

N. I. T.

Name of work: Strengthening of all existing damaged internal road at NSTI Campus, D-1, Sector-01, Noida. dg. 2026-27.

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Certified that this N.I.T. contains page **1 to 48 (One to Forty Eight pages Only)**

This N.I.T. is approved for Rs. **58,06,864/-** (Rupees Fifty-Eight Lakh Six Thousand Eight Hundred Sixty-Four Only).

NIT No. 24/EE/NCD/2026-27

Assistant Engineer (P)
NCD, CPWD,

Executive Engineer
NCD, CPWD,

INFORMATION AND INSTRUCTION FOR BIDDERS FOR E-TENDERING

The **Executive Engineer** Noida Central Division, CPWD, NSTI Campus, Noida invites on behalf of President of India online **Percentage Rate bids** from the approved and eligible contractor of CPWD for the following work of:-

S. No.	NIT No	Name of work & location	Estimate cost put to bid	Earnest Money	Stipulated Period of completion of work	Last date of online submission of bid, copy of receipt of deposition of original EMD and other documents as specified in the bid document.	Date & Time of opening of Bid
1	24/EE/NCD/2026-27	Strengthening of all existing damaged internal road at NSTI Campus, D-1, Sector-01, Noida. dg. 2026-27.	Rs. 58,06,864/-	Rs. 1,16,137/-	02 Months	UP TO 15:00 PM on 13.08.2026	AT 15:30 PM on 13.08.2026

1. 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.
2. Information and Instructions for bidders posted on website shall form part of bid document.
3. 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> free of cost.
4. But the bid can only be submitted after deposition of original EMD either in the office of Executive Engineer inviting bids or division office of any Executive Engineer, CPWD within the period of bid 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 including e-Bank Guarantee (for balance amount as prescribed) from any of the Commercial Bank towards EMD in favour of Executive Engineer as mentioned in NIT, receipt for deposition of original EMD to division office of any Executive Engineer (including NIT issuing EE), CPWD and other documents as specified.
5. 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 on download section of <https://etender.cpwd.gov.in>
6. The intending bidder must have valid Class-III digital signature certificate with 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 bid opening process. After opening of bids he will receive the competitor bid sheets.
8. Contractor can upload documents in the form of JPG format and PDF format.
9. Contractor must ensure to quote rate in the prescribed column(s) 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 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. **GST applicable as per Government norms upto date and future circulars. Contractor should quote the rate including GST as per Govt. norms, nothing to be reimbursed against GST directly.**
11. **Location of work for execution is Gautam Buddha Nagar situated in U.P.**

12. **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. Copy of receipt for deposition of original EMD issued from division office of any Executive Engineer, CPWD as per Annexure-A.
- III. Enlistment order of the contractor.
- IV. Copy of certificate of ERP Training.
- V. GST Registration Certificate if already obtained by the bidder.

If the bidder has not obtained GST registration as applicable, then he shall scan and upload following under taking along with 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 account of the work executed and/or for any action taken by CPWD or GST department in this regard".

Note: No cutting/over writing shall be allowed in Insurance Surety Bond, Demand Draft/ Account Payee Banker's Cheque / FDR/ Bank Guarantee of any commercial Bank. If found so, their bid will be rejected.

CPWD-6 (for e-Tendering)

1. **Online Percentage Rate bids** are invited on behalf of the President of India from the approved and eligible contractor of CPWD for the work of **Strengthening of all existing damaged internal road at NSTI Campus, D-1, Sector-01, Noida. dg. 2026-27..** The enlistment of the contractors should be valid on the last date of submission of bids. In case the last date of submission of tender is extended, the enlistment of contractor should be valid on the original date of submission of bids.
 - 1.1 The work is estimated to cost **Rs. 58,06,864/-**. This estimate, however, is given merely as a rough guide.
 2. Agreement shall be drawn with the successful bidders on prescribed Form No. **CPWD-7 of GCC MAINTENANCE WORKS 2023** with upto date amendments, which is available as a Govt. of India Publication and also available on website www.cpwd.gov.in. Bidder shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.
 3. The time allowed for carrying out the work will be **02 Months** from the date of start as defined in schedule 'F' or from the first date of handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in the bid documents.
 4. The site for the work is available in parts.
 5. The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents except Standard General Conditions of Contract Form can be seen on website <https://etender.cpwd.gov.in> or www.cpwd.gov.in free of cost.
 6. **After submission of the bid the contractor can re-submit revised bid any number of times or withdraw it before last date and time of submission of bid as notified. No post-tender modification is allowed by the tenderers except through negotiations, if required. In case, any tenderer does so, the tender will be rejected and the tenderer will be debarred for future tendering in CPWD for two years by the concerned enlisting authority (in case of CPWD enlisted contractor) and by the concerned CE/SE (in case of non-enlisted contractor).**
 7. While submitting the revised bid, contractor can revise the rate of one or more item(s) any number of times (he need not re-enter rate of all the items) but before last time and date of submission of bid as notified.
 8. When bids are invited in three stage system and if it is desired to submit revised financial bid then it shall be mandatory to submit revised financial bid. If not submitted then the bid submitted earlier shall become invalid.
 9. **Earnest money in the form of Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee including e- Bank Guarantee (for balance amount as prescribed) from any of the Commercial Banks (drawn in favour of Executive Engineer Noida Central Division) shall be scanned and uploaded on 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 within the period of bid submission. The EMD receiving Executive Engineer (including NIT Issuing EE) 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 the e-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 including e- Bank Guarantee of any Commercial bank having validity for a period of 90 days for single bid works and 180 days for two bid system or more from the last date of receipt of bids which is to be scanned and uploaded by the intending bidders.

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

Copy of Enlistment Order and certificate of work experience and other documents as specified in the notice inviting e- tender shall be scanned and uploaded on the e-Tendering website within the period of bid submission. However, certified copy of all the scanned and uploaded documents as specified in e- tender notice shall have to be submitted by the lowest bidder within a week physically in the office of tender opening authority. Online bid documents submitted by intending bidders shall be opened only of those bidders, who has deposited EMD with any division of CPWD and other documents scanned and uploaded are found in order.

The bid submitted shall be opened at 15:30 **PM on 13.08.2026**

10. The bid submitted shall become invalid and e-Tender processing fee (if applicable) shall not be refunded if:
 - i. The bidder is found ineligible.
 - ii. The bidder does not upload scanned copies of all the documents stipulated in the bid document.
 - 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 lowest 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.
11. The contractor whose bid is accepted will be required to furnish performance guarantee **and additional Performance Guarantee (if any) as per modifications in Para 5.2 of CPWD works Manual 2024 issued by Authority of DG, CPWD vide File No. CSQ/CM/16(1)/2026 e-file 9212995 (DFA/9365789 dated 27.02.2026 at specified percentage of the estimated cost Put to Tender (ECPT) or contract amount whichever is higher** as mentioned in schedule E and within the period specified in Schedule F. This guarantee shall be in the form of Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt or Bank Guarantee from any of the Commercial Banks in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee **and additional Performance Guarantee (if any)** 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 **and additional Performance Guarantee (if any)**. The contractor whose bid is accepted will also be required to furnish either copy of applicable licenses/ registrations or proof of applying for obtaining labour licenses, registration with EPFO, ESIC and BOCW Welfare Board including Provident Fund Code No. If applicable and also ensure the compliance of aforesaid provisions by the subcontractors, if any engaged by the contractor for the said work within the period specified in Schedule F.
The description of the work is as follows:- Strengthening of all existing damaged internal road at NSTI Campus, D-1, Sector-01, Noida. dg. 2026-27.

12. Intending Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their bids as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidder shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by a bidder implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work.
13. The competent authority on behalf of the President of India does not bind itself to accept the lowest or any other bid and reserves to itself the authority to reject any or all the tenders received without the assignment of any reason. All bids in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidder shall be summarily rejected.
14. Canvassing whether directly or indirectly, in connection with bidders is strictly prohibited and the bids submitted by the contractor who resort to canvassing will be liable to rejection.
15. The competent authority on behalf of President of India reserves to himself the right of accepting the whole or any part of the bid and the bidder shall be bound to perform the same at the rate quoted.
16. 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 Housing and Urban Affairs. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Department.
17. No. Engineer of Gazette rank or other Gazetted officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from Government service, without the prior permission of the Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India as aforesaid before submission of the bid or engagement in the contractor's service.
18. The bid for the works shall remain open for acceptance for a period of Thirty days (30) from the date of opening of bids. Further
 - (i) If any tenderer withdraws his tender within 7 days after last date and time (24 hours basis) of submission of bids, then the Government shall without prejudice to any other right or remedy, be at liberty to forfeit 50% of earnest money absolutely irrespective of letter of acceptance for the work is issued or not.
 - (ii) If any tenderer withdraws his tender after expiry of 7 days after last date and time (24 hours basis) of submission of bids, then the Government shall without prejudice to any other right or remedy, be at liberty to forfeit 100% of the earnest money absolutely irrespective of letter of acceptance for the work is issued or not.

(iii) Withdrawal of the tender, by the tenderer, shall only be made through e-tender portal. Any other method i.e. through letter/e-mail etc. shall be not be considered.

(iv) In case of forfeiture of earnest money as prescribed in Para (i) and (ii) above, the bidder shall not be allowed to participate in the re-tendering process of the work.

19. This Notice inviting bid shall form a part of the contract document. The successful bidder/contractor, on acceptance of his bid by the Accepting Authority, shall, within 15 days from the stipulated date of start of the work, sign the contract consisting of:-

- (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 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 of GCC MAINTENANCE WORKS 2023**

20. **RECOVERY ON ACCOUNT OF LABOUR WELFARE CESS/ WORK CONTRACT TAX/ INCOME TAX/GST/ SUR-CHARGE ETC. SHALL BE DEDUCTED FROM THE BILLS OF CONTRACTOR AGAINST THE AMOUNT PAYABLE TO CONTRACTOR FOR WORK.**

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 (Phone no 011-23378108, e- mail Id ncd_05@yahoo.co.in) or ERP helpline no. 18001803286 or e-mail Id cpwd.support@techmahindra.com. The e- tendering bidders are also advised not to wait to raise any issues till the last date of submission of bid in their own interest.

ANNEXURE - A**FORMAT FOR RECEIPT OF DEPOSITION OF ORIGINAL EMD**

<u>Receipt of deposition of original EMD</u> (Receipt No...../date.....)	
Name of work: Strengthening of all existing damaged internal road at NSTI Campus, D-1, Sector-01, Noida. dg. 2026-27.	
1. NIT No: 24/EE/NCD/2026-27	
2. Estimated Cost: 58,06,864/-	
3. Amount of Earnest Money Deposit: 1,16,137/-	
4. Last date of submission of bid: 15:00 PM on 13.08.2026	
1. Name of contractor:##	
2. Form of EMD:##	
3. Amount of Earnest Money deposit:#	
4. Date of submission of EMD:#	
Signature, Name and Designation of EMD receiving officer alongwith office stamp <i>(# to be filled by EMD receiving EE)</i>	

CPWD-7

GOVERNMENT OF INDIA,
CENTRAL PUBLIC WORKS DEPARTMENT

Percentage Rate Tender & Contract for Works

Tender for the work of :- **Strengthening of all existing damaged internal road at NSTI Campus, D-1, Sector-01, Noida. dg. 2026-27.**

- (i) To be uploaded by **15:00 PM hours on 13.08.2026** to/upload at etender.cpwd.gov.in
- (ii) To be opened in presence of tenderers who may be present at **15:30 PM on 13.08.2026** in the office of **Executive Engineer, Noida Central Division, CPWD, NSTI Campus, Noida.**

TENDER

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

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

I/We agree to keep the tender open for **30** days from the due date of its opening in case of single bid system and not to make any modification in its terms and conditions.

I/We have deposited EMD for the prescribed amount in the office of concerned Executive Engineer as per the bid document.

A copy of earnest money deposit receipt of prescribed amount deposited in the form of Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee (as prescribed) issued by a Commercial Bank, is scanned and uploaded (strike out as the case may be). If I/We, fail to furnish the prescribed performance guarantee **and additional Performance Guarantee (if any)** within prescribed period, I/We agree that the said President of India or his successors, in office shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely. Further, if I/We fail to commence work as specified, I/ We agree that President of India or the successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said performance guarantee **and additional Performance Guarantee (if any)** absolutely. The said Performance Guarantee **and additional Performance Guarantee (if any)** shall be a guarantee to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause 12.2 and 12.3 of the tender form.

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

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

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

Signature of Contractor

Dated

Witness:

Postal Address

Address:

Occupation:

ACCEPTANCE

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

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

(a)

(b)

(c)

For & on behalf of the President of India.

Signatures

Dated:

Designation

PROFORMA OF SCHEDULES

- (Separate Proforma for Civil, Elect. & Hort. Works in case of Composite e-bids)

SCHEDULE 'A'

Schedule of quantities (as per PWD.3) **(Civil work) : Attached**

<u>SCHEDULE 'D'</u>	
Extra schedule for specific requirements/ document for the work, if any.	General conditions, Special Conditions, Particular Specifications etc as attached in tender form,
<u>SCHEDULE 'E'</u>	
Reference to General Conditions of contract	GCC maintenance work-2023 as modified & corrected up to previous day of the last date of submission of tender.
Name of Work	Strengthening of all existing damaged internal road at NSTI Campus, D-1, Sector-01, Noida. dg. 2026-27.
Estimated cost of work	Rs. 58,06,864/-
Earnest money	Rs. 1,16,137/-
Performance guarantee	(a) 5% of tendered value or Estimated cost Put to Tender (ECPT) (whichever is higher) (b) Where the tender amount is less than 80% of the Estimated cost Put to Tender (ECPT) the Performance Guarantee (PG), in addition to the required under (a) above, shall be increased by an amount equal to the difference between eighty percent (80%) of the ECPT and the tendered amount.
Security deposit	2.5% of tendered value
<u>SCHEDULE 'F'</u>	
GENERAL RULES & DIRECTIONS:	
Officer inviting tender	Executive Engineer/Noida Central Division /CPWD
Definitions:	
2(vi) Engineer-in-Charge	Executive Engineer/Noida Central Division /CPWD
2(viii) Accepting Authority	Executive Engineer/Noida Central Division /CPWD
2(x) Percentage on cost of materials and labour to cover all overheads and profits:	15%
2(xi)(b) Standard Schedule of Rates	D.S.R. 2023 with upto date correction slips
2(xi) Department	Central Public Works Department.
9(ii) Standard CPWD Contract Form	General Conditions of Contract Maintenance work-2023 , CPWD form 7 as modified & corrected up to previous day of the last date of submission of tender.
<u>Clause 1</u>	
(i) Time allowed for submission of performance guarantee and additional Performance Guarantee (if any), programme chart (time and progress) and applicable labour licenses, registration with EPFO, ESIC and BOCW Welfare Board or proof of applying thereof from the date of issue of letter of acceptance.	07 days
(ii) Maximum allowable extension with late fee at 0.1% per day of performance guarantee and additional Performance Guarantee (if any) amount beyond the period provided in (i) above.	03 days

Clause 2			
Authority for fixing compensation under clause 2		Chief Engineer, (Ghaziabad), CPWD. Or successor thereof.	
Clause 2A			
Applicable clause 2/ Clause 2A		Clause 2	
Clause 5			
Number of days from the date of issue of letter of acceptance for reckoning date of start.		10 Days	
Mile stone(s) as per table given below:- Applicable			
Mile stone No.	Description of mile stone (Financial)	Period for completion (from date of start in months)	Withheld amount for non achievement of mile stone.
1	1/8th (of the whole work)	1/4th (of the whole time)	1.25% of the accepted tendered value.
2	3/8th (of the whole work)	1/2th (of the whole time)	1.25% of the accepted tendered value.
3	3/4th (of the whole work)	3/4th (of the whole time)	1.25% of the accepted tendered value.
4	Full work	Full time	1.25% of the accepted tendered value.
Note: The withhold milestone will only be released when subsequent milestone is achieved within the specified time.			
Time allowed for execution of work		02 Months	
<u>Authority to decide:</u>			
(i) Authority to convey the decision of shifting of milestone and extension of time		Executive Engineer/Noida Central Division /CPWD	
(ii) Authority to decide rescheduling of milestone and extension of time		Chief Engineer, Ghaziabad, CPWD.	
(iii) Shifting of date of start in case of delay in handing over of site		Chief Engineer, Ghaziabad, CPWD.	
<u>Clause 5.0 PROFORMA OF SCHEDULES</u>			
(a)Schedule of handing over of site			
Sl. No.	Portion of Site	Description	Time Period for handing over reckoned from date of issue of letter of intent
Part A	Portion without any Hindrance	30%	03 days
Part B	Portions with Encumbrances	(i) 40% (ii) 30%	After completion of Part A After completion of Part B (i)
Part C	Portions dependent on work of other agencies		NIL

CLAUSE 5

Applicable Clause 5/ Clause 5A

:

Clause 5

Clause 6 :
Mode of measurement : **EMB**
 Computerized Measure Book (CMB)/Electronic
 Measurement Book (EMB)

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 thereof being eligible to interim Payment : Rs. 29.00 lakh or reasonable part to facilitate the work.

Clause 7A

Whether Clause 7A shall be applicable : **Yes**

Clause 8

Competent authority to inspect and issue Completion Certificate **Executive Engineer, Noida Central Division, D-1, Sec-01, NSTI Campus, Noida**

Clause 10A

: **NOT APPLICABLE**

Clause 10B (ii)

Whether Clause 10 B(ii) shall be applicable : **Not Applicable**

Clause 10C

: **Not Applicable**

Component of labour expressed as percent of value of work : **Not Applicable**

Clause 10CC

: **Not Applicable**

Clause 11

Specifications to be followed for execution of work	CPWD Specifications 2019 , Volume-I and II with correction slips issued up to previous day of the last date of submission of bid and manufacturer's specification wherever applicable.
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Clause 12

Type of Work	Maintenance work
The completion cost of agreement should not exceed 1.50 times of Tendered amount (As per DG/CON/Maintenance 2023/03 Dated:- 18/12/2023)	

Authority to decide Deviation:-

(i) Upto 1.25 times of Contract Amount (with recorded reasons)	(i) Executive Engineer/Noida Central Division /CPWD
(ii) Beyond 1.25 times upto 1.50 times of Contract amount (with recorded reasons)	(ii) Chief Engineer, Ghaziabad, CPWD.

Clause 16

Competent authority for deciding reduced rates.	Chief Engineer , Ghaziabad, CPWD, Or successor thereof
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Clause 18

List of machinery, tools & plants to be deployed by the contractor at site:-	As per site requirement & direction of Engineer-in-Charge
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Clause 19 C

Authority to decide penalty for each default	Executive Engineer, Noida Central Division
--	--

Clause 19 D

Authority to decide penalty for each default	Executive Engineer, Noida Central Division
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Clause 19 G Authority to decide penalty for each default	Executive Engineer, Noida Central Division
Clause 19 K Authority to decide penalty for each default	Not Applicable
Clause 25	
(i) Conciliator	ADG(RL), CPWD or his successor thereof.
(ii) Arbitrator appointing authority	Chief Engineer, Ghaziabad, CPWD or his successor thereof.
(iii) Place of Arbitration	Noida

Clause 32: Requirement of technical representative(s) and recovery rate:-

S. No	Requirement of Technical staff		Minimum experience (Years)	Designation of Technical staff	Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of Clause 36(i)	
	Qualification	Number (of major +minor Component)			Figures	Words
1	Graduate Engineer Or Diploma Engineer	1 (One) No.	2 years for Graduate Engineer Or 5 years for Diploma Engineer	Project Manager cum planning/ quality/Site/billing Engineer	Rs. 15,000/- per month per person	Rs. Fifteen Thousand per month per person

NOTE:-

- Engineer(s) and / or overseer(s) deployed as per stipulation in the contract shall look after only the work under contract and no other work and shall be available fully during execution of work.
- Even if contractor (or partner in case of firm / company) is himself an engineer / overseer, it is necessary on part of the work(s) as per stipulation.
- Assistant Engineers retired from Government services that are holding Diploma will be treated at par with Graduate Engineers. Diploma holder with minimum 10 year relevant experience with a reputed construction co. can be treated at par with Graduate Engineers for the purpose of such deployment subject to the condition that such diploma holders should not exceed 50% of requirement of degree engineers.
- The contractor shall submit a certificate of employment of the technical representative (s) (in the form of copy of Form -16 or CPF deduction issued to the Engineers employed by him) along with every account bill/final bill and shall produce evidence if at any times so required by the Engineer-in-charge.

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

GENERAL CONDITIONS

1. The work in general shall be executed as per the description of the items, special conditions, provisions of this tender document and the CPWD Specifications 2019 Vol-I & II with correction slip as referred in the tender document supplemented with the specifications.
2. The order of preference in case of any discrepancy as indicated 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, Additional Specifications, special conditions for civil and electrical.
 - c) General conditions.
 - d) Additional conditions.
 - e) Contract Clauses of Standard CPWD Contract form 2023.
 - f) CPWD Specifications for civil work.
 - g) Architectural/structural drawings and specifications mentioned in drawings.
 - h) Indian Standard Specifications of BIS.
 - i) Sound engineering practice as per directions of the Engineer-in-Charge.
 - j) Manufacturers specifications.

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 upto 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.

3. The contractor(s) shall give to the Municipality, police and other authorities all necessary notices etc. that may be required by law and obtain all requisite licenses for temporary obstructions, enclosures etc. and pay all fee, taxes and charges which may be leviable on account of these operations in executing the contract. He shall make good any damage to the adjoining property whether public or private and shall supply and maintain lights either for illumination or for cautioning the public at night. The contractor(s) shall do the barricading upto 3 m height enclosing the area as per direction of Engineer-in-charge.
4. The Contractor(s) shall take all precautions to avoid accidents by exhibiting necessary caution boards day and night, speed limit boards, red flags, red lights and providing barriers. He shall be responsible for all damages and accidents caused to existing/new work due to negligence on his part. No hindrances shall be caused to traffic during the execution of the work. In case of any accident of labours / contractor(s) staff the entire responsibility will rest on the part of the contractor and any compensation under such circumstances if becomes payable the same shall be entirely born by the contractor and department shall have no role on this account.
5. The Contractor(s) shall take instructions from the Engineer-in-Charge regarding collection and stacking of materials at any place. No excavated earth or building rubbish shall be stacked on areas where other construction activities to be carried out. The stacking shall take place as per stacking plan however, if any change is required, the same shall be done with the approval of Engineer-in-Charge.
6. Water tanks, taps, sanitary, water supply and drainage pipes, fittings and accessories should conform to bye-laws of municipal body/corporation, where CPWD specifications are not available. The Contractor (s) should engage approved, licensed plumbers for the work and get the materials (fixtures/fittings) tested, by the municipal Body/Corporation authorities wherever required at his own cost. The Contractor(s) shall submit for the approval of the Engineer-in-Charge, the name of the plumbing Agency proposed to be engaged by him.
7. The contractor shall give performance test of the entire installation(s) as per the specifications in the presence of the Engineer-in-charge or his authorized representative before the work is finally accepted and nothing extra what-so-ever shall be payable to the contractor for the test.
8. Any cement slurry added over base surface (or) for continuation of concreting for better bond is deemed to have been built in the items and nothing extra be payable (or) extra cement considered in consumption on this account.
9. The department shall not bear responsibility for lack of knowledge of site condition and also the consequences thereof. The information and site data shown in the drawings and mentioned herein and also elsewhere in the tender documents are being furnished for general information and guidance only. The Engineer-in-charge in no case shall be held responsible for the accuracy thereof or any interpretation / or conclusions drawn there from by the contractor.
10. The contractor shall conduct 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 contractor simultaneously working or he shall arrange his work with that of the others in an acceptable and coordinated manner and shall perform it in proper sequence to the complete satisfaction of others.

11. The work shall be carried out in accordance with the Architectural drawings and structural drawings, to be issued from time to time, by the Engineer-in-Charge. Before commencement of any item of work, the contractor shall correlate all the relevant architectural and structural drawings issued for the work and satisfy himself that the information available there from is complete and unambiguous. The discrepancy, if any, shall be brought to notice of Engineer-in-Charge before execution of the work. The contractor alone shall be responsible for any loss or damage occurring by the commencement of work on the basis of any erroneous and or incomplete information.
12. The contractor shall leave such recesses, holes, openings etc. as may be required for the electric, air- conditioning and other related works (for which inserts, sleeves, brackets, conduits, base plates, clamps etc. shall be supplied free of cost by the department unless otherwise specifically mentioned) and the contractor shall fix the same at the time of casting of concrete, stone work & brick work etc., if required, and nothing extra shall be payable on this account.
13. No payment shall be made for any damage caused by rain, snowfall, flood or any other natural calamity, whatsoever during the execution of the work. The contractor shall be fully responsible for any damage to the Govt. property and work for which the payment has been advanced to him under the contract and he shall make good the same at his risk and cost.
14. Any discrepancy in the drawing /nomenclature of item /additional specification etc. shall be got clarified from Engineer in Charge. Decision of Engineer in Charge shall be final and binding on the agency.
15. The work is to be carried out in more than one shift or during night, no claim on this account shall be entertained. The contractor has to take permission from the police authorities etc. if required for work during night hours, no claim/hindrance on this account shall be considered if work is not allowed during night time.
16. Existing drains, pipes, cables, over-head wires, sewer lines, water lines and similar services 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.
17. The Contractor shall be responsible for the watch and ward / guard of the buildings safety, fittings and fixtures provided by him against pilferage and breakage during the period of installations and thereafter till the building is physically handed over to the department. No extra payment shall be made on this account.
18. Sample of building materials, paints, distemper, fittings and other articles required for execution of work shall be got approved from the Engineer-in-Charge before use in the work. The quality of samples brought by the contractor shall be judged by standards laid down in the relevant BIS specifications. 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.
19. BIS marked materials except otherwise specified 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. Wherever BIS marked materials are brought to the site of work, the contractor shall, if required, by the Engineer-in-Charge, furnish manufacturer's test certificate or test certificate from approved testing laboratory to establish that the material / procured by the contractor for incorporation in the work satisfies the provisions of specifications / BIS codes relevant to the material and / or the work done.
20. The contractor shall be fully responsible for the safe custody of materials brought by him / issued to him even though the materials may be under double lock and key system.
21. The contractor shall procure the required materials in advance so that there is sufficient time to testing of the materials and clearance of the same before use in the work. The contractor shall provide at his own cost suitable weighing and measuring arrangements at site for checking the weight / dimensions as may be necessary for execution of work. The sealed samples are to be handed over to the testing lab by contractor in the presence of Junior Engineer-in-charge of work.
22. The work is to be carried out in a restricted area. It shall be deemed that the contractor has satisfied himself as to the nature and location of the work, general and local conditions and particularly those pertaining to transport, including the restrictions on plying trucks etc. The department may provide all assistance by way of reasonable recommendations, in obtaining permits for plying trucks etc. from the concerned traffic authorities but bears no responsibility for the same. It shall be assumed that the contractor has also satisfied himself about, handling, availability and storage of materials, availability of labour, weather conditions at site and general ground level and the contractor has estimated and calculated his cost accordingly.

23. The tenderer shall study carefully, the building drawings, specifications, schedule of quantities and conditions of the tender documents to fully appreciate the scope of work before quoting his rates.
24. The building work shall be carried out in the manner complying in all respects with the requirements of relevant bye-laws 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.
25. The contractor shall ensure the stability of the excavation so that the surrounding ground and all adjoining structures and plants will be safe against settlement, subsidence, and damage and that there is no risk of injury to personnel.
26. The contractor shall not stack building material/malba on the NDMC land or road or on the land owned by any other authority, as the case may be. In case, the Contractor is found stacking the building material/malba as stated above, he shall be liable to pay the stacking charges as may be levied by NDMC or any other local body or authority and also to face penal action as per the rules, regulations and bye-laws of the said body or authority. The Engineer-in-Charge shall be at liberty to recover the sums due but not paid to the concerned authorities on the above counts from any sums due to the contractor including amount of the Security Deposit or Retention Money in respect of this contract or any other contract.
27. The contractor shall be responsible for arranging at his own cost all necessary tools and plants required for proper execution of work.
28. All tools, plant and machinery provided by the contractor shall, when brought on to the site, be deemed to be exclusively intended for the construction and completion of this work and the contractor shall not remove the same or any part thereof (say for the purpose of moving it from one part of the site to another) without the consent of the Engineer-in-Charge.
29. The rates for various items of the work shall apply for all floor heights and depths unless otherwise specified in the relevant items or schedule of quantity attached with this tender document.
30. All incidental charges of any kind whatsoever including cartage, storage, cutting and wastage etc., shall be borne exclusively by the contractor and nothing extra shall be paid to him on this account.
31. The contractor shall provide at his own cost suitable weighing measures, levelling equipment's and measuring equipment's etc. at site for checking the weight, dimensions and levels as may be necessary for execution of work.
32. The day to day receipt and issue accounts of cement, paint, distemper etc. shall be maintained in the standard proforma by the Junior Engineer/Assistant Engineer in-charge of the work and which shall be duly signed by the contractor or his authorized representative.
33. 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 expenditure to be incurred for testing of samples e.g. packaging, sealing, transportation, loading, unloading etc. including testing charges shall be borne by the contractor.**
34. 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.
35. 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.
36. 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.
37. 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.
38. 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.

39. 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.
40. 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
41. 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.
42. **Movement of labour and traffic at site**

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 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.

43. **Environmental Management Action Plan**

The contractor is required to abide the following instructions of environmental management action plan.

44.1 **Pre-construction stage**

- 44.1.1 All vehicles, equipment and machinery to be procured for construction will confirm to the relevant Bureau of India Standard (BIS) norms.
- 44.1.2 Emission from the vehicles must conform to environmental norms.
- 44.1.3 Sprinkling of water can mitigate dust produce from the vehicular movement and other site activities.

44. **Construction of bins for disposal of waste**

- 45.1 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.
- 45.2 Contractor will get approved the location of disposal site prior to commencement of the excavation on any section of the project location.
- 45.3 Contractor will ensure that any spoils of material will not be disposed off in any municipality solid waste collection bins.

45. **Pollution**

46.1 **Water Pollution**

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

46.2 **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:
- d All vehicles and equipment used in construction will be fitted with exhaust silencers.
- e 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.
- f Noise emission from compactors (rollers) front loaders, concrete mixers, cranes (movable), vibrators and saws should be less than 75 db (A).
- g 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 $94+10 \log_{10}$ (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.

47.0 Procurement of Construction Materials.

- a All vehicles delivering construction materials to the site will be covered to avoid spillage of materials and maintain cleanliness of the roads.
- b Wheel tyres of all vehicles used by of the contractor, or any of his sub-contractor or material suppliers will be cleaned and washed clear of all dust/mud before leaving the project premises
- c Contractor will 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.
- d The unloading of materials which are required to be approved by the Engineer-in-Charge, at construction site will be restricted to daytime only. For this purpose the information shall be given to the Engineer-in-Charge at least one day in advance.

48.1 Personnel Safety Measures for Labour

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

48.2 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.

48.3 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.

- 49.0** The contractor shall use double scaffolding in the work.
- 50.0** 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.
- 51.0 Cement: -**
- 51.1** Every delivery of cement shall be accompanied by producer's certificate conforming that the supplied cement confirms to relevant specifications. These certificates shall be endorsed to the engineer in charge for his record.
- 51.2** The cement shall be brought at site in bulk supply as decided by the Engineer-in-charge.
- 51.3** Cement bags shall be stored in two separate godowns, one for tested cement and the other for fresh cement (under testing) constructed by the contractor at his own cost as per sketch of **General conditions of contract for CPWD works-2023** with weather proof roofs and walls. The size of the cement godown is indicated in the sketch for guidance only. The actual size of godown shall be as per site requirements and as per the direction of the Engineer in charge and nothing extra shall be paid for the same. The decision of the Engineer-in-charge regarding the capacity required/needed will be final. Each godown shall be provided with a single door with two locks. The keys of one lock shall remain with Engineer-in-charge or his authorized representative and that of other lock with the authorized agent of the contractor at the site of work so that the cement is issued from godown according to the daily requirement with the knowledge of both the parties. The account of daily receipt and issue of cement shall be maintained in a register in the prescribed Proforma and signed daily by the contractor or his authorized agent in token of its correctness.
- 51.4** Samples of cement arranged by the contractor shall be taken by the Engineer-in charge and got tested in accordance with provisions of relevant BIS codes. In case test results indicate that the cement arranged by the contractor does not conform to the relevant BIS codes, the same shall stand rejected and shall be removed from the site by the contractor at his own cost within three days of written order from the Engineer-in-charge to do so.
- 51.5** The actual issue and consumption of cement on work shall be regulated and proper accounts maintained as provided in clause 10 of the contract.
- 51.6** The theoretical, consumption of cement/bitumen shall be worked out as per procedure prescribed in clause 42 of the contract and shall be governed by conditions laid therein. No payment for excess consumption of cement will be allowed. However, for lesser consumption beyond permissible theoretical variation recovery shall be made in accordance with conditions of contract given in **Schedule A to F of CPWD-7** without prejudice to action for acceptance of work/item at reduced rate or rejection as the case may be.
- 51.7** For non-schedule items, the decision of the Superintending Engineer regarding theoretical quantity of cement, which should have been actually used, shall be final and binding on the contractor.
- 51.8** Cement brought to site and remaining unused after completion of work shall not be removed from site without written permission of the Engineer-in-charge.
- 52. Reinforcement**
- 52.1** The reinforcement shall conform to relevant BIS Specifications and it should be laid as per CPWD Specifications.
- 52.2** The rate of item of reinforcement of RCC work includes all operations including straightening, cutting, bending, welding, binding with annealed steel or welding and placing in position at all the floors with all leads and lift complete as per CPWD Specifications.
- 52.3** The contractor shall provide approved type of support for maintaining the bars in position and ensuring required spacing and correct cover of concrete to reinforcement as called for in the drawings, spacer blocks of required shape and size. Chairs and spacer bars shall be used in order to ensure accurate positioning of reinforcement.
- 52.4** To ensure proper cover, only factory made round type cover blocks will be used to avoid displacement of bars in any direction.
- 52.5** The contractor shall procure thermo mechanically treated (TMT) steel reinforcement bars conforming to BIS 1786-2008 specifications of Fe 500-D grade and CPWD specifications from main producers as SAIL, Tata Steel Ltd., RINL, Jindal Steel & Power LTD. and JSW Steel Ltd. or any other producer as approved by CPWD. The contractor shall have to obtain and furnish test certificate to the Engineer in charge as per the provisions in this regard in relevant BIS codes. In case the test results indicate that the steel arranged by the contractor does not conform to BIS codes, the same shall stand rejected and shall be removed from the site of work by the contractor at his own cost within three days of written orders from the Engineer in charge to do so.

- 52.6** The steel reinforcement shall be brought at site as per direction of the Engineer-in-charge.
- 52.7** The steel reinforcement shall be stored by the contractor at site of work in such a way as to prevent distortion and corrosion and nothing extra shall be paid on this account. Bars of different sizes and lengths shall be stored separately to facilitate easy counting and checking.
- 52.8** The contractor shall supply free of cost the required steel bars for testing. The cost of tests shall be borne by the contractor.
- 52.9** 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 42 of the contract and shall be governed by conditions laid therein.
- 52.9.1** Steel brought to site and remaining unused shall not be removed from site without the written permission of Engineer-in-Charge.
- 52.9.2** Reinforcement including authorized spacer bars and overlaps shall be measured in length of different diameters as actually (not more than as specified in the drawings) used in the work nearest to a centimeter. Wastage and unauthorized overlaps shall not be measured. Record of actual sectional weights shall also be kept dia wise and lot wise. The average sectional weight for each diameter shall be arrived at from samples from each lot of steel received at site. The decision of the Engineer in charge shall be final for the procedure to be followed for determining the average sectional weight of each lot. Quantity of each diameter of steel received at site of work each day will constitute one single lot for the purpose. The weight of steel by conversion of length of various sizes of bars based on the actual weighted average sectional weight shall be termed as Derived Actual Weight.
- (a) If the derived weight as in sub-para (iii) above is less than the standard weight as in sub-para (ii) above, than the Derived Actual Weight shall be taken for payment.
- (b) If the derived actual weight is found more than the standard weight, than standard weight as worked out in sub para (ii) above shall be taken for payment nothing shall be paid extra for the difference in Derived Actual Weight and standard weight.
- 52.10** Mixing different types of grade of bars shall not be allowed.
- 52.11** The reinforcing steel brought to site of work shall be stored on brick timber platform of 30 to 40 cm height, nothing extra shall be paid on this account.
- 53.0** **Water:**
- 53.1** 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.
- 54. Form Work:**
- 54.1** The work shall be done in general as per CPWD Specifications 2019 Vol-I & II.
- 54.2** Only M.S. centering / shuttering and scaffolding material unless & otherwise specified shall be used for all R.C.C. work to give an even finish of concrete surface. However, marine-ply shuttering in exceptional cases as per site requirement may be used on specific request from contractor to be approved by the Engineer-in-Charge.
- 54.2.1** Double steel scaffolding having two sets of vertical supports shall be provided for external wall finish, cladding etc. The supports shall be sound and strong, tied together with horizontal pieces over which scaffolding platform shall be fixed.
- 54.2.2** Nothing extra shall be paid for the centering and shuttering, circular in shape whenever the form work is having a mean radius exceeding 6m in plan.
- 54.3** In order to keep the floor finish as per architectural drawings and to provide required thickness of the flooring as per specifications, the top level of RCC surface shall be accordingly adjusted at the time of its centering, shuttering and casting for which nothing extra shall be paid to the contractor.
- 54.4** As per general engineering practice, level of floors in toilet / bath, balconies, shall be kept 12 to 20mm or as required, lower than general floors shuttering should be adjusted accordingly. Nothing extra is payable on this account.
- 54.5** Steel shuttering as approved by the Engineer-in-Charge shall be used by the contractor. Minimum size of shuttering plates shall be 600mm x 900mm except for the case when closing pieces required to complete the shuttering panels.
- 54.6** Dented, broken, cracked, twisted or rusted shuttering plates shall not be allowed to be used on the work. The shuttering plates shall be cleaned properly with electrically driven sanders to remove any cement slurry or cement mortar or rust. Proper shuttering oil or de-bonding compound shall be applied on the surface of the shuttering plates in the requisite quantity before assembly of steel reinforcement.
- 54.8** For the execution of centering and shuttering, the contractor shall use propriety “Reebole” chemical mould release agent of FOSROC or equivalent as shuttering oil as approved by Engineer-in-charge and nothing extra shall be paid on this account.
- 54.9** Work is mainly related to maintenance work.

55.0 Other Conditions:-

1. The contractor shall not store/dump construction materials 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 materials to ensure that no construction material dust fly outside the plot area.
4. The contractor shall ensure that all the trucks or vehicles of any kind which are used for construction purpose/or are carrying construction materials 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 contraction 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 construction of building and carry of construction materials 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 a vehicle to 20 kmph. Speed bumps shall be used to ensure speed reduction. In case 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 materials 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.

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 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 tenders.
- 3 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.
- 4 Wherever desired by Engineer-in-charge, the contractor shall also construct a sample unit complete in all respect within time specified by the Engineer-in-charge & this sample unit shall be got approved from the Engineer-in-charge before mass construction is taken up. No extra claim, whatsoever beyond the payment due at agreement rates, will be entertained to the contractor on this account.
- 5 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.
- 6 If as per municipal rules, or due to any other restrictions, the huts for labourers are not to be erected at the site of work by the contractors, then the contractors shall provide such accommodation at such locations as are acceptable to local bodies, or contractor shall make his own alternative arrangement for stay of labourers outside the site of work, for which nothing extra shall be payable.
- 7 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. However, payment for centering, shuttering, if required to be done for floor heights greater than 3.5m, shall be admissible at rates arrived at, in accordance with clause 12 of the agreement, if not already specified otherwise.
- 8 The working drawings appearing at para 8.1(iii) of conditions of contract in the form CPWD-7, shall mean to include both architectural and structural drawings respectively. The structural and architectural drawings shall be properly correlated before executing the work. In case of any difference noticed between architectural and structural drawings, final decision, in writing of the Engineer-in-charge shall be obtained by the contractor before proceeding further.
- 9 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.
- 10 Some restrictions may be imposed by the security staff etc. on the working and for movement of labour, materials etc. The contractor shall be bound to follow all such restriction / instructions and nothing extra shall be payable on this account.
- 11 Other agencies doing works related with this project will also simultaneously execute the work and the contractor shall afford necessary facilities for the same. The contractor shall leave such necessary holes, opening etc., for laying/burying in the work pipes, cables, conduits, clamps, boxes and hooks for fan clamps etc. as may be required for other agencies. Conduits for electrical wiring/cables will be laid in such a way that they leave enough space for concreting and do not adversely affect the structural members. Nothing extra over the agreement rates shall be paid for the same. The contractor shall extend necessary co-operation to other such agencies without any claim on this account.
- 12 Cast iron pipes and fittings without ear shall be used. However, pipes and fittings with ears may be accepted without any extra payment. In such cases, clamps are not required and no extra payment shall be made for fixing the pipes in a different manner.
- 13 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.
- 14 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.
- 15 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.
- 16 (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.
- 17 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 .
- 18 The work pertaining to the items of internal finishing should be started in consultation and with prior approval of Engineer-in-Charge as soon as the structure of two floors is completed.
- 19 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 .
- 20 Dismantling of cement concrete floors inside the quarters shall be done with the help of mechanized vibratory hammer, drills etc. The work shall be carried out in such a way that there should be least disturbance to the adjoining allottees and work should be completed within least possible time. The contractor must ensure that there should be no damage to the supporting RCC members.
- 21 **TESTING OF MATERIALS**
- (a) **Samples of various materials required for testing shall be provided free of cost by the contractor. All expenditure to be incurred for testing of samples e.g. packaging, sealing, transportation, loading, unloading etc. including testing charges shall be borne by the contractor.**
- (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.
- (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.
- 22 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.
- 23 The work is required to be executed in odd hours and the agency shall plan the work to be carried out accordingly.
- 24 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.
- 25 Existing drains, pipes, cables, overheads wires, sewer lines and water lines and similar services encountered in the course of the execution of the work shall be protected against the damage by the contractor at his expenses. 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.
- 26 Malba received from site shall be removed to designated site (fixed by Engineer in charge) on same day, otherwise it will be removed and a penalty of Rs. 500/- shall be imposed on the contractor for each day of default
- 27 If the material as instructed is not brought to the site within 7 days from the date of start of work, Earnest money shall be forfeited by Engineer in charge or his authorized representative by giving notice through site order book.
- 28 Before dismantling the structure / item the contractor shall bring the entire material required for particular job at site after getting the sample approved from the Engineer in charge.
- 29 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.
- 30 For mixing of mortar, M.S. sheet must be used over the brick platform. Mortar should not be mixed on road or floor or on garden. In case mortar / concrete is mixed on floor or on road etc., a recovery of Rs. 1000/- shall be made for each default. Malba should not be dumped over green grass / plants.
- 31 Splashes on the floors, walls, glasses & other places must be removed after completion of work. Glass panes must be cleaned after completion of works. In the event of failure to clean splashes the work of cleaning will be got done at the risk and cost of the agency.

32. Due to restriction of driving slow moving vehicle / hand driven rickshaw in NDMC areas, it is required that contractor should not operate the hand driven rickshaw. Contractor has to make his own arrangement of desired transportation & nothing extra shall be payable on this account.
33. Before starting the work the contractor shall chalk out a programme in consultation with the Junior Engineer / Assistant Engineer in charge so as to inform the occupants in advance. The contractor shall have to adhere this programme, failing which he shall be held responsible for any inconvenience caused to the occupants. In order to ensure that the work is carried out according to the programme drawn up, the contractor shall ensure adequate supply of the material and employ required labour strength for execution of work. In case contractor fails to arrange / employ adequate labour and stick to the programme, the Engineer in charge may supplement the labour at the risk and cost of the contractor after issue of one day's notice to the contractor through site order book. No claim for idle labour shall be entertained. The contractor shall put his representative daily on site of work. His name & signature shall be attested by the contractor on the record for the department.
34. 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.
35. The contractor should note that the items of work in any room shall be undertaken at one time, one after the other and completed at one stretch in reasonable time allotted for the same by Engineer in charge and got noted by the Junior Engineer in charge. Any item left over in any building will be got done at his risk and cost without any further notice (other than one entry in the site order book) to the contractor after one day from the date of entry in the site order book.
36. No T&P shall be supplied by the department.
37. Any damage done to the existing structure shall be made good by the contractor at his own risk and cost.
38. 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.
39. The labour welfare fund / cess @1% of gross work done shall be deducted.
40. The contractors are advised to get acquainted with the proposed work and its site and also study the Architectural 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.
41. 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.
42. 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.
43. 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.
44. 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.**
45. 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 tender documents unless specifically mentioned otherwise.
46. No accommodation is available at the site of work. The lab our 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.

47. 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).
48. 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.
49. The Contractors will associate himself with specialized electrical contractor.
50. 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.
51. 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.
52. 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.
53. 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.
54. For mixing of mortar, M.S. sheet must be used over the brick platform. Mortar should not be mixed on road or floor or on garden. In case mortar / concrete is mixed on floor or on road etc., **a recovery of Rs. 1000/-** shall be made for each default. Malba should not be dumped over green grass / plants.
- 56 The finishing/Painting of surface will be done by Roller/Brush to get even and smooth surface as per direction of Engineer-in-charge.**

SPECIAL CONDITIONS FOR PROCUREMENT OF CEMENT

1. The contractor shall procure **43 grade** (conforming to IS 8112) ordinary **Portland cement/ Pozzolona Portland cement (PPC)** as required in work form reputed manufacturers of cement having a production capacity not less than one million tonnes or more per annum, such as ACC, Ultra Tech, J.P. Rewa, Vikram, Shri Cement, Birla Jute & cement corporation of India etc., as approved by Ministry of Industry, Government of India and holding license to use ISI certification mark for their product. The tenderers may also submit a list of names of cement manufacturers which they propose to use in the work. The tender accepting authority reserves rights to accept or reject name (s) of cement manufacturer(s) which the tenderer proposes to use in the work. No change in the tendered rates will be accepted if the tender accepting authority does not accept the list of cement manufacturers, given by the tenderer fully or partially.
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. Double lock provision shall be made to the door of cement godown. The keys of one lock shall remain with CPWD Engineer-in-charge or his authorized representative and the keys of the other lock shall remain with the contractor. The contractors shall be responsible for the watch and ward and safety of the cement godown. The contractor shall facilitate the inspection of the cement godown by the Engineer-in-Charge at any time.
4. **All expenditure to be incurred for testing of samples e.g. packaging, sealing, transportation, loading, unloading etc. including testing charges shall be borne by the contractor.**
5. 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 42 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 shown prescribed shall be made. In case of excess consumption no adjustment need to be made.
6. Cement brought to site and cement remaining unused after completion of work shall not be removed from site without written permission of Engineer-in-Charge.
7. The damaged cement shall be removed from the site immediately by the contractor on receipt of a notice in writing from the Engineer-in-Charge. If he does not do so within three days of receipt of such notice, the Engineer-in-Charge shall get it removed at the cost of the contractor.

SPECIAL CONDITION FOR PROCUREMENT OF STEEL

1. The contractor shall procure TMT bars of **Fe500D grade** (the grade to be procured is to be specified) from primary producers such as SAIL or TISCO or RINL Jindal Steel & Power LTD. and JSW Steel Ltd. or any other producer as approved by CPWD. In case of non-availability of steel from primary producers the NIT approving authority may permit use of TMT reinforcement bars procured from secondary producers. In such cases following action is to be taken by NIT approving authority:
 - a. The grade of the steel such as **Fe500D grade** to be procured is to be specified as per BIS 1786-2008.
 - b. The secondary producers must have valid BIS license to produce HSD bars conforming to IS 1786: 2008. In addition to BIS license, the secondary producer must have valid license from either of the firms Tempcore, Thermex Evcon Turbo & Turbo Quench to produce TMT Bars.
 - c. The TMT bars procured from primary producers shall conform to manufacturer's specifications.
 - d. The TMT bars procured from secondary producers shall conform to the specifications as laid by Tempcore, Thermex, Evcon Turbo & Turbo Quench as the case may be.
 - e. TMT bars procured either from primary producers or secondary producers, the specifications shall meet the provisions of IS 1786 : 2008 pertaining to **Fe 500D grade** of steel as specified in the tender of steel as specified in the tender (while preparing NIT the grade of the steel to be specified).
2. The contractor shall have to obtain and furnish test certificates to the Engineer-in-charge in respect of all supplies of steel brought by him to the site of work.
3. Sample shall also be taken and got tested by the Engineer-in-Charge as per the provisions in this regard in relevant BIS codes. In case the test results indicate that the steel arranged by the contractor does not conform to the specifications as defined under para (1) (d) & (1) (e) 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 time or written orders from the Engineer-in-Charge to do so.
4. The steel reinforcement bars shall be brought to the site in bulk supply of 10 tonnes or more, or as decided by the Engineer-in-Charge.
5. The steel reinforcement bars shall be stored by the contractor at site of work in such a way as to prevent their distortion and corrosion, and nothing extra shall be paid on this account. Bars of different sizes and lengths shall be stored separately to facilitate easy counting and checking.
6. For checking nominal mass tensile strength bend test, re-bend test etc. specimen of sufficient length shall be cut from each size of the bar at random, and at frequency not less than that specified below.

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

7. 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 42 of the contract and shall be governed by 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.
8. The steel brought to site and steel remaining unused shall not be removed from site without the written permission of the Engineer-in-Charge.
9. In case contractor is permitted to use TMT reinforcement bars procured from secondary producers then:
 - 10.1 The base price of TMT reinforcement bars as stipulated under schedule 'F' shall be reduced by **Rs. 2.23 Per KG.**
 - 10.2 The rate of providing & laying TMT reinforcement bars as quoted by the contractor in the tender shall also be reduced by **Rs. 2.23 Per KG.** (The rate of reduction shall be same as 10.1 above including Contractor's profit and Over Head @ **15%**)
 - 10.3 The rates under 10.1 & 10.2 shall be specified by NIT approving authority at the time of issue of NIT.

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).
- 1.2.1) 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 .
- 1.2.2) 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.
- 1.4) All the materials required to be tested shall be tested as per provisions of the relevant I.S. Codes. Should there be any difference between acceptances CRITERIA given in I.S. Codes, C.P.W.D. specifications and special conditions, the acceptance CRITERIA shall be in the following order of precedence:
 1. Special conditions
 2. C.P.W.D. Specifications
 3. 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 for 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.

1. 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.

4.0 WOOD WORK

- 4.1 Factory made shutter, as specified shall be obtained from factories to be approved by the Engineer-in-charge & shall conform to relevant Indian Standards. The contractor shall inform well in advance to the Engineer-in-charge, the names and address of the factory from which the contractor intends to get the shutters manufactured. The contractor will place order for manufacture of shutters only after written approval of the Engineer-in-charge in this regard is given. The contractor is bound to attend by the decision of the Engineer-in-charge & recommend a name of another factory from the approved list in case the factory already proposed by the contractor is not found competent to manufacture quality shutters. Shutters will, however, be accepted only if this meet the specified tests. The contractor will also arrange stage wise inspection of the shutters at factory to the Engineer-in-charge or is authorised representative. Contractor will have no claim if the shutters brought at site are rejected by Engineer-in-charge in part or in full lot due to bad workmanship and quality. Such shutters will not be measured & paid and the contractor shall remove the same from the site of work within **7 days** after the written instruction in this regard are issued by Engineer-in-charge or his authorised representative.

5.0 FLOORING, SKIRTING, VENEERING, DADO, RISERS & STEPS, JAMBS, SILLS & SOFFITS

- 5.1 Nothing extra shall be payable for using combination of marble, granite, kota, sand stone slabs & ceramic tiles etc. in the required pattern at various locations.

- 5.2 Nothing extra will be paid for the additional thickness of bed mortar that will be required to achieve uniform finished surfaces on account of difference in specified thickness of marble, granite, kota stone, sand stone & ceramic tiles etc.
- 5.3 Flooring in toilets, verandah, kitchen, courtyard etc. shall be laid to the required slope/gradient as per the directions of the Engineer-in-Charge.
- 5.4 The pattern, spacing and locations of joints shall be as per drawings and direction of the Engineer-in-Charge.

6.0 **STEEL WORK**

6.1 **The rate of T/L iron frame shall include the cost of materials & labour of the following.**

- (a) M.S. tie of 10 mm dia. bar shall be welded to M.S. frames at the bottom to keep the frames in correct position. The tie shall be embedded in floor concrete. No tie shall be necessary for window frames.
- (b) M.S. frame for doors shall have 4 Nos. M.S. lugs 15 x 3 mm., 10 cm long, welded to each vertical member of the frame.
- (c) The M.S. plate cramps 15 x 6 mm thick for holding arrangements shall be provided and welded as per site conditions.

6.2 **Steel windows/ventilators to be provided in the work shall be from ISI approved manufacturers or from the firms approved by the Chief Engineer (Ghaziabad), CPWD,**

7.0 **WATER PROOFING TREATMENT**

The water proofing items shall be got done through the firms approved by the **Chief Engineer, Ghaziabad, CPWD.**

7.1 **INTEGRAL CEMENT BASED WATER PROOFING TREATMENT**

- 7.1.1 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.
- 7.1.2 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.
- 7.1.3 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.
- 7.1.4 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.
- 7.1.5 After curing, the surfaces shall be applied with a coat of cement slurry admixed with proprietary water proofing compound.
- 7.1.6 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.
- 7.1.7 Curing of water proofing treatment, thus completed, shall be done for a minimum period of ten days.
- 7.1.8 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.
- 7.1.9 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 0.40sqm. Nothing extra shall be paid, for forming such openings. For similar areas exceeding 0.40sqm. deductions shall be made in measurements for full openings and nothing extra shall be paid for making such openings.

- 7.1.10** The rate shall include the cost of all labour and materials involved in all the operations described above.
- 7.1.11 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 Authorised distributor accompanied with Test Certificate of the product with batch number & date etc complete as per the direction of Engineer –in-Charge.
- 7.1.12 GUARANTEE FOR WATER PROOFING TREATMENT**
The contractor shall give Five years performance guarantee **and additional Performance Guarantee (if any)** in the prescribed proforma (specimen attached) 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. 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.
- 8.0 CUT BRICK (MARUKONA)**
Wherever cut brick (Marukona), as required under para 6.2.4.7 of C.P.W.D. Specifications 2019, is not feasible, on account of available quality of bricks, the same shall be replaced by cement concrete 1:2:4 and no extra payment for the provisions of C.C. 1:2:4 shall be made nor would the quantity of C.C. 1:2:4 thus provided be deducted from measurements of brick work.
- 9.0 ALUMINIUM WORK**
- 9.1 GENERAL**
The following are applicable particularly to Aluminum Works as contained in this tender documents:-
- 9.2 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.
- 9.3 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.**
- 9.4 ALUMINIUM SECTIONS.**
- 9.4.1** 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.
- 9.4.2** The aluminium extruded sections shall conform to I.S., Designations EIWP/HVIWP alloy, with chemical composition and technical properties as per I.S. 733 and I.S. 1285, respectively.
- 9.4.3** **Aluminum sections to be used for windows, ventilators and fixed glazing etc. shall be of Z section and be manufactured by reputed companies & shall be appropriate to meet architectural designs of relevant components. The aluminium extruded sections shall be of thickness 16 gauge (1.29mm)**
- 9.4.4** For sectional weight, tolerance limits shall be (-) 0.5%
- 9.5 FABRICATION**
- 9.5.1** All joints shall be accurately fabricated and be hairline in appearance.
- 9.5.2** 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.
- 9.5.3** 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.
- 9.5.4** 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.

9.5.5 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.

9.5.6 Verticals of the frame shall be embedded in the floors, wherever required, up to 50 mm, by cutting and making good of the floor. Nothing extra shall be paid for the same.

9.6 FIXING

9.6.1 (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.

9.7 ANODISING / ELECTRO COLOURING

9.7.1 Aluminium sections shall be anodised as per I.S. 7088-1973. Anodising to be as per grade AC-15 and not less than 15 microns thick, when measured as per I.S. 6012, in matt Champagne electro colour with colour fastness rating No. 8 of I.S. 1868-1982. **Colour anodising would be done only by electro-colour process. No visual variation in colour shall be permitted.**

9.7.2 The anodic coating shall be properly sealed by steam or by boiling in de-iodized water as per I.S. 1868 and / or I.S. 6057. Sealing quality shall be tested in accordance with the relevant standards. Nothing extra shall be paid for above.

9.7.3 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 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.

9.7.4 All anodised aluminium works shall conform to relevant I.S. standards relating to materials, workmanship & fabrications respectively. Codes including I.S. 1868-1982, I.S. 733-1983 I.S. 1948-1961, I.S. 7088-1973, I.S.. 6012-1970, I.S. 1285-1975, I.S. 740-1975 respectively are considered relevant and applicable.

9.7.5 A thick layer of clear transparent lacquer based on methacrylates or cellulose styrate shall be applied on the anodised 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.

9.8 GLAZING

9.8.1 All glass panes shall be retained within aluminium 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.

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

9.9. PROTECTION AND CLEANING

- 9.9.1 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.

9.10 MEASUREMENT AND RATES

- 9.10.1 For Aluminium frame work, the payment shall be made as per actual weight in accordance with the procedure prescribed by Engineer-in-charge.
- 9.10.2 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.
- 9.10.3 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.
- 9.7.6 Prefabricated anodised aluminium decorative 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.
- 9.10.5 It is made clear that items such as cleats/angles, other fixtures, nuts, bolts, screws etc., which shall be required for fabrication and erection of aluminium work as per this 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.

10.0 VARIATION IN CONSUMPTION OF PIG LEAD

The pig lead for caulking of joints of SCI/CI pipes shall be issued as per theoretical consumption for SCI/CI pipes of size 100 mm, 75 mm & 50 mm, @ 0.98 kg., 0.88 kg. and 0.77 kg. per joint respectively. Over and above the theoretical quantities of lead as worked out, a variation of 5% shall be allowed for wastage etc. Any difference between the actual consumption of pig lead and theoretical consumption worked out on the above basis, including the authorised variation shall be recovered at the rate mentioned under schedule "F". Where the pig lead is arranged by the contractor, variation of 5% will be allowed. In case variation is on lesser side, the quantity of less pig lead used shall be recovered from the contractor at market rate to be determined by the Engineer-in-charge, whose decision in the matter shall be final & binding.

11.0 PAINT BROUGHT BY THE CONTRACTOR

- 11.1 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
- 11.2 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
- 11.3 Empty containers shall not be removed without the written permission of the Engineer-in-charge.

12.0 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.

13.0 MULTICOAT-SYNTHETIC PLASTER:---

This shall consist of two parts--- (1) SCRATCH-PLASTER & (2) TERRACOAT respectively. whose composition shall be as under :--

- i) SCRATCH-PLASTER:--It shall have two component which comes in liquid & powder form. These shall be mixed at site before application in the ratio 25kg. Powder in 1.0 litre of liquid. Powder shall be made-up of Acrylic powder polymer, inert filler material in powder form, finally graded silica (450 micron to 1.00mm graded) particles, Anti-fungal agents, Emulsifying agent (Extender) to prevent lumping of powder during mixing, Titanium di-oxide pigments for making it water-proof from exterior while allowing trapped water vapour breathability & Thixotropic agent for maintaining consistency of mix. & to prevent flowing of mix during application (EUROFIN Or equivalent). The surface to be covered shall be pre-cured & shall be applied with surface stabilization primer before application of Scratch-plaster ii) TERRACOAT :-- It shall be made-up of Acrylic Co-polymer emulsion, crushed &

precisely graded silica particles (500 micron & down size), high quality rutile (Purest form) grade Titanium di-oxide, fungicide, plasticisers & anti-corrosive agent (**EUROFIN Or equivalent**). This shall be applied over scratch-plaster in two or more coats to get approved shade & pattern

13.1 Measurement:-- Area of surface covered shall be measured to the nearest Sq.cms..

13.2 Rate:-- Rate shall be inclusive of all materials & labour involved in its application & appurtenant operations involved therein

14.0 SANITARY INSTALLATIONS /WATER SUPPLY / DRAINAGE

14.1 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.

14.2 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.

14.3 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.

14.4 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.

14.5 Vitreous China sanitary fittings procured from firms Neycer, Hindware, Cera, Parryware shall only be used subject to approval of samples by the Engineer-in-Charge unless otherwise specified in the items.

14.6 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.

14.7 The Centrifugally spun cast iron pipe IS: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.

14.8 P or S floor traps (long arm upto 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.

14.9 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.

14.10 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 any where 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.

14.11 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 performa.

14.12 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.

15.0 The order of preference in case of any discrepancy as indicated in condition no 8.1 under “Conditions of Contract” given in General conditions of contract 2023 for Maintenance work may be read as the following:

15.1 Description of item nomenclature in the schedule of quantities.

15.2 Particular specifications for Repair and Rehabilitation works (if applicable)

15.3 Particular specifications.

- 15.4** Additional and Special conditions.
- 15.5** Contract Clauses of GCC Maintenance work – 2023 for CPWD.
- 15.6** CPWD specifications as mentioned in Schedule ‘F’.
- 15.7** Architectural Drawings, if any.
- 15.8** Indian Standard Specifications.
- 15.9** Sound Engineering Practice.5
- 16.0** The words “Equivalent”, “Approval” and authorized” in these specifications shall imply and require written approval of the Engineer-in-Charge.
- 17.0** The rates shall include the following:-
- 17.1** 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 tenderer 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.
- 17.2** Cutting, making and repairing of any holes/opening Junction Box for electrical purpose etc. required for any light fittings, loudspeakers, air-conditioning grills etc.

SPECIAL CONDITIONS

1. Work shall be carried out as per CPWD Specifications & direction of Engineer-in-charge.
2. During execution of work, at least one supervisor shall be made available at site.
3. Contractor is to adhere to all security instructions of the TAKSAL/MINT/CISF/BSF & other secured campus.
4. Working hours for execution shall be up to Sun-Set only.
5. The work is to be executed under high security check due to this; some labour may be waste for which nothing extra shall be paid. Agency will work in coordination with the client Department.

SPECIAL CONDITION FOR NGT :

The guidelines regarding preventive measures for Air Pollution from demolition & construction activities issued by Delhi Pollution Control Committee vide no. DPCC/EIA/Res-001 to 172 /NGT-21/2015/225-408 dated 17.04.2015 in compliance of Hon'ble National Green Tribunal directions are applicable to the contractor. All appropriate protection measures as per NGT & DPCC guidelines shall be taken by the contractor at his own cost. Nothing extra shall be payable to the contractor on this account.

Hon'ble National Green Tribunal in its order dated 04.12.2014 in respect of air pollution from dust resulting from demolition and construction activity inter-alia has directed as follows:

- I. No government, authority, contractor, builders or any person would be permitted to store/dump construction material or debris on metalled road.
- II. Beyond the metalled road the area where such the construction material or debris can be stored shall be physically demarcated by officers of all the concerned Authorities/Corporation ensuring that it would not cause any obstruction to the free flow of traffic/inconvenience to the pedestrians. It should be ensured that no accidents occur on account of such permissible storage.
- III. Every builder, contractor or person shall ensure that the construction material is covered by tarpaulin and all other precaution should be taken to ensure that no dust particles are permitted to pollute air quality as a result of such storage.
It shall also be ensured that appropriate protection measures are taken by raising wind breakers of appropriate height on all sides of the plot/area using plastic and/or other similar material to ensure that no construction material dust fly outside the plot area and 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 by 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 pay compensation which would be determined by Tribunal in accordance with law.
- IV. All the trucks or vehicles of any kind which are used for construction purposes/ are carrying construction material like cement, sand and other allied material should be fully covered. The vehicles should be properly cleaned should be dust free and every necessary precautions is to be taken to ensure that enroute their destination, the dust, sand or any other particles are not permitted to be released in air/contaminate air. Any truck not complying with the above directions would not be permitted to enter NCR, Delhi.

Hon'ble National Green Tribunal in order Dated 10.04.2015 inter-alia has directed as follows:

1. Every builder or owner shall put tarpaulin on scaffolding around the area of construction and the building. No person including builder, owner can be permitted to store any construction material particularly sand on any part of the street, roads in any colony.
2. The construction material of any kind that is stored in the site will be fully covered in all respects so that it does not disperse in the Air in any form.
3. All the construction material and debris shall be carried in the trucks or other vehicles which are fully covered and protected so as to ensure that the construction debris or the construction material does not get dispersed into the air or atmosphere, in any form whatsoever.
4. The dust emissions from the constructions site should be completely controlled and all precautions taken in that behalf.
5. The vehicles carrying construction material and construction debris of any kind should be cleaned before it is permitted to ply on the road after unloading of such material.
6. Every worker working on the construction site and involved in loading, unloading and carriage of construction material and construction debris shall be provided with mask to prevent inhalation of dust particles.
7. Every owner and or builder shall be under obligation to provide all medical help, investigation and treatment to the workers involved in the construction of building and carry of construction material and debris relatable to dust emissions.
8. It shall be the responsibility of every builder to transport constructions material and debris waste to construction site, dumping site or any other place in accordance with rules and terms of this order.
9. All to take appropriate measures and to ensure that the terms and conditions of the earlier order and these orders should strictly comply with by fixing sprinklers, creations of green air barriers.

10. Compulsory use of wet jet in grinding and stone cutting.
11. Wind breaking wall around construction site.
12. All the builders who are building commercial, residential complexes which are covered under the EIA Notification 2006 shall provide green belt around the building that they construct. All authorities shall ensure that such green belts are in existence prior to issuance of occupancy certificate.
13. All builders shall ensure that C&D waste is transported in terms of this order to the C&D waste site only and due record in that behalf shall be maintained by the builders, transporters and NCR of Delhi.
14. Even if constructions have been started after seeking environmental clearance under 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.

Environmental Impact Assessment Guidance Manual for Building, Construction, Township and area development Projects of February, 2010 is available on the website of MoEF & CC envisaging the following guidelines for mitigation measures in respect of dust control from Building, Construction Projects:

“Adopting techniques like, air extraction equipment, and covering scaffolding, hosing down road surfaces and cleaning of vehicles can reduce dust and vapour emissions. Measures include appropriate containment around bulk storage tanks and materials stores to prevent spillages entering water courses.

The others measures to reduce the air pollution on site are:-

- Sprinkling of water and fine spray from nozzles to suppress the dust.
- On-Road-Inspection should be done for black smoke generating machinery.
- Promotion of use of cleaner fuel should be done.
- All DG sets should comply emission norms notified by MoEF.
- Vehicles having pollution under control certificate may be allowed to ply.
- use of covering sheet to prevent dust dispersion at buildings and infrastructure sites, which are being constructed.
- Use of covering sheets should be done for trucks to prevent dust dispersion from the trucks, implemented by district offices.
- Paving is a more permanent solution to dust control, suitable for longer duration projects. High cost is the major drawback to paving.
- Reducing the speed of a vehicle to 20kmph can reduce emissions by a large extent.

Speed bumps are commonly used to ensure speed reduction. In cases where speed reduction cannot effectively reduce fugitive dust, it may be necessary to divert traffic to nearby paved areas.

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.”

By way of these orders/notice you are hereby notified for mandatory strictly adherence to and compliance of the directions contained in the order of Hon’ble Tribunal as well as MoEF guidelines, 2010 in relation to precautions required to be taken while carrying on construction activities.

Copy of NGT orders dated 04.12.2014, 10.04.2015 copy of MoEF guidelines 2010 and copy of notice issued are available at the DPCC website also i.e. “<http://dpcc.delhigovt.nic.in>.”

Please note that the non-compliance of Hon’ble NGT order will make you liable for action as per law including the directions for stoppage of work.

LIST OF PREFERRED MAKES FOR CIVIL WORKS

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

S. No.	Material	List of Preferred Makes
1	(i) Portland Pozzolona Cement	ACC, Ultratech, Ambuja Cement, J.K.Cement, Century Cement, Shree Cement, Jaypee Cement, Vikram Cement. Prism Johnson Limited (formerly Prism Cement Limited), Wonder Cement.
	(ii) White Cement	Birla White, J.K.White.
2	Reinforcement Steel TMT bars Fe-500D	SAIL, Tata Steel Ltd, RINL, JSW Steel Ltd, Jindal Steel & Power Ltd, Shyam Steel Industries Ltd, Electro steel.
3	Water Proofing Compounds, Admixtures, Plasticizer, Super Plasticizer, Curing Compounds.	Fosroc, Pidilite Industries, CICO, Sika, BASF, Ardex Endura (Bal Endura), Ferrous crete, MAKPHALT
4	Integral Water Proofing compound with cement (For Plaster & Mortar)	Fosroc : Conplast 421, Dr.Fixit : L.W+, Sika : Sikacin Asian Paints : Smart Case Vitalia& equivalent product of BASF, CICO, Ardex Endura, MAKPHALT
5	Water Proofing for bathroom / toilet / balcony & other wet areas	Fosroc : Brush Bond, Dr.Fixit : Pidifine 2K, Sika : Nito Bond, Asian Paints : Damp Block 2 K & equivalent product of BASF, CICO, Ardex Endura, MAKPHALT
6	Crystalline water proofing compound	Fosroc : Bushbond TGP, Dr.Fixit : Dr.FixitKrystalline Sika : Sika 101 h, Asian Paints : Smart care & equivalent product of BASF, CICO, Ardex Endura, STP Ltd. MAKPHALT, TECHNONICOL.
7	Grouts, Adhesive	Laticrete, STP Ltd, BASF, Ardex Endura, Ferrous Crete, MAKPHALT, JK Tile MaxX
8	Structural Steel	SAIL, Tata Steel, Rastriya Ispat Nigam Ltd (RINL), and JSW Steel Ltd., Jindal Steel & Power Ltd.
9	Polycarbonate Sheet	GE Plastic, LEXAN& MG Polyp last.
10	Profile steel sheet (Precoated)	Ezydeck of TATA, Lloyd Super deck, JSW, Jindal.
11	Particle Board	Action TESA, Merino & ArchidPly.
12	Laminated Particle Board / Laminates	Action TESA, Greenlam, Century Ply, Merino & ArchidPly, Amulya Mica

13	Flush Door shutters	Duro, Century, Durian, Green Ply, archidply, Jayana (Jain wood Industries).
14	Fire Rated Doors	Signum Fire Protection, Shakti Hormann, Navair, Promat. Ecotone, Suniti Construction, Radiant, Sehgal Doors, Indian Fire.
15	False Ceiling System	Armstrong, Hunter Douglas, USG Boral, Saint Gobain, Aerolite, Interarch., PROLAD., GYPTECH SYSTEMS Pvt. Ltd., ANAKON, HI-Steel, RITE, BSR Calsi Ceilings, P.R. Ceiling products, Royal Kraft, WESTERN, BOLLARD
16	Plywood / Veneer	Green ply, Century, Merino, Durian, Archidply.
17	Melamine Polish	Asian Paints Melamine Gold, Wudfine of Pidilite, Timber tone of ICI Dulux.
18	Floor Spring & Door Closure	Godrej, Dorma, Dorset & Kich.
19	(a) Aluminium Section	Hindalco, Jindal, Indian Aluminium Co.
	(b) Anodised Aluminium Hardware (Heavy Duty)	Kilong, Alualpha, Classic, Ebco.
20	Clear/Float/Frosted/Refractive/Coated Glass	Saint Gobain, AIS, Modiguard, Asahi Float.
21	Stainless Steel Railing, Accessories etc.	JINDAL, Dorma, Ozone, Godrej.
22	S.S. fittings for Door & Window	Dorma, Kich, Doorset, Godrej, Ozone.
23	Silicon based water repellent / Weather sealant	G.E. Plastics, Dow Corning, Wacker, BASF, Pidilite (Dr.Fixit/Roff).
24	Poly-Sulphide Sealant	Fosroc, Pidilite (Dr.Fixit/Roff), Sika, BASF, MAKPHALT
25	Mosaic Tiles / Chequerred Tiles	Ultra Tiles, NITCO, Hyper, Mayur, Pavcon.
26	Glazed Ceramic Tiles	Somany, Kajaria, RAK, NITCO, Johnson, AGL, Orient Bell, Oasis, Hindware, Simero.
27	Vitrified Tiles (Antiskid/Matt/Glazed)	Somany, Kajaria, RAK, NITCO, Johnson, AGL, OrientBell, Oasis, Hindware, Simero.
28	Paver Block &Kerb Stone	BIS Mark in UP manufacturer.
29	Dash / Anchoring Fasteners	HILTI, Fischer, Bosch, Wurth.
30	Cement Based Wall putty	Birla wall care, JK White, Berger, Asian Paints, WESTERN.
31	Oil Bound Washable Distemper / Dry Distemper	Asian Paints (Professional Acrylic Distemper), Nerolac : Beauty Acrylic Distemper, Berger: Bison Acrylic Distemper, DuluxICI: Maxilite, British Paints.
32	Ist Quality Acrylic Distemper (washable / Ready Mix / Low VOC)	Asian Paints (Tractor Aqua Lock Paint), Berger : Commando, Or equivalent paints of Nerolac or ICI Dulux., British pints Acrisilkacrylic distemper, JK Maxx Paints.

33	Plastic Emulsion Paint	Asian Paints : (Apcolite Heavy Duty Premium Emulsion Paint), Nerolac : Impression, Berger : Easy Clean ICI-Dulux : 3 in 1, British paints-Glamour Anti-Stain, JK Maxx Paints
34	Acrylic Emulsion Paints	Asian Paints (Royale Luxury Emulsion), Nerolac : Impression, Berger : Silk, ICI Dulux : Velvet Touch, British Paints-Sheer Class Splendor, JK Maxx Paints
35	Textured Exterior Paint	Asian paints, Nerolac, Berger Paints, Ultratech Paints&Luxture., British paints, JK Maxx Paints
36	Premium Acrylic Smooth Exterior Paint with silicon additive	Asian Paints : (Apex Ultima), Nerolac : XL Total Berger : Weather Coat all guard, ICI-Dulux : Weather Shield max, British paints-Expa 7 Advanced, JK Maxx Paints
37	Synthetic Enamel Paint	Asian (Apcolite Premium gloss enamel), Nerolac : Synthetic Hi gloss, Berger : Luxol Hi gloss, ICI-Dulux : Gloss Synthetic enamel, British paints Glo Advanced enamel, JK Maxx Paints
38	Cement Primer	Nerolac, Berger (BP White), Asian (Decoprime WT) & ICI (White Primer), British paints Acrylic water base cement primer, JK Maxx Paints
39	Steel Primer (Red Oxide Zinc Chromate Primer)	Asian Paints, Nerolac, Berger, ICI, British paints, JK Maxx Paints
40	Wood Primer	Asian Paints (Wood Primer – White / Pink), Berger, ICI, Nerolac, British paints Wood primer-white/pink, JK Maxx Paints
41	Epoxy Paint	Asian, Nerolac, Berger, ICI, Kansai Akzo Nobel, British paints.
42	Fire Paint	Asian Paints, Akzo Nobel Coatings India Ltd., PROMAT, Jotun.
43	G.I. / M.S. Pipe	Tata, Jindal (Hisar), Prakssh Surya, APL-Appollo.
44	G.I. Fittings	Unik, AVR, Zoloto.
45	HDPE Pipes	Reliance, Jain Pipes, ORIPLAST, Supreme, PRINCE.
46	DI Pipes	Jindal, TATA DUCTURA, Kapilansh, Kesoram.
47	DI Fittings	Jindal, TATA DUCTURA, Kapilansh, Kesoram.
48	UPVC pipe and Fittings	Astral, Supreme, Ashirwad, Kishan, AKG, PRAYAG, PRINCE.
49	UPVC PIPES	SUPREME, PRINCE, FINOLEX, AKG, PRAYAG.
50	Centrifugally Cast (Spun) Iron Pipes & Fittings	NECO, BIC, Kapilansh, SKF.
51	C.I. Manhole covers, frames & GI Gratings	NECO, BIC, Kapilansh, SKF.

52	SFRC Manhole covers & gratings	KK, JAIN, PARGATI.
53	C.P. Bath fittings	BLUES, PRIMA, KINGSTON, TOYO.
54	CP Brass Fittings(Superior Range)	Jaquar, Grohe, Roca, Kohler
55	Sanitary ware, Fittings & accessories	Jaquar, Hindware, Parryware, Cera, Nycer, Johnson, Toyo.
56	Mirror Glass	Atul, Modi Guard, Golden Fish.
57	CPVC Pipe & fitting	Astral, Supreme, Ashirwad, Kishan, AKG, PRINCE
58	Stainless Steel Sink	Neelkanth, Nirali, Jyna, PRAYAG.
59	RCC Pipes(NP-2)	ISI Make.
60	Extruded Polystrene Insulation Board	Dowcorning, Supreme, Texas, Analco.
61	Heat Resistant Tiles	Swastik, Thermatek.
62	Gypsum Plaster	Ferrous Crete, Gyproc Saint Gobain, Ultratech, JK White, WESTERN.
63	Floor hardener	Ironite, Ferrok, Hardonate.
64	Hardware for uPVC Windows	Rotto, Dorset, Kinlong, Fenesta.
65	AAC Blocks	Ultratech, HIL, BILTECH and As Approved by E-I-C.
66	PVC Rain water pipe & fittings As per IS :13592	Finolax, Supreme, Plasto
67	PVC Shutter	Rajshri, Sintex, M/s Jain Wood Industries, Amulya Mica
68	Fire door Accessories	Yale, Assa Abloy, Ozone, Dorma.
69	UPVC Door/Windows/Ventilator	Fensta, Komerling, Rehean, Veka, Duroplast, Aluplast, Wintech, PSP Dynamic Ltd.
70	FRP Door Shutter & Frame	Jayana, Fibreways & Selected product company.
71	Water Storage Tank	SPL, PRAYAG, PRINCE.
72	Acoustic Wall Panelling	ANAKON, RITE, BOLLARD.
73	W.P.C. Board, WPC Doorframe, WPC Shutter	Amulya Mica, AVSL
74	WINDOW- BLINDS & TRACKS, ROLLER, CURTAINS	VISTA, MAC, MARVEL, SSG, DECK, HUNTER DOUGLAS.
75	ACRYLIC SOLID SURFACE	LG HI-MACS, DUPONT CORION, NEONNEX, LUXOR (DURLAX)

NOTE: The items for which no makes are specified, only ISI marked and/ or the make approved by Engineer-in-Charge shall be used.

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/Mobilization Advance

1. 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 irrevocable Bank Guarantee for Rs. (Rupees only) valid upto (date)*..... as Earnest Money Deposit from (name and address of contractor)(hereinafter called "the contractor") for compliance of his obligations in accordance with the terms and conditions of the said NIT.

OR**

Whereas the Executive Engineer (name of division), 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 upto (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.

2. We, (indicate the name of the bank) (herein after referred to as "the Bank"), hereby undertake to pay to the Government an amount not exceeding Rs. (Rupees..... only) on demand by the Government within 10 days of the demand.
3. 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. (Rupeesonly)
4. 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.
5. We, (indicate the name of the Bank), further agree that the Government shall have the fullest liberty without our consent and without affecting in any manner our obligation here under to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor from time to time or to postpone for any time or from time to time any of the powers exercisable by the Government against the said contractor and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said Contractor or for any forbearance, act of omission on the part of the Government or any indulgence by the Government to the said

Contractor or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6. We, (indicate the name of the Bank), further agree that the Government at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor at the first instance without proceeding against the Contractor and notwithstanding any security or other guarantee the Government may have in relation to the Contractor's liabilities.
7. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor.
8. We, (indicate the name of the Bank), undertake not to revoke this guarantee except with the consent of the Government in writing.
9. This Bank Guarantee shall be valid up to unless extended on demand by the Government. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs. (Rupees only) and unless a claim in writing is lodged with us within the date of expiry or extended date of expiry of this guarantee, all our liabilities under this guarantee shall stand discharged.

Date

Witnesses:

1. Signature.....

Name and address

Authorized signatory

Name

Designation

Staff code no.

2. Signature

Name and address

Bank seal

**GUARANTEE BOND TO BE EXECUTED BY CONTRACTORS FOR REMOVAL OF DEFECTS
AFTER COMPLETION IN RESPECT OF WATER PROOFING WORKS**

The Agreement made this day of two thousand and between son of of (hereinafter called the Guarantor of the one part) and the PRESIDENT OF INDIA (hereinafter called Government of the other part).

WHEREAS this agreement is supplementary to a contract (hereinafter called the Contract) dated and made between the GUARANTOR of the one part and the Government of the other part, whereby the Contractor, inter alia, undertook to render the buildings and structures in the said contract recited completely water and leak-proof.

AND WHEREAS GUARANTOR agreed to give a guarantee to the effect that the said structures will remain water and leak-proof for five years from the date of giving of water proofing treatment.

NOW THE GUARANTOR hereby guarantees that water proofing treatment given by him will render the structures completely leak-proof and the minimum life of such water proofing treatment shall be five years to be reckoned from the date after the maintenance period prescribed in the contract.

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

(a) Misuse of roof shall mean any operation which will damage proofing treatment, like chopping of firewood and things of the same nature which might cause damage to the roof;

(b) Alteration shall mean construction of an additional storey or a part of the roof or construction adjoining to existing roof whereby proofing treatment is removed in parts;

(c) The decision of the Engineer-in-Charge with regard to cause of leakage shall be final.

During this period of guarantee the guarantor shall make good all defects and in case of any defect being found, render the building water-proof to the satisfaction of the Engineer-in-Charge at his cost, and shall commence the work for such rectification within seven days from the date of issue of the notice from the Engineer-in-Charge calling upon him to rectify the defects, failing which the work shall be got done by the Department by some other contractor at the GUARANTOR'S cost and risk. The decision of the Engineer-in-Charge as to the cost, payable by the Guarantor shall be final and binding.

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

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

Signed, sealed and delivered by OBLIGOR in the presence of

- 1.
- 2.

Signed for and on behalf of THE PRESIDENT OF INDIA by in the presence of

Schedule of Quantity					
Name of Work:- Strengthening of all existing damaged internal road at NSTI Campus, D-1, Sector-01, Noida. dg. 2026-27.					
S.No	Description of Item	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 level :				
1.1	1:5:10 (1 cement : 5 coarse sand (zone-III) derived from natural sources : 10 graded stone aggregate 40 mm nominal size derived from natural sources)	15.00	cum	6518.60	97779.00
2	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete at all level (upto plinth level and above plinth level.)				
2.1	Thermo-Mechanically Treated bars Fe 500 D or more	1500.00	kg	107.85	161775.00
3	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portland Pozzolana / Ordinary Portland /Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of the engineer-in-charge; for the following grades of concrete. Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.				
3.1	All works above plinth level upto floor V level				
3.1.1	Concrete of M30 grade with minimum cement content of 350 kg /cum	12.00	cum	10011.35	120136.00
4	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:				
4.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	4.15	Cum	7370.65	30588.00
5	12 mm cement plaster of mix :				
5.1	1:6 (1 cement: 6 coarse sand)	18.00	sqm	343.65	6186.00
6	15 mm cement plaster on rough side of single or half brick wall of mix:				
6.1	1:6 (1 cement: 6 coarse sand)	45.00	sqm	395.35	17791.00
7	15 mm cement plaster 1:3 (1 cement: 3 coarse sand) finished with a floating coat of neat cement on the rough side of single or half brick wall.	18.00	Sqm	506.60	9119.00
8	Finishing walls with Acrylic Smooth exterior paint of required shade :				

8.1	New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 0.90 litre/10 sqm)	45.00	Sqm	160.60	7227.00
9	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :				
9.1	Two or more coats on new work	150.00	Sqm	155.90	23385.00
10	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.	45.00	Sqm	156.05	7022.00
11	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.				
11.1	Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	85.00	cum	2434.25	206911.00
12	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in- charge.	12.00	cum	3551.25	42615.00
13	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.				
13.1	In cement mortar	1.00	cum	2060.20	2060.00
14	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.	98.00	cum	263.95	25867.00
15	Providing and laying design mix cement concrete of M-30 grade, in roads/ taxi tracks/ runways, using cement content as per design mix, using coarse sand and graded stone aggregate of 20 mm nominal size in appropriate proportions as per approved & specified design criteria, providing dowel bars with sleeve/ tie bars wherever required, laying at site, spreading and compacting mechanically by using needle and surface vibrators, levelling to required slope/ camber, finishing with required texture, including steel form work with sturdy M.S. channel sections, curing, making provision for contraction/ expansion, construction & longitudinal joints (10 mm wide x 50 mm deep) by groove cutting machine, providing and filling joints with approved joint filler and sealants, complete all as per direction of Engineer-in-charge (Item of joint fillers, sealants, dowel bars with sleeve/ tie bars to be paid separately).				
	Note:- Cement content considered in M-30 is @ 340 kg/cum. Excess/ less cement used as per design mix is payable/ recoverable separately.				

15.1	Cement concrete manufactured in automatic batching plant (RMC plant) i/c transportation to site in transit mixer	409.00	Cum	11098.45	4539266.00
16	Providing, laying and making kerb channel 30 cm wide and 50 mm thick with cement concrete 1:3:6 (1 cement: 3 coarse sand:6 graded stone aggregate 20 mm nominal size) over 75mm bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including finishing the top smooth etc. complete and as per direction of Engineer-in-charge.	45.00	Sqm	558.30	25124.00
17	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement concrete in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement: 3 coarse sand), including making joints with or without grooves (thickness of joints except at sharp curve shall not to more than 5mm), including making drainage opening wherever required complete etc. as per direction of Engineer-in-charge (length of finished kerb edging shall be measured to calculate volume for payment). (Precast C.C. kerb stone shall be approved by Engineer-in-charge).	1.50	Cum	10117.60	15176.00
18	Providing and laying factory made chamfered edge Cement Concrete paver blocks in footpath, parks, lawns, drive ways or light traffic parking etc, of required strength, thickness & size/ shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of sand, compacting and proper embedding/laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand. complete all as per direction of Engineer-in-Charge.				
18.1	60mm thick cement concrete paver block of M-35 grade with approved colour, design & pattern.	150.00	Sqm	1045.65	156848.00
19	Constructing brick masonry road gully chamber 45x45x77.5 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) with precast R.C.C. vertical grating complete as per standard design :				
19.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	10.00	each	6889.80	68898.00
20	Constructing brick masonry chamber for underground C.I. inspection chamber and bends with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg), R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 fine sand : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand), finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design:				

20.1	Inside dimensions 600x 850 mm and 45 cm deep for pipe line with three or more inlets :				
20.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	2.00	each	9594.35	19189.00
21	Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc.direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.				
21.1	160 mm dia (OD-160 mm & ID-135 mm nominal)	24.00	Mtr	537.00	12888.00
21.2	200 mm dia (OD-200 mm & ID-175 mm nominal)	120.00	Mtr	733.00	87960.00
	Total				5683810.00
	Amount of schedule items after using Correction factor on DSR 2023 on account of GST @0.973				5530347.00
	Add Cost Index @ 5%				276517.00
	Total				5806864.00

Assistant Engineer (P)
NCD, CPWD,

Executive Engineer
NCD, CPWD,