CENTRAL PUBLIC WORKS DEPARTMENT

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Name of Work:- **Providing toilet facility for differently abled persons near Museum and improvement of sewer systems at football ground toilet in Sch 'B' Rashtrapati Bhavan during 2026-27.**

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Certificate that this NIT Contains Page 1 to 62 (One to Sixty Two) only.

NIT Approved for Rs:- **17,77,402**/- (Rupees Seventeen Lac Seventy Seven Thousand Four Hundred Two Only).

Assistant Engineer (P)
President's Estate
CPWD, Rashtrapati Bhavan
New Delhi

Executive Engineer
President's Estate
CPWD, Rashtrapati Bhavan
New Delhi

Addition… Nil Correction... Nil Deletion ... Nil Overwriting... Nil Sr.D/MAN AE(P) EE

CENTRAL PUBLIC WORKS DEPARTMENT
Notice Inviting e-Tenders

The **Executive Engineer,** President's Estate, CPWD, Rashtrapati Bhavan, New Delhi-110004 on behalf of the President of India invites online Percentage Rate tenders from approved and eligible contractors of CPWD for the following work(s): -

NIT NO.	**:**	**92/EE/PE/26-27**
Name of Work:	**:**	**Providing toilet facility for differently abled persons near Museum and improvement of sewer systems at football ground toilet in Sch 'B' Rashtrapati Bhavan during 2026-27.**
Estimated Cost	**:**	Rs. **17,77,402/-**
Earnest money	:	Rs. 35,548/-
Period of completion	**:**	01 Months

Last date and time of submission of bid 20-11-2026 at 02:00 P.M.

The bid forms and other details can be obtained from the website CPWD eTendering (https://etender.cpwd.gov.in). **The notice inviting e-Tender is also available on www.eprocure.gov.in.**

Executive Engineer,
President's Estate
CPWD, Rashtrapati Bhavan,
New Delhi- 110004

Addition… Nil Correction... Nil Deletion ... Nil Overwriting... Nil Sr.D/MAN AE(P) EE

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

The **Executive Engineer**, President's Estate, CPWD, Rashtrapati Bhavan, New Delhi-110004 on behalf of the President of India invites online Percentage rate tenders from approved and eligible contractors of CPWD for the following work(s): -

S. No.	NIT No.	Name of work & Location	Estimated cost put to Bid	Earnest money	Period of Completion	Last date & time of submission of Online Bid, EMD, e-tender Processing Fee and other Documents as uploaded on Website	Time & date of opening of Bid
1	2	3	4	5	6	7	8
1	92/EE/PE/26-27	Providing toilet facility for differently abled persons near Museum and improvement of sewer systems at football ground toilet in Sch 'B' Rashtrapati Bhavan during 2026-27.	Rs. 17,77,402/-	Rs. 35,548/-	01 Months	Upto 02:00 P.M on 20-11-2026	At 02:30 P.M on 20-11-2026

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 tender 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 CPWD eTendering (https://etender.cpwd.gov.in), and www.eprocure.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 Insurance Surety Bonds, Account Payee Demand Draft or Bankers Cheque or Fixed Deposit Receipts or/ and Bank Guarantee (for balance amount as prescribed) from any of the Commercial bank towards EMD in Favour of **Executive Engineer, President Estate Division, CPWD, Rashtrapati Bhavan, New Delhi** as mentioned in NIT**, receipt for deposition of original EMD to division office of any Executive Engineer (including NIT issuing EE/AE), CPWD** and other documents as specified

The Contractors already registered on the e-tendering portal will have option to continue by paying tender processing fee upto one year from the date of registration, or to switch over the (new) registration without tender processing fee anytime.

5. Those contractors not registered on the website mentioned above, are required to get registered beforehand. If needed they can be imparted training on online tendering process as per details available on the website. The intending bidder must have valid class-III digital signature to submit the bid.

6. Copy of Enlistment Order shall be scanned anduploaded to the e-tendering website within the period of bid submission. However, certified copy of all the scanned and uploaded documents as specified in on website shall have to be submitted by the lowest bidder only within a week physically in the office of tender opening authority.

7. Earnest Money in the form of *Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt,* Bankers Cheque *or Bank Guarantee (For balance amount as prescribed) from any of the commercial banks*. (**drawn in favour of Executive Engineer, President Estate Division, CPWD, Rashtrapati Bhavan, New Delhi-110004**) shall be scanned and uploaded to the e-tender 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/AE) 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 cases 50% of earnest money or Rs. 20 lac, whichever is less, shall have to be deposited in shape prescribed above, and balance can be accepted in form of bank guarantee issued by a commercial bank the Bank Guarantee submitted as a part of earnest money is valid for a period of 90 days for single bid works and 180 days for two bids system or more from the date of submission of the tender 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.. Entry of the demand draft/bankercheque received as earnest money with the tenders is kept in the tender opening register and these need not be deposited in the bank accept for the lowest tenderer, if required .

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

9. The bid submitted shall be opened at **20-11-2026** at **02:30 P.M.** on

10. The bid submitted shall become invalid if:

(i) The bidder is found ineligible.

(ii) The bidder does not deposit original EMD with division office of any Executive Engineer, CPWD.

(iii) The bidders does not upload all the documents (including GST registration) as stipulated in the bid document including the copy of receipt for deposition of original EMD. (OM No. DG/MAN/353).

(iv) If any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted physically by the lowest bidder in the office of tender opening authority.

(v) If a tenderer quotes nil rates against each item in item rate tender or does not quote any percentage above/below on the total amount of the tender or any section/sub head in percentage rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer

11. Contractor can upload documents in the form of JPG format and PDF format.

12. It is mandatory to upload scanned copies of all the documents including GST registration if

stipulated in the bid document. If such document is not uploaded his bid will become invalid.

13. The successful tenderer shall be required to submit a Performance Guarantee **(a) 5% (Five percent) of tendered value or Estimated Cost Put to Tender (ECPT) (whichever is higher). (b) where the tendered amount is less than eighty percent (80%) of the Estimate Cost Put to Tender (ECPT), the Performance Guarantee, In addition to the requirement under (a) above, shall be increased by an amount equal to the difference between eighty percent (80%) of the ECPT and the tendered** amount within a period after issue of letter of acceptance as specified in schedule 'F'. This period can be further extended by Engineer-in-Charge upto a maximum period of 3 days on written request of the contractor.

14. GST, purchase tax, turn over tax, Excise duty, or any other tax on materials as applicable shall be paid by the contractor himself. The contractor shall quote his rates considering all such taxes.

15. In e-tendering, the intending bidder does not sign any document physically and entire bid document is submitted through digital signature. Since IP is a part of bid document no separate physical submission is required with other documents to be submitted in the office of tender opening authority. In addition to other component of bid document, the integrity pact along shall also be signed between Assistant Engineer and successful bidder after acceptance of bid.

16. List of Mandatory Documents to be scanned and uploaded with in the period of bid submission :-

(if any agency failed to upload the scanned copies of the following documents then his/her/their tender shall be treated as rejected)

(i) Insurance surety bonds, Account payee Demand Draft, fixed deposit receipt (FDR), Bankers Cheque or Bank Gurantee (For balance amount as prescribed) from any of the commercial Bank against EMD.

(ii) Enlistment order of the Contractor in CPWD in appropriate class along with all Circulars documents showing validity of enlistment as on date of receipt of tender.

(iii) Copy of receipt for deposition of original EMD issued from division office of any Executive Engineer (including NIT issuing EE AE CPWD.

(iv) ERP training certificate. (Note the enlisted contractor will not be allowed to participate in the tendering process without uploading the certificate of ERP Training w.e.f. 01.07.2024)

(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 undertaking 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 anypayment by CPWD, whichever is earlier, failing which I/We shall be responsible for any delay in payments which will be due towards me/us on a/c of the work executed and/or for any action taken by CPWD or GST department in this regard."

Executive Engineer
President's Estate,
CPWD, Rashtrapati Bhavan,
New Delhi

Addition… Nil Correction... Nil Deletion ... Nil Overwriting... Nil Sr.D/MAN AE(P) EE

Receipt of Deposition of original EMD

(Receipt No. /Dated_)

Name of Work: - Providing toilet facility for differently abled persons near Museum and improvement of sewer systems at football ground toilet in Sch 'B' Rashtrapati Bhavan during 2026-27.

1. **NIT No. 92/EE/PE/26-27**
2. **Estimated Cost:** Rs. 17,77,402/-
3. **Amount of Earnest Money:** Rs. 35,548/-
4. **Last date of submission of bid: 20-11-2026 up to 02:00 P.M.**

1. **Name of Contractor:** _____
2. **Form of EMD**_____
3. **Amount of Earnest Money Deposit**_____
4. **Date of Submission of EMD**_____

Signature
Name & Designation of EMD receiving Officer
[EE/AE(P)/AE/AAO]
Along with office stamp

Addition… Nil Correction... Nil Deletion ... Nil Overwriting... Nil Sr.D/MAN AE(P) EE

CPWD-6 FOR e-TENDERING
GOVERNMENT OF INDIA
CENTRAL PUBLIC WORKS DEPARTMENT
NOTICE INVITING TENDER

1 Percentage Rate Tenders are invited on behalf of President of India from approved and eligible composite category Contractors of CPWD in appropriate class for the work of **Providing toilet facility for differently abled persons near Museum and improvement of sewer systems at football ground toilet in Sch 'B' Rashtrapati Bhavan during 2026-27.** The work is of **Estimated Cost** Rs. 17,77,402/- 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 (or other Standard Form as mentioned) (as amended up to last date of submission of bid) which is available as a Govt. of India Publication and also available on website www.cpwd.gov.in. Bidders shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.

3. The time allowed for carrying out the work will be **01 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.

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 CPWD e Tendering (https://etender.cpwd.gov.in) After submission of the bid, the bidder can re-submit revised bid any number of times but before last time and date of submission of bid as notified

6. While submitting the revised bid, bidder can revise the quoted rates of one or more items any number of times but before last time and date of submission of bid as notified.

7. Earnest Money in the form of Banker's Cheque of a commercial Bank, Account Payee Demand draft of a commercial bank, Fixed deposit Receipt (FDR) of a commercial bank, Insurance surety Binds & Bank Guranttee (for balance amount as prescribed) from a commercial bank. (**drawn in favour of Executive Engineer, President Estate Division, CPWD, Rashtrapati Bhavan, New Delhi-110004**) shall be scanned and uploaded to the e-tender 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/AE) 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.

8. Agencies willing to participate in this bidding process should get themselves registered with e-tendering website of ERP by credit/debit card or internet banking or RTGS/NEFT facility. Only e-bids shall be accepted.

9. Copy of documents as specified in the on website shall be scanned and uploaded to the e-Bidding website within the period of bid submission.

10. GST or any other tax applicable in respect of inputs procured by the Bidder for this contract shall be payable by the Bidder and government will not entertain any claim whatsoever in respect of the same. However, component of GST at time of supply of

service (as provided in CGST Act 2017) provided by the contract shall be varied if different from that applicable on the last date of receipt of tender including extension if any.

11. The bid submitted shall become invalid and e-bid processing fees shall not be refunded if:

(i) The bidder is found ineligible.

(ii) The bidder does not deposited original EMD with division office of any Executive Engineer, CPWD.

(iii) The bidders does not upload all the documents (including GST registration) as stipulated in the bid document including the copy of receipt for deposition of original EMD. (OM No. DG/MAN/353).

(i) 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 tender opening authority.

(ii) 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.

12. The bidder whose bid is finally accepted will be required to furnish performance guarantee of **(a) 5% (Five percent) of tendered value or Estimated Cost Put to Tender (ECPT) (whichever is higher). (b) where the tendered amount is less than eighty percent (80%) of the Estimate Cost Put to Tender (ECPT), the Performance Guarantee, In addition to the requirement under (a) above, shall be increased by an amount equal to the difference between eighty percent (80%) of the ECPT and the tendered amount** within the period specified in schedule F. This guarantee shall be in the form of cash (in case guarantee amount is less than Rs 10000) or Deposit at Call receipt of any scheduled bank / Banker's cheque of any scheduled bank / Demand Draft of any scheduled bank / Pay order of any Scheduled bank (in case guarantee amount is less than Rs 100000) or Government Securities or Fixed Deposit Receipts of a Scheduled bank or an irrevocable bank Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the prescribed form. In case the Bidder fails to deposit the said performance guarantee within the period as indicated in schedule 'F' including the extended period if any tender shall be canceled automatically. I/We shall be suspended for one year and shall not be eligible to bid for CPWD tenders from date of issue of suspension order in this division. Further the bidder shall not be allowed to participate in the re-bidding process of the work.

The Bidder 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 sub-agencies, if any engaged by the Bidder for the said work Program chart (Time & Progress) with in the period specified in Schedule-F.

13. 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 oraffect their bid. A bidder shall be deemed to have full knowledge of the site whether heinspects it or not and no extra claims / payments consequent on any misunderstanding orotherwise shall be allowed. The bidders shall be responsible for arranging and maintainingat his own cost all materials, tools & plants, water, electricity. Access, facilities for workersand all other services required for executing the work unless otherwise

specificallyprovided for in the contract documents. Submission of bid implies that he has read this notice and all other contract documents and has made himself aware of the scope andspecifications of the work to be done and local conditions and other factors having abearing on the execution of the work.

14. The competent authority on behalf of the President of India does not bind itself to accept the lowest or any other bid and reserves to itself the authority to reject any or all the bids received without assigning any reason. Bids in which any of the prescribed conditions is not fulfilled or any condition including that of conditional rebate is put forth by the bidders shall be summarily rejected.

15. Canvassing whether directly or indirectly, in connection with bids is strictly prohibited and the bids submitted by the bidders who resort to canvassing will be liable to rejection.

16. 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 bidders shall be bound to perform the same at the rate quoted.

17. The bidder shall not be permitted to bid for works in the CPWD Circle (Division in case of Bidders of Horticulture / Nursery category) responsible for award and execution of contracts, in which his near relative is posted as Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any gazetted officer in the Central Public Works Department or in the Ministry of Urban Development. Any breach of this condition by the bidder would render him liable to be removed from the approved list of Bidders of this Department in case of CPWD registered Bidders and this breach by other Bidders i.e. non CPWD registered shall be treated as concealing of information and penal.

18. No Engineer of gazetted rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a Bidder 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 Bidder or any of his employees is found any time to be such a person who has not obtained the permission of the Government of India as aforesaid before submission of the bid or engagement in the Bidder's service.

19. The bid for the works shall remain open for acceptance for a period of Thirty (30) days from the date of opening of bid. In case the bidder withdraws his bid before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the bid which are not acceptable to the department, then the Government shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the bidder shall not be allowed to participate in the re-bidding process of the work.

20. This notice inviting bid shall form a part of the contract document. The successful bidder / bidder, on acceptance of his bid by the Accepting Authority shall within 03 days from the letter of acceptance, sign the agreement consisting of:

(i) The Notice Inviting Bid, all the documents including special conditions, additional conditions, particular specifications and drawings, if any, forming part of the bid as

uploaded at the time of invitation of bid and the rates quoted online at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.

(ii) Standard C.P.W.D. Form 7 (GCC for CPWD Works 2023 maintenance) as applicable.

Executive Engineer
President's Estate
CPWD, Rashtrapati Bhavan
New Delhi -110004

Section-I

BRIEF PARTICULARS OF THE WORK

1. Salient details of the work for which bids are invited are as under:

Name of work	Estimated cost	Period of completion
Providing toilet facility for differently abled persons near Museum and improvement of sewer systems at football ground toilet in Sch 'B' Rashtrapati Bhavan during 2026-27.	**Rs. 17,77,402/-**	**01 Months**

1. The work shall be carried out within the campus of **President's Estate, New Delhi.**

2. **Providing toilet facility for differently abled persons near Museum and improvement of sewer systems at football ground toilet in Sch 'B' Rashtrapati Bhavan during 2026-27.**

3. Work shall be executed according to General conditions of Contract 2023 (Maintenance work) for Central PWD works available at www.cpwd.gov.in and at printer's outlets. The bidder may obtain the address of the outlets from the **Executive Engineer, President's Estate**, CPWD, Rashtrapati Bhavan, New Delhi-110004

CPWD-7	CPWD

GOVERNMENT OF INDIA
CENTRAL PUBLIC WORKS DEPARTMENT

STATE : DELHI **DIVISION : PE**

BRANCH : B&R **ZONE : Region Delhi**

1. Percentage rate Tender & Contract for Work: **Providing toilet facility for differently abled persons near Museum and improvement of sewer systems at football ground toilet in Sch 'B' Rashtrapati Bhavan during 2026-27.**

(i) To be submitted online by **02:00 PM** on **20-11-2026.**

(ii) To be opened in presence of tenderers who may be present at **02:30 PM on 20-11-2026** in the office of **Executive Engineer, President's Estate, CPWD, Rashtrapati Bhavan, New Delhi-110004**.

Issued to : ……..*…….

Signature of officer issuing the documents ……..*……

Designation: **Executive Engineer PE**

Date of issue ……..* …….

Addition… Nil Correction... Nil Deletion ... Nil Overwriting... Nil Sr.D/MAN AE(P) EE

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 respects with the specifications, designs, drawings and instructions in writing referred to in Rule-1 of General Rules and Directions and in Clause 11 of the Conditions of contract and with such materials as are provided for, by, and in respects in accordance with, such conditions so far as applicable.

We agree to keep the tender open for **(30 Days)** days from the date of opening of financial bid and not to make any modification in its terms and conditions.

A sum of **Rs. 35,548/-** is hereby forwarded in cash/receipt treasury challan/deposit at call receipt of a scheduled bank/fixed deposit receipt of scheduled bank/demand draft of a scheduled bank/bank guarantee issued by a scheduled bank as earnest money. If I/We, fail to furnish the prescribed performance guarantee within prescribed period. I/We agree that the said President of India or his successors, in office shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely. Further, if I/We fail to commence work as specified, I/We agree that President of India or the successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said earnest money and the performance guarantee absolutely, otherwise the said earnest money shall be retained by him towards security deposit 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 & Performance Guarantee as aforesaid. I/We shall be debarred for participation in the re-tendering process of the work.

"I/We undertake and confirm that eligible similar works(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 contracts in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit / Performance Guarantee."

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

Dated:

Signature of Contractor

Witness:

Postal Address

Address:

Occupation:

Addition… Nil Correction... Nil Deletion ... Nil Overwriting... Nil Sr.D/MAN AE(P) EE

ACCEPTANCE

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

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

(a)

(b)

(c)

For & on behalf of President of India

Signature ……..

Dated:

Designation …….

Addition… Nil Correction... Nil Deletion ... Nil Overwriting... Nil Sr.D/MAN AE(P) EE

PROFORMA OF SCHEDULES

SCHEDULE 'A'

Schedule of quantities: **Attached**

SCHEDULE 'D'

Extra schedule for specific requirements/document for the work, if any — Nil

SCHEDULE 'E':

Reference to General Conditions of contract: General Conditions of Contract 2023 for maintenance Works as amended/modified Upto previous day of the last date of submission of tender.

1. Name of work :- **Providing toilet facility for differently abled persons near Museum and improvement of sewer systems at football ground toilet in Sch 'B' Rashtrapati Bhavan during 2026-27.**

(i) Estimated cost of work : **Rs. 17,77,402/-**

(ii) EMD : Rs. 35,548/- (To be returned after receiving performance guarantee)

(iii) Performance Guarantee : (a) 5% (Five percent) of tendered value or Estimated Cost Put to Tender (ECPT) (whichever is higher)
(b) where the tendered amount is less than eighty percent (80%) of the Estimate Cost Put to Tender (ECPT), the Performance Guarantee, In addition to the requirement under (a) above, shall be increased by an amount equal to the difference between eighty percent (80%) of the ECPT and the tendered amount.

(iv) Security Deposit: 2.5% (Two point Five percent)

SCHEDULE 'F' (FOR CIVIL COMPONENT OF WORK)

1. General Rules & Directions

(i)	Officer inviting tender :	:-	Executive Engineer, President's Estate, CPWD, Rashtrapati Bhavan, New Delhi – 110004
(ii)	Maximum percentage for quantity of items of work to be executed beyond which rates are to be determined in accordance with Clauses 12.2 & 12.3	:-	As given under clause 12 of schedule 'F'.

Addition… Nil Correction... Nil Deletion ... Nil Overwriting... Nil Sr.D/MAN AE(P) EE

Definition

2 (v)	Engineer-in-Charge	:-	Executive Engineer, President's Estate, CPWD, Rashtrapati Bhavan, New Delhi - 110004
2 (viii)	Accepting Authority	:-	Executive Engineer, President's Estate, CPWD, Rashtrapati Bhavan, New Delhi - 110004

2 (x)	Percentage on cost of materials and labour to cover all overheads and profits	:-	**15%**
2 (xi)	Standard Schedule of Rates	:-	***DSR 2023 with correction upto previous day of the last date of submission of tender.***
2 (xii)	Department	:-	Central Public Works Department
(vi)	Standard CPWD contract Form	:-	GCC 2023 CPWD form 7 (Maintenance work), as modified & corrected upto previous day of the last date of submission of tender.

Clause 1

(i)	Time allowed for submission of Performance Guarantee, programme chart (Time and progress) and applicable labour license, registration with EPFO, ESIC and BOCW welfare board or proof of applying there of from the date of issue of letter of acceptance.		**7 days**
(ii)	Maximum allowable extension with late fee @ 0.1% per day of performance Guarantee amount beyond the period provided in (i) above……		**3 days**

Clause 2

(i)	Authority for fixing compensation under clause 2/2A		**Superintending Engineer, President's Estate, CPWD, Rashtrapati Bhavan, New Delhi – 110004**

Clause 2

Applicable Clause 2/2A **2A**

Clause 5

Number of days from the date of issue of letter of acceptance for reckoning date of start **10 Days or from the date of handing over the site, notified by the Engineer-in-charge, whichever is later.**

Addition… Nil Correction... Nil Deletion ... Nil Overwriting... Nil Sr.D/MAN AE(P) EE

Mile stone(s) as per table given below:-

S.No.	Description of milestone (Physical)	Time allowed in days (from date of start)	Amount to be withheld in case of non-achievement of milestones
1	1/4th (of whole work)	1/4th of time allowed	1.25% Contract Amount
2	3/8th (of whole work)	1/2th of time allowed	1.25 % Contract Amount
3	3/4th(of whole work)	3/4th of time allowed	1.25% Contract Amount
4	Full	Full	1.25% Contract Amount

Time allowed for execution of Work **01 Months**

Clause 5:

(i) **Authority to convey the decision of shifting of milestone and** extension of time **Executive Engineer President's Estate (Engineer-in-Charge).**

(ii) **Authority to decide rescheduling of milestone and** extension of time **Superintending Engineer President's Estate** (SE/**SE&PD/CE/CE&ED)**

(iii) Shifting of date of start in case of delay in handing over of site **Superintending Engineer President's Estate** (SE/**SE&PD/CE/CE&ED)**

PROFORMA OF SCHEDULES Clause 5 Schedule of handing over of site

Part	Portion of site	Description	Time period for handing over reckoned from date of issue of letter of intent.
Part-A	**Portion without any hindrance**	**Full site**	**10 Days**
Part-B	**Portions with encumbrances**	—	---
Part-C	**Portions dependent on work of other agencies**	—	---

Clauses 5

Applicable clause 5/ Clause 5A **5A**

Clauses 6, 6A

Clauses Applicable (6 or 6A) **Applicable, (ERP Electronic Measurement Book (e-MB) to be submitted by agency)**

Clause 7

Gross work to be done together with net payment /adjustment of advances for material collected, if any, since the last such payment for being eligible to interim payment. **09 Lac**

Clause 7A

Whether 7A shall be applicable **Yes**

Clause 10A

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

Addition… Nil Correction... Nil Deletion ... Nil Overwriting... Nil Sr.D/MAN AE(P) EE

----------Equipment's as per site requirement.----------

Clause 10C

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

Clause 10CA **Not applicable**

S.No	Material covered under this clause	Nearest Materials (other than cement, reinforcement bars and the structural steel) for which All India Wholesale Price Index to be followed	Base Price of all Materials covered under clause 10 CA*
1	----------N.A.----------		

Clause 10CC **Not Applicable**

Schedule of component of other materials, labour etc. for price escalation.

Component of civil work (except materials covered under clause 10 CA)/ Electrical construction Value of work.-	**Xm**	N.A. %
Component of Labour - expressed as percent of total value of work.	**Y**	N.A.%

Clause 11

Specifications to be followed for execution of work — C.P.W.D. specification 2019 Vol I and Vol II with correction slipupto previous day of the last date of submission of tender.

Clause 12 — **Applicable as per CPWD GCC 2023 with upto correction slip issued** upto previous day of the last date of submission of tender.
(Deviation limit all maintenance works = No Limit)

Clause 16

Competent Authority for deciding reduced rates. — **SE upto 5% of tender value**
Beyond 5% with prior approval of Additional Director General, Region Delhi.

Clause 18 List of mandatory machinery, tools to be deployed by the contractor at site
------As per site requirement-------

Clause 19 C Executive Engineer authority to decide penalty for each default

Clause19 D Executive Engineer authority to decide penalty for each default

Clause 19 G Executive Engineer authority to decide penalty for each default

Clause 19 K Executive Engineer authority to decide penalty for each default

Clause 25

1	Conciliator: - ADG, Region Delhi.
2	Arbitrator appointing authority:- Superintending Engineer - President Estate
3	Place of Arbitration: - New Delhi.

Addition… Nil Correction... Nil Deletion ... Nil Overwriting... Nil Sr.D/MAN AE(P) EE

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

S.No.	Minimum Qualification of Technical Representative	Discipline	Designation (Principal Technical / Technical Representative)	Minimum Experience	Number	Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of Clause 36(i)	
						Figures	Words
1	**Graduate Engineer or Diploma Engineer**	**Civil**	**Project planning quality/ billing engineer**	**2 Years** **5 years**	**One**	**Rs. 15000/-per month**	**Rs. Fifteen Thousand per Month**

CLAUSE 38

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

Executive Engineer,
President's Estate
CPWD, Rashtrapati Bhavan,
New Delhi- 110004
Phone No. 23017456

FORM OF PERFORMANCESECURITY (GUARANTEE)
BANK GUARANTEE BOND

In consideration of the President of India (here in after called "the Government") having offered to accept the terms and conditions of the proposed agreement between…… and ..... (Herein after called "the said contractors(s)") for the work.....(Hereinafter called "the said agreement') having agreed, to production of an irrevocable Bank Guarantee for Rs ..... (Rupees ……only) as a security/guarantee from the contractors(s) for compliance of his obligations in accordance with the terms and conditions in the said agreement.

1. We …… (*hereinafter referred to as "the Bank")* hereby undertake to pay to the Government an amount not exceeding Rs……. (Rupees.....) only on demand by the Government.
2. We …… (indicate the name of Bank) do hereby undertake to pay the amounts due and payable under this Guarantee without any demure, 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 (s). Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs ..... (Rupees ……..……) only.

3. We, the said bank further undertake to pay the Government any money so demand notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the contractor(s) shall have no claim against us for making such payment.
4. We ……. (indicate the name of the Bank) further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the Government under or by virtue of the said Agreement have been fully paid and its claim satisfied or discharged or till Engineer-in-Charge on behalf of the Government certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said contractor(s) accordingly discharges this guarantee.
5. We ……. (Indicate the name of Bank) further agree with the Government that the Government shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Agreement or to extend time of performance by the said contractor(s) 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(s) and to forebear 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(s) or for any forbearance, act of omission on the part of the Government or any indulgence by the Government to the said contractor(s) 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. This guarantee will not be discharged due to the change in the constitution of the Bank or the contractor(s).

7. We .....(Indicate the name of bank) lastly undertake not to revoke this guarantee except with the previous consent of the Government in writing.

8. This guarantee shall be valid upto.....unless extended on demand by Government. Now with standing 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 six months of the date of expiry of this guarantee, all our liabilities under this guarantee, shall stand discharged.

Dated, the ……Day of..... For.....(Indicate the name of the Bank)

SALIENT HIGHLIGHTS OF THE TENDER

NAME OF WORK:- **Providing toilet facility for differently abled persons near Museum and improvement of sewer systems at football ground toilet in Sch 'B' Rashtrapati Bhavan during 2026-27.**

1. The buildings are located Rashtrapati Bhavan, New Delhi.

2. The contractor (s) shall make his own arrangement for electricity and water required for the execution of work and nothing extra shall be paid for the same. However, the Engineer-in-Charge shall recommend the application to the local authority for electric connection, if desired. Necessary payment shall be made by the contractor directly to the department concerned. In case local authority fails to sanction the electric connection or delays the sanction for electric connection, the contractor shall make his own arrangement by providing diesel generators of adequate capacity at his own cost. For water supply, contractor shall make his own arrangements including boring of tube well with necessary clearance from CGWB, if necessary and nothing extra shall be paid by the Department for arrangement of water or on its treatment as per IS:456/2000/CPWD specifications 2009 volume-I to II

3. All the materials including cement and steel (T.M.T Bars) will be arranged by the contractor himself.

4. The contractor shall lay and host the concrete wherever necessary to expedite the progress of work. Nothing extra shall be paid on this account.

5. For lifting of concrete or other construction materials to various levels, to we cranes/ mechanical hoist of appropriate size/ capacity shall be deployed by the contractor. Nothing extra shall be paid on this account.

6. The contractor shall quote the rates for each complete item in figures and words accurately so that there is no discrepancy in rates written in figures and word sand totals. In case of discrepancy, procedure specified in the contract document of CPWD shall be followed.

Quality Assurance

The contractor shall ensure quality control measures on different aspects of construction including materials, workmanship and correct construction methodologies to be adopted.

The contractor shall get the source of various raw materials namely aggregate, cement, sand, steel, water etc. to be used on the work, approved from the Engineer-in-Charge. The contractor shall stick to the approved source unless it is absolutely unavoidable. Any change shall be done with the prior approval of the Engineer-in-Charge for which tests etc. shall be done by the contractor at his own cost.

8 Similarly, the contractor shall submit brand/ make of various materials to be used for the approval of the Engineer-in-Charge along with samples and once approved, he shall stick to it. Any change will have to be got approved from engineer in charge in advance

9 The contractor shall submit shop drawings of staging and shuttering arrangement, stone cladding and other works including mock work as desired by Engineer In Charge for his approval before execution. The contractor shall also submit bar bending schedule for approval of Engineer-in-charge before execution.

10. Safety Precautions

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

11. Scaffolding

Forfacia work and internal Finishing work, double steel scaffolding having two sets of vertical supports with steel staircase for inspection of works by engineer in charge shall be used. The supports shall be sound and strong, tied together with horizontal piece over which scaffolding planks shall be fixed.

GENERALCONDITIONS FOR WORKS

1. The work in general shall be carried out in accordance with the CPWD Specifications 2019 Vol. I to II with up-to-date correction slips hereinafter referred as CPWD Specifications.

2. The order of preference in case of any discrepancy as indicated in condition no. 8.1 under "Conditions of Contract" given in the Standard CPWD Contract form at page No. 10 may be read as the following:

a) Nomenclature of item as per Schedule of Quantities
b) Particular specifications and special conditions for civil and electrical.
c) General conditions
d) Additional conditions
e) Contract Clauses of Standard CPWD Contract form 2014 with upto date Amendments
f) CPWD Specifications for civil and electrical as applicable.
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) Manufacturer's specifications.

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.

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 / contractual staff's the entire responsibility will rest on the part of the contractor and any compensation under such circumstances if becomes payable the same shall be entirely 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 buildings, roads, services and compound walls are to be constructed. The stacking shall take place as per stacking plan however, if any change is required, the same shall be done with the approval of Engineer-in-Charge.

6 Contractor(s) shall provide permanent bench marks, flag tops and other reference points for the proper execution of work and these shall be preserved till the end of the work. All such reference points shall be in relation to the levels and locations, given in the Architectural and plumbing drawings. On completion of work, the Contractor(s) shall submit at his own cost four prints of "as built" drawings to the Engineer-in-Charge. These drawings shall have the following information.

a. Run off all piping and their diameters including soil waste pipes and vertical stacks.
b. Ground and invert levels of all drainage pipes together with locations of all manholes and connections, upto outfall.
c. Run off all water supply line with diameters, locations of control valves, access panels etc.

7 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.

8 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.

9 Any cement slurry added over base surface (or) for continuation of concerting 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.

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

11 Water Proofing treatment of all types of work: The contractor(s) shall submit for the approval of the Engineer-in-Charge, the names of specialized agencies, of repute along with their technical capability proposed to be engaged by him.

12 If the work is 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.

13 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.

14 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.

SAMPLE OF MATERIALS

15 Sample of building materials, 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.

16 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.

17 The contractor shall render all help and assistance in documenting the total sequence of this project by way of photography, slides, audio-video recording etc. nothing extra shall be payable to the contractor on this account. However, cost of photographs, slides, audio-videography etc. shall be borne by the department.

18 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.

19 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 Executive Engineer/Assistant Engineer/Junior Engineer-in-charge of work.

20 The rate of items of flooring is inclusive of providing sunken flooring in bathrooms, kitchen etc. and nothing extra on this account is admissible.

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

22. No payment shall be made for any damage caused by rain, snowfall, flood or another natural calamity, whatsoever during the execution of the work. The contractor shall be fully responsible for any damage to the govt. property and work for which the payment has been advanced to him under the contract and he shall make good the same at his risk and cost. The contractor shall be fully responsible for safety and security of his material, T&P, Machinery brought to the site by him.

23. The contractor shall provide samples of material required for testing free of cost. 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. All necessary tests as per the NIT/CPWD specifications/relevant BIS codes shall be carried out on all the materials whether ISI marked or otherwise. Wherever NIT/CPWD specification / relevant BIS codes do not specify the frequency of test, the same shall be carried out as per the direction of Engineer-in-Charge. The charge for such testing shall be borne by the contractor.

Particular Specifications and special condition for civil work

1. Earthwork

Excavation shall be undertaken to the width of the Basement / Retaining wall footing including necessary margins for construction operation as per drawing or directed otherwise. Where the nature of soil or the depth of the trench and season of the year, do not permit vertical sides, the contractor at his own expense shall put up the necessary shoring, strutting and planking or cut slopes with or without steps, to a safer angle or both with due regard to the safety of personnel and works and to the satisfaction of the Engineer-in-charge. Measurement of plan area of excavation for payment shall be permitted only.

All the major excavation shall be carried out by mechanical excavator. No extra payment shall be made for that.

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 rain water, floods, leakages from sewer and water mains, subsoil 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 the Engineer-in- Charge. of construction shall be got approved by the Engineer-in-charge.

2. Condition for cement

2.1 Cement required for the work shall be procured by the contractor.

2.2 The contractor shall procure 43 grade Ordinary Portland cement conforming to IS :8112 as required in the work from reputed manufacturer such as ACC, Ultratech, Ambuja, Jaypee Cement, Birla Uttam & J.K. Cement or from any other reputed cement Manufacturer having a production capacity not less than one million tones per annum as approved by ADG ,NDR. Supply of cement shall be taken in 50-kg bags bearing manufacturer's name, or his registered trademarks if any and grade and type of cement as well as ISI marking. The packing of the cement bags shall be as per CPWD specifications 2019.

2.3 Every delivery of cement shall be accompanied by producer's certificate confirming that the supplied cement confirms to relevant specifications. These certificates shall be endorsed to the engineer in charge for his record.

2.4 The cement shall be brought at site in bulk supply of approximately 200 Bags or part thereof as decided by the Engineer-in-charge.

2.5 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 given in General conditions of contract for CPWD 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. However, the capacity of each godown shall not be less than 25 tonnes.Each godown shall be provided with a single door with two locks. The keys of one lock shall remainwith CPWD Engineer-in- charge or his authorized person 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 Performa and signed daily by the contractor or his authorized agent in token of its correctness.

2.6 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. Incase test results indicate that the

cement arranged by the contractor does not confirm 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 a week's time of written order from the Engineer-in-charge to do so.

2.7 The contractor shall supply free of charge the cement required for testing. The cost of tests shall be borne by the contractor

2.8 The actual issue and consumption of cement on work shall be regulated and proper accounts maintained as provided in clause 10 of the contract.

2.9 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. No payment for excess consumption of cement will be allowed. However, for consumption lesser beyond permissible theoretical variation recovery shall be made in accordance with conditions of contract at Schedule "F" without prejudice to action for acceptance of work/item at reduced rate or rejection as the case may be. 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 onthe contractor.

2.10 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.

3.0 CC/R.C.C. WORK:-

3.1 **General Requirement for RMC/Site Batched Design Mix:-**

(a) The contractor shall use **Ready Mix Concrete (RMC**) as per IS: 4926 (2003). The contractor shall ensure that transit mixtures shall transport the concrete to site. All the precautions shall be taken during the transportation and handling of concrete to achieve the desired strength, durability, etc. as envisaged in the Mix Design. Contractor has to get the approval from Engineer- in-Charge regarding source of RMC by giving the details of such plants indicating name of owner

/ company, its location, technical establishment, past experience and text of Memorandum of Understanding (proposed to be entered between purchaser and supplier). The Engineer-in-Charge, after satisfying himself about quality / capability of the company shall give approval in writing (subject to drawing of MOU). The MOU shall be drawn with RMC plant owner / company and submitted to Engineer-in-Charge within a week of such approval. The contractor will not be allowed to purchase RMC without completion of above formalities for use in the project. Notwithstanding the approval granted by Engineer-in-Charge in aforesaid manner, the contractor shall be fully responsible for quality of concrete including input control, production, transportation and placement etc. The Engineer-in-Charge will reserve the right to deploy his supervisor at plant site to inspect at any such stage and reject the material / concrete etc. if he is not satisfied about quality of material / product.

(b) All measuring equipment shall be maintained in a clean and serviceable condition and their accuracy shall be checked at least once a month.

(c) Only single sized good quality stone aggregate shall be brought to site of work from the approved source. The grading of the stone aggregate shall be controlled by blending the aggregate of different sizes in the required proportions at site of work

The aggregate of different sizes shall be stock-piled separately, preferably a day before use.

The grading of coarse and fine aggregates shall be checked as frequently as possible and as directed by the Engineer-In-Charge to ensure that the specified grading and quality of aggregate is maintained.

(d) It is important to maintain the Water Cement Ratio constant at its specified or approved value by making adjustment for the moisture contents of both fine and coarse aggregates.

The moisture contents in the aggregate shall be determined as frequently as possible in keeping with the weather conditions and as per the provisions of IS: 2386 (Part-III).

(e) All other operations in concreting work like mixing, slump, laying, placing of concrete, compaction, curing etc. not mentioned in this particular specifications for Ready Mix of Concrete shall be as per CPWD Specifications and IS Codal provisions.

3.2 DESIGN MIX CONCRETE:-

3.2.1 The RCC work shall be done with RMC plant. However for minor concreting works for which the required quantity is less than 10 cum on a single day, agency has to liberty to use site batched design mix concrete with prior approval of Engineer-in-charge. For this purpose contractor shall use fully computerized mini weigh batching plant of suitable capacity. Wherever letter M has been indicated, the same shall imply for the Design Mix Concrete. The Design Mix Concrete will be designated based on the principles given in IS: 456, 10262 & SP 23. The concrete mix shall be designed for the specified target mean compressive strength in order to ensure that work test result do not fall below the acceptance criteria specified for the concrete mix. The Contractor shall design mixes for each class of concrete indicating that the concrete ingredients and proportions will result in concrete mix meeting the requirements specified.

(a) The contractor has to submit design mix with and without use of admixtures.
(b) Admixture may be added (by maintaining the minimum cement content as per CPWD specifications and as per direction of Engineer-in-Charge) in case of specific technical requirement so as to meet the workability / slump requirement or for any other reason but nothing extra is to be paid to contractor on account of adding admixtures.

3.2.2 The sources of coarse aggregate, fine aggregate, water, admixture & cement to be used in concrete work shall be identified by the contractor & he will satisfy himself regarding their conforming to the relevant specifications & their availability before getting the same approved from the Engineer-In-Charge.

(a) **Coarse Aggregate:-** As per CPWD Specifications
(b) **Fine Aggregate:-** As per CPWD Specifications
(c) **Water:-** It shall conform to requirements laid down in IS:456-2000 / Para 3.1.1 of CPWD Specifications. If on testing, water from the source is not found fit for construction, the necessary arrangement for treatment of water shall have to be made by the contractor at the site and nothing extra shall be payable for the same.
(d) **Cement:-** Ordinary Portland Cement required in the work from reputed manufacturers of cement as per the approved make in 50 kg bags bearing manufacturer's name and ISI marking, along with manufacturers test certificate for each lot. However, if the contractor uses higher grade of cement nothing extra shall be paid.

(e) **Admixture/ Plasticizer:-** The admixture shall conform to IS: 9103. Whenever required, the admixture of approved quality & approved make only shall be used to attain the required workability. Nothing extra on account of use of Admixture / Plasticizer shall be payable.

3.2.3 **Water Cement Ratio and Slump :-**

3.2.3.1 In proportioning a particular mix, the manufacturer/producer/contractor shall give due considerationto the moisture content in the aggregates, and the mix shall be so designed as to restrict the maximum free water cement ratio as per IS Code provisions.

3.2.3.2 Due consideration shall be given to the workability of the concrete thus produced. Slump shall be controlled on the basis of placement in different situations. For normal methods of placing concrete, maximum slump shall be restricted to 100mm when measured in accordance with IS:1199.

3.2.3.3 The minimum cement content, maximum free water-cement ratio and minimum grade of concrete are individually related to exposure as per Table 5 of IS: 456, 2000 and as per **CPWD Specifications 2019 (Vol-I)** with upto date correction slips.

3.2.3.4 **Grade of Concrete: -** The compressive strength of various grades of concrete with various parameters shall be as per IS 456 latest version.

3.2.4 The Contractor shall engage one of the following approved laboratories / test house for designing the concrete mix in accordance with relevant IS Code and to conduct laboratory tests to ensure the target

strength & workability criteria for a given grade of concrete: -

i) IIT, New Delhi
ii) NSUT, Delhi
iii) DTU (or)
i) Any reputed Government Engineering Institute

3.2.5 The various ingredients for mix design / laboratory tests shall be sent to the lab / test houses through the Engineer-in-charge and the samples of such aggregates sent shall be preserved at site by the department.

In the event if all the **above** laboratories are unable to carry out the requisite design / testing, the contractor may have it done from any other laboratory with prior approval of the ADG, Delhi.

3.2.6 The contractor shall submit the report on design mix from any of above approved laboratories for approval of Engineer in Charge within 30 days from the date of issue of letter of acceptance of the tender. No concreting shall be done until the design mix is approved. In case of White Portland Cement and the likely use of admixtures in concrete with ordinary Portland/ White Portland Cement, the contractor shall design and test the concrete mix by using trial mixes with white cement and / or admixtures also, for which nothing extra shall be payable.

3.2.7 In case of change of source or characteristic properties of the ingredients used in the concrete mix during the work, the contractor as per the directions of the Engineer-in-charge shall submit a revised laboratory mix design report conducted at laboratory established at site.

3.2.8 All cost of mix designing and testing, connected therewith, including charges payable to the laboratory shall be borne by the Contractor including redesigning of the concrete mix whenever required & as directed by Engineer-In-Charge

3.2.9 TRIAL BATCHES

(a) The designed mix proportions shall be checked for target mean compressive strength bymeans of trial batches.

(b) Minimum three sets of separate preliminary tests shall be carried out for each trial batch of concrete mix. Each test shall comprise of six specimens and only one test-set of six specimens shall be made on any particular day.

(c) The quantities of materials for each trial mix shall be sufficient for at least six specimens (cubes) and the concrete required for carrying out workability tests.

(d) The workability of trial mix No.1 shall be measured and mix shall be carefully observed for freedom from segregation, bleeding and its finishing characteristics. The water content, if required, shall be adjusted corresponding to the required changes in the workability.

(e) With the modified Water Content, the mix proportions shall be recalculated by keeping with water cement ratio unchanged. The mix proportion, as modified, shall form the Trial Mix No.2 and tested for the specified strength and workability.

(f) In addition, trial mix No.3 and 4 shall be designed by keeping water contents same as that determined for trial mix 2 but varying the water cement ratio by $\pm$ 10 percent of the specified value and tested for their design characteristics.

Out of the six specimen of each set, three shall be tested at seven days and remaining three at 28 days. The preliminary tests at seven days are intended only to indicate the strength to be attained at 28 days, while the design mix shall be approved only on the basis of test strengthat 28 days.

3.2.9 APPROVAL OF DESIGN MIX

The design mix shall be considered satisfactory and approved if at least three preliminary test-setsindividually satisfy the following strength and workability criteria:

(a) The average strength of each test-set is not less than the specified target mean compressive strength (Tck).

(b) The strength of any specimen cube is not less than 0.85 Tck.

(c) The concrete mix is of required degree of workability and acceptable concrete finish.

3.3 Workability of Concrete

The contractor shall follow as per the provision laid in IS 456 latest version

3.4 OTHER OPERATIONS: -

All other operations in concreting work like mixing, slump, laying, placing of concrete, compaction, curing etc. not mentioned in this particular specifications for RMC/Site batched Design Mix ofConcrete shall be as per CPWD Specifications.

3.5 **SAMPLING, TESTING & STANDARD OF ACCEPTANCE:-**

The contractor shall follow the criteria laid in IS codes for the purpose of sampling ,testing and acceptance criteria for Concrete.

3.6 Production of Concrete

The contractor shall use RMC for all major concreting works. However, for minor concreting works for which the required quantity is less than 10 cum on a single day, agency has to liberty to use site batched design mix concrete with prior approval of Engineer-in-charge. For this purpose contractor shall use fully computerized mini weigh batching plant of suitable capacity. The mobile plant shall be made available well in advance at site whenever required. The quality of the site batched design mix shall also be follow CPWD Specification 2019 and IS 456 latest version.

The available land at site may be used for mobile batching plant by the contractor

3.7 **Transportation, Placing and Compaction of Concrete**

a. Mixed concrete from the RMC / Batching plant shall be transported to the point of placement by transit mixers and placed in position through concrete pumps and/or steel closed bottom buckets capable of carrying minimum 0.6 cum concrete. In case the concrete is proposed to be transported by transit mixer, the mixing speed shall not be less than 4 rev/min. of the drum nor greater than a speed resulting in a peripheral velocity of the drum 70 m/minutes at its largest diameter. The agitating speed of the agitator shall be not less than 2 rev/min nor more than 6 rev/min of thedrum. The number of revolution of the mixing drum or blades at mixing speed shall be between 70 to 100 revolutions for a uniform mix, after all ingredients, have been charged into the drum. Unless tempering water is added, all rotation after 100 revolutions shall be at agitating speed of 2to 6rev/min and the number of such rotations shall not exceed 250. The general construction of transit mixer and other requirement shall conform to IS:5892.

b. In case concrete is to be transported by pumping, the conduit shall be primed by pumping a batchof mortar through the line to lubricate it. Once the pumping is started, it shall not be interrupted (ifat all possible) as concrete standing idle in the line is liable to cause a plug. The operator shallensure that some concrete is always there in the pump receiving hopper during operation. The lines shall always be maintained clean and shall be free of dents at all stages. Special precaution shall be taken that surrounding temperature during concreting shall not exceed 30 degree centigrade.

c. Except where otherwise agreed to by the Engineer-in-Charge, concrete shall be deposited in horizontal layers to a compacted depth of not more than 450 mm. Unless agreed to by the Engineer- in- Charge, concrete shall not be dropped into place from a height exceeding1.5m. In order to avoid such situations chutes, tremie pipe or closed bottom buckets shall be used. Theseshall be kept clean and used in such a way as to avoid segregation. Slope of the chute shall be so

adjusted that concrete flows without the use of excessive quantity of water. The delivery end of chute shall be as close as possible to the point of deposit. The chute shall be thoroughly flushed with water before and after each working period and the water used for this purpose shall be discharged outside the formwork. The concrete shall be compacted by using immersion type

vibrators. When the concrete is being continuously deposited to a uniform depth along a member, vibrator shall not be operated within one meter of free end of the advancing concrete. Every effort shall be made to keep the surface of the previously placed layer of concrete alive so that the succeeding layer can be amalgamated with it by the vibration process. In case the concrete in underlying layer has hardened to such an extent that it cannot be penetrated by the vibrator but is still fresh (that is, just after initial set), un-imposed bond shall be achieved between the top and underlying layer by first scarifying the lower layer before the new concrete is placed by systematically and thoroughly vibrating the new concrete. The points of insertion of vibrator in the concrete shall be so spaced that the range of action overlap to some extent and the freshly filled concrete is sufficiently consolidated at all locations.

The spacing between the dipping positions of vibrator shall be maintained uniformly throughout the surface of concrete so that concrete is uniformly vibrated. The vibrating head shall be regularly and uniformly inserted in the concrete so that it penetrates of its own accord and shall be withdrawn slowly whilst running so as to allow redistribution of concrete in its way and allow the concrete to flow back into the hole behind the vibrator. The vibrator head shall be kept in one position till the concrete within its influence is completely consolidated. Vibration shall be continued until the coarse aggregate particle have blended into the surface but have not disappeared. The contractor shall keep at least one additional vibrator in serviceable condition to be used in the event of breakdowns and maintenance problems.

d. The vibrator head shall not be brought more than 200 mm near to the formwork as this may cause formation of water stagnations. The formwork shall be strong and great care shall be exercised in its assembly. It shall be designed to take up increased pressure of concrete and pressure variations caused in the neighborhood of vibrating head, which may result in excessive local stress on the formwork. The joints of the formwork shall be made and maintained tight and close enough to prevent the squeezing out slurry or sucking in of air during vibration. The formwork to receive concrete shall be cleaned and made free from standing water, dust, etc. The contractor shall keep provision for screed and shutter vibrators at site.

e. No concrete shall be placed in any part of the structure until the approval of Engineer-in-Chargehas been obtained. If concreting is not started within 24 hours of the approval being given, it shall have to be obtained again from the Engineer-in-Charge. Concreting shall be done continuously over the area between construction joints. Fresh concrete shall not be placed against concrete which has been in position for more than 30 minutes unless a proper construction joint is formed. When concreting has to be resumed on a surface which has hardened, it shall be roughened, swept, clean, thoroughly wetted and covered with a 13 mm thick layer of mortar composed of cement and sand in the same ratio as in the concrete mix itself. The 13 mm layer of mortar shall be freshly mixed and placed immediately before placing of new concrete.

f. Where concrete is not fully hardened, all latency shall be removed by scrubbing the wet surface with wire or bristle brushes. Care shall be taken to avoid dislodgement of particles of coarse aggregate. The surface shall then be thoroughly wetted, all free water removed and then coated with neat cement grout. Particular attention shall be given to corners and close spots.

In case of rejection of concrete on account of unacceptable compressive strength, governed by para “Standard of Acceptance” as above, the work for which samples have failed shall be redone at the cost of contractor. However, the Engineer-in-Charge may order for additional tests (like cutting cores, ultrasonic pulse velocity test, load test on structure on part of structure, etc) to be carried outat the cost of contractor to ascertain if the portion of structure wherein concrete represented by the sample has been used, can be retained on the basis

of results of individual or combination of these tests. The Contractor shall take remedial measures necessary to retain the structure as approved by the Engineer-in-Charge without any extra cost. However, for payment, the basis of rate payable to contractor shall be governed by the 28 days cube test results and reduced rates shall be regulated in accordance with provisions laid in this NIT

3.8 Cover Blocks: Contractor shall use factory made cover blocks of approved shape and strength for all RCC works to avoid displacement of bars in any direction and to ensure proper cover.

3.9 CURING:

i) The contractor shall ensure moist curing to all structural members in general. Curing shall be done with 2 or 3 layers of wet hessian cloth covered by PVC sheets in order not to allow the moistureto evaporate.

ii) Since the design mix is having controlled water content, the contractor shall protect the concrete from drying shrinkage by resorting to early age curing. Covering of wet hessian cloth shall be done after the onset of the final setting time.

iii) The contractor shall submit methodology of proposed curing which ensures continuous maintenance of required temperature regime.

iv) Membrane curing by chemical compounds may be allowed at places which are normally in accessible and repair works and nothing extra is payable on this account. If curing compounds are proposed for any particular use, the contractor shall obtain permission for use of any particular brand of compounds from Engineer-In-Charge.

v) The drip course/ groove in plastered surface or moulding to R.C.C. projections shall be provided

3.10 MEASUREMENT –

(i) As per **CPWD Specifications 2019(Vol-I)** with upto date correction slips.

(ii) In respect of all projected slabs at all levels including cantilever, canopy, the payment for the RCC work shall be made under the item RCC slabs. The payment for shuttering at the edges shall be made under item of centering and shuttering for RCC slabs. Nothing extra shall be paid for the side shuttering at the edge of these projected balconies / projected verandah slabs.

3.11 TOLERANCES - As per CPWD Specifications.

3.12 In respect of projected balconies, projected slabs at roof level and projected verandah, the payment for the RCC work shall be made under the item of RCC slabs. The payment for centering and shuttering of such items shall similarly be paid under the item of centering and shuttering of RCC slab. Nothing extra shall be paid for the side shuttering at the edges of these projected balconies and projected verandahs. All the exposed edges shall however be finished as per specifications and nothing extra shall be paid for this.

3.13 The contractor shall provide approved type of supports for maintaining the bars in position and ensuring required spacing and correct cover of concrete to reinforcement as called for in the drawings. Spacer block/cover blocks of required shape and size, M.S. chairs and spacer bars shall be used in order to ensure accurate positioning of reinforcement. Spacer blocks/cover blocks shall be cast well in advance or approved proprietary pre-packed free flowing mortars of high early strength can also be used in alternative. Blocks of polymer shall not be used as spacer blocks unless specially approved by the Engineer-in-charge. Rate of item of steel reinforcement is inclusive of cost of such cover blocks.

4. Conditions for water:

The contractor shall make his own arrangement for providing water for construction and drinking purpose. Contractor shall get the water tested from any laboratory approved by the Engineer-in-charge at regular interval as per the CPWD specifications 2019. All expenses towards collection of

samples, packing transportation except testing charges, etc. shall be borne by the contractor.

5. Brickwork:

Unless otherwise specified, FPS bricks shall be used in all items of brickwork. The classifications of bricks brought by the contractor shall strictly conform to the CPWD specifications

6. FORM WORK

6.1 The work shall be done in general as per CPWD Specifications.

6.2 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.

6.3 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.

7. WATER PROOFING WORK

7.1 The work shall be got executed from the specialized agency as approved by the Engineer-in-Charge.

7.2 Contractor shall also submit the names of water proofing specialist along with information about their technical capabilities and list of similar works executed by the specialized agency in the past for the approval of Engineer -in-charge within 30 days from the date of award of work.

7.3 Total quantity of the water proofing compound required shall be arranged only after obtaining the prior approval of the make by Engineer-in-charge in writing. Materials shall be kept under double lock and key and proper account of water proofing compound used in the work shall be maintained. It shall be ensured that the consumption of the compound is as per specified requirements.

7.4 The finished surface after water proofing treatment shall have adequate smooth slope as per the direction of the Engineer-in-charge.

7.5 Before commencement of treatment on any surface, it shall be ensured that the outlet drain pipes / spouts have been fixed and the spout openings have been eased and rounded off properly for easy flow of water.

7.6 The approved specialized agency for the work of water proofing will have to execute a guarantee bond in prescribed Proforma enclosed at ANNEXURE I for removing any defects for at least 5 years. Guarantee bond shall be signed by both the specialized agencies as approved by the Engineer-in-Charge and the contractor to meet their liability under the guarantee bond. However, the sole responsibility about the efficiency of water proofing treatment shall rest with the building contractor.

7.7 10% of the cost of water proofing work shall be retained as additional security deposit and the amount so withheld would be released after ten years from the date of completion of the entire work under the agreement. If the performance of the work done is found unsatisfactory and any defects noticed during the guarantee period, they shall be rectified by the contractor within seven days of receipt of intimation of defects in the work. If the defects pointed out are not attended to within the specified period, the same will be got done from another agency at the risk and cost of the contractor.

7.8 Brick Bat Terracing/ Water Proofing

7.8.1 The water proofing compound used in integral water proofing treatment shall satisfy all the performance requirements indicated in IS : 2645 and shall be got tested before its use.

7.8.2 The compound shall be used @ 2% by weight of cement used or as recommended by the manufacturer.

7.8.3 Total quantity of the water proofing compound required shall be arranged only after obtaining the prior approved of the Engineer-in-Charge in writing. Materials shall be kept under double lock and key and proper account of the water proofing compound used in the work shall be maintained. It shall be ensured that the consumption of the compound is as per specified requirements.

7.8.4 The finished surface after water proofing treatment for roof slab shall have smooth slope.

7.8.5 Before commencement of treatment on roof surface, it shall be ensured that the outlet drain pipes/

spouts have been fixed and the spout opening have been eased and rounded off properly for easy flow of water.

7.9 Water proofing of Sunken Portion Area

7.9.1 Application of cementitious- organic chemical based coating as per manufacturers Specifications applied on vertical and horizontal surface after laying of all pipes and smooth plugging of holes.

7.9.2 Concrete surface on which water proofing is desired shall be kept wet for 48 hrs. after cleaning of all dirt, oil grease, bitumen, laitance or other contaminants.

7.9.3 Surface water shall be removed prior to application of waterproofing, but surface shall remain wet during the application to enhance deep penetration & formation of crystals at greater depth to block voids.

7.9.4 The area be shall be protected from sun and rain for 48 hrs. and continues flooding for 7 days. Flooding shall be done for 72 hrs. to test the area for any leakage/ seepage etc. In case of failure, the process shall be repeated and tested again by the contractor at his own risk and cost.

Rates shall be inclusive of all operations including labour, material, T&P, scaffolding and testing etc. complete. Nothing extra shall be payable on any account

8. REINFORCEMENT

8.1 The reinforcement shall be done as per CPWD Specifications with upto date correction slips.

8.2 The 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 with upto date correction slips.

8.3 To maintain the vertical/horizontal distance between the reinforcement bars, chairs consisting of 12 mm dia reinforcement steel bar shall be provided in the slab, walls and rafts. Nothing extra shall be payable on this account.

8.4 For reinforced cement concrete work, the reinforcement bars shall consist of following grades conforming to IS 1786:2008 (Indian standard Specifications for high strength deformed steel bars and wires for concrete reinforcement) : Fe500D / Fe550D.The contractor shall obtain manufacturer's certificate stating the process of manufacture, chemical composition and test sheet having result of each mechanical test applicable to the material purchased and submit it to the Engineer-in-charge. Each test certificate shall indicate the number of the cast to which it applies, corresponding to the number or identification mark to be found on the material.

8.5 The Engineer-in-charge shall get each consignment tested for both chemical composition physical properties (including bend and re-bend test) as specified in IS 1786 form NABL accredited laboratory or any Government laboratory.

8.6 Reinforcement bar is the one of the most important building materials. Its quality directly affects the life span, resistance to earthquake and durability of the structure. In order to ensure consistence quality of re-bars, steel may be procured from reputed brands like SAIL, TATA steel Ltd, RINL, JSPL and JSW.

8.7 The contractor shall have to obtain vouchers and furnish Test certificates to Engineer-in-charge in respect of all supplies of steel brought by him to the site.

8.8 The procured steel should have following qualities :-

i. Excellent ductility, bend ability and elongation of finished product due to possible refiningtechnology.
ii. Consumption of steel should be accurate as per design.
iii. Steel should have no brittleness problem in finished product.
iv. Steel should carry the quality of corrosion and earthquake resistance.
v. Quality steel with achievement of proper level of Sulphur and Phosphorus as per IS:1786-2008. In case the test results indicate that the steel arranged by the contractor does not conform to the Specifications, the same shall stand rejected, and it shall be removed from the site of work by the contractor at his own cost within a week time of written orders from the Engineer-in-Charge to do so.

The steel reinforcement bars shall be brought at site in bulk supply of 50 tonnes or more or as decided by the Engineer-in-charge.

The steel reinforcement bars 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.

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 at frequency as specified in CPWD Specification 2019

The contractor shall supply free of charge the steel required for testing including its transportation to testing laboratories. The cost of tests shall be borne by the contractor. The actual issue and consumption of steel on work shall be regulated and proper accounts maintained as provided in **clause 10** of the contract. The theoretical consumption of steel shall be worked out as per procedure prescribed in clause 38 of the contract and shall be governed by 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. The Steel brought to site and remaining unused shall not be removed from site without the written permission of Engineer-in-Charge.

9. MASONRY WORK

9.1 Unless otherwise specified Common burnt Clay Bricks/AAC Block shall be used in all items of brick work. The classification of bricks brought by the contractor shall strictly conform to CPWD Specifications with upto date correction slips or as specified. The work shall also include for leaving chases / notches for dowels / cramps for all kinds of cladding to come over brick work.

9.2 2 Nos 6 mm dia M.S. bars at every third course of 115 /150 mm thick Brick/ AAC masonry work and RCC band at sill level and lintel level in 200/250 mm thick AAC Block Masonry Work shall be provided for which nothing extra shall be paid.

10. STONE/MARBLE WORK

10.1 The execution of stones work shall be in general as per CPWD Specifications with upto date correction slips.

10.2 All holes, rebates, recesses etc. for providing fixing and inserts shall be predrilled and precut and worked using precision machine tools. Nothing extra on this account shall be payable.

10.3 Samples of each item of stone work either individually or in combination shall be prepared for approval of Engineer-in-Charge before commencement of work.

10.4 Sequence of execution for cladding work shall be suggested by the contractor for approval of Engineer-in-Charge

10.5 Whenever flooring is to be done in patterns of stones, the contractor shall get samples of each pattern laid and approved by the Engineer-in-charge before final laying of such flooring. Nothing extra shall be payable on this account. Any design beyond the scope of relevant specification of the item is not covered in this clause

i) The sample produced shall be fully supported by the details of location/quarry and the same shall not be removed except with the written permission of Engineer-in-Charge.

ii) Full width stone over kitchen platform/Counter Top shall be provided except to adjust for closing pieces The marble/any stone flooring in treads and risers of stair case is to be laid in single piece.

10.6 The rate of items of flooring is inclusive of providing sunken flooring in bathrooms, kitchen etc. and nothing extra on this account is admissible. The proper gradient shall be given to flooring for toilets, verandah, kitchen, courtyard, etc. as per the directions of Engineer-in-charge.

10.7 The rate of item of Kota stone/ granite stone / marble stone flooring is inclusive of providing required shaped pattern with combination of both and nothing extra will be paid on this account.

10.8 Sand Stone Work –

Providing, laying, jointing, grouting including fixing in position to backing, machine cut, fine chiseled

dressed 40mm thick Sand stone to pattern, design & details as per drawings or as directed butt jointed with a joint width not more than 2 mm and including preparing the backing to receive the stone work, white cement mortar mixed with pigment to match colour of stone for bedding & jointing, inc. providing machine drilled holes recesses, rebates for stainless steel attachments fixing in stones, as well as making wedge shape pocket in masonry and filling concrete mixed with non-shrink compound in pockets, providing moment joints, edge mouldings to shape and design, drip courses, tapered surfaces in sills, copping for slop etc., all as per specifications and as directed complete for stone work in:

a) Scope of work The work shall include providing stone cladding to internal and external surfaces of the landscape works including posts and railings, chajjas, fascias, sides of beams/ lintels/ columns, soffits of slabs/beams/ lintels/ chajjas, parapets, copings. of walls, retaining walls, planter walls, skirting etc. whether to RCC or concrete or brick masonry or steel/ metal all to design, patterns, shapes and thicknesses, details all as shown on the approved Architectural drawings or as specified or as directed by the Engineer-in Charge, complete in all respects to give the quality of finished work as desired by and to the entire satisfaction of the engineer-in-Charge. The work shall also include providing stone jalis, screens, balustrades, hand railings, flooring, kerbs, stone pillars, cornices, bollards. Fountains and carving of incised motif on stones, etc.

10.9 Cladding

a) Applicable Specifications:
All work shall generally be in accordance with the CPWD Specifications Volume I & II 2019 with upto date correction slips

a) Material :
Stone
Stone shall also not contain crypt, crystalline silica or chart, mica and other deleterious materials like iron Oxide, organic impurities etc.
All stones used on one face of the work/ one area shall be from the same lot and shall be of uniform colour, quality, texture and grain.
The Contractor shall provide stones to match approved samples and they shall comply with the following:
   a) Stone shall be machine cut into slabs of required thickness and to required sizes. Hand cutting shall be permitted only for curved pieces.
   b) Stone shall be properly seasoned and brought tó the proper condition for use.
   c) Each worked stone shall be marked with the natural of quary bed.
   d) Stone shall be supplied to the work site with all shaping and matching completed at the masonry yard. The mortises, Sinkings, perforations and notches for cramps, dowels and corbel plates for supporting nibs shall be carefully formed, to ensure alignment of adjacent stones, in accordance with approved working drawings. All holes, rebates, recesses, etc. for providing and fixing and inserts shall be pre-drilled and worked using precision electric machine tools.
   e) Feature stones shall be marked for identification with drawings.
   f) Stone shall be finished as specified for all faces and returns etc. visible in the finished work.
   g) Stone shall be worked truly square from all face lines for the full width and thickness.
   h) The minimum thickness of stone behind a cramp mortise shall not be less than that specified.

10.10 Stone and Workmanship

a) The Contractor shall submit samples of the various stones, in sizes as required by the Engineer-in-Charge for approval. The stones shall be dressed as specified and directed by the Engineer-in-Charge.
b) The contractor shall ensure that the stone procured confirms to the approved sample and shall arrange for bulk supplies from similar source.

10.11 Design and Pattern

All work shall be laid as per design, detail, pattern, colours, sizes and / dimensions given on the drawings. Any modifications and variations at site shall be reflected in adjustment in design as per the approval of the Engineer-in-Charge. All junctions, rebates, nosings, corners shall have square, curved or shaped moulding as desired and as shown on the drawings.

10.12 Service and Other Outlets

Before any work is to be taken up, the sizes and the pattern of stones shall be laid out, together with the location of

electrical. sanitary outlets and those of all other services and approval sought from the Engineer. in-Charge. Thereafter the stones shall be laid out on the floor showing pattern of grain. etc. and work shall only be carried out after obtaining approval of the Engineer-in-Charge.

10.13 Setting Out

The Contractor shall set out the stone and cladding work so as to achieve the following:

(a) Establish a bench mark or datum for setting out.
(b) Establish a vertical centre line in each plain area with reference to the building.
(c) Establish the positions of movement joints.
(d) Avoid or minimize unsightly cutting.
(e) Obtain truly horizontal or vertical joint lines.
(f) Obtain Where openings and other features occur the work shall be done as per the detailed drawings or as directed by the Engineer-in-Charge.

10.14 Stone Jalis/ Screens

All relevant clauses under stonework cladding shall apply.

Stone jalis/ screens shall have a finished thickness as specified in the item or as directed by Engineer-in-charge.

11. FLOORING

11.1 All the work in general shall be carried out as per CPWD Specifications 2019.

11.2 The Vitrified Flooring in rooms / Ceramic tiles flooring in Toilets shall be as specified in the item. The tiles shall be of specified colours as shown in the drawings and will be laid in pattern as per architectural drawings. Nothing extra shall be paid for laying tiles in specific pattern. The tiles shall be of first quality of approved make.

11.3 Proper gradient shall be given to flooring for toilets, verandah, kitchen, courtyard etc. so that the wash water flows towards the direction of floor trap. Any reverse slop if found, these shall be made good by the contractor by ripping open the floor/grading concrete and nothing shall be paid for such rectifications.

11.4 The flooring and skirting will be executed as per pattern shown in the Architectural drawings and as preapproval of Engineer-in-Charge and nothing extra shall be payable on this account.

11.5 Samples of flooring material are to be deposited well in advance to the Engineer-in-Charge for approval. Approved samples should be kept at site with the Engineer-in-Charge and the same shall not be removed except with the written permission of Engineer-in-Charge. No payment whatsoever will be made for these samples.

11.6 The Additional Mortar on account of differencing thickness of flooring material to match the level is inclusive of the rates and Nothing extra shall be paid on this account.

The rate shall include the cost of all materials and labour involved in all the operations. Nothing extra shall be paid for use of cut/sawn tiles in the work.

12. WATER SUPPLY, SANITARY INSTALLATIONS AND DRAINAGE

12.1 The contractor shall furnish all labour, materials and equipment, transportation and incidental necessary for supply, installation, testing and commissioning of the complete Plumbing / Sanitary system as described in the Specifications and as shown on the drawings. This also includes any material, equipment, appliances and incidental work not specifically mentioned herein or noted on the Drawings/Documents as being furnished or installed, but which are necessary and customary to be performed under this contract. The Plumbing / Sanitary System shall comprise of following:

a. Sanitary Fixtures and Fittings.

b. Internal and External Water Supply,

c Internal and External Drainage

d Balancing, testing & commissioning.

e Completion drawings

12.2 The contractor shall ensure that senior and experienced plumbers are assigned exclusively for this work.

12.3 The work shall be in conformity with the Bye-laws, Regulations and Standards of the local authorities concerned. But if these Specifications and Drawings call for a higher standard of

12.4 materials and / or workmanship than those required by any of the above regulations and standards, then these Specifications and Drawings shall take precedence over the said regulations and standards. However, if the Drawings and specifications require something which violates the Bye-laws and Regulations, then the Bye-laws and Regulations shall govern the requirement of this installation.

12.5 The Plumbing / Sanitary Drawings given by the Engineer In-Charge or issued with tenders are diagrammatic only and indicate arrangement of various systems and the extent of work covered in the contract. These Drawings indicate the points of supply and of termination of services and broadly suggest the routes to be followed. Under no circumstances shall dimensions be scaled from these Drawings. The contractor shall follow these drawings in preparation of his shop drawings, and for subsequent installation work.

12.6 The contractor shall examine all architectural, structural, plumbing, electrical and other services drawings and check the as-built works before starting the work, report to the Engineer In-Charge any discrepancies and obtain clarification. Any changes found essential to coordinate installation of his work with other services and trades, shall be made with prior approval of the Engineer In-Charge without additional cost to the department.

12.7 Shop drawings shall be submitted for approval four weeks in advance of planned delivery and installation of any material to allow the Engineer In-Charge ample time for scrutiny. No claims for extension of time shall be entertained because of any delay in the work due to his failure to produce shop drawings at the right time, in accordance with the approved programme

12.8 Samples of all materials like valves, pipes and fittings etc. shall be submitted to the Engineer In-Charge prior to procurement for approval and retention by Engineer In-Charge and shall be kept in their site office for reference and verification till the completion of the Project.

12.9 All materials and equipment shall conform to the relevant Indian Standards and shall be of the approved make and design. Makes shall be in conformity with list of approved manufacturers as per list of preferred make attached.

12.10 The installation shall be tested and shall be commissioned only after approval by the Engineer In-Charge. All tests shall be carried out in the presence of the representatives of the Engineer In-Charge and nothing extra shall be payable on this account.

12.11 The contractor shall submit completion plans for water supply, internal sanitary installations and building drainage work within 15 days of the date of completion. These drawings shall clearly indicate complete plant room layouts, piping layouts and sequencing of automatic controls, location of all concealed piping, valves, controls and other services. In case the contractor fails to submit the completion plans as aforesaid, security deposit shall not be released and these shall be got prepared at his risk and cost

12.11 The CCI/CI/PVC pipe and GI pipe etc. wherever necessary shall be fixed to RCC columns, beams etc. with rawl plugs and nothing extra shall be paid for this.

12.12 The variation in consumption of material shall be governed as per CPWD specification and clauses of the contract to the extent applicable.

12.13 "The pig lead to be used in joints of 150mm, 100mm, 75mm, 50mm dia of sand cast iron, centrifugally

cast (Spun) iron pipes shall be as per relevant CPWD Specifications". However, in case of 150 mm dia pipes less use of pig lead by more than the required quantity and the permissible variation thereof, a recovery for such quantity shall be made from the contractor at market rate to be determined by Engineer in Charge whose decision in the matter will be final.

12.14 The contractor shall bear all incidental charges for cartage, storage and safe custody of materials and shall construct suitable godowns, yards at the site of work for storing materials so as to be safe against damage by sun, rain, fire or theft etc., at his own cost and also employ necessary watch and ward establishment for the purpose at his own cost.

12.15 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, equipment, testing &commissioning etc. Accessories shall include proper fixing arrangement, brackets, nuts, bolts, screws and required connection pieces. Nothing extra whatsoever shall be payable on this account.

12.16 Porcelain sanitary ware shall be glazed vitreous china of first quality free from warps; cracks and glazing defects and shall conform to relevant .BIS codes. Colour of sanitary ware, shall be specified or as selected by the Engineer-in-Charge. Nothing extra shall be payable on this account.

12.17 The contractor shall be responsible of the protection of the sanitary and water supply fittings and other fittings and fixtures against pilferage and breakage during the period of installation and thereafter until the building is handed over.

12.18 The sanitary ware and CP brass fittings will be installed with the superior specifications, technical dimensions and drawings recommended by the manufacturer or as directed by Engineer-in-charge.

12..19 **General**

a) Rates for all items quoted shall be inclusive of all work and items given in the above mentioned specifications and Schedule of Quantities and applicable for the work under floors, in shafts or at ceiling level at all heights and depths. All rates are inclusive of cutting holes and chases in RCC and masonry work and making good the same.

b) All rates are inclusive of pre testing and on site testing of the installations, materials and commissioning.

12.20 **Cleaning and Disinfection of Pipelines:-**

On completion of hydraulic tests and before a pipe is disinfected, it shall be proved to be free from obstruction, debris and sediment by scouring or by any other process which the Engineer-in-charge may prescribe. Upon satisfactory completion of testing and cleaning, the pipelines shall be disinfected as order. Chlorine solution shall be applied at the charging point as the pipeline is being filed and dosing shall be continued until the pipeline is full and at least 50 parts of chlorine per million parts of water have been made available and distributed evenly. If ordinary bleaching powder is used, proportions will 150 gms of powder to 1000 litre of water. If a proprietary brand is used, the proportion shall be as specified by the manufacturer. The treated water shall be left in pipeline for a period as directed but not exceeding 24 hours chlorine residual tests shall be taken at various points along the pipeline. The disinfection process shall be repeated until the sample of water taken from the pipeline is declared fit for human consumption by a recognized laboratory.

13.0 False Ceiling:

The work in general shall be carried out as per CPWD Specification 2019 with upto date correction slips.

14.0 WOOD WORK

14.1 The samples of species of timber to be used shall be got approved and deposited by the contractor with the Engineer-in-charge before commencement of the work. The contractor shall produce cash vouchers and certificates from kiln seasoning or/and chemical treatment plants about the timber section to be used on the work having been kiln seasoned or/and chemically treated by them.

14.2 Factory made shutter shall be of any of the make as given in the list of preferred makes in Schedule-F. The contractor shall inform well in advance to the Engineer-in-charge the names and address of the factory from where 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 adhere to the decision of the Engineer-in-charge and 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. 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 / quality even after inspection of factory. Such shutters will not be measured and 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 authorized representative.

15.0 STEEL WORK

15.1 All welded structural steel work shall be tested for quality of weld as laid down in IS 822-1970 before actual erection if required.

16.0 INTERLOCKING/RCC GREEN PAVER BLOCKS

16.1 The Interlocking/RCC Green Paver Blocks of grade M-30 and 70mm thickness conforming to IS : 15658. Testing shall be conducted for properties mentioned in IS 15658 on four(4) paver block every 25,000 Paver Blocks to satisfy the quality of material.

17.0 VARIATION IN CONSUMPTION OF MATERIALS

17.1 The variation in consumption of material shall be governed as per CPWD specification and clauses of the contract to the extent applicable.

18.0 Handling of C&D Waste

18.1 The debris / building rubbish waste and the like (Construction & Demolition waste commonly known as C & D waste) generated from the demolition work, should be taken out to be disposed it off the campus in a legal and environmentally friendly way to the “declared dumping/Land fill sites” where the facility of re-cycling of C&D waste is available. The documentary proof as challans and invoices with respect to disposal of all C&D waste generated out of demolition work shall be submitted to Engineer-in-charge for reimbursement of charges against C & D waste disposal. The excavated earth only can be disposed of at suitable location as per prevailing guidelines of competent authority.

18.2 It shall be ensured that C& D waste is transported from the site in after keeping due record on behalf of Engineer-in-charge. The C& D waste shall only be dumped at sites declared as Dumping ground and having arrangements for recycling of C& D waste in Delhi.

19. Geospatial Refraction Survey:

Existing drains, pipes, cables, overhead wires, sewer lines, water lines and similar services encountered in the course of the execution of the work shall be protected/ maintained against the damage by the Contractor. The Contractor shall identify all underground / overhead services using Geospatial Refraction Survey of the entire area at his own cost and take necessary measures to protect the services before starting any excavation / activity. All temporary supports and other measures required to protect and maintain the services during construction period as per direction of Engineer-in-charge, shall be deemed to be included in the quoted rate / amount of the Contractor and nothing extra shall be paid on this account. For any permanent shifting, CPWD shall arrange to shift the services as and when required. However, in the interest of work, if CPWD decides to get it shifted by the Contractor, then Contractor shall be paid separately at the rates as decided by the Engineer-in-charge based on the actual quantum of the work involved in shifting such utilities/services. The decision of the Engineer-in-Charge in this regard shall be final and binding.

Samples of Testing:-

The contractor shall provide samples of material required for testing free of cost. 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.

All necessary tests as per the NIT/CPWD specifications/relevant BIS codes shall be carried out on all the materials whether ISI marked or otherwise. Wherever NIT/CPWD specification / relevant BIS codes do not specify the frequency of test, the same shall be carried out as per the direction of Engineer-in-Charge. The charge for such testing shall be borne by the contractor.

The contractor has to establish field laboratory at site including all necessary equipment (conforming to BIS) as per Annexure attached and skilled manpower for field tests at his own cost.

Testing of the building material will be done as per the following priority.

1) All govt institutes, Indian Institute of Technology, National Institute of Technology, Central and State Research Centers, Centrally and State Funded Laboratories (No approval is required for testing in these laboratories/ institutes)

Executive Engineer,
President's Estate,
CPWD, Rashtrapati Bhavan,
New Delhi- 110004
Phone No.011- 23017456

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

The agreement made this..... day of year two thousand and.....between…… (Hereinafter called the Guarantor of the one part) and the PRESIDENT OF INDIA (Hereinafter called the 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 building and structures in the said contract recited completely water and leak proof.

AND WHEREAS THE GURANTOR agreed to give guarantee to the effect that the said work will remain water and leak proof for ten years from the date of giving of water proofing treatment.

NOW THE GURANTOR hereby guarantee 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 ten years to be reckoned from the date after the maintenance period prescribed in the contract.

The decision of the Engineer-in-charge with regard to nature and cause of defect shall be final and binding on Guarantor.

During this period of guarantee, the guarantor shall make good all defects and in case of any defect being found render the building water proof to the satisfaction of the Engineer-in-Charge calling upon him to rectify the defects failing which the work shall be got done by the Department by some other contractor at the Guarantors risk and cost. 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 and fails to control all kinds of leakage and seepage 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 obligator
..... and ..... By..... For and on behalf
of the PRESIDENT OF INDIA on the day, month and year first above written.
SIGNED, sealed and delivered by OBLIGATOR in the presence of :

1..... **2.....**

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

1..... **2.**

Addition… Nil Correction... Nil Deletion ... Nil Overwriting... Nil Sr.D/MAN AE(P) EE

SPECIAL SPECIFICATIONS AND OTHER CONDITIONS

1. No claim for idle labourers on any account shall be entertained. The contractor shall depute his representative daily to the site of work. His name and signature shall be attested by the contractor for record in the department.

2. The work is to be executed on any day shall be got approved from the representative of Engineer-in-charge at the site of work in writing. No work shall be carried out without the approval of the representative of the Engineer-in-charge.

3. Any work carried out without the approval of the representative of the Engineer-in-charge at the site of work shall be rejected and will not be measured and paid for.

4. The contractor shall have to get the shades of all types of paints, distemper, water proofing cement paint etc. approved from the Engineer-in-charge before procurement of materials.

5. The site for the collection and stacking of the material shall be got approved from the Engineer-in-charge.

6. Nothing extra shall be paid to the contractor for excess consumption of material.

7. The contractor shall prepare one sample of item which shall be got approved from the Engineer-in-charge. Only on acceptance of sample work, contractor will be allowed to commence the work and sample is to be preserved by the JE-in-charge of work till the whole work is completed. The quality of entire work should confirm to the approved samples.

8. The contractor and/or his Engineer should see the site order book every day and get the compliance noted by the junior Engineer/Assistant Engineer/Engineer-in-charge.

9. All the items of work shall have to be taken up-sequentially i.e. after the patch repairs are carried out in one room, white/colour washing will be taken in the same quarter and thereafter painting shall have to be got completed.

10. All the malba or rubbish obtained from dismantling or otherwise during the execution of the work shall be brought down through the staircase and shall not be thrown to the ground directly from first floor or second floor etc. this shall be carried and stacked properly to the specified common disposal point on the same day and site shall be left clear as per the instructions of the Engineer-in-charge. A compensation of Rs.100/- shall be recovered from the contractor for each complaint/default.

11. The contractor will not pitch up tents for labourers, material and his stores etc. except cement godown if required which will be covered as per relevant agreement clause.

12. No temporary huts/structures will be constructed by the contractor at the site of work or at any government land within the jurisdiction of Division. Such structures, if any, found at the site or at Government land will be demolished and removed without any notice.

13. Any damage to the building structure, fitting or any other articles etc. done by the contractor or his workman during the execution of the work shall be made good by the contractor at his own cost.

14. The contractor shall clear the site properly after the completion of the work.

15. Unless otherwise specified, the agreement rates for all items of work of the schedule of quantities are for all heights, depths, leads and lifts involved in the execution of work.

16. The contractor shall make his own arrangements for obtaining electric connection for carrying out any maintenance activity and make necessary payment directly to the department concerned. In the absence of electric connection or failure of power supply, the contractor shall make his own arrangement of generators.

17. Other agencies working at site will also simultaneously execute the work entrusted to them and the contractor shall offer necessary co-operation wherever required to other agencies.

18. On account of security consideration, there could be some restrictions on the working hours, movement of vehicles for transportation of materials. The contractor shall be bound to follow all such restrictions and adjust the programme for execution accordingly.Nothing extra shall be paid on this account.

19. All malba/rubbish/silt/waste/garbage etc. generated due to any operation and other open spaces whatsoever shall be disposed off on daily basis by the contractor to the specified common disposal point in colony and nothing extra shall be paid on this account. After the collection of full truck load of the said malba (approx. 4.5 cubic metres), the same shall be disposed off by the contractor to the authorized municipal dhalao/dumping ground within **Seven (7)** day. In case of non-removal/disposal in the specified period, a Penalty of Rs. One Thousand per day shall be recovered from the contractor.

20. No Residential accommodation shall be provided to any of the staff engaged by the contractor. The contractor shall also not be allowed to erect any temporary set up for staff in the campus.

21. No claims of the labours shall be entertained by the Department including that of providing employment, regularization of services etc.

22. The engineers who are present at the site from 9:00 AM to 5:00 PM on all working days or as working hours allowed by Engineer-in-charge shall carry mobile telephone(s) to enable the Engineer-in-charge to have easy and quick communication. Nothing extra shall be paid to the contractor on this account and his quoted rates for various items under this contract will be inclusive of this obligation.

23. The staff employed by the contractor should be well behaved, Polite & courteous. Any complaint against staff on behaviour should be taken very seriously and such should be removed by the contractor immediately from the site.

24. The contractor shall make all safety arrangement required for the labour engaged by him at his own cost. All consequences due to negligence or due to lapse of security/safety or otherwise shall remain with the contractor. The department shall not be responsible for any mishap, injury, accident or death of the contractor's staff. No claim in this regard shall be entertained /accepted by the department

25. Contractor shall be fully responsible for any damages caused to govt. Property or allotee's property by his labour / staff in carrying out the work and shall be rectified by the contractor at his own cost.

26. Taxes as applicable shall be recovered from the contractor's bill.

27. Chases, holes & drilling works etc. shall be done using power operated tools & nothing extra shall be paid on this account.

Applicability of EPF and ESI and uploading of labour welfare Details

Applicability of EPF and ESI and uploading of Labour Welfare details the following should be followed:-

(i) It should be ensured by the contractor that he shall have provident Fund code Numbers and also ensure that and sub-contractor engaged should also have provident Fund Code.

(ii) All the works deployed by contractors or sub-contractors are enrolled as members of Provident Fund and should be given the Universal Account Number (UAN).

(iii) Before clearing the bills of contractor, certificate be obtained that all workers employing directly or indirectly by him are registered for EPF and the due contributions have been into their account. The EPFO in their official website has also made facility to verify whether the contractor having provident Fund code Number is regularly depositing the PF Contribution every month in respect of all the employees deployed by them. The failure to provide social security benefits to the workers engaged by any organization directly or through a contractor is an offence under EPF & MP Act.

(iv) In case of default. The contractor is liable for penal action. Engineer-in-charge or his subordinates must ensure that contractor who is providing outsourced staff is registered with EPFO and ESIC and payment to the contractor is made only after verifying that social security cover is being extended to such staff.

(v) In view of above, it is now clear that EPF & ESI is applicable for construction worker also. Hence CPWD contractor will have to be registered with ESIC and EPFO if number of workers deployed in a day is more than 10 or 20 in preceding one year respectively. Accordingly, the labour welfare details also be updated and uploaded for each and every ongoing work by the agency or contractors.

CONDITION RELATED TO PREVENTION OF POLLUTION AS PER PRINCIPAL BENCH OF NATIONAL GREEN TRIBUNAL.

1. The contractor shall not store/dump construction material or debris on metalled road.
2. The contractor shall get prior approval from Engineer-in-Charge for the area where the construction material or debris can be stored beyond the metalled road. This area shall not cause any obstruction to the free flow of traffic/inconvenience to the pedestrians. It should be ensured by the contractor that no accidents occur on account of such permissible storage.
3. The contractor shall take appropriate measures for protection are to be taken by raising of wind breakers of the appropriate height on all side of plot/ area using plastic and / or other similar material, 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 purposes/or are carrying construction material like cement, sand and other allied material are fully covered. The contractor shall take every necessary precautions that the vehicles are properly cleaned and dust free to ensure that enroute their destination, the dust, sand or any other particles are not released in air/contaminate air.
5. The contractor shall provide mask to every worker working on the construction site and involved in loading, unloading and carriage of construction material and construction debris to prevent inhalation of dust particles.
6. The contractor shall provide all medical help, investigation and treatment to the workers involved in the construction of building and carry of construction material and debris relatable to dust emission.
7. The contractor shall ensure that C&D waste is transported to the C & D Waste site only and due record shall be maintained by the contractor.
8. The contractor shall compulsory use of wet jet in grinding and stone cutting.
9. The contractor shall comply all the preventive and protective environmental steps as stated in the MoEF guidelines, 2010.
10. The contractor shall carry out on-road-Inspection for black smoke generating machinery. The contractor shall use cleaner fuel.
11. The contractor shall ensure that all DG sets comply emission norms notified by MoEF.
12. The contractor shall use vehicles having pollution under control certificate. The emissions can be reduced by a large extent by reducing the speed of a vehicle to 20 kmph. Speed bumps shall be used to ensure speed reduction. In cases where speed reduction cannot effectively reduce fugitive dust, the contractor shall divert traffic to nearby paved areas.
13. The contractor shall ensure that the construction material is covered by tarpaulin. The contractor shall take all other precaution to ensure that no dust particles are permitted to pollute air quality as a result of such storage. All other precautions should be taken to ensure that no dust particles are permitted to pollute the air quality.
14. The Agency would be personally responsible for effective compliance of these directions as per court orders.
15. 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."

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.

SPECIAL TERMS AND CONDITIONS

1. Works is to be carried out at **President's Estate, New Delhi**. The restrictions & rules for movement of vehicles & labour as applicable in the area shall have to be observed by the contractor including that of disposal of debris / dismantled material daily. In addition there may be some restrictions on the working hours & days in this restricted area which shall have to be observed strictly in consultation with Engineer-in-Charge. Due to this no claim whatsoever shall be entertained by the Deptt.for restricted area. The contractor should arrange sufficient work force and arrange materials to completethe work within stipulated time.
2. The contractor shall take all precautions to avoid all accidents by exhibiting necessary precautionary sign boards during day & night. He shall be responsible for all damage & all accidents caused due to negligence on his part.
3. The material will be issued to the contractor at the place of delivery as mentioned in the schedule of materials. The materials will be issued between the working hours & as per rules of the CPWD as framedtime to time. Nothing extra/shall be paid on A/c of carriage of material to any part of President's Estate.
4. All material obtained from Govt. stores or otherwise shall be got checked by the Engineer-in-Charge ofthe work on receipt of the same at site before use.
5. No godown will be allowed for constructions in President's Estate & no deduction / extra payment willbe made.
6. No labour huts will be allowed to be erected in President's Estate.
7. All materials/ Chemicals like grouts, Acrylic polymer etc. of approvable brand shall be brought to the site of work by the contractor in their original containers in sealed conditions. The materials shall be brought to the site of work by the contractor in their original containers in sealed conditions. The materialshall be brought in full quantities before start of work. Material shall be kept in the joints custody of thecontractor & the Engineer- in- charge or his representative. The empty containers shall be removed from the site only with written permission of Engineer-in-charge after completion of work, the theoretical statement of consumption of these items shall be prepared & compared with the actual quantity used after allowing authorized variation. The contractor will produce proof of purchases of material.
8. He shall ensure the site to be cleared thoroughly, of rubbish, scaffolding, material etc. before the actualdate of completion of the work.
9. The contractor shall make his own arrangement for electric connection if required and make necessary payments directly to the department concerned.
10. No payment will be made to the contractor for damages caused by rains or other natural calamities during the execution of the works & no such claims on this account will be entertained.
11. The contractor shall provide at his own cost suitable weighting & measuring arrangement at site for checking the weight / dimension as may be necessary for execution of the work.
12. The material must be got approved from the Engineer in charge before starting the work.
13. No information obtained by the contractor in course of execution of any work in President's Estate should be reproduced in any manner or format without obtaining proper permission from President's Sectt.
14. No fabrication of steel work shall be allowed within the premises of President's Estate / Work site.
15. Strictly no electronic gadget like microphone, mobile phone, pen drive, camera, chip, SIM or other electronic equipment is allowed in President's Estate specially Family Wing.
16. Gutkha / Pan Masala / Smoking / Spitting is strictly prohibited.
17. Due to Security restriction, permission for entry of labours is given only to those labourers/Supervisorswho have valid ID Proof like Aadhar Card, Driving License, Ration Card, PAN Card or any other proofissued by Govt. Department.
18. Police verification of workers is must before start of work.
19. Agency /Contractor must see the site conditions before quoting their rates. Agency /Contractor interestedto visit the site may contact the office of AE B-II/ PE or EE/PE (Phone No. 23017456 or 23013981) between office hours on working days.
20. **Work shall be carried out by concerned agency day & night if required in view of urgency of work. No extra claim will be entertained on account of this.**

Addition… Nil Correction... Nil Deletion ... Nil Overwriting... Nil Sr.D/MAN AE(P) EE

List of Preferred make for civil works
(Materials 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. 1st quality product/brands from the following manufacturers will only be accepted. However approved equivalent materials andfinishes of any other specialized firms may be used subject to approval of the alternate brand by the Engineer-in-Charge (See also conditions of contract).

Sl. No.	Materials	Preferred make
1	ADHESIVE	PIDILITE, SIKA, THERMOSHIELD, DUNLOP, VAMORGANIC
2	ALUMINIUM DOOR FITT	CLASSIC, ISI MARKED
3	BITUMEN	INDIAN OIL, HINDUSTAN PETROLEUM
4	BALL VALVES	ZOLOTO, IBP, ARCO
5	CERAMIC TILES	JOHNSON, SOMANY, KAJARIA
6	C.P. BRASS FITTINGS	JAQUAR(CONTINENTAL), KINGSTON(ELTA), MARC(ORIENTAL), PARYAG (NEPTUNE-H)
7	C.I. DOUBLE FLANGED SLUICE VALVES	KIRLOSKAR, IVC, BURN
8	CPVCPIPE	SUPREME, PRINCE, FINOLEX, ASHIRVAD, ASTRAL
9	CC PAVERS/ CHEQURED PRE CAST CONCRETE TILES	HINDUSTAN, DALAL, TERRAFERMA, SUSHMA, KRISHNA
10	CEMENT	ACC, ULTRATECH, J.K. SUPER, SHREE CEMENT, AMBUJA, JAYPEE CEMENT, BIRLA UTTAM
11	DASH FASTNERS	HILTI ,FISHER,CANON
	DECORATIVE LAMINATE	MERINO, CENTURY, GREENLAM
12	FRP DOOR SHUTTERS AND FRAMES	ASHOO MODEL ARTS, JAI SHREE
13	FLOAT GLASS	MODI FLOAT, SAINT GOBAIN, ASAHI, GLAVERBEL, PILKINGTON, ART N GLASS INC.
14	D.I. PIPES AND FITTINGS	TATA, JINDAL, ELECTROSTEEL
15	G.I. PIPES	TATA, JINDAL (HISSAR)
16	G.I. FITTINGS	UNIK, ICS OR OTHER ISI MARKED.
17	GUNMETALVALVES	LEADER, SANT, ZOLOTO
18	HYDRAULIC DOORCLOSER /FLOOR SPRING	HARDWYN, GODREJ,YALE
19	LOCKS/LATCH	GODREJ, HARRISON, PLAZA, GOLDEN, YALE
20	MIRROR	ATUL, MODIGUARD, SAINT GOBAIN
21	PRELAMINATED PARTICLE BOARD	CENTURY PLY, KITLAM, ECOBOARD, MERINO
22	PRECAST C.C. COVER DRAIN/MANHOLE	KKMG, NIMCO, HINDUSTAN, TERRAFERMA
23	LAMINATES	FORMICA, GREENLAM, BAKELITE HYLAM
24	PVC WATER STORAGE TANK	SINTEX, POLYWELL,SHEETAL, LOTUS
25	POLY CARBONATE SHEET	GE PLASTIC POLYGAL
26	PRECOATED GALVANIZED IRON PROFILE SHEET	TATA, JINDAL, ESSAR STEEL
27	R.C.C. PIPES-(NP-2)	PRAGATI, LAKSHMI, SOOD & SOOD, JAIN SPUN PIPES, INDIAN HUME PIPE CO. SPUN PIPE CO.,
28	RMC	ACC, ULTRATECH ,ULTRATECH(BIRLA), LAFARGE,RMC INDIA, NDCON
29	STRUCTURAL STEEL SECTIONS	TATA, SAIL, RINL, JINDAL STEEL AND POWER LTD &JSW STEEL LTD.
30	REIN FORCEMENT BARS	TATA, SAIL, RINL,

Addition… Nil Correction... Nil Deletion ... Nil Overwriting... Nil Sr.D/MAN AE(P) EE

31	STAINLESS STEEL SINKS	NILKANTH, NIRALI, COBRA, PRAYAG
32	SOIL, WASTE & VENT PIPES &FITTINGS (A) CENTRIFUGAL CAST IRON	NECO, RIF
33	STONEWARE PIPE & GULLY TRAPS	PERFECT, PARRY, ANY ISI MARK
34	SMC STORAGE PANEL TANK	ANY MAKE IN INDIA BRAND (ISI MARKED)
35	TILE ADHESIVE	CICO, PIDILITE, ARDEX ENDURA, MYK-LATRICRETE, KERAKOLL, SAINT GOBAIN- WEBER, MAPEI.
36	UPVC WINDOW	FENESTA, REHAU, POLYWOOD
37	VITRIFIED TILES	GRANITO, KAJARIA, JOHNSON (MARBONITE), RAK
38	VITREOUS CHINA SANITARYWARE (W.C./ WASH BASIN)	HINDWARE,CERA, KEROVIT
39	WHITE CEMENT	J.K. WHITE, BIRLA WHITE
40	WATER PROOFING COMPOUND	TAPCRETE, CICO, ACCOPROOF, IMPERMO
41	WIRE MESH	STERLING ENTERPRISES, TRIMURTY WELDED MESH
42	WATER-PROOF CEMENT PAINT	SNOWCEM, ASIAN,BERGER PAINT.
43	WATER PROOFING MEMBRANE -APP (ATACTIC POLYPROPYLENE POLYMER)	SIKA INDIA, IWL INDIA LTD., PIDILITE, SHALIMAR SEAL AND TAR PRODUCTS (P) LTD., BENGAL BITUMEN.
44	OIL BOUND WASHABLE DISTEMPER	BISON WASHABLE OIL BOUND DISTEMPER OF BERGER MAKE, PREMIUM WASHABLE OIL BOUND DISTEMPER OF KANSAI -NEROLAC MAKE, TRACTOR BRAND WASHABLE DISTEMPER OF ASIAN PAINTS MAKE, MAXILITE OF ICI- DULUX PAINTS MAKE.
45	ACRYLIC / PLASTIC EMULSION	RANGOLI ACRYLIC EMULSION OF BERGER MAKE', BEAUTY GOLD OF KANSAI - NEROLAC MAKE, APCOLITE ACRYLIC EMULSIONOF ASIAN PAINTS MAKE, SUPER COVER ICI-DULUX PAINTS MAKE.
46	ACRYLIC EXTERIOR PAINT	SONWCRYL XT OF SNOWCEM PAINT, WEATHERCOAT SMOOTH OF BERGER PAINTS, WEATHER SHIELD OF ICI PAINT, APEX OF ASIAN PAINTS
47	SYNTHETIC ENAMEL PAINT	LUXOL SILK EMULSION OF BERGER PAINT MAKES.ALLSCAPE OF KANSAI- NEROLAC PAINT LTD. MAKE.APCOLITE OF ASIAN PAINT MAKE. SUPER ENAMEL OF ICI- DULUX PAINTS MAKE.
48	PLY WOOD	ARCHID PLY, DURO BOARD, KITPLY INDUSTRIES (SWASTIKA) CENTAURY OR EQUIVALENT, DUROPLY (BWR) CENTURY PLYWOOD, GREEN PLYWOOD, MYSORE BOARDS.
49	FLUSH DOOR SHUTTERS	KUTTY FLUSH DOOR, KITPLY INDUSTRIES (SWASTIK), SAMRAT LAMINATE PVT. LTD. (SAMRAT) CNC COMMERCIAL LTD. (SHIVALIK), SR JINDAL PLY WOOD INDUSTRIES (PRIMA), ARCHIDPLY, KIT' PLY, MYSORE BOARDS, KITLAM, NATIONAL, SWASTIC, CORBEET OR ANY BIS APPROVED BRAND

Addition… Nil Correction... Nil Deletion ... Nil Overwriting... Nil Sr.D/MAN AE(P) EE

50	CI SLUICE VALVES, CHECK VALVES	IVC (CALCUTTA) KIRLOSKAR/ UPADYAYA/OR WITH ISI MARK.
51	PTMT FITTINGS	PRAYAG, SHAKTI
52	GROUTING COMPOUND/ ADMIXTURE	ENDURA, PIDILITE
53	BLOCK BOARD	ARCHID PLY, DURO BOARD, KITPLY INDUSTRIES (SWASTIK) CENTUARY OR EQUIVALENT.
54	READY TO USE MICRO CONCRETE	DR, FIXIT(MICRO CONCRETE), BRONCO(CEMREPAIR MC), BASF (MASTEREMACO ® S 346),FOSROC(RENDEROC ® RG.
55	AWNING FABRIC	VISTA, MAC or equivalent (Fabric of desired quality)
56	BAMBOO MAT CORRUGATED SHEET (BMCS)	TIMPACK GREEN GOLD ISI MARK OR EQUIVALENT ISI MARK.
57	WALL PUTTY	BIRLA, JK, ASIAN, BERGER, SAKARNI.
58	TEXTURED PAINT (INTERIOR/ EXTERIOR)	OIKOS, SKK, ASIAN (NOVA COLOUR), ULTRATECH (UTTPL), ARMOURCOAT, DULUX, SPECTRUM, HERITAGE.
59	STEEL PRIMER AND WOOD PRIMER	ASIAN, ICI, BERGER PAINTS, JOTUN, NIPPON, NEROLAC.
60	CEMENT PRIMER	AISAN PAINTS, AKZO NOBEL (DULUX), JOTUN, BERGER, NEROLAC
61	LIME GRANULES	ULTRATECH TEXTURE PAINT PVT LTD, ASIAN PAINT, BERGER PAINT.
62	MASONRY PRIMER	ULTRATECH TEXTURE PAINT PVT LTD, ASIAN PAINT, BERGER PAINT
63	PERMEABLE POLYMER DECORATIVE PAINT	ULTRATECH TEXTURE PAINT PVT LTD, ASIAN PAINT, BERGER PAINT
64	PREMIUM ARCYLIC GOLD PAINT	DULUX, ASIAN, BERGER.
65	RETRO REFLECTIVE FLIM	3M, AVERY DENNISON
66	STAINLESS STEEL TUBES/ PIPES ETC.	JSL JINDAL STAINLESS, SAIL

Note:-

The weight and thickness of the material should be as per CPWD Specification/relevant IS code/manufacturer specification.

Unless otherwise specific specified, the makes mentioned in the nomenclature of concerned item will prevail over the list of makes specified above.

The contractor shall provide the materials as per the make Brand indicated above. When twoor more alternative brands have been mentioned, the brand to be finally used shall be decided by the Engineer-in-Charge. The contractor shall obtain the approval of Engineer-in-Charge for the alternative brands, before the actual execution of items.

Performa for Labour to be submitted along with PG Letter by the contractor

Details of the Contractor
Name;-
Address:-
Contact No.:-

S.No.	Name, Parentage & Present Address	Permanent Address	Date of birth / Age	Place of work	Nature of work	Period & time	Photograph	Thump impression	Identity no. & contact no.	Verification no. / form Deposited

Addition… Nil Correction... Nil Deletion ... Nil Overwriting... Nil Sr.D/MAN AE(P) EE

Schedule of Quantity

Name of Work :- Providing toilet facility for differently abled persons near Museum and improvement of sewer systems at football ground toilet in Sch 'B' Rashtrapati Bhavan during 2026-27.

S. No.	Description of Item	Qty.	Unit	Rate	Amount
1	Excavating trenches by mechinical / manual means of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, for all depth, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m : All kinds of soil Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia.	80.00	Mtr	356.45	28516.00
2	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : 1:2:4 (1 cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 20 mm nominal size derived from natural sources).	8.00	Cum	7974.70	63798.00
3	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : 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).	6.00	Cum	6598.20	39589.00
4	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundations and plinth in :				
4.1	Cement mortar 1:3 (1 cement : 3 coarse sand)	30.00	sqm	943.15	28295.00
5	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing of edges to give high gloss finish etc. complete at all levels. Granite stone slab of colour black, Cherry/Ruby red Area of slab over 0.50 sqm.	5.00	Sqm	5199.00	25995.00

Addition… Nil Correction... Nil Deletion ... Nil Overwriting... Nil Sr.D/MAN AE(P) EE

6	Providing and fixing Ist quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	90.00	Sqm	1283.45	115511.00
7	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately).	0.70	Cum	144695.40	101287.00
8	Providing and fixing panelled or panelled and glazed shutters for doors, windows and clerestory windows, fixing with butt hinges of required size with necessary screws, excluding panelling which will be paid for separately, all complete as per direction of Engineer-in-charge. (Note:- Butt hinges and necessary screws shall be paid separately) Second class teak wood 35 mm thick shutters.	5.00	Sqm	4162.15	20811.00
9	Extra for providing frosted glass panes 4 mm thick (weight not less than 10 kg per sqm) instead of ordinary float glass panes 4 mm thick (weight not less than 10 kg per sqm) in doors, windows and clerestory window shutters. (Area of opening for glass panes excluding portion inside rebate shall be measured).	5.00	Sqm	178.55	893.00
10	Providing and fixing nickel plated M.S. pipe curtain rods with nickel plated brackets : 20 mm dia (heavy type).	8.00	Mtr	177.15	1417.00
11	Providing and fixing ISI marked IS:1341 M.S. pressed butt hinges bright finished with necessary screws etc. complete : 125x65x2.12 mm.	18.00	Each	53.65	966.00
12	Providing and fixing aluminium sliding door bolts, ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868), transparent or dyed to required colour or shade, with nuts and screws etc. complete :				
12.1	300x16 mm	3.00	Each	306.95	921.00
13	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :			0.00	0.00
13.1	300x10 mm	6.00	Each	131.70	790.00
13.2	100x10 mm	6.00	Each	65.50	393.00
14	Providing and fixing aluminium hanging floor door stopper, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete.			0.00	0.00
14.1	Twin rubber stopper	3.00	Each	73.25	220.00

15	Providing and fixing bright finished brass 100 mm mortice latch and lock, ISI marked, with six levers and a pair of anodised (anodic coating not less than grade AC 10 as per IS : 1868) aluminium lever handles of approved quality with necessary screws etc. complete.	3.00	Each	879.55	2639.00
16	Providing & Fixing decorative high pressure laminated sheet of plain / wood grain in gloss / matt/ suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 Type S, including cost of adhesive of approved quality. 1.0 mm thick.	90.00	sqm	897.30	80757.00
17	Providing and fixing fly proof stainless steel grade 304 wire gauge, to windows and clerestory windows using wire gauge with average width of aperture 1.4 mm in both directions with wire of dia. 0.50 mm all complete. With 2nd class teak wood beading 62X19 mm.	3.00	Sqm	1616.65	4850.00
18	Providing and fixing bright /matt finished Stainless Steel handles of approved quality & make with necessary screws etc all complete.				
18.1	125 mm.	20.00	each	120.65	2413.00
18.2	100 mm	15.00	each	91.55	1373.00
19	Providing and fixing stainless steel soft closing spring hinges at 0 degree hinges (hydraulic type) of approved make/brand to cupboard shutters with full threaded steel screws including making necessary recess in board and finished etc. complete as per direction of Engineer-in-charge.	40.00	Each	275.30	11012.00
20	Providing and fixing magnetic catcher of approved quality in cupboard / ward robe shutters, including fixing with necessary screws etc. complete. Triple strip vertical type.	40.00	Each	53.15	2126.00
21	Providing and fixing special quality bright finished brass cupboard or ward robe locks with four levers of approved quality including necessary screws etc. complete. 40 mm.	35.00	Each	315.00	11025.00
22	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying priming coat of approved steel primer. M.S. tube.	30.00	KG	199.20	5976.00
23	Providing and fixing carbon steel galvanised (minimum coating 5 micron) dash fastener of 10 mm dia double threaded 6.8 grade (yield strength 480 N/mm2), counter sunk head, comprising of 10 mm dia polyamide PA 6 grade sleeve, including drilling of hole in frame , concrete/ masonry, etc. as per direction of Engineer-in-charge. 10 x 120 mm.	20.00	Each	173.05	3461.00

24	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	20.00	Kg	772.40	15448.00
25	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) : 25 mm thick.	30.00	sqm	1972.05	59162.00
26	Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement: 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete.	5.00	sqm	2383.45	11917.00
27	Providing and laying Polished Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing , curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge. Polished Granite stone slab colour of Black, Cherry/Ruby Red or equivalent.	42.00	sqm	4536.05	190514.00
28	15 mm cement plaster on the rough side of single or half brick wall of mix : 1:6 (1 cement: 6 fine sand)	40.00	sqm	387.70	15508.00
29	12 mm cement plaster of mix : 1:6 (1 cement: 6 fine sand)	20.00	sqm	337.40	6748.00
30	Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping, sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.	70.00	sqm	25.45	1782.00
31	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.	70.00	sqm	157.95	11057.00
32	Distempering with 1st quality acrylic distemper (ready mixed) having VOC content less than 50 gram/litre, of approved manufacturer and of required shade and colour all complete to achieve even shade and colour : New work (two or more coats) over and including water thinnable priming coat with cement primer having VOC content less than 50 gram/litre.	70.00	sqm	187.90	13153.00

33	Finishing walls with Acrylic Smooth exterior paint of required shade :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)	80.00	sqm	162.55	13004.00
34	Polishing in high gloss/matt finish melamine clear polish on wood work in required color/wooden shade texture with following process in the sequence as detailed below:1. The surface to be polished is rubbed with sand paper 80/120 no. and then with sand paper of 160/180 nos.2. Applying two coats of sealer with spray gun and allowing sufficient drying time for 1st coat and 2nd coat is allowed to dry for 8 to 12 hrs.3. On drying of sealer coat, wet rubbing with emery cloth of finer grading with ample water to remove excess sealer layer and make the surface further smooth after this wet rubbing, then surface is applied with special grade melamine fillers to fill all the small and big holes/grooves etc. Filler coat to be allowed to dry for 4 to 6 hrs on which again a light wet rubbing is done this surface is further allowed to dry for 12 hrs.4. On this, 1st coat of melamine polish is applied with spray gun using melamine clear polish and melamine thinner in required proportion. This 1st coat is allowed to dry for 24 hrs then this dry surface is again fine wet rubbed smooth, which is further allowed to dry for 12 hrs. The final melamine polish is applied with compressor pressure spray gun using melamine clear polish and melamine thinner mixed in required proportion complete as per direction of Engineer-in-Charge. (Final coat to be done in 1 or 2 layers without gap of time.)	16.00	Sqm	1377.05	22033.00
35	Dismantling W.C. Pan of all sizes including disposal of dismantled materials i/c malba all complete as per directions of Engineer-in-Charge.	2.00	Each	135.75	272.00
36	Dismantling 15 to 40 mm dia G.I. pipe including stacking of dismantled pipes (within 50 metres lead) as per direction of Engineer-in-Charge. (a) Internal Work- Exposed on wall	15.00	mtr	3.30	50.00
37	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge. Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	8.00	Cum	2464.00	19712.00
38	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. In cement mortar	12.00	Cum	2085.35	25024.00
39	Dismantling stone slab flooring laid in cement mortar including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	55.00	Sqm	269.70	14834.00
40	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead. For thickness of tiles 10 mm to 25 mm	100.00	Sqm	74.30	7430.00
41	Dismantling of flushing cistern of all types (C.I./PVC/Vitrious China) including stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead.	2.00	Each	113.40	227.00

42	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead : Of area beyond 3 sq. metres	6.00	each	508.90	3053.00
43	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.	25.00	cum	267.15	6679.00
44	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.	50.00	Sqm	55.30	2765.00
45	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete. Semi rigid pipe 32 mm dia.	3.00	Each	105.15	315.00
46	Providing and fixing soil, waste and vent pipes : 100 mm dia. Sand cast iron S&S pipe as per IS: 1729.	40.00	Mtr	1165.95	46638.00
47	Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete. 100 mm dia Sand cast iron S&S as per IS - 1729.	10.00	Each	605.80	6058.00
48	Making chases up to 7.5x7.5 cm in walls including making good and finishing with matching surface after housing G.I. pipe etc.	20.00	mtr	205.40	4108.00
49	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, i/c cutting and making good the walls etc. Internal work - Exposed on wall.				
49.1	15 mm dia nominal bore	5.00	mtr	370.85	1854.00
49.2	20 mm dia nominal bore	20.00	mtr	442.65	8853.00
50	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work) :			0.00	0.00
50.1	15 mm nominal bore	5.00	Each	322.25	1611.00
50.2	20 mm nominal bore	10.00	Each	351.05	3511.00
51	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete : 150 mm diameter.	40.00	Mtr	704.30	28172.00
52	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) all-round S.W. pipes including bed concrete as per standard design : 150 mm diameter S.W. pipe.	40.00	Mtr	1194.25	47770.00
53	Providing and fixing square-mouth S.W. gully trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design: 100x100 mm size P type. With common burnt clay F.P.S. (non modular) bricks of class designation 7.5.	6.00	Each	2740.70	16444.00

54	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design : Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) : With common burnt clay F.P.S. (non modular) bricks of class designation 7.5.	4.00	Each	12926.50	51706.00
55	Constructing brick masonry road gully chamber 50x45x60 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm pre-cast R.C.C. horizontal grating with frame complete as per standard design : With common burnt clay F.P.S. (non modular) bricks of class designation 7.5.	8.00	Each	6030.65	48245.00
56	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete : 300 mm dia. R.C.C. pipe.	30.00	Mtr	1006.45	30194.00
57	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 coarse sand), finished with a floating coat of neat cement and making necessary channels for the drain etc. complete :				
57.1	For pipes 100 to 250 mm diameter	4.00	Each	820.35	3281.00
58	Dismantling of manhole including R.C.C. top slab, C.I. cover with frame, including stacking of useful materials near the site and disposal of unserviceable materials within 50 m lead as per direction of Engineer-in-charge: Rectangular manhole 90x80 cm and 45 cm deep.	3.00	Each	2571.90	7716.00

59	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :				
59.1	For fixed portion				
59.1.1	Powder coated aluminium (minimum thickness of powder coating 50 micron).	25.00	KG	537.40	13435.00
59.2	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately) Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	20.00	Kg	605.90	12118.00
60	Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade l Type ll, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineer-in-charge. Pre-laminated particle board with decorative lamination on one side and balancing lamination on other side	5.00	sqm	1153.20	5766.00
61	Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying : (a) First layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/ sqm. This layer will be allowed to air cure for 4 hours. (b) Second layer of slurry of cement @ 0.242 kg/sqm mixed with water proofing cement compound @ 0.126 kg/sqm. This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours. The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.	25.00	sqm	624.60	15615.00
62	Providing & fixing (ALD-CHR-579) Hand shower (Health Faucet) with 1 Meter Long Easy Flex Tube in Chrome Finish and Wall Hook with N.R.V. (Back Flow Preventer) of make jaguar or equivalent as per direction of Engineer-in-charge	3.00	Each	1573.00	4719.00
63	Providing & fixing (ACN-CHR-1111S) Towel Rail of make jaguar or equivalent as per direction of Engineer-in-charge	3.00	Each	2027.75	6083.00
64	Providing & fixing (ACN-CHR-1121BN) Towel Ring round with round flage of make jaguar or equivalent as per direction of Engineer-in-charge.	3.00	Each	1382.95	4149.00

65	Providing & fixing (ACN-CHR-1131N) Soap Dish Holder of make jaguar or equivalent as per direction of Engineer-in-charge	3.00	Each	915.85	2748.00
66	Providing and fixing Stainless steel jali (grating) with or without vent hole for waste pipe of approved make and design complete as per direction of Engineer-in-charg (a) 100 mm dia	6.00	Each	241.60	1450.00
67	Providing & fixing (COP-CHR-107NPM) Long body Bib Cock with wall flange of make jaguar or equivalent as per direction of Engineer-in-charge	6.00	Each	2154.75	12929.00
68	Providing & fixing (KUP-CHR-35037PM) Bib Cock with wall flange of make jaguar or equivalent as per direction of Engineer-in-charge.	3.00	Each	2834.00	8502.00
69	Providing & fixing (KUP-CHR-35041PM) Two way bib cock with wall flange of make jaguar or equivalent as per direction of Engineer-in-charge.	3.00	Each	3415.35	10246.00
70	Providing & fixing (KUP-CHR-35053PM) Angular stop cock with wall flange of make jaguar or equivalent as per direction of Engineer-in-charge.	3.00	Each	2136.35	6409.00
71	Providing & fixing (ACN-CHR-1151N) Toilet Roll Holder of make jaguar or equivalent as per direction of Engineer-in-charge.	3.00	Each	1207.40	3622.00
72	Providing & fixing (ALD-CHR-805) PVC connection of make jaguar or equivalent as per direction of Engineer-in-charge.	4.00	Each	381.70	1527.00
73	Providing & fixing (ALD-CHR-705) Waste Coupling 32mm size full thread with 80mm height of make jaguar or equivalent as per direction of Engineer-in-charge .	4.00	Each	829.40	3318.00
74	Providing & fixing (KUP-CHR-35001PM) Pillar cock of make jaguar or equivalent as per direction of Engineer-in-charge.	4.00	Each	3170.75	12683.00
75	Providing & fixing (ALD-CHR-069FT) stop cock of make jaguar or equivalent as per direction of Engineer-in-charge	4.00	Each	1275.65	5103.00
76	Providing and fixing 19 mm BWP board (grade-1) with both side teak veneering in walls partition, shelves,sides ,bottom & top etc with necessary screws, adhesive, wooden cleats etc wherever required. All the exposed edges shall be finished with suitable teak wood lipping with nails and adhesive etc complete as per direction of Engineer-in-charge.	30.00	Sqm	4628.48	138854.00
77	Providing & fixing (ONS-WHT-10955P180UFSM) Rimless Single Piece-WC with UF-soft close seat cover , hinges, dual flush cistern fitting, fixing accessries and Accessroes set, size Size: 360x575x410 mm, P Trap- 180 mm ,Single Piece Concealed Cistern Body (JCS-WHT-2431P) and Control Plate Opal (JCP-CHR-152415) of make jaguar or equivalent as per direction of Engineer-in-charge.	3.00	Each	31349.70	94049.00
78	Providing & fixing (Cat. No.: WHT-7803PM) Pedestal wash Basin of size Size: 610 x 465 x 275 mm mm of make Handware or equivalent as per direction of Engineer-in-charge	4.00	Each	15689.60	62758.00

79	Providing & fixing (Cat. No.: F680036) Looking mirror of Size: 600x800 mm of make Handware or equivalent with touch on off and three lamp colour lights as per direction of Engineer-in-charge	4.00	Each	12359.25	49437.00
				TOTAL	**1777402.00**

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