



Central Public Works Department



NIT No.: 03/EE(C)-II/SE-Vadodara/2026-27

Name of Work: *Construction of Academic Building, Student Hostel & Electric Substation along with all necessary infrastructure facilities for IIIT-Vadodara at Dumad, Vadodara.SH: Execution of balance work at IIIT Vadodara.*

Composite Estimated cost	Rs. 34,81,63,367/- (Civil Rs. 18,51,21,280/- + Elect. Rs.16,30,42,087/-)
Earnest Money	Rs 44,81,634/-
Period of Completion	5 (Five) Months

**O/O SUPERINTENDING ENGINEER,
CPWD, DAK BUNGALOW, FATEHGUNJ,
VADODARA**

PART -A

**GOVERNMENT OF INDIA
CENTRAL PUBLIC WORKS DEPARTMENT**

Office of the Superintending Engineer, CPWD, Vadodara.

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Assistant Engineer (E)(P)
O/o SE, Vadodara

Assistant Engineer(C)(P)
O/o SE, Vadodara

Executive Engineer(E)
CPWD, Vadodara

Executive Engineer(C)-II
CPWD, Vadodara

Superintending Engineer
CPWD, Vadodara.

Insertion : Nil Correction : Nil Omission : Nil AE(P)... / EE.....

PRESS NOTICE

CENTRAL PUBLIC WORKS DEPARTMENT

NOTICE INVITING e-TENDERS

The Executive Engineer (C)-II, Vadodara Project Division, CPWD, Dak Bungalow, Behind Post Office, Fatehgunj, Vadodara-390002 (Gujarat) (Mob No. 9511317216 (*e-mail-[ee-iiitvpd@cpwd.gov.in](mailto:iiitvpd@cpwd.gov.in)*)) on behalf of the President of India invites online percentage rate bids from approved and eligible contractors of CPWD enlisted in appropriate class (B&R/Composite) for the following work: -

NIT NO: ***03/EE(C)-II/SE-Vadodara/2026-27***

Name of Work: ***Construction of Academic Building, Student hostel & Electric Substation along with all necessary infrastructure facilities for IIIT Vadodara at Dumad, Vadodara.SH:Execution of balance work at IIIT Vadodara.***

Estimated Cost: Rs. 34,81,63,367/- (Civil Rs. 18,51,21,280/- + Elect. Rs.16,30,42,087/-)

Earnest money: Rs 44,81,634/-

Time of completion: 5 (Five) Months

Last time & date of submission of Bid: Upto 03:00 PM on 23.07.2026

The tender forms and other details can be obtained from the website <http://etender.cpwd.gov.in>

Note: - Applicants are advised to keep visiting the above-mentioned websites from time to time (till the deadline for bid submission) for any updates in respect of the tender documents, if any. Failure to do so shall not absolve the applicant of his liabilities to submit the applications complete in all respects including updates thereof, if any. An incomplete application may be liable for rejection.

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

The Executive Engineer (C)-II, Vadodara Project Division, CPWD, Dak Bungalow, Behind Post Office, Fatehgunj, Vadodara-390002 (Gujarat) (Mob No. 9511317216 ([e-mail-ee-iiitvdp@cpwd.gov.in](mailto:ee-iiitvdp@cpwd.gov.in))) on behalf of the President of India invites online percentage rate bids from approved and eligible contractors of CPWD enlisted in appropriate class (B&R/Composite) for the following work:-

S. No.	NIT No.	Name of work & Location	Estimated cost put to bid	Earnest Money	Stipulated Period of Completion of Work	Last date & time of online submission of bid, EMD, copy of receipt or deposition of original Bank guarantee and other Documents as specified in the bid document	Time and date of opening of bid
01	03/EE(C)-II/SE-Vadodara/2026-27	Construction of Academic Building, Student Hostel & Electric Substation along with all necessary infrastructure facilities for IIIT-Vadodara at Dumad, Vadodara. SH: Execution of balance work at IIIT Vadodara.	Rs. 34,81,63,367/- (Civil Rs. 18,51,21,280/- + Elect. Rs.16,30,42,087/-)	Rs 44,81,634/-	5 (five) Months	Upto 03:00 PM on 23.07.2026	At 03:30 PM on 23.07.2026

1. The intending bidder must read the terms and conditions of CPWD-6 carefully. He should only submit his bid if he considers
2. himself eligible and he is in possession of all the documents required.
3. Information and Instructions for bidders posted on the website shall form part of bid document.
4. The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website <http://etender.cpwd.gov.in> or www.cpwd.gov.in free of cost.

5. But the bid can only be submitted after deposition of original EMD either in the office of Executive Engineer inviting bids or division office of any Executive Engineer, CPWD, within the period of bid submission and uploading the mandatory scanned documents such as Insurance Surety Bonds, Account Payee Demand Draft or Banker's Cheque or Fixed Deposit Receipts or/ and Bank Guarantee (for balance amount as prescribed) from any of the Commercial Bank towards EMD in favour of Executive Engineer as mentioned in NIT, receipt for deposition of original EMD to division office of any Executive Engineer (**including NIT issuing EE/AE**), CPWD and other documents as specified.
6. Those contractors who are not registered or have not updated their profile on the website mentioned above, are required to get registered / update their profile beforehand. The necessary training materials including the videos with step-to-step process are available on download section of <http://etender.cpwd.gov.in> .
7. The intending bidder must have valid Class II digital signature certificate with encryption key (combo type) to perform any operations/transactions on the e-tendering portal / website and the bidder should download and install the eMSigner on their system as per instructions available on download section of <https://etender.cpwd.gov.in>.
8. On opening date, the contractor can login and see the bid opening process. After opening of bids he will receive the competitor bid sheets.
9. Contractor can upload documents in the form of **JPG** format and **PDF** format.
10. Contractor must ensure to quote rate in the prescribed column(s) meant for quoting rate in figures appears in **yellow** colour and the moment rate is entered, it turns sky blue.
In addition to this, while selecting any of the cells a warning appears that if any cell is left blank the same shall be treated as "0". Therefore, if any cell is left blank and no rate is quoted by the bidder, rate of such item shall be treated as "0" (ZERO).
However, if a tenderer quotes nil rates against each item in item 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. Intending Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their bids as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra cost consequent on any misunderstanding or otherwise shall be allowed. The bidders shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by a bidder implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work.
11. GST applicable as per Government norms up to date and future circulars. Contractor should quote the rate including GST as per Govt. norms, nothing to be reimbursed against GST directly.

12. The tenderer must associate with himself, agencies of the appropriate eligibility to tender for each of specialized nature of items / work listed below individually. Such works shall be got executed only through associated agencies specialized in these fields. The tenderer whose tender is accepted shall indicate the name(s) of his associated specialized agencies those fulfilling the eligibility criteria laid down below after award of work and at least 30 days before commencement of such items / work for the approval of the Engineer-in-Charge of that component, whose decision shall be final and binding. If the tenderer, himself fulfils the eligibility criteria laid down below for associated specialized agencies, then the tenderer shall not require to associate with himself the associated specialized agency.

S.No.	Specialized work(s) /Item of work (s)	Eligibility Criteria of Associated Agencies
A	CIVIL WORK	
1	Waterproofing treatment	<p><i>The agency shall associate specialized agencies, who have satisfactorily completed three works each costing not less than an amount equal to 40% of the tendered amount of the corresponding specialized item, or two works each costing not less than an amount equal to 60% of tendered amount of corresponding specialized item or one specialized work costing not less than amount equal to 80% of tendered amount of corresponding specialized item during the last seven years ending on the last day of the month previous to the one in which the tenders are invited. The value of executed similar works shall be brought to the current costing level by enhancing the actual value of work at a simple rate of 7% per annum calculated from the date of completion to the last day of the month previous to the one in which the tenders are invited.</i></p>

List of Documents to be scanned and uploaded within the period of bid submission:

I.	Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee (as prescribed) issued by any Commercial Bank towards EMD to be scanned and uploaded.
II.	Enlistment Order of the Contractor Contractor in appropriate class of composite category/Buildings & Roads in CPWD.
III	Copy of Receipt for deposition of original EMD issued from division office of any Executive Engineer, CPWD (Including NIT issuing EE.) Annexure-A
IV.	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 the following undertaking along with bid documents. "If work is awarded to me, I/We shall obtain a GST registration certificate, as applicable, within one month from the date of receipt of the award letter or before release of any payment by CPWD, whichever is earlier, failing which I/We shall be responsible for any delay in payments which will be due towards me/us on a/c of the work executed and/or for any action taken by CPWD or GST Department in this regard". (Form-B)
V	Undertaking on structural stability and soundness as per prescribed format (Form -F).
VI	<i>ERP Training certificate regarding successful completion of ERP Training if already obtained by the bidder.</i> (or) <i>If Bidder has not obtained ERP (Enterprise Resource Planning) training, then he shall scan and upload the undertaking in the prescribed format (Form-k)</i>
VII	Uploading of valid electrical license of eligible class which is valid in Gujarat Or Uploading of an undertaking that "I /we will either obtain valid electrical license at the time of execution of electrical work or associate Contractors having valid electrical license of eligible class (Form -E)

-sd-

**Executive Engineer(C)-II,
CPWD, Vadodara**

(Annexure-A)

RECEIPT OF DEPOSITION OF EMD

(Receipt No. / date

Name of Work : *Construction of Academic Building, Student hostel & Electric Substation along with all necessary infrastructure facilities for IIIT Vadodara at Dumad, Vadodara.SH:Execution of balance work at IIIT Vadodara.*

2. NIT No. : **03/EE(C)-II/SE-Vadodara/2026-27**

3. Estimated Cost: **Rs. 34,81,63,367/- (Civil Rs. 18,51,21,280/- + Elect. Rs.16,30,42,087/-)**

4. Amount of Earnest Money Deposit to be (In favour of: **“Executive Engineer, Vadodara Central Division, CPWD, Vadodara”**) : **Rs 44,81,634/-**

5. Last date & Time of submission of Bid: Upto 03:00 PM on 23.07.2026

(* To be filled by NIT approving authority/ EE at the time of issue of NIT and uploaded along with NIT)

Name of Contractor:#.....

1. Form of EMD#.....

2. Amount of Earnest Money Deposit#.....

3. Date of submission of EMD#.....

.....
Signature, Name and Designation of EMD
Receiving officer (EE/AE(P)/AAO) along with Officer stamp

Note:

- 1) *The EMD document (except DD) should be issued from the place where it is to be deposited/ submitted in Division office, for example, if the EMD has to be deposited in Division office CPWD Vadodara then the EMD should be issued from the Bank situated at Vadodara only.*
- 2) *The EMD documents should be deposited in Division office, not in Sub-Division office.*
- 3) *The Executive Engineer receiving EMD in original form shall examine the EMD deposited by the bidder and shall issue a receipt of deposition of earnest money to the agency in a given format uploaded by tender inviting EE. The receipt may be issued by the AE(P)/AAO.*
- 4) *The Executive Engineer receiving original EMD shall also intimate tender inviting Executive Engineer about deposition of EMD by the agency by email/ fax/telephonically.*
- 5) *The original EMD receiving Executive Engineer shall release the EMD after verification from the e-tendering portal website www.etender.cpwd.gov.in. free view> advance search>awarded tenders) that the particular contractor is not L-1 tenderer and work is awarded.*
- 6) *The tender inviting Executive Engineer will call for original EMD of the L-1 tenderer from EMD receiving Executive Engineer immediately.*

To be filled by EMD receiving EE.

Insertion : Nil Correction : Nil Omission : Nil AE(P)... / EE.....

(Form-B)

UNDERTAKING REGARDING GST REGISTRATION

To,
The Executive Engineer(C)-II
Central P.W.D., Vadodara

Subject :- ***Construction of Academic Building, Student hostel & Electric Substation along with all necessary infrastructure facilities for IIIT Vadodara at Dumad, Vadodara.SH:Execution of balance work at IIIT Vadodara.***

Having examined the details given in press notice and bid document for the above work, I/We hereby submit the following.

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

Seal of bidder.

Date of submission

Signature(s) of bidder(s)

Form-F

(Affidavit on Non-Judicial Stamp paper)

Undertaking on structural stability and soundness of already completed buildings and infrastructure Projects.

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

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

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

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

*Signature of
Notary with seal*

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

Note:

- 1) Affidavit to be furnished on a 'Non-judicial' stamp paper of **Rs. 200/-** (scanned copy of the notarized affidavit to be uploaded at the time of submission of bid).
- 2) All affidavits shall be made in current date after the date of invitation of tender.

Form-K

(Undertaking for ERP Training in CPWD)

To,
The Executive Engineer(C)-II,
CPWD, Vadodara.

Subject: Name of Work:##.....

to be filled by the Contractor

Dear Sir,

Having examined the details given in the bid document for the above work, I/we hereby submit the Undertaking that:

“If work is awarded to me/us, I/we or my/our authorized representative shall obtain ERP (Enterprise Resource Planning) training through any of the CPWD Regional Training Institutes at Delhi, Mumbai, Chennai and Kolkata, National CPWD Academy (NCA) Ghaziabad, Training arranged by Graduates of ERP "Train the Trainers Programme" conducted by NCA, Ghaziabad or through any other special training arranged by ERP Unit of CPWD within two months from the date of issue of letter of acceptance / intent. Training will be valid only if I/we/am/are registered in LMS of ERP and certificate is issued through LMS of ERP. Failure to do so, a recovery of **Rs.10,000/-** per week shall be made from the R/A bill without giving any show cause notice in this regard.

Signature of Bidder(s) or

An authorized Officer of the firm with stamp

UNDERTAKING REGARDING ELECTRICAL LICENCE

To,
The Executive Engineer(C)-II
Central P.W.D., Vadodara

Subject :- Construction of Academic Building, Student hostel & Electric Substation along with all necessary infrastructure facilities for IIIT Vadodara at Dumad, Vadodara.SH:Execution of balance work at IIIT Vadodara.

Sir,

Having examined the details given in press notice and bid document for the above work, I/we hereby submit the following:

“I/we hereby certify that I/we will either obtain valid electrical licence for Gujarat State at the time of execution of electrical work or associate Contractor having valid electrical licence of eligible class”.

Seal of bidder:

Date of submission:

Signature(s) of Bidder(s)

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CPWD-6 for e-Tendering

1. Percentage rate bids are invited on behalf of President of India from approved and eligible contractors of CPWD registered for Composite category for the work of
“Construction of Academic Building, Student hostel & Electric Substation along with all necessary infrastructure facilities for IIIT Vadodara at Dumad, Vadodara.SH:Execution of balance work at IIIT Vadodara.”

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

- 1.1 The work is estimated to cost **Rs. 34,81,63,367/- (Civil Rs. 18,51,21,280/- + Elect. Rs.16,30,42,087/-)** 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) 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 **5 (Five) 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. (i) The site for the work is available.
(ii) The architectural and structural drawings for the work are available
OR

The architectural and structural drawings shall be made available in phased manner, as per requirement of the same as per approved programme of completion submitted by the contractor after award of the work. **(Necessary shop drawing to be submitted by agency for approval as per direction of Engineer in charge)**

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 <http://etender.cpwd.gov.in> or www.cpwd.gov.in free of cost.
6. After submission of the bid the contractor can re-submit revised bid any number of times but before last time and date of submission of bid as notified.
7. ~~While submitting the revised bid, contractor can revise the rate of one or more item(s) any number of times (he need not re-enter rate of all the items) but before last time and date of submission of bid as notified.~~
8. Earnest Money in the form of Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipts, Banker's Cheque or Bank Guarantee (for balance amount as prescribed) from any of the Commercial Banks **(drawn in favour of Executive Engineer, Vadodara Central Division, CPWD, Vadodara)** shall be scanned and uploaded to the e-tendering website within the period of bid submission. **The original EMD should be deposited either in the office of Executive Engineer inviting bids or division office of any Executive Engineer, CPWD 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 up to the specified bid submission date and time.

A part of earnest money is acceptable in the form of bank guarantee also. In such a case, minimum 50% of earnest money or Rs. 20 lac, whichever is less, shall have to be deposited in shape prescribed above, and balance may be deposited in shape of Bank Guarantee of any Commercial bank having validity for a period of six months or more from the last date of receipt of bids which is to be scanned and uploaded by the intending bidders.

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

Copy of Enlistment Order and certificate of work experience and other documents as specified in the notice inviting e-tender shall be scanned and uploaded to the e-Tendering website within the period of bid submission. However, certified copy of all the scanned and uploaded documents as specified in e-tender notice shall have to be submitted by the lowest bidder within a week physically in the office of tender opening authority.

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

The bid submitted shall be opened at 03:30 PM on 23.07.2026.

10. The bid submitted shall become invalid and e-Tender processing fee shall not be refunded if:
- (i) The bidder is found ineligible.
 - (ii) The bidders does not deposit original EMD with division office of any Executive Engineer, CPWD.
 - (iii) The bidders does not upload scanned copies of all the documents as stipulated in the bid document.
 - (iv) If any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted physically by the lowest bidder in the office of bid opening authority.
 - (v) If a tenderer quotes nil rates against each item in item rate tender or does not quote any percentage above/below on the total amount of the tender or any section/sub head in percentage rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer.

11. The bidders whose bid is accepted will be required to furnish **Performance guarantee of 5% (Five Percent) of the ECPT or Contract Amount whichever is higher as per OM No. DG/CON/Construction 2023/20 dated 27/02/2026** of the bid amount within the period specified in Schedule F. This guarantee shall be in the form of Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt or Bank Guarantee from any of the Commercial Banks in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule 'F', including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor. The earnest money deposited along with bid shall be returned after receiving the aforesaid performance guarantee.

The contractor whose bid is accepted will also be required to furnish either copy of applicable licenses/registrations or proof of applying for obtaining labour licenses, registration with EPFO, ESIC and BOCW Welfare Board including Provident Fund Code No. if applicable and also ensure the compliance of the aforesaid provisions by the sub contractors, if any engaged by the contractor for the said work and Programme Chart (Time and Progress) within the period specified in Schedule F.

12. Description of the work is as follows “**Construction of Academic Building, Student hostel & Electric Substation along with all necessary infrastructure facilities for IIIT Vadodara at Dumad, Vadodara.SH:Execution of balance work at IIIT Vadodara.**”

Intending Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their bids as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidder shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by a bidder implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work.

13. The competent authority on behalf of the President of India does not bind itself to accept the lowest or any other bid and reserves to itself the authority to reject any or all the bids received without the assignment of any reason. All bids in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidders shall be summarily rejected.
14. Canvassing whether directly or indirectly, in connection with bidders is strictly prohibited and the bids submitted by the contractors who resort to canvassing will be liable for rejection.
15. The competent authority on behalf of President of India reserves to himself the right of accepting the whole or any part of the bid and the bidders shall be bound to perform the same at the rate quoted.
16. The contractor shall not be permitted to bid for works in the CPWD Circle (Division in case of contractors of Horticulture/Nursery category) responsible for award and execution of contracts, in which his near relative is posted a Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any Gazetted officer in the Central Public Works Department or in the Ministry of Housing and Urban Affairs. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Department.
17. No Engineer of Gazetted Rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from Government service, without the prior permission of the Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission

of the Government of India as aforesaid before submission of the bid or engagement in the contractor's service.

18. The bid for the works shall remain open for **acceptance for a period of thirty (30) days from the date of opening of bids.**

i) If any tenderer withdraws his tender or makes any modifications in the terms and conditions of the tender which is not acceptable to the department within 7 days after the last date of submission of bids, then the Government shall without prejudice to any other right or remedy, be at liberty to forfeit 50% of the earnest money absolutely irrespective of letter of acceptance for the work is issued or not.

ii) If any tenderer withdraws his tender or makes any modifications in the terms and conditions of the tender which is not acceptable to the department after expiry of 7 days after the last date of submission of bids, then the Government shall without prejudice to any other right or remedy, be at liberty to forfeit 100% of the earnest money absolutely irrespective of letter of acceptance for the work is issued or not.

iii) In case of forfeiture of earnest money as prescribed in para (i) and (ii) above, the bidders shall not be allowed to participate in the rebidding process of the same work.

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

- (a) The Notice Inviting Bid, all the documents including additional conditions, specifications and drawings, if any, forming part of the bid as uploaded at the time of invitation of bid and the rates quoted online at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.
- (b) Standard **C.P.W.D. Form 7** or other Standard C.P.W.D. Form as applicable.

20. For Composite Bids

20.1.1 The Executive Engineer in charge of the major component will call bids for the composite work. The cost of bid document and Earnest Money will be fixed with respect to the combined estimated cost put to tender for the composite bid.

20.1.2 The bid document will include following Five components:

Part A:- CPWD-6, **CPWD-7** including schedule A to F for the major component of the work, Standard General Conditions of Contract for CPWD 2023 (Construction Works) as amended/modified up to **the last date of submission of tender.**

Part B:- General / specific conditions, specifications and schedules of quantities applicable to major component (s) of the work.

Part C:- Schedule A to F for minor component of the work. (Competent authority under clause 2 and clause 5 shall be same authority as mentioned in schedule A to F for major components), General/specific conditions, specifications and schedule of quantities applicable to minor component(s) of the work.

Part D:- Schedule of quantities applicable to major & minor component (s) of the work.

Part E:- Price Bid Sheet.

20.1.3 The bidders must associate himself, with agencies as per NIT condition.

20.1.4 The eligible bidders shall quote rates for all items of major component as well as for all items of minor components of work.

20.1.5 After acceptance of the bid by competent authority, the EE in charge of major component of the work shall issue letter of award on behalf of the President of India. After the work is awarded, the main contractor will have to enter into one agreement with EE in charge of major component and has also to sign two or more copies of agreement depending upon number of EE's/~~DDH~~ in charge of minor components. One such signed set of agreement shall be handed over to EE/~~DDH~~ in charge of minor component(s).

EE of major component will operate **Part A, Part B and Part D** of the agreement. EE in charge of minor component(s) shall operate **Part C & D** along with **Part A** of the agreement.

20.1.6 Entire work under the scope of composite bid including major and all minor components shall be executed under one agreement.

20.1.7 Security Deposit will be worked out separately for each component corresponding to the estimated cost of the respective component of works.

20.1.8 The main contractor has to associate agencies for specialized component(s) conforming to eligibility criteria as defined in the bid document and has to submit detail of such agency(s) to Engineer-in-charge of relevant component(s) within prescribed time. Name of the agency(s) to be associated shall be approved by Engineer-in-charge of relevant component(s).

20.1.9 In case the main contractor intends to change any of the above agency/agencies during the operation of the contract, he shall obtain prior approval of Engineer-in-charge of relevant specialized component(s).

The new agency/agencies shall also have to satisfy the laid down eligibility criteria. In case Engineer-in-charge is not satisfied with the performance of any agency, he can direct the contractor to change the agency executing such items of work and this shall be binding on the contractor.

20.1.10 The main contractor has to enter into MoU with agency(s) associated by him. Copy of such MoU shall be submitted to EE/~~DDH~~ in charge of each relevant component as well as to EE in charge of major component. In case of change of associate contractor, the main agency(s) has to enter into MoU/agreement with the new- contractor associated by him.

20.1.11 Running payment for the major component shall be made by EE of major discipline to the main contractor. Running payment for minor components shall be made by the Engineer-in-charge of the discipline of minor component directly to the main contractor. The CMB shall be maintained independently by Engineer-in-Charge of major and minor components.

20.1.12A. The composite work shall be treated as complete when all the components of the work are complete. The completion certificate of the composite work shall be recorded by Engineer-in-charge of major component after record of completion certificate of all other components.

20.1.12B. Final bill of whole work shall be finalized and paid by the EE of major component. Engineer(s) in charge of minor component(s) will prepare and pass the final bill for their component of work and pass on the same to the EE of major component for including in the final bill for composite contract.

21 The intending bidders are required to update their profile in CPWD e-tender portal and to upload their bids well in advance of last date of submission of tender. Any issue related to updating profile / uploading tender can be resolved through the concerned Executive Engineer/ Assistant Engineer (Email Id- eevcd.cpwd@gov.in) or ERF help line no. 18001803286 or e-mail Id: cpwd.support@techmahindra.com. The e-tendering bidders are also advised not to wait to raise any issues till the last date of submission of the bid in their own interest. (As per DG/SOP/36 dated 25.03.2022).

22. The agency/contractor may seek any clarification regarding the above tender via email by 20.07.2026 (3:00 PM). After that, no clarification will be entertained by this office. (Email ID: ee-iiitvpd@cpwd.gov.in).
23. Defect liability period shall be one year from date of the completion recorded by the competent authority for entire work other than items specified exclusively in this agreement.

CENTRAL PUBLIC WORKS DEPARTMENT

PERCENTAGE RATE TENDER & CONTRACT FOR WORKS

(A) Tender for the work of: ***“Construction of Academic Building, Student hostel & Electric Substation along with all necessary infrastructure facilities for IIIT Vadodara at Dumad, Vadodara.SH:Execution of balance work at IIIT Vadodara.”***

- (i) To be uploaded by **03:00 PM** on 23.07.2026 at <http://etender.cpwd.gov.in>
- (ii) To be opened in presence of tenderers who may be present at **03:30 PM** on 23.07.2026 in the office of **Executive Engineer(C)-II, CPWD, Vadodara**

TENDER

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

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

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

A sum of **Rs.44,81,634/-** is hereby forwarded in Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee (for balance amount as prescribed) from any of the Commercial Banks as earnest money.

A copy of earnest money in Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee (for balance amount as prescribed) from any of the Commercial Banks is scanned and uploaded (**strike out as the case may be**). If I/We, fail to furnish the prescribed performance guarantee within prescribed period, I/We agree that the said President of India or his successors, in office shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely.

Further, if I/We fail to commence work as specified, I/We agree that President of India or the successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said performance guarantee absolutely. The said Performance Guarantee shall be a guarantee to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause 12.2 and 12.3 of the tender form.

Further, I/We agree that in case of forfeiture of Earnest Money or Performance Guarantee as aforesaid, I/We shall be debarred for participation in the re-tendering process of the work./We undertake and confirm that eligible similar work(s) has/have not been got executed through another contractor on back to back

basis. Further that, if such a violation comes to the notice of Department, then I/We shall be debarred for tendering in CPWD in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee.

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

Dated

Signature of Contractor

Witness:

Postal Address

Address:

Occupation:

ACCEPTANCE

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

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

- (a)
- (b)
- (c)

For & on behalf of President of India

Signature

Designation

Dated:

JURISDICTION OF COURTS

1.0 The court of the place from where the letter of award of work has been issued shall have the jurisdiction to decide any dispute arising out of or in respect of the contract.

2.0 CPWD does not have funds of its own and it carries out the works of client department from their funds (deposit, budgetary, authorization). The CPWD is making payments to the contractors after getting budget/ authorization/ deposit from various Ministries/ Client department. The payment to the contractor can be done only on availability of funds for that work from client department and in case of delay in getting funds from ministry. Client department, CPWD will not be responsible for delay in payment and no extra compensations on this account shall be granted apart from specified elsewhere in this document. The contractor has to quote his tender accordingly considering this aspect.

Additional Conditions for tender

- 1.0 The tile work in the toilet blocks of the Hostel Block and Academic Block has been executed partially. Tiles of RAK make have been used in the executed work. The bidder shall use tiles of the same brand, make, pattern, size, shade, and specifications for the balance work in the toilet portions of the Hostel Block and Academic Block to maintain uniformity. No deviation shall be permitted without the prior written approval of the Engineer-in-Charge.
- 2.0 The fixed portion of the aluminium work has been almost completed. The remaining shutter portion, glazing, hardware, fittings, and all other accessories shall be executed in conformity with the already completed fixed aluminium work in the Academic Block and Hostel Block so as to maintain uniformity in design, finish, and specifications.
- 3.0 The framework for the structural glazing has been partially executed in the Academic Block. The balance structural glazing work shall be carried out strictly in accordance with the already executed work, maintaining the same design, specifications, material, finish, and workmanship.
- 4.0 The campus shall achieve a minimum GRIHA 4-Star Rating. The DD-1 and DD-2 assessments have already been completed. The successful bidder shall carry out all pending compliances required for obtaining the GRIHA 4-Star Rating Certificate from the competent authority. No extra payment whatsoever shall be admissible on this account, and the quoted rates shall be deemed to include the cost of all such compliances and certification.
- 5.0 The successful bidder shall obtain the Occupancy Certificate and all other statutory approvals, clearances, and completion certificates required from the concerned authorities. The statutory fees payable to the concerned authority/Department/Government Office for obtaining such approvals, clearances, and certificates shall be reimbursed by the Department on production of original receipts and other authentic documentary evidence of the actual payment made by the bidder.

**PROFORMA OF SCHEDULES
(Major Component)**

(Separate Proforma for Civil, Elect. & Hort. Works in case of Composite e-bids)
(Operative Schedules to be supplied separately to each intending e-bidder)

Schedule 'A'

Schedule of quantities: Page No. 152 - 233.

Schedule 'D'

Extra schedule for specific requirement for the work: - As attached in this tender document.

Schedule 'E'

Reference to General Conditions of contract –

General Conditions of Contract 2023 for construction work as modified and corrected up to the previous day of the last date of submission of the tender

Name of Work	<i>Construction of Academic Building, Student hostel & Electric Substation along with all necessary infrastructure facilities for IIIT Vadodara at Dumad, Vadodara.SH:Execution of balance work at IIIT Vadodara.</i>
Estimated cost of the work	Rs. 34,81,63,367/- (Civil Rs. 18,51,21,280/- + Elect. Rs.16,30,42,087/-)
Earnest money	Rs 44,81,634/-
Performance Guarantee	<p>a) 5% of tendered value or Estimated Cost Put to tender (ECPT) (whichever is higher).</p> <p>b) Where the tendered amount is less than eighty percent (80%) of the Estimated 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.</p> <p>(Please see amendment vide OM No. DG/CON/Construction 2023/20 dated 27.02.2026).</p>
Security Deposit	2.5% of tendered amount

SCHEDULE 'F'

GENERAL RULES & DIRECTIONS:

Officer inviting tender	<i>Executive Engineer(C)-II, C.P.W.D, Vadodara or his successor thereof.</i>
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Definitions:

2(vi)	Engineer-in-Charge	i) Executive Engineer(C)-II, CPWD, Vadodara or successor thereof for Major component i.e. Civil work, and ii) Executive Engineer(E), CPWD, Vadodara or <i>her/his</i> successor for Minor component i.e. E & M works.
2(viii)	Accepting Authority	Special Director General, Mumbai, or her/his successor
2(x)	Percentage of cost of materials and labor to cover all overheads and profits	15%
2(x) (a)	Standard Schedule of Rates: Civil Items of Work:	i) DSR 2023 with up-to-date correction slips issued up to the previous day of the last date of submission of tender. ii) DSR-2025 (E&M) with up-to-date correction slips issued up to the previous day of the last date of submission of tender.
2(xi)	Department:	Central Public Works Department
9(ii)	Standard CPWD contract Form:	C.P.W.D. FORM 7 of General Conditions of Contracts 2023 for construction work, modified and corrected up to the previous day of the last date of submission of bid.

Clause 1

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

Clause 2

Authority for fixing compensation under clause 2	Superintending Engineer, CPWD, Vadodara, or her/his successor
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Clause 5

Number of days from the date of issue of letter of acceptance for reckoning date of start.	10 days
Time allowed for the execution of work	5 (Five) Months

Milestone(s) as per the table given below:

Sl. No	Description of milestone	Period for completion (From date of start in days)	Withheld amount for non-achievement of milestone
1.	30% of tendered value (Civil)	2 Months	1.25% of tendered amount (civil).
2	60% of tendered value (civil)	3 Months	1.25% of tendered amount (civil).
3.	90% of tendered value (civil)	4 Months	1.25% of tendered amount (civil).
4.	Completion of work in all respect including all statutory approvals and occupancy certificate.	5 Months	1.25% of tendered amount (civil).

Note: - The Withhold milestone will only be released when subsequent milestone is achieved within the specified time.

(i) Authority to convey the decision of shifting of milestone and extension of time	Executive Engineer(C)-II, CPWD, Vadodara or her/his successor
(ii) Authority to decide rescheduling of milestones and extension of time	Superintending Engineer, CPWD, Vadodara, or her/his successor
(iii) Authority to decide shifting of date of start in case of delay in handing over of site	Superintending Engineer, CPWD, Vadodara, or her/his successor
Clause 5.2	Hinderance shall be done through CPWD ERP Portal and hindrance registrar shall be maintained as well.

Proforma of 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	Entire site	10 th day
Part B	Portion with encumbrances	Nil	NA
Part C	Portions dependent on work of other agencies	Nil	NA

Schedule of issue of drawings

Part	Portion of site	Time Period for Issue of drawings reckoned from the date of issue of letter of intent
Part A	Architectural Drawings	On the day of start of the work
Part B	Structural Drawings	On the date of start of individual activity
Part C	E&M Drawings	On the date of start of individual activity

Clause 6

Computerized Measure Book (CMB) / Electronic Measurement Book (EMB)

Mode of Measurement	CMB/EMB through ERP Module.
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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 for interim payment.	Civil- Rs 370 Lakhs Electrical- Rs. 326 Lakhs
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Clause 7A

Whether Clause 7A shall be applicable	Yes, applicable
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Clause 8A

Authority to decide compensation on account of if contractor fails to submit completion plans	Engineer-in-Charge
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Clause 10 A

List of testing equipment to be provided by the contractor at site lab.	As per the list given on pages 37-38 of this document.
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Clause 10 B (i) & (ii)

Clause 10 B (i)	Applicable
Clause 10 B (ii)	Not Applicable

Clause 10 C

Applicable

Component of labor expressed as a percentage of the value of work	Applicable (25% Labour Component)
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Clause 10 CC

Applicable/Not applicable	Not Applicable
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Clause 11

Specifications to be followed for execution of work	CPWD Specifications for works-2019 Vol. I & II, with up-to-date correction slips issued up to the previous day of submission of tender for items of building works, and Particular Specifications included in this tender document. (Hereinafter called specifications)
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Clause 12.2 (c)

Deviation limit beyond which clause 12.2 (c) shall apply for all the items	100%
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(i) Deviation Limit beyond which clauses 12.2(c) shall apply for foundation work (except items mentioned in earthwork subhead in DSR and related items)	100%
(ii) Deviation Limit for items mentioned in earthwork subhead in DSR and related items	

Clause 16

Competent Authority for Deciding reduced rates	Superintending Engineer, CPWD, Vadodara, or her/his successor
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Clause 18

List of mandatory machinery, tools & plants to be deployed by the contractor at the site.	As per page 75
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Clause 19 C

Authority to decide the penalty for each default	Executive Engineer(C)-II, CPWD, Vadodara.
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Clause 19 D

Authority to decide the penalty for each default	Executive Engineer(C)-II, CPWD, Vadodara.
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Clause 19 G

Authority to decide the penalty for each default	Executive Engineer(C)-II, CPWD, Vadodara.
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Clause 19 K

Authority to decide the penalty for each default	Executive Engineer(C)-II, CPWD, Vadodara.
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Clause 25

Conciliator	Special Director General (Mumbai or her/his successor)
Arbitrator Appointing Authority	SE-Vadodara CPWD
Place of Arbitration	Vadodara

Clause 32

Requirement of Technical Representative (s) and Recovery Rate						
Sl. No.	Requirement of Technical Staff		Minimum experience (Years)	Designation of Technical Staff	The rate at which recovery shall be made from the contractor in the event of the not fulfilling the provision of Clause	
	Qualification	Number (of major + minor component)			Figures	Words
1	Graduate Engineer	1 (Civil Engineering)	20 (and having experience of one similar nature of work)	Project Manager	Rs. 60,000/- Per Month	Sixty Thousand per Month
2	Graduate Engineer	1 (Civil Engineering)	12 (and having experience of one similar nature of work)	Deputy Project Manager	40,000/- Per Month	Forty Thousand per month
3	Graduate Engineer /Diploma Engineer	1 (Civil Engineering) + 1 (Elect. Engineering)	5 or 10 respectively	Project /Site Engineer	25,000/- Per Month per Person	Twenty five Thousand Per Month per Person
4	Graduate Engineer /Diploma Engineer	1 (Civil Engineering) + 1 (Elect. Engineering)	2 or 5 respectively	Project planning/ quality/ billing Engineer	15,000/- Per Month per Person	Fifteen Thousand Per Month per Person

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

Clause 38

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

PART-B

(CIVIL WORK)

GENERAL REQUIREMENTS FOR THE TENDER/WORKS

Name of Work: “Construction of Academic Building, Student hostel & Electric Substation along with all necessary infrastructure facilities for IIIT Vadodara at Dumad, Vadodara.SH: Execution of balance work at IIIT Vadodara”

- 1 The tenderer is advised to read and examine the tender documents for the work and the set of drawings available with Engineer-in-charge. He should inspect and examine the site and its surroundings by himself before submitting his tender.
- 2 Separate schedule of quantity is included in this tender for civil and electrical items of work. If the tenderer wants to offer any unconditional rebates on their rates, the same should also be offered in the respective components of civil and electrical schedule separately. The contractor shall quote the percentage rates in figures and words accurately so that there is no discrepancy in rates written in figures and words.
- 3 Time allowed for the execution of work is **5 (Five) Months**.
- 4 The contractor(s) shall submit a detailed program of execution in accordance with the master programme / milestone within ten days from the date of issue of award letter.
- 5 Contractor has to install Fully Automatic batching plant on minimum capacity 18 cum/hr during the Currency of work and nothing extra will be paid on this account.
- 6 Quality of the project is of utmost importance. This shall be adhered to in accordance with the provisions of CPWD specifications and guidelines given in the relevant paras.
- 7 The contractor (s) shall make his own arrangements for electricity and water required for the execution of work. Nothing extra shall be paid on this account.
- 8 **Cement shall be arranged by the contractor himself.**
- 9 **Steel Reinforcement shall be arranged by the contractor himself.**
- 10 **Engagement of agency for specialized works:**

Contractor has to engage specialized agencies for specialized items of works such as water proofing. Only those specialized agencies/firms who have satisfactorily executed works as per criteria prescribed in **Para-12, page – 8**.
- 11 Contractor has to deploy required Plant and machinery on the project. In case the contractor fails to deploy the plant and machinery whenever required and as per the direction of the Engineer-in-charge, he (Engineer-in-charge) shall be at a liberty to get the same deployed at the risk and cost of the contractor.
- 12 The contractor shall submit the running bills in the shape of the computerized MB in pages of A-4 size as per the standard format of department and shall act as per modified clause 6 A of CPWD-7.
- 13 Contractor has to provide reinforcement cover blocks made of approved proprietary pre packed free flowing mortars (Conbextra as manufactured by M/s Fosroc Chemical India Ltd. or approved equivalent) of high early strength.
- 14 The contractor shall comply with the provisions of the Apprentices Act 1961, and the rules and orders issued there under from time to time.
- 15 Bricks shall be of not less than class designation as specified in the nomenclature of the item. The average water absorption of bricks, when immersed in water for 24 hours, shall not be more than 20% of their dry weight.

16.0 Intending Bidders are advised to get familiarized with the local body rules. Fire fighting VMC rule, tree cutting authorities, environment clearances, orders passed by any court on the environment issues, any other issue related to obtaining commencement certificate & occupancy certificate and satisfy themselves before submitting their bids as to the status, nature of the rules and regulations and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. Bidder shall be deemed to have full knowledge of such rules and regulations whether he has read it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. In case of reduction of scope of work or no work is possible to carry out on account of such issues, no cost shall be payable to them. Submission of a bid by the bidder implies that he has read this notice and all other documents and has made himself aware of the Local Body Byelaws and other factors having a bearing on the execution of the work.

MATERIAL AND QUALITY ASSURANCE

- 1 The contractor shall ensure quality control measures on different aspects of construction including materials, workmanship and correct construction methodologies to be adopted. He shall have to submit quality assurance programme within two weeks of the award of work. The quality assurance programme should include method statement for various items of work to be executed along with check lists to enforce quality control.
- 2 The contractor shall get the source of all other materials, not specified elsewhere in the document, 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. Similarly, the contractor shall submit brand/ make of various materials not specified in the agreement, to be used for the approval of the Engineer-in-Charge along with samples and once approved, he shall stick to it.
- 3 The contractor shall submit shop drawings of staging and shuttering arrangement, aluminum work, and other works 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.

4 Test Laboratories :

A. Laboratory at site :

The contractor shall establish a testing lab at site and provide and materials for the field tests mentioned in the list of mandatory tests given in CPWD specifications 2019 Vol. 1 & 2. Nothing extra shall be payable to him on this account.

The representatives of the department shall be at liberty to inspect the testing facilities at site and conduct testing at random in consultation with Engineer in charge. The contractor shall provide all necessary facilities for the purpose. The laboratory shall be equipped, inter alia, with the following equipments:

a) Balances:

- i) 7 kg to 10 kg capacity, semi-self indicating type – Accuracy 10 gm.
- ii) 500 gm capacity, semi-self indicating type Accuracy 1 gm.
- iii) Pan Balance- 5 kg Capacity- Accuracy 10 gm.

b) Ovens- Electrically operated thermostatically controlled up to 110°C- Sensitivity 1°C.

c) Sieves: as per IS: 460

- i) IS Sieves – 450 mm internal dia of sizes 100 mm, 80 mm, 63 mm, 50 mm, 40 mm, 25 mm, 20 mm, 12.5 mm, 10 mm, 6.3 mm, 4.75 mm, complete with lid and pan.
- ii) IS Sieves – 200 mm internal dia (brass frame) consisting of 2.36 mm, 1.18 mm, 500 microns, 425 microns, 300 microns, 212 microns, 150 microns, 90 microns, 75 microns with lid and pan.

d) Sieve shaker capable of 200 mm and 300 mm dia sieves, manually operated with timing switch assembly.

e) Equipment for slump test- slump cone, steel plate, taping rod, steel scale, scoop.

Insertion : Nil Correction : Nil Omission : Nil AE(P)... / EE.....

f) Equipment for concrete testing

i) Concrete cube moulds 15x15x15cm.	36	Nos.
ii) Tempering Rods 2Kg weight length 40cm and ramming face 25mm	2	Nos.
iii) Extra Bottom plates for 15cm cube mould	12	Nos.
iv) Standard Vibration table for cubes	2	Nos.
v) Dial gauges 25 mm travel- 0.01 mm/division least count-	2	Nos.
vi) Universal Compression testing machine of 100 tonne capacity electrically operated.	1	Nos.

Not more than 90% tests for material be performed at site lab with above stated equipment's, however at least 10% testing of materials shall be got done from external laboratories. However, for the tests to be carried out by the external laboratories, the contractor shall supply free of charge all the materials required for testing, including transportation. If the tests which were to be conducted in the site laboratory are conducted in other laboratories for any the reasons the cost of such tests shall be borne by the contractor.

• **Other Laboratories :**

The contractor shall arrange carrying out all tests required under the agreement through the laboratory as approved by the Engineer-in-Charge and shall bear all charges in connection therewith including charges for testing for all materials.

Testing of materials in any Govt Lab / Public Undertaking Lab/IIT or NIT lab/Government Engineering college may be allowed by the Engineer in charge. However incase of private lab, the **competent authority** will approve the lab accredited by NABL or any other accreditation body which operates in accordance with ISO/IEC 17011 and accredits labs as per ISO/IEC 17025 for testing and calibration scopes.

• **Sampling of Materials :**

- (i) Sample of building materials fittings and other articles required for execution of work shall be got approved from the Engineer-in-Charge. Articles manufactured by companies of repute and approved by the Engineer-in-Charge shall only be used. Articles bearing BIS certification mark shall be used. In case the above are not available, 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.
- (ii) The contractor shall ensure quality of construction in a planned and time bound manner. Any sub-standard material/work beyond set out tolerance limit shall be summarily rejected by the Engineer-in-Charge.
- (iii) 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/materials. Wherever BIS marked materials are brought to the site of work, the contractor shall if required, by the Engineer-in-Charge furnish manufacturers test certificate to establish that the material produced by the contractor for incorporation in the work satisfies the provisions of BIS codes relevant to the material and/or the work done.

- (iv) The contractor shall procure all the materials in advance so that there is sufficient time to testing and approving of the materials and clearance of the same before use in work.
- (v) All materials brought by the contractor for use in the work shall be got checked from the Engineer-in-Charge or his authorized representative of the work on receipt of the same at site before use.
- (vi) The contractor shall be fully responsible for the safe custody of the materials issued to him even if the materials are in double lock and key system.
- (vii) The Stone aggregate / stone, sand shall be brought from source **Sevaliya, Sankheda** subjected to the said materials confirm CPWD specifications.

5 The day to day receipt and issue accounts of different grade/brand of cement shall be maintained separately in the standard proforma by the Jr. Engineer-in-Charge of work and which shall be duly signed by the contractor or his authorized representative.

6 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/ideography etc shall be born by the department.

7 The contractor shall be fully responsible for the safe custody of materials brought by him issued to him even though the materials are under double lock key system.

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

9 Cement issued shall be for consumption at site only. No cement for factory made items and those not manufactured at site shall be issued.

10 In case there is any discrepancy in frequency of testing as given in the list of mandatory test and that in the individual sub-head of work as per CPWD specification 2019 Vol. 1 & 2 the higher of the two frequencies of testing shall be adopted.

11 Maintenance of Registers:

11.1 All the registers for tests of material to be carried out at construction site or in outside laboratories shall **be maintained by the contractor**. These register shall be issued to the contractor by Engineer-in-Charge in the same manner as being issued to CPWD field staff.

11.2 The test registers to be issued to the contractor are:

- (a) Materials at site account register.
- (b) Cement register.
- (c) Master test registers.
- (d) Cube test register.
- (e) Paint register.
- (f) Inspection registers.
- (g) Drawing register.

11.3 All the entries in the register will be made by the designated engineering staff of the contractor and same should be regularly reviewed by JE/AE/EE.

11.4 Contractor shall be responsible for safe custody of all the test registers.

11.5 Submission of copy of all test registers, material at site register along with each alternate running account bill and final bill shall be mandatory. These registers should be checked in the office of Executive Engineer(C)-I, CPWD, Vadodara. Or his successor thereof.

11.6 Ultrasonic Pulse velocity Method of Test for RCC: Ultrasonic pulse velocity method of test for RCC shall be done as routine test as per IS 13311 (Part-I) : 1992. Concrete quality grading shall be done and concrete having graded as good and excellent shall be accepted.

ADDITIONAL CONDITIONS FOR CEMENT

1. The contractor shall procure 43 grade ordinary Portland cement conforming to IS: 8112 /Portland Pozzolana Cement conforming to IS:1489 {Part-I} as required in the work, from reputed manufacturers or their authorized dealers/ reseller of cement such as Ultra Tech, A.C.C., Ambuja, Birla, Vikram, Shreecement, Century cement **or from any other reputed cement Manufacturer having a production capacity not less than one million tonnes per annum as approved by the competent authority or his successor thereof appointed by competent authority for that region** . The tenderers may also submit a list of names of cement manufacturers which they propose to use in the work. The tender accepting authority reserves right to accept or reject name(s) of cement manufacturer(s) which the tenderer proposes to use in the work. No change in the tendered rates will be accepted if the tender accepting authority does not accept the list of cement manufacturers, given by the tenderer, fully or partially.

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

2. The cement shall be brought at site in bulk supply of approximately 50 tonnes or as decided by the Engineer-in-Charge. The cement godowns of the capacity to store a minimum of **2000 bags** of cement shall be constructed by the contractor at site of work for which no extra payment shall be made.
3. Double lock provision shall be made to the door of the cement godown. The keys of one lock shall remain with the Engineer-in-charge or his authorized representative and the key of the other lock shall remain with the contractor. The contractor shall be responsible for the watch and ward and safety of the cement godown. The contractor shall facilitate the inspection of the cement godown by the Engineer-in-Charge at any time.
4. The cement shall be got tested by the Engineer-in-Charge and shall be used on the work only after satisfactory test results have been received. The contractor shall supply free of charge the cement required for testing including its transportation cost to test laboratories. The cost of tests shall be borne by the contractor.
5. The actual issue and consumption of cement on work shall be regulated and proper accounts maintained as provided in clause 10 of the contract. The theoretical consumption of cement shall be worked out as per procedure prescribed in clause 38 of the contract and shall be governed by conditions laid therein. No Minus side cement consumption is allowed. In case of excess consumption no adjustment need to made.
6. The cement brought to site and the cement remaining unused after completion of the work shall not be removed from site without the written permission of the Engineer-in-Charge.
7. The damaged cement shall be removed from the site immediately by the contractor on receipt of a notice in writing from the Engineer-in-Charge. If he dose not do show within three days of receipt of such notice, the Engineer-in-Charge shall get it removed at the cost of the contractor.

- 8** The contractor may use PPC conforming to IS 1489 (Part I) in place of OPC for other items of work other than concrete and RMC.
- 9** 43 grade ordinary Portland cement conforming to IS 8112. shall be used for concrete and RMC work. However Portland Pozzolona Cement conforming to IS 1489 (Part I) shall be used for other items of work. The Contractor shall procure cement only from reputed manufacturers as per list of preferred brands as specified in the tender document.
- 10** Cement:- 43 grade ordinary Portland cement conforming to IS 8112. Shall be used.
- a) In case 43 grade Ordinary Portland Cement is not available, the contractor will be allowed to use 53 grade Ordinary Portland Cement (confirming to IS: 12269), subject to documentary evidence produced by the contractor regarding non availability of the specified grade and also subject to independent verification by the Engineer-in-Charge. Nothing extra shall be paid for this.
 - b) Use of fly ash conforming to IS 3812 (Part –I) is permitted in cement concrete work as partial substitution of OPC subject to fulfilment of conditions as per IS 1489 (Part-I) and satisfying the condition of minimum cement content.

ADDITIONAL CONDITIONS FOR STEEL REINFORCEMENT

1 Special condition for steel reinforcement bars

1.1 (a) The CPWD / Contractor shall procure *ISI-marked TMT reinforcement bars* of various grades from:-

- (1) The Steel Manufacturers such as SAIL, TATA steel Ltd., RINL, Jindal Steel & Power Ltd, and JSW steel Ltd. or their authorized dealers having valid BIS license for IS: 1786-2008 (Amendment-1 November 2012)
- (2) The steel manufacturers or their authorized dealers (as per following selection criteria) having valid BIS license for IS:1786- 2008 (Amendment-1 November 2012).

The procured steel should have the following qualities: -

- i. Excellent ductility, bendability, and elongation of finished product due to possible refining technology.
- ii. Consumption of steel should be accurate as per design.
- iii. Steel should have no brittleness problem in the finished product.
- iv. Steel should carry the quality of corrosion and earthquake resistance.
- v. Quality steel with achievement of the proper level of sulphur and phosphorus as per IS: 1786-2008.

(b) Selection Criteria of steel manufacturers

(l) The supply of reinforcement steel for all CPWD works should have following selection criteria of steel manufacturers: - Steel producers of any capacity using iron or/processed iron ore as the basic raw material adopting advanced refining technologies as given under,

- (i) DRI-EAF= Direct Reduced iron - Electric arc furnace.
or
- (ii) BF-BOF= Blast furnace - Basic oxygen furnace
or
- (iii) COREX-BOF= COREX- Basic oxygen furnace

For production of liquid steel to finish product at single/multiple locations with NABL or any other Similarly placed accrediting Government body that operates in accordance with ISO/IEC 17011 and accredits labs as per ISO/IEC 17025 conforming to IS:1786 -2008 (Amendment -1 November 2012).

The checklist for incorporation of any quality steel producer is enclosed for technical assessment is given in Annexure-IV

Chief Engineer CSQ (Civil) unit, Directorate of CPWD shall approve the steel manufacturers.

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

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

1.4 The steel reinforcement bars shall be brought to the site in bulk supply of 10 tonnes or more, or as decided by the Engineer-in charge.

- 1.5** The steel reinforcement bars shall be stored by the contractor at site of work in such a way as to prevent their distortion and corrosion, and nothing extra shall be paid on this account. Bars of different sizes and lengths shall be stored separately to facilitate easy counting and checking.
- 1.6** For checking nominal mass, tensile strength, bend test, re-bend test etc. specimens of sufficient length shall be cut from each size of the bar at random, and at frequency not less than that specified below:

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

- 1.7** The contractor shall supply free of charge the steel required for testing including its transportation to testing laboratories. **The cost of tests shall be borne by the contractor.**
- 1.8** The actual issue and consumption of steel on work shall be regulated and proper accounts maintained as provided in clause 10 of the contract. The theoretical consumption of steel shall be worked out as per procedure prescribed in clause 38 of the contract and shall be governed by conditions laid therein. No Minus side consumption is allowed. In case of excess consumption no adjustment need to be made.
- 1.9** The steel brought to site and the steel remaining unused shall not be removed from site without the written permission of the Engineer-in-charge.

Special Condition for Steel (Annexure-IV)

S.No	Item	Checkpoint	Remarks
1	Steel Producer having manufacturing facilities at Plant	a. Factory address and Registration No.	
		b. Certificate of manufacturing process	
		c. refining process of steel producer	
		d.1 BF-BOF route	
		e.2 Corex-BOF route	
		f.3 DRI-EAF route	
		with documentary evidence either for BOF or EAF	
		d. Steel plant having infrastructure for producing sponge iron, billetes and TMT Rebars	
		e. Production and Quality Flow Chart	
		f. Plant evaluation and Process Verification	
2	Established	Document verification for :	
		a. Govt./PSU Approvals	
		b. Supply orders of TMT Re-bars in Govt. Projects (Minimum-5 years)	

Insertion : Nil Correction : Nil Omission : Nil AE(P)... / EE.....

		c. Verification of direct supply orders to any state/central govt. Department	
		d. User Certificate issued by any Govt. Department directly	
3	Indigenous	Document evidence like :	
		a. Certificate of incorporation	
		b. Memorandum of Articles of Association	
		c. Credit rating of the company from CARE/CRISIL/ICRA should not be C/D grade (minimum last 3 year)	
4	Reliable	a. Test results from Govt./NABL accredited laboratories	
		b. In-house testing facility for physical / Chemical tests (NABL accredited)	
		c. Calibration Certificates	
		d. List of Lab Equipments	
		d.1 Spectrometer	
		d.2 Computerized UTM	
5	Use of Iron-Ore/ Processes iron are as basic raw materials	Verification of Iron-Ore/Process iron are invoices	
6	In-house rolling facility	Plant verification to identify in-house rolling facilities, production of liquid steel & crude steel	
7	Licenses & Certificates	a. ISO 9001:2008 Certification	
		b. ISO 14001:2004 Certification	
		c. OHSAS 18001:2007 Certification	
		d. IS 1786:2008 (TMT Re-bars)	
		e. IS 2830:1992 (billets)	
8	Product Range	TMT Re-bars FE 415/415D/500/500D/500/550D	
		CRS (Corrosion Resistant) & EQR (Earthquake Resistant) TMT Re-bars Size 8 to 36 mm dia	

Note :

DRI - EAF - > Direct Reduce iron – Electric ARC Furnace

BF – BOF - > Blast Furnace – Basic Oxygen Furnace

COREX – BOF - > COREX Furnace – Basic Oxygen Furnace

- 1.10** Steel bars brought by the contractor for use in the work shall be got checked from the Engineer-in-Charge or his authorized representative of the work on receipt of the same at site before use.
- 1.11** In case the contractor brings surplus quantity of steel the same after completion of the work will be removed from the site by the contractor at his own cost after approval of the Engineer-in-Charge.
- 1.12** Reinforcement including authorized spacer bars and lappages shall be measured in length of different diameters, as actually (not more than as specified in the drawing) used in the work, nearest to a centimeter. Wastage and unauthorized overlaps shall not be measured.

Insertion : Nil Correction : Nil Omission : Nil AE(P)... / EE.....

1.13 The standard sectional weights referred to as in Table 5.4 under para 5.3.4, page-140, in CPWD specifications for works 2019 Vol.1 will be considered for conversion of length of various sizes of MS bars, Tor steel bars and TMT bars into standard weight.

1.14 Records of actual sectional weight shall also be kept dia-wise & lot-wise. The average sectional weight for each diameter shall be arrived at from samples from each lot of steel received at site. The decision of the Engineer-in-Charge shall be final for the procedure to be followed for determining the average sectional weight of each lot. Quantity of each diameter of steel received at site of work each day will constitute one single lot for the purpose. The weight of steel by conversion of length of various sizes of bars based on the actual weighted average sectional weight shall be termed as derived actual weight.

1.15 If the derived weight as in para **1.14** above is lesser than the standard weight as in para 1.13 above the derived actual weight shall be taken for payment.

If the derived actual weight is found more than the standard weight then the standard weight as worked out in para 1.13 above shall be taken for payment. In such case nothing extra shall be paid for the difference between the derived actual weight and the standard weight.

1.16 Mixing of different type of steel/different grades of steel shall not be allowed in the same structural members as main reinforcement to satisfy clause 26.1 of IS:456.

1.17 Tolerances on Nominal Mass (individual sample) shall be as under:-

(Table 5.4A / page-141 / Specification – Vol-1-2019)

Sl. No.	Nominal size mm	Tolerances on the Nominal Mass, percentage
1	Up to and including 10	-8%
2	Over 10 up to & including 16	-6%
3	Over 16	-4%

GENERAL TERMS AND CONDITIONS

1. The order of preference in case of any discrepancy as indicated in condition No. 8.1 under “Conditions of Contract” give in standard CPWD contract form may be read as the following:
 - (i) Description of items as given in Schedule of quantities
 - (ii) Particular specifications
 - (iii) Special conditions
 - (iv) Additional Conditions
 - (v) Tender drawings attached
 - (vi) CPWD Specifications
 - (vii) General Conditions of Contract for CPWD works
 - (viii) I.S. Codes
 - (ix) National Building code.
 - (x) ASTM, BS, or other foreign origin code mentioned in tender document
 - (xi) Decision of Engineer-in-Charge
 - (xii) Sound Engineering practices or well-established local construction practices

Note: Unless otherwise specified, CPWD Specifications 2019 volume I & II with corrections slips till the last date of tender submission shall be followed in general. Any additional item of work, if taken up subsequently, shall also conform to the ‘relevant CPWD specifications mentioned above.

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

2. Except for the items, for which particular specifications are given or where it is specifically mentioned otherwise in the description of items in the schedule of quantities the work shall generally be carried out in accordance with the “CPWD specifications 2019 Vol. 1 and Vol. 2 (with upto date corrections slips). (Hereinafter to be referred to as CPWD specifications) and instructions of Engineer-in-Charge. Wherever CPWD specifications are silent the latest IS codes/specification shall be followed.
- 3 Unless otherwise provided in the Schedule of Quantities/Specifications, the rates tendered by the contractor shall be all inclusive and shall apply to all heights, lifts, leads and depths of the work and nothing extra shall be payable to him on account of the same.
- 4 The proposed building is a prestigious project and quality of work is paramount importance. Contractor shall have to engage well experienced skilled labour and deploy modern T&P and other equipment to execute the work. Many items like stone masonry & stone cladding works, stone flooring, and structural glazing, PVDF coating aluminium composite panel and other specialized flooring work, Wood work will specially require engagement of skilled workers having experience particularly in execution of such items.
- 5 (a) The contractor (s) shall inspect the site of work before tendering and acquaint himself with the site conditions and no claim on this account shall be entertained by the department.
b) The contractor (s) shall get himself acquainted with nature and extent of the work and satisfy himself about the availability of materials from kiln or approved quarries for collection and conveyance of materials required for construction.
- 6 The contractor (s) shall study the soil investigation report for the site and satisfy himself about complete characteristics of soil and other parameters of site. However, no claim on the alleged inadequacy or incorrectness of the soil data shall be entertained.

- 7** The main work at the **IIIT Vadodara** site is progressing in full swing. The contractor must complete the work in a coordinated manner with the existing contractor. No hindrance on this account will be entertained by the Engineer-in-charge.
- 8** 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 light and other illumination on for cautioning the public at night.
- 9** The contractor 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 dangers and incidents caused to existing / new work due to negligence on his part. No hindrances shall be caused to traffic during the execution of the work.
- 10** Contractor shall provide permanent bench marks and other reference points for the proper execution of work and these shall be preserved till the end of work. All such reference points shall be in relation to the levels and locations, given in the architectural and plumbing drawings.
- 11** The contractor shall make his own arrangement for obtaining electric connection(s) if required and make necessary payments directly to the department concerned.
- 12** Other agencies doing works related with this project may also simultaneously execute their works and the contractor shall afford necessary facilities for the same. The contractor shall leave such necessary holes, openings etc. for laying/burying in the work, pipes cables, conduits, clamps, boxes and hooks for fan clamps etc. as may be required for the other agencies. Nothing extra over the Agreement rates shall be paid for doing these.
- 13** The contractor shall fully comply with all legal orders and directions of the Public or local authorities or municipality and adhere by their rules and regulations and pay all fees and charges for which he may be liable in this regard. Nothing extra shall be paid/reimbursed for the same.
- 14** The building work shall be carried out in the manner complying in all respects with the requirements of the relevant bylaws and regulations of the local body under the jurisdiction of which the work is to be executed or as directed by the Engineer-in-charge and nothing extra shall be paid on this account.
- 15** The contractor shall give a performance test of the entire installation(s) as per standing specifications before the work is finally accepted by making his own arrangements for water supply, electricity etc. and nothing extra whatsoever shall be payable for the same.
- 16** If as per local Municipal regulations, huts for labour are not to be erected at the site of work; the contractor shall be required to provide such accommodation at a place outside the campus as is acceptable to the local body and nothing extra shall be paid on this account.
- 17** It shall be ensured by the contractor that no electric live wire is left exposed or unattended to avoid any accidents in this regard.
- 18** The structural and architectural drawings shall at all times be properly co-related before executing any work. However, in case of any discrepancy in the item given in the schedule of quantities

appended with the tender and Architectural drawings relating to the relevant item, the former shall prevail unless otherwise given in writing by the Engineer-in-charge.

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

20 The entire royalty at the prevalent rates shall have to be paid by the contractor on all the boulders, metals, shingle sand etc. collected by him for execution of the work, directly to the Revenue authority or authorized agents of the State Government concerned or the Central Government, as the case may be.

21 The contractor shall issue Identity card to all labourers and engineers/staff engaged by him and nothing shall be paid on this account.

22 PROGRAMME CHART

The contractor shall prepare an integrated programme chart for the execution of work and the detailed provision in clause 5 of GCC shall be followed.

23 If the work is carried out in more than one shift or during night no claim on this account shall be entertained.

24 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. 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.

25 The contractor shall be responsible for the watch and ward / guard of the buildings, safety of all fittings and fixtures including sanitary and water supply 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.

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

27 The contractor shall take instructions from the Engineer-in-charge for stacking of materials. No excavated earth or building materials etc. shall be stacked / collected in areas where other buildings, roads, services, compound walls etc. are to be constructed.

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

28 The works shall be carried out in accordance with the Architectural drawings and structural drawings, to be issued from time to time by the Engineer-in-Charge. Before commencement of any item of work, the contractor shall correlate all the relevant architectural and structural drawings issued for the work and satisfy himself that the information available there of is complete and unambiguous. The discrepancy, if any shall be brought to the notice of the Engineer-in-Charge before execution of the work. The contractor alone shall be responsible for any loss or damage executing by the commencement of work on the basis of any erroneous and or incomplete information.

- i) The contractor shall take all precautions to avoid accidents by, exhibiting caution boards day and night, speed limit boards, red flags, red light and providing necessary barriers and other measures required from time to time. The contractor shall be responsible for all damages and accidents due to negligence on his part.
- ii) Other agencies will also simultaneously execute and install the works of electrification, air conditioning, lifts, fire-fighting etc. for this work and the contractor shall provide necessary facilities for the same. The contractor shall leave such recesses, holes openings etc. as may be required for the electric, air-conditioning and other related works (for which inserts, sleeves, brackets, conduits base pinion, clamps etc. shall be supplied free of cost by the department unless otherwise specifically mentioned) and the contractor shall fix the same at time of casting of concrete, stone work & brick work, if required and nothing extra shall be payable on this account.
- iii) The contractor shall conduct work so as not to interfere with or hinder the progress or completion of the work being performed by other contractor(s) or by the Engineer-in-Charge and shall as far as possible arrange his work and shall place and dispose off the materials being used or removed so as not to interfere with the operations of other contractor or he shall arrange his work with that of the others in an acceptable and coordinated manner and shall perform it in proper sequence to the complete satisfaction of others.
- iv) All Architectural drawings given in the tender other than those indicated in nomenclature of items are only indicative of the nature of the work and materials/fixings involved unless and otherwise specifically mentioned. However, the work shall be executed in accordance with the drawings duly approved by the Engineer-in-Charge.

29 Samples of all materials and fittings to be used in the work in respect of brand manufacturer and quality shall be approved from the Engineer-in-Charge, well in advance of actual execution and shall be preserved till the completion of the work. Articles bearing BIS certification mark shall only be used unless no manufacturer has got BIS mark for the particular material. Any material/fitting whose sample has not been approved in advance and any other unapproved material brought by the contractor shall be immediately removed as soon as directed.

Unless otherwise specified in the schedule of quantities the rates for all items shall be considered as inclusive of pumping/baling out water, if necessary, for which no extra payment shall be made. Those conditions shall be considered to include water from any source such as inflow of flood, surface and sub-soil water etc. and shall apply to the execution in any season.

30 Green Building Norms:-

The building is planned as a minimum three-star GHAR rating. The contractor is required to execute the work in a befitting manner to suit these standards.

30.1 Construction Vehicles, Equipment and Machinery

- a) All vehicles, equipment and machinery to be procured for construction shall conform to the relevant Bureau of India Standard (BIS) norms.
- b) Emission from the vehicles must conform to environmental norms.
- c) Dust produced from the vehicular movement and other site activities is to be mitigated by sprinkling of water.
- d) Noise limits for construction equipments shall not exceed 75 dB(A), measured at one meter from the edge of the equipment in free area, as specified in the Environment Protection Act, 1986, schedule

VI part E, as amended on 9th May, 1993. The maximum noise levels near the construction site should be limited to 65 dB (A) Leq (5 min) in project area.

30.2 Construction Wastes Disposal

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

30.3 Procurement of Construction Materials

- (i) All vehicles delivering construction materials to the site shall be covered to avoid spillage of materials and maintain cleanliness of the roads.
- (ii) Wheel Tyres of all vehicles used by of the contractor, or any of his sub contractor or materials suppliers shall be cleaned and washed clear of all dust/mud before leaving the project premises. This shall be done by routing the vehicles through tyre washing tracks.
- (iii) Contractor shall arrange for regular water sprinkling at least twice a day (i.e. morning and evening) for dust suppression of the construction sites and unpaved roads used by his construction vehicles.

30.4 Water Pollution

- (i) The Contractor shall take all precautionary measures to prevent the wastewater during construction to accumulate anywhere.
- (ii) The wastewater arising from the project is to be disposed off in the manner that is acceptable to the Engineer –in-charge.

30.5 Air and Noise Pollution

Contractor shall use dust screens and sprinkle water around the construction site to arrest spreading of dust in the air and surrounding areas.

- a. Contractor shall ensure that all vehicles, equipment and machinery used for construction are regularly maintained and confirm that emission levels comply with environmental emission standards/norms.
- b. For controlling the noise from Vehicles, Plants and Equipments, the Contractor shall confirm the following:
- c. All vehicles and equipment used in construction will be fitted with exhaust silencers.
- d. Servicing of all construction vehicles and machinery will be done regularly and during routine servicing operations, the effectiveness of exhaust silencers will be checked and if found defective will be replaced.
- e. Noise emission from compactors (rollers) front loaders, concrete mixers, cranes (movable), vibrators and saws should be less than 75 dB(A).

- f. As per the standards/guidelines for control of Noise Pollution from Stationary Diesel Generator (DG) sets, noise emission in dB(A) from DG Set (15-500 KVA) should be less than $94+10 \log_{10} (KVA)$. The standards also suggest construction of acoustic enclosure around the DG Set and provision of proper exhaust muffler with insertion loss of minimum 25 dB(A) as mandatory.

30.6 Personal Safety Measures for Labour

The contractor shall provide the following items for the safety of workers employed by the contractor and associate agencies:

- (i) Protective footwear / helmet and gloves to all workers employed for the work on mixing, cement, lime mortars, concrete etc. and openings in water pipeline/sewer line.
- (ii) Welder's protective eye-shields to workers who are engaged in welding works.
- (iii) Safety helmet and Safety harness/ belt Provide adequate sanitation/safety facilities for construction workers to ensure the health and safety of the workers during construction, with effective provisions for the basic facilities such as sanitation, drinking water and safety equipments or machinery.
- (iv) All the workers should be wearing helmet and shoes all the time on site.
- (v) Masks and gloves should be worn whenever and wherever required.
- (vi) Adequate drinking water facility should be provided at site, adequate number of decentralized latrines and urinals to be provided for construction workers.
- (vii) Full-time workers (if any with the approval of Engineer-in-Charge) residing on site should be provided with clean and adequate temporary hutment.
- (viii) First aid facility should also be provided.
- (ix) Overhead lifting of heavy materials should be avoided. Barrow wheel and hand-lift boxes should be used to transport materials onsite.
- (x) Tobacco and cigarette smoking should be prohibited onsite.
- (xi) All dangerous parts of machinery are well guarded and all precautions for working on machinery are taken.
- (xii) Maintain hoists and lifts, lifting machines, chains, ropes and other lifting tackles in good condition. Provide a safety net of adequate strength to arrest falling material down below.
- (xiii) Use of durable and reusable formwork systems to replace timber formwork and ensure that formwork where used is properly maintained.
- (xiv) Ensure that walking surfaces or boards at height are of sound construction and are provided with safety rails and belts. Provide protective equipments such as helmets.
- (xv) Provide measure to prevent fire. Fire extinguisher and buckets of sand to be provided in fire prone area and elsewhere.
- (xvi) Provide sufficient and suitable light for working during night.

(xvii) Ensure that measures to protect workers from materials of construction, transportation, storage and other dangers and health hazards are taken.

(xviii) Ensure that the construction firm/division/company have sound safety policies.

(xix) Comply with the safety procedure, norms and guidelines (as applicable) as outlined in NBC 2016.

(xx) Adopt additional best practices and prescribed norms as in NBC 2016.

30.7 Identify roads on-site that would be used for vehicular traffic. Update vehicular roads (if these are unpaved) by increasing the surface strength by improving particle size, shape and mineral type that make up the surface base. Add surface gravel to reduce source of dust emission. Limit amount of fine particles (smaller than 0.075mm) to 10 - 20%. Limit vehicular speed on site 10km/h. Nothing extra will be payable for this.

30.8 All material storages should be adequately covered and contained so that they are not exposed to situations where winds on site could lead to dust/particulate emissions.

30.9 Spills of dirt or dusty materials shall be cleaned up promptly, so the spilled material does not become a source of fugitive dust and also to prevent of seepage of pollutant laden water into the ground aquifers. When cleaning up the spill, ensure that the clean – up process does not generate additional dust. Similarly, spilled concrete slurries or liquid wastes should be contained/cleaned up immediately before they can infiltrate into the soil/ground or runoff in nearby areas.

30.10 Ensure that water spraying is carried out by wetting the surface by spraying water on:

- (i) Any dusty material.
- (ii) Areas where demolition work is carried out.
- (iii) Any unpaved main-haul road and.
- (iv) Areas where excavation or earth moving activities are to be carried out.

30.11 The contractor shall ensure the following:

- (i) Cover and enclose the site by providing dust screen, sheeting or netting to scaffold along the perimeter of a building.
- (ii) Covering stockpiles of dusty material with impervious sheeting.
- (iii) Covering dusty load on vehicles by impervious sheeting before they leave the site.
- (iv) Transferring, handling / storing dry loose materials like bulk cement and dry pulverized fly ash inside a totally enclosed system.
- (v) Spills of dirt or dusty materials shall be cleaned up promptly so that the spilled material does not become a source of fugitive dust and also to prevent seepage of pollutant laden water into the ground aquifers. When cleaning up the spill, ensure that the clean-up process does not generate additional dust. Similarly, spilled concrete slurries or liquid wastes should be contained/cleaned up immediately before they can infiltrate into the soil/ground or runoff in nearby areas.
- (vi) Clear vegetation only from areas where work will start right away.

30.12 Adopt measures to prevent air pollution in the vicinity of the site due to construction activities. There is no standard reference for this. The best practices should be followed (as adopted from international best practice documents and codes).

30.13 Provide sheet covering / barricading of site of not less than 3m height along the site boundary, next to a road or other public area. Nothing extra will be paid for this.

30.14 The contractor shall provide experienced personnel with suitable training to ensure that these methods are implemented. Prior to the commencement of any work, the method of working, plant equipment and air pollution control system to be used on –site should be made available for the inspection and approval of the Engineer –in-Charge to ensure that these are suitable for the project.

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

30.16 To preserve the existing landscape and protect it from degradation during the process of construction. Select proper timing for construction activity to minimize the disturbance such as soil pollution due to spilling of the construction material and its mixing with rainwater. The construction management plan including soil erosion control management plan shall be prepared accordingly for each month. The application of erosion control measures includes construction of gravel pits and tyre washing bays of approved size and specification for all vehicular site entry/exits, protection of slopes greater than 10%. Sedimentation Collection System and run-off diversion systems shall be in place before the commencement of construction activity. Preserve and protect the existing vegetation by not-disturbing or damaging to specified site areas during construction.

30.17 The Contractor should follow the construction plan as proposed by the Engineer-in-charge / landscape consultant to minimize the site disturbance such as soil pollution due to spilling. Use staging and spill prevention and control plan to restrict the spilling of the contaminating material on site.

30.18 Spill prevention and control plans should clearly state measures to stop the source of the spill. Measures to contain the spill and measures to dispose the contaminated material and hazardous wastes. It should also state the designation of personnel trained to prevent and control spills. Hazardous wastes include pesticides, paints, cleaners and petroleum products.

30.19 A soil Erosion and Sedimentation Control Plan (ESCP) should be prepared prior to construction and should be applied effectively.

30.20 The contractor shall prepare and submit ‘Spill prevention and control plans’ before the start of construction, clearly stating measures to stop the source of the spill, to contain the spill, to dispose the contaminated material and hazardous wastes, and stating designation of personnel trained to prevent and control spills. Hazardous wastes include pesticides, paints, cleaners, and petroleum products.

30.21 The contractor shall ensure that no construction leaches (Ex: cement slurry) is allowed to percolate into the ground. Adequate precautions are to be taken to safeguard against this including reduction of wasteful curing processes, collection, basic filtering and reuse. The contractor shall follow requisite measures for collecting drainage water run-off from construction areas and material storage sites and diverting water flow away from such polluted areas. Temporary drainage channels, perimeter dike/swale, etc. shall be constructed to carry the pollutant –laden water directly to the treatment device or facility (municipal sewer line).

30.22 All lighting installed by the contractor around the site and at the labour quarters during construction shall be CFL bulbs of the appropriate illumination levels. This condition is a must, unless specifically prescribed otherwise.

31. SUBMISSION OF AS BUILT DRAWINGS AND OBTAINING COMMENCEMENT CERTIFICATE & OCCUPANCY CERTIFICATE (BUILDING USE PERMISSION)

The Contractor shall submit required sets of "AS BUILT" drawings to the CPWD, Municipal Corporation / Local bodies etc. for obtaining various service connections and OBTAINING COMMENCEMENT CERTIFICATE & OCCUPANCY CERTIFICATE. The Contractor shall submit to the Department, 4 sets of "AS BUILT" drawings and also in soft copy (CD – 4 sets) in one of the standard software packages. **Nothing extra shall be payable on this account.**

32. The building work shall be carried out in the manner complying in all respect with the requirements of the relevant bylaws and regulations of the local body under the jurisdiction of which the work is to be executed or as directed by the engineer-in -charge and nothing extra shall be paid on this account. However, local body approvals of buildings plans, fire clearance, forest clearance, occupancy certificate etc if required shall be obtained by contractor from the concerned respective government authorities. Statuary fees for above approvals, deposited by the contractor will be reimbursed to the contractor on the production of authentic receipts.

33. FACILITIES FOR THE DEPARTMENT

33.1 The Contractor shall provide, construct and maintain at all times during execution and till the completion of work, a temporary site office with adequate electric light fittings, A.C., fans, electric/ power points, switches etc for use of the Engineer-in-Charge and his authorized representatives. The entire site office and its surroundings shall be maintained in a neat and clean condition by the Contractor for the entire duration of the construction. The premises / facilities provided by the contractor shall be owned and thus demolished / dismantled / disconnected and material carted away by him at its own cost after the completion of work or as directed by Engineer-in-Charge. **The rates quoted by the Contractor shall be inclusive of providing and maintaining such facilities and nothing extra shall be payable on this account.**

33.1.1 The contractor shall make arrangements for Helmets and safety shoes (meant of construction work at sites) for all field staff of the department during the entire period of construction for safety reasons. One helmet and two pairs of shoes per staff member (maximum ten members) of the departments per year shall be arranged by the contractor.

33.1.2 The Contractor shall arrange for one number computer and one number laptop along with printer, necessary peripherals and including broadband connection with one number computer operator at the disposal of Engineer-in-charge. The computer shall be provided with MS-project & the computer operator shall be fully conversant with MS Word, Excel, PowerPoint, Auto CAD & MS-Project. Nothing extra shall be paid on this account.

Note 1: The special conditions detailed above are in addition to general/ other/ additional conditions as specified elsewhere in tender document.

Note 2: Nothing extra shall be paid on account of these special conditions.

PARTICULAR SPECIFICATION & CONDITIONS OF WORK

1 EARTH WORK

- 1.1 The work shall be done in accordance with CPWD specifications. Any trenching and digging within the least possible for laying sewer lines/water lines/cables etc. shall be commenced by the contractor only when all men, machineries and materials have been arranged and closing of the trench(s) thereafter shall be ensured time.
- 1.2 Note for all items for excavation:-
It is the responsibility of the contractor to take suitable slope protection measures, If required, to ensure protection of adjoining structures / buildings / compound wall / service line etc during excavation.
The contractor shall submit a proposal for the measures to be undertaken, to the Engineer in Charge for approval before excavation. The approval shall not absolve the contractor of his responsibility to ensure protection of adjoining structures / buildings / compound wall / service line etc during excavation. The rates quoted by the contractor shall be inclusive of all such protection measures.
- 1.3 Note regarding payment of Royalty to State Government
No excavated earth shall be removed from the campus unless suggested otherwise by Engineer in Charge. All subsoil shall be reused in backfilling / landscape, etc. as per the instructions of the Engineer in Charge. The surplus excavated earth shall be disposed of by the contractor at his own cost for reuse. Royalty at the prevailing rate on the soil is to be deposited with the State Govt. Deptt. A receipt of the same is to be produced by the contractor to the Engineer-in-Charge as a proof of payment. A certificate of reuse as required by the Engineer-in-Charge shall be submitted by the contractor.

2 RCC WORK

The work shall be done as per CPWD specifications.

- 2.1 If the quantity of cement actually used in the work is found to be more than the theoretical quantity of cement including authorised variation, nothing extra shall be payable to the contractor on this account. No minus side variation is allowed in the quantity of cement actually used.
- 2.2 For non-scheduled items, the decision of the Engineer-in-charge or his successor thereof regarding the theoretical quantity of the cement which should have been actually used shall be final and binding on the contractor.
- 2.3 Cement brought to site and cement remaining unused after completion of work shall not be removed from site without written permission of the Engineer-in-Charge.
- 2.4 In case the contractor brings surplus quantity of cement the same after completion of the work will be removed from the site by the contractor at his own cost after approval of the Engineer-in-Charge.
- 2.5 Cement register for the cement shall be maintained at site. Cement bags shall be stored in separate godowns to be constructed by the contractor at his own cost as per sketch (which is only indicative and actual size will depend on the site requirements) given in CPWD specifications with weatherproof roofs and walls. Each godown shall be provided with a single shutter door with two locks. The key of one lock shall remain with Engineer-in-charge or his authorized representative and that of the other lock with the authorized agent of the contractor at the site of work so that the cement is issued from the godown according to the daily requirements with the knowledge of both parties and proper account for the same is maintained in the standard proforma.

PROFORMA FOR THE CEMENT REGISTER

PARTICULARS OF RECEIPT

Date of receipt	Quantity received	Progressive total	Date of issue	Quantity issued	Items of work for which issued
1	2	3	4	5	6

PARTICULARS OF ISSUE

Qty. returned at the end of the day	Total issued	Daily balance in hand	Contractor's initial	JE's initial	Remarks (AE/EE's periodical check)
7	8	9	10	11	12

3 DESIGN MIX CONCRETE:

3.1 CPWD Specifications and latest IS Codes shall be followed.

3.2 The concrete mix design / laboratory tests with and without admixture shall be got done by contractor at his own cost and will be carried out by the contractor through one of the following laboratory/Test houses:

IIT /NIT / Govt. Engineering Institutions as directed by the Engineer-in-charge.

The various ingredients for mix design / laboratory tests shall be sent to the test houses through the Engineer-in-Charge and the samples of such aggregate & cement shall be preserved at site by the department

3.3 The contractor shall submit the mix design report from any of above approved laboratory for approval of Engineer-in-Charge within 30 days from the date of issue of letter of acceptance of the tender. No concreting shall be done until the mix design is approved by the Engineer-in-charge. In case of white Portland cement and the likely use of admixtures in concrete with PPC/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.

3.4 In case of change of source or characteristic properties of the ingredients used in the concrete mix during the work, a revised laboratory mix design report conducted at laboratory established at site shall be submitted by the contractor as per the direction of the Engineer-in-Charge

4 Concrete and RCC Work

4.1 Design Mix Concrete from RMC plant/BMC

- i) The agency shall arrange Batch Mix Concrete from fully automatic batching plant installed at site.
- ii) The Engineer-in-Charge reserves the right to inspect at any stage and reject the concrete if he is not satisfied about quality of product at the user's end.
- iii) RMC plant may be approved by competent authority in case batch mix concrete not possible or any circumstance as decided by engineer-in-charge.
- iv) The Engineer-in-charge reserves the right to exercise control over the:-

Insertion : Nil Correction : Nil Omission : Nil AE(P)... / EE.....

- a) Ingredients, water and admixtures to be used in the concrete including conducting of tests for checking quality of materials, recording of test results and declaring the materials fit or unfit for use in production of mix.
 - b) Calibration checks of the RMC plant.
 - c) Weight and quantity check on the ingredients, water and admixtures added for batch mixing.
 - d) Time of mixing of concrete.
 - e) Testing of fresh concrete, recordings of results and declaring the mix fit or unfit for use. This will include continuous control of the workability during production and taking corrective action, if required.
- v) For exercising such control, the Engineer-in-charge may depute his authorized representative at the RMC plant. It shall be responsibility of the agency to ensure that all necessary equipment, manpower & facilities are made available to Engineer-in-Charge and/or his authorised representative at RMC plant.
- vi) The computerized dispatch slips for each dispatch of RMC shall be kept as record and shall be made available to the Engineer-in-Charge or his authorized representative.
- vii) All required relevant records of produced and used concrete shall be made available to the Engineer-in-Charge or his authorised representative. Engineer-in-Charge shall, as required, specify guidelines & additional procedures for quality control & other parameters in respect of materials, production & transportation of concrete mix which shall be binding on the agency.
- viii) Concrete as per approved design mix by Engineer-in-Charge shall only be produced and transported to the site.
- ix) The concrete mix design will be carried out by the agency, at his own cost, through one of the following laboratories/Test houses to be approved by Engineer-in-charge:
 - a. National Test House.
 - b. IITs, NITs or any Govt. Engineering College, or any reputed testing lab
- x) In the event above laboratories are unable to carry out the requisite design/testing, the agency shall have to get the same done from any other reputed laboratory with prior approval of the Engineer-in-Charge.

4.2 Cement:- 43 grade ordinary Portland cement conforming to IS 8112. shall be used.

- a) In case 43 grade Ordinary Portland Cement is not available, the contractor will be allowed to use 53 grade Ordinary Portland Cement (confirming to IS: 12269), subject to documentary evidence produced by the contractor regarding non availability of the specified grade and also subject to independent verification by the Engineer-in-Charge. Nothing extra shall be paid for this.
- b) The contractors shall use of fly ash conforming to IS 3812 (Part –I) in cement concrete work as partial substitution of OPC subject to fulfillment of conditions as per IS 1489 (Part-I) and satisfying the condition of minimum cement content.
- c) Admixtures/ Plasticizers: - The admixture shall conform to IS:9103, wherever required, the admixture of approved quality and from preferred make list attached to this tender document only shall be used to attain the required workability. Nothing extra shall be paid for use of admixtures.

5 PRE-CAST RCC WORK

- 5.1** Pre-cast reinforced concrete units shall be of grade or mix as specified. Provision shall be made in the mould to accommodate fixing devices such as hooks, flats etc. and forming of notches and holes. Each unit shall be cast in one operation. A sample of the unit shall be got approved from Engineer-in-Charge before taking up the work.
- 5.2** Pre-cast units shall be clearly marked to indicate the top of member and its locations.
- 5.3** Pre-cast units shall be stored, transported and placed in position in such a manner that these are not damaged.

6 SANITARY INSTALLATIONS, WATER SUPPLY AND DRAINAGE

- 6.1** The work of water supply and sanitary installations shall be got executed by the agency as approved by Engineer-in-Charge.
- (i) The entire plumbing drawing and sanitary installation drawing/ details shall be submitted by the contractor and got approved by the Engineer-in-Charge before the execution.
- (ii) The entire responsibility for the quality of work will however rest with the building contractor only.
- 6.2** The work of water supply, internal sanitary installations and drainage etc. shall be carried out as per the bylaws of the Municipal Corporation or any other local body and the contractor shall produce necessary completion certificates from such authority after completion of work.
- 6.3** All water tanks, taps, sanitary, water supply and drainage pipes fittings and accessories etc. shall conform to the bylaws and specifications of the Municipal Body/Corporation where CPWD specifications are not available.
- 6.4** The contractor shall engage licensed plumbers for the work and the materials (fixtures/fittings) tested by the local Municipal Body/Corporation wherever required at his own cost. Nothing extra shall be paid/reimbursed for the same.
- 6.5** The contractor shall give a performance test of the entire installation(s) as per standing specifications before the work is finally accepted by making his own arrangements for water supply, electricity etc. and nothing extra whatsoever shall be payable for the same.
- 6.6** The work in general shall be carried out as per CPWD specifications. Rate includes all materials, labour and all the operations mentioned in the respective items unless and otherwise specifically mentioned.
- 6.7** The contractor shall be responsible for all the protection of sanitary, water supply fittings and fixtures against pilferage and breakage during the period of installation until the completion / handing over of the work.
- 6.8** The contractor shall submit completion plans for water supply internal sanitary installations and building drainage work within thirty days of the date of completion. These plans are to be submitted on drawings prepared preferably through computers (1 original copy + 3 photocopies) on suitable scales to show the general arrangement and desired details.
- 6.9** **The chasing, cutting and making holes in the masonry and / or cement concrete and / or RCC works shall be done carefully without causing any damage to the structure. As far as possible, mechanical cutters & core cutting machines shall be used in a workman like manner, for concealing the pipelines and fittings, and for hanging the SCI pipes, as there is no provision for sunken floors in toilet. The chases / holes, so made, shall be made good with the cement mortar of mix 1:4 (1 cement: 4 coarse sand) after testing of the pipe lines for**

leakage. The cost of cutting cores in RCC, cutting holes in masonry & making good the same shall be inclusive in the respective item of drainage / water supply lines.

- 6.10** The contractor shall give a satisfactory performance test of the entire installation (s) before the work is finally accepted and nothing extra shall be payable to the contractor on this account.

7 WATER PROOFING TREATMENT

The water proofing items should be got done through the firm approved by Engineer-in-charge. The contractor shall submit proposal for engaging a specialized firm for this work. The tenderer must associate with himself, agencies of the appropriate eligibility to tender for each of specialized nature of items / work listed below individually. Such works shall be got executed only through associated agencies specialized in these fields. The tenderer whose tender is accepted shall indicate the name(s) of his associated specialized agencies those fulfilling the eligibility criteria laid down below after award of work and at least 30 days before commencement of such items / work for the approval of the Engineer-in-Charge of that component, whose decision shall be final and binding. If the tenderer, himself fulfils the eligibility criteria laid down in NIT for associated specialized agencies, then the tenderer shall not require to associate with himself the associated specialized agency.

7.1 GUARANTEE FOR WATER PROOFING TREATMENT

- 7.1.1** The contractor shall be fully responsible for and shall guarantee proper performance of the entire waterproofing system for a period of 10 (Ten) years from the completion of works. In addition, specific 10 years written guarantee (to be furnished in a non-judicial stamp paper of value not less than Rs. 100/-) in approved Performa shall be submitted for the performance of the system, before final payment and shall not in any way limit any other rights the employer may have under the contract.

- 7.1.2** All waterproofing work shall be carried out through approved specialist agency as per the method of working approved by the engineer-in charge. However, the contractor shall be solely responsible for water proofing treatment until the expiry of the above guaranty period.

- 7.1.3** **Ten (10) years guarantee** in the prescribed Performa attached must be given by the contractor for the water proofing treatment. In addition 10% (ten percent) of the cost of these items would be retained as guarantee to watch the performance of the work executed. However, half of this amount (withheld) would be released after **five monsoon seasons** after the date of completion of the work, if the performances of the waterproofing work is satisfactory. If any defect is noticed within guarantee period, it shall be rectified by the contractor within seven days and, if not attended to, the same shall be got done by other agency at the risk and cost of the contractor. In any case the guaranteeing firms during the guarantee period should inspect and examine the treatment once in every year and make good any defect observed. However, the security deposit can be released in full, if bank guarantee of equivalent amount for ten (10) years is produced and deposited with the department.

7.2 MEASUREMENTS

Only plan area shall be measured and paid. Nothing extra shall be paid for rounding off at junctions and taking treatment along sides of beams and walls. Length and breadth shall be measured correct to one centimetre and area shall be worked out to nearest 0.01 Sqm. No deduction in measurements shall be made for either opening or recesses for chimneys, stacks, roof lights and the like for areas up to 0.40 Sqm. nor anything extra shall be paid for forming such `openings. For similar areas exceeding 0.40 Sqm. deductions will be made in measurements for full openings and nothing extra shall be paid for making such openings.

7.3 RATES

The rate shall include the cost of all labour and materials involved in all the operations described above.

7.4 SUNKEN FLOOR SLAB, ITS TREATMENT ETC.

7.4.1 Brick bat aggregate shall be from well burnt bricks. The proprietary water proofing compound shall be used.

7.4.2 The surface shall be thoroughly cleaned with wire brushes. All loose scales shall be removed and dusted off. The surface bottom as well as sides shall be treated with cement slurry admixed with proprietary water proofing compound to penetrate into crevices and fill up all the pores in the surface.

7.4.3 After the slurry coat is laid, layer of well burnt brick bats of about 40 mm size shall be laid in cement mortar of mix as specified by the specialist firm but not leaner than 1:5 (1 cement : 5 coarse sand) admixed with proprietary water proofing compound, the mortar being filled to half the depth of the brick bat layer. The bricks bat layer shall be rounded off at junctions with the beam/ wall etc. and tapered towards top at height of 150 mm along beams/ wall etc. Curing of this layer shall be done for these days.

7.4.4 After curing, the surface shall be applied with a coat of neat cement slurry admixed with proprietary water proofing compound.

7.4.5 Joints of brick bat shall be filled fully with cement mortar of mix as specified by the specialist firm but not leaner than 1:4 (1 cement : 4 coarse sand) admixed with proprietary water proofing compound and top finished with average 20 mm thick layer of same mortar. This layer of mortar shall be continued to the sides shall be as directed by the Engineer-in-charge. The surface shall be finished smooth with cement slurry admixed with proprietary water proofing compound.

7.4.6 While the water proofing treatment is done, it shall be ensured that the outlet pipes are properly fixed and the gaps between the wall and pipes are properly filled with brick / stone aggregate and cement mortar admixed with proprietary water proofing compound and grouted with cement slurry admixed with proprietary water proofing compound.

7.4.7 Waterproof treatment shall be cured for a minimum period of two weeks.

7.5 MEASUREMENTS

Measurements for the floor treatment shall be taken of the plan area of the floor treated. Nothing extra shall be paid for rounding off at junctions and taking the treatment along the sides of beams and walls for about 150mm.

7.6 RATES

The rate shall include the cost of all labour and materials involved in all the operations described above. Base treatment and sides treatment will be paid separately under respective items.

7.7 Source of Materials :

7.7.1 All stone aggregate and stone ballast shall be of hard stone variety to be obtained from approved quarries at **Sevaliya** or any other source to be got approved by the Engineer-in-charge.

7.7.2 Coarse sand should be obtained from **Sankheda** or any other source to be got approved by the Engineer-in-charge and screened as required. The same shall be clean and sharp angular grit type. If the sand brought to site is dirty it must be washed in clean water.

7.7.3 Fine sand should be obtained from **Sankheda** any other source to be got approved by the Engineer-in-charge and screened as required. The same shall be clean and sharp angular grit type. If the sand brought to site is dirty it must be washed in clean water.

8.0 STONE / MARBLE /GRANITE WORK (OTHER THAN MASONRY)

- The execution of stones work shall be in general as per CPWD Specifications - 2019 - Vol. I & Vol. II with up to date correction slips.
- All holes, rebates, recesses etc. for providing fixing and inserts shall be predrilled and pre-cut and worked using precision machine tools. Nothing extra on this account shall be payable.
- **SAMPLES FOR STONWORK:** 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.
- Sequence of execution for cladding work shall be suggested by the contractor for approval of Engineer-in-Charge.

9.0 WOOD WORK

- The wood work in general shall be carried out as per CPWD Specifications - 2019 Vol. I & II with up to date correction slips.
- The samples of species of timber to be used shall be got approved and deposited by the contractor with the EE 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.
- Factory made shutter as specified shall be obtained from factories approved by the Engineer in charge. 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 abide by 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. The contractor will also arrange stage wise inspection of the shutters at factory to the Engineer-in-charge or his authorized representative. Contractor will have no claim if the shutters brought at site are rejected by Engineer-in-charge in part or in full lot due to bad workmanship / 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.
- All fittings and fixtures shall be got approved from the Engineer-in Charge before procurement well in advance and the approved samples shall be kept at site till completion of the work.
- Glazing for toilets shall be of translucent type.
- The shape and size of beading shall be as per drawings. The joints of beading shall be mitred.

10.0 FLOORING WORKS

- Flooring works in general shall be carried out as per CPWD Specifications- 2019 -Vol.I & Vol.II with up-to-date correction slips.
- Various types of flooring, skirting & dado shall be carried out by the contractor referring the Minimum Requirements & Specifications, Schedule of finishes. The contractor needs to refer room data sheet/schedule of finishes and material palette attached with the tender document. Window sills/soffit/lintel shall be provided as per detailed architectural plans prepared by bidder.
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- Contractor will submit all material or finishing samples to Engineer in charge for approvals before executing the respective job.
- Contractor shall need to protect the finished floor surface during execution of other activities using Cello or approved equivalent bubble guard of minimum 500 GSM thick (minimum size 8' x 4'), fixing the same over floor surface with mastic tape or another approved adhesive. Removing protective layer during handing over, disposal of all debris out of site, cleaning the entire covered flooring area as directed by the Engineer-in-charge.
- All flooring, skirting, dado and window sill works will be done in accordance with CPWD specifications 2019 Volume I & II with correction slips up to the last date of submission of tender documents. The provision of IS Codes listed in CPWD specifications shall form a part of this document with all latest codes.
- Pattern for any type of flooring / dado shall be as per detail drawings. The joints for all flooring to run in a straight line and level.

12. 0 STAINLESS STEEL RAILING/HANDRAILS:

- GENERAL: The contractor shall apply all materials, labour, tools, ladders, scaffolding and other equipment necessary for the completion and protection of all stainless-steel work.
- MATERIAL: All stainless-steel pipes and plates shall conform to 304 grade and the relevant clauses associated with this grade of steel to be followed.
- SURFACE FINISH: Surface finish of all the stainless-steel materials will be in 240 grit satin finish / matt finish.
- ACCESSORIES: Fixing will be done by stainless steel expansion bolts of approved size and make as per Engineer-in-charge and welding to be done by using organ welding rods and the surface being duly finished and cleaned by K2 passivation, which is nitric acid plus fluoric acid solution treatment by which the chances of corrosion will be eliminated, and any burn out makes on the metal will also be eliminated.
- COATING MASS: All stainless-steel material will have to be coated by a solution of Inox to avoid finger in prints and avoidance of settlement of environment / atmospheric dust.

13. ALUMINIUM DOOR, WINDOW, VENTILATOR WORKS:

Extent and Intent:

- The work shall be carried out through an approved specialized agency, who shall furnish all materials, labour, accessories, equipment, tool and plant and incidentals required for providing and installing aluminium doors, windows, claddings, louvers and other items as called for on the drawings. The specialized agency for the Aluminium work shall be got approved from the Engineer-in-charge, well before actual commencement of the item of work. Necessary performance certificates in respect of agencies proposed to be engaged shall be submitted within 30 days from the date of issue of acceptance letter to substantiate technical capability and experience of the agency for prior approval of the Engineer-in-charge.
- The drawings and specifications cover the major requirement only. The supplying of additional fastenings, accessory features and other items not mentioned specifically herein, but which are necessary to make a complete installation shall be a part of this contract.

General:

- Work shall be carried out as per CPWD Specifications- 2019 Vol. I & Vol. II with up to date correction slips.
- Aluminium doors, windows etc. shall be of sizes, section details as shown on the drawings. The details shown on the drawings indicate generally the sizes of the component parts and general standards. These may be varied slightly to suit the standard adopted by the manufacturer. Before

proceeding with any manufacturing, the contractor shall prepare and submit complete manufacturing and installation drawings for approval of the Engineer-in-Charge and no work shall be performed until the approval of these drawings is obtained.

Shop Drawings:

The contractor shall submit the shop drawings of doors, windows, louvers, cladding and other aluminium work, based on architectural drawings, to the Engineer-in-Charge for his approval. The drawings shall show full size sections of doors, windows etc. thickness of metal (i.e. wall thickness), details of construction, sub frame/ rough ground profile, anchoring details, hardware as well as connection of windows, doors and other metal work to adjacent work. Samples of all joints and methods of fastening and joining shall be submitted to the Engineer-in-Charge for approval well in advance of commencing the work.

Samples:

Samples of doors, windows, louvers etc. shall be fabricated, assembled and submitted to the Engineer-in-Charge for his approval. They shall be of sizes types etc. as decided by Engineer-in-Charge. All samples shall be provided at the cost of the contractor.

Sections:

Minimum doors and windows shall be fabricated from extruded section of profile of detailed on drawings. The sections shall be extruded by the manufacturers approved by the Engineer-in-charge. The aluminium extruded sections shall conform IS designation 63400-WP (HV9WP Old designation) with chemical composition and technical properties as per IS:733 and IS:1285. The permissible dimensional tolerance of the extruded sections shall be such as not to impair the proper and smooth function/ operation and appearance of doors and windows.

Fabrication:

Doors, windows, etc. shall be fabricated to sizes as shown at factory and shall be of section, sizes combinations and details as shown in the Architectural Drawings. All doors, windows etc. shall have mechanical joints. All members shall be accurately machined and fitted to form hairline joints prior to assembly. The joint and accessories such as cleats, brackets, etc. shall be of such materials as not to cause any bimetallic action. The fabrication of doors, windows, etc. shall be done in suitable sections to facilitate easy transportation, handling and installation. Adequate provision shall be made in the door and window members for anchoring to support and fixing of hardware and other fixtures as approved by the Engineer-in-Charge.

Powder Coating:

All aluminium sections shall be powder coated 50 microns to required colour as specified in the item and as per direction of Engineer-in-Charge. Polythene tape protection shall be applied on the powder coated section before they are brought to site. All care shall be taken to ensure surface protection during transportation, storage at site and installation. The tape protection shall be removed on installation. The samples will be tested in the approved laboratory and cost of samples, cost of testing, shall be borne by the contractor.

Protection of Finish:

All aluminium members shall be wrapped with approved self-adhesive non- staining masking tapes.

Handling and stacking:

- Fabricated materials shall be stacking in an approved manner to protect the material against any damage during transportation. The loading and unloading shall be carried out with utmost care, on receipt of materials at site, they shall be carefully examined to detect any damaged pieces. Arrangements shall be made for expeditious replacement of damaged piece/ parts. Materials

found to be acceptable on inspections shall be repacked in crates and stored safely.

- In the case of Composite windows and doors, the different units are to be assembled first. The assembled Composite units should be checked for line, level and plumb before final fixing is done. Units may be serial numbered and identified as how to be assembled in their final location of situation so warrants.
- Where aluminium comes into contact with masonry brickwork, concrete, planter or dissimilar metals, it shall be coated with approved insulation lacquer, paint or plastic tape to ensure that electro- chemical corrosion is avoided. Insulation material shall be trimmed off to a clean flush line on completion.
- The contractor shall be responsible for assembling Composite, bedding and filling the groove with backup roads polysulphide sealant inside and outside, placing the doors, windows etc. in their respective opening. After the doors/ windows have been fixed in their correct assigned position, the open hollow sections abutting masonry concrete shall be fitted with approved polysulphide sealant densely packed and neatly finished.
- The contractor shall be responsible for doors, windows, etc. being set straight plumb, level and for their satisfactory operation after fixing is complete.

Installation

- Just prior to installation the doors, windows etc. shall be un-crated and stacked on edge on level bearers and supported evenly. The frame shall be fixed into position true to line and level using adequate number of expansion machine bolts, anchor fasteners of approved size and manufacturer and in an approved manner. The holes in concrete/ masonry members for housing anchor bolts shall be drilled with an electric drill.
- The doors, windows assembled as shown on drawings shall be placed in correct final position in this opening and marks made on concrete members at jambs, sills and heads against the holes provided in frames for anchoring. The frame shall then be removed from the opening and laid aside. Neat hole with parallel sides of appropriate size shall then be drilled in the concrete members with an electric drill at the marking to house the expansion bolts. The expansion bolts shall then be inserted in the holes, struck with a light hammer till the nuts is forced into the anchor shell. The frame shall then be placed in final position in the opening and anchored to the support through cadmium plated machine screws of required size threaded to expansion bolts. The frame shall be set in the opening by using wooden wedges at supported and bar plumbed in position. The wedges shall invariably be placed at meeting points of glazing bars and frames.

Neoprene Gaskets:

- The contractor shall provide and install Neoprene gaskets of approved size and profile at all locations as shown and as called for to render the doors, windows etc. absolutely air tight and weather tight. The contractors shall produce samples of the gaskets for approval and procure after approval only.

Fittings:

- Hinges, stays, handles, tower bolts, locks and other fittings shall be of excellent quality and manufacturers shall be approved by the Engineer-in-Charge.

Manufacturer's Attendance:

- The manufacturer immediately prior to the commencement of glazing shall adjust and set all windows and doors and accept responsibility for the satisfactory working of the opening frames.

Mastic Cement:

- The gaps between frames and supports and also any gaps in the windows section shall be raked out as

directed and filled with mastic cement of approved colour and make to ensure complete water tightness. The mastic cement shall be of such colour and Composition that it would not stain the masonry/ concrete work, shall receive paint without bleeding, will not sag and shall not set hard or dry out under any conditions of weather. The samples of mastic cement to be used for this purpose shall be got approved by the Engineer-in-Charge before its actual use.

Sealant:

- Use modified silicone for joint subject to movement and in glazing.
- Surfaces to receive sealant shall be properly prepared, cleaned, primed and excess sealant removed from finished surfaces.
- Sealed joints shall be neatly tooled and surfaces smoothed.
- Follow the instruction of the sealant manufacturers.
- Colour of the sealant shall be approved by the Engineer-in-Charge.

Glazing:

- Glazing shall generally be accomplished from the inside of building.
- The glazing system shall be designed to this end use a continuous EPDM compression gasket on both sides (Present Gasket on one side of glazing pocket and roll in gasket on another side). A continuous wet seal shall be employed to ensure a complete water tightness.
- Maintain a minimum glazing bite, edge clearance and surface clearance depending on the glass as recommended by the glass manufacturer.

Sealant and Gasket Application:

- Sealant and gasket shall be provided wherever shown in the drawings or required for a permanently weather tight installation. The sealing mechanism is necessary but is not indicated, it shall be of type recommended by the sub- contractor and approved by the Engineer-in-Charge.
- All adjoining surfaces shall be protected to receive sealant against staining by masking and/ or other methods.
- Joints and joint surfaces shall be clean, dry, and free of any material that may have an adverse effect on the bonding and/ or seal of the sealant and gasket materials.
- Apply sealant and gasket under the conditions recommended by the manufacturer(s). Prime all surface to receive sealant and gasket unless recommended otherwise, use no sealant that has started to set in its container or a sealant that has exceeded the self-life published by the manufacturer.
- Fill all joints continuously and completely with sealant, forming a neat, uniform, concave bead. Finish the material flush with adjoining surfaces unless shown on the drawings. All sealant surfaces shall be tooled smooth.
- Tensile or shear stress in structural silicone sealant joint shall not exceed 1.4 kg/ sqm.

Protection & Cleaning: The contractor shall adequately protect all components and accessories from *damage* during shipments, storage at job site, erection and after completion of the work. At such time as may be directed, the sub-contractor shall remove all protective tapes or coating, thoroughly clean all anodized aluminium and glass surfaces with suitable cleaning agent, make final adjustments to all ventilators, etc. and hardware leaving all in first class working order.

Details of Tests

Insertion : Nil Correction : Nil Omission : Nil AE(P)... / EE.....

- The various tests on aluminium sections shall be conducted in accordance with the relevant IS codes.
- The minimum number of tests for powder coating and corrosion resistance shall be as given below:

S. No.	Details	No. of Tests
1	<i>Doors, Windows & Ventilators</i>	<i>5% of Nos. manufactured.</i>

- The samples of major member of each unit of doors/ windows shall be selected at random by Engineer-in-Charge as such that all the aluminium section be got tested.
- The cost of samples, carriage or the samples and testing charges, if any, shall be borne by the contractor.

Acceptance Criteria:

The Aluminium sections shall conform to the provisions of the relevant items. For payment purpose only, actual weight of sections shall be taken into account. However, if the sectional weight of any Aluminium section is higher than the permissible variation then the weight payable shall be restricted to the weight of the section including permissible variation.

Measurement:

Payment by weight shall be made for Aluminium sections including beading only and all fixing angles cleats fittings and fixtures such as handles and hinges etc., shall not be included in the weight to be paid.

Rates:

The rates of the items shall include the cost of all materials, labours and inputs required

Factory made glazed Steel/Aluminium Doors; Windows & Ventilators shall be manufactured in a workshop approved by the Engineer-in-charge.

13.0 STRUCTURAL GLAZING

- General:

The work shall be carried out through an approved specialized agency, who shall furnish all materials, labour, accessories, equipment, tool and plant and incidentals required for providing and installing Structural Glazing work. The specialized agency shall be got approved from the Engineer-in-charge, well before actual commencement of the item of work. Necessary performance certificates in respect of agencies proposed to be engaged shall be submitted within 30 days from the date of issue of acceptance letter to substantiate technical capability and experience of the agency for prior approval of the Engineer-in-charge.

The Contract Documents define only the design intent and general performance requirements. The Contractor is entrusted with total responsibility for design, structural calculations, shop drawings, fabrications, installation, warranties, certifications and related documentation.

The Contractor shall be entirely responsible for the design, fabrication and erection of the systems, and all work shall be performed entirely by his own forces.

Design approved metal framing members to accommodate expansion and contraction of components without buckling, creating stress on glass, structural components and fasteners, joint seals or other damaging effects.

The Contractor shall provide to sealant manufacturer samples of all relevant substrates, including finished aluminium, coated glass, gaskets, setting blocks and brackets.

Sealant manufacturer shall perform tests to verify adhesion, staining and chemical compatibility. The Contractor shall use sealants and substrates only in combinations for which favourable addition and compatibility results have been obtained.

Aluminium surfaces in contact with mortar, concrete, plaster, masonry, wet application of the fire proofing and absorptive materials shall be coated with an anti- galvanic, moisture barrier material.

▪ Conceptual design:

- Component and hardware description.
- Design, fabrication & execution methodologies.
- Detailed bar chart & showing all activities from macro to micro details.
- Structural design and engineering fabrication, supply and erection of the Structural/ Structural Glazing wall system including but not limited to the following:
 - Extrusion aluminium framing members.
 - All interior trim covers and closures.
 - All anchor clips, fasteners, and brackets.
 - Glazing, including materials, gaskets, sealants, spacers and related work.
 - A continuous gutter system at each floor of the unitized Structural Glazing wall.
 - Field water tests.

▪ Samples:

Sample of one typical panel shall be fabricated, assembled and installed for approval. It shall be of type as per approved drawings. All samples shall be provided at no cost to the Project In-charge.

▪ Design Considerations:

The Contractor should possess adequate engineering background and facilities inclusive of trained system personnel from their parent company and should be able to prove their design and engineering capabilities to meet structural design parameters. The Contractor should carry adequate Professional Indemnity Insurance supporting a design warranty to the benefit of the Project In-charge. The Copies of the same to be forwarded to the Engineer-In-charge within 2 weeks of signing the Agreement.

The Contractor shall submit structural calculations for the system and it shall be stamped and signed by a qualified structural engineer, including mock-up complying with current design rules of the relevant aluminium code include analysis for wind, dead loads, deflections and if appropriate seismic loads on framing members and anchors. All Structural Glazing shall have mechanical joints shall be designed IS 875.

The design shall also ensure that the maximum deflection of any member shall not exceed 1/175 of the span between supports or 20mm, whichever is less for vertical elements & 1/250 of the span between supports for horizontal elements. Air leakage through windows should not exceed 0.60 Cu.ft/Sq.ft. Minimum design pressures both inward, outward and acting perpendicular to glass (including return surfaces) shall be per the requirements the Indian Wind Loading Code IS 875 Part 3 and earthquake regulations.

The framing members should be designed such that deflection perpendicular to the wall plane of any unsupported span shall not exceed 1/175 or 20mm whichever is the least, under the required design load both positive and negative. Also, no failure of structural silicone Jolts, damage to joinery, components, or permanent set in the framing members in excess of 0.2 percent of the span shall occur under 1.5 times the design load. Deflection in the wall plane of any glazed horizontal span should not exceed ½ the glass edge clearance dimension below.

The Contractor shall also submit the calculations for the structural silicone joint, size as required.

▪ Water Tightness:

A complete drainage system must be incorporated into the Structural Glazing wall frame. Water leakage and

condensation shall be drained or discharged to exterior face of the wall and all internal spaces shall be vented by acceptable means to ensure air-pressure equalization when possible.

Drainage system shall be sealed off per floor height to prevent infiltrated water from leaking to lower floors.

Movement of water behind and on exposed surfaces must be controlled to ensure that water is not retained and that elements will not be damaged or corroded by water and to minimize the potential for algae and fungus growth as a result of standing or trapped water.

▪ Shop Drawings:

The Contractor shall prepare detailed shop drawings incorporating all allowances for construction and fabrication tolerances.

The Contractor shall submit detailed shop drawings for the Structural wall system, aluminium composite panel cladding works to the Project In-charge for review.

The Architect's review will be conformance to the design concept and for the general arrangement only. And such review shall not relieve the Contractor of any responsibilities as stated herein or any other applicable items herein specified.

The Shop drawings shall show joinery techniques, provisions for horizontal and vertical expansion, glass and metal thickness, framing and anchor member profiles, identification all materials including metal alloys, glass types, fasteners and glazing materials, all shop and field sealants by product name. This shall also show relative

layout of all adjacent walls, beams, columns and slabs with all dimensions to each other and grid lines/ dimension position of glass edge relative to metal daylight, anchorage details to the building structure and coping details at the parapet are also to be submitted. The drawing shall also indicate all gaskets, weather strips and Aluminium extrusions.

Shop Drawings shall be signed and sealed by a Qualified Structural Engineer with specific experience in Structural Glazing Wall construction and design.

▪ Samples:

The Contractor shall submit samples for review three (3) sets of labelled samples of each required type and colour of metal finish, on 300mm long sections of aluminium extrusion shapes. Samples must show extremes of colour texture variation. Samples will be reviewed by Project In-charge for colour and texture only. Compliance with other requirements is the responsibility of the Contractor. Colour and texture range of production material shall match approved samples.

Project In-charge reserves the right to require samples which will show the fabrication techniques and workmanship of the component parts, and the design of accessories and other exposed auxiliary items, before fabrication of this work proceeds.

The Contractor shall also submit samples for review three (3) sets of labelled samples of sealant backers, anchor components, anchor assemblies and epoxies.

▪ Aluminium:

Extruded aluminium sections should conform to BIS designation HE9WP/HV9WP, the chemical composition requirements of IS:733, and technical properties as laid down in IS:1285. Standard commercial tolerances shall apply to finished, fabricated and assembled materials.

The sections of mullions and transoms shall be designed to withstand deflection and wind pressure as described in specifications and shall be rigid enough to support and retain the glass and other construction variation as indicated.

Reinforcing member, where used, shall be completely enclosed and if fabricated from steel shall be galvanized and protected with two coats of zinc chromate where welded shall be treated in the same way.

The frames shall be formed by integrated PVDF 3 coats (40 – 45 microns) as per AAMA 2605 specification aluminium section with provision to receive fixed glass spandrel and other construction variation as indicated.

Sections of the frame shall be cut and profiled for assembly in the best workman like manner and finished in a neat and weatherproof construction with proper tempering of aluminium sections.

All dimensions of the Structural Glazing wall shall conform to the overall sizes shown on the drawings. They shall be fabricated to proven and tested detail designs. All parts shall be supplied ready for fixing and complete with all necessary fittings. The exact dimensions for frame work shall be physically checked at site before starting fabrication.

All joints shall be mechanical, jointed with aluminium angles with stainless steel screws.

▪ Silicone Sealant:

The Contractor shall send a sample of PVDF 3 coats (40 – 45 microns) as per AAMA2605 specification aluminium section & selected glass to the silicon sealant manufacturer and get his approval. A copy of that certificate to be submitted to Engineer-In-charge. The cost of samples, carriage of the samples and testing charges, if any shall be borne by the Contractor.

The Contractor shall submit, for record only, glass manufacturer's written statement that any insulated glass, reflective glass and spandrel glass is supported by structural silicone is suitable for such application.

The colour/ shade of sealant shall be decided by the Engineer-in-charge and the Contractor to get approval before procurement.

▪ Glass Specification:

Providing and fixing aluminium semi unitized vertical Structural glazing system with glazed vision panel and spandrel panel of approved make having main frame of verticals and horizontals made out of specially designed extruded aluminium sections to withstand wind pressure at a height of 40m and fabricated, fixed at all levels, elevation and heights to the Masonry / RC walls with necessary clamps, brackets and anchor fasteners. All clamps and brackets shall be Mild Steel Hot dip galvanized minimum 80 microns thick and shall conform to IS: 4759-1996. The extruded aluminium section shall be anodized in approved colour with an anodic coating of minimum 20 microns. Extruded section shall be of 6063 T5 or T6 alloy conforming to ASTM B 221. Any other fastening straps, nuts, bolts, rivets, washers, Fire stops at all floor levels etc. shall be in stainless steel SS 304 grade. All tapes shall be of approved make. The system shall be designed to withstand a wind pressure of 200 kg/Sqm and shall be fixed to the masonry/RC walls with necessary clamps, brackets and anchor fasteners, clamps and brackets shall be Hot dip galvanized minimum 80 microns thick all complete as per manufacturer's manual and specifications. The spandrel panel shall have 50mm thick fiber glass insulation of 48 kg/Cum density of approved make conforming to IS-8183 and 1.0 mm thick Twiga black tissue conforming to BS 476 Part 7. This insulation shall be enclosed in a GI tray fabricated out of 1mm thick. GI sheet and fixed to the glazing framework with stainless steel fasteners. The gap between the GI framework and the concrete framework shall be sealed with Aluminium flashing fixed with stainless steel fasteners. All gaps shall be sealed with Silicone sealant of approved brand. Insulation should be provided in between the Structural glazing aluminium frame work (i.e., behind the spandrel glazed panel) and the structure.

Providing DG glass consisting of 6 mm thick toughened glass inside and 6 mm thick toughened glass outside having 12 mm air gap having VLT = 69 to 73 %, External reflectance = 8 to 12%, Internal reflection = 10 to 14%, Solar factor = 0.51 to 0.55, U value = 1.6 to 2 W/sqm K etc

▪ Accessories:

Silicon gaskets, weather stripping, extruded seals and spacers, which do not come into contact with structural silicone sealant shall be of Silicon gasket or approved equivalent. Where in parallel contact with structural silicone sealants, all gaskets, setting blocks and spacers other than foam glazing tapes shall be of heat cur silicone rubber, chemically compatible with the silicone sealant and suitable for the specific purpose intended.

All extruded gaskets, weather stripping and spacers other than foam glazing tapes shall have continuous mechanical engagement to framing members adhesive attachment is not acceptable.

The cladding system shall be constructed with (and shall maintain during its design life) a standard of seal which shall not result in any reduction of sound insulation performance.

Gaskets, weather stripping and seals used to achieve the required weather proofing and/ or air tightness shall be selected to accommodate fully the range of dimensional tolerances associated with fabrication and installation of the cladding system. Gaskets, weather stripping and seals shall be formed from materials capable of retaining their elastic qualities, dimensions and resistance to physical and chemical attack sufficient to maintain the full water tightness, air tightness and acoustic performance for the design life of the Structural wall.

Extruded gaskets, weather stripping, seals and spacers mechanically engaged by flutes or pockets extruded in framing member shall be installed without residual tension or extension. Dry lubricants may be used to reduce drag during installation of synthetic rubber extrusions and to induce compression so as to prevent gradual elastic shrinkage and retraction from their ends. Wet lubricants containing detergent shall not be used for any purpose which may bring the liquid into contact with the coated surfaces of vision and spandrel glass.

▪ Fabrication & Installation:

Installation shall be in true line vertically and horizontally.

Work shall be done by competent workmen who are thoroughly skilled in their trade. Assemblies shall be neat and free of defects that impair strength, function or appearance. The work shall be accomplished in compliance with the specified criteria without buckling opening or joints. Under stress on fasteners, sealants and gaskets, opening of welds cracking of glass leakage noises and other harmful effects.

As far as practicable fitting and assembly of the work shall be done in the shop.

All exposed work shall be carefully matched to produce continuity of line and design.

All joints in exposed metal work, unless otherwise shown or specified shall be accurately fitted end rigidly secured with joint sizes conforming to industry standards.

Except where otherwise shown specified or directed the method of assembly and joining shall be as per approved shop drawings. Fabricate and fasten metal work so that the work will not be distorted nor the fasteners over stressed from the expansion and contraction of the metal.

All welding shall be in accordance with the appropriate recommendations of the Indian welding codes and shall be done with electrodes and/ or by methods recommended by the manufacturer of the alloys being welded. All welds behind finished surfaces shall be done as to minimize distortion and/ or dis-coloration on the finished side. All weld spatter and welding oxides on finished surfaces shall be removed by de-scaling and/ or grinding.

Unless otherwise shown or specified, all weld beads or exposed surfaces shall be ground and finished to match and blend with finish on adjacent parent metal. Grinding and polishing of nonferrous metal shall be done only with clean wheels and compounds free from iron and iron compounds. No soldering and/ or brazing shall be allowed.

The Contractor shall conceal all the fasteners where visible in the finished work.

All aluminium components shall fabricate before finishing, cutting of components will not be acceptable.

As the building is exposed to varying weather actions, all fasteners shall be stainless steel, self-tapping screws with Aluminium brackets. Steel anchors shall be pre-holed and galvanized. The bolts shall be steel chromium plated along with nuts and covered with butyl sealing compound.

Where aluminium comes into contact with masonry, brickwork, concrete, plaster or dissimilar metals, it shall

be coated with an approved insulation lacquer, paint or plastic tape to ensure that electro-chemical corrosion is avoided.

The Contractors shall be responsible for placing in position the Structural Glazing wall frames for the satisfactory performance and should be totally leak proof for a minimum period of ten years Sealant and Gasket Application

Sealant and gasket shall be provided wherever shown in the drawings or required for a permanently weather tight installation. The sealing mechanism for each location and use shall be as indicated on drawings in those locations where a mechanism is necessary but is not indicated. It shall be of type recommended by the Contractor and approved by the Project In-charge.

All adjoining surfaces shall be protected to receive sealants against staining by masking and/ or other methods.

Joints and joint surfaces shall be clean, dry and free of any material that may have an adverse effect on the bonding and/ or seal of the sealant and gasket materials.

Apply sealants and gasket under the conditions recommended by the manufacturer(s) Prime all surface to receive sealants and gasket unless recommended otherwise use no sealant that has started to set in its container or a sealant that has exceeded the self-life published by the manufacturer.

Fill all joints continuously and completely with sealant forming a neat uniform concave bead. Finish the material flush with adjoining surfaces unless otherwise shown on the drawings. All sealant surfaces shall be tooled smooth.

▪ Certification:

The Contractor shall submit a letter of certification from the sealant manufacturer stating that the sealant has been tested for adhesion and compatibility on production samples of metals, glass, and other glazing components, and that all sealant details and application procedures shown on the reviewed shop Drawings are acceptable for use.

Where the Structural Glazing wall and other cladding impinges on, intercepts, covers, is attached to or supported by the work of other trades, for instance at parapet-level junctions with roof membranes and back-up walls, the Contractor's shop drawing and location drawings shall clearly distinguish elements and components of construction by other.

Anchorage System and Building Frame

Each mullion shall be fixed to the structural slab at each floor level. All steel fasteners shall be galvanized to minimum 80-90 microns coated with zinc chromate primer and supplied by the Contractor.

▪ Water Tightness:

No gross leakage shall be observed when subject to test for water penetration as described in BS 4315 Part-1

GUARANTEE:

- The Structural Glazing work shall carry 5 Years guarantee for proper design and performance to be reckoned from the date of completion of the entire work under the contract against faulty workmanship, finishing, unsound materials and other related problems.
- The design and installation shall be to the best international standards and shall specially take account of wind and seismic loads, storms, thermal stresses, building movements and the like.
- The 5 year guarantee shall be furnished in non-judicial stamp paper of value Rs.100/- or more, in prescribed Performa. The guarantees shall be submitted before final payment and shall not in any way limit any other rights to correct which the Employer may have under the Contract.

- In addition to above, 10% (Ten percent) of the cost of "Structural Glazing Work" shall be withheld from the bills towards guarantee as per decision of Engineer-in-Charge whose decision will be final and binding. This amount to be withheld towards guarantee shall be in addition to the other amounts to be withheld as mentioned elsewhere in the contract agreement. However, half of this withheld amount would be released after two years from the date of completion of the work, if the performance, as required, is satisfactory. The remaining withheld amount shall be released after 5 years from the date of completion of work, if the performance, as required, is satisfactory. If any defects are noticed during the guarantee period, it shall be rectified by the Contractor within seven days of issue of notice to the Contractor, temporarily, to the satisfaction of the CPWD/ Client Department or any other authorized representative of client department and within a period of one month the permanent rectification of the defects/replacement of defective materials should be carried out by the Contractor. If not attended to, the same shall be got done through other Contractor at the risk and cost of the Contractor and the cost, which shall be final and binding on the Contractor, shall be recovered from the amount withheld towards the guarantee as mentioned above or any other amount due to the Contractor. However, the amount withheld as guarantee can be released in full against irrevocable bank guarantee from a Schedule/Nationalized Banks, of the same amount, for the guarantee period is submitted by the Contractor in favour of Engineer-in-charge. The defects, if any, shall be rectified, retaining the same aesthetics and other functional parameters of the original work.

14.0 FALSE CEILING

False ceiling in different locations shall be done as per Schedule of Finishes and as per CPWD specifications, as per direction of engineer-in-charge.

15.0 specification for galvalume roofing system with truss .

Providing and installing prefabricated sandwich PUF roof Panel comprising of on two faces PPGL (galvalume) colour coated 0.5mm TCT sheet and CFC free close cell, high density rigid polyurethane foam of high density (40 ± 2 kg/m³) having a thermal conductivity value of 0.023 w/mk and of required thickness sandwiched between the two galvalume sheets. The outer & inner galvalume sheet of 0.50mm TCT steel 550 Mpa shall have a coating mass of 150 g/sqm zinc aluminium alloy coating total of both sides as per AS-1397 and finished with 20 microns colour coating of SMP polyester quality paint as per AS/NZS-2728:1997 (Category-3) over a 5 micron primer on exposed side and a back coat of 5 microns on inner side over a 5 micron primer including miscellaneous expanses of fixing accessories such as dash fastners and making arrangement for concealed conduits etc.

The prefabricated panels shall be fixed directly to the over purlin using self drilling fasteners. The metal sheet shall confirm to IS: 513.AS-1397&2728. The polyurethane insulation shall confirm to IS: 12436 The rate include cost of flashing/ridges/ corner pieces/ hips etc, made of 0.5 mm TCT PPGL (Galvalume) steel sheet in required shape and size including all accessories required to complete the work. The rate of the item is inclusive of all materials, likes base channal of required size and shape for seating of wall panels on floor /walls, erection accessories, incidental charges, cost of dash fastners etc. Shop drawing for the same has to approved from Engineer-in -charge before execution of work at site.

SPECIAL CONDITIONS

- 1 The contractor shall not store/dump construction material or debris on metalled road.
- 2 The contractor shall get prior approval from Engineer-in-Charge for the area where the construction material or debris can be stored beyond the metalled road. This area shall not cause any obstruction to the free flow of traffic/inconvenience to the pedestrians. It should be ensured by the contractor that no accidents occur on account of such permissible storage.
- 3 The contractor shall take appropriate protection measures like raising wind breakers of appropriate height on all sides of the plot/area using CGI sheets or plastic and/or other similar material to ensure that no construction material dust fly outside the plot area.
- 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 vehicle 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 relating 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 compulsorily use jet in grinding and stone cutting.
- 9 The contractor shall comply all the preventive and protective environmental steps as stated in the MoEF as per prevailing guidelines .
- 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 the 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.
- 14 **Roofing sheet:-** a) Shop drawing / design to be submitted approved specialize agency and get it approved by Engineer in charge before execution at site and no extra payment done of drawing / design
b) For payment purpose surface area (excluding over lapping area) to be measured.
15. No extra payment will be made for operation/activity mentioned at Sl. No. 1 to 14 above.
16. The contractor shall comply all the preventive and protective environmental steps as stated in the NGT guidelines, if any.
17. The contractor shall comply all the preventive and protective prevailing guidelines issued by MHA and Gujarat government for prevention and control of COVID-19.

SPECIAL CONDITIONS FOR ACRYLIC PAINTING.

All purchase of paint shall be made directly from the manufacturers or their authorized dealers. The delivery challan shall be issued by the manufacturers store yard directly with full description of the work for which the purchases is being made. The condition shall be applicable for all purchases if the quantity is 100 liters or more in a work.

Guarantee for external finishing walls with smooth exterior paint.

The work of external wall finishing work as per item shall be guaranteed for a period of 5 (Five) years as per enclosed guarantee bond against non uniform colouring flaking workmanship and defective finishing. On notification by the Engineer- In – Charge of any compliance to be performed under this guarantee by the contractor. The contractor shall immediately supply labour/ material and rectify all the defects notified by the Engineer – In –Charge to perform this guarantee at no additional cost and to ensure that the defects are fully rectified. In addition extra **2% (two percent)** of the amount of the external finishing work as per **relevant item of the agreement** shall be withheld on this account which shall be refunded under expiry of the guarantee period if no defects are observed in the said period if the defects have been rectified in pursuant in the agreement to the entire satisfaction of the Engineer – In - Charge.

The materials shall be Premium Acrylic Smooth Exterior paint with silicone additives “Snowcyl 1 – XT, Of M/s Snowcem India Ltd.. or equivalent like (a) Weather Coat Smooth “ of M/s Berger Paint India Ltd (b) “ Dulux – Weather Shield” of M/S . ICI (India) Paints (c) Apex Ultima“ of M/s Asian Paints.

The base for painting (Acrylic) be prepared by cleaning, scaling mosses etc. with wire brushes and cleaning with water etc. complete for which no extra payment shall be made.

Annexure- T&P

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

S. No.	Name of Equipment	Numbers
	Equipment for Concrete work	
1	Concrete transit mixer	As per requirement
2	Concrete mixer (diesel)	2 Nos.
3	Needle vibrator (electrical)	3 Nos.
4	Needle vibrator (petrol)	3 Nos.
5	Surface vibrator	2 Nos.
	Equipment for Building work	
1	Bar bending Machine	1 Nos.
2	Bar cutting machine	1 Nos.
3	Welding machine i/c transformer	1 Nos.
4	Cube testing machines	1 Nos.
5	Grinding/polishing machines	4 Nos.
	Equipment for transportation	
1	Tippers	1 Nos.
2	Trucks	1 Nos.
3	Tractor with Trolley	1 Nos.
4	Water Tanker	1 Nos.
	Pneumatic equipment	
1	Air compressors (diesel)	1 No.
	Dewatering equipment	
1	Pump (diesel)	1 Nos.
2	Pump (electric) (Desirable)	1 No.
	Power equipment	
1	Diesel generator of sufficient capacity	1 No.
	/ Survey Instruments	
1	Autolevel and Staff	1 No.
2	Graduated Glass Cylinder	As per requirement
3	Measuring jars 100ml, 200ml, 500ml	1 No. each
4	Verniers calipers 12" & 6"	1 No.
5	Digital Micrometer least count 0.01 mm	1 NO.
6	Screw Gauge 0.01mm – 10mm,	1 No.

Note:- The above list is only indicative and not exhaustive. The above T&P list is not exhaustive and the contractor shall procure necessary T&P whenever required for timely completion of the work.

LIST OF PREFERRED MAKES

Note:

1. The contractor shall obtain prior approval from the Engineer-in-Charge before placing order for any specific material or engaging any of the specialized agencies. The contractor shall make a detailed submittal with catalogues and highlighted proposed specification as well as full details of the works executed by the specialized agencies, as specified.
2. Wherever applicable, the Engineer-in-Charge may obtain prior approval from T.S authority for any material equivalent to that specified in the tender subject to proof being offered by the contractor for equivalence to his satisfaction.
3. Unless otherwise specified, the brand / make of the material as specified in the item nomenclature, in the particular specification and in the list of approved materials attached in the tender, shall be used in the work.
4. In case of non availability of the brand specified in the contract the contractor shall be allowed to use alternate equivalent brand of the material subject to submission of documentary evidence of non availability of the specified brand. The necessary cost adjustments on account of above change shall be made for the material.
5. The Engineer-In-Charge shall verify that manufacturers must have valid IS Certification as on date for materials wherever applicable.

The following brands shall be used if not otherwise mentioned in the items.

LIST OF PREFERRED MATERIALS & SPECIALIZED AGENCIES

MATERIALS	APPROVED BRANDS
Ordinary Portland Cement / Portland Pozzolana Cement	Ultra Tech, A.C.C., Ambuja, Birla, Vikram, Shreecement, Century cement
White Cement	J.K., Birla White
Reinforcement Steel	Tiscon, SAIL, TATA, RINL, Jindal Steel & PowerLtd./, JSW Steel Ltd., APL Apollo
Parallel Threaded Couplers	DEXTRA, G-TECH, Spplcetek,ISHITA
Re-barring Chemical	HILTI, 3M INDIA, Fischer
Structural Steel/Tubes	Tata Steel, SAIL, RINL, Jindal,JSPL, APL Apollo
Plasticizer, Super Plasticizer, Admixtures, Other constructionchemicals	MC Bauchemie, Sika, Fosroc, BASF,Dr. Fixit, CICO, Asian,Home shield, Smart care, Penetron, MYK arment, MCON RASAYANIndia LTD., PAR, Ferrous Crete, Berger
AAC Block	ULTRA TECH, BILTech ,SIPOREX, Ecolite , Aerocon, ACC, B.G SHIRKE, BILT, WONDER,ECO GREEN, FERROUS CRETE
ACC Block Adhesive	ACC, ULTRA TECH, J.K., FERROUS CRETE,BAL ENDURA, AEROCON, ARDEX ENDURA
Polymer modified cementitious/epoxy grout, Tile/stone Adhesive	ARDEX ENDURA, LATECRETE, FOSROC,BASF, ACC,ECO GREEN,Kerakoll, Ultratech, STP limited, BIRLA, MCON RASAYAN INDIA LTD
Waterproofing Compound	DOCTOR FIXIT (Pidilite), BASF, CICO, SIKA , Fosroc, STRUCO, STP Ltd., Ultratech, Technicol, Birla White, Kerakoll.
Water Proofing Base Coat	UNO, Birla opus, MYK Arment.

Insertion : Nil Correction : Nil Omission : Nil AE(P)... / EE.....

Silicon based water repellent/ Weather Sealant membran	GE Plastics, Dow Comings, Wacker,BASF, Pidilite,smartcare, Birla opus,MYK ARMENT, MCON RASAYAN INDIA LTD, PAR,STP , Ferrous Crete limited
Poly-Sulphide Sealant	Fosroc, Pidilite, Sika, BASF, Technicol,STP limited
Plywood	ARCHID PLY, KITPLY, GREEN PLY, CENTURY, Anchor.
Flush door shutters	KENWOOD,ARCHID PLY, KUTTY FLUSH DOORS, Greenply, A-1 Teak, Century Ply, Duro, Anchor
High-pressure laminate	Formica, Merino, Greenlam, Century, Decolam, Kitply, Action TESA, Sunmica
Rolling Shutter with Grills	STANDARD,SWASTIK,SHUBDHWAR,SONA
Aluminium Extrusions	HINDALCO,JINDAL
Dash Fastners	HILTI,FISHER,CANON
SS Hardware and accessories for Doors and doors	DORMA, HAFELE, GEZE, ,KICH, Archware, Ozone, Pacific, SHALIMAR, BHAWANI Fire
S.S. railing and other Stainless-steel works	Salem Steel, Jindal , AQUINOX INDIA or equivalent works
Hardware for Kitchen cabinet, ward robe and shelves	Godrej, EBCO, KAFF, SLEEK.
Particle board	Action TESA, Greenlam, Merino, Kitply
Melamine Polish	ASIAN PAINTS (MELAMYNE GOLD), PIDILITE INDUSTRIES (WUDFIN), ICI DULUX (TIMBERTONE)
Cement Based Wall putty	Birla wall care, JK White , Berger, Asian Paints,JSW paints, Ferrous Crete
Oil Bound Washable Distemper / Dry Distemper	Asian paint :(Professional Acrylic Distemper), NEROLAC : Beauty Acrylic Distemper Berger: Bison Acrylic Distemper Dulux ICI : JSW paints
1st Quality Acrylic Distemper / Dry Distemper	Asian Paints :(Tractor Aqua Lock Paint), Berger : Commando Or equivalent paints of Nerolac or ICI-Dulux , Birla Opus, JSW paints
Acrylic Emulsion Paints	Asian Paints :(Professional Premium Interior Emulsion Paints), Nerolac :Beauty Gold Berger : Rangoli total care ICI-Dulux : Super Cover, Birla Opus, JSW paints
Plastic Emulsion Paint	Asian Paints :(Apolite Heavy Duty Premium Emulsion Paint), Nerolac : Impression Berger : Easy Clean ICI-Dulux : 3 in 1 Birla Opus, JSW paints
Premium Acrylic Emulsion Paints (Interior)	Asian Paints :(Royal Luxury Emulsion), Nerolac : Impression Berger : Silk ICI-Dulux : Velvet touch JENSON & NICHOLSON,

Insertion : Nil Correction : Nil Omission : Nil AE(P)... / EE.....

	Birla Opus
Textured Exterior Paint	Asian paints, Nerolac, Berger Paints, Ultratech Paints, Luxture, SPECTRUM, INSPIRA.
Acrylic Smooth Exterior Paint	Asian Paints :(Apex/Professional Premium Exterior Emulsion), Nerolac : XL Berger : weather Coat, PEARL, PEARL-ULTIMA (Advance Anti-Algal Weather Proof Paint) ICI-Dulux : Weather Shield
Premium Acrylic Smooth Exterior Paint with Silicon additive	Asian Paints :Apex Ultima Nerolac : XL Total Berger : weather Coat all guard , ICI-Dulux : Weather Shield max
Synthetic Enamel Paint	Asian Paints : Apcolite Premium Gloss Enamel, Nerolac : Synthetic Hi Gloss Berger : Luxol Hi Gloss ICI-Dulux : Gloss Synthetic Enamel Birla Opus, JSW paints
Cement Primer	NEROLAC, Berger, BP White (Berger), Decoprime WT (Asian), White primer (ICI). Birla Opus, JSW paints, Birla White
Steel Primer (Red Oxide Zinc Chromate Primer)	Asian paints, Berger, ICI , NEROLAC, JSW paints
Wood Primer	Asian paint (Wood Primer- White/Pink), Berger ICI , NEROLAC, JSW paints
Epoxy Paint	ICI, NEROLAC, ASIAN, BERGER, Kansai Akzo Nobel.
Fire Paint	ASIAN PAINTS, Akzonobel Coatings India Ltd, PROMAT, Jotun
Gypsum Plaster	Gyproc, Asian Paints, Birla ,Ferrous Crete, Ultra Tech.
Gypsum Board	SAINT GOBAIN,BORAL
Cement based Ready Mix Plaster	Ultratech, Wallplast, Buildwell, ACC, Birla, MCON RASAYAN INDIA LTD, Birla White, Ferrous Crete
EPDM Gasket	Amee Rubber Industries Pvt. Ltd., Bohra Rubber, Osaka, Technicol
Dash / Anchoring Fasteners	Hilti, Fischer, Arrow, Kundan, Trixel, Wurth
Mortice lock	Godrej,Harrison,kich
SPIDER FITTINGS	DORMA,HAFELE
Aluminium Structural Members - Windows, Glazing and Partitions	Hindalco, Indalco, Jindal Aluminium Ltd.
Aluminum composite panel(ACP)	ALSTRONG, ALUCOBOND, ALUDECOR,4MANN B Arrownond,VIVA,Eurobond
FLOOR SPRING/DEAD LOCK/DOOR CLOSERS/PANIC BAR	DORMA,GEZE,HAFELE,DEFINE, Kich
ALL TYPE OF SILICONE	DOW CORNING,GE SILICON
False Ceiling	Armstrong, Hunter Douglas, SAINT GOBAIN,DEXUNE,Interach,MCRA, Hi-Steel, Diamond
Floor & Wall Tiles : Ceramic / Vetrified tiles / Antiskid / Matt / Glazed	KAJARIA, JOHNSON, NITCO, SOMANY, RAK, Marbito, VITERO, CERA, ITALICA.

Phenol bonded Bamboo wood flooring	Lemi wood, S. M. Flooring or equivalent
POLYCARBONATE SHEET	SUNPOL, GALENA, ALCOX, GE PLASTIC, LEXAN, DANPALON, Coxwell, Lexan, Tuflite, Danpalon/Palaram
Chequered Tiles, Paver Block & Kerb Stone	Super Tiles, Hind Mosaic, Vyaara, Kajaria, Ultra Designer Tile, Nitco, Vitco, Bhavani pavers.
Vitrified paver tiles	Kajaria, Johnson, Nitco, RAK, SOMANI
Clear / Float / Frosted Glass / Mirror	ST. GOBAIN, MODIGUARD, ASAHI, PILKINGTON, CERA
Vitreous Chinaware sanitary work	Parryware, Hindware, Jaquar, Cera, Euronics.
Bathroom accessories (Towel ring, Towel rack, Soap Dish Holder, etc)	Cera, Jaguar, Archware
GULLY TRAPS(S.W.)	PERFECT, PARRY, CHERRY
Plastic seat with Lid	Parryware, Hindware, Seabird
Sanitary ware	Parryware, Hindware, Jaquar, Cera, Euronics.
Water supply CP Fittings & Accessories	Cera, Jaquar, Euronics, ESSESS & Bathsense
PVC water tank	Sintex, National Plastic, Kaveri
Stainless Steel Sink	Nirali, Cera, Jaquar, Neelkantha, STAR, JAYNA, NIRALI
C P Brass fittings	JAQUAR, Cera, Kohler, Roca
C P Brass, Flush Valve	JAQUAR, zoloto, leader, Euronics.
GI Pipes	Zenith / Tata / Jindal, SURYA, ASIAN
GI Fittings	Unik, Zoloto, AVR, R-BRAND
Valves	Zoloto, Sant, KIRLOSKAR, LEADER
HDPE Pipe	Reliance, Jain Pipes, ORIPLAST, Supreme
DI Pipes AND Fittings	ELECTROSTEEL, Kesoram, JINDAL, TATA DUCTURA, Neco, Kapilansh
Centrifugally Cast (Spun) Iron Pipes & Fittings	Neco, Kapilansh, SKF, BIC
Hubless CI Pipes & Fittings	Neco, Kapilansh, SKF,
CI Manhole covers, Frames & GI Gratings	Neco, Kapilansh, SKF,
SFRC Covers	KK spun pipes, Jain spun pipes, SS industries
RCC Pipes	Jain Spun Pipes, LAKSHMI, SOOD & SOOD, PRAGATI, K.K. Spun Pipe, The Indian Hume Pipe Co. Ltd., Patel Hume Pipes.
UPVC / CPVC Pipe & Fittings	Finolex Supreme, Prince, Astral, Ashirwad, Raksha, AKG
UPVC DOORS & windows (Profile makers & their authorized Fabricators only)	Fenesta, Kommerling, Aluplast, Duroplast, KAKA, RAJSHREE Plastiwood, VENSTER/OKOTECH
UPVC DOORS & windows Hardware	Rotto, Dorset, Kinlong
FRP chajja, FRP Shutters & Frame	Fibreways, Bhutt FRP

Insertion : Nil Correction : Nil Omission : Nil AE(P)... / EE.....

Anodised Aluminium Doors Fittings (ISI Marked only)	Classic , Shalimar , Prestige
PVC Shutters & Frame	RAJSHREE Plastiwood , DUROPLAST,POLYLINE,POLYWOOD,KAKA
Steel Door / Window Frames	SenHarvik, Shiv Mular, Steel Plast, AGEW,
SBR COMPOUND (For REPAIR MORTAR & WATER PROOFING SLURRY)	MASTER EMACO SBR2 OF BASF, SIKA LATEX POWER, CICO LATEX sbr. Ultratech, PAR, Technicol
Acrylic Polymer FOR BOND COAT AND POLYMER MODIFIED MORTAR	Anuvi Chemical, Sunanda Specialty Coating Pvt. Ltd, Ultratech, Technicol, MYK Arment,PAR, Berger
Rust remover	Anuvi Chemical, Sunanda Specialty Coating Pvt. Ltd,
Rust Passivator	Anuvi Chemical, Sunanda Specialty Coating Pvt. Ltd,
READYMADE SINGLE COMPONENT POLYMER MODIFIED REPAIR MORTAR	MASTER EMACO S 348 OF BASF, ANUVI CHEMICAL, SUNANDA SPECIALITY COTING PVT.LTD, SKG CONSTN, MCON RASAYAN India LTD, Technicol,ULtratech, MYK Arment,STP ltd
MICRO CONCRETE	DR. FIXIT , BASF , FOSROC,PAR, Technicol, Smartcare, Home Shield,MYK Arment, STP limited, Berger
Stone Ware Pipes Grade-A (ISI Marked only)	Sonya, Supertech, Cherry*
PTMT (ISI Marked only)	Prayag, Polytuf.
APP Sheet	Asian/smartcare, Dr. Fixit, SIKA, STP limited , Technicol, Technicol,
Overhead steel storage unit / Customize furniture	Accufur, Rockworth, Citizen, Wipro, Durian or equivalent.
WPS doors & Frames, sheets & Jali	KAKA, RAJSHREE Plastiwood

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

(BASEMENT /LOWER GROUND FLOOR / UNDER GROUND TANK / ROOF)

The Agreement made this _____ day of _____ Two thousand and _____ between _____ son of _____ (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 buildings and structures in the contract recited completely water and leak-proof.

AND WHEREAS THE GUARANTOR agreed to give a guarantee to the effect that the said structures will remain water and leak-proof for **10 (Ten) years** from the date after the maintenance period prescribed in the contract.

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

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

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

During this period of guarantee the guarantor shall make good all defects and in case of any defect being found, render the building water proof to the satisfaction of the Engineer-in-charge at his cost and shall commence the work for the rectification within seven days from the date of issue of the notice from the Engineer-in-charge calling upon him to rectify the defects failing which the work shall be done by the department by some other agency contractor at the GUARANTOR's 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 make good all defects or commits breach there under 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 Obligor _____ and by _____ and for and on behalf of the PRESIDENT OF INDIA on the day, month and year first above written.

SIGNED, SEALED, AND delivered by OBLIGOR in the presence of :

- 1.
- 2.

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

1.
2.

**GUARANTEE BOND TO BE EXECUTED BY THE CONTRACTOR FOR REMOVAL OF DEFECTS
AFTER COMPLETION IN RESPECT OF ALUMINIUM DOORS, WINDOWS VENTILATORS,
STRUCTURAL GLAZING AND ACP WORK.**

The agreement made this _____ day of _____ Two Thousand and _____ between _____ son of _____ (hereinafter called the GURANTOR 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 work in the said contract recited structurally stable, leak proof and sound material, workmanship, anodizing, colouring, sealing.

AND WHEREAS THE GURANTOR agreed to give a guarantee to the affect that the said work will remain structurally stable, leak proof and guaranteed against faulty material and workmanship, defective anodizing, colouring, sealing and finishing for **5 (Five) years** to be reckoned from the date after the expiry of maintenance period prescribed in the contract.

NOW THE GUARANTOR hereby guarantee that work executed by him will remain structurally stable, leak proof and guaranteed against faulty material and workmanship, defective anodizing, colouring, sealing and finishing for two years to be reckoned from the date after the expiry of maintenance period prescribed in the contract.

The decision of the Engineer-in-charge with regard to nature and cause of defects shall be final.

During this period of guarantee, the guarantor shall make good all defects to the satisfaction of the Engineer-in-charge at his cost and shall commence the work for such rectification within seven days from the date of issue of the notice from the Engineer-in-charge calling upon him to rectify the defects failing which the work shall be got done by the Department by some other contractor at the Guarantor's 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 the guarantor fails to make good all the defects or commits breach there under, then the guarantor will indemnify the principal and his successor against all loss, damage, cost expense or otherwise which may be incurred by him by reason of any default on the part of the GUARANTOR in performance and observance of this supplementary agreement. As to the amount of loss and/or damage and/or cost incurred by the Government, the decision of the Engineer-in-charge will be final and binding on both the parties.

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

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

1. _____
2. _____

SIGNED FOR AND ON BEHALF OF THE PRESIDENT OF INDIA BY _____

_____ in the presence of :

1. _____
2. _____

1.
2.

GUARANTEE TO BE EXECUTED BY CONTRACTORS FOR REMOVAL OF DEFECTS AFTER COMPLETION IN RESPECT OF ACRYLIC PAINT WORKS.

This agreement made this ----- day of ----- Two thousand and ----- between ----- son of ----- of ----- (herein after called the Guarantor of the part) and the PRESIDENT OF INDIA (herein after called the Government of the other Part)

WHEREAS THIS AGREEMENT is supplementary to a contract (hereinafter called for Contract) dated ----- and made between the GUARANTOR of the one part and the GOVERNMENT of the other part, hereby the Contractor interalia, under took that the acrylic painting work done on building will remain non flaking and uniform colouring without patches.

AND WHEREAS THE GUARANTOR agreed to give a guarantee to effect that the said Acrylic painting will remain non flaking and uniform colouring without patches for five years from the date of completion of work.

NOW THE GURANTOR hereby guarantee that Acrylic painting done by him will remain non flaking and uniform colouring without patches and the minimum guarantee period of such painting shall be five years to be reckoned form the date of the completion of work.

Provided that the guarantor will not be responsible for damage caused due to earthquake or misuse of buildings or alteration and for such purpose. The decision of the Engineer-in-Charge with regard to cause of damage shall be final and binding.

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

That if the guarantor fails to make good the defects or commits breach there under then the guarantor will indemnify the principal and his successors against all loss, damage cost, expenses or otherwise which may be incurred by him by reasons of any default on the part of 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 and the decision of the Engineer-in-Charge will be final and binding on both the parties.

An amount equivalent to 2% of item will be deducted from R. A. Bills as security and the same will be refunded after five years from the date of completion of work.

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

SIGNED sealed and Delivered by (OBLIGATOR) in the presence of

SIGNED FOR AND BEHALF OF THE PRESIDENT OF INDIA
BY

In the presence of

- 1.
- 2.

**GUARANTEE TO BE EXECUTED BY THE CONTRACTOR FOR REMOVAL OF DEFECTS
AFTER COMPLETION IN RESPECT OF WATER SUPPLY AND SANITARY INSTALLATIONS**

The agreement made this _____ day of _____ Two Thousand and _____ between _____ son of _____ (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 work in the said contract recited structurally stable workmanship, finishing and use of sound materials.

AND WHEREAS THE GUARANTOR agreed to give a guarantee to the effect that the said work will remain structurally stable and guaranteed against faulty workmanship, finishing, manufacturing defects of materials and leakages, etc.

NOW THE GUARANTOR hereby guarantee that work executed by him will remain structurally stable after expiry of maintenance period prescribed in the contract for the minimum life of 02 (Two) year to be reckoned from the date after the expiry of maintenance period prescribed in the contract.

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

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

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

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

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

1. _____
2. _____

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

1. _____
2. _____

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

Form of Bank Guarantee for Earnest Money Deposit / Performance Security (Guarantee) / Security Deposit / Mobilization Advance

1. WHEREAS, the Executive Engineer (Name of division).....,CPWD on behalf of the President of India (hereinafter called "the Government") has invited bid under..... (NIT No.) dated for (name of work)..... The Government has further agreed to accept irrevocable Bank Guarantee for Rs.(Rupees.....only) valid upto(date)* as **Earnest Money Deposit** from(name and address of contractor)..... (hereinafter called "the contractor ") for compliance of his obligations in accordance with the terms and conditions of the said NIT.

OR**

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

1. We,..... (indicate the name of the Bank) (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 within 10 days of the demand.
2. We,..... (indicate the name of the Bank), do hereby undertake to pay the amount due and payable under this guarantee without any demur, merely on a demand from the Government stating that the amount claimed is required to meet the recoveries due or likely to be due from the said contractor. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs.....(Rupees.....only).
3. We,..... (indicate the name of the Bank), further undertake to pay the Government any money so demanded notwithstanding any dispute or dispute raised by the contractor in any suit or proceeding pending before any court or tribunal, our liability under this Bank Guarantee being absolute and unequivocal. The payment so made by us under this Bank Guarantee shall be valid discharge of our liability for payment there under and the contractor shall have no claim against us for making such payment.
4. We,..... (indicate the name of the Bank), further agree that the Government shall have the fullest liberty without our consent and without affecting in any manner our obligation here under to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor from time to time or to postpone for any time or from time to time any of the powers exercisable by the Government against the said contractor and to for bear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said contractor or for any forbearance, act of omission on the part of the Government or any indulgence by the Government to the said contractor or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

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

DATE

WITNESSES:

Authorised signatory

1. SIGNATURE

Name

NAME AND ADDRESS

Designation

Staff code no.

Bank seal

2. SIGNATURE

NAME AND ADDRESS

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

** In paragraph 1, strike out the portion not applicable. Bank Guarantee will be made either for earnest money or for Performance Guarantee /Security Deposit / Mobilization Advance, as the case may be.

केन्द्रीय लोक निर्माण विभाग

कार्यालय ज्ञापन

No. DG/CON/Construction 2023/20

ISSUED BY AUTHORITY OF DIRECTOR GENERAL, CPWD

VIDYUT BHAWAN, NEW DELHI

Dated: 27.02.2026

Subject: Modifications in General Rules & Directions, Clause 1 and Schedule E of GCC 2023 Construction Works

The following modifications are made in the General Rules & Directions, Clause 1 and Schedule E of GCC 2023 Construction Works.

Existing provision	Modified provision
<p>General Rules & Directions</p> <p>11 (i) The Contractor whose tender is accepted, will be required to furnish performance guarantee at specified percentage of the tendered amount as mentioned in Schedule 'E' and within the period specified in Schedule F.</p>	<p>General Rules & Directions</p> <p>11 (i) The Contractor whose tender is accepted, will be required to furnish performance guarantee as mentioned in Schedule 'E' and within the period specified in Schedule F.</p>
<p>Clause 1</p> <p>Performance Guarantee</p> <p>(i) The contractor shall submit an irrevocable Performance Guarantee at specified percentage of the tendered amount as mentioned in Schedule 'E', in addition to other deposits mentioned elsewhere in the contract for his proper performance of the contract agreement, (not withstanding and/or without prejudice to any other provisions in the contract) within period specified in Schedule 'F' from the date of issue of letter of acceptance.</p>	<p>Clause 1</p> <p>Performance Guarantee</p> <p>(i) The contractor shall submit an irrevocable Performance Guarantee as mentioned in Schedule 'E', in addition to other deposits mentioned elsewhere in the contract for his proper performance of the contract agreement, (not withstanding and/or without prejudice to any other provisions in the contract) within period specified in Schedule 'F' from the date of issue of letter of acceptance.</p>
Sl. No. (ii) to (v)	No change
<p>SCHEDULE 'E'</p> <p>Reference to General Conditions of contract</p> <p>Sl. No. (i)</p>	<p>SCHEDULE 'E'</p> <p>Reference to General Conditions of contract</p> <p>No change</p>

1/27/26
EE (C)
D.P. Jindal
EE (Contract)

