	Amount to be withheld in case of Non-achievement of each Milestone(s)
1	Work done amounting to 20% of accepted tender amount (Civil).	1.5 Months	1.25 % of accepted tendered amount.
2	Work done amounting to 45% of accepted tender amount (Civil).	2.5 Months	1.25 % of accepted tendered amount.
3	Work done amounting to 75% of accepted tender amount (Civil).	3.5 Months	1.25% of accepted tendered amounts
4	Work done amounting to 100% of accepted tender amount (Civil).	04 Months	1.25% of accepted tendered amount.

Time allowed for execution of work : **04 (Four) Months**

Authority to decide:

i) Authority to convey the decision of shifting of milestone and extension of time:	Executive Engineer, CED-IV, CCU, MoEF&CC or his legal successor or Assignee thereof
ii) Authority to decide rescheduling of mile stones and extension of time.	Superintending Engineer, CCU, MoEF&CC or his legal successor or Assignee thereof
iii) Shifting of date of start in case of delay in handing over of site	Superintending Engineer, CCU, MoEF&CC or his legal successor or Assignee thereof

Note: Date of completion for civil I items of work will be same. Levy of Compensation under Clause 2 as well as fair and reasonable extension of time will be granted by the Superintending Engineer, CCU, MoEF&CC thereof in consultation with and on receipt of required information in this regard from Executive Engineer, CED-IV, CCU, MoEF&CC for Civil works.

Schedule of handing over of site

Part	Portion of site	Time period for handing over reckoned from date of issue of letter of intent
Part A	Portion without any hindrance	On date of commencement
Part B	Portions with encumbrances	NA
Part C	Portions dependent on work of other agencies	NA

CLAUSE 5.4: Schedule of rate of recovery for delay in submission of the modified programme in terms of delay days **Rs.500/day.**

Mode of measurement

CMB

Clause 7

Gross work to be done together with net payment/ adjustment of advances for material collected, if any, since the last such payment for being eligible to interim payment	Rs. 8 Lakhs for Civil Works
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Clause 7A

No Running Account Bill shall be paid for the work till the applicable labour licenses, registration with EPFO, ESIC and BOCW Welfare Board, whatever applicable as submitted by the Bidder to the Engineer-in- Charge.	Yes
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Clause 8 A: Completion plans to be submitted by the contractor

Authority to decide compensation on account if contractor fails to submit completion plans	Superintending Engineer, CCU, MoEF&CC or his legal successor or Assignee thereof.
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Clause 10 A

List of testing equipment to be provided by the contractor at site lab.

As per details attached in the relevant pages of this bid document.

Clause 10 B

Clause 10B (ii)	
Whether Clause 10 B (ii) shall be applicable	No

Clause 10 C

Whether Clause 10 C shall be applicable	N.A
Component of labour expressed as percent of value of work	25%

Clause 10 CC : Not Applicable.**Clause 11 :**

Specifications to be followed for execution of civil work	:	CPWD Specifications 2019 Volume-I and II with correction slips issued upto last date of submission of bids.
Building information model (BIM) is applicable and BIM professional to be deployed by contractor (NIT approving authority to write Yes or No)	:	N.A.

Clause 12 : Maintenance Work

The completion cost of shall, in no case, exceed 1.5 times the contract amount and governed as per DG CPWD Memorandum No. DG/CON/Maintenance 2023/03 dated 18.12.2023.		
Authority to decided deviation upto 1.25 times of tendered amount	Engineer-in-Charge	
Authority to decided deviation beyond 1.25 times & 1.50 times of tendered amount	Superintending Engineer, CCU, MoEF&CC, New Delhi	
12.2. &12.3	Deviation limit beyond which clauses 12.2 & 12.3 shall apply for building work.	No Limit (All deviated quantities shall be paid on agreement rates)

Clause 16 :

Competent authority for deciding reduced rates	:	Superintending Engineer, CCU, MoEF&CC or his legal successor or Assignee thereof
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Clause 18 :

List of Mandatory Machinery, tools & plants to be deployed by the contractor at site: -

As per details attached in the relevant pages of this bid document
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Clause 19

Clause 19 C	Authority to decide penalty for each default	Executive Engineer, CED-IV, CCU, MoEF&CC or his legal successor or Assignee thereof
Clause 19 D	Authority to decide penalty for each default	Executive Engineer, CED-IV, CCU, MoEF&CC or his legal successor or Assignee thereof
Clause 19 G	Authority to decide penalty for each default	Executive Engineer, CED-IV, CCU, MoEF&CC or his legal successor or Assignee thereof
Clause 19 K	Authority to decide penalty for each default	Executive Engineer, CED-IV, CCU, MoEF&CC or his legal successor or Assignee thereof

Clause 25: Settlement of disputes by Conciliation and Arbitration

Conciliator:	:	SE, CCU or his legal successor or Assignee thereof
Arbitrator Appointing Authority	:	Chief Engineer, CCU, MoEF&CC or his legal successor or Assignee thereof
Place of Arbitration	:	New Delhi

Clause 32 : Requirement of Technical Representative(s) and Recovery Rate

Sl. No.	Minimum Qualification of Technical Representative	Discipline	Designation	Minimum experience	Number	Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of Clause 32
1	Graduate Engineer Or Diploma Engineer	Civil + Electrical	Project manager cum planning/ quality/site/billing Engineer	2 or 5 years respectively	1 of major Component	Rs. 15,000/- per month per person

- 1) Assistant Engineers retired from Government services that are holding Diploma will be treated at par with Graduate Engineers.
- 2) Diploma holder with minimum 10-year relevant experience with a reputed construction co. can be treated at par with Graduate Engineers for the purpose of such deployment subject to the condition that such diploma holders should not exceed 50 % of requirement of degree engineers.
- 3) Minimum recovery for not deploying Building information Model (BIM) professional shall be Rs. two lac per month or as mentioned above, whichever is higher.

Clause 38

(i)	(a)	Schedule/statement for determining theoretical quantity of cement & bitumen on the basis of Delhi Schedule of Rates	DSR 2023 with Amendments/ Correction slips up to last date of submission of Tender
(ii)		Variations permissible on theoretical quantities:	
	(a)	Cement	
		For works with estimated cost put to tender more than Rs. 5 lakh.	3% (Three percent) plus/minus.
		Bitumen for all works	2.5% (Two-point five percent) plus only and nil on minus side.
	(b)	Steel Reinforcement and structural steel sections for each diameter, section and category	2% (Two percent) plus / minus
	(c)	All other materials	Nil

RECOVERY RATES FOR QUANTITIES BEYOND PERMISSIBLE VARIATION

S. No.	Description of item	Rates in figures and words at which recovery shall be made from the Contractor	
		Excess beyond permissible variation	Less use beyond permissible variation not permitted
1.	Cement OPC 43 grade /PCC	-	-
2.	Steel reinforcement bars	-	-
3.	Structural steel	-	-

- Nothing extra shall be paid for excess use of materials beyond the theoretical consumption.
- Less use of materials from the theoretical consumption is not permitted.

**(Guarantee offered by Bank to CCU in connection with the execution of contracts)
Form of Bank Guarantee for Earnest Money Deposit /Performance Guarantee/Security Deposit**

1. Whereas the Executive Engineer (name of division) ,
CCU on behalf of the President of India (hereinafter called "The Government")has invited
bids under(NIT number)..... dated for
..... (name of work)
..... The Government has further agreed to accept irrevocable
Bank Guarantee for Rs. (Rupees only)
valid upto (date)*..... as Earnest Money Deposit from
(name and address of contractor)(hereinafter called "the contractor")
for compliance of his obligations in accordance with the terms and conditions of the said
NIT.

OR**

Whereas the Executive Engineer (name of division)..... ,
CCU on behalf of the President of India (hereinafter called "The Government") has
entered into an agreement bearing number with
.....(nam
e
and address of the contractor) (hereinafter called "the Contractor") for
execution of work(Name of work)
..... The Government has further agreed to accept an
irrevocable Bank Guarantee for Rs. (Rupees
..... only) valid upto (date)..... as Performance
Guarantee/Security Deposit from the said Contractor for compliance of his obligations in
accordance with the terms and conditions of the agreement.

- 2. We, (indicate the name of the bank) (herein after referred
to as "the Bank"), hereby undertake to pay to the Government an amount not
exceedingRs. (Rupees only) on demand by the Government
within 10 days of the demand.
- 3. We,(indicate the name of the Bank), do
hereby undertake to pay the amount due and payable under this guarantee
without any demur, merely on a demand from the Government stating that the
amount claimed is required tomeet the recoveries due or likely to be due from
the said Contractor. Any such demand made on the Bank shall be conclusive as
regards the amount due and payable by the Bank under this Guarantee.
However, our liability under this guarantee shall be restricted to an amount not
exceeding Rs.(Rupeesonly).
- 4. We, (indicate the name of the Bank), further undertake
to pay the Government any money so demanded notwithstanding any dispute or
disputesraised by the contractor in any suit or proceeding pending before any Court or
Tribunal, our liability under this Bank Guarantee being absolute and unequivocal. The
payment somade by us under this Bank Guarantee shall be a valid discharge of our
liability for

payment there under and the Contractor shall have no claim against us for making such payment.

5. We, (indicate the name of the Bank)..... , further agree that the Government shall have the fullest liberty without our consent and without affecting in any manner our obligation here under to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor from time to time or to postpone for any time or from time to time any of the powers exercisable by the Government against the said contractor and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said Contractor or for any forbearance, act of omission on the part of the Government or any indulgence by the Government to the said Contractor or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.
6. We, (indicate the name of the Bank), further agree that the Government at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor at the first instance without proceeding against the Contractor and notwithstanding any security or other guarantee the Government may have in relation to the Contractor's liabilities.
7. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor.
8. We, (indicate the name of the Bank), undertake not to revoke this guarantee except with the consent of the Government in writing.
9. This Bank Guarantee shall be valid up to unless extended on demand by the Government. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs. (Rupees only) and unless a claim in writing is lodged with us within the date of expiry or extended date of expiry of this guarantee, all our liabilities under this guarantee shall stand discharged.

Date

Witnesses:

- | | |
|---|--------------------------------------|
| 1. Signature.....
signatoryName and address
Designation | Authorized
Name
Staff code no. |
| 2. Signature
sealName and address | Bank |

*Date to be worked out on the basis of validity period of 90 days where only financial bids are invited and 180 days for two/three bid system from the date of submission of tender.

**In paragraph 1, strike out the portion not applicable. Bank Guarantee will be made either for earnest money or for performance guarantee/security deposit/mobilization advance, as the case may be.

ANNEXURE-I I

GUARANTEE TO BE EXECUTED BY THE CONTRACTOR FOR REMOVAL OF DEFECTS AFTER COMPLETION IN RESPECT OF WATERPROOFING WORKS

This agreement made this..... day of Two Thousand..... between M/s

..... (hereinafter called the GUARANTOR on the one part) and the PRESIDENT OF INDIA (hereinafter called the Government on the other part)

WHEREAS THIS agreement is supplementary to a Contract No..... dated

..... (Hereinafter called the Contract) and made between the GUARANTOR on the one part and the Government on the other part whereby the contractor inter alia undertook to render the building and structures in the said contract completely water and leak-proof.

AND WHEREAS THE GUARANTOR agreed to give a guarantee to the affect that the said work will remain water and leak proof, for **Five** Years from the date of completion of the work under the contract.

NOW THE GUARANTOR hereby guarantee that work executed by him will render the structures completely leak proof and the minimum life of such water proofing treatment shall be **Five** years to be reckoned from the date of completion of the work under the contract.

Provided that the guarantor will not be responsible for leakage caused by earthquake or structural defects or misuse of roof or alteration and for such purpose:

- (a) Misuse of roof shall mean any operation which will damage proofing treatment, like chopping of firewood and things of the same nature which might cause damage to the roof;
- (b) Alteration shall mean construction of an additional storey or a part of the roof or construction adjoining to existing roof whereby proofing treatment is removed in parts;
- (c) The decision of the Engineer-in-Charge with regard to nature and cause of defect shall be final.

During this period of guarantee, the guarantor shall make good all defects and in case of any defect being found render the building water proof to the satisfaction of the Engineer-in-Charge calling upon him to rectify the defects failing which the work shall be got done by the Department by some other contractor at the Guarantor's cost and risk. The decision of the Engineer-in-Charge as to the cost payable by the Guarantor shall be final and binding.

That if the guarantor fails to execute the water proofing or commits breach there under, then the guarantor will indemnify the principal and his successor against all loss, damage, cost expense or otherwise which may be incurred by him by reason of any default on the part of the GUARANTOR in performance and observance of this supplementary agreement. As to the amount of loss and/or damage and or cost incurred by the Government, the decision of the Engineer-in-Charge will be final and binding on both the parties.

IN WITNESS WHEREOF these presents have been executed by the obligator and by for and on behalf of the PRESIDENT OF INDIA on the day, month and year first above written.

SIGNED, sealed and delivered by OBLIGATOR in the presence of:

- 1.
- 2.

SIGNED FOR AND BEHALF OF THE PRESIDENT OF INDIA BY in the presence of:

- 1.
- 2.

LIST OF EQUIPMENTS FOR TESTING OF MATERIALS&CONCRETE AT SITE

LABORATORY

All necessary equipment for conducting all necessary tests shall be provided at the site in the well-furnished site laboratory by the contractor at his own cost The following minimum laboratory equipment's shall be set up at site office laboratory:

Sl. No.	Equipmen t	Numbers (Minimum)
1	Compressing testing machine	As per requirement of work
2	Cube mould	
3	Slump cone, steel plate, tamping rod, steel scale, scoop	
4	Graduated glass measuring cylinder	
5	Sets of sieves of 450mm internal dia for coarse aggregate [100mm, 80mm, 40mm; 20mm;12.5mm, 10mm;4.75mm complete with lid and	
8	Sets of sieves of 200mm internal dia for fine aggregate[4.75mm;2.36mm;1.18mm; 600 microns;300 microns& 150micron ,	
9	Sieve Brushes and sieve shaker capable of 200mm and 300mm diasieves, manually operated with timing switch assembly	
10	Electronic balance 600gx0.1g., 10kg and 50kg	
11	Physical balance weight upto 5 kg	
12	Measuring jars100ml, 200ml,500ml	
13	Gauging trowels 100mm & 200mm with wooden Handle	
14	Spatula 100mm & 200mm with long blade wooden Handle	
15	Vernier callipers12" &6" size	
16	GI tray 600x450x50mm, 450x300x40mm,300x250x40mm	
17	Screw gauge 0.1mm-10mm, least count 0.05	
18	Set of box spanner	
19	Hammer1lb & 2lb	
20	Rubber Hammer	
21	Hacksaw with 6 blades	
22	Measuring tape 5mtr	
23	Depth gauge 20cm	
24	Shovels &Spade	

Note: The above list is only indicative and not exhaustive. The contractor may be required to provide more equipment's as per the requirement of work and as per the direction of the engineer- in- charge.

**LIST OF MANDATORY MACHINERY, TOOLS & PLANTS TO BE DEPLOYED BY
THE CONTRACTOR AT SITE**

S. No.	Equipmen t	Numbers (Minimum)
1.	Needle Vibrators.	As per requirement of work
2.	Plate Vibrator	
3.	JCB, Excavator, Dumper, Tipper	
4.	Reinforcement cutting & Bending machines	
5.	Total station.	
6.	Auto level & staff.	
7.	Water tanker (Minimum capacity of 5000 litres)	
8.	Welding machine 400 Ampere	
9.	Screener for coarse sand and fine sand	
10.	Centrifugal mono block water pump minimum capacity 2 HP	
11.	Steel Shuttering with necessary steel props	
12.	Steel scaffolding and staging materials	
13.	Plain Concrete/Mortar Mixer	
14.	Semi-Automatic Pavement Concrete Paver	
15.	Screed Vibrator	
16.	Any other machinery required for completion of the work as per decision of Engineer-in-charge.	

PART - B

Civil Condition and Specification of Major Component

ADDITIONAL CONDITIONS

GENERAL

The Contractors are advised to inspect and examine the site and its surroundings and satisfy themselves with the nature of site, the means of access to the site, the constraints of space for stacking material / machinery, labour etc., constraints put by local regulations (if any), weather conditions at site (rainfall, snowfall, winter/summer temperatures etc.), general ground / subsoil conditions etc. or any other circumstances which may affect or influence their tenders. No claims, whatsoever, shall be entertained at a later date for any errors found, on plea that the information supplied by the Department in the tender is insufficient or is at variance with the actual site conditions

The work shall generally be carried out in accordance with the "CPWD Specifications 2019 Vol. I & II" with correction slips up to last date of submission of bid (including any extension in last date of bid submission), additional/Particular Specifications, Architectural/Structural drawings and as per instructions of Engineer-in-Charge. Any additional item of work, if taken up subsequently, shall also conform to the relevant specifications mentioned above

The several documents forming the tender are to be taken as mutually complementary to each other.

Detailed drawings shall be followed in preference to small scale drawings and figured dimensions in preference to scale dimensions. Between two or more Clauses of this Contract, the provisions of a specific Clause relevant to the issue under consideration shall prevail over those in other Clauses.

Should there be any difference or discrepancy between the description of items as given in the particular specifications for individual items of work, special conditions and I.S. Codes, drawings etc., the following order of preference shall be observed.

I) Nomenclature of items as per Schedule of Quantities

II)Special/Additional Conditions

III) Particular Specifications

IV)Architectural/Structural drawings

V)CPWD Specifications including upto date correction slips.

CPWD General Conditions of Contract (2023) for Maintenance works including correction slips

VI) Issued up to last date of submission of bid including extensions if any.

VIII)Indian Standards Specifications of B.I.S.

VIII)ASTM, BS, or other foreign origin code mentioned in tender document.

IX) Manufacturer's specifications and as decided by the Engineer-in-Charge.

X)Sound Engineering practices or well-established local construction practices.

A reference made to any Indian Standard Specifications in these documents, shall imply to the latest version of that standard, including such revisions / amendments as issued by the Bureau of Indian Standards up to last date of receipt of tenders. The Contractor shall keep at his own cost all such publications of relevant Indian Standard applicable to the work at site.

The tenderer shall acquaint himself with the proposed site of work, its approach roads, working space available etc. before quoting his rates and no claim on this account shall be entertained by the department.

The contractor will not be allowed to construct labour huts in the Campus. The contractor has to make arrangement for labour huts outside Campus at his own cost.

Nothing extra shall be paid on this account.

The contractor shall keep the site neat & clean during execution of the work and cover the building materials with cloths

In case of any fine imposed by authorities due to scattered malba / building materials or any harm due to malba / materials or by worker of the contractor the same shall be paid by contractor within prescribed period otherwise same shall be recovered from the bills or securities / performance guarantee of the contractor.

The contractor(s) shall get himself acquainted with nature and extent of the work and satisfy himself about the availability of materials from kiln or approved quarries for collection and conveyance of materials required for construction

Any legal or financial implications resulting out of disposal of earth shall be sole responsibility of the contractor. Nothing extra shall be paid on this account.

The tenderer shall see the approaches to the site. In case any approach from main road is required at site or existing approach is to be improved and maintained for cartage of materials by the contractor, the same shall be provided, improved and maintained by the contractor at his own cost. No payment shall be made on this account and the quoted rates shall be deemed to be inclusive of all such activities.

The contractor(s) shall give to the local body, police and other authorities all necessary notices etc. that may be required by law and obtain all requisite licenses for temporary obstructions, enclosures etc. and pay all fee, taxes and charges which may be levied on account of these operations in executing the contract. The building work shall be carried out in the manner complying in all respects with the requirements of the relevant bylaws and regulations of the local body under the jurisdiction of which the work is to be executed and nothing extra shall be paid on this account.

The contractor shall ensure that there is no damage to adjoining property. If any such untoward incident happens, he shall be entirely responsible for any consequences besides making good any damages to the adjoining property whether public or private. He shall supply and maintain lights either for illumination or for cautioning the public at night.

The work shall be carried out in the manner complying in all respects with the requirements of the relevant bylaws and regulations of the local body under the jurisdiction of which the work is to be executed or as directed by the Engineer-in-charge and nothing extra shall be paid on this account.

The contractor shall take all necessary precautions to prevent any nuisance or inconvenience to the owners, tenants or occupiers of adjacent properties and to the public in general and to prevent any damage to such properties and any pollution of smoke, streams and water-ways. He shall make good at his cost and to the satisfaction of the Engineer-in-Charge, any damage to roads, paths, cross drainage works or public or private property whatsoever caused thereon by the contractor. All waste or superfluous materials shall be carried away by the contractor without any reservation entirely to the satisfaction of the Engineer-in-Charge

Utmost care shall be taken to keep the noise level to the barest minimum so that no disturbance as far as possible is caused to the occupants / users of building/adjacent properties

Other agencies may also simultaneously execute and install the works of other civil and E&M services for the work. The contractor shall afford necessary facilities for the same. The contractor shall leave such recesses, holes, openings, trenches etc. as may be required for such related works and the contractor shall fix the same at time of casting of concrete, stone work and brick work, if required, and nothing extra shall be payable on this account.

The contractor shall conduct work so as not to interfere with or hinder the progress or completion of the work being performed by other contractor(s) or by the Engineer-in- Charge and shall as far as possible arrange his work and shall place and dispose of the materials being used or removed so as not to interfere with the operations of other contractor or he shall arrange his work with that of the others in an acceptable and coordinated manner and shall perform it in proper sequence to the complete satisfaction of others

Royalty at the prevailing rates wherever payable shall have to be paid by the contractor on the boulders, metal, shingle, sand, local earth/soil and bajri etc. or any other material collected by him for the work direct to revenue authorities and nothing extra shall be paid by the department for the same.

Permission for the Excavation of the Basement and/or any Mining Approval along with carriage and disposal of surplus excavated earth shall be obtained by the contractor at his own expenses from Local Administration / Revenue Authority. Department / Client Department shall only forward the case to the concerned Authority. Moreover, all the fee including royalty for surplus excavated earth is to be paid by the contractor to the concerned department. Nothing extra shall be paid on account of this to the contractor.

No payment shall be made for any damage caused by rain, snowfall, flood or any other natural calamity, whatsoever during the execution of the work. The contractor shall be fully responsible for any damage to the govt. property and work for which the payment has been advanced to him under the contract and he

shall make good the same at his risk and cost. The contractor shall be fully responsible for safety and security of his material, T&P, Machinery brought to the site by him.

The contractor shall deploy adequate resources e.g. manpower, labour, T&P, Plant & Equipment etc. as per actual requirement of work.

The rates for all items of work shall, unless clearly specified otherwise, include cost of all labour, material, tools and plants and other inputs including all heights/depths, leads and carriages involved in the execution of the item.

The Contractor shall keep himself fully informed of all acts/laws of the Central/State/Local Governments, orders of central/state/local government, decrees of statutory bodies, tribunals having any jurisdiction or authority, which in any manner may affect those engaged or employed and anything related to carrying out the work. All the rules & regulations and bye-laws laid down by Collector / Municipal Corporation of area (where site is located) and any other statutory bodies shall be adhered to, by the contractor, during the execution of work. The Contractor shall also adhere to all traffic restrictions notified by the national/state/local authorities. The contractor shall abide and ensure compliances to terms and conditions of various approvals obtained for the project. He shall protect and indemnify the Department and it's officials & employees against any claim and /or liability arising out of violations of any such laws, ordinances, orders, decrees, by himself or by his employees or his authorized representatives. The Contractor shall indemnify the Department against all claims in respect of patent rights, royalties, design, trademarks- of name or other protected rights, damages to adjacent buildings, roads or members of public, in course of execution of work or any other reasons whatsoever, and shall himself defend all actions arising from such claims and shall indemnify the Department in all respect from such actions, costs and expenses. Nothing extra shall be payable on this account

The fee payable to statutory authorities for obtaining the various permanent service connections and occupancy certificate for the building shall be borne by the Department

.

The rates for all items shall be considered as inclusive of pumping/baling out water, if necessary, for which no extra payment shall be made. The conditions shall be considered to include water from any source such as inflow of flood, rain water, surface drainage, sewerage or due to any other reason including surface and sub-soil water etc. and shall apply to the execution in any season

Unless otherwise specified in the schedule of quantities, the rates tendered by the contractor shall be inclusive of all costs & taxes and shall apply to all leads, lifts, depth and height and nothing extra shall be payable on this account.

For completing the work in time, the Contractor might be required to work in two or more shifts (including night shifts). Normally contractors shall not be allowed to execute the RCC, electrical and finishing work at night. Work at night shall, however, be allowed if the site conditions/circumstances so demand. No claim whatsoever shall be entertained on this account, notwithstanding the fact that the contractor may have to pay extra amounts for any reason, to the labours and other staff engaged directly or indirectly on the work according to the provisions of the labour Act and other statutory bodies regulations and the agreement entered upon by the contractor with them.

The contractor shall maintain in perfect condition, all portions executed till completion of the entire work allotted to him. Where however phased delivery of work is contemplated these provisions shall apply separately to each phase

All material shall only be brought at site as per program finalized with the Engineer-in- Charge. Any pre-delivery of the material not required for immediate consumption shall not be accepted and thus not paid for.

The contractor(s) shall take instructions from the Engineer-in-Charge regarding collection and stacking of materials at any place. No excavated earth or building rubbish shall be stacked on areas where other buildings, roads, services and compound walls are to be constructed. The stacking shall take place as per stacking plan however, if any change is required, the same shall be done with the approval of Engineer-in-Charge.

The Contractor shall bear all incidental charges for all type of cartage/carriage upto execution site, storage and safe custody of materials issued by department/arranged by the contractor.

The terms machine batched, machine mixed and machine vibrated concrete used elsewhere in agreement shall mean the concrete produced in concrete batching and mixing plant and if necessary, transported by transit concrete mixers, placed in position by the concrete pumps, tower crane and

vibrated by surface vibrator /needle vibrator / plate vibrator, as the case may be to achieve required strength and durability.

The work should be planned in a systematic manner so that chase cuttings in the walls, ceilings and floors are minimized. Wherever absolutely essential, the chase shall be cut using chase cutting machines. Chases will not be allowed to be cut using hammer / chisel. The electrical boxes should be fixed in walls simultaneously while raising the brick work. The contractor shall ensure proper coordination of various disciplines viz. sanitary & water supply, electrical, fire- fighting and any other services.

Any cement slurry added over base surface for continuation of concreting for better bond is deemed to have been built in the items and nothing extra shall be payable and no extra cement considered in consumption on this account.

Existing drains, pipes, cables, over-head wires, sewer lines, water lines and similar service encountered in the course of the execution of work shall be protected against the damage by the contractor at his own expense. In case the same are to be removed and diverted. The same shall be payable to the contractor. The contractor shall work out the cost and the same shall be approved by Engineer-in-Charge. The contractor shall not store materials or otherwise occupy any part of the site in a manner likely to hinder the operation of such services.

The contractor shall be responsible for the watch and ward / guard of the buildings safety, fittings and fixtures provided by him against pilferage and breakage during the period of installations and thereafter till the building is physically handed over to the department. No extra payment shall be made on this account.

SAFETY PRECAUTIONS

The contractor(s) shall erect the barricading of required height with Precoated galvanized iron profile sheet/MS sheets with proper structural support for enclosing the full area of constructions as per direction of Engineer-in- charge.

Contractor shall within two weeks of award of work, submit to the Engineer-in- Charge for his approval, list of measures for maintaining safety of manpower deployed for construction

Entry to the site shall be controlled for proper security of man and materials and to avoid accidents.

Necessary personal protective and safety equipment's such as helmet, safety shoes & harness, gloves etc. shall be provided to the all-site Engineers, Supervisory staff, labour and technical staff of the contractor by the Contractor at his own cost and to be used at site

The Contractor(s) shall take all precautions to avoid accidents by exhibiting necessary caution boards, day & night speed limit boards, red flags, red lights and providing barriers. He shall be responsible for all damages and accidents caused to existing/new work due to negligence on his part. No hindrances shall be caused to traffic during the execution of the work.

In case of any accident of labours/ contractual staff's the entire responsibility will rest on the part of the contractor and any compensation under such circumstances if becomes payable the same shall be entirely borne by the contractor and department shall have no role on this account.

It shall be ensured by the contractor that no electric live wire is left exposed or unattended to avoid any accidents in this regard.

Any trenching and digging for laying sewer lines/water lines/cables etc. shall be commenced by the contractor only when all men, machineries and materials have been arranged and closing of the trench(s) thereafter shall be ensured within the least possible time.

The contractor shall have to work in pandemic / epidemic conditions such as COVID 19 for which he has to make safety arrangement / measures for the workers / staff and for the premises meant for them, as

per guidelines issued by Government and directions issued by Engineer-in-charge from time to time and nothing extra shall be paid on this account.

QUALITY ASSURANCE

The contractor shall ensure quality construction in a planned and time bound manner. Any sub-standard material/work beyond set out tolerance limit shall be summarily rejected by the Engineer-in-charge & contractor shall be bound to replace / remove such sub-standard / defective work immediately. If any material, even though approved by Engineer-In-Charge is found defective or not conforming to specifications shall be replaced / removed by the contractor at his own risk & cost. All materials and fittings brought by the contractor to the site for use shall conform to the samples approved by the Engineer-in-charge which shall be preserved till the completion of the work. If a particular brand of material is specified in the

particular specification, the same shall be used after getting the same approved from Engineer- In-Charge. Wherever brand / quality of material are not specified in the particular specifications; the contractor shall submit the sample as per list of preferred make given in tender documents. For all other items, materials and fittings of ISI Marked shall be used with the approval of Engineer-In-Charge. Wherever ISI Marked material / fittings are not available, the contractor shall submit samples of materials / fittings manufactured by firms of repute conforming to relevant specifications or IS codes and use the same only after getting the approval of Engineer-In-Charge.

The Contractor shall procure and provide all the materials from the manufacturers / suppliers as per the item description in schedule of quantity and particular specifications for the work. The equivalent brand other than brand / make mentioned in particular specification for any item, shall be permitted to be used in the work, only when the specified make is not available. This is, however, subject to documentary evidence produced by the contractor for non-availability of the brand specified and also subject to independent verification by the Engineer-in-Charge. In exceptional cases, where such approval is required, the decision of Engineer-in- Charge as regards equivalent make of the material shall be final and binding on the Contractor. No claim, whatsoever, of any kind shall be entertained from the Contractor on this account. Nothing extra shall be payable on this account. Also, the material shall be procured only after written approval of the Engineer-in-Charge.

Water tanks, taps, sanitary, water supply and drainage pipes, fittings and accessories should conform to byelaws and municipal body / corporation where CPWD Specifications are not available. The contractor should engage licensed plumbers for the work and get the materials (fixtures/fittings) tested by the Municipal Body/Corporation authorities wherever required at his own cost. Nothing extra shall be paid on this account.

The tests, as necessary, shall be conducted in the laboratory approved by the Engineer-in-Charge. The samples shall be taken for carrying out all or any of the tests stipulated in the particular specifications and as directed by the Engineer-in- Charge or his authorized representative.

All the registers of tests (carried out at Construction Site or in outside laboratories) and all material at site (MAS) registers including cement register shall be maintained by the contractor which shall be issued to the contractor by Engineer-in- charge. All the entries in the registers will be made by the designated Engineering Staff of the contractor and same should be regularly reviewed by JE/AE/AEE/EE. Contractor shall be responsible for safe custody of all the registers.

The Contractor shall at his own risk and cost make all arrangements and shall provide all such facilities including material and labour, the Engineer-in-Charge may require for collecting, preparing, forwarding the required number of samples for testing as per the frequency of test stipulated in the contract specifications or as considered necessary by the Engineer-in-Charge, at such time and to such places, as directed by the Engineer-in-Charge. Nothing extra shall be payable for the above.

The Contractor or his authorized representative shall associate in collection, preparation, forwarding and testing of such samples. In case he or his authorized representative is not present or does not associate him, the result of such tests

and consequences thereon shall be binding on the Contractor. The Contractor or his authorized representative shall remain in contact with the Engineer-in-Charge or his authorized representative associated for all such operations. No claim of payment or claim of any other kind, whatsoever, shall be entertained from the Contractor.

Unless specified otherwise, all the testing charges shall be borne by contractor.

All the hidden items such as water supply lines, drainage pipes, electrical conduits, sewers etc. are to be properly tested as per the design conditions before covering.

The contractor shall give performance test of the entire installation(s) as per the standing specifications before the work is finally accepted and nothing extra whatsoever shall be payable to the contractor for the test.

The Contractor shall make available, on request from the Department, the copies of challan, cash memos, receipts and other certificates, if any, vouchers towards the quantity and quality of various materials procured for the work. The Contractor shall also provide information and necessary documentation on the name of the manufacturer, manufacturer's product identification, manufacturer's instructions, warning, date of manufacturing and test certificates (from manufacturers for the product for each consignment delivered at site), shelf life, if any etc., for the department to ensure that the material have been procured from the approved source and is of the approved quality, as directed by the Engineer-in-Charge. Wherever specified, day-to-day account of receipt of such material shall be maintained at site of work

If the Contractor does not provide adequate supporting staff or labour or both for carrying out field tests or collecting and forwarding samples to outside laboratory or for maintaining test records, Engineer in charge may carry out field tests or collect and forward sample to outside laboratory or appoint any person to maintain the registers at risk and cost of Contractor. The charges so incurred shall be entirely borne by contractor and shall be deducted from Running or final bill of contractor. Further, recovery of Rs. 1000/- for each default shall be levied to contractor..

CLEANLINESS OF SITE

The Contractor shall not stack building material / malba / muck on the land or road of the local development authority or on the land owned by the others, as the case may be. So, the muck, rubbish etc. shall be removed periodically, from the site of work to the approved dumping grounds as per the local byelaws and regulations of the concerned authorities and all necessary permissions in this regard from the local bodies shall be obtained by the Contractor. Nothing extra shall be payable on this account. In case, the Contractor is found stacking the building material / malba as stated above, the Contractor shall be liable to pay the stacking charges / penalty as may be levied by the local body or any other authority and also to face penal action as per the rules, regulations and bye-laws of such body or authority. The Engineer –in-Charge shall be at liberty to recover, such sums due but not paid to the concerned authorities on the above counts, from any sums due to the Contractor including amount of the Security Deposit and performance guarantee in respect of this contract agreement.

The contractor shall take instructions from the Engineer-In-Charge regarding collection and stacking of materials at any place. No excavated earth or building rubbish shall be stacked on areas where other buildings, roads, services and compound walls are to be constructed

The site of work shall be always kept clean due to constraints of space and to avoid any nuisance to the users of buildings in the adjacent plots. The Contractor shall take all care to prevent any water- logging at site. The wastewater, slush etc. shall not be allowed to be collected at site. For discharge into public drainage system, necessary permission shall be obtained from relevant authorities after paying the necessary charges, if any, directly to the authorities. The work shall be carried out insuch a way that the

area is kept clean and tidy. All the fees/charges in this regard shall be borne by the Contractor. Nothing extra shall be payable on this account

It is the responsibility of contractor to keep building neat and clean. The contractor shall spray the chemicals fumigate site area to check the mosquitoes at frequent interval or as directed by the Engineer in charge. The contractor shall also make lighting and temporary ventilation arrangement in basement.

The contractor shall not wash the drum of TM (transit mixture) at site and shall avoid the spread of leachate / cement slurry to be spread at the site of work and all care shall be taken to keep the site neat and clean at his own cost

Employ measures to segregate the waste on-site into inert, chemical or hazardous wastes. Recycle the unused chemical/hazardous wastes such as oil, paint, batteries and asbestos. The inert waste is to be disposed off to Municipal Corporation/local bodies dump yard and landfill sites

The contractor shall provide potable water for all workers. The contractor shall provide the minimum level of sanitation and safety facilities for the workers at site. The contractor shall ensure cleanliness of workplace with regard to the disposal of waste and effluent; provide clean drinking water and latrines and urinals as per applicable standard.

Special condition for Cement

Agency shall procure OPC conforming to IS : 8112 / PPC conforming to IS : 1489 (Part 1) as required in the work from cement manufacturers mentioned in the list of Preferred makes for civil works.

Supply of cement shall be made in 50 kg. bags bearing manufacturer's name and ISI marking. Samples of cement arranged by the contractor shall be taken by the Engineer- in-Charge and got tested in accordance with provisions of the relevant BIS codes. In case the test results indicate that the cement arranged by the contractor does not confirm to the relevant BIS code the same shall stand rejected and shall be removed from the site by the contractor at his own cost within a week's time of written order from the Engineer-in-charge to do so.

The cement shall be brought at site in bulk supply of approximately 10 tonnes or as decided by the Engineer-in-Charge

The cement godown of the capacity to store a minimum of 200 bags of cement shall be constructed by the contractor at site of work for which no extra payment shall be made.

Double lock provision shall be made to the door of the cement godown. The keys of one lock shall remain with the Engineer-in-charge or his authorized representative and the key of the other lock shall remain with the contractor. The contractor shall be responsible for the watch and ward and safety of the cement godown. The contractor shall facilitate the inspection of the cement godown by the Engineer-in-Charge at any time.

The cement shall be got tested by the Engineer-in-Charge and shall be used on the work only after satisfactory test results have been received. The contractor shall supply free of charge the cement required for testing including its transportation cost to test laboratories

The actual issue and consumption of cement on work shall be regulated and proper accounts maintained. The theoretical consumption of cement shall be worked out as per procedure prescribed in clause 38 of the contract and shall be governed by conditions laid therein. In case the cement consumption is less than theoretical consumption including permissible variation, recovery at the rate so prescribed shall be made after ensuring structural soundness and stability on the basis of testing. In case of excess consumption, no adjustment need to be made

The cement brought to site and the cement remaining unused after completion of the work shall not be removed from site without the written permission of the Engineer-in- Charge

The damaged cement shall be removed from the site immediately by the contractor on receipt of a notice in writing from the Engineer-in-Charge. If he does not do so within three days of receipt of such notice, the Engineer-in-Charge shall get it removed at the cost of the contractor

Separate cement registers showing the receipt of the OPC and PPC shall be maintained at site. The contractor shall construct separate godowns for storage of OPC & PPC at site and nothing extra on this account shall be payable

SPECIAL CONDITION FOR CEMENT:

i) Unless otherwise specified in this document, PPC cement shall be used except for RCC work and Design Mix concrete. However, use of PPC cement for RCC work and design mix concrete may be allowed in case the concrete is produce in batch mix plant installed at site with no cost adjustment in the contract amount. Agency shall procure OPC conforming to IS: 8112 / PPC conforming to IS : 1489 (Part 1) as required in the work from cement manufacturers mentioned in the list of Preferred makes for civil works or from any other reputed cement manufacturer having a production capacity not less than 1 million tons per annum as approved by competent authority of CCU. Uses of GGBS /Fly ash with OPC is permitted as per norms.

ii)The supply of cement shall be taken in 50 kg. bags bearing manufacturer's name and ISI marking. Samples of cement arranged by the Contractor shall be taken by the Engineer-in-charge and got tested in accordance with provisions of relevant BIS codes. In case the test results indicate that the cement arranged by the Contractor does not conform to the relevant BIS codes, the same shall stand rejected, and it shall be removed from the site by the Contractor at his own cost within a weeks time of written order from the Engineer- in-charge to do so. Supply of cement shall be taken in 50-kg bags bearing manufacturer' s name, or his registered trademarks if any and grade and type of cement as well as ISI marking.

iii) The cement shall be brought at site in bulk supply of approximately 40 tons or as decided by the Engineer-in-charge on the basis of requirement of work in progress. The cement godown of Minimum 2000 bags capacity to store the cement shall be constructed by the Contractor at site of work for which no extra payment shall be made.

iv) Double lock provision shall be made to the door of the cement godown. The keys of one lock shall remain with the engineer-in-charge or his authorised representative and the keys of other lock shall remain with the contractor. The contractor shall be responsible for the watch and ward and safety of cement godown. The contractor shall facilitate the inspection of cement godown by the Engineer-incharge at any time.

v)The cement shall be got tested by the Engineer-in-charge and shall be used on the work only after satisfactory test results have been received.

vi) The actual issue and consumption of cement on work shall be regulated and proper accounts shall be maintained. The theoretical consumption of cement shall be worked out. In case the cement consumption is less than theoretical consumption including permissible variation, recovery at the rate so prescribed shall be made. In case of excess consumption, no cost adjustment shall be made.

vii) The cement brought to the site and the cement remaining unused after completion of the work shall not be removed from site without the written permission of the Engineer-in-charge.

viii) The damaged cement shall be removed from the site immediately by the Contractor on receipt of a notice in writing from the Engineer-in-charge. If he does not do so within 3 days of receipt of such notice, the Engineer-in-charge shall get it removed at the cost of the Contractor.

SPECIAL CONDITIONS FOR STEEL REINFORCEMENT

i)The Contractor shall/procure ISI marked TMT bars of various grades from the Steel Manufacturers mentioned in preferred make list for civil works or their authorized dealers/ authorizeddistributors/ channel partners.

ii)Samples shall also be taken and got tested by the Engineer-in-Charge as per the provisions in this regard in relevant BIS codes. In case the test results indicate that the reinforcement steel arranged by the contractor does not conform to the specifications, the same shall stand rejected, and it shall be removed from the site of work by the contractor at his cost within a week time or written orders from the Engineer-in-Charge to do so.

iii) The steel reinforcement bars shall be brought to the site in bulk supply of 25 tonnes or more, or as

decided by the Engineer-in-charge.

iv) The steel reinforcement bars shall be stored by the contractor at site of work in such a way as to prevent their distortion and corrosion, and nothing extra shall be paid on this account. Bars of different sizes and lengths shall be stored separately to facilitate easy counting and checking.

v) For checking nominal mass, tensile strength, bend test, re-bend test etc. specimens of sufficient length shall be cut from each size of the bar at random, and at frequency not less than that specified below:

Size of bar	For consignment below 100ton	For consignment above 100ton
Under 10 mm dia bars	One sample for each 25 tonnes or part there of	One sample for each 40 tonnes or part there of
10 mm to 16mm dia bars	One sample for each 35 tonnes or part there of	One sample for each 45 tonnes or part there of
Over 16mm dia bars	One sample for each 45 tonnes or part there of	One sample for each 50 tonnes or part there of

vi) The contractor shall supply free of charge the steel required for testing including its transportation to testing laboratories.

vii) The actual issue and consumption of steel on work shall be regulated and proper accounts maintained. The theoretical consumption of steel shall be worked out. In case the consumption is less than theoretical consumption including permissible variations, recovery at the rate so prescribed shall be made. In case of excess consumption, no adjustment needs to be made.

viii) The Steel brought to site and remaining unused shall not be removed from site without the written permission of Engineer-in-Charge.

ix) The standard sectional weights referred to shall be as given in Table 5.4 in para 5.3.4 in CPWD Specification 2019 Vol.-I and will be considered for conversion of length of various sizes of TMT Bars in to standard weight. Record of actual sectional weights shall also be kept diameter and lot wise. The average sectional weight for each diameter shall be arrived at from samples from each lot of steel received at site. The decision of the Engineer-in-Charge shall be final for the procedure to be followed for determining the average sectional weight of each lot. Quantity of each diameter of steel received at site of work each day will constitute one single lot for the purpose. The weight of steel by conversion of length of various sizes of bars based on the actual weighted average sectional weight shall be termed as Derived Actual Weight. If the derived weight is less than the standard weight, then the Derived Actual Weight shall be accepted if it is within the following tolerances specified in IS:1786-2008, otherwise whole lot will be rejected. However, deductions shall be made for the difference in derived actual weight and standard weight at the rate determined by engineer-in-charge. If the derived actual weight is found more than the standard weight, then nothing shall be paid extra for the difference in derived actual weight and standard weight.

x) The contractor shall submit original vouchers from the manufacturer for the total quantity of steel supplied under each consignment to be used in the work. All consignment received at the work site shall be inspected by the Site staff along with the relevant documents before acceptance. The contractor shall obtain Original Vouchers and copy of Test Certificates and furnish the same to the Engineer-in-Charge in respect of all the lots of steel brought by him from approved supplier to the site of work. The original vouchers and copy of test certificates shall be defaced by the Site staff and kept on record in the site office.

xi) The reinforcement steel brought to site of work shall be stored on brick / timber platform of 30/40-cm height, nothing extra shall be paid on this account

CONDITION FOR WATER PROOFING TREATMENT :

- a) Work shall be executed as per CPWD Specifications, 2019 Vol I & II with upto date correction slips and manufacturer specification.
- b) The contractor shall associate himself with the specialized firm, to be approved by the Engineer- in-charge in writing, for water proofing treatment for basement/lower ground floor, underground tank and on roofs.
- c) Before commencement of treatment on roof surface, it shall be ensured that the outlet drain pipes/ spouts have been fixed and the spout opening have been eased and rounded off properly for easy flow of water.
- d) The work shall carry 5 Years guarantee to be reckoned from the date of completion of the entire work under the contract against faulty workmanship, finishing, unsound materials, efficiency of water proofing treatment and other related problems.

The contractor must produce a 5 years guarantee in prescribed proforma, and must be signed by the contractor in token of his overall responsibility. In addition, 10% (Ten percentages) of the cost of item No- 3.1,8.1 &8.2.1 would be retained as security deposit to watch the performance of the work done.

However, half of this amount (withhold) would be released after 3 years, if the performance of the work done is satisfactory. If any defect is noticed during the guarantee period, it should be rectified by the contractor within seven days and if not attended to, the same will be got done by another agency at the risk and cost of the contractor

LIST OF PREFERRED MAKE / MANUFACTURERS FOR DIFFERENT MATERIALS TO BE USED IN THIS PROJECT FOR CIVIL WORKS

Acceptable makes of materials to be used in the work are enclosed. In case of non-availability of these makes, the Superintending Engineer, CCU may allow use of alternative makes on the recommendations of Engineer-in-charge. Only BIS marked materials in the list shall be used in the work. Non-BIS marked materials may be permitted by the Engineer-in-charge only when BIS marked materials are not manufactured. If approved make/brand of any material is not given in the list, the same will be approved by the Superintending Engineer, CCU on the recommendations of Engineer-in-charge

SL. NO.	DETAILS OF MATERIALS	MANUFACTURERS NAME
1	ANTI TERMITE PESTICIDES	BAYER, FMC INDIA, HINDUSTAN INSECTICIDES
2	STEEL (TMT FE-500D)	TATA TISCON, RINL, JINDAL STEEL & POWER LTD, JSW STEEL LTD. AND SAIL
3	STRUCTURAL STEEL SECTIONS	TATA, JINDAL, SAIL, RINL
4	CEMENT [OPC AND (P.P.C.) 43 GRADE]]	ACC, AMBUJA, ULTRATECH, WONDER, JK, SHREE
5	PRECAST DUCTS/DRAINS/ DRAIN COVER/KERB CHANNEL	KK, NITCO, KERAKROME, TERRAFIRMA, FUJISILVERTECH
6	WHITE CEMENT	BIRLA WHITE, J.K. WHITE, ULTRATECH
7	CC PAVERS	NITCO, UNISTONE, KK
8	VITRIFIED TILES (DOUBLE CHARGED / FULL BODY/ULTRA SLIM /ANTISKID / ACID-ALKALI RESISTANT)- (ALL TILES SHALL BE PROCURED FROM FULLY OWNED FACTORY OF THE MANUFACTURER AND NOT FROM JV / OUTSOURCED)	SOMANY, KAJARIA, RAK
9	CERAMIC GLAZED TILES	SOMANY, KAJARIA, RAK
10	WATER-PROOF CEMENT PAINT	SNOWCEM, ASIAN PAINT, SIKA, NEROLAC
11	SYNTHETIC ENAMEL PAINT	ASIAN PAINT, AKZONOBEL (DULUX), NEROLAC, ICI
12	PLASTIC EMULSION PAINT	ASIAN PAINT, NEROLAC, AKZONOBEL (DULUX),, ICI
13	DISTEMPER/ACRYLIC EMULSION PAINT	ASIAN PAINT, BERGER, NEROLAC, DULUX
14	TEXTURED PAINT	ASIAN, OIKAS, DULUX
15	STEEL PRIMER	NEROLAC, BERGER, ASIAN PAINTS
16	WOOD PRIMER	NEROLAC, BERGER, ASIAN PAINTS
17	EXTERIOR WATERPROOFING PAINT	RAINCOAT (DR. FIXIT), ASIAN, BERGER
18	WOOD FINISH (MELAMINE & PU POLISH)	ASIAN. ICI, JOTUN, NEROLAC

S. NO.	DETAILS OF MATERIALS	MANUFACTURERS NAME
19	LAMINATE	MERINO, GREENLAM, CENTURY, DURO
20	PLY BOARD, PLYWOOD (PINE BOARD)	GREEN, MERINO, CENTURY, DURO
21	SELF LEVELLING COMPOUND	MAPAI, ARDEX ENDURA, BIZZAR
22	EPDM GASKET	HANU, ANAND, VICTOR
23	WOOD ADHESIVE	FEVICOL, 3M, ARALEDITE, SIKA
24	FLUSH DOOR (ALL FLUSH DOORS SHALL BE PROCURED FROM FULLY OWNED FACTORY OF THE MANUFACTURER AND NOT FROM JV / OUTSOURCED)	GREEN, MERINO, CENTURY, DURO
25	WATER REPELLENT PAINT	ARDEX ADURA, WEBER, PIDILITE
26	FIRE SEALANT	HILTI, 3M, MCCOY
27	TILE ADHESIVE	PIDILITE, ARDEX ENDURA, WEBER, MAPEI
28	STONE ADHESIVE	PIDILITE, ARDEX ENDURA, WEBER
29	DASH, ANCHORING FASTENERS	HILTI, FISCHER, CANON
30	ALUMINIUM COMPOSITE PANEL	ALUCOBOND, REYNOBOND, ALPOLIC
31	EPOXY GROUTING COMPOUND	PIDILITE, ARDEX ENDURA, WEBER, MAPEI
32	READY MIX GYPSUM PLASTER	SAINT GOBAIN, USG BORAL, ULTRATECH
33	READY MIX CEMENT PLASTER	WEBER, ULTRATECH, BIRLA WHILTE
34	SILICON SEALANT	GE, DOW CORNING, PIDILITE
35	GYPSUM BOARD	USG BORAL, LAFAGE, SAINT GOBAIN, KNAUF DANOLINE
36	FLOAT GLASS	ASAHI, MODI GLASS, SAINT GOBAIN GLASS
37	MECHANICAL COUPERS	USHA MARTIN, DEXTRA, HALFEN
38	CRYSTALLIANE CEMENTITIOUS WATERPROOFING COMPOUND	XYPEX CONSTRUCTION CHEMICAL, KRYTONE, PENETRON
39	WATERPROOFING MEMBRANE (SBS/HDPE/POLYUREA/CEMENTITIOUS ETC.)	SIKA, GRACE, SOPREMA
40	WATERPROOFING CUM PU FOAM INSULATION	SIKA, GRACE, SOPREMA
41	VERMICULLITE TREATMENT	NEWKEM, GRACE, SOPREMA
42	HOLLOW METAL PRESSED DOORS (METAL DOORS)	NAVAIR, TATA PRAVESH, SHAKTI HORMANN

S. NO.	DETAILS OF MATERIALS	MANUFACTURERS NAME
43	ROLLER BLIND	VISTA, MAC, HUNTER DOUGLUS
44	PRELAMINATED PARTICLE BOARD	MERINO, CENTURY PLY, GREENLAM
45	HYDRAULIC DOOR CLOSER, FLOOR SPRING, DOOR AUTOMATION	DORMA, GEZE, HAFELE, HORMANN
46	HARDWARES FOR FIRE RATED DOORS	HAFELE, DORMA, GEZE, HORMANN
47	HARDWARE FOR FURNITURE ITEMS	HETTICH, EBCO, HAFELE
48	STAINLESS STEEL FITTINGS/HARDWARE FOR WOODEN/METAL/GLAZED/STEEL DOOR & WINDOWS	HAFELE, DORMA, GEZE, HORMANN
49	WIRE MESH	STERLING ENTERPRISES, MICROMESH, HARVER STANDARD, INDIA WIRE MESH
50	ADHESIVE TAPE	3M, NORTON, BOPD, TESA
51	HIGH PERFORMANCE EPOXY BASED RESIN ANCHOR SYSTEM	FOSROC, CICO, SIKA
52	EPOXY MORTAR	FOSROC, SIKA, MYK LATICRETE, CICO
53	NUTS, BOLTS & SCREWS	GKW, KUNDAN, PRIYA, ATUL
54	ALUMINIUM SECTIONS FOR DOORS & WINDOWS ETC.	JINDAL, HINDALCO, BHORUKA
55	HARDWARE FITTINGS FOR ALUMINIUM WINDOWS & DOORS	GEZE, HAFELE, DORMA
56	MS SECTIONS (PIPES, BOXES CHANNELS)	JINDAL HISAR, TATA, SURYA
57	S.S. MATERIAL/HADRAILS/RAILINGS	JINDAL STAINLESS STEEL LTD., TATA STEEL, SAIL
58	WALL PUTTY	JK, BIRLA, ASAIN PAINT
59	FLOOR HARDENER	PIDILITE, FOSROC, SIKA, CICO
60	POLYSULPHIDE SEALANT	PIDILITE, ARDEX ENDURA, WEBER, BASF.
61	EXPANSION JOINT	MIGUA, CS, CAMEO
62	WATERPROOFING COMPOUND	FOSROC, SIKA, PIDILITE
63	ADMIXTURES/CURING COUMPOUND	FOSROC, SIKA, ATPL, KUNALCOM CHEM, ASIAN PAINT, PIDILITE
64	REFLECTIVE GLASS, TINTED GLASS, HIGH PERFORMANCE GLASS, LACQUERED GLASS	SAINT GOBAIN, ASAHI (INDIA), PILKINGTON
65	LOOKING GLASS / MIRROR	ATUL, MODI GUARD, GOLDEN FISH
66	HIGH PERFORMANCE GLASS	SAINT GOBAIN, ASAHI, PILKINGTON

S. NO.	DETAILS OF MATERIALS	MANUFACTURERS NAME
67	METAL/ALUMINUM FALSE CEILING	SAINT GOBAIN, HUNTER DOUGLUS, ARMSTRONG
68	AAC BLOCK	AEROCON, JINDAL BLOCK, MODCRETE, FINECRETE
69	AAC BLOCK ADHESIVE	ARDEX ENDURA, PIDILITE, WEBER
70	HIGH PRESSURE LAMINATE INTERIOR/EXTERIOR GRADE	MERINO, FUNDERMAX, GREENLAM
71	UPVC WINDOWS	FENESTA, ALUPLAST, KOENMERLING
72	WALL GUARD, HAND RAIL, CORNER GUARD	CONSTRUCTION SPECIALITIES / GRADUS INPROCORP INDIA PVT. LTD./WINDOWTECH
73	SOLID ACRYLIC SURFACE	MERINO, LG, GRANIMUM, SAMSUNG- STARON
74	VINYL / CONDUCTIVE FLOORING, DADO SKIRTING	FORBO, TARAKETT, ARMSTRONG, GERFLOOR
75	CALCIUM SILICATE TILES FALSE CEILING	AEROLITE, RAMCO, HILUX
76	FIRE CHECK DOORS (METAL/ROLLING/GLAZED)	NAVAIR, TATA PRAVESH, SHAKTI HORMANN
77	FIRE CURTAIN	ORIENT, PACIFIC, KENT, NECO
78	LEAD LINED DOOR	NAVAIR, SHAKTI HORMANN, METAFLEX, RESPONSIVE
79	FIRE RESISTANT GLASS	SAINT GOBAIN, ASAHI, PILKINGTON
80	ALUMINIUM GLAZED DOORS/WINDOWS	HINDALCO, SHAKTI HORMANN, GLAZE TECHNO, SARLA
81	POLYESTER POWDER COATING/ PVDF COATING	JOTUN, AKZONOBEL, ASIAN PPG, NIPPON
82	GLASS PROCESSOR FOR MAKING DGU/TOUGHENING	AIS, ART N GLASS, GSC, KAENAL GLASS, SAINT GOBAIN
83	PVB/ SGP LAMINATE FILM, SENTRY FILM	DUPONT, SAFLEX, EASTMAN, LG, 3M
84	ACOUSTIC SEAL / DOOR SEAL	LORIENT, RAVEN, DORMA, 3M, HAFELE
85	PAINT AND PRIMER FOR FIRE CHECK DOOR.	VIPER, BERGER, NULLIFIRE
86	INTUMESCENT FIRE / SMOKESEAL	ASTRO FLAME, RAVEN, SEALZ, LORIENT
87	CALCIUM SILICATE BOARD FOR FIRE DOOR	PROMOTECH, PROMINA, RAMCO
88	FRP DOOR & FRAMES	FIBREWAYS, JAISHREE, FIBRE TECHNO, BHATT FRP, JAYNA

S. NO.	DETAILS OF MATERIALS	MANUFACTURERS NAME
89	FLY ASH BRICKS	POWERBRICKS, PAUBHARA, YBW
90	INSULATION	UP TWIGA, LLOYD, ROXUL ROCKWOOL, ROCKWOOLINDIA
91	ANTI BACTERIAL PAINT	JOTUN/LIQUIDE PLASTIC /CONSTRUCTION SPECIALITY
92	GRAPHIC FILM	3M, AVERY DENNISON
93	GRC/ FRP	BIRLA WHITE, UNISTONE, SANDERSON, SHENISHA CORPORATION
94	PLASTER OF PARIS	JK, BIRLA, SAKARNI, ULTRATECH
95	MR BOARD	SAINT GOBAIN, USG BORAL, ARMSTRONG
96	MINERAL FIBRE SUSPENDED CEILING SYSTEM	SAINT GOBAIN, USG BORAL, ARMSTRONG, KNAUF AMF
97	CURTAIN TRACK AND CURTAIN FABRIC	WINDOWTECH, DECOREX, MEDFRESHE, RESPONSIVE
98	POLYMER MODIFIED ADHESIVE	ULTRATECH, BALL ENDURA, PIDILITE, WEVER
99	ANTI BACTERIAL AND ANTI SKID VITRIFIED TILES	SOMANY, SIMPOLO, KAJARIA, JOHNSON, RAK
100	POLYCARBONATE SHEET	DANPALON, SOLALITE, DPI SYSTEM, EVERLITE, CPI
101	GI PIPES	JINDAL, PRAKASH SURYA
102	GI FITTINGS	UNIK, KS, ICS
103	CPVC PIPES	ASTRAL, PRINCE, SFMC
104	HDPE PIPES	SUPREME, FINOLEX, ASTRAL, RELIANCE, SMARTFLOW
105	CC (SPUN) IRON PIPE	NECO, SKF, HIF
106	CCI SOIL, WASTE, VENT PIPES & FITTINGS	NECO, SKF, HIF
107	C.P. BRASS FITTING	JAQUAR, ROCA, KOHLER
108	SS SINK	NILKANTH, NIRALI, JAYNA
109	C.P. BRASS BATHROOM ACESSORIES / FITTINGS	JAQUAR, ROCA, KOHLER
110	GLASS SHOWER PARTITION	DORMA, HAFELE, GEZE
111	SANITARY WARE (URINAL, WASH BASIN, WC ETC.)	JAQUAR, GROHE, KOHLER
112	GLASS MOSAIC TILE	ITALIA, CORAL, KAJARIA
113	LIQUID SOAP DISPENSER	EURONICS, TOSHI, UTEC, DOLPHY
114	HAND DRIER	EURONICS, TOSHI, UTEC, DOLPHY
115	AROMA DISPENSER	EURONICS, TOSHI, UTEC, DOLPHY

S. NO.	DETAILS OF MATERIALS	MANUFACTURERS NAME
116	SHOE SHINNING MACHINE	EURONICS, TOSHI, UTEC, DOLPHY
117	TISSUE DISPENSER WITH TRASH	EURONICS, TOSHI, UTEC, DOLPHY
118	HAND TOWEL DISPENSER	EURONICS, TOSHI, UTEC, DOLPHY
119	NITRILE RUBBER INSULATION	ARMACELL, K-FLEX, A-FLEX, SUPREME
120	FAÇADE AND WINDOW SYSTEM	SCHUCO, ALUK, REYNAERS, GUTMANN
121	FIRE STOP IN CURTAIN WALL SYSTEM	HILTI, 3M, FISCHER, LORIENT
122	POP OUT VENT FOR FAÇADE AND SYSTEM WINDOW HARDWARE	COTSWOLD, SCHUCO, ALUK, REYNAERS
123	ALUMINIUM OPERABLE LOUVER	TECHNAL, DOMAL, YOGI GLAZE, SCHUCO
124	AIR TRANSFER GRILL	RUSKIN, SYSTEM AIR, TROX, TREMCO
125	POLYURETHANE CONCRETE FLOORING, EPOXY FLOORING, SELF-LEVELLING FLOORING	ARDEX ENDURA, SIKA, MAPEI, SAINTGOBAIN - WEBER
126	ENGINEERED WOODEN FLOORING AND SKIRTING	MIKASA (GREENLAM), TARKETT, HAVWOODS, PARADOR (HIL), PERGO, KAHR
127	RAISED/ FALSE ACCESS FLOORING SYSTEM	LINDNER, UNIFLOOR, TANKARIA, FLEXI FLOOR
128	SOLID SURFACE (CORIAN)	DUPONT, LG, STARON-SAMSUNG, LUXOR (DURLAX)
129	CAR DECK FLOORING SYSTEM	MAPEI, SAINT GOBAIN – WEBER, MYK ARMENT
130	ENGINEERED MARBLE	HR JOHNSON, KALINGA STONE, NITCO, QUASTONE
131	RUBBERISED PAVERS	SUNFLEX, FLOOR GUARD, BORON RUBBERS
132	COLOUR HARDENER	SIKA, FOSROC, PIDILITE
133	IPE WOOD	HKS FLOORING, INDIANA, RESHAWOOD
134	SYNTHETIC THATCH ROOFING	PALMEX, WINROYAL, SYNTHETIC THATCH
135	ASPHALT CEMENT SHINGLES	TAPCO, CERTAINTEED, MALARKEY
136	STRETCH MEMBRANE / TENSILE FABRIC	SERGE FERRARI, CHUKOH, MEHLER, VERSAIDAG
137	STAMP CONCRETE PIGMENT / APPLICATOR	UNITED FLOORING, CONCRETE BY DESIGN, FLEX STONE

S. NO.	DETAILS OF MATERIALS	MANUFACTURERS NAME
138	SS TACTILE	EMINENT, FERROTECH, SUNDARAM, JINDAL
139	BAMBOO DECKING, ROOFING & CLADDING	ECO GREEN FLOORING, EPITOME BAMBOOWOOD, LAMIWOOD
140	OUTDOOR SIGNAGES	3M, AVERY DENNISON, VEDAAANSHI SIGNS
141	ACOUSTIC PANELS	ARMSTRONG, USG BORAL, ANUTONE, ROCKWORTH,
142	C&D WASTE PRECAST ELEMENT	GM CONCRETE, ILFS
143	THERMOPLASTIC PAINT/ROAD MARKING PAINT	NEROLAC, ASIAN, SHALIMAR, BERGER, STP LTD
144	WEATHER/STRUCTURE SILICON SEALANT	WACKER, MCCOY, DOW CORNING
145	BACKER ROD	SUPREME/SYSTRANS
146	POLYSTRENE BOARD	SUPREME, DOW CORNING, TEXAS, PIDILITE
147	DUCTILE IRON PIPES	ELECTROSTEEL, KESORAM, TISCO
148	STAINLESS STEEL PIPES AND FITTINGS	VIEGA, JINDAL STAINLESS STEEL, J- PRESS
149	SLUICE VALVES	SANT, ADVANCE, AUDCO, ZOLOTO, KIRLOSKAR, LEADER
150	GATE / BALL VALVES	SANT, LEADER, ZOLOTO
151	ELECTROMAGNETIC FLOWMETER	ENDRESS HAUSER, KROHNE MARSHALL, NEXTENG ENVIRO PVT LTD, SEIMENS, ABB
152	CI/DI MANHOLE COVER	NECO, SKF, RIF, BIC
153	DWC PIPES	NOBLE POLYTEC, ALOM POLY EXTRUSIONS LTD ,. ASTRAL, ANEKINDUSTRIAL PLASTICS
154	DRAIN CHANNEL WITH SS SLOTTEDGRATING	ACO, KESSEL, PRUTHA
155	WATER BASED MELAMINE POLISH	ASIAN, PIDILITE, DULUX
156	ALL FURNITURE ITEMS	ROCKWORTH / SPACEPLUS DESIGN / LABS/DURIAN/GODREJ STEELCASE / HERMAN MILLER/ HAWORTH
157	CARPET	SUPINOE/ MILLIKAN/ SHAW
158	IRRIGATION FITTINGS, VALVES AND OTHER ACCESSORIES	RAIN BIRD / NETAFIM / BERMAD / HUNTER / TORO
159	IRRIGATION PUMPS	LUBI / RAIN BIRD / GRUNDFOS

SCHEDULE OF QUANTITY

Annexure 1 SCHEDULE OF QUANTITIES					
Name of Work:- Replacement and repairing of overhead PVC water tank i/c shifting of GI pipes at FSI, ER Office building during the year 2024-25.					
SI No.	Description of Items	Quantity	Unit	Rate (Rs.)	Amount (Rs.)
	CONCRETE WORK				
1.1	Extra for providing and mixing water proofing material in cement concrete work in doses by weight of cement as per manufacturer's specification.	186.00	per bag of 50kg cement used	17.65	3282.90
	MASONRY WORK				
2.1	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in :				
2.1.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	0.45	cum	7975.80	3589.11
	FLOORING				
3.1	Crazy ceramic tile flooring, with under layer 12 mm thick cement mortar 1:4 (1 cement: 4 coarse sand), with joints not exceeding 5 mm, including filling the gaps with ordinary cement mixture & mixing with synthetic polyester fibre, triangular in shape having specific gravity of 1.34 to 1.40, cross section size ranging from 10 to 40 micron & length upto 6 mm , mixing fibre @ 125 grams per 50 kg of cement in cement mortar, including providing and mixing water proofing material in mortar @ 1 kg per 50 kg of cement, all complete as per direction of Engineer-in-charge.	384.00	Sqm	928.40	356505.60
	ROOFING				
4.1	Providing gola 75x75 mm in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 stone aggregate 10 mm and down gauge), including finishing with cement mortar 1:3 (1 cement : 3 fine sand) as per standard design :				
4.1.1	In 75x75 mm deep chase	13.00	metre	296.90	3859.70
	Finishing				
5.1	12 mm cement plaster of mix :				
5.1.1	1:4 (1 cement: 4 coarse sand)	3.90	sqm	347.75	1356.23
	REPAIRS TO BUILDING				
6.1	Disconnecting damaged overhead/terrace PVC water storage tank	2.00	Each	422.05	844.10

	of any size from water supply line and removing from the terrace including shifting at ground level as per direction of Engineer-in-charge.				
6.2	Dismantling 15 to 40 mm dia G.I. pipe including stacking of dismantled pipes (within 50 metres lead) as per direction of Engineer-in-Charge.				
	(a) Internal Work- Exposed on wall	251.00	metre	3.15	790.65
	WATER SUPPLY				
7.1	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.				
	Internal work - Exposed on wall				
7.1.1	25 mm nominal dia Pipes	15.00	metre	390.75	5861.25
7.1.2	40 mm dia nominal bore	156.00	metre	684.00	106704.00
7.1.3	50 mm dia nominal bore	80.00	metre	908.95	72716.00
7.2	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :				
7.2.1	40 mm nominal bore	8.00	Each	803.85	6430.80
7.2.2	50 mm nominal bore	2.00	Each	998.95	1997.90
7.3	Providing and placing on terrace (at all floor levels) polyethylene water storage tank, IS : 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.	10000.00	per litre	10.70	107000.00
	WATER PROOFING				
8.1	Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of applying:				
	(a) after surface preparation, first layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm.				
	(b) laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less				

	than 10 cm.				
	(c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around.				
	(d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately.				
	For the purpose of measurement the entire treated surface will be measured.	384.00	Sqm	670.35	257414.40
8.2	Grading roof for water proofing treatment with				
8.2.1	Cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size)	29.00	Cum	7825.45	226938.05
				Total	1155290.69
	Add Enhancement for Cost Index @ 20% On DSR'2023 Item Including GST on (a) Rs				231058.00
				Total	1386348.69
			Total (Say)		1386349.00

CIVIL CONSTRUCTION UNIT					
. 05/EE/CED-IV/CCU/Kol/2024-25					
Name of work: Replacement and repairing of overhead PVC water tank i/c shifting of GI pipes at FSI, ER Office building during the year 2024-25.					
SCHEDULE OF QUANTITY					
Name of the Contractor					
Sl. No.	Name of component	Estimated cost (Rs.)	Percentage above or below the estimated cost	% in Figures	Total Cost (Rs.)
1	2	3	4	5	6
1	Civil Works	Rs.13,86,349.00/-	*	*	*

:-* - To be filled online in bid document.

- 1) The Column Nos. 4 & 5 are mandatory to be filled by the bidders / tenderers. If these columns are left blank, the tender become invalid.
- 2) The amount in figures in column No.6 shall appear automatically corresponding to the percentage quoted in column No.4 & 5.
- 3) The tenderer is required to quote the percentage only above or below or at par with the estimated cost to cover all the rates of item covered under the respective packages.
- 4) The percentage shall be written in 2 (two) place of decimal.
- 5) If the percentage selection in column No 4 is "At Par", by default the percentage will be considered as "Zero" only. In other words, if "At par" is selected in column No.4, then no need to fill column No. 5