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Name of work: - SPECIAL REPAIR WORKS IN CFQC & TI AT NH-IV, FARIDABAD DURING 2026-27.

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NIT Approved for **Rs. 18,39,351/- (Rupees Eighteen Lakhs Thirty Nine Thousand Three Hundred Fifty One Only)**

**Executive Engineer
Faridabad Division,
CPWD, Faridabad**

NOTICE INVITING TENDER

N.I.T. No.	59/EE/FD/2026-27
Name of work	SPECIAL REPAIR WORKS IN CFQC & TI AT NH-IV, FARIDABAD DURING 2026-27.
Estimated Cost	Rs. 18,39,351/- (Rupees Eighteen Lakhs Thirty Nine Thousand Three Hundred Fifty One Only)
Earnest Money	Rs. 36,787/-
Performance Guarantee	5% of the accepted tendered value or Estimated cost of whichever is higher + Additional performance guarantee (OM NO. DG/Manual-2024/20 dated 27.02.2026)
Security Deposit	2.5% of tendered value
Time Allowed	03 months

Executive Engineer
Faridabad Division
CPWD, Faridabad

Press Notice (e-Tendering)

कार्यपालक अभियन्ता, फरीदाबाद मंडल, के०ला०ने०वि०, फरीदाबाद-121001 के द्वारा भारत के राष्ट्रपति की ओर से निम्नलिखित कार्य के लिए ऑनलाईन दर प्रतिशत निविदा from approved and eligible CPWD enlisted contractors of appropriate class in Building & Roads category से आमन्त्रित की जाती हैं।

नि.आ.सू.स०. **59/EE/FD/2026-27**

कार्य का नाम: **SPECIAL REPAIR WORKS IN CFQC & TI AT NH-IV, FARIDABAD DURING 2026-27.**

अनुमानित लागत: रू०. **Rs. 18,39,351/- (Rupees Eighteen Lakhs Thirty Nine Thousand Three Hundred Fifty One Only)**

धरोहर राशि: — **Rs. 36,787/-**

समापन की अवधि: — **03 months**

निविदा भरने की अन्तिम तिथि एवं समय: **17.09.2026 को 15:00** बजे तक।

Tender forms and other details can be obtained from the website <https://etender.cpwd.gov.in> or www.cpwd.gov.in

Note: Not to be printed below this line.

**Executive Engineer
Faridabad Division
CPWD Faridabad**

**INFORMATION AND INSTRUCTIONS FOR BIDDERS FOR e-TENDERING FORMING
PART OF BID DOCUMENT**

(Applicable for inviting open tenders)

The Executive Engineer, Faridabad Division, CPWD, Faridabad on behalf of President of India invites **online Percentage rate tenders** for the following work from approved and eligible CPWD enlisted contractors of appropriate class in Building & Roads category for the following work.

S.No.	NIT No.	Name of work & Location	Estimated Cost put to bid	Earnest Money	Period of Completion	Last date & time of submission of bid, Original EMD, copy of receipt of deposition of original EMD and other Document as specified in the bid document	Time & date of opening of tender
1	2	3	4	5	6	7	8
1	59/EE/FD/2026-27	SPECIAL REPAIR WORKS IN CFQC & TI AT NH-IV, FARIDABAD DURING 2026-27.	Rs.18,39,351/-	Rs. 36,787/-	03 Months	Up to 15:00 PM on 17.09.2026	AT 15:30 P.M. On 17.09.2026

- 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.
- Information and Instructions for bidders posted on website shall form part of tender document.
- 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 and downloaded from website <https://etender.cpwd.gov.in> or www.cpwd.gov.in free of cost.
- But the bid can only be submitted after depositing of original EMD either in the office of Executive Engineer inviting tender or division office of any Executive Engineer, CPWD within the period of tenders submission and uploading the mandatory scanned documents such as **Insurance Surety Bonds, Account Payee Demand Draft or Banker's Cheque or Fixed Deposit Receipts or / and Bank Guarantee (for balance amount as prescribed) from any of the Commercial Bank towards EMD in favour of Executive Engineer, Faridabad Division, CPWD, Faridabad as mentioned in NIT**, receipt for deposition of original EMD to division office of any Executive Engineer (including NIT issuing EE/AE), CPWD and other documents as specified.
- Those contractors not registered on the website mentioned above, are required to get registered beforehand. If needed they can be imparted training on online bidding process as per details available on the website. Those contractors who are not registered or have not updated their profile on the website mentioned above, are required to get registered /update their profile beforehand. The necessary training materials including the videos with step to step process are available download section of <https://etender.cpwd.gov.in>.
- The intending bidder must have valid class-III digital signature certificate with the encryption key (combo type) to perform any operations / transactions on the e-tendering portal/ website

and the bidder should download and install the eMsigner on their system as per instructions available on download section of <https://etender.cpwd.gov.in>.

7. On opening date, the contractor can login and see the tender opening process. After opening of tenders he will receive the competitor tender sheets.
8. Contractor can upload documents in the form of JPG format and PDF format.
9. Contractor must ensure to quote rate of each item. The column meant for quoting rate in figures appears in **Yellow** colour and the moment rate is entered, it turns sky blue. 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". 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).

However, If a tenderer quotes nil rates against each item in the 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. List of documents to be scanned and uploaded within the period of bid submission.

- i. Insurance Surety Bond, Demand Draft/ Account Payee Banker's Cheque / FDR/ Bank Guarantee of any commercial Bank against EMD
- ii. Enlistment Order of Contractors
- iii. Receipt for deposition of original EMD to division office of any EE, CPWD in prescribed Proforma along with scanned copy of original EMD
- iv. GST registration Certificate *as applicable*, if already obtained by the bidder.
If the bidder has not obtained GST registration *as applicable*, then he shall 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 CPWD, whichever is earlier, failing which I/We shall be responsible for any delay in payments which will be due towards me/us on a/c of the work executed and/or for any action taken by CPWD or GST department in this regard."
- v. Bidder's Pan Card.
- vi. EPFO, ESIC, BOCW Welfare Board, PF Nos., labour License if available or given undertaking he should submitted the required document along with P.G. The letter of award shall be issued to lowest bidder only on receipt of copy of Labour license, Registration with EPFO, ESIC, BOCW Welfare Board and PF Nos. or submitting the proof of applying for these thereof along with P.G.
- vii. Affidavit on blacklisting /debarment as per form 'G' "Page no. 12".
Note: "Affidavit to be furnished on a 'Non-judicial' stamp paper of Rs. 100/- and it should not be older than the date of publication of NIT"
- viii. "The Email ID and Contact Number of the office where the EMD is deposited should be clearly mentioned, failing which the bid shall be rejected."
- ix. Declaration form for Contact detail "Page No. 12".
- x. Any other document as specified in the Bid document.

**Executive Engineer,
Faridabad Division,
CPWD, Faridabad.**

RECEIPT OF DEPOSITION OF ORIGINAL EMD

Receipt No.....#..... /date.....#.....	
Name of Work: SPECIAL REPAIR WORKS IN CFQC & TI AT NH-IV, FARIDABAD DURING 2026-27.	
1. NIT No.	: 59/EE/FD/2026-27
2. Estimated Cost:	Rs. 18,39,351/-
3. Amount of Earnest Money Deposit	: Rs. 36,787/-
4. Last date of submission of Bid	: 17.09.2026
1. Name of Contractor : #..... 2. Form of EMD #..... 3. Amount of Earnest Money Deposited #..... 4. Date of submission of EMD #..... 5. Email ID & Contact Number of the office, where EMD is deposited.....	
Signature, Name and Designation of EMD receiving officer (EE/AE(P)/AE/AAO) with Officer stamp	

(# to be filled by EMD receiving EE/AE/AAO as the case may be)

CPWD-6 FOR e-Tendering

The percentage rate tender are invited on behalf of President of India from approved and eligible CPWD Enlisted Contractors of appropriate class in Building & Roads category for the work of:- **SPECIAL REPAIR WORKS IN CFQC & TI AT NH-IV, FARIDABAD DURING 2026-27.**

The work is estimated to cost **Rs. 18,39,351/- (Rupees Eighteen Lakhs Thirty Nine Thousand Three Hundred Fifty One Only)**

This estimate, however, is given merely as a rough guide.

1. Agreement shall be drawn with the successful bidder on prescribed Form No. **CPWD 7/8** which is available as a Govt. of India Publication and also available on web site. <https://etender.cpwd.gov.in> or <https://eprocure.gov.in> Bidder shall quote his rates i/c GST and other applicable taxes as per various terms and conditions of the said form which will form part of the agreement.
2. The time allowed for carrying out the work will be **03 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 tender documents.
3.
 - (i) The site for the work is available.
 - (ii) The architectural and structural drawings shall be made available in phased manner, as per requirement of the same as per approved programme of completion submitted by the contractor after award of the work.
4. 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 Form can be seen on website <https://etender.cpwd.gov.in> free of cost.
5. After submission of the bid the contractor can resubmit revised bid any number of times but before last time and date of submission of tender as notified.
6. 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 tender as notified.
7. Earnest Money in the form of **Insurance Surety Bonds, Account Payee Demand Draft or Banker's Cheque or Fixed Deposit Receipts or / and Bank Guarantee (for balance amount as prescribed) from any of the Commercial Bank towards EMD in favour of Executive Engineer, Faridabad Central Division-I, CPWD, Faridabad** 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 with in the period of bid submission. (The EMD document shall only be issued from the place in which the office of receiving division office is situated). The EMD receiving Executive Engineer shall issue a receipt of deposition of earnest money deposit to the bidder in a prescribed format (enclosed) uploaded by tender inviting EE in the NIT.

This receipt shall also be uploaded to thee-tendering website by the intending bidder upto the specified bid submission date and time.

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 in shape prescribed

above, and balance may be deposited in shape of Bank Guarantee of any **Commercial bank having validity for 6 Months 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 earliest. 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 for e-tender 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 press notice shall have to be submitted by the lowest bidder only within 5 days physically in the office of tender opening authority.

Online bid documents submitted by intending bidders shall be opened only of those bidders, **whose EMD deposited with any division office of CPWD** and other documents scanned and uploaded are found in order.

The bid submitted shall be opened at **15:30 P.M. on 17.09.2026**

8. The bid submitted shall become invalid if:
 - (i) The bidder is found ineligible.
 - (ii) **The bidder does not deposit original EMD with division office of any Executive engineer, CPWD.**
The bidder does not upload all the documents (including GST registration) as stipulated in the bid document **including the copy of receipt for deposition of original EMD.**
 - (iii) 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 bidder** in the office of bid opening authority.
 - (iv) 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.
9. The contractor whose bid is accepted, will be required to furnish **performance guarantee at specified percentage of the tendered amount or estimated cost whichever is higher and Additional Performance Guarantee as office OM NO. DG/Manual-2024/20 dated 27.02.2026 at Page No. 23 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 or Banker's Cheque or Fixed Deposit Receipts or / and Bank Guarantee (for balance amount as prescribed) from any of the Commercial Bank** 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 within the period specified in Schedule F.

The description of the work is as follows: **SPECIAL REPAIR WORKS IN CFQC & TI AT NH-IV, FARIDABAD DURING 2026-27.**

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 tender. 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.

10. 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 tenderer shall be summarily rejected.
11. 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 to rejection.
12. The competent authority on behalf of President of India reserves to himself the right of accepting the whole or any part of the tender and the bidder shall be bound to perform the same at the rate quoted.
13. The contractor shall not be permitted to bid for works in the CPWD Circle (Division in case of contractors of Horticulture/Nursery category) responsible for award and execution of contracts, in which his near relative is posted a Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any gazetted officer in the Central Public Works Department or in the Ministry of Urban Development any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Department.
14. 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 previous 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 tender or engagement in the contractor's service.
15. **The bid for the works shall remain open for acceptance for a period of Thirty days from the date of opening of tenders.** If any tenderer withdraws his tender before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the tender which are not acceptable to the department, then the Government shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the tenderer shall not be allowed to participate in the retendering process of the work.

16. 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 7 days from the stipulated date of start of the work, sign the contract consisting of:-
- (a) 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.
 - (b) Standard C.P.W.D. Form 7 and amended upto last date of receipt of tenders.

20. FOR COMPOSITE TENDERS

- 20.1.1 The Executive Engineer in charge of the major component will call tenders for the composite work. The cost of bid document and Earnest Money will be fixed with respect to the combined estimated cost put to tender for the composite tender.
- 20.1.2 The bid document will include following three components:
 Part A:- CPWD-6, CPWD-7 including schedule A to F for major component of the work, standard General Condition of Contract for CPWD 2023 for **maintenance works** as amended/modified upto last date of submission of tender.
 Part B:- General/specific conditions, specifications and schedule of quantities applicable to major component of the work.
- 20.1.3 The bidder must associate with himself, with agencies as per NIT conditions.
- 20.1.4 The eligible bidders shall quote rates for all items of major component as well as for all items of minor component of work.
- 20.1.5 After acceptance of the tender by component 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 in to 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/DDH in charge of minor components. One such signed set of agreement shall be handed over to EE/DDH in charge of minor component. EE of major component will operate Part A and Part B of the agreement. EE/DDH in charge of minor component(s) shall operate Part C along with Part A of the agreement.
- 20.1.6 Entire work under the scope of composite tender including major and all components shall be executed under one agreement.
- 20.1.7 Security Deposit will be worked out separately for each component corresponding to the estimated cost of the respective component of works.
- 20.1.8 The main contractor has to associate agency(s) for specialized component(s) conforming to eligibility criteria as defined in the tender 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 of relevant component(s).
- 20.1.9 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 of relevant specialized component(s). 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.
- 20.1.10 The main contractor has to enter into MOU with the contractors associated by him. Copy of such MOU shall be submitted to EE/DDH in charge of each relevant 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 MOU/agreement with the new contractor associated by him.

- 20.1.11 Running payment for the major component shall be made by EE of major discipline to main contractor. Running payment for minor components shall be made by the Engineer-in-charge of the discipline of minor component directly to the main contractor.
- 20.12A The composite work shall be treated as complete when all the components of the works are complete. The completion certificate of the composite work shall be recorded by Engineer-in-charge of major component after record of completion certificate of all other components.
- 20.12B** Final bill of whole work shall be finalized and paid by the EE of major component. Engineer(s) in charge of minor component(s) will prepare and pass the final bill for their component of work and pass on the same to the EE of major component for including in the final bill for composite contract.
21. **The intending bidders are required to update their profile in CPWD e-tender portal and to upload their bids well in advance of last date of submission of tender. Any issue related to updating profile / uploading tender can be resolved through the concerned Executive Engineer/ Assistant Engineer (Phone No 0129-2985663 e-mail id fbdeefcdi.cpwd@gov.in or ERP help line nO- 18001803286 or e-mail id cpwd.support@techmahindra.com .The e-tendering bidders are also advised not to wait to raise any issue till the last date of submission of bid in their own interest.**

**Executive Engineer
Faridabad Division,
CPWD, Faridabad,**

E-Stamp Certificate No.

Name of Work :- SPECIAL REPAIR WORKS IN CFQC & TI AT NH-IV, FARIDABAD DURING 2026-27.

NIT No. 59/EE/FD/2026-27

FORM "G"

PROFORMA OF AFFIDAVIT FOR NON - BLACK LISTING

I/we undertake and confirm that our firm/partnership firm has not been blacklisted by any state/Central Departments/PSUs/Autonomous bodies during the last 7 years of its operations. Further that, if such information comes to the notice of the department, then I/we shall be debarred for bidding in CPWD in future forever. Also, if such information comes to the notice of department on any day before date of start of work, the Engineer-in-charge shall be free to cancel the agreement and to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee (Scanned copy of this notarized affidavit to be uploaded at the time of submission of bid)

Note: "Affidavit to be furnished on a 'Non-judicial' stamp paper of Rs. 100/- and it should not be older than the date of publication of NIT"

Signature of Bidder(s) or an authorized

Officer of the firm with stamp

Signature of Notary with seal

Contact Details

S. No.	Description	:	Details
1.	NAME OF THE AGENCY	:	
2.	CORRESPONDENCE ADDRESS	:	
3.	NAME OF THE AUTHORIZED PERSON OF THE AGENCY	:	
4.	OFFICIAL CONTACT NUMBER ON WHICH CONTRACTOR IS AVAILABLE FOR THE DEPARTMENT	:	
5.	OFFICIAL E-MAIL FOR CORRESPONDENCE	:	

Integrity Pact

To,

M/s
.....
.....

Sub: NIT No. 59/EE/FD/2026-27 for the Work of:- SPECIAL REPAIR WORKS IN CFQC & TI AT NH-IV, FARIDABAD DURING 2026-27.

Dear Sir,

It is here by declared that CPWD is committed to follow the principle of transparency, equity and competitiveness in public procurement.

The subject Notice Inviting Tender (NIT) is an invitation to offer made on the condition that the Bidder will sign the integrity Agreement, which is an integral part of tender/bid documents, failing which the tenderer/bidder will stand disqualified from the tendering process and the bid of the bidder would be summarily rejected.

This declaration shall form part and parcel of the Integrity Agreement and signing of the same shall be deemed as acceptance and signing of the Integrity Agreement on behalf of the CPWD.

Yours faithfully

Executive Engineer

To,

The Executive Engineer,
Faridabad Division,
CPWD, NH-IV, Faridabad,
Haryana-121001

Subject:- SPECIAL REPAIR WORKS IN CFQC & TI AT NH-IV, FARIDABAD DURING 2026-27.

Dear Sir,

I/We acknowledge that CPWD is committed to follow the principles thereof as enumerated in the Integrity Agreement enclosed with the tender/bid document.

I/We agree that the Notice Inviting Tender (NIT) is an invitation to offer made on the condition that I/We will sign the enclosed integrity Agreement, which is an integral part of tender documents, failing which I/We will stand disqualified from the tendering process. I/We acknowledge that THE MAKING OF THE BID SHALL BE REGARDED AS AN UNCONDITIONAL AND ABSOLUTE ACCEPTANCE of this condition of the NIT.

I/We confirm acceptance and compliance with the Integrity Agreement in letter and spirit and further agree that execution of the said Integrity Agreement shall be separate and distinct from the main contract, which will come into existence when tender/bid is finally accepted by CPWD. I/We acknowledge and accept the duration of the Integrity Agreement, which shall be in the line with Article 1 of the enclosed Integrity Agreement.

I/We acknowledge that in the event of my/our failure to sign and accept the Integrity Agreement, while submitting the tender/bid, CPWD shall have unqualified, absolute and unfettered right to disqualify the tenderer/bidder and reject the tender/bid in accordance with terms and conditions of the tender/bid.

Yours faithfully

(Duly authorized signatory of the Bidder)

TO BE SIGNED BY THE BIDDER AND SAME SIGNATORY COMPETENT / AUTHORIZED TO SIGN
THE RELEVANT CONTRACT ON BEHALF OF CPWD.
INTEGRITY AGREEMENT

This Integrity Agreement is made at*..... on this*..... day of*.....
 20..*.....

BETWEEN

President of India represented through Executive Engineer (E), FED, CPWD, NH-IV, Faridabad, Haryana (Hereinafter referred as the '**Principal/Owner**', which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

AND

(Name and Address of the Individual/firm/Company)

through _____ (Hereinafter referred to as
 the "**Bidder**/

(Details of duly authorized signatory)

Contractor" and which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

Preamble

WHEREAS the Principal / Owner has floated the Tender (**NIT No.59/EE/FD/2026-27**) hereinafter referred to as "**Tender/Bid**") and intends to award, under laid down organizational procedure, contract "**SPECIAL REPAIR WORKS IN CFQC & TI AT NH-IV, FARIDABAD DURING 2026-27.**"

Herein after referred to as the "**Contract**".

AND WHEREAS the Principal/Owner values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relation with its Bidder(s) and Contractor(s).

AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Integrity Agreement (hereinafter referred to as "**Integrity Pact**" or "**Pact**"), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Bid documents and Contract between the parties.

NOW, Therefore, in consideration of mutual covenants contained in this Pact, the parties hereby agree as follows and this Pact witnesses as under:

Article 1: Commitment of the Principal/Owner

- 1) The Principal/Owner commits itself to take all measures necessary to prevent corruption and to observe the following principles:
 - a) No employee of the Principal/Owner, personally or through any of his/her family members, will in connection with the Tender, or the execution of the Contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
 - (b) The Principal/Owner will, during the Tender process, treat all Bidder(s) with equity and reason. The Principal/Owner will, in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/additional information through which the Bidder(s) could obtain an advantage in relation to the Tender process or the Contract execution.

- c) The Principal/Owner shall end favour to exclude from the Tender process any person, whose conduct in the past has been of biased nature.
- 2) If the Principal/Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code (IPC)/Prevention of Corruption Act, 1988 (PC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Principal/Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

Article 2: Commitment of the Bidder(s)/Contractor(s)

- 1) It is required that each Bidder/Contractor (including their respective officers, employees and agents) adhere to the highest ethical standards, and report to the Government / Department all suspected acts of **fraud or corruption or Coercion or Collusion** of which it has knowledge or becomes aware, during the tendering process and throughout the negotiation or award of a contract.
- 2) The Bidder(s)/Contractor(s) commits himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the Tender process and during the Contract execution:
- a) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal/Owner's employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the Tender process or during the execution of the Contract.
- b) The Bidder(s)/Contractor(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to cartelize in the bidding process.
- c) The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act. Further the Bidder(s)/Contractor(s) will not use improperly, (for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Principal/Owner as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- d) The Bidder(s)/Contractor(s) of foreign origin shall disclose the names and addresses of agents/representatives in India, if any. Similarly Bidder(s)/Contractor(s) of Indian Nationality shall disclose names and addresses of foreign agents/representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both. Further, in cases where an agent participate in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of another manufacturer along with the first manufacturer in a subsequent/parallel tender for the same item.
- e) The Bidder(s)/Contractor(s) will, when presenting his bid, disclose (with each tender as per Performa enclosed) any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.
- 3) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- 4) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice means a willful misrepresentation or omission of facts or

submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Government interests.

5) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his/ her reputation or property to influence their participation in the tendering process).

Article 3: Consequences of Breach

Without prejudice to any rights that may be available to the Principal/Owner under law or the Contract or its established policies and laid down procedures, the Principal/Owner shall have the following rights in case of breach of this Integrity Pact by the Bidder(s)/Contractor(s) and the Bidder/ Contractor accepts and undertakes to respect and uphold the Principal/Owner's absolute right:

- 1) If the Bidder(s)/Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article 2 above or in any other form, such as to put his reliability or credibility in question, the Principal/Owner after giving 14 days notice to the contractor shall have powers to disqualify the Bidder(s)/Contractor(s) from the Tender process or terminate/determine the Contract, if already executed or exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Principal/Owner. **Such exclusion may be forever or for a limited period as decided by the Principal/Owner.**
- 2) **Forfeiture of EMD/Performance Guarantee/Security Deposit:** If the Principal/Owner has disqualified the Bidder(s) from the Tender process prior to the award of the Contract or terminated/determined the Contract or has accrued the right to terminate/determine the Contract according to Article 3(1), the Principal/Owner apart from exercising any legal rights that may have accrued to the Principal/Owner, may in its considered opinion forfeit the entire amount of Earnest Money Deposit, Performance Guarantee and Security Deposit of the Bidder/Contractor.
- 2) **Criminal Liability:** If the Principal/Owner obtains knowledge of conduct of a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes corruption within the meaning of Indian Penal code (IPC)/Prevention of Corruption Act, or if the Principal/Owner has substantive suspicion in this regard, the Principal/Owner will inform the same to law enforcing agencies for further investigation.

Article 4: Previous Transgression

- 1) The Bidder declares that no previous transgressions occurred in the last 5 years with any other Company in any country confirming to the anticorruption approach or with Central Government or State Government or any other Central/State Public Sector Enterprises in India that could justify his exclusion from the Tender process.
- 2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the Tender process or action can be taken for banning of business dealings/ holiday listing of the Bidder/Contractor as deemed fit by the Principal/ Owner.

3) If the Bidder/Contractor can prove that he has resorted / recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal/Owner may, at its own discretion, revoke the exclusion prematurely.

Article 5: Equal Treatment of all Bidders/Contractors/Subcontractors

- 1) The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder/Contractor shall be responsible for any violation(s) of the principles laid down in this agreement/Pact by any of its Subcontractors/sub-vendors.
- 2) The Principal/Owner will enter into Pacts on identical terms as this one with all Bidders and Contractors.
- 3) The Principal/Owner will disqualify Bidders, who do not submit, the duly signed Pact between the Principal/Owner and the bidder, along with the Tender or violate its provisions at any stage of the Tender process, from the Tender process.

Article 6- Duration of the Pact

This Pact begins when both the parties have legally signed it. It expires for the Contractor/Vendor 2 Months after the completion of work under the contract or till the continuation of defect liability period, whichever is more and for all other bidders, till the Contract has been awarded.

If any claim is made/lodged during the time, the same shall be binding and continue to be valid despite the lapse of this Pact as specified above, unless it is discharged/ determined by the Competent Authority, CPWD.

Article 7- Other Provisions

- 1) This Pact is subject to Indian Law, place of performance and jurisdiction is the **Headquarters of the Division** of the Principal/Owner, who has floated the Tender.
- 2) Changes and supplements need to be made in writing. Side agreements have not been made.
- 3) If the Contractor is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a Company, the Pact must be signed by a representative duly authorized by board resolution.
- 4) Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- 5) It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Agreement / Pact, any action taken by the Owner/Principal in accordance with this **Integrity Agreement/ Pact or interpretation thereof shall not be subject to arbitration.**

Article 8- LEGAL AND PRIOR RIGHTS

All rights and remedies of the parties hereto shall be in addition to all the other legal rights and remedies belonging to such parties under the Contract and/or law and the same shall be deemed to be cumulative and not alternative to such legal rights and remedies aforesaid. For the sake of brevity, both the Parties agree that this Integrity Pact will have precedence over the Tender/Contact documents with regard any of the provisions covered under this Integrity Pact.

IN WITNESS WHEREOF the parties have signed and executed this Integrity Pact at the place and date first above mentioned in the presence of following witnesses:

The Executive Engineer,
Faridabad Division,
CPWD, NH-IV, Faridabad,
Haryana.

(For and on behalf of Principal/Owner)

.....
(For and on behalf of Bidder/Contractor)

WITNESSES:

1.....

(Signature, name and address)

2.....

(Signature, name and address)

Place

GOVERNMENT OF INDIA

CENTRAL PUBLIC WORKS DEPARTMENT

STATE	HARYANA		
BRANCH	B & R	DIVISION	FD
CIRCLE	SE (FARIDABAD)	SUB-DIVISION	I/II/III

Percentage Rate Tender & Contract for Works

1. Tender for the work of :- **SPECIAL REPAIR WORKS IN CFQC & TI AT NH-IV, FARIDABAD DURING 2026-27.**
 - (i) To be submitted online by 15:00 PM (time) on **17.09.2026** (date) to **Executive Engineer, Faridabad Division, CPWD, Faridabad.**
 - (ii) To be opened online in presence of bidders who may be present at 15.30 PM on **17.09.2026** in the office of **Executive Engineer, Faridabad Division, CPWD, Faridabad.**

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 bid 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 respects with the specifications, designs, drawings 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 respects in accordance with, such conditions so far as applicable.

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

A sum of **Rs. 36,787/-** is hereby forwarded in Insurance Surety Bonds, Account Payee Demand Draft or Banker's Cheque or Fixed Deposit Receipts or / and Bank Guarantee (for balance amount as prescribed) from any of the Commercial Bank as earnest money. 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 his successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said earnest money and the performance guarantee absolutely and to carry out such deviations as may be ordered, upto maximum of the percentage mentioned in Schedule 'F' and 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 bid form.

Further, I/We agree that in case of forfeiture of Earnest Money or both Earnest Money and performance guarantee as aforesaid, I / We shall be debarred for participation in the re-bidding process of the work.

I/We hereby declare that I/We shall treat the bid documents drawings and other records connected with the work as secret/confidential documents and shall not communicate information / derived therefrom to any person other than a person to whom I/We, am/are authorised to communicate the same or use the information in any manner prejudicial to the safety of the state.

Dated**

Signature of the Contractor

Postal Address -----**

Telephone No.-----**

Witness:-----**

Address:-----**

Occupation:-----**

FAX -----**

E-MAIL -----**

**** To be filled by Contractor**

ACCEPTANCE

The above bid (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 the President of India

Signature.....*

Dated*

Designation.....*

-*- To be filled by E.E.

केन्द्रीय लोक निर्माण विभाग

कार्यालय झापन

No. DG/Manual-2024/20

ISSUED BY THE AUTHORITY OF DIRECTOR GENERAL, CPWD

Vidyut Bhawan, New Delhi

Dated: 27.02.2026

Sub: Modification in Para 5.2 for CPWD Works Manual 2024.

Following modification is made in Para no. 5.2 for CPWD Works Manual 2024:

Existing Provision	Modified Provision
5.2 Performance Guarantee	5.2 Performance Guarantee
Sl. No. 1	No Change
2. PG shall be 5% of the contract amount or as prescribed from time to time to be submitted in the form as prescribed in GCC. Performance Guarantee shall remain valid for a minimum period of sixty days beyond the date of completion of all contractual obligations as per GCC. In case of contracts where supplementary agreement is drawn, the fresh PG shall be obtained from the contractor @ 5% of the amount of the supplementary agreement or as prescribed from time to time. The PG received against the original work shall be released as per contract conditions.	2. PG shall be 5% of the Estimated cost put to tender (ECPT) or contract amount whichever is higher , or as prescribed from time to time, to be submitted in the form as prescribed in GCC. Performance Guarantee shall remain valid for a minimum period of six months beyond the date of completion of all contractual obligations as per GCC. In case of contracts where supplementary agreement is drawn, the fresh PG shall be obtained from the contractor @ 5% of the amount of the supplementary agreement or as prescribed from time to time. The PG received against the original work shall be released as per contract conditions.
Sl. No. 3	No Change
4. No provision	4. A bid will be treated as abnormally low if the quoted bid amount is lesser than 80% of the estimated cost put to tender.
5. No provision	5. Requirement of Additional Performance Guarantee (APG) : In case of abnormally low bids as defined above, the bidder shall be required to submit Additional Performance Guarantee (APG) in addition to the Standard Performance Guarantee (PG). The amount of Additional Performance Guarantee (APG) shall be equivalent to the difference between the 80% amount of ECPT and quoted amount. (e.g. if ECPT is A and quoted amount is 0.7A then the amount of APG shall be

12/2/26 B. Jindal
EE (Contract)

	0.8A – 0.7A). The Additional Performance Guarantee (APG) shall be in the prescribed format of Performance Guarantee and has to be submitted within the time frame prescribed for submission of Performance Guarantee. The other terms and conditions of release etc. of APG shall be same as that of PG.
--	--

This is issues with the approval of DG CPWD.


 ((चन्द्र पाल))
 अधीक्षण अभियंता (सी.एंड.एम.) (सी. एंड.एम.)
 Chandar Pal, SE (C&M)

Issued from file No. CSQ/CM/16(1)/2026 e-file 9212995 (DFA/ 9365789)

केलोनवि तथा लोनवि दिल्ली के सभी अधिकारियों को आवश्यक सूचना एवं कार्यवाही हेतु। (केलोनवि वेबसाईट के माध्यम से)


 21/1/26

D.P. Jindal
EE (Contract)

PROFORMA OF SCHEDULES

SCHEDULE 'A'

Schedule of quantities, enclosed on separate sheet on page no. **As Enclosed.**

SCHEDULE 'D'

Extra schedule for specific requirements / documents for the work, if any:-

1. General conditions & Additional conditions
2. Special Conditions
3. Particular Specifications
4. Guarantee Bonds

SCHEDULE 'E'

Reference to General Conditions of contract: -

General Conditions of Contract 2023 for Maintenance works for CPWD works (amended with amendments issued up to previous day of the last date of submission of the tender).

Name of work:

SPECIAL REPAIR WORKS IN CFQC & TI AT NH-IV, FARIDABAD DURING 2026-27.

Estimated cost of work:-

Rs. 18,39,351/-

(i) Earnest money:-

Rs. 36,787/-

(ii) Performance Guarantee:-

5% of the accepted tendered value or Estimated cost of whichever is higher + Additional performance guarantee (OM NO. DG/Manual-2024/20 dated 27.02.2026)

(iii) Security deposit :-

2.5% of tendered value

SCHEDULE 'F'

General Rules & Directions: -

Officer inviting tender:

Executive Engineer, Faridabad Division, CPWD, Faridabad

Definitions:

2 (v) Engineer-in-Charge

Executive Engineer, Faridabad Division, CPWD, Faridabad

2 (viii) Accepting Authority

Executive Engineer, Faridabad Division, CPWD, Faridabad

2 (x) Percentage on cost of materials and labour to cover all overheads and profits.

15%

2 (xi) Standard schedule of Rates

Delhi Schedule of Rates-2023 (amended with amendments issued up to previous day of the last date of submission of the tender).

2 (xii) Department

Central Public Works Department (CPWD)

9 (ii) Standard CPWD contract form

General Conditions of Contract-2023 (Maintenance Works) and **CPWD Form-7 (Percentage Rate Tender & Contract for Works)** as amended / modified up to the last date of submission of Tenders**Clause 1**

(i) Time allowed for submission of Performance Guarantee, Programme Chart (Time & 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.

07 days

(ii) Maximum allowable extension with late fee @ 0.1% per day of Performance Guarantee amount beyond the period provided in (i) above.

03 days**Clause 2**

Authority for fixing compensation under clause 2.

SE, Faridabad.**Clause 2A**

Whether Clause 2A shall be applicable

No**Clause 5**

Number of days from the date of issue of letter of acceptance for reckoning date of start mile stone (S) as per table given below

10 Days**TABLE OF MILE STONES**

S. No.	Description of Milestone (Physical/Financial)	Time allowed (From Stipulated Date of Start)	Amount to be With-held in Case of Non- Achievement of Milestone
-----NIL-----			

Time allowed for execution of work

03 Months

Authority to decide:	
1. Extension of time	Executive Engineer, Faridabad Division, CPWD, Faridabad.
2. Rescheduling of mile stones	Superintending Engineer (Civil), Faridabad, CPWD or successor thereof
3. Shifting of date of start in case of delay in handing over of site.	

PROFORMA OF SCHEDULES Clause 5 Schedule of handing over of site

Part	Portion of site	Description	Time Period for handing over reckoned from date of issue of letter of intent.
Part-A	Portion without any hindrance	Full site is available without any hindrance.	7 Days
Part-B	Portions with encumbrances		
Part-C	Portions dependent on work of other agencies		

Clause 5A

Applicable

Clause- 6 :

Applicable

Mode of measurement: Computerised Measurement Book (EMB/CMB) : 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.

06.00 Lakhs

Clause 7A

Whether Clause 7A shall be applicable

Yes, 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.

Clause 8A

Authority to decide compensation on account if contractor fails to submit completion plan

Engineer – in –charge

Clause 10A

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

Equipment for conducting necessary Site Tests as per requirements of Specifications and quality assurance plan shall be provided and installed at site in the well-furnished Site Laboratory by the contractor at his own cost.

Clause 10 – B(ii)

Whether clause 10-B(ii) shall be applicable.

No

Clause 10C - Component of labour expressed as percent of value of work = 25%

Clause 10CC

Clause 10CC to be applicable in contracts with
 Stipulated period of completion exceeding the period Not Applicable
 Shown in next column.

Schedule of component of other Materials, Labour, POL etc. for price escalation.

Component of civil (Except materials covered under clause 10 CA)/ Electrical construction materials expressed as percent of total value of work.	Xm	} Not Applicable
Component of labour expressed as percent of total value of work.	Y	
Component of POL expressed as percent of total value of work.	Z	

Clause 11

Specifications to be followed for execution of work **CPWD Specification for works-2019 Vol I & II with up to date correction slips issued till last date of submission of tender and manufacturer specifications.**

Clause 12	
Authority to decide deviation upto 1.5 times of tendered amount :	SE Faridabad.
Deviation Limit	No Limit
Clause 16	
Competent Authority for deciding reduced rates.	SE Faridabad.

Clause 18

List of mandatory machinery tools and plants to be deployed by the contractor at site of work. **Not Applicable**

Clause 19 C..... authority to decide penalty for each default **Engineer- in-charge.**

Clause 19 D..... authority to decide penalty for each default **Engineer- in-charge.**

Clause 19 Gauthority to decide penalty for each default **Engineer- in-charge.**

Clause 19 Kauthority to decide penalty for each default **Engineer- in-charge.**

Clause 25

Conciliator – **SDG, Chandigarh**
 Arbitrator Appointing Authority– **SE Faridabad**
 Place of Arbitration **Delhi NCR**

Clause 32**“Requirement of Technical Representative (s) and Recovery Rates”**

Sl. No.	Requirement of Technical		Minimum Experience (Years)	Designation Technical Staff	Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of clause 36 (i)	
1	Qualification	Number of Major + Minor component			Figures (in Rs.)	Words
	Graduate Engineer Or Diploma Engineer	1	2 or 5 respectively	Project Planning /Quality/ Billing Engineer	15,000/- Per Months per person	(Rupees Fifteen Thousand only) Per Months per person

Assistant Engineers retired from Government services that are holding Diploma will be treated at par with Graduate Engineers. Diploma holder with minimum 10 years relevant experience with a reputed construction company can be treated at par with graduate Engineers for the purpose of such deployment subject to the condition that such diploma holder should not exceed 50% of requirement of degree engineers.

Clause 38

- (i) (a) Schedule/statement for determining theoretical quantity of cement & bitumen on the basis of **Delhi Schedule of Rates 2023** printed by CPWD with upto date correction slips till last date of submission of tender.
- (ii) Variations permissible on theoretical quantities:
 - a) Cement
 - (i) For works with estimated cost put 3% plus/minus to tender not more than Rs. 25 lakhs
 - (ii) For works with estimated cost put to 2% plus/minus tender more than Rs 25 lakh
 - b) Bitumen for all works. 2.5% on plus side only & nil on minus side
 - c) Steel Reinforcement and structural steel 2% plus/minus sections for each diameter, section and category.
 - d) All other materials. Nil

On non- Judicial stamp paper of minimum Rs. 100

(Guarantee offered by Bank to CPWD in connection with the execution of contracts)

**FORM OF BANK GUARANTEE FOR EARNEST MONEY DEPOSIT/PERFORMANCE
GUARANTEE/SECURITY DEPOSIT/MOBILISATION ADVANCE**

- Whereas the Executive Engineer (name of division) CPWD 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 an irrevocable Bank Guarantee for Rs. (Rupees only) valid up to (date)*..... as ***Earnest Money Deposit*** from (name and address of the contractor) (herein 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), CPWD on behalf of the President of India (hereinafter called "The Government") has entered into an agreement bearing number with (name 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 up to (date)..... as ***Performance Guarantee / Security Deposit / Mobilization Advance*** from the said Contractor for compliance of his obligations in accordance with the terms and conditions of the agreement.

- We, (indicate the name of the bank) (herein after referred to as "the Bank"), hereby undertake to pay to the Government an amount not exceeding Rs. (Rupees only) on demand by the Government within 10 days of the demand.
- We, (indicate the name of the bank), do here by 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 to meet 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 (Rupees only).
- We, (indicate the name of the Bank), further undertake to pay the Government any money so demanded notwithstanding any dispute or disputes raised 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 so made 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
- 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.
- 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 tounless 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	Authorized signatory
Name and address	Name
	Designation
1. Signature	Staff code no.
Name and address	Bank seal

*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 / Performance Guarantee / Security Deposit / Mobilization Advance, as the case may be.

**UNDERTAKING ON STRUCTURAL STABILITY AND SOUNDNESS OF ALREADY
COMPLETED BUILDINGS AND INFRASTRUCTURE PROJECTS**

I/we undertake and confirm that any building / infrastructure constructed by our firm /partnership firm/ company has not suffered any failure, making it unfit for intended use, either due to structural design and defects or due to use of sub-standard materials or execution of sub-standard work, poor workmanship or any other reason during the last 25 (twenty five) years.

I/we, further, undertake that if such information comes to the notice of CPWD, then Engineer-in-Charge shall be free to terminate the bid/agreement and to forfeit the entire amount of earnest money deposit, performance guarantee and security deposits.

I/we, also undertake that in addition to above, the Engineer-in-Charge shall be free to debar us forever from tendering in CPWD.

The decision of Engineer-in-Charge or any higher authority shall be final and binding.

Signature of
Notary with seal

Signature of bidder or an authorized person of the
firm with stamp

GENERAL CONDITIONS

- 1.0** The work has to be carried out at **NH-IV, Faridabad.**
- 1.1** The working general shall be carried out in accordance with the CPWD Specifications 2019 **Vol. I to II** (corrected upto the last date of submission/uploading of bid) here in after referred as CPWD Specifications.
- 1.2** Unless otherwise provided in the Specifications, the amount tendered by the contractor shall be all inclusive and shall apply to all heights, lifts, leads and depths of the work and nothing extra shall be payable to him on account of the same.
- 2.0** The work in general shall be carried out in accordance with the CPWD Specifications 2019 Vol. I & II with up-to-date correction slips.
- 3.0** The order of preference in case of any discrepancy as indicated in condition no. 8.1 under “Conditions of Contract” given in the Standard CPWD Contract form may be read as the following:
- a) Nomenclature of item as per schedule of quantities.
 - b) Particular specifications and Special conditions, if any.
 - c) Additional conditions.
 - d) Contract Clauses of Standard CPWD contract form.
 - e) Drawings
 - f) CPWD Specifications as applicable.
 - g) Indian standard specifications of BIS
 - h) Manufacture’s specifications
 - i) Sound Engineering Practice as per direction of Engineer-in-charge.
- A reference made to any Indian Standard Specifications in these documents, shall imply reference 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 Standards applicable to the work at site.
- 4.0** The sample of all the items shall have to be got approved by the contractor from Engineer-in-charge before the supply is commenced.
- 5.0** The contractor shall, if required, furnish the manufacturer’s certificate that the materials supplied satisfy the requirements of the relevant specifications.
- 6.0** All the materials brought to the site by the contractor for use in the work as well as fabricated work shall be subject to the inspection and approval by the Engineer-in-charge. The contractor shall be required as directed by the Engineer-in-charge to get necessary tests carried out on materials and works. The samples of the materials shall be provided free of cost by the contractor. All other incidental expenditure to be incurred for testing of samples e.g. Packaging, sealing, transportation, loading, unloading etc. and testing charges (unless specifically provided for otherwise elsewhere in the contract or specification) for conducting tests as per specification, shall be borne by the contractor.
- 7.0** In case any material is rejected by the Engineer-in-charge, the same shall be removed from the site within 48 hours, failing which the same shall be got removed by the Engineer-in-charge at risk and cost of contractor.

- 8.0 Royalty, Octroi, Terminal Tax or any other taxes/charges etc. at prevalent rates shall have to be paid by the contractor himself and the rates quoted by him shall include these duties and nothing extra on this account shall be payable.
- 9.0 The contractor shall take all safety precautions to avoid accidents by exhibiting caution boards, red flags, red lights and by providing necessary barriers barricading at his own cost and all other measures required from time to time. The contractor shall be responsible for all damages and accidents due to negligence on his part.
- 10.0 The contractor shall give due notices to Municipality, Police and / or other authorities that may be required under the law/ rules under force and obtain all requisite permissions/ licenses for temporary obstructions/ enclosures and pay all charges which may be leviable on account of his execution of the work under the agreement. Nothing extra shall be payable on this account.
- 11.0 All materials shall be got checked by the Engineer-in-Charge on receipt of the same at site before use.
- 12.0 The contractor shall carry out his 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 off the materials being used or removed, so as not to interfere with the operations of other contractors, 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 Engineer-in-Charge.
- 13.0 The contractor shall fully comply with all **legal orders and directions** of the Public or local authorities or municipality and adhere by their rules and regulations and pay all fees and charges for which he may be liable in this regard. Nothing extra shall be paid/reimbursed for the same.
- 14.0 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 or as directed by the Engineer-in-charge and nothing extra shall be paid on this account.
- 15.0 If as per local Municipal regulations or if space is not available at site huts for labourers are not to be erected at the site of work, the contractor shall be required to provide such accommodation at a place outside the campus as is acceptable to the local body and nothing extra shall be paid on this account.
- 16.0 It shall be ensured by the contractor that no electric live wire is left exposed or unattended to avoid any accidents in this regard.
- 17.0 The contractor shall take instructions from the Engineer-in-charge for stacking of materials. No excavated earth or building materials etc. shall be stacked/collected in areas where other buildings, roads, services, compound walls etc. are to be constructed.
- Any trenching and digging for laying sewer lines/water lines/cables etc. shall be commenced by the contractor only when all men, machinery and materials have been arranged and closing of the trench(s) thereafter shall be ensured within the least possible time.**
- 18.0 The contractor shall arrange carrying out of all tests required under the agreement through the laboratory as approved by the Engineer-in-Charge and shall bear all to and fro carriage charges in connection therewith. The cost of tests shall be borne by the contractor.

- 19.0 The contractor shall be responsible for the watch and ward/guard of the site/ property/ material provided by him against pilferage and breakage during the period of execution and thereafter till the work is physically handed over to the department no extra payment shall be made on this account.
- 20.0 Samples of all building materials, fittings and other materials/ articles required for execution of the work shall be got approved from the Engineer-in-Charge. Materials/ articles manufactured by the Firms of repute as indicated in tender documents and approved by the Engineer-in-Charge shall only be used. Materials/ articles classified, as “First Quality” by the manufacturer shall only be used. All materials and articles 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.
- 21.0 The contractor shall be required to produce samples of all materials i/c material like sand, stone aggregates & bricks etc. to be arranged and procured by him sufficiently in advance to obtain approval of the Engineer-in-Charge. Subsequently the materials to be used in the actual execution of the work shall be strictly of the same quality of the samples approved. In case of variation in the quality, such materials shall be liable to rejection. The rejected material shall be immediately removed from the site of work by the contractor at his own cost. If the contractor fails to remove the rejected material from the site within 3 days of their rejection by the Engineer-in-Charge or his authorized representative i.e. AE/ JE the same shall be got removed at the risk and cost of the contractor. No claim financially or otherwise shall be entertained on account of any rejection whatsoever.
- 22.0 The contractor shall ensure quality construction in a planned and time bound manner. Any sub-standard material or work beyond set out tolerance limits shall be summarily rejected by the Engineer-in-Charge.
- 23.0 Even ISI marked materials shall be subjected to quality test at the discretion of the Engineer-in-Charge besides testing of other materials as per the specifications described for the item/ material. Whenever ISI marked materials are brought to the site of work; the contractor shall, if required by the Engineer-in-Charge, furnish manufacturer’s test certificate to establish that the material procured by the contractor for incorporation in the work satisfy the provisions of IS Codes relevant to the material and/or the work done.
- 24.0 The contractor shall make his own arrangement of water including boring of tube-wells required for execution of work and nothing extra shall be paid for the same. The water used shall conform to the requirements as laid down in IS: 456-2000. The contractor shall obtain necessary permission from Central Ground Water Board of Govt. of India before actually starting the boring work for a tube well. Nothing shall be paid extra on this account.
- 25.0 The contractor should maintain the registers for cement, paint, water proofing compound and other materials as required by the Engineer-in-Charge and these should be signed by the contractor or his authorized agent and the representative of the Engineer-in-Charge
- 26.0 The contractor shall make his own arrangements for temporary electric connection, if required and make necessary payment including electric charges for its use direct to the authority concerned. The department will not at all be responsible for making arrangements in these regards. The department will provide all possible assistance by way of reasonable recommendation for obtaining electric connection to the concerned authorities but bears no responsibility for the same. In case local body fails to sanction/provide the electric connection or delays it, the contractor shall make his own arrangement by providing diesel generators of adequate capacity at his own cost.

- 27.0 The contractor shall take all necessary precautions to prevent any nuisance or inconvenience to the owners, tenants or occupants of adjacent properties and to the public in general and to prevent any damage to such properties and any pollution of smoke, noise, streams and waterways. 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.
- 28.0 The rates quoted by the contractor are deemed to be inclusive of site clearance, setting out work, profile, establishment of reference bench mark, spot levels, construction of all safety and protection devices, barriers, preparatory works, working during monsoon, working at all depths, heights and locations etc. unless specified in the schedule of quantities
- 29.0 No inflammable materials including P.O.L. shall generally be allowed to be stored at site. However, reasonable quantity may be permitted for storage subject to the compliance of all rules/ instructions issued by the competent authorities and as per the direction of Engineer-in-Charge.
- 30.0 **Movement of labour and traffic at site**
- 30.1 In the event of any restrictions being imposed by the Security agency, CPWD, Traffic Police or any other authority having jurisdiction in the area on the working or movement of labour /material, the contractor shall strictly follow such restrictions/instructions and nothing extra shall be payable to the contractor on this account. The loss of time on this account, if any, shall have to be made up by generating additional resources etc. General Security restrictions are given as under:
- a) The movement of trucks and vehicles shall be regulated in accordance with rules and regulations as approved by competent authority.
 - b) The contractor shall inform, in advance, the truck registration numbers, ownerships of the trucks, names and addresses of the drivers for necessary action by the Security agency.
 - c) Labour huts /stay of workmen will not be allowed at site.
 - d) Names and addresses of labour/ staff etc. working at site shall be furnished for security verification.
 - e) The labour / staff should not be changed too frequently once the verification of the character and antecedents is done.
 - f) After verification of antecedents of workers, identification badges will be issued to them by the contractor under the seal of the Engineer-in-Charge or his representative. The cost of badges would be borne by the contractor.
 - g) As and when there will be security requirements, certain additional restriction (s) can be imposed as per the requirement of the situation.
 - h) No claim whatsoever will be entertained by the department on account of any restriction (s) imposed by the security agencies in execution of work including temporary suspension of work due to V V I P movements.
 - i) The contractor shall be responsible for behavior and conduct of his labour. No labour with doubtful integrity or having a bad record shall be engaged by the contractor.
- 31.0 The contractor shall have to engage well experienced skilled labour and deploy modern T&P and other equipments to execute the work. Many items like stone masonry & stone cladding work, stone flooring & other specialized flooring work, wood work, aluminium work, separation joints will specifically require engagement of skilled workers having experience particularly in execution of such items.
- 32.0 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 government 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.

33.0 Environmental Management Action Plan

The contractor is required to execute the work with the following instructions of environmental management action plan.

33.1 Construction vehicles, equipment and machinery

- (i) All vehicles, equipment and machinery to be procured for construction will confirm to the relevant Bureau of India Standard (BIS) norms.
- (ii) Emission from the vehicles must conform to environmental norms.
- (iii) Dust produced from the vehicular movement and other site activities is to be mitigated by sprinkling of water .
- (iv) Noise limits for construction equipments shall not exceed 75 dB(A), measured at one meter from the edge of the equipment in free area, as specified in the Environment Protection Act,1986, schedule VI part E, as amended on 9th May,1993. The maximum noise levels near the construction site should be limited to 65 dB (A) Leq (5 min) in project area.

33.2 Construction waste disposal

- (i) The pre-identified dump locations will be a part of solid waste management plan to be prepared by the contractor in consultation with Engineer-in-Charge.
- (ii) Contractor will get approved the location of disposal site prior to commencement of the excavation on any section of the project location.
- (iii) Contractor will ensure that any spoils of material/construction waste will not be disposed off in any municipality solid waste collection bins.

33.3 Use of Recycled Material from C&D waste

Recycled material made from C& D waste shall be allowed to be used with prior intimation to Engineer-in-charge for non-structural works, such as:

- i) Cement Concrete Blocks in filler / partition walls.
- ii) Pavers, footpath tiles / slabs
- iii) Kerb Stones
- iv) Manhole covers, precast service ducts
- v) Graded Aggregate of size 10mm – 5 mm and up to 150 mm for Sub base of internal roads & paths.

The recycled material produced from C & D waste should be conforming to prevailing IS codes and specifications according to their uses.

33.4 Procurement of construction material

- (i) All vehicles delivering construction materials to the site shall be covered to avoid spillage of materials and maintain cleanliness of the roads.
- (ii) Wheel Tyres of all vehicles used by of the contractor, or any of his sub contractor or materials suppliers shall be cleaned and washed clear of all dust/mud before leaving the project premises. This shall be done by routing the vehicles through tyre washing tracks.

- (iii) Contractor shall arrange for regular water sprinkling at least twice a day (i.e. morning and evening) for dust suppression of the construction sites and unpaved roads used by his construction vehicles.

33.5 Pollution

33.5.1 Water Pollution

- a The Contractor will take all precautionary measures to prevent the waste water during construction to accumulate anywhere.
- b The waste water arising from the project is to be disposed off in the manner that is acceptable to the Engineer-in-charge and conforming to Local Pollution Control committee norms.

33.5.2 Air and Noise Pollution

- a Contractor will use dust screens and sprinkle water around the construction site to arrest spreading of dust in the air and surrounding areas.
- b Contractor will ensure that all vehicles, equipment and machinery used for construction are regularly maintained and confirm that emission levels comply with environmental emission standards/norms.
- c For controlling the noise from Vehicles, Plants and Equipments, the Contractor will conform the following:
 - (i) All vehicles and equipment used in construction will be fitted with exhaust silencers.
 - (ii) Servicing of all construction vehicles and machinery will be done regularly and during routine servicing operations, the effectiveness of exhaust silencers will be checked and if found defective will be replaced.
 - (iii) Noise emission from compactors (rollers) front loaders, concrete mixers, cranes (movable), vibrators and saws should be less than 75 db (A).
 - (iv) As per the Standards/Guidelines for control of Noise Pollution from Stationary Diesel Generator (DG) Sets, noise emission in db (A) from DG set (15 – 500 KVA) should be less than $94+10 \log_{10}(\text{KVA})$. The standards also suggest construction of acoustic enclosure around the DG set and provision of proper exhaust muffler with insertion loss of minimum 25db(A) as mandatory.

33.6 Condition of National Green Tribunal

1. The contractor shall not store/dump construction material or debris on metalled road.
2. The contractor shall get prior approval from Engineer-in-Charge for the area where the construction material or debris can be stored beyond the metalled road. This area shall not cause any obstruction to the free flow of traffic/inconvenience to the pedestrians. It should be ensured by the contractor that no accidents occur on account of such permissible storage.
3. The contractor shall take appropriate protection measures like raising wind breakers of appropriate height on all sides of the plot/area using CGI sheets or plastic and / or other similar material to ensure that no construction material dust fly outside the plot area. It will be the builder /contractor responsibility to ensure that their activity does not cause any air pollution during course of construction and /or storage of material or construction activity. This condition shall be strictly adhered to every builder, contractor, person or authority. In the event of default they shall be liable to be prosecuted under the law in force, as well as for causing environmental pollution and will be liable to be pay compensation which would be determined by Tribunal in accordance with law.
4. The contractor shall ensure that all the trucks or vehicles of any kind which are used for construction purposes/or are carrying construction material like cement, sand and other allied material are fully covered. The contractor shall take every necessary precautions that the

vehicles are properly cleaned and dust free to ensure that enroute their destination, the dust, sand or any other particles are not released in air/contaminate air.

5. The contractor shall provide mask to every worker working on the construction site and involved in loading, unloading and carriage of construction material and construction debris to prevent inhalation of dust particles.
6. The contractor shall provide all medical help, investigation and treatment to the workers involved in the constructions of building and carry of construction material and debris relatable to dust emission.
7. The contractor shall ensure that C&D waste is transported to the C & D Waste site only and due record shall be maintained by the contractor.
8. The contractor shall compulsory use of wet jet in grinding and stone cutting.
9. The contractor shall comply all the preventive and protective environmental steps as stated in the MoEF guidelines, 2010.
10. The contractor shall carry out on Road inspection for black smoke generating machinery. The contractor shall use cleaner fuel.
11. The contractor shall ensure that all DG sets comply emission norms notified by MoEF.
12. The contractor shall use vehicles having pollution under control certificate. The emissions can be reduced by a large extent by reducing the speed of vehicle to 20kmph. Speed bumps shall be used to ensure speed reduction. In cases where speed reduction cannot effectively reduce fugitive dust, the contractor shall divert traffic to nearby paved areas.
13. The contractor shall ensure that the construction material is covered by tarpaulin. The contractor shall take all other precaution to ensure that no dust particles are permitted to pollute air quality as a result of such storage.
14. The paving of the path for plying of vehicles carrying construction material is more permanent solution to dust control and suitable for longer duration projects.
15. As per EIA Notification of 2006, sufficient green belt around the building shall be provided. Such green belts shall be in existence prior to applying for occupancy certificate and handing it over.
16. Any violation of orders of MOEF including guidelines of State Government, SPCB or any officer of any department shall lead to stoppage of work for which Contractor shall be responsible and no hindrance shall be accounted in this regard.
17. Even if constructions have been started after seeking Environmental Clearance under the EIA notification 2006 and after taking other travel but is being carried out without taking the preventive and protective environmental steps as stated in this order and MoEF guidelines, 2010, the State Government, SPCB and any officer of any department as aforesaid shall be entitled to direct stoppage of work.

“Material storages/warehouses- Care should be taken to keep all material storages adequately covered and contained so that they are not exposed to situations where winds on site could lead to dust/particulate emissions. Fabrics and plastics for covering piles of soils and debris is an effective means to reduce fugitive dust”.

33.7 Prevention of Nuisance and Pollution

- (i) 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. He shall make good at his own cost and to the satisfaction of the Engineer-in-charge, any damage to roads, paths, drainage works or public or private property whatsoever caused by the execution of the work or by traffic brought thereon by the Contractor. All waste or superfluous materials shall be cleaned away by the Contractor without any reservations entirely to the satisfaction of the Engineer-in-charge at no extra cost.
- (ii) The site shall be kept clean of all debris, rubbish and dirt & surplus/waste material all the time. It also includes maintenance, cleaning & de-silting the pipe lines laid by the contractor for all internal services etc. executed by the contractor to the entire satisfaction of the Engineer-in-charge during the maintenance periods. Cleaning and de-silting will also be done by the contractor before handing over the completed structures to CPWD. All machines, equipment and labour for this purpose will be arranged by Contractor at no extra cost to CPWD.

34.0 Safety, Health and Environment: he contractor shall follow the provisions contained in Safety, Health and Environment handbook 2019 available at CPWD website.

34.1 Protection of Environment:

- 34.1.1** The Contractor shall take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or other resulting from pollution, noise or other causes arising as a consequence of his methods of operation. The Contractor shall be required to follow all the rules/norms of National Green Tribunal applicable to this work.
- 34.1.2** During continuance of the contract, the Contractor and his sub-agencies shall at all times, abide by all existing enactments on environmental protection and rules made there under, regulations, notifications and bye-laws of the State or Central Government, or local authorities and any other law, by-law, regulations that may be passed or notification that may be issued in this respect in future by the State or Central Government or the local authority. However, Salient features of some of the major laws that are applicable are given below:
- 34.1.3** Water Pollution is to be prevented as per **The Water (prevention and Control of Pollution) Act, 1974** which provides for the prevention and control of water pollution and the maintaining and restoring of wholesomeness of water. 'Pollution' means such contamination of water or such alteration of the physical, chemical or biological properties of water or such discharge of any sewage or trade effluent or of any other liquid, gaseous or solid substance into water (whether directly or indirectly) as may, or is likely to, create a nuisance or render such water harmful or injurious to public health or safety, or to domestic, commercial, industrial, agricultural or other legitimate uses, or to the life and health or animals or plants or of aquatic organisms.
- 34.1.4** Air Pollution is to be prevented as per **The Air (prevention and Control of Pollution) Act, 1981** which provides for prevention, control and abatement of air pollution. 'Air Pollution' means the presence in the atmosphere of any 'air pollutant', which means any solid, liquid or gaseous substance (including noise) present in the atmosphere in such concentration as may be or tend to be injurious to human beings or other living creatures or plants or property or environment.
- 34.1.5** Environment is to be protected as per **The Environment (Protection) Act, 1986** which provides for the protection and improvement of environment and for matters connected therewith, and the prevention of hazards to human beings, other living creatures, plants and property. 'Environment' includes water, air and land and the inter-relationship which exists

among and between water, air and land, and human being, other living creatures, plants, micro-organism and property.

34.1.6 The public Liability Insurance Act, 1991: This provides for public liability insurance for the purpose of providing immediate relief to the persons affected by accident occurring while handling hazardous substances and for matters connected herewith or incidental thereto. Hazardous substance means any substance or preparation which is defined as hazardous substance under the Environment (Protection) Act 1986, and exceeding such quantity as may be specified by notification by the Central Government.

35.0 Personnel Safety Measures for Labour

This shall be ensured as per the CPWD Safety Code given in “General conditions of contract for CPWD works - 2023”.

35.1 Risks from Electrical Equipment

- a** The contractor will comply the relevant industrial electrical safety legislations.
- b** The Contractor will take adequate precautions to prevent danger from electrical equipment i.e. no material will be so stacked or placed as to cause danger or inconvenience to any person or the public.
- c** All necessary fencing and lights will be provided to protect the public.
- d** All electric machines to be used in the construction will conform to the relevant Indian Standards (IS) codes, will be free from patent defect, will be kept in good working order, will be regularly inspected and properly maintained as per IS provision and to the satisfaction of the Engineer-in-charge.
- e** The contractor will arrange for a first aid kit including an adequate supply of sterilized dressing materials and appliances to meet emergencies. He will also arrange suitable transport to take injured or sick person(s) to the nearest hospital.
- f** The contractor will provide, erect and maintain informatory/safety signs, hoardings written in English and Hindi wherever required or as suggested by the Engineer-in-charge.

35.2 Plantation/preservation/conservation measures

- a** The contractor will take reasonable precaution to prevent his workmen and employees from removing and damaging any flora (plant/vegetation) from the project area.
- b** All fossils, coins, articles of value of antiquity, structures and other remains or things of geological or archaeological interest discovered on any project location during excavation/construction shall be the property of the Government, and shall be dealt with as per provisions of the relevant legislation. The contractor will take reasonable precaution to prevent his workmen or any other persons from removing and damaging any such article or thing. He will, immediately upon discovery thereof and before removal inform the Engineer-in-charge of such discovery and carry out the official instructions of Engineer-in-charge for dealing with the same, till then all work shall be stopped.

36.0 The contractor shall make at his own cost all necessary arrangements for maintaining water level, in the area where works are under execution low enough so as not to cause any harm to the works or problems in carrying out with the execution and the rates for all items of work shall be considered as inclusive of pumping out or bailing out water, if required, for which no extra payment shall be made. This will include water coming from any source, such as rains, accumulated water, floods, leakages from sewer and water mains, sub-soil water table being high or due to any other cause whatsoever. The contractor shall make necessary provision of pumping, dredging, bailing out water coming from all above sources and excavation and other works shall be kept free of water by providing suitable system approved by Engineer-in-charge.

37.0 Water:

- 37.1** The contractor shall make his own arrangement for providing water for construction and drinking purpose. Water charges shall not be recovered on account of it. Contractor shall get the water tested from any approved laboratory by the Engineer-in-charge at regular interval as per the CPWD specifications 2019 vol.-I & II). All expenses towards collection of samples, packing transportation and testing charges, etc. shall be borne by the contractor.

ADDITIONAL CONDITIONS

1. In case there is any discrepancy between English Version and corresponding Hindi version, if provided, then the provisions in English Version will prevail.
2. Unless otherwise specified, CPWD Specifications 2019 Volume I & II with up to date corrections slips shall be followed in general. Any additional item of work, if taken up subsequently, shall also conform to the relevant CPWD specifications mentioned above, in case CPWD specification for any of the items is not available then the BIS specification, manufacture's specifications and sound Engineering practice shall be followed and take preference in that order. 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 date of release of tenders through e-procurement. **The Contractor shall keep at his own cost all such publications of relevant Indian Standard, applicable to the work at site.**
3. The order of preference in case of any discrepancy as indicated in condition no. 8.1 under "General Conditions of Contract 2023" at page No. 11 may be read as the following:
 - a) Nomenclature of item as per schedule of quantities.
 - b) Particular specifications and Special conditions, if any.
 - c) Additional conditions.
 - d) Contract Clauses of Standard CPWD contract form.
 - e) Drawings
 - f) CPWD Specifications as applicable.
 - g) Indian standard specifications of BIS
 - h) Manufacture's specifications
 - i) Sound Engineering Practice as per direction of Engineer-in-charge.
4. The nomenclature of the item given in the schedule of quantities gives in general the work content but is not exhaustive i.e. does not mention all the incidental works required to be carried out for complete execution of the item of work. The work shall be carried out, all in accordance with true intent and meaning of the specifications and the drawings taken together, regardless of whether the same may or may not be particularly shown on the drawings and / or described in the specifications, provided that the same can be reasonably inferred there from. There may be several incidental works, which are not mentioned in the nomenclature of each item but will be necessary to complete the item in all respect. All these incidental works / costs which are not mentioned in item nomenclature but are necessary to complete the item shall be deemed to have been included in the rates quoted by the contractor for various items in the schedule of quantities. No adjustment of rates shall be made for any variation in quantum of incidental works due to variation / change in actual working drawings. Also, no adjustment of rates shall be made due to any change in incidental works or any other deviation in such element of work (which is incidental to the items of work and are necessary to complete such items in all respects) on account of the directions of Engineer-in-Charge. Nothing extra shall be payable on this account.
5. The rates for all items of work shall, unless clearly specified otherwise, include cost of all labour, material, tools and plants and other inputs involved in the execution of the item and **nothing extra shall be payable on this account.**
6. The contractor(s) shall quote all-inclusive rates against the items in the schedule of quantities and **nothing extra shall be payable for any of the conditions and specifications** mentioned in the bid documents unless specifically mentioned otherwise.
7. No accommodation is available at the site of work. The labour huts shall not be erected on the plot and the Contractor shall make his own arrangements to provide such accommodation as per the rules of the local bodies. He shall make his own arrangements for stores, field office etc. Before tendering, he shall visit the site and assess the manner in which he is able to

arrange the above facilities. The Engineer-in- Charge shall in no way be responsible for any delay on this account and no claim, whatsoever, on this account shall be entertained. Nothing extra shall be payable on this account.

8. The work shall be executed and measured as per metric dimensions given in the schedule of quantities, drawings etc. (FPS units wherever indicated are for guidelines only).
9. The Contractors will associate himself with specialized electrical contractor.
10. The contractor shall take all precautions to avoid accidents by exhibiting caution boards, red flags, red lights and providing necessary barriers and all other measures required from time to time. The contractor shall be responsible for all damages and accidents due to negligence on his part.
11. The Contractor shall assume all liability, financial or otherwise in connection with this contract and shall protect and indemnify the Department from any and all damages and claims that may arise on any account. 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.
12. Any of the item (whole or part) supplied under this contract may be subjected to test on site or sent to laboratory at the discretion of the engineer-in-charge. If the test result is not as per the standard requirements, the entire lot will be rejected and the contractor will remove the whole lot.
13. The contractor will bear the cost of sample, transportation to the lab, testing fees and any other incidental charges.
14. Minor variations (up to $\pm 2\%$) in the dimensions of items manufactured by approved brands, may be accepted. However, the decision of the Engineer-in-Charge, in this regard will be final and binding on the contractor.
15. Wherever any reference to any Indian Standard Specifications/ International standard occurs in the documents relating to this contract, the same shall be inclusive of all amendments issued there-to or revisions thereof, if any, up to the date of receipt of bids.
16. Samples for particular items of work shall be prepared, where so specifically desired by Engineer-in- charge, for prior approval of the Engineer-in-charge, before taking up the same on mass scale and nothing shall be payable on this account.
17. The contractor shall take instructions from the Engineer-in-charge for stacking of materials at site. No excavated earth or building materials shall be stacked on areas where the buildings, roads, services or compound walls or any other structure are to be constructed.
18. Unless otherwise specifically provided in the Schedule of quantities, the rates tendered by the contractor shall be all inclusive and shall apply to all heights, lifts, leads and depths of the building and nothing extra quoted rates in agreement shall be payable to him on this account.
19. If ISI marked products are available, the contractor shall use only ISI marked products. In other cases, the materials shall conform to CPWD specifications. In case a materials/product is neither covered by ISI nor by CPWD specification, the work shall be carried out as per sound engineering practice, in such case, the decisions of the Engineer-in-charge shall be final & binding. In such cases Engineer-in-charge shall satisfy himself about the quality of such materials and give his approval in writing. Only articles classified as first quality by the manufacturers shall be used, unless otherwise specified. All materials not bearing ISI mark

shall be tested as per relevant ISI specifications. The Engineer-in-charge may relax the condition regarding testing if the quantity of the materials required for the work is small. In all cases of use of ISI marked materials, proper proof of procurement of materials from authentic manufacturers shall be provided by the contractor to the entire satisfaction of Engineer-in-charge.

20. Any cement slurry, required to be added over base surface for bond or for continuation of concreting, its cost shall be deemed to have been included in the respective items, unless specified otherwise and nothing extra shall be payable nor extra cement shall be considered in the cement consumption on this account.
21. Stacking of materials and excavated earth including its disposal shall be done as per the directions of the Engineer-in-Charge. Double handling of materials or excavated earth, if required, shall have to be done by the contractor at his own cost.
22. No claim for idle establishment & labour, machinery & equipments, tools & plants and the like, for any reason whatsoever, shall be admissible during the execution of work as well as after its completion.
23. (a) The building work will be carried out in the manner complying in all respect with the requirements of relevant bylaws 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 will be paid on this account.

(b) The work of water supply, internal sanitary installations and the drainage work etc may required to be carried out as per local Municipal Corporation or such local body-Bylaws and the contractor in such cases shall produce necessary completion certificate from such authorities after completion of the work.
24. The contractor shall give a performance test of the entire installation(s), as per standing specifications, before the work is finally accepted and nothing extra whatsoever shall be payable to the contractor for the test .
25. Any damage to work resulting from weathering conditions, defacing or from any other cause such as negligent act on the part of contractor, until the work is taken over by the Department after completion of work, shall be made good by the contractor at his own cost .

26. **TESTING OF MATERIALS**

- (a) Samples of various materials required for testing shall be provided free of cost by the contractor. Testing charges, if any, shall be borne by the contractor. All other expenditures required to be incurred for taking the samples, conveyance, packing etc. shall be borne by the contractor himself.
- (b) The contractor shall produce all the materials in advance so that there is sufficient time for testing and approval of the materials and clearance before use in work . The Engineer in charge shall be at liberty to test representative sample(s) of each item of schedule of quantity in any approved laboratory as decided by him. The sample of testing shall be provided by the contractor free of cost. Any expenditure required to be incurred for taking sample, Conveyance and packing shall be borne by the contractor. In case of any sample of particular lot fails in testing the contractor shall be bound to replace the entire lot with fresh material of prescribed specifications. The rejected lot shall be returned to the contractor only after fresh lot is supplied.
- (c) With a view to avoid controversy about quality of cement concrete as revealed in the test results of 7 days cubes falling short of the prescribed standards by over 10% to 20%

and pending testing of balance 3 cubes for 28 days as final confirmatory acceptance tests, crushed samples of cement concrete from the failed 7 days cubes should be preserved in a sealed bag .

- (d) In case of concrete and reinforced concrete work, the contractor shall be required to make arrangement for carrying out crushing strength tests at his own cost . He shall render all assistance for the preparation of cubes, safe custody of the same, proper curing and carriage upto the laboratory where the test is to be performed. The cube test can be performed at any laboratory approved by the Engineer-in-charge.
- (e) **The contractor shall arrange carrying out of all tests required under the agreement through the Govt. approved laboratory and shall bear all to and fro carriage charges in connection therewith. The cost of tests shall be borne by the contractor.**
- 27. No labour huts shall be allowed inside the campus of above said work. The contractor shall arrange for the stay of labour outside the campus including transport and nothing extra shall be payable on the account.
- 28. The Engineer employed by the contractor must attend the office of AE/JE in charge daily and note any instructions given on site order book.
- 29. The contractor shall prepare one sample of all items which should be got approved from the Engineer in charge. Only after acceptance of sample work, contractor will be allowed to commence the work and sample is to be preserved by contractor till the whole work is completed. The quality of work should confirm to the approved samples.
- 30. No T & P shall be supplied by the department.
- 31. Any damage done to the existing structure shall be made good by the contractor at his own risk and cost.
- 32. The contractor shall be responsible for behavior and conduct of his worker. No worker with doubtful integrity or having a bad record shall be engaged by the contractor.
- 33. The labour welfare fund/ cess @ 1% of gross work done shall be deducted from the bills of the contractor.
- 34. The contractors are advised to get acquainted with the proposed work and its site and also study the Drawings, specifications and special conditions carefully before tendering. No claim of any sort shall be entertained on account of any site conditions and ignorance of specifications and special conditions.
- 35. The contractor shall make his own arrangements for electricity and water required for the execution of the work and nothing extra shall be paid for the same. However, for electrical connection, Engineer-in-Charge shall recommend the application to concerned authority for Electrical connection if required. Necessary payment shall be made by the contractor directly to the department concerned. In case the concerned authority fails to sanction the electric connection or delays the sanction of electric connection, the contractor shall make his own arrangements by providing diesel generators of adequate capacity at his own cost.
- 36. For water supply, contractor shall make his own arrangement including boring of tube well, if necessary, and nothing extra shall be paid by the Department for arrangement of water or on its treatment as per requirements laid down in IS: 456 / 2000.

37. There may be some restrictions on free movement of labourers at site and restriction of working hours and the agency shall consider this fact while quoting the rates and executing the work. Photo passes if any required for worker shall be responsibility of the contractor.
38. The proposed work is a prestigious project and quality of work is of paramount importance. Contractor shall have to engage well-experienced skilled labour and deploy modern T&P and other equipment to execute the work.
39. This is an occupied campus. The work is to be carried out in such a manner so that the residents are not inconvenienced.
40. Work is to be done in **NH-IV, Faridabad.** the security agencies may impose restrictions on the working hours, movement of vehicles for transportation of materials. The contractor shall be bound to follow all such restrictions and adjust the programme for execution accordingly. He should take into consideration all factors and contingencies while quoting rates. No claim what so ever shall be entertained by the department on this account.
41. Contractor shall submit initially and at every change list of workmen to be employed with their proof of identities at least 2 days before their entry for issue of gate passes.
42. Unserviceable material obtained from dismantling not required at site will not be kept at the site and disposed off promptly by the contractor at the location/directed by the Engineer-in-charge or dumping ground inside the campus at his own cost.
43. Limited space is available for stocking of excavated earth, serviceable and unserviceable demolished material and construction material and machinery, contractor is to plan accordingly. No payment for shifting, re-shifting and handling will be admissible.
44. No payment for back filling of trenches and foundation created due to demolition work will be admissible.
45. The contractor has to obtain electric connection from power supply company at his level.
46. Any damage done by the contractor to any existing work during the course of execution of the work shall be made good by him at his own risk and cost.
47. No labour except one chowkidar shall be allowed to stay at site beyond working hours.
48. The site will be maintained neat and clean to the satisfaction of the Engineer-in-charge.
49. The amendments made time to time in GCC Clauses and others shall be applicable.

SPECIAL CONDITIONS FOR PROCUREMENT OF CEMENT

1. The contractor shall procure **43 grade** ordinary Portland cement conforming to IS 8112 Part-I/ or Portland Pozzolana Cement conforming to IS 1489 (Part-I) as required in work, from reputed manufacturers of cement having a production capacity not less than one million tonnes or more per annum, such as **ACC, Ultratech, Ambuja, Birla, J K Lakshmi Shree Cement**, or from any other reputed cement Manufacturer having a production capacity not less than one million tones per annum as approved by ADG for that sub region.
The supply of cement shall be taken in 50 kg. bags bearing manufacturer's name and ISI marking. Samples of cement arranged by the contractors shall be taken by the Engineer-in-Charge and got tested in accordance with provisions of relevant BIS codes. In case of 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 week's time of written order from the Engineer-in-Charge to do so.
2. The cement shall be brought at site in bulk supply of approximately 25 tonnes or as decided by the Engineer-in-charge.
The cement godown of the capacity to store a minimum of 500 bags of cement shall be constructed by the contractor at site of work for which no extra payment shall be made.
3. 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 testing laborites. **The cost of tests etc. shall be borne by the contractor.**
4. The actual issue and consumption of cement on work shall be regulated and proper accounts maintained as provided in clause 10 of the contract. 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 of cement consumption is less than theoretical consumption including permissible variation; recovery at the rate prescribed shall be made. In case of excess consumption no adjustment need to make.
5. Cement brought to site and cement remaining unused after completion of work shall not be removed form site without written permission of Engineer-in-Charge.
6. The damaged cement shall be removed from the site immediately by the contactor on receipt of a notice in writing form 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.

SPECIAL CONDITION FOR PROCUREMENT OF STEEL REINFORCEMENT BARS

The contractor shall procure TMT bars of Fe 500D grade steel (the grade to be procured is to be specified from primary steel producers such as SAIL, Tata Steel Ltd, RINL, Jindal Steel & power Ltd., and JSW Steel Ltd. or any other producer as approved by CPWD who are using iron ore as the basic raw material/input and having crude steel capacity of 2.0 million tonnes per annum and above.

1. The TMT bars procured from primary producers shall conform to manufacturer's specifications.
2. TMT bars procured from primary producers, the specifications shall meet the provisions of IS 1786 : 2008 pertaining to Fe 500 D grade steel.
3. The contractor shall have to obtain vouchers and furnish test certificates to the Engineer-in-charge in respect of all supplies of steel brought by him to the site of work.
4. Samples shall also be taken and got tested by the Engineer-in-charge as per the provisions in this regard in the relevant BIS codes. In case the test results indicate that the steel arranged by the contractor does not conform to the specifications as defined under para 1.1 and 1.2 above, the same shall stand rejected and it shall be removed from the site of work by the contractor at his cost within a week of written orders from the Engineer-in-charge to do so.
5. The steel reinforcement shall be brought to the site in bulk supply of 25 tonnes or more or as directed by the Engineer-in-charge.
6. The steel reinforcement bars shall be stored by the contractor at site of work in such a way as to prevent distortion & 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.
7. 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 at frequency not less than that specified below:

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

7. The contractor shall supply free of charge the steel required for testing including its transportation to testing laboratories. The cost of tests shall be borne by the contractor.
8. The actual issue and consumption of steel on work shall be regulated and proper accounts maintained as provided in clause 10 of the contract. The theoretical consumption of steel shall be worked out as per procedure prescribed in clause 38 of the contract and shall be governed by the conditions laid therein. 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 need to be made.

9. The steel brought to the site and the steel remaining unused shall not be removed from site without the written permission of the Engineer-in-charge.
10. Steel bars brought by the contractor for use in the work shall be got checked from the Engineer-in-charge or his authorized representative of the work on receipt of the same at site before use.
11. If the quantity of steel actually used in the work is found to be more than the theoretical quantity of steel including authorized variation, nothing extra shall be payable to the contractor on this account. In the event of it being discovered that after the completion of the work the quantity of steel used is less than the quantity ascertained as herein before provided (allowing variation on the minus side as stipulated in clause 38). The cost of quantity of steel so less used shall be recovered from the contractor at rate as specified in schedule 'F'. Decision of the Engineer-in-charge in regard to theoretical quantity of steel which should have been actually used and recovery of the rate specified shall be final and binding on the contractor.
12. In case the contractor brings surplus quantity of steel the same after completion of the work will be removed from the site by the contractor at his own cost after approval of the Engineer-in-charge.
13. Reinforcement including authorized spacer bars and lappages shall be measured in length of different diameters, as actually (not more than as specified in the drawing) used in the work, nearest to a centimeter. Wastage and unauthorized overlaps shall not be measured.
14. The standard sectional weights referred to as in CPWD specifications for works 2019 Vol. I will be considered for conversion of length of various sizes of MS bars, Tor steel bars and TMT bars into standard weight.
15. Records of actual sectional weight shall also be kept dia-wise & 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 weighted average sectional weight shall be termed as derived actual weight.
16. If the derived weight as in para 16 above is lesser than the standard weight as in para 15 above, the derived actual weight shall be taken for payment.

If the derived actual weight is found more than the standard weight then the standard weight as worked out in para 15 above shall be taken for payment. In such case nothing extra shall be paid for the difference between the derived actual weight and the standard weight.
17. Mixing of different type of steel/different grades of steel shall not be allowed.

Particular Specifications

1.0 GENERAL

- 1.1 The work shall be executed and measured as per metric dimensions given in the Schedule of quantities, drawings etc. (F.P.S. units wherever indicated are for guidance only).
 - 1.1.1 All stone aggregate and stone ballast shall be of hard stone variety to be obtained from approved quarries to be got approved from the Engineer-in-charge.
 - 1.1.2 Sand to be used for cement concrete work, mortar for masonry and plaster work shall be of standard quality and shall be obtained from approved source to be got approved from the Engineer-in-charge and screened as required. The same shall consist of hard siliceous material. It shall be clean sand.
- 1.2 Unless otherwise specified in the schedule of quantities, the rate of all items of the work shall be considered as inclusive of pumping out or bailing out water, if required, for which no extra payment will be made. This will include water encountered from any source such as rains, floods, sub-soil water table being high or due to any other cause whatsoever.
- 1.3 All the materials required to be tested shall be tested as per provisions of the relevant B.I.S. Codes. Should there be any difference between acceptances CRITERIA given in B.I.S. Codes, C.P.W.D. Specifications and special conditions, the acceptance CRITERIA shall be in the following order of precedence:
 - a. Special conditions
 - b. C.P.W.D. Specifications
 - c. B.I.S. Codes

2.0 EMBEDDING OF PIPES, CONDUITS ETC.

- 2.1 The brick work for the portions of external wall of W.C. through which pipes are taken, will be done after the pipes are fixed as far as practicable.
- 2.2 All crossings, embedment etc. in walls and floors for water supply, drainage and sanitary pipes, fittings etc. shall be provided as per previously prepared detailed drawings for individual walls and floors so as to avoid cuttings of brick work and floors. All such areas shall be made good during finishing and nothing extra shall be paid for this.

3.0 RCC WORK

- 3.1 The steel bars shall be stored about 30 to 45 cm above ground. A uniform coat of cement wash shall be given to steel reinforcement bars. In places where rainfall is heavy, steel bars shall be stored in protective environment to mitigate deterioration due to corrosion.

The cement for application of slurry on steel bars will be duly issued. However, no extra payment shall be payable for the application of slurry coating on steel bars.

3.2 Design Mix Concrete

The bulk of concrete of required mix shall be arranged from RMC plant and smaller quantities in lintel band etc. similar locations will be allowed for production at site for contractor shall be required to install automatic batching plant of minimum 5 cum per hour capacity. For design mix, provisions of IS:456-2000 – Latest Edition shall be followed. Following parameters shall be adopted for mix design as per IS-456-2000 (Latest Edition).

- 3.2.1 Approved admixtures conforming to IS 9103 shall be permitted to be used. The chloride content in the admixture shall satisfy the requirement of BS 5075. The total amount of chloride content in the admixture mixed concrete shall satisfy the requirement of IS 456-2000.
- 3.2.2 The Concrete mix design with and without admixture will be carried out by the Contractor, at his own cost, through one of the following laboratories/ Test House to be approved by Engineer-in-Charge:-
- (i) IIT, Delhi
 - (ii) National Council for Cement & Building Materials, Ballabhgarh.
 - (iii) CRRI, Delhi
 - (iv) Delhi College of Engineering
- 3.2.3 In the event of all the four laboratories being unable to carry out the requisite design/ testing, the contractor shall have to get the same done from any other reputed laboratory with prior approval of the Engineer- in-Charge.
- 3.2.4 The various ingredients for mix design/ laboratory tests shall be sent to the approved lab/ test houses through the Engineer – in – Charge and the samples of such ingredients sent shall be preserved through at site by the contractor till completion of work or change in Design Mix whichever is earlier. The sample taken from the approved materials which are proposed to be used in the work.
- 3.2.5 The Contractor shall submit the mix design report from approved laboratory for approval of Engineer-in-Charge within 30 days from the date of issue of letter of acceptance of the tender. No concreting shall be done until the mix design is approved by Engineer-in-Charge.

The contractor shall make cubes of trial as per approved laboratory for all grades of concrete in presence of the Engineer-in-charge using same ingredients as adopted for design mix, prior to commencement of concreting and get them tested in presence of Engineer-in-charge. The testing and the acceptance of the trial mixes shall be as CPWD specifications. The conformity of mix design should be established by conducting three repeat trial mix tests. In each repeat trial mix cubes of standard size 15cm x 15 cm x 15 cm shall be cast, out of which three cubes shall be tested after 7 days & 3 cubes shall be tested after 28 days. The provision shall be as per relevant paras of CPWD specifications 2019.

- 3.2.6 90% of the total trial mix tests shall be done in the laboratory established at site by the contractor and remaining 10% in the laboratory of Central Design Organization, CPWD or in any other laboratory as directed by Engineer –in-Charge. The testing charges would be governed by para 5.0 of special conditions.
- 3.3 For each change of source or quality/ characteristic properties of the ingredients from that approved & used in the concrete mix during the work, a fresh mix design shall be got done by the contractor. However, maximum two such changes shall be permitted in the whole work. For any change, the Contractor shall bear the cost of fresh Mix Design. Revised trial mix tests shall be conducted at laboratory established at site or Engineer-in-charge may order for testing of these cubes from any approved labortory.
- 3.4 The cost of packaging, sealing, transportation, loading, cost of samples and the testing charges for mix design in all cases shall be borne by the Contractor.
- 3.5 The mix design shall be done considering the degree of quality control as “GOOD” in all cases.

3.6 REQUIRMENT OF DESIGN MIX

- 3.6.1 The mix design for a specified grade of concrete shall be done for target mean compressive strength
 $T_{ck} = f_{ck} + 1.65 S$
 Where : f_{ck} = characteristic compressive strength at 28 days.
 S = Standard deviation which depends on degree of quality control.
- 3.6.2 The degree of quality control for this work shall be “GOOD” for which the standard deviation (s) for different grades of concrete as per IS 456-2000 shall be followed.
 Standard deviation calculation of test results shall also be done as per clause 9.2.4 of IS 456-2000 for maintaining the quality control.
- 3.6.3 The mix design shall be carried out generally in accordance with the provisions made in CPWD specification and IS456-2000 read along with the provisions mentioned in these documents.
- 3.6.4 Acceptance criteria for trial Mix:-
 Average of all the cubes tested at 28 days shall be more than target mean strength (i.e. $f_{ck} + 1.65 S$). No. individual cube shall be less than 0.85 times target mean strength.
- 3.6.5 Work strength Test and Acceptance criteria :-
 Work strength Test for strength of concert shall be carried out as per para 5.8.12.2 of CPWD specifications 2002, relevant paras of CPWD specifications 2019 will supersede. 90% of the total work strength tests shall be done at the laboratory established at site by the contractor and remaining 10% in the laboratory of Central Design Organization, CPWD or in any other laboratory as directed by Engineer-in-charge. The testing charges would be governed by para 5.0 of special conditions. The acceptability criterion given in para 5.8.4.1 of CPWD specifications 2002, relevant paras of CPWD specifications 2019 will supersede shall be read along with followings :-
- (a) In case four consecutive tests results (as per 5.8.4.1 of CPWD specifications) are not available in one day's concerting the standard deviation for purpose of acceptance of concrete shall be calculated on the basis of all the cube test results of the particular day of concreting.
 - (b) If the cube results of individual cube do not comply with the conditions mentioned in column 3 of Table 6 of para 5.8.4.1 of CPWD specifications 2002, relevant paras of CPWD specification 2019 will superceed but the test results satisfy the requirement of mean compressive strength as mentioned in column 2 of above table the concrete represented by the cube not meeting the requirement shall be at risk. The Engineer-in-Charge reserves the right to reject the said concrete or to accept it at reduced rated subject to establishing the structure adequacy by mean of additional tests and suitable remedial measures as directed by Engineer-in-Charge.
- 3.7 If the test results do not satisfy the requirement of mean compressive strength as mentioned in column 2 of Table 6 of para 5.8.4.1 of CPWD specifications, 2002, relevant paras of CPWD specifications 2019 will superceed. The Concrete represented by the test results shall be at risk. **All mass Reinforced Cement Concrete work/RCC in Structural Members shall be design mix concrete of specified grade. The contractor shall install on/near the project site automatic batching plant of desired capacity to be approved by Engineer-in-charge for production of design mix concrete which shall be used in the work or procure it from RMC plant to be approved by Engineer-in-charge.**
- 3.7.1 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.

- 3.7.2 The cost of flooring is inclusive of providing sunken flooring in bath-rooms, kitchen, etc. and nothing extra on this account shall be payable.
- 3.7.3 Any legal or financial implications resulting out of carriage of earth from outside or disposal of earth shall be sole responsibility of the contractor. Nothing extra shall be paid on this account.
- 3.7.4 No chase cutting/dismantling of plaster/RCC/CC shall be allowed, so contractor has to execute the electrical work accordingly. 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.
- 3.7.5 The work of water supply, internal sanitary installations and drainage etc. shall be carried out as per CPWD Specifications, NBC-2016 and bylaws of the Municipal Corporation or any other local body and the contractor shall produce necessary completion certificates from such authority after completion of work wherever applicable.
- 3.7.6 In case of local Municipal regulations / restrictions by client /non-availability space at site if huts for labour are not allowed to be erected at the site of work, the contractor shall be required to provide such accommodation at suitable place at his own cost and nothing extra shall be paid on this account.
- 3.7.7 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.
- 3.7.8 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.
- 3.7.9 The contractor shall be responsible for the watch and ward of the building complex and to safeguard materials, equipment, 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.

3.8 **SETTING OUT**

- 3.8.1 Contractor shall provide permanent bench marks and other reference points for the proper execution of work and these shall be preserved till the end of work. All such reference points shall be in relation to the levels and locations, given in the Architectural and plumbing drawings.
- 3.8.2 The contractor shall establish, maintain and assume responsibility for grades, lines, levels and bench marks. He shall report any errors or inconsistencies regarding grades, lines, levels, dimensions to the Engineer-in-Charge before commencing work. Commencement of work

shall be regarded as the contractor's acceptance of such grades, lines, levels and dimensions and no claim shall be entertained at a later date for any errors found.

- 3.8.3 If at any time, any error in this respect shall appear during the progress of the work, the contractor shall, at his own expense rectify such error if so required to the satisfaction of the Engineer-in-Charge.
- 3.8.4 Though the site levels may be indicated in the drawings the contractor shall ascertain himself and confirm the site levels with respect to GTS bench mark from the concerned authorities.
- 3.8.5 The approval by the Engineer-in-Charge of the setting out by the contractor shall not relieve the contractor of any of his responsibilities.
- 3.8.6 The contractor shall be entirely and exclusively responsible for the horizontal, vertical and other alignment, the level and correctness of every part of the work and shall rectify effectively any errors or imperfections therein. Such rectifications shall be carried out by the contractor at his own cost to the instructions and satisfaction of the Engineer-in-Charge.

3.9. **DE-WATERING**

- 3.9.1. De-watering required, if any, shall be done conforming to BIS Code IS: 9759 (guide lines for de- watering during construction) and / or as per the specifications approved by the Engineer-in-charge. Design of an appropriate and suitable dewatering system shall be the Contractor's responsibility.
- 3.9.2. Such scheme shall be modified / augmented as the work proceeds based on fresh information discovered during the progress of work, at no extra cost. At all times during the construction work, efficient drainage of the site shall be carried out by the Contractor and especially during the laying of plain cement concrete, taking levels etc. The Contractor shall also ensure that there is no danger to the nearby properties and installations on account of such lowering of water table. If needed, suitable precautionary measures shall be taken by the Contractor. Also the scheme of dewatering adopted shall have adequate built in arrangement to serve as stand-by to attend to repair of pumps etc. and disruption of power / fuel supply. Nothing extra shall be payable on this account.
- 3.9.3. In trenches where surface water is likely to get into cut / trench during monsoons, a ring bund of puddle clay or by any other means shall be formed outside, to the required height, and maintained by the Contractor. Also, suitable steps shall be taken by the Contractor to prevent back flow of pumped water into the trench. Nothing extra shall be payable on this account.
- 3.9.4. For works below ground level the contractor shall keep that area free from water. If dewatering or bailing out of the water is required, the contractor shall do the same at his own cost and nothing extra shall be paid. Nothing extra shall be paid for execution of work in or under water and / or liquid mud including pumping out of water as required.

4.0 **WATER PROOFING TREATMENT**

The water proofing items to be approved by **Engineer-in-charge**.

4.1 **INTEGRAL CEMENT BASED WATER PROOFING TREATMENT**

- 4.1.1 The proprietary waterproofing compound shall preferably bear ISI mark or shall conform to I.S. 2645 (upto date amendments) Water proofing compound shall be brought to site prior to commencement of work, from which random sample would be got tested to ascertain its conformity to the relevant I.S. code. The proprietary waterproofing compound shall be added at the rate recommended by the manufacturing firm, but not exceeding 3 percent by weight

of cement. Water proofing compound shall be kept under double lock and key & record of its issue shall be kept in the same manner as for issue of cement.

- 4.1.2 While doing treatment of roof surface, it shall be ensured that the outlet drain pipes have been fixed and mouths at the entrance have been eased and rounded off properly for easy flow of water.
- 1.1.3 The surface where the waterproofing is to be done, shall be thoroughly cleaned with wire brushes. All loose scales shall be removed and dusted off. The surface shall be treated with neat cement slurry admixed with proprietary water proofing compound, to penetrate into crevices and fill up all the pores in the surface. This cement slurry shall also be applied at the junction of parapet and terrace slab including the vertical face of the parapet.
- 1.1.4 After the slurry coat is laid, layer of well burnt brick bats shall be laid to required gradient and joints filled to half the depth, in cement mortar of mix as specified by the manufacturing firm, but not leaner than 1:5 (1 cement : 5 coarse sand) duly admixed with proprietary waterproofing compound. The brickbat layer shall be rounded at the junction with parapet and merged with the treatment to be provided on the parapet up to 300mm. height. Curing of this layer shall be done for 3 days.
- 1.1.5 After curing, the surfaces shall be applied with a coat of cement slurry admixed with proprietary water proofing compound.
- 1.1.6 Joints of brick bats layer shall be filled fully with cement mortar of mix as specified by the specialist firm but not leaner than 1:4 (1 cement: 4 coarse sand) admixed with proprietary water proofing compound and finally top finished with average 20 mm thick layer of same mortar and finished smooth with cement slurry admixed with proprietary water proofing compound. The finished surface shall have marking of 300 x 300 mm false squares.
- 1.1.7 Curing of water proofing treatment, thus completed, shall be done for a minimum period of ten days.
- 1.1.8 The finished surface, after water proofing treatment, shall have minimum slope of 1 in 80. At no point, shall the thickness of water proofing treatment, be less than 65 mm.
- 1.1.9 The measurements shall be taken along the finished surface of treatment including the rounded and tapered portion at junction of parapet wall. Length and breadth shall be measured correct to one centimeter and area shall be worked out to nearest 0.01 sqm. No deduction in measurements shall be made for either openings or recesses for chimneys, stacks, roof lights and the like for areas up to 0.40 sqm. Nothing extra shall be paid, for forming such openings. For similar areas exceeding 0.40 sqm. deductions shall be made in measurements for full openings and nothing extra shall be paid for making such openings.
- 1.1.10 The rate shall include the cost of all labour and materials involved in all the operations described above.
- 1.1.11 **APP Water Proofing Treatment:** The membrane shall be laid as per manufacturers specification fully bonded to substrate with 10cm side laps, 15 cm end laps and 100x35cm base flushing. Material should be procured from the Authorized distributor accompanied with Test Certificate of the product with batch number & date etc complete as per the direction of Engineer –in- Charge.

4.1.12 **GUARANTEE FOR WATER PROOFING TREATMENT**

The contractor shall give **Ten** years performance guarantee in the prescribed proforma (specimen appended) for the water proofing treatment. In addition 10% (Ten percent) of the cost of these items shall be retained as security, to watch the performance of the work executed. However, half of this amount (withheld) shall be released after maintenance period of Five years, after the completion of the work, if no defect comes to the notice. If any defect is noticed during the guarantee period, it shall be rectified by the contractor within Seven days

and, if not attended to, the same shall be got done by other agency at the risk and cost of the contractor. In any case the guaranteeing firms during the guarantee period shall inspect and examine the treatment once every year and make good any defect observed. However, the 10 % security deposit referred above can be replaced with bank guarantee of equivalent amount for relevant period.

5.0 **ALUMINIUM WORK**

5.1 **GENERAL**

The following are applicable particularly to Aluminum Works as contained in this tender documents:-

5.2 **MANUFACTURER'S TEST CERTIFICATE**

The contractor, if required by the Engineer-in-Charge, shall produce manufacturer's test certificates for any material or particular batch of materials supplied by him. The test carried out shall be as per relevant specifications / Indian standard codes.

5.3 **APPROVAL OF SAMPLES**

The contractor shall submit to the Engineer-in-charge, samples of all materials for approval and no work shall commence before such samples are approved. **Samples of un-anodised as well as anodised and electro-coloured aluminum sections, neoprene gaskets, thermal barrier sections, glass, screws, hardware and any other material components requiring approval of samples, in opinion of Engineer-in-charge shall be submitted for approval. The above samples will be retained as standards of materials and workmanship.**

5.4 **ALUMINIUM SECTIONS.**

- 5.4.1 Aluminum sections to be used for doors, windows, ventilators and fixed glazing etc. shall be manufactured by reputed companies & shall be appropriate to meet architectural designs of relevant components.
- 5.4.2 The aluminium extruded sections shall conform to B.I.S., Designations EIWP/HVIWP alloy, with chemical composition and technical properties as per B.I.S. 733 and B.I.S. 1285, respectively.
- 5.4.3 For sectional weight, tolerance limits shall be (-) 0.5%

5.5 **FABRICATION**

- 5.5.1 All joints shall be accurately fabricated and be hairline in appearance.
- 5.5.2 Taking into consideration varying profiles of aluminium sections being extruded by approved manufacturers, the contractor shall prepare detailed shop drawings of his proposal using suitable sections based on architectural design/drawings, adequate to meet the requirement/specifications laid down in this tender documents and as proposed by the manufacturer and these detailed show drawings shall be subject to approval of the Engineer-in-Charge.
- 5.5.3 All doors, windows, ventilators and glazing etc. shall be completely leak proof against water and air with neoprene gaskets and silicon sealants to the best satisfaction of the Engineer-in-charge, for which no extra payment shall be made.

- 5.5.4 The frames shall be strictly as per Architectural drawings, the corners of the frame being fabricated to the true right angles. Both the fixed frames and openable shutter frames shall be fabricated out of sections, which have been cut to length, mitered and mechanically joined for satisfactory performance. All members shall be accurately machine milled and fitted to from hairline joints. The jointing accessories such as cleats, brackets, screws etc. shall be of such materials as not to cause any bimetallic action. Nothing extra shall be paid for jointing accessories.
- 5.5.5 Mitered joints of the doors, windows, ventilators shutters and frames shall be either corner crimped or fixed with self tapping stainless steel screws of approved make and quality with heavy duty extruded aluminium cleats and sealed with silicon sealant, for which nothing extra shall be paid.
- 5.5.6 Verticals of the frame shall be embedded in the floors, wherever required, upto 50 mm, by cutting and making good of the floor. Nothing extra shall be paid for the same.

5.6 **FIXING**

- 5.6.1(a) The screws used for fixing aluminium frames to masonry walls/RCC members and aluminium members to another aluminium members shall be **Cadmium plated & of aluminium alloy or stainless steel** of approved make and quality. Threads of machine screws used shall conform to requirement of I.S. 4218.
- (b) **The gap between frames and supports and any gap in the various sections shall be filled with approved silicon sealant to ensure complete water tightness. The sealant shall be such approved colour and composition that it would not stain the masonry/RCC work. It should not sag or flow and shall not set hard or dry out under any conditions of weather. The SILICON sealant shall be used as required and shall match the colour of the aluminium sections. Any excess sealant shall be removed/cleared. Nothing extra shall be paid for the above.**

5.7 **ANODIZING / ELECTRO COLOURING**

- 5.7.1 **Aluminium sections shall be anodized as per B.I.S. 7088-1973. Anodizing to be as per grade AC-15 and not less than 15 microns thick, when measured as per B.I.S. 6012, in matte champagne electro colour with colour fastness rating No. 8 of B.I.S. 1868-1982. Colour anodizing would be done only by electro-colour process. No visual variation in colour shall be permitted.**
- 5.7.2 The anodic coating shall be properly sealed by steam or by boiling in deionized water as per B.I.S. 1868 and / or B.I.S. 6057. Sealing quality shall be tested in accordance with the relevant standards. Nothing extra shall be paid for above.
- 5.7.3 The contractor should satisfy himself by 100% checking in the factory that the thickness of the anodic coating is found to be minimum 15 microns and sealing quality appropriate everywhere. The testing shall be done by **EDDY CURRENT METHOD** as per B.I.S. 6012 for thickness. If any material is found substandard, the same shall be totally rejected. Requisite tests shall also be required to be carried out at site as instructed by the Engineer-in-charge and the contractor shall arrange all the equipments required for these tests at site. Nothing extra shall be paid for above.
- 5.7.4 All anodized aluminum works shall conform to relevant B.I.S. standards relating to materials, workmanship & fabrications respectively. Codes including B.I.S. 1868-1982, B.I.S. 733-1983 B.I.S. 1948-1961, B.I.S. 7088-1973, B.I.S. 6012-1970, B.I.S. 1285-1975, B.I.S. 740-1975 respectively are considered relevant and applicable.

- 5.7.5 A thick layer of clear transparent lacquer based on methacrylate or cellulose styrate shall be applied on the anodized sections, before they are brought at site. This lacquer shall be removed after installations are complete or as an alternative, the exposed surface of the aluminium sections shall be provided with gummed paper tape protection. After fixing and assuring of proper functioning of doors, windows etc, such protective layer shall be cleaned out/removed. Nothing extra shall be paid for above to the Contractor.

5.8 **GLAZING**

- 5.8.1 All glass panes shall be retained within aluminum framing by use of exterior grade neoprene gaskets. No water leakage should occur on the interior even if water penetrates exterior neoprene gaskets. Use of glazing or caulking compounds around the perimeter of glass will not be permitted. All fixed glass panes shall be supported by setting blocks. There should be no whistling or rattling. Before installation of glass, contractors shall ensure the following:

- a) All glazing rebates shall be square, to plumb, true to plane, dry and free from dust.
- b) Glass edge shall be clean and cut to exact size.
- c) Glazing shall provide such thermal expansion and contraction of components, as will be caused by temperature variations inside and outside without causing buckling stress on glass or detrimental effect on and structural elements components.

- 5.8.2 Samples of typical glazing shall be made and got approved by the Engineer-in-charge before mass installation is taken in hand.

5.9. **PROTECTION AND CLEANING**

- 5.9.1 After erection and removal of protective layer, all aluminium works including glass panes shall be washed with a suitable thinner and water to give a uniform clear appearance free from all marks and blemishes.

5.10 **MEASUREMENT AND RATES**

- 5.10.1 For Aluminium frame work, the payment shall be made as per actual weight in accordance with the procedure prescribed by Engineer-in-charge.

- 5.10.2 For fixed glazing and fixed laminated inserts, length and breadth of the area where glass panes etc. are to be seated, shall be measured correct to half a centimeter and area to be calculated in square meters correct to two places of decimal.

- 5.10.3 For openable shutters portion for all types payable on the area basis, clear openings of shutter shall be measured at its closed position correct to half centimeter and area shall be calculated in square meter correct to two places of decimal.

- 5.10.4 Prefabricated anodized aluminium protective grill (including frame work) shall be measured correct to half a centimeter in both the directions and area worked out correct to two places of decimal.

- 5.10.5** It is made clear those items such as cleats/angles, other fixtures, nuts, bolts, screws etc., which shall be required for fabrication and erection of aluminium work as per these tender documents, shall not be considered for the purpose of measurements and payment of various items. The rate of various items as per schedule of quantities is however inclusive of above elements and nothing extra shall be paid for the same.

6.0 **PAINT BROUGHT BY THE CONTRACTOR**

- 6.1 The contractors shall bring sufficient quantity of paint of brand & shade approved by Engineer-in-charge prior to the commencement of work & keep it in his stores at site of work under double lock & key.
- 6.2 The paint shall be issued to the contractor from time to time according to requirements for the work in the same manner as followed for issue of cement
- 6.3 Empty containers shall not be removed without the written permission of the Engineer-in-charge.

7.0 **FIXING OF SCI/CI PIPE**

The SCI/CI pipes and G.I. pipes, wherever necessary, shall be fixed to RCC columns, beams etc. with rawl plugs, or appropriate fasteners as approved by Engineer-in-Charge, and nothing shall be payable on this account.

8.0 **SANITARY INSTALLATIONS /WATER SUPPLY / DRAINAGE**

- 8.1 For the work of water supply and sanitary installations, the contractor shall engage the approved licensed plumbers and submit the name of proposed plumbing agencies with their credentials for approval of the Engineer-in-Charge.
- 8.2 The entire plumbing drawing and sanitary installation drawings / details shall be submitted by the contractor and got approved by the Engineer-in-Charge and nothing extra shall be paid for on this account.
- 8.3 The work in general shall be carried out as per CPWD Specifications - 2019 Volume I and II modified / corrected upto last date of receipt of tender. Rate includes all materials, labour and all the operations mentioned in the respective items unless and otherwise specifically mentioned.
- 8.4 The tendered rates shall include the cost of cutting holes in walls, floors, RCC slabs etc. wherever required and making good the same for which nothing extra shall be paid.
- 8.5 Vitreous China sanitary fittings procured from firms Neycer, Hindware, Cera, Parrware shall only be used subject to approval of samples by the Engineer-in-Charge unless otherwise specified in the items.
- 8.6 C.P. Brass pillar taps, bib cocks, flush valves, angle valves etc. shall be of make Gem / Jaguar / Kingston as per sample approved by the Engineer-in-Charge. C.P. Brass bib cocks / angle valves shall be fixed with heavy duty CP flange for which nothing extra shall be paid.
- 8.7 The Centrifugally spun cast iron pipe BIS:3989-1984 wherever necessary shall be fixed to RCC columns, beams etc. with dash fastener of approved quality and nothing extra shall be paid for on this account.
- 8.8 P or S floor traps (long arm up to 90cm length) in WCs shall be of deep seal type of approved make and shall have a minimum water seal of 75mm. While for floor traps (long arm upto 90cm length) shall have a minimum water seal of 50mm.
- 8.9 The contractor shall be responsible for all the protection of sanitary water supply fittings and fixtures against pilferage and breakage during the period of installation until the completion / handing over of the work.

- 8.10** Sanitary fixtures shall be of the best quality and shall be of approved make and manufacture (wherever specified) as defined in the item of work or defined anywhere in this document or shall be as mentioned in the CPWD specifications failing which the same shall be of ISI mark subject to approval by the Engineer-in-Charge. All fixtures and fittings shall be provided with all such accessories as are required to complete the item in working condition whether specifically mentioned or not in the Schedule of Quantities, specifications, elsewhere in this tender document & drawings. The quoted rates shall be deemed to be all inclusive for a complete item fit for use including all materials, labour, T&P, specials, equipments, testing & commissioning etc. Accessories shall include proper fixing arrangement, brackets, nuts, bolts, screws and required connection pieces. All the accessories shall be of the arrangements required and recommended by manufacturer including testing and commissioning.
- 8.11** The entire responsibility for the quality of work will however rest with the building contractor only and he shall submit a guarantee bond as per proforma.
- 8.12** The contractor shall submit completion plans for water supply, internal sanitary installations and building drainage work within thirty days of the date of completion. These plans are to be submitted on drawings prepared through computers (1 original copy plus 3 Photostat and one soft copy) on suitable scales to show the general arrangement and desired details. Nothing extra shall be paid for on this account. In case the contractor fails to submit the completion plans as aforesaid, security deposit shall not be released.
- 9.0** The words “Equivalent”, “Approval” and authorized” in these specifications shall imply and require written approval of the Engineer-in-Charge.
- 10.0** The rates shall include the following:-
- 10.1** All necessary materials, bolts, nuts, fasteners, nails, screws, rawl plugs, etc. as may be necessary to complete the work detailed in the specifications, whether or not specifically mentioned. The bidder should ensure that he has studied the drawings carefully and should seek any clarifications he may have from the Executive Engineer-in-charge of the work. No extra claims will be entertained later on.
- 10.2** Cutting, making and repairing of any holes/opening Junction Box for electrical purpose etc. required for any light fittings, loudspeakers, air-conditioning grills etc.

ANNEXURE-1**LIST OF EQUIPMENT FOR FIELD TESTING LABORATORY**

S. No.	Equipments	Nos.
1.	Balances	
(i)	7 kg. to 10 kg. capacity, semi-self indicating type- accuracy 10 gms.	1
(ii)	500 gm. capacity, semi-self indicating type – accuracy 1 gm.	1
(iii)	Pan balance – 5 kg. capacity – accuracy 10 gms.	1
2.	Ovens – electrically operated, thermostatically controlled upto 110° C – sensitivity 1° C.	1
3	Sieves: as per IS 460-1962.	
(a)	Sets of sieves of 450mm internal dia for coarse aggregate [100mm, 80mm, 40mm; 20mm; 12.5mm, 10mm; 4.75mm complete with lid and pan]	2
(b)	Sets of sieves of 200mm internal dia for fine aggregate [4.75mm; 2.36mm; 1.18mm; 600 microns; 300 microns & 150 microns, with lid and pan]	2
(c)	Sieve Brushes and sieve shaker capable of 200mm and 300mm dia sieves, manually operated with timing switch assembly	2
4	Slump cone, steel plate, tamping rod, steel scale, scoop	2
5	Dial gauges, 25mm travel – 0.01 mm/division least count- 2 nos.	1
6	100MT compression testing machine, electrical-cum-manually operated)	1
7	Graduated glass measuring cylinder	As per requirement
8	Enamel trays (for efflorescence test for bricks)	
(i)	300mm x 250mm x 40mm – 2 nos.	2
(ii)	Circular plates of 250mm dia – 4 nos.	4

ANNEXURE-II
FIELD TESTING INSTRUMENTS

S.No.	Instruments	Nos
1	Steel tapes – 3m	3
2	Vernier calipers	1
3	Micrometer screw 25mm gauge.	1
4	A good quality plumb bob.	2
5	Spirit level, minimum 30 cms long with 3 bubbles for horizontal vertical.	1
6	Wire gauge (circular type) disc	1
7	Foot rule.	2
8	Long nylon thread	5
9	Rebound hammer for testing concrete	1
10	Dynamic penetrometer	1
11	Magnifying glass	1
12	Screw driver 30 cms long	4
13	Ball pin hammer, 100 gms.	1
14	Plastic bags for taking samples	As per requirement
15	Moisture meter for timber	1
16	Earth resistance tests (for electrical divisions)	1
17	Megger (for electrical divisions)	1

ANNEXURE-III**PROFORMA FOR MANDATORY TESTS TO BE ATTACHED WITH RUNNING BILLS**

Name of the work.....Name of
 contractor.....Agreement No. and date.....R/A Bill
 No.....

Sl. No.	Item	Quantities as per agmt.	Frequency as per specification	No. of tests required	Upto date quantity	No. of tests required	No. of tests actually done	Remarks
1	2	3	4	5	6	7	8	9

Note: If the number is less than that required, then reasons shall be recorded.

Signature of Junior Engineer Signature of Assistant Engineer Signature of Executive
 Engineer

MINIMUM QUALITY ASSURANCE PLAN

1. The contractor has to comply with the minimum quality assurance plan, as follows: -
 - (i) Lot size, number of required tests and frequency of testing shall be conducted as per CPWD specification and BIS Code.
 - (ii) All the relevant and applicable codes, specification and standards, as well as the acceptance criteria for various items of work, workmanship, materials & process employed should be made available at site office by contractor.
 - (iii) Maintenance of register of tests –
 - (a) All the register of tests carried out at Construction site or in outside laboratories shall be maintained by the contractor which shall be issued to the contractor by Engineer – in – Charge.
 - (b) All samples of materials including cement concrete cubes shall be taken jointly with contractor by JE and out of this at least 50% samples shall be taken in presence of AE-in-charge. If there is no JE, all samples of materials including cement concrete cubes shall be taken by AE jointly with contractor. All the necessary assistance shall be provided by the contractor. Cost of sample materials is to be borne by the contractor & he shall be responsible for safe custody of sample to be tested at site.
 - (c) All the test in field lab setup at construction site shall be carried out by the Engineering staff deployed by the contractor which shall be 100% witnessed by JE and 50% of tests shall be witnessed by AE-in-charge. At least 10% of the tests are to be witnessed by the Executive Engineer.
 - (d) 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/ EE.
 - (e) Contractor shall be responsible for safe custody of all the test register.
 - (iv) Submission of copy of all test registers, material at site register and hindrance register along with each alternate Running Account Bill and Final Bill shall be mandatory. These registers should be duly checked by AE (P) in Division Office and receipt of registers should also be acknowledged by AAO by signing the copies.
 - (v) Maintenance of material at site (MAS) Register.
 - (a) All the MAS registers including cement and steel register shall be maintained by contractor which shall be issued to the contractor by Engineer- in- charge.
 - (b) Each of the entry of receipt of material at site shall be test checked 100% by the J.E. or by AE of there is no JE.
 - (c) MAS register shall be checked twice a week by the JE and at least once a week by the AE.
 - (d) Cement register shall be reviewed by EE at least once in a Months.
2. The contractor shall make his own arrangement of water for construction and drinking purpose as well for electricity and its distribution at his own cost. The department will render only assistance to the contractor for making application to Local body/ authorized Electric supply agency, if required. All the fees and charges including consumption charges shall be borne by the contractor. The contractor can make deep well boring at site. The water should be as per CPWD specifications, 2019 and necessary test shall be conducted as per CPWD specification.
3. The contractor shall not damage any electric cable / inter com cable / sewer line / water line during execution of work. For any damage to the services if occurred, the contractor shall be fully responsible and he has to restore the same services at his risk & cost. The contractor will not have any claim in case of any delay by the Engineer-in-Charge in removal of trees or shifting, removing of telegraph, telephone or electric lines (overhead or underground), water and sewer lines and other structure etc., if any which may come in the way of the work. However, suitable extension of time can be granted to cover such delay.
4. The malba /garbage generated at site due to construction activities shall be removed from the site immediately & shall be disposed off by the contractor to the approved dumping site identified by the Engineer-in-charge. The surplus soil/earth shall be disposed of as per the directions of Engineer-in-charge separately.

5. The contractor shall clean the site thoroughly of scaffolding materials, rubbish, equipments left out of his work and dress the site around the building to the complete satisfaction of the Engineer-in-charge before the work is treated as completed.
6. The contractor shall ensure quality control measures on different aspects of construction materials, workmanship and correct construction methodologies to be adopted. All the registers of tests carried out at Construction Site or in outside laboratories shall be maintained by the contractor which shall be issued to the contractor by Engineer-in-Charge.
The contractor shall submit samples of various materials to be used for the approval of the Engineer-in-charge out of the brands provided in the agreement.

The contractor shall submit drawings of shuttering arrangement etc. for the approval of Engineer-in-Charge. The contractor shall also submit bar bending schedule for approval of Engineer-in- Charge before execution.
7. The contractor shall establish a site laboratory & make arrangement of Engineers / Technicians for testing of materials as per specification and maintain the record of test results in required Proforma as per direction of engineer-in-charge. A tentative list of minimum equipment's for site laboratory, to be established by the contractor at site is as under:-

LIST OF PREFERRED MAKES FOR CIVIL WORK

Approved makes of materials to be used in the work are as given in the table below. In case of non-availability of these makes, the Engineer-in-charge may allow use of alternative makes after seeking approval of TS authority. Only BIS marked materials shall be generally used in the work. Non-BIS marked materials may be permitted by the Engineer-in-charge only when BIS marked materials are not manufactured.

Some preferred brands names of materials, whichever are applicable for the scope of work are listed below. However preferred equivalent materials of any other specialized firms may be used, in case it is established that the brands specified below are not available in the market duly certified by manufacturer and subject to approval of the alternate brand by the Engineer-in-Charge, (See also conditions of contract or any other manufacturer approved by the Engineer-in-charge.

The Contractor shall obtain prior approval from the Engineer-in-charge before placing order for any specific material or engaging any of the specialized agencies and the brand / make of the material as specified in the particular specifications and in the list of preferred makes of materials attached in the tender. The Contractor shall make a detailed submittal with catalogues and highlighted proposed specifications, as well as full details of the works proposed to be executed by the specialized agency.

Note: The makes are subject to the compliance of Make in India norms.

S. No.	Material	Preferred Make
1.0	Concrete Work	
(i)	Ordinary Portland Cement / Portland Pozzolana Cement.	ACC, Ultratech, Ambuja, Birla, J K Lakshmi Shree Cement,
(ii)	White Cement	Birla White, J K White, Ultratech
(iii)	Construction Chemicals / Admixtures / Plasticizers / Super Plasticizers/Curing compounds	BASF, FOSROC, Pidilite, Ardex Endura, Mapei, MC Bauchemie, Weber (Saint Gobain), Sika, MYK, Asianpaints, Ferrouscrete
(iv)	Precast Cover Blocks	ACC, Nuvoco, Ultratech, Modi Cover blocks, Steelmax
2.0	Reinforced Cement Concrete	
(i)	Reinforcement Steel TMT bars Fe-500D	SAIL, Tata Steel Ltd, RINL, JSW Steel Ltd, Jindal Steel & Power Ltd.
(ii)	Mechanical Couplers for Reinforcement	Dextra India, Halfen, Sanfield, G-Tech
(iii)	Anchor fastener, Rebar chemical/Mechanical Fastener, Core Cutting, Expandable Fastener	Hilti, Fisher, Bosch, Wurth, Canon, Trixel, 3M India
(iv)	Ready Mix Concrete Plants	ACC, Ultratech, JK, RMC Plant or own Batch Mix Plant with appropriate capacity to be set up by contractor at or away from the site
(v)	Aluminium customized Shuttering	S-Form, MFE, Eins Technik Pvt. Ltd. ALFOAC, MFS
3.0	Water Proofing	
(i)	Crystalline Water Proofing Compound	Penetron, Kryton, Xypex, MC Bauchemie, Pidilite, Asianpaints, Velosit, Weber (Saint Gobain) (Dosage as per manufacturer specification or that required to achieve performance criteria of DSR item 22.22 i.e. more than 90% permeability reduction and resistance to hydrostatic pressure up to 16 bar, whichever is more), Fosroc, Dr.Fixit, Sika, Asian Paints : BASF, CICO, Ardex Endura, STP Ltd., Berger Paint,
(ii)	Water Proofing swellable bar/ Liquid membrane/ single component applied (spray applied for deck water proofing/ Elastomeric acrylic UV resistant liquid applied coating	Ardex Endura, MYK Laticrete, Pidilite, BASF, Fosroc, Sika, MC Bauchemie, Kryton, Mapei, Asian paints, Penetron, Ferrouscrete, Velosit, Weber (Saint Gobain) Dr Fixit/ Dulux.
(iii)	Waterproofing PU / Polyurea/ Acrylic / Elastomeric Cementitious / SRI Coating/	BASF, Fosroc, Pidilite, Penetron, Sika, Asianpaints, Weber (Saint Gobain), Mapei, MYK, Ferrouscrete, MC Bauchemie, Velosit
(iv)	Polysulphide Sealant for Joints	Fosroc, Pidilite, Sika, Dow Corning, Wacker, Penetron, Asianpaints, Ferrouscrete, MC Bauchemie, Weber (Saint Gobain)

(v)	Water proofing membrane HDPE /TPO based waterproofing	Fosroc, Pidilite, BASF, Sika, Asianpaints, Weber (Saint Gobain), Mapei, MYK, Ferrouscrete, MC Bauchemie
(vi)	Water proofing compound	BASF, Fosroc, Pidilite, Penetron, Sika, Mapei, Asianpaints, MC Bauchemie, MYK, Ferrouscrete, Weber (Saint Gobain), Velosit
(vii)	Polyurethane over deck insulation foam	BASF, Fosroc, Pidilite, Penetron, Sika, Mapei, MYK, MC-bauchemie, Asianpaints, Weber (Saint Gobain), Ferrouscrete, Velosit
(viii)	Food Grade Coating for Water Tanks	BASF, Fosroc, Pidilite, Penetron, Sika, Mapei, MYK, Weber (Saint Gobain), Asianpaints, MC Bauchemie
(ix)	Integral Water Proofing compound with cement (For Plaster & Mortar)	Fosroc, Dr. Fixit, Sika, Asian Paints : BASF, CICO, Ardex Endura.
(x)	Water Proofing for bathroom / toilet / balcony & other wet areas	Fosroc, Dr. Fixit, Sika, Asian Paints : BASF, CICO, Ardex Endura.
(xi)	Elastomeric fiber membrane	Fosroc, Dulux, Asian, Sika
4.0	Masonry Work	
(i)	AAC Blocks	ACC, Tata Tiscobuild, Ultratech, Ferrouscrete, Magicrete, HIL, BILTECH and As Approved by E-I-C.
(ii)	AAC Block adhesive	Ultratech, Ardex Endura, Ferrouscrete, Weber (Saint Gobain), Asianpaints
5.0	Steel Work	
(i)	Structural Steel Sections / Tubular Sections	SAIL, Tata Steel, RINL, JSPL, JSW, 7 APL Apollo
(ii)	Dash / Anchor Fasteners, Rawl Plug	HILTI, Fischer, Bosch, Wurth, Canon, ASES
(iii)	EPDM Gasket	Schuco, Hanu, Raven, Anand
(iv)	Metal deck profile sheet	Ezydeck of TATA / Lloyd Superdeck, JSW
(v)	Roofing Steel Sheet (Precoated)	Tata Bluescope Steel Ltd., Jindal Steel, JSW Steel, APL Apollo
(vi)	Polycarbonate Sheet	GE-LEXAN, Polygal, Tuflite Dalphalon, Coxwell, GE Plastic, LEXAN & MG Polyplast.
6.0	Aluminium Work	
(i)	Aluminium Extrusions	Hindalco, Jindal, NALCO
(ii)	Anodised Aluminium Hardware (Heavy Duty)	HARDIMA, EVERITE, Alu Alpha, Hindalco, Pulse of LGF Sysmac, Kilong, Classic, Ebco.
(iii)	Alluminium Door & Window Systems	Schuco, Technal, Eternia-Hindalco, AIS Windows, Alupure, Axsys, A2Z Infra Solutions, Pabros
(iv)	Aluminium Glass Facade & Structural Glazing Systems	Schuco, Technal, Eternia-Hindalco, Dow, Lindner AG, Art N Glass, AIS Window system, A2Z Infra Solutions, Pabros
(v)	Aluminium Composite Panels / Honeycomb Composite Panels / Aluminium-HPL Panels	Allucobond, Alstone, Aludecor, Kalco, Reynoarch, Alutech, Virgo, AICA (Sunmica), VIVA
(vi)	Metal (Aluminium) Facade Panels	Hunter Douglas, Dwall Metallic, Lindner AG, Anakon, Hindalco
(vii)	Silicone Sealant / Weather Sealant / Fire Sealant / Polysulphide Sealant	Alstone, Sika, Dow, Choksey, Hilti, Wuerth (Promat), GE Plastics, Pidilite, FOSROC, BASF, Dow Corning, Wacker, Sika,
7.0	Flooring	
(i)	Glazed, Ceramic & Vitrified wall / floor Tiles (Antiskid / Matt / Glossy)	Manufactured in own mother plant by: Kajaria, Johnson, Somany, RAK, NITCO, AGL, Oasis,
(ii)	Epoxy Grouts / Tile adhesive / Polymer modified cementitious grouts/	Ardex Endura, Ferrouscrete, MYK Schomburg, Pidilite, FOSROC, Sika, Weber (Saint Gobain), Asianpaints Laticrete, STP Ltd, BASF, Ferrous Crete, Berger Paint,
(iii)	Epoxy flooring	MYK Schomburg, BASF, Flowcrete, Ardex Endura, FOSROC, Sika, Weber (Saint Gobain), Ferrouscrete, Asianpaints
(iv)	Wooden Laminated Flooring	Vista, Action Tesa, Pergo, Apex, Lamiwood, Kronotex, Greenply, Floormax, Kahrs Enginner Wood product, Crossbond
(v)	PVC Flooring	Armstrong, Unitex, LG, Responsive Industries, Tarkett, Tremco
(vi)	Vinyl Flooring	LG, 3M, Responsive Industries, Wonderfloor, Tarkett, Armstrong, Tremco, Rexcode,
(vii)	Floor hardener	Ardex Endura, Weber (Saint Gobain), MC Bauchemie, Ferrouscrete, Ironite, Ferrok, Hardonate.
(viii)	Carpet Flooring	Interface, Shaw, Welspun, CCIL, Milicon, Flotex

(ix)	Marble/Stone flooring	Continental marble, Stonex, A Class Marble (for artificial stone only)
(x)	Rubberized Flooring	Ebaco, Armstrong, Wonderfloor
(xi)	Mosaic Tiles / Chequerred Tiles	Ultra Tiles, NITCO, Hyper, Mayur, Pavcon.
(xii)	Paver Block & Kerb Stone	K.K. , ACC, DALAL Tiles Pvt. Ltd.
8.0	Roofing / False Ceiling / Partition EPF	
(i)	GRG (Glass Fibre Reinforced Gypsum) false ceiling with GI grid system	Diamond ceilings, Saint Gobain, Armstrong, Hunter Douglas USG Boral, Aerolite, Interarch., PROLAD, METAPRO.
(ii)	Calcium Silicate / Mineral Fiber False Ceiling Tiles and frame work	Saint Gobain, Armstrong, Aerolite, Ramco Hilux, USG Borals, Anakon, Dexune, Aerolite, METAPRO
(iii)	Gypsum Board False Ceiling/Partition and frame work	Saint Gobain Gyproc., USG Boral Armstrong, Knauf AMF, Anakon, Dexune, Western,
(vi)	Metal / U-Baffle / Open Cell / Wooden Laminated false ceiling i/c framework	Diamond ceilings, Armstrong, Hunter Douglas, Lindner AG, Anakon, Techno ceiling
(vii)	Rock Wool / Glass Wool	UP Twiga, Roxul (Rockwool), Rockloyd (Lloyd Insulations), Dhanbad Rockwool, Dexune, Rockfon, Techno ceiling
(viii)	Fibre cement board	HIL (Birla Aerocon), Bison (NCL), RAMCO Hicem, Everest, Visaka Industries, Dexune
(ix)	Extruded Polystyrene Insulation Board	Du Pont, Dow Corning, Supreme, Texas, Analco, Unitech-ikk, Sika
(x)	Heat Resistant Tiles	Kajaria, Somany, Johnson, Swastik, Thermatek.
(xi)	Roof puff pannel	King Span, Jindal, Altos, Arctic, Blue Scope
9.0	Doors / Windows / Wood work / Furniture	
(i)	Automatic sliding Glass doors with complete mechanism	Auto Ingress, Godrej, Dorma, Ozone
(ii)	Flush Door Shutter	Century, Greenply, Archidply, Duro, Jayana, Jain Doors Pvt Ltd., NAVAIR, HORMANN, Century, Durian, Woodify, Green Panel. Alstone, EUROBOND, VIRGO, Rajshri, KITPLY, Crossbond
(iii)	Ply Wood / Block Board	Century, Greenply, Merino, Archidply, KITPLY,
(iv)	Laminated Particle Board / veneered Particle Board	Greenlam, Century, Archidply, Merino, action Tesa, Woodify, Green Panel. VIRGO, KITPLY, Crossbond
(v)	Laminates/Veneers	Greenlam, Century, Archidply, Merino, Virgo, AICA (Sunmica), Green ply, Durian, Green Panel, KITPLY.
(vi)	Acrylic sheet/Acrylic Laminate	Rehau, Opulux, Treelam, Praveedh Décor, EGR, Virgo, KITPLY,
(vii)	Wood Plastic Composite (WPC) Board/Door Shutter/Door Frame	Treelab, Floresta, Rajshree, Alstone
(viii)	Factory made wooden Door Frames & Shutter	Jain wood Industries, D S Doors, Duro, Ambika Wood, Shreeji Woodcraft, SM Corporation, Jain Doors Pvt Ltd
(ix)	Factory made kitchen cabinets, wardrobes etc.	Evoke, Godrej, Brown Crust, Sleek, Infurgo, Treelab
(x)	UPVC Doors & Windows	Fenesta, VEKA, KOMERLING, Aluplast, Wintech, Deceuninck, Saint Gobain, Prominace, Duroplast, Pabros
(xi)	G.I. Steel Door Frame	Kutty Doors, Shakti Metdoor, NAVAIR, Synergy Thrislington, APL Apollo
(xii)	Fire Rated Metal/Wooden/Acoustic Doors (Glazed/Unglazed/sliding)	Shakti-met, Pacific, Navair, ASES, Pyrotech, GMP, Sukriti, Bhawani Fire, Signum Fire Protection, Shakti Hormann, Navair, Promat. Ecotone, Suniti Construction, Radiant, Sehgal Doors, Synergy Thrislington, Woodify.
(xiii)	Fire Rated Glass	Pilkington, SCHOTT, FIRELITE, Saint Gobain, ASAHI, Pyroguard, Yale, Assa Abloy, Ozone, Dorma, Becker Fire solutions, ASES (Agani Suraksha).
(xiv)	Hardware for Fire Check Doors	Dorma, Assa Abloy, Geze, Hormann, Dorset, Becker FS, Kich Yale, Assa Abloy, Ozone, Dorma, Becker Fire solutions, ASES (Aganisuraksha).
(xv)	S.S. Hardware, Door & Window Fittings, Hinges	Dorma, Godrej, Hafle, Dorset, Hettich, Kich, Ozone.
(xvi)	Brass Hardware	Magnum (Mukund Overseas), Artistick's (Artistic Art Forum), EPPW, Décor, Palladium

(xvii)	Friction Stay Hinges	Hettich, Kich, Hafle, Dorset
(xviii)	Floor Spring / Door Closer	Godrej, Dorma, Hafele, GEZE, Assa Abloy, Dorset, Becker FS, Kich, Auto Ingress.
(xix)	Aluminum/U-PVC Doors & Windows Hardware	Rotto, McCoy 8M, Oben, Dorset, Kinlong, Fenesta, Rehau.
(xx)	Aluminum Glazed Partition System	Kubik, Jeb, Lycos
(xxi)	Window Blinds, blackouts, curtains, etc.	Vista, Deck, Hunter Douglas, Marvel
(xxii)	Window Roller/Zebra Blind/Curtains	Aerolux, Hunter Douglas, Deck, D'Decor
(xxiii)	Hospital Cubicle Track & Curtain System	Toso, Forest, Deck, Hunter Douglas,
(xxiv)	Lead lined doors	Tata Pravesh, Shakti-met, Pacific, Navair, Sukriti, Bhawani, ASES, 4C Fire
(xxv)	Auditorium chair	Godrej, HNI, Fuego, Steelcase, Featherlite.
(xxvi)	PVC Shutter	Rajshri, Sintex, M/s Jain Wood Industries./Jain Pvt. Ltd.
(xxvii)	UPVC Door/Windows/Ventilator	Fenesta, Komerling, Rehau, Veka, Duroplast, Aluplast, Wintech, ENCRAFT
(xxviii)	FRP Door Shutter & Frame	Jayana, Fiberways & Selected product company, Bhatt FRP, Jain Doors Pvt. Ltd,
10.0	Finishing Works	
(i)	Ready Mix Plaster	Ultra Tech Readiplast, JSW Enduro Plast, Magicrete, Birla HIL/Birla White, Accoplast (ACC)
(ii)	Gypsum Plaster / Ready Mix Plaster/ Polymer modified self-curing Mortar	Saint Gobain (Elite 90), Ardex Endura, Pidilite, FOSROC, Ferrous Crete, Western, Berger, Ultratech, JK White.
(iii)	Cement Primer	Nerolac, Berger, BP White (Berger), Decoprime WT(Asian), White primer (ICI), Acro paints, Shalimar Paints, British paints Acrylic water base cement primer.
(iv)	Cement Based & Acrylic Wall putty	Birla HIL, JK White, Asianpaints, Ferrous Crete, Acro Paints, Weber (Saint Gobain), Western, Shalimar Acrylic Putty, Berger
(v)	Oil Bound Washable Distemper	Asian paints, Nerolac, Berger, Dulux ICI, Shalimar Paints, British Paints.
(vi)	Dry Distemper	Asianpaints (Professional Acrylic Distemper), Nerolac: (Beauty Acrylic Distemper), Berger (Bison Acrylic Distemper), Dulux ICI (Maxilite), British Paints.
(vii)	Acrylic Distemper (washable/ Real mix/ Low VOC)	Asianpaints (Tractor Aqua Lock Paint), Berger (Commando) Acro Paints (Aqualin AWD) or equivalent paints of Nerolac or ICI-Dulux, Shalimar No. 1 PAD, British paints Acrisil kacrylic distemper.
(viii)	Acrylic Emulsion Paints	Asianpaints (Professional Premium Interior Emulsion Paint), Nerolac (Beauty Gold), Berger (Rangoli total care), ICI-Dulux (Super Cover), Acro Paints (Acropearl), Shalimar Paints (Superlac Advance), British paints-Sheer Class Splendor.
(ix)	Texture Finish	Asianpaints, Bakelite & Hylam, Spectrum, Heritage, Ultratech Texture Paints, Berger, Nerolac, Berger Paints, British paints.
	Exposed Concrete Texture Finish	Ultratech Texture Paints, Armourcoat, Oikos, Heritage, Spectrum, Berger
(x)	Steel Primer (Red Oxide Zinc Chromate Primer)	Asianpaints, Nerolac, Berger, ICI-Dulux, Acropaints, Berger, Shalimar Paints, British paints.
(xi)	Synthetic Enamel Paint	Asian (Apolite Premium gloss enamel), Nerolac (Synthetic Hi gloss), Berger (Luxol Hi gloss), ICI- Dulux (Gloss Synthetic Enamel), Acro paints (Acrogold), Shalimar Paints (Superlac Hi-gloss), British paints Glow Advanced enamel.
(xii)	Paint- Texture Concept Paints (Interior)	Asianpaints, Ultratech Texture Paints, Berger, acro paints, Shalimar Paints
(xiii)	Paint- Anti carbonation paint	Fosroc, Pidilite, BASF, Asianpant, Sika, Berger, Shalimar Paints
(xiv)	Wood Primer	Asian paints, Berger, ICI-Dulux, Nerolac, Shalimar Paints., British paints Wood primer- white/pink.
(xv)	Melamine Polish for wood work	Asian Paints Melamine Gold, Wudfin of Pidilite, Timbertone of ICI-Dulux, MRF.

(xvi)	PU Polish for wood work	ICA, MRF, Asian, Berger
(xvii)	Epoxy Paint	Asian, Nerolac, Berger, ICI, Kansai Akzo Nobel, Weber (Saint Gobain) Shalimar Paints., British paints.
(xviii)	Fire Resistant Paint	Asian paints, Akzo Nobel Coatings India Ltd., Viper, Shalimar Paints., PROMAT, Jotun, Wurth.
11.0	Water Supply & Sanitary Works	
(i)	Stainless Steel pipe and fitting of grade AISI 304 as per JIS standard 3448 for water supply line & Fittings	SAIL (Salem Steel), Jindal, J-Press, Alfa press, Primegold, Dorma, Ozone, Godrej. VEGA, Player
(ii)	G.I. Pipe	Tata Steel, Jindal Pipes, Surya Roshni, APL Apollo, Jindal (Hisar), Prakssh Surya,
(iii)	GI Pipe Fittings	Unik, Zoloto, Surya, Jinda Pipesl, Tata Steel, AVR,
(iv)	U-PVC pipe and Fittings	Supreme, Finolex, Astral, Prince, AKG, Birla HI, APL Apollo, Ashirwad, Kishan.
(v)	HDPE, PPR & C-PVC pipe and Fittings	Supreme, Finolex, Astral, Prince, AKG, Ashirwad, Oriplast, Birla HIL, APL Apollo, Reliance, Jain Pipes, ORIPLAST, Kishan, Player.
(vi)	M.S. Black Pipes	Tata, Jindal, SAIL, Surya
(vii)	CP Fittings	Somany (Rejoice/Kenzo), Jaquar (Opel Prime / Alive / Florentine Prime), Euronics (Riviera / Orlando), Kerovit (Urbane / Hydrus / Curve Plus), Cera (Brooklyn / Valentina / Ruby), Roca (Victoria Plus / L20) , Grohe, Kohler
(viii)	Sanitary ware / Fixtures / Fittings (Premium range)	Kohler, Grohe, Jaquar, Somany, Cera, Euronics, Kerovit, Roca, Hindware
(ix)	Urinal Frosted Glass partition	Greenlam, Jaquar, Merino, Fundermax, Cera, Roca, Saint Gobain, AIS, Modiguard, Asahi Float.
(x)	Sensor Operated Urinal	Jaquar, Roca, Kohlar, Euronics
(xi)	Glass Mirror	Saint Gobain, Modi Guard, Atul, Pilkington, Cera, Golden Fish.
(xii)	Specially abled Fitting	Pressalit, Hindustan, Cardin, Euronics, Cera
(xiii)	Gun Metal Valves/Sluice Valves/ Air Release Valves	Zoloto, Audco (L&T), Castle, Leader Valves, SKS
(xiv)	Sluice Valve / Pressure Reducing valve / Non-Return valve / check valve / Butter fly valve / ball valve	Zoloto, Kirloskar, Leader Valves, Zoloto, SKS, Castle, Audco (L&T)
(xv)	Toilet Cubicles	Merino (Titan Series), Greenlam (Sturdo Classic), Trespa, Dorma
(xvi)	Glass Shower Partition	Dormakaba, Kich, Hafelle, Jaquar, Kohler, Kerovit
(xvii)	Insulation for external / exposed hot water pipes	KAIFLEX, ARMAFLEX, CAREFLEX
(xviii)	Pipe protection for external water supply pipes	PYPKOTE, ARMAFLEX, AKPOLYKOTE
(xix)	Water Meter	Prima, Kranti, Leader, Zoloto, Dashmesh
(xx)	Brass stop & Bib Cock	Zoloto, Sant, L&K, Leader,
(xxi)	Brass Ferrules	Dhawan Sanitary Udyog (PRIMA), Annapurna, Kalsi
(xxii)	PVC water storage tank	Amitex, SPL, Sintex, Hindware, Vectus, Astral,
12.0	Drainage	
(i)	Soil Waste / Vent Pipes and Fittings:	
	a) Hubless Centrifugally Cast Spun Iron Pipe and fittings	NECO, SKF, Hepco, Saint Gobain,
	b) Centrifugally (Spun) CI Pipes Class 'LA' / Ductile Iron Pipe	Kesoram, Electro Steel Castings Ltd., NECO, BIC, Kapilansh, SKF, RPFM
(ii)	C.I. Manhole covers, frames & GI Gratings	NECO, BIC, RIF, SKF, Hepco, Kapilansh,
(iii)	Unplasticized Non-Pressure Polyvinyl Chloride (PVC-U) Pipes underground conforming to IS: 15328-2003 & Fittings	Supreme, Astral, Finolex, Ashirvad
(iv)	Low noise system rain water pipes and fittings made of mineral reinforced Poly Propylene	Supreme, Astral, Finolex, Ashirvad, Plasto.
(v)	Drainage AC/HDPE Pipes	Jain Pipes, Oriplast, Reliance, MAZZA AC Pipes, Supreme

(vi)	DI Pipes & Fittings	Supreme, Electrosteel, Jindal, TATADUCTURA, Kesoram, Kapilansh
(vii)	SFRC Manhole covers & gratings	KK, JAIN, PARGATI
(viii)	FRP Manhole covers, Drain Covers & gratings	Dudhi, Neco, HP, Indogyp
13.0	Stainless Steel & Glass Works	
(i)	Modular SS-304/316 Grade / Glass Railing with SS-304/316 grade Hardware	Dorma, Jindal, GEZE, Q-Rail, Technorail, Kich, Koncept
(ii)	Stainless Steel Sink (Out of Salemsteel)	Neelkanth, Niralli, Jayna, Silver shine KINGSTON/COBRA, Jaynam
(iii)	Float Glass	Saint Gobain Glass India Ltd., AIS Glass Solutions Ltd., Pilkington, Modi Guard, Glaverbel, Asahi Float.
(iv)	High Performance Glass	Saint Gobain Glass, Pilkington, Guardian, Emirates Glass LLC, Glaverbel, AIS Glass.
(v)	Lacquered Glass	Saint Gobain Glass, AIS Glass, Art N Glass, Guardian
(vi)	Glass Processor for making DGU/Toughening	Art N Glass, Shankar Tuff, Sheeshmahal, Shivshakti, GSC, Kaimapnat Glass, SK Tuff, AIS Glass
14.0	Miscellaneous	
(i)	Terracotta Cladding Tiles	Moeding, Clayton, Tempio
(ii)	SS Dry Cladding Anchor with SS Clamp	Hilti, Fisher, Wuerth, Trixel
(iii)	Solid Acrylic Surface Boards	Dupont, LG Himacs, Neonnex, Hanex, GMGR India
(iv)	Modular Expansion / Seismic Joint System	Herculus, Sanfield, Vexcolt, MigUA, Katanaflex, Inprocorp, Bizzar
(v)	Solid Surface (Corian)	Dupont, Neonnax, LG, Samsung
(vi)	Window Blinds	Vista, Deck, Hunter Douglas, MAC, TRAC
(vii)	Fire Sealant	Hilti, 3M India, Wuerth, Fischer
(viii)	Modular Rainwater Harvesting system	Retas Enviro Solutions Pvt Ltd, Bantair Pvt Ltd, Adwyn Impex Pvt Ltd, Life green system Ltd
(ix)	Precast GRC / Sand Stone Jali (Screen)	Unistone, Dalal, Birla GRC, Sanderson
(x)	Wall Paper	D'décor, Lifencolours, India Circus, Ego, Vescom, Nilaya by Asian Paints, Muraspec, Marshalls
(xi)	XPS Board/ Dimple board	Supreme, Insuboard, Soprema, Own corning, Shalimar, Technonicol, Pidilite
(xii)	Wall Guard/Column Guard/Corner guard	Wallpro, C/S Group, SPM International
(xiii)	Expansion filler board	Supreme, Insuboard, Soprema, Shalimar, Own corning, Technonicol
(xiv)	Concrete / HDPE/Grass grid pavers	Ovilite Industries, Eco Vision Industries, Dalal, Unistone
(xv)	Drain board	Ovidrain, Tikidan, Technonicol, Virendra textile, Soprema
(xvi)	Expansion Joint filler / Joint covers	Vexcolt International Ltd, Construction Specialities, Sainfield, Hercules, MIGUA, Mapei, Balco India, Z-tech, Inprocorp, Moldo Sports
(xvii)	Poly-sulphide Sealant for Joints joint width up to 25 mm	Pidilite, Sika, Dow Corning, Wacker, Ferrouscrete
(xviii)	Window Roller/Zebra Blind/Curtains	Aerolux, Hunter Douglas, Deck, D'Decor
(xix)	Bitumen	Indian Oil, Hindustan Petroleum, Bharat Petroleum, HINCOL
(xx)	Aluminium Composit Panel PVC Door shutter	Alstone, EUROBOND, VIRGO, Rajshri, Crossbond
(xxi)	Thermoplastic Paint	Asian (Apcomark), Berger (Sigmark,), ICI (Neromark), Kataline (Traffix – O)
(xxii)	Glass Beads	Potters – Thailand, Sovitech and Swarco
(xxiii)	Glow Stud (Cat Eye)	Dark Eye, 3M, Avery Dennison

Executive Engineer
Faridabad Division,
CPWD, Faridabad

SCHEDULE OF QUANTITY					
NIT No. 59/EE/FD/2026-27					
NAME OF WORK : SPECIAL REPAIR WORKS IN CFQC & TI AT NH-IV, FARIDABAD DURING 2026-27.					
S. NO.	DESCRIPTION OF ITEMS	QTY.	UNIT	RATE	AMOUNT
1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth				
1.1	1:1½:3 (1 Cement: 1½ coarse sand (zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	1.00	cum	8340.85	8341.00
2	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc., up to floor five level, excluding the cost of centering, shuttering and finishing:				
2.1	1:1½:3 (1 cement : 1½ coarse sand (zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources).	2.00	cum	10357.55	20715.00
3	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				
3.1	Cement mortar 1:6 (1 cement : 6 coarse sand)	1.00	Cum	9105.95	9106.00
4	Providing and fixing Ist quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	46.00	sqm	1267.95	58326.00
5	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters				
5.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screw	4.00	sqm	3473.85	13895.00
6	Providing and fixing aluminium die cast body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 35 kg and door width upto 700 mm), with necessary accessories and screws etc. complete.	2.00	each	1124.85	2250.00
7	Providing and fixing aluminium sliding door bolts, ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868), transparent or dyed to equired colour or shade, with nuts and screws etc. complete :				

7.1	250x16 mm	2.00	each	260.60	521.00
8	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :				
8.1	200x10 mm	12.00	each	99.70	1196.00
9	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :				
9.1	125 mm	10.00	each	66.25	663.00
10	Providing and fixing aluminium hanging floor door stopper, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete.				
10.1	Twin rubber stopper	10.00	each	72.35	724.00
11	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-incharge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	36.00	Kg	772.40	27806.00
12	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS:15622, of approved brand & manufacturer, in all colours and shade, laid on 20 mm thick cement mortar 1:4 (1 cement: 4 coarse sand) jointing with grey cement slurry @3.3 kg/sqm including grouting the joints with white cement and matching pigments etc. The tiles must be cut with the zero chipping diamond cutter only . Laying of tiles will be done with the notch trowel, plier, wedge, clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily.				
12.1	Glazed vitrified floor tiles polished finish of size				
12.1.1	Size of Tile 600 x 600 mm	33.00	Sqm	1502.77	49591.00
13	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 :				
13.1	In 75x75 mm deep chase	150.00	metre	305.15	45773.00
14	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1 m x1 m x 400 micron, finished with 12 mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement, rounding the edges and making and finishing the outlet complete.	15.00	each	298.24	4474.00

15	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes.				
15.1	110 mm diameter	120.00	metre	377.40	45288.00
16	Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion.				
16.1	Bend 87.5°				
16.1.1	110 mm bend	30.00	each	150.35	4511.00
16.2	Shoe (Plain)				
16.2.1	110 mm Shoe	30.00	each	131.85	3956.00
17	Providing and fixing unplasticised -PVC pipe clips of approved design to unplasticised - PVC rain water pipes by means of 50x50x50 mm hard wood plugs, screwed with M.S. screws of required length,including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete.				
17.1	110 mm	45.00	each	371.30	16709.00
18	Providing and Fixing 15 mm thick densified tegular edged eco friendly light weight calcium silicate false ceiling tiles of approved texture of size 595 x 595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanised steel sections (galvanising @ 120 grams per sqm including both side) consisting of main 'T' runner suitably spaced at joints to get required length and of size 24x38 mm made from 0.33 mm thick (minimum) sheet, spaced 1200 mm centre to centre, and cross 'T' of size 24x28 mm made out of 0.33 mm (Minimum) sheet, 1200 mm long spaced between main'T' at 600 mm centre to centre to form a grid of 1200x600 mm and secondary cross 'T' of length 600 mm and size 24 x28 mm made of 0.33 mm thick (Minimum) sheet to be inter locked at middle of the 1200x 600 mm panel to from grid of size 600x600 mm, resting on periphery walls /partitions on a Perimeter wall angle pre-coated steel of size(24x24X3000 mm made of 0.40 mm thick (minimum) sheet with the help of rawl plugs at 450 mm centre to centre with 25 mm long dry wall screws @ 230 mm interval and laying 15 mm thick densified edges calicum silicate ceiling tiles of approved texture in the grid, including, cutting/ making opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc., wherever required. Main 'T' runners to be suspended from ceiling using G.I. slotted cleats of size 25x35x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm G.I. adjustable rods with galvanised steel level clips of size 85 x 30 x 0.8 mm, spaced at 1200 mm centre to centre along main 'T', bottom exposed with 24 mm of all Tsections shall be pre-painted with polyster baked paint, for all heights,				

	as per specifications, drawings and as directed by Engineer-in-Charge.				
18.1	Note :- Only calcium silicate false ceiling area will be measured from wall to wall. No deduction shall be made for exposed frames/ opening (cut outs) having area less than 0.30 sqm. The calcium silicate ceiling tile shall have NRC value of 0.50 (Minimum), light reflection > 85%, non-combustible as per B.S. 476 part IV, 100% humidity resistance and also having thermal conductivity <0.043 w/ mK.	33.00	sqm	2158.15	71219.00
19	Distempering with 1st quality acrylic distemper (ready mixed) having VOC content less than 50 gms/litre, of approved manufacturer, of required shade and colour complete, as per manufacturer's specification				
19.1	Two or more coats on new work	404.00	Sqm	185.65	75003.00
20	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :				
20.1	Two or more coats on new work	100.00	sqm	155.90	15590.00
21	French spirit polishing :				
21.1	Two or more coats on new works including a coat of wood filler	6.00	Sqm	446.25	2678.00
22	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete	404.00	Sqm	156.05	63044.00
23	Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sq.meters and under, including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete, including disposal of rubbish to the dumping ground, all complete as per direction of Engineer-in-Charge.				
23.1	With cement mortar 1:4 (1cement: 4 coarse sand)	50.00	Sqm	560.50	28025.00
24	Renewing glass panes, with putty and nails wherever necessary including racking out the old putty:				
24.1	Float glass panes of nominal thickness 4 mm (weight not less than 10kg/sqm)	10.00	sqm	1090.65	10907.00
25	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.				
25.1	Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	2.00	cum	2434.25	4869.00
26	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead :				
26.1	Of area beyond 3 sq. metres	9.00	each	502.75	4525.00
27	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead				
27.1	For thickness of tiles 10 mm to 25 mm	239.00	Sqm	73.40	17543.00

28	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.	46.00	Sqm	54.65	2514.00
29	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	45.00	Cum	263.95	11878.00
30	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				
30.1	25 mm nominal dia Pipes	20.00	Mtr.	401.55	8031.00
30.2	32 mm nominal dia Pipes	10.00	Mtr.	518.75	5188.00
30.3	40 mm nominal dia Pipes	10.00	Mtr.	702.95	7030.00
31	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :				
31.1	For fixed portion				
31.1	Powder coated aluminium (minimum thickness of powder coating 50 micron)	207.00	Kg	530.90	109896.00
30.2	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately)				
30.2.1	Powder coated aluminium (minimum thickness of powder coating 50 micron)	62.00	Kg	634.45	39336.00
31	Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc.				

	complete as per architectural drawings and directions of engineer in- charge.				
31.1	Pre-laminated particle board with decorative lamination on both sides	10.00	sqm	1115.40	11154.00
32	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item):				
32.1	With float glass panes of 5 mm thickness (weight not less than 12.50 kg/sqm)	21.00	sqm	1505.25	31610.00
33	Providing and fixing anodised aluminium grill (anodised transparent or dyed to required shade according to IS: 1868 with minimum anodic coating of grade AC 15) of approved design/pattern, with approved standard section and fixed to the existing window frame with C.P. brass/ stainless steel screws @ 200 mm centre to centre, including cutting the grill to proper opening size for fixing and operation of handles and fixing approved anodised aluminium standard section around the opening, all complete as per requirement and direction of Engineer-in-charge. (Only weight of grill to be measured for payment).	32.00	Kg	638.35	20427.00
34	Providing and fixing 12 mm thick frameless toughened glass door shutter of approved brand and manufacture, including providing and fixing top & bottom pivot & double acting hydraulic floor spring type fixing arrangement and making necessary holes etc. for fixing required door fittings, all complete as per direction of Engineer-in-charge (Door handle, lock and stopper etc.to be paid separately).	9.00	Sqm	5325.90	47933.00
35	Providing and applying fibre reinforced elastomeric liquid water proofing membrane with resilient acrylic polymers having Sun Reflectivity Index (SRI) of 105 on top of concrete roof in three coats @10.76 litre/ 10 sqm. One coat of self-priming of elastomeric waterproofing liquid (dilution with water in the ratio of 3:1) and two coats of undiluted elastomeric waterproofing liquid (dry film thickness of complete application/system not less than 500 microns). The operation shall be carried out after scrapping and properly cleaning the surface to remove loose particles with wire brushes, complete in all respect as per the direction of Engineer-in-Charge.	683.00	sqm	563.10	384597.00
36	Chipping of unsound/weak concrete material from slabs, beams, columns etc. with manual Chisel and/ or by standard power driven percussion type or of approved make including tapering of all edges, making square shoulders of cavities including cleaning the exposed concrete surface and reinforcement with wire brushes etc.				

	and disposal of debris for all lead and lifts all complete as per direction of Engineer-In-Charge				
36.1	25 mm average thickness	50.00	sqm	126.75	6338.00
37	Providing, mixing and applying bonding coat of approved adhesive on chipped portion of RCC as per specifications and direction of Engineer-In-charge complete in all respect.				
37.1	SBR Polymer (@10% of cement weight) modified cementitious bond coat @ 2.2 kg cement per sqm of surface area mixed with specified proportion of approved polymer	50.00	sqm	141.20	7060.00
38	Providing, mixing and applying SBR polymer (of approved make) modified Cement mortar in proportion of 1:4 (1 cement: 4 graded coarse sand with polymer minimum 2% by wt. of cement used) as per specifications and directions of Engineer-in-charge. Note: Measurement and payment: The pre-measurement of thickness shall be done just after the surface preparation is completed and Payment under this item shall be made only after proper wet curing has been done and surface has been satisfactorily evaluated by sounding / tapping with a blunt metal instrument and/or the 75mm size cube crushing strength at the end of 28 days to be not less than 30 N/Sqmm2).				
38.1	25 mm average thickness in 2 layers.	50.00	sqm	587.35	29368.00
				TOTAL	1329608.00
USING MODIFIED ESTIMATE GST CORRECTION FACTOR @ 0.973					1293709.00
39	Providing fiber glass cloth mesh over the 1st coat damp proof elastomeric liquid layer and 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. The operation shall be carried out after properly cleaning the surface to remove loose particles with wire brushes, complete in all respect as per the direction of Engineerin-Charge.	683.00	sqm	66.35	45317.00
40	Providing and fixing window double curtain blinds(Zebra) in vertical position including required brackets, runner, dori etc fixed with ss screws and wooden plugs etc. wherever necessary complete.	12.00	sqm	5010.70	60128.00
41	Grading roof for water proofing treatment with				
41.1	Ready-Mix Cement Mortar laid to required slope including surface preparation, curing, scaffolding, carriage and all labor complete as directed by Engineer-in-Charge.	20.00	cum	22009.85	440197.00
				TOTAL	1839351.00

**Executive Engineer
Faridabad Division,
CPWD, Faridabad**

PROFORMA FINANCIAL BID

SCHEDULE OF WORK				
NIT No. 59/EE/FD/2026-27				
NAME OF WORK: - SPECIAL REPAIR WORKS IN CFQC & TI AT NH-IV, FARIDABAD DURING 2026-27.				
Name of Contractor:.....				
S. No.	Component of Work	Estimated Cost (Rs.)	Quoted Percentage (at par/above/below) the Total Estimated Cost	TOTAL TENDERED AMOUNT (Rs.)
1.	(Civil Works) (As per Schedule of Qty)	18,39,351/-		
TOTAL ESTIMATED COST		18,39,351/-		

**Executive Engineer
Faridabad Division,
CPWD, Faridabad**