

GOVERNMENT OF INDIA
CENTRAL PUBLIC WORKS DEPARTMENT

Name of work:- A/R & M/O to Audit General Office at Shakti Nagar, Jammu.
SH: Supply of material to attend day to day complaints.

PART-A
GENERAL INDEX

<i>Sl. No.</i>	<i>Description</i>	<i>Sheet No.</i>
1.	Part A	1-4
	(Information and instructions to contractors, CPWD-6 & Eligibility criteria)	5-10
	(CPWD -7, SCHEDULE A to F)	11-18
2.	Part B (Civil)	19
	Special conditions (Civil)	20-33
	Additional Conditions of contract specific to Green Building Practices	34-36
	Particular Specifications (Civil)	37-44
	List of Bureau of Indian Standard codes	45-48
	Proforma for Receipt of deposition of original EMD	49
	Form of Performance Security	50-51
	Guarantee for Water Proofing Treatment	52
	Guarantee Bond for Water Supply, Sanitary Installations and drainage	53
	Guarantee Bond for removal of defects in respect of stone/tile work	54
	Guarantee Bond for Aluminum Work	55
	Authority letter	56
	List of Field Tests, Field Testing equipments & instruments, List of T&P.	57
	Proforma for Test carried out, proforma for Cement/Paint registers.	58-59
	List of approved makes of Materials, Fixtures & Fittings etc.	60-68
	Circular GCC - 2023	69-86
	Schedule of Quantities	87-90

It is certified that this NIT contains page no. 1 to 90 is hereby approved.

Assistant Engineer(P),
Jammu Division,
CPWD, Satwari, Jammu.

Executive Engineer,
Jammu Division,
CPWD, Satwari, Jammu.

Correction- Nil

Deletion- Nil

Insertion- Nil

Overwriting- Nil

A.E (P)

E.E.

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

The Executive Engineer, Jammu Division, CPWD, Jammu on behalf of President of India Invites online, percentage rate bids from approved and eligible contractors of CPWD registered in Composite category for following works: -

Sl. No	NIT No.	Name of Work and Location	Estimated Cost Put to Tender	Earnest Money	Time/Period of completion	Last time & date of submission of bid EMD, e-tendering processing fee, and other Documents as specified in press notice.	Time and Date of opening of the bid
1	29/EE/Jammu Division /2026-27/Recall 1	A/R & M/O to Audit General Office at Shakti Nagar, Jammu. SH: Supply of material to attend day to day complaints.	Rs 6,28,191/-	Rs 12,564/-	1 month	Up to 3.00 PM on 03-10-2026	Upto 3.30 PM on 03-10-2026

1. The contractor submitting the tender should read the schedule of quantities, additional conditions, additional specifications, particular specifications, CPWD- 6 and other terms and conditions given in the NIT and drawings. The bidder should also read the General Conditions of Contract of 2023 **Maintenance Work** of CPWD works with upto date correction slips, which is available as Government of India Publications; however, provisions included in the tender document shall prevail over the provisions contained in the standard form. The set of drawings and NIT shall be available in the office of **Executive Engineer, Jammu Division, CPWD, Jammu**. The contractor should also visit the site of work and acquaint himself with the site conditions before tendering. He should only submit his tender if he considers himself eligible and he is in possession of all the required documents. The following conditions, which already form part of the tender conditions, are specially brought to his notice for compliance while submitting the tender online. They are requested to comply following instructions.
 - (A) Tenders with any condition including that of conditional rebates shall be rejected forthwith.
 - (B) **The successful bidder shall be required to submit a Performance Guarantee within 07 days of issue of the Letter of intent, which may be extended by the Engineer-in-Charge up to a maximum period of 03 days on the written request of the contractor, with late fee as defined in Schedule-'F'. The Performance Guarantee shall be 5% (Five Percent) of the Tendered Value or the Estimated Cost Put to Tender (ECPT), whichever is higher.**

Further, in cases where the Tendered Amount is less than eighty percent (80%) of the Estimated Cost Put to Tender (ECPT), the Performance Guarantee shall be increased by an additional amount equal to the difference between eighty percent (80%) of the ECPT and the Tendered Amount, in addition to the Performance Guarantee specified above.

Correction-Nil

Deletion-Nil

Insertion-Nil

Overwriting-Nil

A.E (P)

E.E.

- (C) GST, Work Contract Tax, Labour-Cess etc. as applicable shall be borne by the contractor himself. The contractor shall quote his rates considering all such taxes and hence their quoted rates should be inclusive of all the tax components.
- (D) It will be obligatory on part of the Contractor/ Bidder to tender for and sign the tender documents for all the component parts. The department reserves right to accept tender in full or in part without assigning any reasons.

(E) Forfeiture of Earnest Money

- (1). (i) If any tenderer withdraws his tender or makes any modification in the terms & conditions of the tender which is not acceptable to the department within 7 days after last date of submission of bids, then the Government shall without prejudice to any other right or remedy, be at liberty to forfeit 50% of earnest money absolutely irrespective of letter of acceptance for the work is issued or not.
- (ii) If any tenderer withdraws his tender or makes any modification in the terms & conditions of the tender which is not acceptable to the department after expiry of 7 days after last date of submission of bids, then the Government shall without prejudice to any other right or remedy, be at liberty to forfeit 100% of the earnest money absolutely irrespective of letter of acceptance for the work is issued or not.
- (2). If contractor fails to furnish the prescribed performance guarantee within the prescribed period, the earnest money is absolutely forfeited to the President automatically without any notice.
- (3). In case of forfeiture of earnest money as prescribed in Para (1) and (2) above, the bidder shall not be allowed to participate in the re-tendering process of the work.

2. The intending bidder must read the terms and conditions of CPWD-6 carefully. He should only submit his bid if he considers himself eligible and he is in possession of all the documents required.

3. Information and instructions for bidder posted on website shall form part of tender document.

4. The bid document consisting of plans, specifications, the schedule of quantities of various types of work to be done and the set of terms and conditions of the contract to be complied by the contractor whose bid may be accepted and other necessary documents can be seen between **11.00 AM to 5.00 PM** every day except on Sunday & public holiday or can be seen and downloaded from website www.etender.cpwd.gov.in.

5.. Earnest Money in the form of Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee / e-Bank guarantee (for balance amount as prescribed) from any of the Commercial Banks (**drawn in favour of Executive Engineer, Jammu Division, CPWD, Jammu**) 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 officer (EE/DDH) 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.

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

6. The bids will be submitted upto **3:00 PM on 03-10-2026**. The bid shall be opened at **3:30 PM on 03-10-2026**.

7. Those contractors not registered on the website mentioned above are required to get registered beforehand. If needed they can be imparted training on online tendering process as per details available on the website.

8. The intending bidder must have valid class-III digital signature to submit the tender.
9. On opening date, the contractor can login and see the tender opening process. After opening of tenders he will receive the competitor's tender sheets.
10. Contractor can upload documents in the form of JPG format and PDF format.
11. Certain modifications may be required. Addendum / Corrigendum shall be uploaded by the Engineer-in- Charge, if felt necessary by him, which shall form part of tender document.
12. The bidders are advised to visit the site before submitting his bid to have more clarity about the site conditions and availability of space for execution of the work.
- 13. List of mandatory documents to be scanned and uploaded within the period of bid submission:**
 - (i) Enlistment order of CPWD contractor in appropriate class and category
 - (ii) EMD as per para 5 above.
 - (iii) Certificate of registration of GST in J&K.
 "If the bidder has not obtained GST registration in the state in which the work is to be taken up, then in such a case the bidder shall upload following undertaking with the bid document "If work is awarded to me, I/we shall obtain GST registration certificate within one month from date of receipt of award letter or before payment of 1st R.A. Bill".
 - (iv) Copy of receipt for deposition of original EMD issued from any Division / office of Executive Engineer, CPWD.
 - (v). CPWD form 7 duly signed.
 - (vii). The agency is submit its mobile number, address, and email ID duly mentioned on its official letter head.

Executive Engineer,
Jammu Division,
CPWD, Jammu
(For and on behalf of President of India)

Correction-Nil

Deletion-Nil

Insertion-Nil

Overwriting-Nil

A.E (P)

E.E.

CPWD-6 FOR e-TENDERING

Percentage rate bids are **Invited** on behalf of President of India from approved and eligible contractors of CPWD registered in Composite category for following works:-

Name for the work :- A/R & M/O to Audit General Office at Shakti Nagar, Jammu. SH: Supply of material to attend day to day complaints.

1. 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 6,28,191/-. This estimate, however, is given merely as a rough guide.
- 1.1.1 The authority competent to approve NIT for the combined cost and belonging to the major discipline will consolidate NITs for calling the bids. He will also nominate Division which will deal with all matters relating to the invitation of bids.
For composite bid, besides indicating the combined estimated cost put to bid, should clearly indicate the estimated cost of each component separately. The eligibility of bidders will correspond to the combined estimated cost of different components put to bid.
2. Agreement shall be drawn with the successful bidders on prescribed Form No. **CPWD 7** which is available as a Govt. of India Publication and also available on website www.cpwd.gov.in. Bidders shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.
3. The time allowed for carrying out the work will be **1 month** 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 shall be made available in parts.
(ii). The architectural & structural drawing 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.
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 from website **CPWD eTendering (<https://etender.cpwd.gov.in>) or www.cpwd.gov.in** free of cost.
6. After submission of the bid the contractor can re-submit revised bid any number of times but before last time and date of submission of bid as notified.
7. While submitting the revised bid, contractor can revise the rate of one or more item(s) any number of times (he need not re-enter rate of all the items) but before last time and date of submission of bid as notified.
8. **Earnest Money in the form of Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee / e-Bank guarantee (for balance amount as prescribed) from any of the Commercial Banks (drawn in favour of Executive Engineer, Jammu Division, CPWD, Jammu) 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 officer (EE/DDH) 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.**

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

Copy of Enlistment Order and certificate of work experience and other documents as specified in the press notice shall be scanned and uploaded to the e-Tendering website within the period of bid submission. **However, certified copy of all the scanned and uploaded documents as specified in press notice shall have to be submitted by the lowest bidder only along with physical EMD of the scanned copy of EMD uploaded 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 documents scanned and uploaded are found in order.

The contractors registered prior to 01.04.2015 on e-tendering portal of CPWD shall have to deposit tender processing fee at existing rates, or they have option to switch over to the new registration system without tender processing fee any time.

The bid submitted shall be opened at **03:30 PM on 03-10-2026**

9. The bid submitted shall become invalid and e-tender processing fee shall not be refunded if:

- (i) The bidder is found ineligible.
- (ii) The bidder does not upload scanned copies of all the documents stipulated in the bid document.
- (iii) If any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted physically by the lowest bidder in the office of bid opening authority.
- (iv) If a tenderer quotes nil rates against each item in item rate tender or does not quote any percentage above/below on the total amount of the tender or any section / sub head in percentage rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer.

10. **The bidder whose bid is accepted will be required to furnish performance guarantee at specified percentage of the tendered amount as mentioned in Schedule E and within the period specified in Schedule-F, in favour of Executive Engineer, Jammu Division, CPWD, Jammu payable at Jammu. This guarantee shall be in the form of Insurance Surety Bonds, Account payee Demand Draft, Fixed Deposit Receipt or Bank Guarantee / e-Bank Guarantee from any of the Commercial Banks in accordance with the prescribed form. In case the Bidder fails to deposit the said performance guarantee within the period as indicated in Schedule-F including the extended period if any, the earnest money deposited by the contractor shall be forfeited automatically without any notice to the contractor. The earnest money deposited alongwith bid shall be returned after receiving the aforesaid performance guarantee. The contractor whose bid is accepted will also be required to furnish either copy of applicable licenses/registrations or proof of applying for obtaining labour licenses, registration with EPFO, ESIC and BOCW Welfare Board including Provident Fund Code No. if applicable and also ensure the compliance of aforesaid provisions by the sub-contractors, if any engaged by the agency for the said work within the period specified in Schedule-F.**

11. The description of the work is as follows : A/R & M/O to Audit General Office at Shakti Nagar, Jammu. SH: Supply of material to attend day to day complaints.

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.

12. 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.
13. Canvassing whether directly or indirectly, in connection with bidders is strictly prohibited and the bids submitted by the contractors who resort to canvassing will be liable to rejection.
14. 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.
15. 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 as Divisional Accountant or as an officer in any capacity between the grades of Chief 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 gazette officer in the Central Public Works Department or in the Ministry of Housing & 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.

16. No Engineer of Gazetted rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from Government service, without the previous permission of the Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India, as aforesaid, before submission of the bid or engagement in the contractor's service.
17. The bid for the works shall remain open for acceptance for a period of **30 (Thirty) days** from the date of opening of bid. If any bidder withdraws his bid before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the bid which are not acceptable to the department, then the Government shall, without prejudice to any other right or remedy, be at liberty to suspend the contractor for one year period. Further bidders shall not be allowed to participate in the rebidding process of the work.
18. This Notice Inviting bid shall form a part of the contract document. The successful bidder/contractor, on acceptance of his bid by the Accepting Authority, shall, within 15 days from the stipulated date of start of the work, sign the contract consisting of:-
- (a) The Notice Inviting bid, all the documents including additional conditions, specifications and drawings, if any, forming the bid as issued at the time of invitation of bid and acceptance thereof together with any correspondence leading thereto.
- (b) Standard CPWD Form-7 or other Standard CPWD Form as applicable.

19. ~~For Composite Bids~~

~~The Executive Engineer in charge of the major component will call bids for the composite work.~~

~~The bid document will include following three components:~~

~~**Part A:** CPWD-6, CPWD-7 including schedule A to F for the major component of the work, Standard General Conditions of Contract of 2023 Maintenance Work of CPWD works as amended/modified up to last date of submission of bids.~~

~~General / special conditions, specifications and particular specifications of major component of the work. & Major component(s) of the work.~~

~~**Part B:** Special conditions (Civil), Additional Conditions of contract specific to Green Building Practices, Particular specifications, List of Bureau of Indian Standard codes, Proforma for Receipt of deposition of original EMD, Form of Performance Security, Guarantee Bonds, Authority letter, List of approved Makes List of Material, , Circulars GCC-2023, Schedule of Quantities (Civil).~~

~~**Part C:** Schedule of A to F (Electrical), E&M Component and Corresponding Terms and Conditions, Commercial and additional conditions, Technical specifications for IEI works, Acceptable make, Schedule of Quantity (Elect.).~~

~~A The building category contractor shall have to associate other agency(s) for execution of each of the work(s), which fulfils the eligibility criteria as defined after taking prior approval. The Composite Contractor and the associated specialized agencies shall give required affidavit to confirm their association. Tender accepting authority may approve change of sub agency in case it is required during the currency of contract. However the building category contractor shall also be eligible to carry out himself any or all of these works without associating any specialized agency provided :-~~

~~a) He fulfills the prescribed eligibility criteria respectively for these work(s).~~

OR

~~b) He directly procures the equipment of approved make from manufacturer and gets it installed from authorized agency / service provider of the manufacturer or specialized agency as per criteria mentioned.~~

Specialized work(s)/item Of work(s)	Criteria of associated agencies
Electrical Works	Certificate of registration of CPWD in appropriate class of building & Road category. Electrical contractor licence OR undertaking that they will either obtain valid electrical licence at the time of execution of electrical work or associate contractor having valid electrical licence of appropriate class. c) He will also associate specialized agency for the specialized works

~~In case the main contractor himself meets the required eligibility criteria as laid down by the Department for specialized component of work, he shall be allowed to execute the same after due verification etc., otherwise the bidder must associate himself with agency of the appropriate class and category eligible to bid for specialized components.~~

~~The eligible bidders shall quote percentage rate for major component as well as for minor components of work.~~

~~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 in charge of minor components. One such signed set of agreement shall be handed over to EE in charge of minor component(s). EE of major component will operate **Part A, Part B (Civil Component)** of the agreement. EE in charge of minor component(s) shall operate **Part B**, along with **Part A Part B & Part C (Elect. Component)** of the agreement.~~

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

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

~~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).~~

~~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.~~

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

~~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(s) directly to the main contractor.~~

~~A. 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.~~

~~B. 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 inclusion in the final bill for composite contract.~~

20. In case of reduction in scope of work no claim on account of reduction in value of work, loss of expected profit, consequential overheads etc. shall be entertained.
21. 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 contractor, the bid shall become invalid and processing fee shall not be refunded.

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

- (i). Enlistment order of CPWD contractor in appropriate class and category
- (ii). EMD as per para 5 above.
- (iii). Certificate of registration of GST in J&K.
 "If the bidder has not obtained GST registration in the state in which the work is to be taken up, then in such a case the bidder shall upload following undertaking with the bid document "If work is awarded to me, I/we shall obtain GST registration certificate within one month from date of receipt of award letter or before payment of 1st R.A. Bill".
- (iv). Copy of receipt for deposition of original EMD issued from any Division / office of Executive Engineer, CPWD.
- (v). CPWD form 7 duly signed.
- (vi). The agency is submit its mobile number, address, and email ID duly mentioned on its official letter head.

- 23. Goods & Service Tax (GST), construction Worker's Welfare Cess, Education Cess, etc. shall be payable by the contractor and Government will not entertain any claim whatsoever in respect of the same.
- 24. GST or any other tax applicable in respect of inputs procured by the contractor for this contract shall be payable by the Contractor and Government will not entertain any claim whatsoever in respect of the same. However, component of GST at time of supply of service (as provided in CGST Act 2017) provided by the contract shall be varied if different from that applicable on the last date of receipt of tender including extension if any.
- 25. The ESI and EPF contribution on the part of employer in respect of this contract shall be paid by the contractor. These contributions on the part of the employer paid by the contractor shall be reimbursed by the Engineer-in-Charge to the contractor on actual basis. The applicable and eligible amount of EPF & ESI shall be reimbursed preferably within 7 days but not later than 30 days of submission of documentary proof of payment provided same are in order.
- 26. The intending bidders are required to update their profile in CPWD e-tender portal and to upload their bids well in advance of last date of submission of tender. Any issue related to updating profile/uploading tender can be resolved through the concerned Executive Engineer/Assistant Engineer (Phone No. **9582734968** email id **eejmcd.cpwd@nic.in** ERP help line no. 18001803286 or e-mail id cpwd.support@techmahindra.com). The e-tendering bidders are also advised not to wait to raise any issue till the last date of submission of bid in their own interest.

Executive Engineer
 Jammu Division,
 CPWD, Jammu
 (For and on behalf of President of India)

BRIEF PARTICULARS OF THE WORK

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

Sr. No.	Name of Work	Approx. Cost	Period of completion
1.	A/R & M/O to Audit General Office at Shakti Nagar, Jammu. SH: Supply of material to attend day to day complaints.	Rs 6,28,191/-	1 month

2. The work is situated at AG Office, Shakti Nagar, Jammu (J&K) under jurisdiction of the Executive Engineer, Jammu Division, CPWD, Jammu (J&K)

3.0 **Features:**

- 3.1 **General features and major components of the work are as under:**

1. Supply of Material.

**GOVERNMENT OF INDIA
CENTRAL PUBLIC WORKS DEPARTMENT**

STATE: J&K
BRANCH: B&R

REGION: ADG-Jammu
DIVISION: Jammu Division

PERCENTAGE RATE TENDER & CONTRACT FOR WORKS

Tender for the work of : A/R & M/O to Audit General Office at Shakti Nagar, Jammu. SH: Supply of material to attend day to day complaints.

- i). To be uploaded up to 3:15 P. M. on 24-09-2026 on website <https://etender.cpwd.gov.in>
- ii). To be opened in presence of tenderers who may be present at 3:30 hours on 03-10-2026 in the office of **Executive Engineer, Jammu Division, CPWD, Jammu**

T E N D E R

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

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

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

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

A copy of earnest money deposit receipt of prescribed amount deposited in the form of Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee (as prescribed) issued by a Commercial Bank, is scanned and uploaded (strike out as the case may be). If I/We, fail to furnish the prescribed performance guarantee 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.

Correction –Nil

Insertion –Nil

Deletion –Nil

A.E (P)

E.E.

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

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 the President of India.

Signatures

Dated:Designation

PROFORMA OF SCHEDULES**SCHEDULES (A TO F)****SCHEDULE 'A'**

Schedule of quantities

- As per schedule attached Page No - **87-90****SCHEDULE 'D'**

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

1. Special conditions
2. Particular Specifications.
3. Form of performance security (Bank Guarantee Bond), Earnest Money deposit declaration form, guarantee bond for water proofing/sanitary installations/water supply/for removal of defects in Stone/tile work etc.

SCHEDULE 'E'Reference to General Conditions
of Contract :General Conditions of contract 2023
(Maintenance work) for CPWD amended up to last date
of submission of bid.

- | | | |
|-----|---------------------------|--|
| 1.1 | Name of Work: | A/R & M/O to Audit General Office at Shakti Nagar,
Jammu. SH: Supply of material to attend day to day
complaints. |
| 1.2 | Estimated Cost of work: - | Rs 6,28,191/- |
| 1.3 | Earnest Money : - | Rs 12,564/- |
| 1.4 | Performance Guarantee | (a). 5% of tendered value or Estimated Cost Put to Tender
(ECPT) (whichever is higher).
(b). Where the tendered amount is less than eighty percent
(80%) of the 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.
(PG should be initially valid for a period of 7 months) |
| 1.5 | Security Deposit | 2.50% of accepted tendered value |

SCHEDULE 'F':-**General Rules & Directions:-**

Officer Inviting Tender: -

**Executive Engineer, Jammu Division, C.P.W.D, Jammu
(J&K) or his Successor thereof.**

Maximum percentage for quantity of items
of work to be executed beyond which rates
are to be determined in accordance with
Clauses 12.2 & 12.3

See below under Clause-12.

Definitions:-

2(v) Engineer-In-Charge

**Executive Engineer, Jammu Division, C.P.W.D,
Jammu(J&K) or his Successor thereof.**

2(viii) Accepting Authority

**Executive Engineer, Jammu Division, C.P.W.D,
Jammu(J&K) or his Successor thereof.**

- 2(x) Percentage on cost of materials and labour to cover all overheads and profits 15%
- 2(xi) Standard Schedule of Rates DSR - 2023 with correction slip issued upto last date of submission of bid
- 2(xii) Department Central Public Works Department.
- 9(ii) Standard CPWD Contract Form GCC 2023 (Maintenance works) and CPWD Form 7 as amended/ modified upto the last date of online submission of bid.

Clause-1 :

- (i) Time allowed for submission of performance guarantee, programme chart (Time and Progress) and applicable labour licences, registration with EPFO, ESIC and BOCW Welfare Board, Provident Fund Nos. 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 the performance guarantee amount beyond the period provided in (i) above 3 days

Clause-2 :

Authority for fixing compensation under Clause 2

Superintending Engineer,
Jammu Circle, CPWD, Jammu

Clause-5:

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

10 days

Time Period allowed for Completion of Work: - 1 month

Sl. No.	Description of Financial Milestone	Time Allotted (From date of start)	Amount to be withheld in case of non-achievement of milestone (% of Tendered Amount)
1.	Work upto 1/8 th of the tendered amount	-----	In the event of not achieving the necessary progress as accessed from the running payments, 1% of the tendered value of work will be withheld for failure of each milestone.
2.	Work upto 3/8 th of the tendered amount	-----	
3.	Work upto 3/4 th of the tendered amount	-----	
4.	Full Work Completed in all respect.	1month	

Authority to decide

i. Extension of time

Executive Engineer, Jammu Division, CPWD,
or his Successor thereof after approval of NIT
approving authority)

ii. Re-scheduling of Mile stones

Superintending Engineer-Jammu,
or his Successor thereof.)iii Shifting of date of start in case of
delay in handing over of siteSuperintending Engineer-Jammu,
or his Successor thereof.)**Clause 5A**

Applicable Clause 5A

Clause -5A Applicable

Part	Portion of site	Description	Time period for handing over reckoned from date of issue of letter of intent.
A	Portion without any hindrance		Site is available without any hinderance
B	Portions with encumbrances		
C	Portions depended on work of other agencies		

Clause-6

(i) Mode of measurement

e-MB through ERP/CMB

Clause-7:- Gross work to be done together with net payment / adjustment of advances for material collected, if any since the last such payment for being eligible to interim payment

Rs 6.28 lacs

Clause 7(A) Regarding applicability of labour laws :- Yes, Applicable

Related to Labour license, registration of contractor with EPFO, ESIC and BOCW welfare board i/c Provident Fund

- (a) No Running Account Bill/Final Bill shall be paid for the work till the applicable labour licenses, registration with EPFO, ESIC and BOCW Welfare Board, whatever applicable are submitted by the contractor to the Engineer-in-Charge.
- (b) The following documents shall also be part of the bill submitted by the contractor (these documents shall be owned by the contractor) before making payment:-
1. Details of person employed with date of their employment up to previous month.
 2. Documents of payment made to the employees directly into their bank accounts up to previous month.
 3. Documents of attendance through biometric attendance or other mode up to previous month.
 4. Documents of deposition of EPF and ESI deductions in the employee's accounts up to previous month.
 5. Any penalty imposed on the agency for delay in disbursing payment and deposition of EPF and ESI deductions in the employee's accounts up to previous month.
 6. Any other document(s) required as per statutory requirements and/or as directed by Engineer-in-Charge.
- (c) In case, any of the documents submitted by the contractor is found false/forged at a later date, action for debarment of contractor will be taken by the SE/CE concerned.

Clause 8A:-

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

Engineer-in-charge
(Penalty @ 0.1% of Tendered Amount
or Rs.50,000/- whichever is more
shall be levied for non-compliance).

Correction –Nil

Insertion –Nil

Deletion –Nil

A.E (P)

E.E.

Clause-10A:-

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

(As per General Index)

Clause-10-B (ii):-

Whether clause 10-B (ii) shall be applicable

Not Applicable

Clause-10C:-

Component of labour expressed as percent of total value of work

Not Applicable

Clause-10-CC:-

Not Applicable

Clause-11:- Specifications to be followed for execution of work

- (i). CPWD Specification 2019 Vol-I & Vol-II with correction slips issued upto last date of submission of bid
- (ii). Specification as per NIT

Clause-12:-

Type of Work

Maintenance Work
The completion cost shall in no case exceed 1.5 times the contract amount.

12.2 & 12.3 Deviation limit beyond which clause 12.2 & 12.3 shall apply for Building work.

- 12.5(i) (i) Deviation limit beyond which clause 12.2 & 12.3 shall apply for foundation works (except items mentioned in earth work Sub-Head in DSR and related items)
- (ii). Deviation limit for items in earth Work subhead of DSR or related items

No Limit

Clause-16:- Competent Authority for deciding reduced rates.

Superintending Engineer,
Jammu Circle, CPWD, Jammu.

Clause 18

List of mandatory machine, tools & plants to be deployed by the contractor at site:		As per direction of Engineer-in-charge and contract provision / site
Sl. No.	Name of Equipment	Numbers
	Civil	
1	Excavators (various sizes)cum loader	2
2	Tower Crane or Builder's hoist	1
3	Fully automatic Concrete batching plant of sufficient capacityas per direction of Engineer-in-Charge(Min. 25 cum/ hr.)	1
4	Concrete pump	1
5	Concrete transit mixer (As & when required)	1

Correction –Nil

Insertion –Nil

Deletion –Nil

A.E (P)

E.E.

6	Concrete mixer	2 Nos.
7	Needle vibrator	3 Nos.
8	Surface vibrator	2 Nos.
9	Bar bending Machine	2 No.
10	Bar cutting machine	2 No.
11	Drilling machine	2 No.
12	Welding machine i/c transformer	2 No.
13	Cube testing machines of required capacity.	1 No.
14	Adjustable steel props	3000 Nos.
15	Steel shuttering	13000 sqm or as per actual requirement.
16	Steel scaffolding	1000 qm 1000 sqm
17	Grinding/polishing machines	3 Nos.

18	Tippers	2 Nos.
19	Trucks	2 Nos
20	Air compressors (diesel)	1 No.
21	Diesel generator of appropriate capacity	1 No.
22	Core cutting machine (As & when required).	1 No.

1. Workshop facilities for fabrication/addition and alterations, and other allied works shall be arranged by the contractor at his own cost.
2. The list of equipment /T&P/ machinery as per above is for general guidance. In addition to these, machinery / equipment as required shall be arranged by the contractor in case the requirement at any stage exceeds as per the programme finalized at his own cost and nothing extra whatsoever on this account shall be paid. This includes equipment for arrangement of concrete from RMC producing plants also.
3. All the equipment, T&P and machinery shall be kept in good working conditions.
4. Equipment like batching plant, concrete pump excavators/Transit mixer etc. shall be allowed to be moved away from the site when, the same are no longer required at site of work in the opinion of Engineer-in-charge.

Clause 19C	Authority to decide penalty foreach default	Executive Engineer, Jammu Division CPWD, Jammu or his successor thereof.
Clause 19D	Authority to decide penalty foreach default	Executive Engineer, Jammu Division CPWD, Jammu or his successor thereof.
Clause 19G	Authority to decide penalty foreach default	Executive Engineer, Jammu Division CPWD, Jammu or his successor thereof.
Clause 19K	Authority to decide penalty foreach default	Executive Engineer, Jammu Division CPWD, Jammu or his successor thereof.

Clause-25:

	For all claims in dispute
Conciliator	ADG, Jammu, CPWD, Landoi bridge, Satwari Cantt. Jammu
Arbitrator Appointing Authority	SE, Jammu, CPWD, Landoi bridge, Satwari Cantt. Jammu or his successor
Place of Arbitration	Jammu

Clause -32 Requirement of Technical Representative (s) and recovery Rate

S.N o.	Minimum Qualification of Technical Representative	Discipline	Designation (Principal Technical/ Technical Representative)	Minimum Experience	Number	Rate at which recovery shall be made from contractor in the event of not fulfilling provision of clause 36(i)	
						Figures	Words
			----NIL----				

~~Assistant Engineers retired from Government Services that are holding Diploma will be treated at par with Graduate Engineers.~~

~~Diploma holder with minimum 10 years relevant experience with a reputed construction co. can be treated at par with Graduate Engineers for the purpose of such deployment subject to the condition that such diploma holders should not exceed 50% of requirement of degree engineers. The contractor shall submit a certificate of such employment of the technical representative(s) (in the form of copy of Form-16 or CPF deduction issued to the Engineers employed by him) along with every account bill/final bill and shall produce evidence if at any times so required by the Engineer-in-charge.~~

Clause-38:-

- | | |
|---|--|
| <p>i) Schedule / Statement for determining
with theoretical quantity of cement & bitumen</p> | <p>As per Delhi Schedule of Rates 2023
amendments upto the last date of
submission of bids</p> |
| <p>ii) Variations permissible on theoretical quantities.</p> <p>a) Cement for works with estimated cost</p> <p>b) Bitumen for all work.</p> <p>c) Steel Reinforcement and structural
steel sections for each diameter,
section and category.</p> <p>d) All other materials.</p> | <p>3% plus/ minus.</p> <p>2.5% Plus side only and NIL on minus side.</p> <p>2%plus/ minus.</p> <p>Nil.</p> |

GOVERNMENT OF INDIA
CENTRAL PUBLIC WORKS DEPARTMENT

Name of work:- A/R & M/O to Audit General Office at Shakti Nagar, Jammu.
SH: Supply of material to attend day to day complaints.

PART B

**O/O Executive Engineer,
JAMMU DIVISION, CPWD, Jammu**

SPECIAL CONDITIONS

1.0 General

- 1.1 Except for the items, for which Particular Specifications are given or where it is specifically mentioned otherwise in the description of the items in the schedule of quantities, the work shall generally be carried out in accordance with the "CPWD Specifications 2019 Vol. I & II" with upto date correction slips and manufacture specification additional / Particular Specifications, Architectural / structural drawings and as per instructions of Engineer-in-Charge.

The several documents forming the tender are to be taken as mutually complementary to one another. Detailed drawings shall be followed in preference to small scale drawings and figured dimensions in preference to scaled dimensions.

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

- (i) Description of Schedule of Quantities
- (ii) Particular Specifications and Special Conditions, if any.
- (iii) Drawings
- (iv) CPWD Specifications.
- (v) Indian Standard Specifications of B.I.S.
- (vi) Manufacturers' specifications & as decided by Engineer-in-charge.

"In the event of any variation/ discrepancy in the drawings, specifications and tender documents etc. the decision of the Engineer-in-charge shall be final binding and conclusive on the contractor and in case the contractor have any doubt and the same should be got clarified immediately from the Engineer-in-charge and no claim of the contractor shall be entertained thereafter. Moreover, the agency is not allowed to take benefit out of any clerical/ grammatical mistake in the standard clauses/Schedule of Quantities/Specifications etc. being used in the agreement".

The works to be governed by this contract shall cover delivery and transportation upto destination, safe custody at site, insurance, erection, testing and commissioning of the entire works.

The works to be undertaken by the contractor shall interalia include the following:

- i. Preparation of detailed SHOP drawings and AS BUILT drawings wherever applicable.
- ii. Obtaining of Statutory permissions where-ever applicable and required.
- iii. Pre-commissioning tests as per relevant standard specifications, code of practice, Acts and Rules wherever required.
- iv. Warranty obligation for the equipments and/or fittings/fixtures supplied by the contractor.

Contractor shall provide all the shop drawings or layout drawings for all the co-ordinated services before starting any work or placing any order for any of the services etc. These shop drawings/layout drawings shall be got approved from Engineer-in-charge before implementation and this shall be binding on the contractor. The contractor shall submit material submittals along with material sample for approval of Engineer-in-charge prior to delivery of material at site.

- 1.2 Any reference made to any Indian Standard Specifications, shall imply to the latest version of that standard, including such revisions / amendments as issued by the Bureau of Indian Standards upto last date of receipt of tenders. **The Contractor shall keep at his own cost all such publications including relevant Indian Standard Codes applicable to the work at site.**
- 1.3 All the hidden items such as water supply lines, drainage pipes, conduits, sewers etc. are to be properly tested before covering.
- 1.4 Samples including brand / quality of materials and fittings to be used in the work shall be got approved from the Engineer-in-Charge, well in advance of actual execution and shall be preserved till the completion of the work.
- 1.5 Equipments like batching plant, concrete pumps excavators/Transit mixers etc. shall be allowed to be moved away from the site when, in written opinion of Engineer-in-Charge, the same are no longer required at site of work.
- 1.6 The contractor, his authorized representative, workmen etc. shall strictly observe orders pertaining to fire precautions prevailing in the area.

- 1.7 Contractor(s) shall study the soil investigation report for the site, available in the office of the Engineer-in-Charge and satisfy himself about complete characteristics of soil and other parameters at site. However, no claim on the alleged inadequacy or incorrectness of the soil data supplied by the department shall be entertained.
- 1.8 The tenderer shall see the approaches to the site. In case any approach from main road is required at site or existing approach is to be improved and maintained for cartage of materials by the contractor, the same shall be provided, improved and maintained by the contractor at his own cost.
- 1.9 Contractor shall take all precautionary measures to avoid any damage to adjoining property. All necessary arrangement shall be made at his own cost.
- 1.10 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 damages and accidents caused to work due to negligence on his part. No hindrances shall be caused to traffic, during the execution of the work.
- 1.11 The contractor shall take instructions from the Engineer-in-Charge regarding collection and stacking of materials at any place. No excavated earth or building rubbish shall be stacked on areas where other buildings, roads, compound wall, services etc are to be constructed.
- 1.12 The contractor shall provide at his own cost suitable weighing, surveying and leveling and measuring arrangements as may be necessary at site for checking. All such equipments shall be got calibrated in advance from laboratory, approved by the Engineer-in-Charge. Nothing extra shall be payable on this account.
- 1.13 Contractor shall provide permanent bench marks, flag tops and other reference points for the proper execution of work and these shall be preserved till the end of work. All such reference points shall be in relation to the levels and locations, given in the Architectural and plumbing drawings.
- 1.14 Water tanks, taps, sanitary, water supply and drainage pipes, fittings and accessories should conform to approved manufacturers specifications where CPWD Specifications are not applicable. The contractor should get the materials (fixtures/fittings) tested from approved labs wherever required at his own cost.
- 1.15 The work shall be carried out in accordance with the Architectural drawings and Structural drawings, to be issued from time to time, by the Engineer-in-Charge. Before commencement of any item of work, the contractor shall correlate all the relevant architectural and structural drawings issued for the work, nomenclature of items, specifications etc. and satisfy himself that the information available there from is complete and unambiguous. The figures & the written dimensions of the drawing shall supercede the measurement by scale. The discrepancy, if any, shall be brought to the notice of the Engineer-in-Charge for immediate decision before execution of the work. The contractor alone shall be responsible for any loss or damage occurring by the commencement of work on the basis of any erroneous and/ or incomplete information and no claim, whatsoever shall be entertained on this account.
- 1.16 The contractor should submit the shop drawing of staging and shuttering for approval of Engineer-in-Charge before actually commencing the execution of work under the item. Nothing extra shall be payable on this account.
- 1.17 Other agencies may also simultaneously execute and install the works and the contractor shall afford necessary facilities for the same. The contractor shall leave such recesses, holes, openings, trenches etc. as may be required for such related works (for which inserts, sleeves, brackets, conduits, base plates, clamps etc. shall be available as specified elsewhere in the contract) and the contractor shall fix the same at the time of casting of concrete, stone work and brick work, if required, and nothing extra shall be payable on this account.
- 1.18 All material shall only be brought at site as per program finalized with the Engineer-in-Charge. Any pre-delivery of the material not required for immediate consumption shall not be accepted and thus not paid for.
- 1.19 The contractor shall procure the required materials in advance so that there is sufficient time for testing of the materials and approval of the same before use in the work.
- 1.20 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. In case temporary supporting of such services is required to facilitate the work, the same shall be done by the contractor at no extra cost.
In case the existing services are to be shifted permanently, then before dismantling the existing services, alternate/diversion of service lines has to be laid by the contractor so that there is no interruption in use of existing services. The contractor has to plan the alternate suitable route for diversion/shifting of service lines and get the same approved from the Engineer-in-Charge before starting shifting of services. Nothing extra shall be paid except the payment of dismantling and laying of new service lines as per conditions of contract.

- 1.21 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 client department. No extra payment shall be made on this account.
- 1.22 The contractor shall be fully responsible for the safe custody of materials brought by him/ issued to him even though the materials may be under double lock key system.
- 1.23 For construction works which are likely to generate malba / rubbish, contractor shall dispose of malba, rubbish & other unserviceable materials and wastes at his own cost to the notified specified dumping ground and under no circumstances these shall be stacked / dumped even temporarily, outside the construction premises.
- 1.24 The rates quoted by the Contractor are deemed to be inclusive of site clearance, setting out work, profile, establishment of reference bench mark(s), taking spot levels, construction of all safety and protection devices, barriers, preparatory works, working during monsoon, working at all depths, height, lead, lift and location etc until / unless specified otherwise and any other incidental works required to complete this work. Nothing extra shall be payable on this account.
- 1.25 For works below ground level the contractor shall keep that area free from water. If dewatering or bailing out of water is required the contractor shall do it and nothing extra shall be paid except otherwise provided in the items of schedule of quantities.
- 1.26 Results of sub-surface investigations conducted at site are indicated in extracts of the report attached. This information about the soil and sub-soil water conditions is being made available to the Contractor, in good faith, for guidance only and the Contractor is advised to obtain details directly as may be considered necessary by him before quoting rates in the tender. No claim whatsoever on account of any discrepancy between the sub-surface strata conditions that may be actually encountered at the time of execution of the work and those given in these tender documents, in-accuracy or interpretation thereof shall be entertained from the Contractor under any circumstances. The ground water table is a variable condition and the information given in the report is only indicative and it may vary from time to time.
- 1.27 Any legal or financial implications resulting out of disposal of earth shall be sole responsibility of the contractor. Nothing extra over the schedule shall be paid on this account.
- 1.28 The Contractor shall keep himself fully informed of all acts and laws of the Central & State Governments, all orders, decrees of statutory bodies, tribunals having any jurisdiction or authority, which in any manner may affect those engaged or employed and anything related to carrying out the work. All the rules & regulations and bye-laws laid down by Collector / MC, LAWDA etc. and any other statutory bodies shall be adhered to, by the contractor, during the execution of work. The Contractor shall also adhere to all traffic restrictions notified by the local authorities. It is clarified that the extra sewerage charges (one time charges for commencement of work) required to be paid to the Municipal Corporation / other statutory bodies shall be paid by the department and need not be considered by the contractor. The water charges (for municipal water connection as well as tanker water) shall be borne by the contractor. Also, if the contractor obtains water connection for the drinking purposes from the municipal authorities or any other statutory body, the consequent sewerage charges shall be borne by the contractor. All statutory taxes, levies, charges (including water and sewerage charges, charges for temporary service connections and / or any other charges) payable to such authorities for carrying out the work, shall be borne by the Contractor. The Contractor shall arrange to give all notices as required by any statutory / regulatory authority and shall pay to such authority all the fees that is required to be paid for the execution of work. He shall protect and indemnify the Department and its officials & employees against any claim and /or liability arising out of violations of any such laws, ordinances, orders, decrees, by himself or by his employees or his authorized representatives. Nothing extra shall be payable on these accounts. The fee payable to statutory authorities for obtaining the various permanent service connections and Occupancy Certificate for the building shall be borne by the Department.

- 1.29 Royalty at the prevalent rates shall be paid by the Contractor as per the terms of supply between them on all materials such as boulders, metals, sand and bajri etc. collected by him for the execution of the work, directly to the revenue authority of the state government concerned. Nothing extra shall be payable on this account.
- 1.30 No foreign exchange shall be made available by the Department for importing (purchase) of equipment, plants, machinery, materials of any kind or any other items required to be carried out during execution of the work. No delay and no claim of any kind shall be entertained from the Contractor, on account of variation in the foreign exchange rate.
- 1.31 The Contractor shall conduct his work so as not to interfere with or hinder the progress of the work being performed by other Contractors or by the Engineer-in-Charge. As far as possible, he shall arrange his work and place, so as not to interfere with the operations of other Contractors or shall arrange his work with that of the others, in an acceptable and coordinated manner and shall perform it in proper sequence.
- 1.32 The Contractor shall assume all liability, financial or otherwise in connection with this contract and shall protect and indemnify the Department from any and all damages and claims that may arise on any account. The Contractor shall indemnify the Department against all claims in respect of patent rights, royalties, design, trademarks of name or other protected rights, damages to adjacent buildings, roads or members of public, in course of execution of work or any other reasons whatsoever, and shall himself defend all actions arising from such claims and shall indemnify the Department in all respect from such actions, costs and expenses. Nothing extra shall be payable on this account.
- 1.33 The Contractor shall make all necessary arrangements for protecting from rains, the work already executed and for carrying out the further work, during rains including providing and fixing temporary shelters, protections etc. Nothing extra shall be payable on this account. Also, no claims for hindrance shall be entertained on this account.
- 1.34 In case of flooding of site on account of rain or any other cause and any consequent damage, whatsoever, no claim financially or otherwise shall be entertained notwithstanding any other provisions elsewhere in the contract agreement. Also, the Contractor shall make good, at his own cost, the damages caused, if any.
- 1.35 The Contractor shall take all necessary precautions to prevent any nuisance or inconvenience to the owners, tenants or occupants of the adjacent properties and to the public in general. The Contractor shall take all care, as not to damage any other adjacent property or other services running adjacent to the plot. If any damage is done, the same shall be made good by the Contractor at his own cost and to the entire satisfaction of the Engineer-in-Charge. The Contractor shall use such methodology and equipments for execution of the work, so as to cause minimum environmental pollution of any kind during construction, to have minimum construction time and minimum inconvenience to road users and to the occupants of the buildings on the adjacent plot and public in general, etc. He shall make good at his own cost and to the entire satisfaction of the Engineer in Charge any damage to roads, paths, cross drainage works or public or private property whatsoever caused, due to the execution of the work or by traffic brought thereon, by the Contractor. Further, the Contractor shall take all precautions to prevent any pollution of streams and waterways. All waste or superfluous materials shall be carted away by the Contractor, entirely to the satisfaction of the Engineer-in-Charge. Utmost care shall be taken to keep the noise level to the barest minimum so that no disturbance as far as possible is caused to the occupants / users of adjoining buildings. No claim what so ever on account of site constraints mentioned above or any other site constraints not specifically stated here, shall be entertained from the Contractor. Therefore, the Contractors are advised to visit site and get first hand information of site constraints. Accordingly, they should quote their tenders. Nothing extra shall be payable on this account.
- 1.36 All ancillary and incidental facilities required for execution of work like labour camp, stores, fabrication yard, offices for Contractor, watch and ward, temporary ramp required to be made for working at the basement level, temporary structure for plants and machineries, water storage tanks, installation and consumption charges of temporary electricity, telephone, water etc. required for execution of the work, liaison and pursuing for obtaining various No Objection Certificates, completion certificates from local bodies etc., protection works, barricading, testing facilities / laboratory at site of work, facilities for all field tests and for taking

samples etc. during execution or any other activity which is necessary (for execution of work and as directed by Engineer-in-Charge), shall be deemed to be included in rates quoted by the Contractor, for various items in the schedule of quantities. Nothing extra shall be payable on these accounts. Before start of the work, the Contractor shall submit to the Engineer-in-Charge, a site / construction yard layout, specifying areas for construction, site office, positioning of machinery, material yard, cement and other storage, steel fabrication yard, site laboratory, water tank, etc.

1.37 The Contractor shall display all permissions, licenses, registration certificates, bar charts, other statements etc under various labour laws and other regulations applicable to the works, at his site office.

1.38 No tools and plants including any special T&P etc. shall be supplied by the Department and the Contractor shall have to make his own arrangements at his own cost. No claim of hindrance (or any other claim) shall be entertained on this account.

The Contractor shall cooperate with and provide the facilities to the associate-Contractors and other agencies working at site for smooth execution of the work. The Contractor shall

- (a) Allow use of scaffolding already erected, toilets, sheds etc.
- (b) Properly co-ordinate their work with the work of other Contractors.
- (c) Provide control lines and benchmarks to his associate-Contractors and the other Contractors.
- (d) Provide electricity and water at mutually agreed rates.
- (e) Provide hoist and crane facilities for lifting material at mutually agreed rates.
- (f) Co-ordinate with other Contractors for leaving inserts, making chases, alignment of services etc. at site.
- (g) Adjust work schedule and site activities in consultation with the Engineer-in-Charge and other Contractors to suit the overall schedule completion.
- (h) Resolve the disputes with other Contractor amicably and the Engineer-in-Charge shall not be made intermediary or arbitrator. The contractor shall indemnify the Department against any claim(s) arising out of such disputes.

1.39 On completion of work, the contractor shall submit at his own cost four prints of "as built" drawings of the completed works to the Engineer-in-Charge. These drawings shall have the following information.

- a) Run off of all piping and their diameters including soil, waste pipes and vertical stacks.
- b) Ground and invert level of all drainage pipes together with locations of all manholes and connections, upto out fall.
- c) Run off of all water supply lines with diameters, location of control valves, access panels etc. In case the contractor fails to supply "as built drawing" aforesaid within 30 days of the date of completion, then the recovery @ Rs.10, 000/- for each such set of drawings shall be made from the contractor's final bill.

2.0 Unless otherwise specified in the schedule of quantities or CPWD specifications, the rates for respective items shall be all inclusive and apply to the following: -

- (i) All lifts & all heights, floors including terrace, leads and depths.
- (ii) All labour, material, tools and plants and other inputs involved in the execution of the item.
- (iii) Any of the conditions and specifications mentioned in the tender documents.
- (iv) Providing sunk flooring in bath-rooms, kitchen, etc.
- (v) Any legal or financial implications resulting out of disposal of earth, if any.
- (vi) Payment of Royalty at the prevailing rates, if any, on the boulders, metal, shingle, sand and bajri etc. or any other material collected by him for the work direct to revenue authorities.
- (vii) Performance test of the entire installation(s) before the work is finally accepted.
- (viii) Any cement slurry added over base surface (or) for continuation of concreting for better bond is deemed to have been built in the items.
- (ix) All incidental charges for cartage, storage and safe custody of materials brought to site.
- (x) All local taxes, Entry taxes, and all other taxes of J&K State government and central taxes.

3.0 QUALITY ASSURANCE/TESTING OF MATERIALS : -

3.1.1 The contractor shall establish a laboratory at site to test the coarse aggregate, fine aggregate, water, sand, cement etc to be used in construction.

- 3.1.2 With each Running Bill, the details of test carried out shall be submitted by the contractor as per Performa **(As per General Index)** .
- 3.1.3 Samples of materials required for testing shall be provided free of charge by the contractor. The cost of tests to be carried out in approved labs shall be borne by the contractor in the manner indicated below:-
All expenditure to be incurred for testing of samples e.g. packaging, sealing, transportation, loading, unloading etc. including testing charges shall be borne by the contractor.
- All the test in field lab setup at construction site shall be carried out by the Engineering Staff deployed by the contractor which shall be 100% witnessed by JE & 50% of tests shall be witnessed by AE -in-charge. At least 10% of the tests are to be witnessed by the EE/ SE.
 - All the entries in the registers will be made by the designated Engineering staff of the contractor and same should be regularly reviewed by JE/AE/EE/SE.
 - Contractor shall be responsible for safe custody of all the test registers.
 - Submission of copy of all test registers, materials at site Register and hindrance register along with each alternate Running Account Bill and Final Bill shall be mandatory.
 - Extensive testing of the materials used for construction is a pre-requisite for attaining high quality of the work. This shall also require specialized tests, physical, chemical, ultrasonic, x-ray and various other types of tests which cannot possibly be carried out in a site laboratory. These tests also require specialized personnel who regularly deal in such testing. Therefore the need arises for carrying out the tests in outside laboratories. These laboratories may be in the Govt. sector, Semi Govt. or Private sector. The outside private laboratories shall be short listed before hand by EE and approval obtained from Superintending Engineer, Jammu Central Circle, CPWD, Jammu. In case of laboratories in the private sector, the past record and reputation of the laboratory must invariably be given due consideration. The infrastructure in these laboratories can also be inspected before they are short listed.
- 3.1.4 However, if any ultrasonic pulse velocity / load testing or special testing is to be done for concrete whose strength is doubtful, the cost of the same shall be borne by the contractor.
- 3.1.5 In case there is any discrepancy in frequency of testing as given in list of mandatory tests and that in individual sub-heads of work as per CPWD Specifications higher of the two frequencies of testing shall be followed and nothing extra shall be payable on this account.
- 3.2 FIELD LABORATORY**
 The contractor has to establish field laboratory at site including all necessary equipments and skilled manpower for the **Field Tests (As per General Index)** at his own cost to have proper quality control. For performing the above tests, the **Field Testing Equipments and Instruments (As per General Index)** are to be arranged and maintained by the contractor.
- 3.2.1 The contractor shall ensure quality construction in a planned and time bound manner. Any sub-standard material / work beyond set-out tolerance limit shall be summarily rejected by the Engineer-in-Charge & contractor shall be bound to replace / remove such sub-standard / defective work immediately.
- 3.2.2 The list of Laboratory/ Field equipment referred above are to be arranged and maintained by the contractor at the site of work. In case the equipment required for any test is not available at site, the department shall get the test conducted from the third party. However in that event, besides providing free materials of sample, the cost of taking of sample, packing, transportation, testing charges etc. shall be borne by the contractor irrespective of the results.
- 3.3 SAMPLE OF MATERIALS:-**
- 3.3.1 All materials and fittings brought by the contractor to the site for use shall conform to the samples approved by the Engineer-in-Charge which shall be preserved till the completion of the work. If a particular brand of material is specified in the item of work in Schedule of Quantity, the same shall be used after getting the same approved from Engineer-in-Charge. Wherever brand / quality of material is not specified in the item of work, the contractor shall submit the samples as per **List of Approved Makes (As per General Index)** for approval of Engineer-in-Charge. For all other items, ISI Marked materials and fittings shall be used with the approval of Engineer-in-Charge. Wherever ISI Marked material / fittings are not available, the contractor shall submit samples of materials / fittings manufactured by firms of repute conforming to relevant Specifications or IS codes for the approval of Engineer-in-Charge.
- 3.3.2 To avoid delay, contractor should submit samples as stated above well in advance so as to give timely orders for procurement. If any material, even though approved by Engineer-in-Charge is found defective or not conforming to specifications shall be replaced / removed by the contractor at his own risk & cost.
- 3.3.3 BIS marked materials except otherwise specified shall also be subjected to quality test besides testing of other materials as per the specifications described for the item/material. Wherever BIS marked materials are

brought to the site of work, the contractor shall, furnish manufacturer's test certificate or test certificate from approved testing laboratory to establish that the material procured by the contractor for incorporation in the work satisfies the provisions of specifications relevant to the material and / or the work done.

BIS marked items (except cement & steel for which separate provisions have been made in para 4.0) required on the work shall be got tested for only important tests, which govern the quality of the product, as decided by the Engineer-in-Charge. The frequency of such tests (except the mandatory test) shall be 5% of the frequency as specified in BIS. For mandatory test, frequency shall be as specified in the CPWD Specifications.

- 3.3.4 For certain items, if frequency of tests is neither mentioned in the CPWD Specifications & BIS, then tests shall be carried out as per decision of Engineer-in-Charge.

4.0 CEMENT & STEEL REINFORCEMENT (IF NOT STIPULATED TO BE SUPPLIED BY THE CONTRACTOR).

- 1.1 Contractor has to produce manufacturers test certificate and challan for each lot of Cement & Steel Reinforcement procured at site.

4.2 CEMENT:-

- 4.2.1 The contractor shall procure 43 grade ordinary Portland Cement conforming to IS: 8112 / Portland Pozzolona Cement conforming to IS: 1489 (Part-1) as required in the work from reputed manufacturers of cement. The cement of approved make as per list of Preferred brand in 50 kg. bags bearing manufacturer's name and ISI marking, **along with manufacturers test certificate for each lot shall be procured by the contractor.** Portland Pozzolona Cement is to be used for RCC works only subject to fulfillment of conditions of circular No. CDO/SE(RR)/Fly ash (MAN) 02 dated 09.04.2009. However, if the contractor uses higher grade of cement or uses OPC only nothing extra shall be paid.
- 4.2.2 Samples of cement arranged by the contractor shall be taken by the Engineer-in-Charge and got tested in accordance with provisions of relevant BIS Codes. The cement for such testing purpose shall be supplied by the contractor free of charge. In case test results indicate that the cement arranged by the contractor does not conform to the relevant BIS Codes, the same shall stand rejected and shall be removed from the site by the contractor at his own cost within a week's time of written order from the Engineer-in-Charge to do so. The cost of tests shall be borne by the contractor.
- 4.2.3 Cement shall be brought at site in bulk supply of approximately **25 tonnes** or as decided by the Engineer-in-Charge.
- 4.2.4 OPC & PPC bags shall be stored in separate godowns. Separate godowns for tested cement and fresh cement (under testing) to be constructed by the contractor at his own cost as per sketches given in C.P.W.D Specifications having weather-proof roofs and walls. The size of the cement godown is indicated in the sketches for guidance. The actual size of godown shall be as per site requirements and nothing extra shall be paid for the same. Each godown shall be provided with a single door with two locks. The keys of one lock shall remain with Engineer-in-Charge or his authorized representative of the work and that of other lock with the authorized agent of the contractor at the site of work so that the cement is issued from godown according to the daily requirement with the knowledge of both parties. The account of daily receipt and issue of cement shall be maintained in a register in the prescribed proforma and signed daily by the contractor or his authorized agent and Engineer-in-Charge or his authorized representative in token of its correctness. The day to day receipt and issue accounts of different grade/brand of cement shall be maintained separately in the standard proforma by the contractor or his authorized representative which shall be duly signed by the authorized representative of the Engineer-in-Charge before issue to the work on day to day basis. Two Separate cement godowns each having capacity of **25 MT** or more as decided by the Engineer-in-Charge shall be constructed by the contractor at site of work for which no extra payment shall be made. The contractor shall be responsible for the watch and ward and safety of the cement go-downs. The contractor shall facilitate the inspection of the cement go-downs by the Engineer-in-Charge at any time.
- 4.2.5 The actual issue and consumption of cement on work shall be regulated and proper accounts maintained as provided in the contract. The theoretical consumption of cement shall be worked out as per procedure prescribed in Clause-42 of the contract and shall be governed by the conditions laid therein.
- 4.2.6 If the quantity of cement actually used in the work is found to be more than the theoretical quantity of cement including authorized variation, nothing extra shall be payable to the contractor on this account. In the event of it being discovered that after the completion of the work, the quantity of cement used is less than the quantity ascertained as herein before provided (allowing variation on the minus side as stipulated in Clause - 42), the cost of quantity of cement not so used shall be recovered from the contractor as specified in schedule.

Decision of the Engineer-in-Charge in regard to theoretical quantity of cement which should have been actually used as per the schedule and recovered at the rate specified, shall be final and binding on the contractor.

For non-scheduled items, the decision of the **Superintending Engineer (Jammu Circle), CPWD, Jammu** regarding theoretical quantity of the cement, which should have been actually used, shall be final and binding on the contractor.

- 4.2.7 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.
- 4.2.8 In case the contractor brings surplus quantity of cement the same shall be removed from the site after completion of work by the contractor at his own cost after approval of the Engineer-in-Charge.
- 4.2.9 Cement, which is not used within 90 days from its date of manufacture, shall be retested at approved laboratory. Until the results of such tests are found satisfactory, it shall not be used on the work.
- 4.2.10 **The original voucher and test certificate of cement shall be defaced by the Site staff and kept on record in the site office.**

4.3 STEEL REINFORCEMENT: -

- 4.3.1 The contractor shall procure Thermo Mechanical Treated (TMT) Steel Reinforcement bars of Fe 500D from Primary producers such as SAIL or Rashtriya Ispat Nigam Ltd. Or TISCO or Jindal Steel & Power Ltd. or JSW Steel Ltd. as approved by Ministry of Steel.
- 4.3.2 The contractor shall have to obtain and furnish test certificates & challan to Engineer –in- Charge in respect of all the supplies brought by him to the site of work.
- 4.3.3 Samples shall also be taken and got tested by the Engineer-in-Charge as per the provisions in this regard in relevant BIS codes. In case the test results indicate that the steel arranged by the contractor does not conform to the specifications, as defined under para 4.3.1 (a) above, the same shall stand rejected, and it shall be removed from the site of work by the contractor at his cost within a week time or written orders from the Engineer-in Charge to do so: -
- 4.3.4 The steel reinforcement shall be brought in bulk supply of 30 tonnes or more or as decided by the Engineer-in-Charge along with manufacturer test certificate for each lot.
- 4.3.5 The steel reinforcement 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 these accounts. Bars of different sizes and lengths shall be stored separately to facilitate easy counting and checking.
- 4.3.6 Unless OTHERWISE specified elsewhere in the contract document, the testing (nominal mass, tensile strength, bend test, rebend test etc.) shall be done as per frequency of samples not less than as given below

SIZE OF BAR	FOR CONSIGNMENT BELOW 100 TONNES	FOR CONSIGNMENT OVER 100 TONNES
Under 10 mm dia	One sample for each 25 tonnes or part thereof.	One sample for each 40 tonnes or part thereof
10 mm to 16 mm dia	One sample for each 35 tonnes or part thereof.	One sample for each 45 tonnes or part thereof
Over 16 mm dia	One sample for each 45 tonnes or part thereof	One sample for each 50 tonnes or part thereof

- 4.3.7 The contractor shall supply free of charge the steel required for testing including transportation to testing laboratories.
- 4.3.8 The Actual issue and consumption of steel on work shall be regulated and proper account maintained as provided in clause 10 of the contract. The theoretical consumption of steel shall be worked out as per procedure prescribed in Clause 42 of the contract and shall be governed by conditions laid therein. In case the consumption is less than theoretical consumption including permissible variation, recovery at the rate so prescribed shall be made. In case of excess consumption no adjustment need to be made.
- 4.3.9 Steel brought to site and steel remaining unused shall not be removed from site without the written permission of the Engineer-in-Charge
- 4.3.10 The contractor shall submit original vouchers from the manufacturer for the total quantity of steel supplied under each consignment to be incorporated in the work. All consignment received at the work site shall be

inspected by the Site staff along with the relevant documents before acceptance. The contractor shall obtain Original Vouchers and Test Certificates and furnish the same to the Engineer-in-Charge in respect of all the lots of steel brought by him from approved supplier to the site of work. **The original vouchers and test certificates shall be defaced by the Site staff and kept on record in the site office.**

- 4.3.11 Reinforcement including authorized spacer bars and lap pages shall be measured in length of different diameters as actually (not more than as specified in the drawings) used in the work nearest to a centimeter. Wastage and unauthorized overlaps shall not be measured.
- 4.3.12 The standard sectional weights referred to as in Table 5.4 in para 5.3.4 in CPWD Specifications will be considered for conversion of length of various sizes of M.S. Bars, Steel Bars and T.M.T. bars into Standard Weight.
- 4.3.13 **Records of actual Sectional weights shall also be kept dia-wise and lot-wise. The average sectional weight for each diameter shall be arrived at from samples from each lot of steel received at site.** The decision of the Engineer-in-Charge shall be final for the procedure to be followed for determining the average sectional weight of each lot. Quantity of each diameter of steel received at site of work each day will constitute one single lot for the purpose. The weight of steel by conversion of length of various sizes of bars based on the actual weighted average sectional weight shall be termed as Derived Actual Weight. However for the stipulated issue of steel reinforcement up to and including 10mm diameter bars, the actual weight of steel issued shall be modified to take into account the variation between the actual and the standard coefficients and the contractors' accounts will be debited by the cost of modified quantity.
4. 3.14 (a) If the Derived Weight as in sub-para (4.3.13) above is less than the Standard Weight as in Sub-para (4.3.12) above then the Derived Actual Weight shall be taken for payment provided, it is within the following tolerances specified in IS1786-2008, otherwise whole lot will be rejected

Tolerances on Nominal Mass

Nominal Size in mm	Tolerance on Nominal mass Percent		
	Batch	Individual sample*	Individual sample for coil**
a) Upto and including 10	±7	-8	±8
b) Over 10 upto and Including 16	±5	-6	±6
c) Over 16	±3	-4	±4

* For individual sample plus tolerance is not specified.

**For coils batch tolerance is not specified.

b) If the Derived Actual Weight is found more than the Standard Weight, the Standard Weight as per in sub-para (4.3.13) 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.

- 4.3.15 **Testing charges for steel reinforcement bars, structural steel will be borne by the agency in both cases whether result conforms to relevant BIS code or not.**

5.0 SECRECY

- 5.1 The contractor shall take all steps necessary that all persons employed on any work in connection with the contract have notice that the Indian Official Secrets Act 1923 applies to them & will continue so to apply even after the execution of such works under the contract.
- 5.2 The contract is confidential and must be strictly confined to the contractor's own use (except so far as confidential disclosure to sub-contractors or suppliers as necessary) and to the purpose of the contract.
- 5.3 All documents, copies thereof & extracts there from furnished to the contractor shall be returned to the Engineer-in-Charge on the completion of the work / works or the earlier determination of the contract.

6.0 LABOUR AND SECURITY

- 6.1 Contractor should provide his plan for labour huts as per his requirement and get it approved from the Engineer-in-Charge. The contractor will be provided space for labour huts etc. inside the campus but the space requirement and location, as assessed by Engineer-in-Charge shall be final and binding.
- 6.2 Contractor has to follow the security requirement of the campus and obtain necessary entry passes for the labour and vehicles and follow security checks at entry / exit gates, restriction on movement of vehicle, restricted timings of working etc. The Department however shall assist the contractor in obtaining such passes for movement of vehicles and labour. No claim whatsoever shall be entertained on account of delay in entry of vehicles and labour including restrictions in working hours, if there is any.
- 6.3 The contractor shall employ only Indian Nationals after verifying their antecedents and loyalty. The contractor shall, on demand submit list of his agents, employees and work people concerned & shall satisfy as to the bonafides of such people.
- 6.4 The contractor & his work people shall observe all relevant rules regarding security promulgated in which work is to be carried out by the Controlling Administrative Authority of the campus/area (hereinafter referred to as "Administrator").
- 6.5 The contractor, his representative, workman shall be allowed to enter through specified gates & timing as laid down by the controlling authority. They shall be issued an identity card or an individual pass in accordance with the standing rules & regulations & they should possess the same while working. The contractor shall be responsible for the conduct & actions of his workmen, agents / representatives.
- 6.6 Normally contractor shall be allowed to carryout work between 7 AM to 6 PM. However, he may also be allowed to carryout the work beyond 6 PM & upto 7 AM if the site conditions / circumstances so demand with prior written permission from the "Administrator". However, if the work is carried out in more than one shift or at night, no claim on this account shall be entertained.
- 6.7 Normally contractor's material / vehicles etc shall be allowed to move in / go-out between 7 AM to 7 PM only & no movement of material / vehicles out of site of work shall be allowed during night hours unless specific permission is obtained from the "Administrator".
- 6.8 In case if a separate entry has been allowed, the contractor has to make all arrangement for making a separate entry gate and barricading of the working area to segregate/separate the same from other areas. All these have to be done by the contractor at his own cost including safeguarding any untoward incident in the restricted area due to separate entry gate and barricading arranged by the contractor. No extra amount on this account shall be payable by the department.

7.0 OFFICE INFRASTRUCTURE:

- 7.1 ~~For Quality Control Measures, Preparation of Bills and Monitoring the Quality, the contractor shall provide (min. one number) Computer with latest version processor, A-3 Coloured Inkjet & A-4 Laser-jet Printers, Scanners, UPS etc. with required number of data entry operators(one or more) in the site office of Engineer-in-Charge.~~

8.0 DOCUMENTATION

The Contractor shall render all help and assistance in documenting the total sequences of this project by way of photography, slides, audio / video recording & other records etc. Nothing extra shall be payable to Contractor on this account. However, cost of photographs, slides, audio / video graph etc. shall be borne by the Department. The original films shall be the property of the Department. No copy shall be prepared without the prior approval of the Engineer- in - Charge.

9.0 PROGRAM CHART: -

- 9.1 The Contractor shall prepare an integrated program chart for the execution of work, showing clearly all activities from the start of work to completion, with details of manpower, equipment and machinery required for the fulfillment of the program within the stipulated period or earlier and submit the same for approval of the Engineer-in-Charge within **15 days** of the issue of letter of acceptance for the contract. This program chart should clearly indicate that work will simultaneously be started on all different locations of Class rooms and hostels. The integrated program chart so submitted should not have any discrepancy with the milestones attached in the Contract Agreement.
- 9.2 The work has to be completed in stages as indicated in the **Milestones under Schedule 'F' (As per General Index)** and the program should be prepared in such a manner to achieve these Milestones as indicated therein or earlier.
- 9.3 The program chart should include the following: -
- Descriptive note explaining sequence of various activities.

- b) Network (PERT / CPM / BAR CHART) prepared on MS project which will indicate resources in financial terms, manpower and specialized equipments for every important stage.
- c) Program for procurement of materials by the contractor.
- d) Program of procurement of machinery / equipments having adequate capacity, commensurate with the quantum of work to be done within the stipulated period, by the contractor.

- 9.4 If at any time, it appears to the Engineer-in-Charge that the actual progress of work does not conform to the approved program referred above, the contractor shall produce a revised program showing the modifications to the approved program by additional inputs to ensure completion of the work within the stipulated time.
- 9.5 The submission of revised program or approval by the Engineer-in-Charge of such program or the furnishing of such particulars shall not relieve the contractor of any of his duties or responsibilities under the contract. This is without prejudice to the right of Engineer-in-Charge to take action against the contractor as per terms and conditions of the agreement.
- Notwithstanding the fact that the contractor will have to pay to the labourers and other staff engaged directly or indirectly on the work according to the provisions of the labour regulations and the agreement entered upon and/or extra amounts for any other reason.

10.0 PROGRESS AND MONITORING OF WORK:

- 10.1 Apart from the above integrated program chart, the contractor shall be required to submit monthly progress report of the work in a computerized form. The progress report shall contain the following, apart from whatever else may be required as specified:
- (i) Construction schedule of the various components of the work through a bar chart for the next three quarters (or as may be specified), showing the milestones, targeted tasks and up to date progress.
 - (ii) Progress chart of the various components of the work that are planned and achieved, for the month as well as cumulative up to the month, with reason for deviations, if any in a tabular format.
 - (iii) Plant and machinery statement, indicating those deployed in the work.
 - (iv) Man-power statement, indicating individually the names of all the staff deployed on the work, along with their designations.
 - (v) Financial statement, indicating the broad details of all the running account payment received up to date, such as gross value of work done, advances taken, recoveries effected, amount withheld, net payments details of cheque payment received etc.
- 10.2 For completing the work in time, the Contractor might be required to work in two or more shifts (including night shifts). No claim whatsoever shall be entertained on this account, notwithstanding the fact that the Contractor may have to pay extra amounts for any reason, to the labourers and other staff engaged directly or indirectly on the work according to the provisions of the labour and other statutory bodies regulations and the agreement entered upon by the Contractor with them.
- 10.3 The work should be planned in a systematic manner so that chase cuttings in the walls, ceilings and floors is minimized. Wherever absolutely essential, the chase shall be cut using chase cutting machines. Chases will not be allowed to be cut using hammer / chisel. The electrical boxes should be fixed in walls simultaneously while raising the brick work. The contractor shall ensure proper co-ordination of various disciplines viz. building works, sanitary & water supply & electrical installations etc.
- 10.4 The contractor shall conduct his work, so as not to interfere with or hinder the progress or completion of the work being performed by other contractor(s) or by the Engineer-in-Charge and shall as far as possible arrange his work and shall place and dispose off the materials being used or removed so as not to interfere with the operations of other contractor or he shall arrange his work with that of the others in an acceptable and coordinated manner and shall perform it in proper sequence to the complete satisfaction of Engineer-in-charge.
- 10.5 The Contractor shall do proper sequencing of the various activities by suitably staggering the activities within various pockets in the plot and at different plots so as to achieve early completion. The agency may deploy adequate equipment, machinery and labour as required for the completion of the entire work within the stipulated period specified. Also ancillary facilities shall be provided commensurate with requirement to complete the entire work within the stipulated period. Nothing extra shall be payable on this account.

Adequate number/sets of equipment in working condition, along with adequate stand-by arrangements, shall be deployed during entire construction period. It shall be ensured by the Contractor that all the equipment, Tools & Plants, machineries etc. provided by him are maintained in proper working conditions at all times during the progress of the work and till the completion of the work. Further, all the constructional tools, plants, equipment and machineries provided by the Contractor, on site of work or his work shop for this work, shall be exclusively intended for use in the construction of this work and they shall not be shifted / removed from site without the permission of the Engineer-in-Charge.

- 10.6 All material shall only be brought at site as per program finalized with the Engineer-in-Charge. Any pre-delivery of the material not required for immediate consumption shall not be accepted and thus not paid for.
- 11.0 **ENGAGING SPECIALISED AGENCIES FOR WORKS: -**
- 11.1 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).
- 11.2 The Specialized agency for the work shall be got approved from the Engineer-in-Charge well before actual commencement of the item of work. The contractor shall submit the list of specialized agencies except for Internal Electrical Installation, proposed to be engaged by him along with necessary performance certificates, 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.
- 11.3 For Internal Electrical Installation work as contained in the Electrical component work under Part C, the Electrical Agency to be engaged as an associate electrical contractor for the Internal E./External E.I work should be as per condition of enlistment in composite category as below :-
They shall be issued tender or production of valid electrical license from competent authority in the name of the contractor. However, the civil contractors shall be allowed to participate in composite tender with an undertaking that they will either obtain valid electrical license at the time of execution of electrical work or associate contractors having valid electrical license of eligible class.
- 11.4 Same milestones shall be applicable for all components of work.
- 11.5 **For the specialized item of door & window fittings, water supply and sanitary installations; the contractor shall engage such vendors/installers as approved by the manufacturers. Provisions mentioned under Sr. No. 11.1 above shall not be applicable for the items mentioned herein above**
- 12.0 ~~**SAMPLE WORK:-**~~
~~The contractor shall construct one sample of quarter complete in all respects including all Civil works and Electrical fittings/ fixtures, before taking up finishing in other areas. The sample accommodation shall be inspected and approved by the Engineer-in-Charge. Slight changes with regard to the fixtures/ fittings/ details/ dimensions etc. may occur as per the actual requirement or in order to enhance the functionality of the product or the unit. Thus, the procurement for all the internal fittings/fixtures/ fabricated material and other material etc. shall be done by the contractor only after the approval of the sample room/toilet block.~~
- 13.0 **Defect liability:**
- 13.1 The contractor's liability during the defect liability period from the final date of completion as per clause 17 shall be limited to rectification of defects including replacement as follows which in the opinion of Engineer-in-Charge are not manmade.

Sl. No.	Description	Defect Liability
(ii)	Concrete	(a) Rectification of structural / superficial / non-structural cracks. (b) Rectification of dampness / seepage in roof slab / junctions & sunken portion. (c) Rectification of cracks in beam, shade, column.
(iii)	Brick work/ Concrete Block Masonry	(a) Rectification of cracks in panel wall / portion. (b) Cracks / settlement of dwarf walls. (c) Rectification of efflorescence/ leaching.
(viii)	Plastering	(a) Rectification of structural / superficial cracks if any. (b) Rectification of protruding / peeling off plaster if any. (c) Rectification of efflorescence
(ix)	Flooring	(a) Rectification of sinking portion of plinth protection including saucer drain. (b) Settlement of foundation & floors, hollow sounding, cracks in

Sl. No.	Description	Defect Liability
		tiles/stones.
(x)	Plumbing / Sanitary fittings	(a) Making good of leakage through soil / waste pipe joints. (b) Replacement of looking mirror if found wavy. (c) Rectification of leakage of over head tanks. (d) Leakage / seepage of sunken floor, blockage of taps / pipes, non-functioning of cistern.
(xi)	Finishes	(a) Making good of defective / dissimilar patches of painting to match with remaining surfaces, peeling of paint.
(xii)	Internal Water Supply	(a) Repairs / Replacement of defective taps / fittings. (b) Repair to leakage of GI water pipe lines including joints. (c) Removal of blockage of GI pipe lines.
(xiv)	Sewage	(a) Rectification of slope / system if found defective during use. (b) Rectification of major blockage in Sewer lines. (c) Cracks & settlement of sewage lines.
(xv)	Drains	(a) Repair to Drains. (b) Settlement of Drains
(xvi)	External Water Supply	(a) Repairs to installations & fittings.
(xvii)	General	(a) All manufacturing defects of structures / fixtures / fittings / equipments other than listed above including any defects of shrinkage or other faults that appear in the work within twelve months after a certificate of its completion is given by the Engineer-in-Charge shall be rectified by the contractor.

Above list is not exhaustive but is only indicative.

14.0 SAFETY MEASURES

14.1 Contractor shall take all precautionary measures to avoid any damage to adjoining property. All necessary arrangement shall be made at his own cost.

14.2 Warning / Caution Boards

All temporary warning / caution boards / glow signage display such as "Construction Work in Progress", "Keep Away", "No Parking", Diversions & protective Barricades etc. shall be provided and displayed during day time by the Contractor, wherever required and as directed by the Engineer-in-Charge. These glow signage and red lights shall be suitably illuminated during night also. The Contractor shall be solely responsible for damage and accident caused, if any, due to negligence on his part. Also he shall ensure that no hindrance, as far as possible, is caused to general traffic during execution of the work. This signage shall be dismantled & taken away by the Contractor after the completion of work, only after approval of the Engineer – in – Charge. Nothing extra shall be payable on this account.

14.3 Sign Boards

The Contractor shall provide and erect a display board of size and shape as required and paint over it, in a legible and workman like manner, the details about the salient features of the project, as required by the Engineer-in-Charge. The Contractor shall fabricate and put up a sign board in an approved location and to an approved design indicating name of the project, client / owner, architects, structural consultants, Department etc. besides providing space for names of other Contractors, Associate contractors and specialized agencies. Nothing extra shall be payable on this account.

14.3.1 Necessary protective and safety equipments shall be provided to the Site Engineer, Supervisory staff, labour and technical staff of the contractor by the Contractor at his own cost and used at site.

14.3.2 No inflammable materials including P.O.L shall be allowed to be stored in huge quantity at site. Only limited quantity of P.O.L may be allowed to be stored at site subject to the compliance of all rules / instructions issued by the relevant authorities and as per the direction of Engineer -in- Charge in this regard. Also all precautions and safety measures shall be taken by the Contractor for safe handling of the P.O.L products stored at site. All consequences on account of unsafe handling of P.O.L shall be borne by the Contractor.

15.0 Special condition for Hardware and sanitary wares:

- 15.1 Engineer-in-Charge will take a decision regarding model numbers of equivalent Door/window hardwares/ sanitary wares at the time of execution, in case the material, from the manufacturer whose model number is mentioned, is not available. However, in case, the equivalent model so approved, is cheaper than the model already mentioned in item/approved makes list, the price adjustment will be made based on the difference in market rate. In case, the rate of subsequently approved model is more, no extra payment will be made on this account.”
16. As part of quality assurance, once the shade is approved by the Engineer-in-charge, the paint shall be brought to the site of work by the contractor in its original containers in sealed condition. The material shall be brought in at a time in adequate quantities to suffice for the whole work. The empty containers shall not be removed from the site of work till the relevant item of work has been completed and permission obtained from the Engineer-in-charge.
- 17.0 **All Structural drawings of Boundary wall, pile foundation, gate etc. shall be prepared by contractor and got vetted through Govt. approved technical institutions like IITs/ NITs within 15 days from the date of acceptance of tender. All expenditure to be incurred for preparation and got vetted of structural drawing shall be borne by the agency.**

ADDITIONAL CONDITIONS OF CONTRACT SPECIFIC TO GREEN BUILDING PRACTICES

- 1.0** The contractor shall strictly adhere to the following conditions as part of his contractual obligations:
- 1.1 SITE**
- 1.1.1 The contractor shall ensure that adequate measures are taken for the prevention of erosion of the topsoil during the construction phase.
- 1.1.2 The Contractor should follow the construction plan as proposed by the Architect /Engineer in Charge to minimize the site disturbance such as soil pollution due to spilling
- 1.1.3 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 on the soil is to be deposited with the State Govt. Deptt.
- 1.1.4 The contractor shall not change the natural gradient of the ground unless specifically instructed by the Engineer in Charge. This shall cover all natural features like water bodies, drainage gullies, slopes, mounds, depressions, etc. Existing drainage patterns through or into any preservation area shall not be modified unless specifically directed by the Engineer-in-charge.
- 1.1.5 The contractor shall not carry out any work which results in the blockage of natural drainage.
- 1.1.6 The contractor shall ensure that existing grades of soil shall be maintained around existing vegetation and lowering or raising the levels around the vegetation is not allowed unless specifically directed by the Engineer-in-charge.
- 1.1.8 Overloading of trucks is unlawful and creates the erosion and sedimentation problems, especially when loose materials like stone dust, excavated earth, sand etc. are moved. Proper covering must take place. No overloading shall be permitted.
- 1.1.9 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 . All trucks or vehicles of any kind which are used for construction purpose or to carrying to construction material like cement , etc. and other allied material should be fully covered .
- 1.1.10 The contractor shall provide mask to every worker working on the construction site. The contractor shall provide medical help and treatment to the workers .
- 1.1.11 To contractor shall use vehicles having pollution under control certificate.
- 1.1.12 The contractor shall comply all the preventive and protective environment steps as stated in the MoEF guidelines 2010.
- 1.2 CONSTRUCTION PHASE AND WORKER FACILITIES**
- 1.2.1 The contractor shall specify and limit construction activity in pre- planned/designated areas and shall start construction work after securing the approval for the same from the Engineer in Charge. This shall include areas of construction, storage of materials, and material and personnel movement.
- 1.2.2 Preserve and Protect Landscape during Construction**
- (a) The contractor shall ensure that construction activities should be restricted to the areas outside of the canopy of the tree, or, from a safe distance from the tree/plant by means of barricading. Trees will not be used for support; their trunks shall not be damaged by cutting and carving or by nailing posters, advertisements or other material. Lighting of fires or carrying out heat or gas emitting construction activity within the ground, covered by canopy of the tree is not to be permitted.
- (b) The contractor shall take steps to protect trees or saplings identified for preservation within the construction site using tree guards of approved specification.
- (c) Contractor should limit all construction activity within the specified area as per the Construction Management Plan (CMP) approved by Engineer in Charge.
- (d) The contractor shall ensure that maintenance activities during construction period shall be performed as needed to ensure that the vegetation remains healthy.
- 1.2.3 The contractor shall provide potable water for all workers.
- 1.2.4 The contractor shall provide the minimum level of sanitation and safety facilities for the workers at site. The contractor shall ensure cleanliness of workplace with regard to the disposal of waste and effluent; provide clean drinking water and latrines and urinals as per applicable standard. Adequate toilet facilities shall be

provided for the workman within easy access of their place of work. Toilet facilities shall be provided from the start of building operations, connection to a sewer shall be made as soon as practicable. Every toilet shall be so constructed that the occupant is sheltered from view and protected from the weather and falling objects. Toilet facilities shall be maintained in a sanitary condition. A sufficient quantity of disinfectant shall be provided. Natural or artificial illumination shall be provided.

- 1.2.5 The contractor shall ensure that air pollution due to dust/generators is kept to a minimum, preventing any adverse effects on the workers and other people in and around the site. The contractor shall ensure that the speed of vehicles within the site is limited to 10 km/hr.
- Spills of dirt or dusty materials will 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.
- 1.2.6 The contractor shall ensure that no construction leachate (e.g. cement slurry etc.), is allowed to percolate into the ground.
- 1.2.7 Staging (dividing a construction area into two or more areas to minimize the area of soil that will be exposed at any given time) should be done to separate undisturbed land from land disturbed by construction activity and material storage.
- 1.2.8 The contractor shall comply with the safety procedures, norms and guidelines (as applicable).
- 1.2.9 The contractor shall ensure the following activities for construction workers safety, among other measures:
- Guarding all parts of dangerous machinery.
 - Precautionary signs for working on machinery
 - Maintaining hoists and lifts, lifting machines, chains, ropes, and other lifting tackles in good condition.
 - Durable and reusable formwork systems to replace timber formwork and ensure that formwork where used is properly maintained.
- 1.2.10 The storage of material shall be as per standard good practices to the satisfaction of the Engineer in Charge. Watch and ward of the Contractor's materials shall be his own responsibility.
- 1.2.11 The contractor shall provide for adequate number of garbage bins around the construction site and the workers facilities and will be responsible for the proper utilization of these bins for any solid waste generated during the construction
- 1.2.12 Where possible, the contractor shall select materials / vendors, harvested and manufactured regionally, within a 800-km radius of the project site.
- 1.2.13 The contractor shall ensure that a flush out of all internal spaces is conducted prior to handover. This shall comprise an opening of all doors and windows for 14 days to vent out any toxic fumes due to paints, varnishes, polishes, etc.
- 1.2.14 Contractor shall make efforts to reduce the quantity of indoor air contaminants that are odorous or potentially irritating harmful to the comfort and well-being of installer and building occupants. Contractor shall ensure that the VOC (Volatile Organic Compounds) content of paints, coatings and primers are low.
- 1.2.15 Water Use during Construction**
- Contractor should spray curing water on concrete structure and shall not allow free flow of water. Concrete structures should be kept covered with thick cloth/gunny bags and water should be sprayed on them. Contractor shall do water poundings on all sunken slabs using cement and sand mortar.
- 1.2.16 The contractor shall provide O & M Manuals wherever applicable.

1.2.17 MATERIALS & FIXTURES FOR THE PROJECT

- (i) Contractor will produce wherever feasible certificate regarding distance of the source of the relevant material.
- (ii) The contractor shall ensure that all paints, polishes, adhesives and sealants used both internally and externally, on any surface, shall be Low VOC products. The contractor shall get prior approval from the Engineer in Charge before the application of any such material.
- (iii) The contractor shall ensure that all composite wood products/agro-fiber products used for cabinetwork, etc do not contain any added urea formaldehyde resin.

1.2.18 RESOURCES CONSUMED DURING CONSTRUCTION

- (a) The contractor shall ensure that the water and electricity is not wasted during construction. The Engineer in Charge can bring to the attention any such wastage and the contractor will have to ensure that such bad practices are corrected.
- (b) The contractor shall ensure that all run-off water from the site, during construction is collected and reused to the maximum.

1.2.19 EQUIPMENT

- (a) To ensure energy efficiency during and post construction all pumps, motors and engines used during construction or installed, shall be subject to approval and as per the specifications of the Engineer in Charge.
- (b) Generally the lighting installed by the contractor around the site and at the labour quarters during construction shall be CFL bulbs of the appropriate illumination levels.

PARTICULAR SPECIFICATIONS

1.0 **R.C.C. WORK:-**

1.1 The Contractor shall engage one of the following approved laboratories / test house for designing the concrete mix in accordance with relevant IS Code and to conduct laboratory tests to ensure the target strength & workability criteria for a given grade of concrete: -

- i) IIT, New Delhi
- ii) National Institute of Technical Teachers Training and Research, Sector 26, Chandigarh.
- iii) Punjab Engineering College, Chandigarh.
- iv) Chandigarh Engineering College, Sector 26, Chandigarh.
- v) Govt. College of Engineering & Technology, Jammu.

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

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

1.2 The contractor shall submit the report on design mix from any of above approved laboratories for approval of Engineer in Charge within 30 days from the date of issue of letter of acceptance of the tender. No concreting shall be done until the design mix is approved. In case of White Portland Cement and the likely use of admixtures in concrete with Portland Pozzolona/ 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.

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

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

1.5 The mix design for a specified grade of concrete shall be done for a target mean compressive strength $T_{ck} = F_{ck} + 1.65s$

Where F_{ck} = Characteristic compressive strength at 28 days.
 s = Standard deviation which depends on degree of quality control.

The assumed standard deviation for different grades of concrete shall be as follows: -

GRADE OF CONCRETE	STANDARD DEVIATION
M-20	4.0
M-25	4.0
M-30	5.0
M-35	5.0

However, actual standard deviation based on test strength of samples for each grade of concrete shall be calculated separately as per procedure laid down in clause 9.2.4 of Code of Practice IS 456:2000.

2.0 **Frequency of Sampling**

2.1 ***Sampling Procedure***

A random sampling procedure shall be adopted to ensure that each concrete batch shall have a reasonable chance of being tested that is the sampling should be spread over the entire period of concreting and cover all mixing units.

2.3 ***Frequency***

The minimum frequency of sampling of concrete of each grade shall be in accordance to CPWD Specification

NOTE- At least one sample shall be taken from each Shift. Where concrete is produced at continuous production unit, such as batch-mixed concrete plant, frequency of sampling may be decided by Engineer-in-charge in such a manner so as

to ensure that each concrete batch shall have a reasonable chance of being tested. Minimum 10% cube should be filled in the presence of Executive Engineer.

2.4 Test Specimen

Three test specimens shall be made for each sample for testing at 28 days. Additional samples may be required for various purposes such as to determine the strength of concrete at 7 days or at the time of striking the formwork, or to determine the duration of curing, or to check the testing error. Additional samples may also be required for testing samples cured by accelerated methods as described in IS 9103. The specimen shall be tested as described in IS 516.

2.5 Test Results of Sample

The test results of the sample shall be the average of the strength of three specimens. The individual variation should not be more than ± 15 percent of the average. If more, the test results of the sample are invalid.

2.6 ACCEPTANCE CRITERIA

2.8 Compressive Strength

The concrete shall be deemed to comply with the strength requirements when both the following condition are met:

- a) The mean strength determined from any group of four consecutive test results compiles with the appropriate limits in col 2 of Table given under para 2.1.4 above.
- b) Any individual test result complies with the appropriate limits in col 3 of Table given under para 2.1.4 above.

2.9 Quantity of Concrete Represented by Strength Test Results

The quantity of concrete represented by a group of four consecutive test-results shall include the batches from which the first and last samples were taken together with all intervening batches.

Where the mean rate of sampling is not specified the maximum quantity of concrete that four consecutive test results represent shall be limited to 60 m³.

2.10 Concrete of each grade shall be assessed separately.

2.11 Concrete is liable to be rejected if it is porous or honey-combed, its placing has been interrupted without providing a proper construction joint, the reinforcement has been displaced beyond the tolerances specified, or construction tolerances have not been met. However, the hardened concrete may be accepted after carrying out suitable remedial measures to the satisfaction of the Engineer-in-Charge.

3. MEASUREMENT

(i) As per CPWD Specifications.

4. TOLERANCES - As per CPWD Specifications.

5. RATES: -

- (i) The rate includes the cost of materials, labour and T&P, including mixing, placing, transportation involved in all the operations described above except for the cost of centring, shuttering & reinforcement which will be paid for separately.
- (ii) In case of rejection of concrete on account of unacceptable compressive strength, governed by para "Standard of Acceptance" as above, the work for which samples have failed shall be redone at the cost of contractor. However, the Engineer-in-charge may order for additional tests (like cutting cores, ultrasonic pulse velocity test, load test on structure or part of structure, etc) to be carried out at the cost of contractor to ascertain if the portion of structure wherein concrete represented by the sample has been used, can be retained on the basis of results of individual or combination of these tests. The Contractor shall take remedial measures necessary to retain the structure as approved by the Engineer-in-charge without any extra cost. However, for payment, the basis of rate payable to contractor shall be governed by the 28 days cube test results and reduced rates shall be regulated in accordance with CPWD Specifications.

6 RCC WORK (ORDINARY)

- 6.1 The work shall be done in accordance with CPWD Specifications.
- 6.2 Water Cement ratio for Ordinary RCC work shall not be more than 0.5. Contractor shall use concrete mixture of proper design having arrangement for measuring water for mixing of concrete.

7 FORM WORK

- 7.1 The work shall be done in general as per CPWD Specifications.
- 7.2 Only M.S. centring / shuttering and scaffolding material unless & otherwise specified shall be used for all R.C.C. work to give an even finish of concrete surface. However, marine-ply shuttering in exceptional cases as per site requirement may be used on specific request from contractor to be approved by the **Engineer-in-Charge**.
- 7.3 Nothing extra shall be paid for the centering and shuttering, circular in shape whenever the formwork is having a mean radius exceeding 6m in plan.
- 7.4 Nothing extra shall be paid for grid beams and the corresponding slabs having clear span more than 1.20 metres.
- 7.5 In order to keep the floor finish as per architectural drawings and to provide required thickness of the flooring as per specifications, the level of top surface of R.C.C. shall be accordingly adjusted at the time of its centring, shuttering and casting for which nothing extra shall be paid to the Contractor except the places where different type of flooring is provided in the same room.
As per general engineering practice, level of floors in toilet / bath, balconies, shall be kept 12 to 20mm or as required, lower than general floors shuttering should be adjusted accordingly. Nothing extra is payable on this account.
- 7.6 Steel shuttering as approved by the Engineer-in-Charge shall be used by the contractor. Minimum size of shuttering plates shall be 600mm x 900mm except for the case when closing pieces are required to complete the shuttering panels.
Dented, broken, cracked, twisted or rusted shuttering plates shall not be allowed to be used on the work.
The shuttering plates shall be cleaned properly with electrically driven sanders to remove any cement slurry or cement mortar or rust. Proper shuttering oil or de-bonding compound shall be applied on the surface of the shuttering plates in the requisite quantity before assembly of steel reinforcement.

8. FLOORING

- 8.1 All work in general shall be carried out as per CPWD Specifications (Volume 1) 2019 with up-to-date correction slips.
- 8.2 Whenever flooring is to be done in patterns of tiles and stones, the contractor shall get samples of each pattern laid and approved by the Engineer-in-charge before final laying of such flooring. Nothing extra shall be payable on this account.
- 8.3 Different stones / tiles used in pattern flooring shall be measured separately as defined in the nomenclature of the item and nothing extra for laying pattern flooring shall be paid over and above the quoted rate. No additional wastage, if any, shall be accounted for any extra payment.
- 8.4 Samples of flooring stones/ Tile (Kota/ Marble/ Granite/ Ceramic tiles/ Vitrified tiles etc.) shall be deposited well in advance with the Engineer-in-Charge for approval. Approved samples should be kept at site with the Engineer-in-Charge and the same shall not be removed except with the written permission of Engineer-in-Charge. No payment whatsoever shall be made for these samples.
- 8.5 The Marble/ Kota/ Granite or any other stone shall be fully supported by the details establishing the quarry and its location.
- 8.6 Full width Marble/ Kota/ Granite stone over kitchen platform shall be provided which shall not be less than 900mm long except to adjust for closing pieces. The marble / stone flooring in treads and risers of staircase shall not be less than 1500mm long except to adjust the closing pieces. Nothing extra shall be paid on these accounts.

9 Vitrified Tile Flooring

The tiles shall be of approved make and shall generally conform to Table 12 of IS15622.
The full body Vitrified tiles of specified sizes shall be used & sample of tiles shall be got approved from the Engineer-in-Charge. All tiles shall be rectified. The Mandatory tests for vitrified tiles shall be got done as per CPWD Specifications (volume-1)/relevant BIS Code

10. Ceramic Tiles Flooring

The tiles shall be procured from the approved manufactures of the specified shade & colour.

The floor & wall tiles shall be conforming to IS:15622 for floor and wall tiles respectively.
 Tiles for dado shall be 300mm x 450mm (minimum size) or more (GROUP-III) as approved.
 Tiles for flooring shall be 300mm x 300mm (minimum size) or more (GROUP-V) as approved.
 Test shall be conducted to satisfy the quality of material as per CPWD Specifications

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

10.2 The entire responsibility for the quality of work will however rest with the building contractor only and he shall submit a Guarantee Bond as per Proforma **(As per General Index) 10% (Ten percent) of the cost of all tile/stone work items would be retained as security deposit and the amount so deducted would be released after Five years from the date of completion of the entire work under the agreement, if the performance of the items is found satisfactory.** If any defect is noticed during the guarantee period, the contractor should rectify it within seven days and if not attended to the same will be got done from another agency at the risk and cost of contractor. However, this security deposit can be released in full if bank guarantee of equivalent amount is produced and deposited with the department.

11 **WATER PROOFING FOR UNDERGROUND RCC WATER RESERVOIR:-**

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

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

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

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

12 **GUARANTEE BOND FOR ALL WATER PROOFING ITEMS:-**

Five years Guarantee bond in prescribed proforma at **(As per General Index)** shall be submitted by the contractor which shall also be signed by both the specialized agency and the contractor to meet their liability / liabilities under the guarantee bond. However, the sole responsibility about efficiency of water proofing treatment shall rest with the building contractor. **10% (Ten per cent) of the cost of water-proofing work shall be retained as Security Deposit and the amount so deducted would be released after five years from the date of completion of the entire work under the agreement, if the performance of the treatment is found satisfactory.** If any defect is noticed during the guarantee period, the contractor shall rectify it within 15 days of receipt of intimation of defects in the work. If the defects pointed out are not attended to within the specified period, the same will be got done from another agency at the risk and cost of contractor.

13. **FINISHING:-**

13.1 The work shall be done in accordance with CPWD Specifications (Volume II) 2019 with up-to-date correction slips and/or manufacturers specifications wherever applicable.

13.2 All painting material of approved brand and manufacturer shall be brought to the site of work in the original sealed containers. The material brought to the site of work shall be sufficient for at least 30 days of work. The material shall be kept under the joint custody of contractor and representative of the Engineer-in-charge. The empty containers shall not be removed from the site till the completion of the work without permission of the Engineer-in-charge.

13.3 In the item of finishing walls with water proofing cement paint, only the plain/flat area shall be measured for payment and nothing extra shall be paid on account of pointed wall surface.

14.0 **EARTH WORK**

14.1 Earth work shall be executed as per CPWD Specification 2019, Volume –I with upto date correction slip.

15.0 **CLEARING OF JUNGLE**

15.1 Before the execution of the item of jungle clearance proper documentation shall be made and kept in record till the completion of the work.

16.0 **SANITARY INSTALLATIONS /WATER SUPPLY / DRAINAGE:-**

16.1 The contractor shall submit schematic drawing of water supply and sanitary installation showing details of layout, including internal water supply and drainage details, showing the detail of water supply lines including

fittings diameter wise and fixtures connecting to soil waste through traps and connection of W.C. to main shaft pipe for drainage including its ventilation system for approval of Engineer-in-Charge.

- 16.2 For the work of water supply and sanitary installations, the contractor shall engage the approved licensed plumbers and submit the name of proposed plumbing agencies with their credentials for approval of the Engineer-in-Charge.
- 16.3 The work in general shall be carried out as per CPWD Specifications (Volume II) 2009 with up-to-date correction slips.
- 16.4 The tendered rates shall include the cost of cutting holes in walls, floors, RCC slabs etc. wherever required and making good the same for which nothing extra shall be paid.
- 16.5 The Centrifugally spun cast iron pipe IS: 3989-1984 wherever necessary shall be fixed to RCC columns, beams etc. with rawl plugs of approved quality and nothing extra shall be paid for on this account.
- 16.6 The pig lead to be used in the jointing should be as per CPWD specifications.
- 16.7 Nothing extra for providing & fixing CP Brass caps /extension pieces wherever required for CP Brass fittings shall be paid beyond the rates payable for corresponding CP Brass fittings.
- 16.8 The entire responsibility for the quality of work will however rest with the building contractor only and he shall submit a Guarantee Bond as per Proforma **(As per General Index) 10% (Ten percent) of the cost of these items would be retained as security deposit and the amount so deducted would be released after five years from the date of completion of the entire work under the agreement, if the performance of the items is found satisfactory.** If any defect is noticed during the guarantee period, the contractor should rectify it within seven days and if not attended to the same will be got done from another agency at the risk and cost of contractor. However, this security deposit can be released in full if bank guarantee of equivalent amount is produced and deposited with the department.
- The contractor shall be responsible for assembling composite, bedding and filling the groove with polysulphide sealant inside and outside, at transoms and mullions placing the doors, windows etc. in their respective openings. 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 finished neat.

17.0 Aluminium doors, windows, ventilators etc. glazing specifications

17.1 Extent and Intent: -

The work shall be carried out in the factory through an approved Special Agency, who shall furnish all material, labour, accessories, equipment, tool and plants and incidentals required for providing and installing anodized/powder coated aluminum doors, windows, claddings, louvers and other items as called for on the drawings. The drawings and specifications cover the major requirements only. The supplying of additional fastenings, accessories, fixtures and other items not mentioned specifically herein, but which are necessary to make a complete installation shall be a part of this contract. Hinges for openable panel shall be stainless steel friction hinges / stays selected for specified wind load and dead loads or specifically extruded in-built hinges.

17.2 General: -

Aluminium doors, windows etc. shall be of sizes, section details as shown on the Architectural 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 manufacturers. 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.

17.3 Shop Drawings: -

The contractor shall submit the shop drawings of doors, windows, louvers, cladding and other aluminium work, based on the architectural drawings to the Engineer-in-Charge for his approval. The shop drawing 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.

17.4. Samples: -

Samples of doors, windows louvers etc. shall be fabricated, assembled in the factory and submitted to 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.

17.5. Sections: -

Aluminium doors and windows shall be fabricated from extruded sections of profiles as detailed on drawings. The sections shall be extruded by the manufacturers approved by the Engineer-in-Charge. The aluminium extruded sections shall conform to BIS designation IIE/IIV 9 WP alloy, with chemical composition technical properties, as per IS: 733 and IS: 1285. The permissible tolerance of the extruded sections shall be such as not to impair the proper and smooth function/ operations and appearance of doors and windows.

17.6 Fabrication: -

Doors, windows etc. shall be fabricated to sizes at factory and shall be of section, sizes, combinations and details as shown on the drawings. All doors, windows etc. shall have mechanical joints. The joints shall be designed to withstand a minimum wind load of 150 Kg. per Sqm. The design shall also incur that the maximum deflection of any member shall not exceed 1/175 of the span of the member. All members shall be accurately machined and fitted to form hairline joints prior to assembly. The joints accessories such as cleats, brackets etc. shall be of such material as not to cause any bimetallic action. The design of the joints and accessories shall be such that the accessories are fully concealed. 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 fixture as approved by the Architect.

17.7 Anodizing/ powder coating: -

All aluminum sections shall be Powder coated (minimum 50 micron thickness) as per requirement as per IS: 7088 and to required colour as specified in the item as per IS: 1868 grading as specified in item schedule after cutting the member to requisite sizes before the final assembly. Powder coating shall be of minimum 50 micron thickness. Anodizing confirming to specified grade with minimum average thickness of 15 microns when measured as per IS: 612. The anodic coating shall be properly sealed by steams or in boiling water are cold sealing process as per IS:1868/IS: 6057. Polythene tape protection shall be applied on the anodised 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 sample will be tested in the approved laboratory and cost of samples; etc. shall be borne by the contractor.

17.8 Protection of finish: - All aluminum members shall be wrapped with approved self-adhesive non- staining. PVC tapes.

17.9 Handling and Stacking: -

17.9.1 Fabricated materials shall be carried 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 material at site, it shall be carefully examined to detect any damaged pieces. Arrangements shall be made for expeditious replacement of damaged pieces/ parts. Materials found to be acceptable on inspections shall be repacked in crates and stored safely.

17.9.2 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 out how to be assembled in their final locations if situation so warrants.

17.9.3 The contractor shall be responsible for assembling composite, bedding and filling the groove with polysulphide sealant inside and outside, at transoms and mullions placing the doors, windows etc. in their respective openings. 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 finished neat.

17.9.4 The contractor shall be responsible for doors, windows, etc. being set straight, plumb, level and for their satisfactory operation after fixing is complete.

18 Installation:

- 18.1 Just prior to installation the doors, windows, etc. shall be uncreated 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 manufacture and in an approved manner. The holes in concrete/masonry members for housing anchor bolts shall be drilled with an electric drill.
- 18.2 The door/ windows assembled as shown on drawings shall be placed in correct final position on the 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 holes 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 nut 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 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 supports and be plumbed in position. The wedges shall invariably be placed at the meeting at points of glazing bars and frame.

19 EPDM Rubber / Neoprene gaskets:

The contractor shall provide and install EPDM Rubber / 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 contractor shall produce samples of the gaskets for approval and shall procure the same after approval only.

20 Fittings:

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

a. 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.

b. Poly-sulphide:

The gaps between frames and supports and also any gaps in the door and windows sections shall be raked out as directed and filled with poly-sulphide of approved colour and make to ensure complete water tightness. The poly-sulphide shall be of such colour and composition that it would not stain the masonry/concrete work, shall receive paint without bleeding, will not sag or run and shall not set hard or dry out under any conditions of weather. The sample of poly-sulphide to be used for this purpose shall be got approved from the Engineer-in-Charge before its actual used.

21. Details of Test :

The various tests on aluminium sections shall be conducted in accordance with the relevant IS codes

The minimum number of tests for anodizing/powder coating and corrosion resistance shall be as given below:

S.No.	Details	No. of Tests
1.	Doors, windows and ventilators	One test for every 1000 kg or part thereof.

- 21.1 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 shall be got tested.

22. **Acceptance Criteria:** - The entire responsibility for the quality of work will however rest with the building contractor only. The aluminium work shall carry Five years guarantee after completion of work against unsound material, workmanship and defective anodizing/ powder coating as per Guarantee Bond. Five years guarantee in prescribed Performa attached under **(As per General Index)** must be given by the specified firm, which shall be counter signed by the contractor, in token of his overall responsibility. **10% (ten percent) of the cost of these items would be retained as security deposit and the amount so deducted would be released after five years from the date of completion of the entire work under the agreement, if the performance of the items is found satisfactory.** If any defect is noticed during the guarantee period, the contractor should rectify it within seven days and if not attended to the same will be got done from another agency at the risk and cost of contractor. However, this security deposit can be released in full if bank guarantee of equivalent amount is produced and deposited with the department.
- 23 **Rates:-**
- 23.1 The rates of the item shall include the cost of materials, labour required in all the above operations.
- 23.2 The rates exclude the cost of stainless steel friction hinges / stays selected for specified wind load and dead loads or specifically extruded in-built hinges, and rest of the fittings shall also be paid separately.

List of Bureau of Indian Standards Codes

All equipment, supply, erection, testing and commissioning shall comply with the requirements of Indian Standards and code of practices given below as amended upto date. All equipment and material being supplied by the contractor shall meet the requirements of IS. Tariff advisory committee's regulation (fire insurance), electrical inspectorate and Indian Electricity rules and other Codes / Publications as given below:

1.	<u>Pipes and Fittings</u>	
	IS : 458, (2003) amendment 1, Active August 2011	Specification for precast concrete pipes (with and without reinforcement)
	IS : 651 (2007) amendment 1, Active August 2011	Salt glazed stone ware pipes and fittings'.
	IS : 1239 (Part 1) 2004, amendment 4, Active August 2011	Mild steel, tubes, tubular and other wrought steel fittings: Part 1 Mild Steel tubes.
	IS : 1239 (Part 2), 1992, amendments 7, Active August 2011	Mild Steel tubes, tubular and other wrought steel fittings: Part 2 Mild Steel tubular and other wrought steel pipe fittings.
	IS : 1536, 2001, amendment 4, active August 2011	Centrifugally cast (spun) iron pressure pipes for water, gas and sewage.
	IS : 1537, 1976, amendment 6, active August 2011	Vertically cast iron pressure pipes for water, gas and sewage.
	IS : 1538 1993, amendments 4, Active august 2011	Cast Iron fittings for pressure pipes for water, gas and sewage.
	IS : 1729, 2002 ,amendments 4, active, August 2011	Cast iron/ / Ductile Iron drainage pipes and pipes fittings for over ground Non pressure pipe line socket and spigot series.
	IS : 1879, 2010, active August 2011	Malleable cast iron pipe fittings.
	IS : 2643 (Part 1) 2005 , active August 2011	Dimensions for pipe threads for fastening purposes: Part 1 Basic profile and dimensions.
	IS : 2643 (Part 2)	Dimensions for pipe threads for fastening purposes: Part 2 Tolerances.
	IS : 2643 (Part 3)	Dimensions for pipe threads for fastening purposes: Part 3 Limits of sizes.
	IS : 3468,1991, amendment 1, Active August 2011	Pipe nuts.
	IS : 3589, 2001 ,amendments 4 , Active August 2011	Seamless or electrically welded steel pipes for water, gas and sewage (168.3 mm to 2032 mm outside diameter).
	IS : 3989, 1984, amendments 5 , Active 2011	Centrifugally cast (spun) iron spigot and socket soil, waste and ventilating pipes, fittings and accessories.
	IS : 4346, 1982, Active August 2011	Specifications for washers for use with fittings for water services.
	IS : 4711,2008, amendments 1, Active August 2011	Methods for sampling steel pipes, tubes and fittings.
	IS : 6392, 1971,amendments 1,Active August 2011	Steel pipe flanges
	IS : 6418, 1971, Active August 2011	Cast iron and malleable cast iron flanges for general engineering purposes.

	IS : 7181,1986 amendments 3, Active August 2011	Specification for horizontally cast iron double flanged pipe for water, gas and sewage.
2.	<u>Valves</u>	
	IS : 778,1984, amendments 3, Active August 2011	Specification for copper alloy gate, globe and check valves for water works purposes.
	IS : 1703,2000,ammendments1 Active August 2011	Specification copper alloy float valves (horizontal plunger type) for water supply fittings.
	IS : 3950,yr(1979), amendments 1, Active August 2011	Specification for surface boxes for sluice valves.
	IS : 5312 (Part 1),yr(2004),amendments 2, Active August 2011	Specification for swing check type reflux (non return) valves: part 2 Multi door pattern.
	IS : 5312 (Part 2),yr(1986), Active August 2011	Specification for swing check type reflux (non return) valves: part 2 Multi door pattern.
	IS:12992(Part1), yr(1993), Active August 2011	Safety relief valves, spring loaded : Design
	IS:13095, yr (1991), amendments 1, Active August 2011	Butterfly valves for general purposes.
4.	Pumps & Vessels	
	IS : 2002, yr (2009), Active August 2011	Steel plates for pressure vessels for intermediate and high temperature service including boilers.
	IS : 2825 Yr.1969, amendments 5, Active August 2011	Code for unfired pressure vessels.
	IS : 4648 (Part 1) Yr.1968, amendments 1, Active August 2011	Code of practice for Electrical layout in residential building.
	IS : 5600, yr 2002,Active August 2011	Specification for sewage and drainage pumps
	IS : 8034 Yr. 2002, amendments 2, Active August 2011	Specification for submersible pump sets for clear, cold, fresh water.
	IS : 8418 Yr.1999 amendment 1, Active August 2011	Specification for horizontal centrifugal self priming pumps.
5.	<u>General</u>	
	SP : 6 (1)	Structural Steel Sections
	IS : 325 Yr.1996, amendments2, Active August 2011	Three Phase Induction Motors
	IS : 554 Yr.1999, amendments 1, Active August 2011	Dimensions for pipe threads where pressure tight joints are required on the threads.
	IS : 694 Yr.2010, amendments 5, Active August 2011	PVC insulated cables for working voltages upto & including 1100 V.
	IS : 779 Yr.1994, amendments 5, Active August 2011	Specification for water meters (domestic type).
	IS : 782 Yr.1978, Active August 2011	Specification for caulking load.
	IS : 800 Yr.2007, Active August 2011	Code of practice for general construction in steel

IS : 1068 Yr.1993, amendments 1 Active August 2011	Electroplated coatings of nickel plus chromium and copper plus nickel plus chromium.
IS : 1172 Yr.1993, Active August 2011	Code of Basic requirements for water supply drainage and sanitation.
IS : 1367 (Part 1) Yr.2002, Active August 2011	Technical supply conditions for threaded steel fasteners: Part 1 introduction and general information.
IS : 1367 (Part 2) Yr.2002, Active August 2011	Technical supply conditions for threaded steel fasteners: Part 2 product grades and tolerances.
IS : 1554 (Part 1) Yr.1988, amendments 4 Active August 2011	PVC insulated (heavy duty) electric cables: Part 1 for working voltages upto and including 1100 V.
IS : 1554 (Part 2) Yr.1988, amendments 3 Active August 2011	PVC insulated (heavy duty) electric cables: Part 2 for working voltages from 3.3 KV upto and including 11 KV.
IS : 1726 Yr.1991, Active August 2011	Specification for cast iron manhole covers and frames.
IS : 1742 Yr.1983, Active August 2011	Code of practice for building drainage.
IS : 2064 Yr.1993, Active August 2011	Selection, installation and maintenance of sanitary appliance code of practice.
IS : 2065 Yr.1983, Active August 2011	Code of practice for water supply in buildings.
IS : 2373Yr.1981, amendments 3 Active August 2011	Specification for water meter (bulk type)
IS : 2379Yr.1990, amendments 1 Active August 2011	Color code for identification of pipe lines.
IS : 2527 Yr.1984, Active August 2011	Code of practice for fixing rainwater gutters and down pipes for roof drainage.
IS : 2629 Yr.1985, amendments 3 Active August 2011	Recommended practice for hot dip galvanizing on iron and Steel.
IS : 3114Yr.1994, Active August 2011	Code of practice for laying of cast iron pipes
IS : 4111 (Part 1) Yr.1986, Active August 2011	Code of practice for ancillary structures in sewerage system: Part 1 manholes.
IS : 4127 Yr.1983, Active August 2011	Code of practice for laying glazed stoneware pipes.
IS : 4853 Yr.1982, Active August 2011	Recommended practice for radiographic inspection of fusion welded butt joints in steel pipes.
IS : 5329 Yr.1983, Active August 2011	Code of practice for sanitary pipe work above ground for buildings.
IS : 5455 Yr.1969, Active August 2011	Cast iron steps for manholes.
IS : 6159 Yr.1998, Active August 2011	Recommended practice for design and fabrication of material, prior to galvanizing.
IS : 7558Yr.1974, Active August 2011	Code of practice for domestic hot water installations.
IS : 8419 (Part 1) Yr.1977, Active August 2011	Requirements for water filtration equipment: Part 1 Filtration medium sand and gravel.
IS : 8419 (Part 2) Yr.1984, Active August 2011	Requirements for water filtration equipment: Part 2 under drainage system.

	IS : 9668 Yr.1990, Active August 2011	Code of practice for provision and maintenance of water supplies and fire fighting.
	IS : 9842 Yr.1994,amendments 2 Active August 2011	Preformed fibrous pipe insulation.
	IS : 9912 Yr.1981, Active August 2011	Coal tar based coating materials and suitable primers for protecting iron and steel pipe lines.
	IS : 10221 Yr.2008, Active August 2011	Code of practice for coating and wrapping of underground mild steel pipelines.
	IS : 10446 Yr.1983, Active August 2011	Glossary of terms relating to water supply and sanitation.
	IS : 11149 Yr.1984,amendment 1 Active August 2011	Rubber Gaskets
	IS : 11790 Yr.1986, Active August 2011	Code of practice for preparation of butt-welding ends for pipes, valves, flanges and fittings...
	IS : 456, 2000	Code of practice for Plain and RCC construction

Receipt of deposition of original EMD

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

1. Name of work :- A/R & M/O to Audit General Office at Shakti Nagar, Jammu.
SH: Supply of material to attend day to day complaints.
2. Invite NIT No:- **29/EE/Jammu Division /2026-27/Recall 1**
3. Estimated Cost: - Rs 6,28,191/-
4. Amount of Earnest Money Deposit: - Rs 12,564/-
5. Last date of submission of bid **03-10-2026**

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

1. Name of contractor#
2. Form of EMD.....#
3. Amount of Earnest Money.....#
4. Date of submission of EMD.....#

Signature, Name and Designation of EMD
receiving officer (EE/AE(P)/ AE/AAO)
alongwith Office stamp
(# to be filled by EMD received EE)

FORM OF PERFORMANCE SECURITY (GURANTEE)**BANK GUARANTEE BOND –FORMAT -I**

In consideration of the President of India (hereinafter called "The Government") having offered to accept the terms and conditions of the proposed agreement between _____ and _____ (hereinafter called "the said contractor(s)" for the work _____ (hereinafter called "The said agreement") having agreed to production of a irrevocable Bank Guarantee for Rs. _____ (Rupees _____ only) as security/guarantee from the contractor(s) for compliance of his obligations in accordance with the terms and conditions in the said agreement.

1. We, (hereinafter referred to as "the Bank") hereby undertake to pay to the Government an amount not exceeding Rs. (Rupees..... Only) on demand by the Government.
2. We,(indicate the name of the Bank) do hereby undertake to pay the amounts due and payable under this guarantee without any demure, merely on a demand from the Government stating that the amount claimed as required to meet the recoveries due or likely to be due from the said contractor(s). Any such demand made on the bank shall be conclusive as regards the amount due and payable by the bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. (Rupeesonly)
3. We, the said bank further undertake to pay the Government any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the Contractor(s) shall have no claim against us for making such payment.
4. We, (indicate the name of the Bank) further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the Government under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till Engineer-in- Charge on behalf of the Government certified that the terms and conditions of the said agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges this guarantee.
5. We, (indicate the name of the Bank) further agree with the Government that the Government shall have the fullest liberty without our consent and without affecting in any manner our obligation hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Government against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Contractor(s) or for any forbearance, act of omission on the part of the Government or any indulgence by the Government to the said Contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.
6. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).
7. We, (indicate the name of the Bank) lastly undertake not to revoke this guarantee except with the previous consent of the Government in writing.
8. This guarantee shall be valid up tounless extended on demand by the Government. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs. (Rupees) and unless a claim in writing is lodged with us within six months of the date of expiry or the extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharged.

Dated theday offor.....(indicate the name of the Bank).

Form of Performance Security (Guarantee)
Bank Guarantee Bond- Format -II

In consideration of the President of India (hereinafter called "The Government") having offered to accept the terms and conditions of the proposed agreement between.....and (hereinafter called "the said Contractor(s)") for the work..... (hereinafter called "the said agreement") having agreed to production of an irrevocable Bank Guarantee for Rs. (Rupees only) as a security/guarantee from the contractor(s) for compliance of his obligations in accordance with the terms and conditions in the said agreement.

1. We, (hereinafter referred to as "the Bank") hereby undertake to pay to the Government an amount not exceeding Rs. (Rupees..... Only) on demand by the Government.
2. We,(indicate the name of the Bank) do hereby undertake to pay the amounts due and payable under this guarantee without any demure, merely on a demand from the Government stating that the amount claimed as required to meet the recoveries due or likely to be due from the said contractor(s). Any such demand made on the bank shall be conclusive as regards the amount due and payable by the bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. (Rupeesonly)
3. We, the said bank further undertake to pay the Government any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the Contractor(s) shall have no claim against us for making such payment.
4. We, (indicate the name of the Bank) further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the Government under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till Engineer-in- Charge on behalf of the Government certified that the terms and conditions of the said agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges this guarantee.
5. We, (indicate the name of the Bank) further agree with the Government that the Government shall have the fullest liberty without our consent and without affecting in any manner our obligation hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Government against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Contractor(s) or for any forbearance, act of omission on the part of the Government or any indulgence by the Government to the said Contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.
6. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).
7. We, (indicate the name of the Bank) lastly undertake not to revoke this guarantee except with the previous consent of the Government in writing.
8. This guarantee shall be valid up tounless extended on demand by the Government. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs. (Rupees)

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

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

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

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

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

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

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

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

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

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

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

1. 2.

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

1. 2.

GUARANTEE BOND TO BE EXECUTED BY THE CONTRACTOR
FOR REMOVAL OF DEFECTS AFTER COMPLETION
IN RESPECT OF SANITARY INSTALLATIONS / WATER SUPPLY / DRAINAGE WORK.

The agreement made this..... day of (Two Thousand only) betweenS/o (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 leak proof with sound material and workmanship.

AND WHEREAS THE GUARANTOR agreed to give a guarantee to the effect that the said work will remain structurally stable, leak proof and guaranteed against faulty material and workmanship, and finishing for five years from the date of completion of work.

NOW THE GUARANTOR hereby guarantee that work executed by him will be free from any leakage, seepage, cracks in pipes and guaranteed against faulty material and workmanship improper slope, defective galvanizing etc. for **Five years** to be reckoned from the date of completion of the work.

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

During this period of guarantee, the guarantor shall make good all defects and in case of any defect to satisfaction of 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 all defects or 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 BOND TO BE EXECUTED BY THE CONTRACTOR
FOR REMOVAL OF DEFECTS AFTER COMPLETION IN RESPECT OF
STONE WORK/ TILE WORK.**

The agreement made this..... day of (Two Thousand ____ only) betweenS/o(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, improper slope, finishing and materials.

NOW THE GUARANTOR hereby guarantee that work executed by him will be free from any material defects, structural defects, cracks, hollow pockets, improper slope, faulty joints etc. for **Five years** to be reckoned from the date of completion of the work.

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 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 VENTILATOR WORK.

The agreement made this..... day of (Two Thousand only)..... betweenS/o(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, powder coating, anodizing, colouring and sealing etc.

AND WHEREAS THE GUARANTOR agreed to give a guarantee to the effect that the said work will remain structurally stable and guaranteed against faulty material and workmanship, defective anodizing/ powder coating for five years from the date of completion of work.

NOW THE GUARANTOR hereby guarantee that work executed by him will remain structurally stable and guaranteed against faulty material and workmanship, defective anodizing/ powder coating for **Five years** to be reckoned from the date of completion of the work.

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

During this period of guarantee, the guarantor shall make good all defects and in case of any defect to satisfaction of 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 all 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.

AUTHORITY LETTER

The contractor gives an authority letter addressed to the Engineer-in- Charge on a non-judicial stamp paper of Rs 100 in the format given below if required:-

I/We authorize the Executive Engineer, Jammu Division, CPWD, Satwari, Jammu to pay directly on my/ our behalf to (name of the third party) an amount of Rs (Rupees in words) for the work done or supplies made by quantity of the same under the provisions of agreement number

Signature of the contractor

LIST OF FIELD TESTS

- i) Particle size and shape
- ii) Slump test
- iii) Flakiness & Elongation Index tests
- iv) Compressive strength (concrete or bricks) test
- v) Bulking of sand
- vi) Silt content of sand
- vii) Temperature measuring with thermometer with brass protected end 0-200° C

FIELD TESTING EQUIPMENT AND INSTRUMENTS**A. (i) Electronic/digital weighing balance(1 no.):**

- (a) 7 kg to 10 kg capacity, semi-self indicating type-Accuracy 10 gm.
- (b) 500 gm capacity, semi-self indicating type-Accuracy 1gm.
- (ii) Cube Testing Machine (1 No.) along with 18 nos. IS marked cube moulds
- (iii) Sieves set as per IS 460-1962 & sieve shaker(1 no.)
- (iv) Slump Cone(2 No.)
- (v) Oven (1 no.)
- (vi) Graduated Measuring Cylinder(2 no.)
- (vii) Enamel trays (for efflorescence test for bricks)-1 Set
- (viii). Ultrasonic Pulse Velocity Test Equipment For concrete(1 No.) as and when required.
- (ix). Measuring Steel Tape 3m (2 Nos.) & 15m (2 Nos.) and Laser Distance Meter of 200 metre range with bluetooth connectivity – 1 No.
- (x). Core cutting Machine – 1 No. as & when required.
- (xi). Other instruments(1 no.each): Vernier calipers, screw gauge, plumb bob, spirit level minimum 30 cm long with 3 bubbles, wire gauge (Circular type) disc, steel foot rule, long nylon thread, magnifying glass, moisture meter.

B. Field Testing Instruments

- i) Steel tapes – 3 m
- ii) Digital Vernier Calipers
- iii) Digital Micrometer Screw 25 mm gauge
- iv) A good quality plumb bob
- v) Spirit level minimum 30 cms long with 3 bubbles for horizontal vertical
- vi) Wire gauge (circular type) disc.
- vii) Foot rule
- viii) Long nylon thread
- ix) Pulse velocity meter
- x) Magnifying glass
- xi) Screw driver 30 cms long
- xii) Ball pin hammer, 100 gms
- xiii) Plastic bags for taking samples
- xiv) Digital Distance meter
- xv) Leveling machine

C. Minimum required T&P

Sr. no.	Detail of T&P	Qty.	Remarks
1	Concrete mixer with hopper (Full bag)	1 Nos.	
2	Steel Shuttering	200 sqm	
3	Water pump	2 Nos.	
4	Needle Vibrator (Electrically operated)	1 No.	
5	Needle Vibrator (Diesel/Patrol operated)	1 No.	
6	Steel Cutter	1 No.	

Correction – Nil

Insertion – Nil

Deletion – Nil

A.E (P)

E.E.

PROFORMA FOR TESTS CARRIED OUT

NAME OF THE WORK :
 AGREEMENT NO. & DATE :

DIVISION/
 SUB-DIVISION

Sl. No.	Item	Quantities as per agreement	Frequency as per specification	No. of tests required	R.A. bill No.	Uptodate quantity	No. of tests required	No. of tests actually done	Remarks
1	2	3	4	5	6	7	8	9	10

Signature of Contractor

Correction –Nil

Insertion –Nil

Deletion –Nil

A.E (P)

E.E.

CEMENT/PAINT REGISTER

NAME OF WORK:
AGREEMENT NO.

DIVISION
SUB-DIVISION

Particulars of Receipt

Date of Receipt	Source of receipt with details if any	Batch No.	Date of manufacture	Date of expiry	Qty. received	Progressive Total	Date of Issue	Qty Issued	Items of work for which Issued	Qty. Returned at the end of day's work
1	2	3	4	5	6	7	8	9	10	11

Particulars of Issue

Net Qty. Issued	Progressive Total	Daily Balance in Hand	Contractor's Initial	J.E.'s Initial		Periodical Check	
						By AE	By EE
12	13	14	15	16		17	18

Correction – Nil

Insertion – Nil

Deletion – Nil

A.E (P)

E.E.

List of Approved Materials for (Civil)

SI No	DETAILS OF MATERIALS	MANUFACTURERS/ MODEL/ MAKE NAME
	CONCRETE/RCC WORK	
1.	CEMENT [O.P.C] AND [P.P.C.] 43 GRADE	ACC, AMBUJA, ULTRATECH, JK CEMENT, BIRLA, WONDER, JAYPEE CEMENT
2.	WHITE CEMENT	BIRLA WHITE, J.K. WHITE, ULTRA TECH
3.	ADMIXTURES FOR PCC/ RCC/ MORTAR	FOSROC, SIKA, BASF, MAPEI, CHRYSO (SAINT GOBAIN), CICO. ASIAN PAINT SMART CARE, FERROUSCRETE, NEROLAC PERMA, KRYPTON, XYPEX, ENDURA(PJL)
4.	CURING COMPOUND	FOSROC, SIKA, CICO, BASF. ENDURA(PJL)
	STEEL WORK	
5.	STEEL (TMT FE-500D or OTHER GRADE)	TATA STEEL LTD., RINL, JINDAL STEEL & POWER LTD (PANTHER), JSW STEEL LTD (NEO), SAIL.
6.	STRUCTURAL STEEL SECTIONS INCLUDING HOLLOW SECTIONS	TATA, JINDAL STEEL & POWER LTD, RINL, SAIL, APL APOLLO
7.	STEEL SECTION FOR DOOR/ WINDOW FRAME.	TATA, JINDAL STEEL & POWER LTD, APL APOLLO, NAVDURGA STEEL, CRM STEEL, SHYAM ISPAT
8.	S.S. RAILING	DORMA, JINDAL LIFESTYLE, DORSET, TECHNORAIL, RINOX, KICH, D-LINE
9.	DASH, ANCHORING FASTENERS, CLAMP SYSTEM FOR STONE CLADDING	HILTI, FISCHER, BOSCH, AXEL, AFT, WUERTH
10.	HIGH TENSILE STEEL TENDONS FOR PT WORK	TATA, USHA MARTIN, DP WIRES
11.	WELDING RODS	ADVANI, ESAB
12.	REBARRING CHEMICAL	BOSCH, 3M INDIA, WUERTH, HILTI
	MASONRY WORK	
13.	AAC BLOCK ADHESIVE	WEBER (WEBERWALL JOINSBOND), ULTRATECH (XTRALITE), MYK LATICRETE, FERROUSCRETE, FINECRETE, ARDEX ENDURA, SIKA

SI No	DETAILS OF MATERIALS	MANUFACTURERS/ MODEL/ MAKE NAME
14.	AAC BLOCKS	ULTRATECH, BUILTECH, MAGICRETE, R.S. GREEN, AEROCON, FINECRETE, CLAVECON, FERROUSCRETE, ECOGREEN, JK LAXMI, EXTRALIGHT
15.	STONE ADHESIVE	ARDEX ENDURA, WEBER, MYK LATICRETE, MAPEI.
16.	STONE SURFACE SEALER/IMPREGNATION & CLEANING AGENTS	ARDEX ENDURA, WEBER, MYK LATICRETE, MAPEI
17.	POLYMER MODIFIED MORTAR	SIKA, FOSROC, LATICRETE, ULTRATECH, WEBER
18.	MICRO CONCRETE	SIKA, FOSROC, BASF, LATICRETE, ULTRATECH
19.	GRC JALI	UNISTONE, BIRLA WHITE, DALAL
20.	EXPOSED BRICKWORK BRICKS	JINDAL MECHNO BRICKS, THE BRICKSTORE (JAYJALARAM BRICKS), UNISTONE, PRAYAG CLAY PRODUCTS (VARANASI)
	WOOD, PVC WORK, JOINERIES	
21.	FACTORY HOT PRESSED LAMINATED/FACTORY VENEERED POLISHED DOOR	GREEN (GREEN DOORS), DURO (TOWER DOORS), CENTURY (CENTURY DOORS PRO), GREENLAM, GREENPANEL (GREENPANEL DOORS- PINE FILLERS), MERINO
22.	FLUSH DOOR (BLOCKBOARD CONSTRUCTON)	GREEN (GREEN DOORS), DURO (TOWER DOORS), CENTURY (CENTURY DOORS PRO), GREENLAM, GREENPANEL (GREENPANEL DOORS- PINE FILLERS) , MERINO, ARCHIDPLY
23.	VENEERED/LAMINATED PARTICLE BOARD/MDF/ HDF/HDHMR BOARD	GREEN, GREENLAM, GREENPANEL, CENTURY, BHUTAN TUFF, MERINO, ARCHIDPLY
24.	BLOCK BOARD, PLYWOOD (PINE BOARD)	GREEN, DURO, CENTURY, MERINO, ARCHIDPLY, BHUTAN TUFF
25.	LAMINATE/HPL/COMPACT LAMINATE	EURO DÉCOR, GREENLAM, CENTURY, MERINO, VIRGO, ARCHID PLY
26.	VENEERED PLY	EURO DÉCOR, CENTURY, DURO, GREEN, GREEN LAM, GREEN PANEL, MERINO, ARCHIDPLY, BHUTAN TUFF
27.	SS 316 HARDWARE/ FITTINGS/ JOINERIES FOR DOOR WINDOWS, WARDROBES, MODULAR KITCHENS	DORMA, HAFELE, HETTICH, GEZE, D-LINE, KITCH, DORSET, ASSA ABLOY

SI No	DETAILS OF MATERIALS	MANUFACTURERS/ MODEL/ MAKE NAME
28.	SS 304 HARDWARE/ FITTINGS/ JOINERIES FOR DOOR WINDOWS, WARDROBES	DORMA, HAFELE, HETTICH, GEZE, D-LINE, KITCH, DORSET, ASSA ABLOY
29.	HYDRAULIC DOOR CLOSER, FLOOR SPRING	DORMA, HAFELE, YALE, DORSET
30.	WOOD ADHESIVE	FEVICOL, 3M, SIKA
31.	FIRE CHECK DOOR (ALL TYPES)	SHAKTI HORMANN, PACIFIC, NAVAIR, SUKRI, TATA PRAVESH, BHAWANI FIRE, ASES, PROMAT
32.	FIRE RESISTANT (WIRED/ INTUMESCENT GEL) GLASS	SAINT GOBAIN, GLAVER BEL, SCHOTT, PYROGUARD
33.	DOOR FITTINGS & HARDWARE FOR FIRE CHECK DOORS DOORS- DOOR CLOSER, PANIC BAR, PANIC TRIM, HINGES, MORTISE DEAD LOCK, HANDLE, FLUSH BOLT, DOOR COORDINATER	DORMA, HEFELE, GEZE, HORMANN, DORSET, ASSA ABLOY
34.	PAINT AND PRIMER FOR FIRE CHECK DOOR	VIPER, FRS 880/FRS 881, NULLIFIRA, AKZO NOBEL, PROMAT
35.	INTUMESCENT FIRE/SMOKESEAL	ASTRO FLAME, RAVEN, SEALZ, LORIENT, 3M, HILTI, FISCHER, WUERTH
36.	TOILET CUBICLES	GREENLAM, FUNDERMAX, CENTURY, MERINO, DORMA
37.	ACRYLIC SOLID SURFACE	LG HI-MACS, DUPONT CORION, NEONNEX, LUXOR (DURLAX)
38.	VENETIAN/HONEYCOMB/ROLLER BLINDS & CURTAIN TRACKS, DRAPERY RODS	MAC, VISTA, DECK, HUNTER DOUGLAS, D'DÉCOR
39.	WPC DOORS & FRAMES	ALSTONE, RAJSHRI, GREENPLY, CENTURY, AMULYA
40.	WPC BOARDS & JALI	ALSTONE, RAJSHRI, GREENPLY, CENTURY, AMULYA
41.	Upvc WINDOWS & DOORS	DUROPLAST, ENCRAFT, KOMMERLING, LG-HAUSYS, VEKA. FENESTA, PROMINANCE, ALUPLAST
42.	UPVC WINDOW/ DOOR HARDWARE FITTINGS (ZINC ALLOY)	PULSE, HOPPE, GU, ROTO, GODREJ, KINLONG, DORSET
	FLOORING	
43.	VITRIFIED TILES AND CERAMIC TILES	KAJARIA, RAK, RESTILE, SOMANY, ORIENTBELL, JOHNSON

SI No	DETAILS OF MATERIALS	MANUFACTURERS/ MODEL/ MAKE NAME
44.	COMPOSITE MARBLE/QUARTZ STONE	JOHNSON, KALINGA
45.	CC CHEQUERED/TACTILE TILES	JOHNSON, RESTILE, KAJARIA, UNISTONE, DALAL, PUJA CONCRETE, SWASTIK TILES
46.	TILE ADHESIVE, EPOXY/CEMENTITIOUS TILE GROUT	ARDEX ENDURA, WEBER, MYK LATICRETE, MAPEI, CHRYSO (SAINT GOBAIN), FERROUSCRETE, ULTRATECH
47.	POLYSULPHIDE SEALANT	BASF, FOSROC, SIKA, MAPEI, ARDEX ENDURA, PIDILITE, CHRYSO (SAINT GOBAIN), FERROUSCRETE
48.	WOODEN FLOORING	ARMSTRONG, PERGO, MIKASA (GREENLAM), PARADOR (HIL), JUNCKERS, VISTA, ACTION TESA
49.	RAISED/ FALSE ACCESS FLOORING SYSTEM	UNITILE, LINDNER, UNIFLOOR, TANKARIA, TATE ACCESS FLOOR SYSTEMS
50.	PVC (VINYL) FLOORING	ARMSTRONG (CCIL) , WONDERFLOOR, PERGO, LG HAUSYS
	ROOFING	
51.	GYPSUM BOARD	INDIA GYPSUM, LAFARGE, BORAL, GYPROC, WESTERN
52.	CALCIUM SILICATE TILES/BOARD FALSE CEILING & FRAMING	AEROLITE, SAINT GOBAIN, HILUX, USG BORAL, ARMSTRONG, PROLAD, ANAKON
53.	MINERAL FIBRE/ GRG FALSE CEILING	ARMSTRONG, GYPROC, AEROLITE, USG BORAL, DIAMOND, DEXUNE, SAINT GOBAIN, PROLAD, ANAKON, GYPTECH
54.	TUBULAR & METAL FALSE CEILING	HUNTER DUGLUS, ARMSTRONG, LINDNER, CREDENCE, DEXUNE, DURLUM, SAINT GOBAIN, GYPTECH, ANAKON, HI-STEEL, WESTERN
55.	ALUMINIUM BAFFLE FALSE CEILING	HUNTER DUGLUS, ARMSTRONG, LINDNER, DURLUM, DEXUNE, SAINT GOBAIN, HI-STEEL, WESTERN
56.	WOODEN FALSE CEILING	ARMSTRONG, ANUTONE, ECOPHONE, EPITOME
57.	DRY WALL SYSTEM-BOARD AND FRAMING	USG BORAL, GYPROC, EVEREST, WESTERN
58.	FALSE CEILING- GYPSUM BOARD/TILES	GYPROC, LAFARGE ,INDIA GYPSUM, USG BORAL, SAINT GOBAIN, LLYOD, DIAMOND CEILING, WESTERN
59.	CEMENT FIBRE BOARDS	EVEREST, BRILA AEROCON, VISHAKHA, CENTURY (Zykron), SAINT GOBAIN
60.	TENSILE FABRIC	BLUE STONE, ENCON, STRUCTURE FLEX, SAINT GOBAIN

SI No	DETAILS OF MATERIALS	MANUFACTURERS/ MODEL/ MAKE NAME
61.	ACCOUSTIC: GLASS / WOODEN FIBRE FALSE CEILING AND WOODEN/ FABRIC WALL LINING	ARMSTRONG, DEXUNE, ACCOUSTIBLOK, HIMALYAN ACOUSTICS, ANUTONE, GYPTECH, PROLAD, ANAKON
	FINISHING	
62.	WATER-PROOF CEMENT PAINT	SNOWCEM, ASIAN, ICI.
63.	SYNTHETIC ENAMEL PAINT	ASIAN (APCOLITE PREMIUM GLOSS/SATIN ENAMEL), ICI (DULUX GLOSS/SATIN), KANSAI NEROLAC (SYNTHETIC ENAMEL HI GLOSS/SATIN ENAMEL SMOOTH FINISH)
64.	PLASTIC/PREMIUM EMULSION PAINT	ICI (DULUX VELVET TOUCH/ DULUX SUPERCLEAN), NEROLAC (BEAUTY GOLD), ASIAN PAINTS (ROYALE LUXURY EMULSION/ROYALE MATT)
65.	OIL BOUND DISTEMPER/ACRYLIC WASHABLE DISTEMPER	ASIAN PAINTS (TRACTOR EMULSION), ICI (DULUX PROMISE INTERIOR), NEROLAC (IMPRESSIONS ECOCLEAN) (IMPRESSIONS IDEAZ)
66.	EPOXY/PU PAINT	ASIAN, ICI, KANSAI NEROLAC
67.	TEXTURED EXTERIOR PAINT	ASIAN PAINTS (APEX WITH HONEYCOMB ROLLER FINISH) ICI (WEATHER SHIELD WITH HONEYCOMB ROLLER FINISH, KANSAI NEROLAC (EXCEL WITH HONEYCOMB ROLLER FINISH)
68.	EXTERIOR EMULSION/PAINT	ASIAN (ULTIMA PROTEK), ICI (DULUX WEATHERSHIELD MAX), NEROLAC (EXCEL TOTAL)
69.	STEEL PRIMER/ WOOD PRIMER	NEROLAC, ASIAN, ICI DULUX
70.	EXTERIOR & INTERIOR WALL PRIMER	DULUX, ASIAN, NEROLAC
71.	EXTERIOR WATERPROOFING PAINT	ASIAN, ICI, NEROLAC
72.	ANTI BACTERIAL PAINT	ICI , ASIAN, BERGER
73.	MELAMINE & PU POLISH	ASIAN, ICI, NEROLAC, BERGER
74.	GYPSUM PLASTER	GYPROC (ELITE-90), ULTRA TECH, USG BORAL, BIRLA WHITE, WESTERN , FERROUSCRETE
75.	WALL PUTTY	JK, BIRLA, ASIAN PAINTS, FERROUSCRETE, ULTRATECH
76.	POWDER COATING	AKZO NOBEL, JOTUN, JENSON& NICHOLSON

SI No	DETAILS OF MATERIALS	MANUFACTURERS/ MODEL/ MAKE NAME
77.	BITUMASTIC PAINT	BERGER, SHALIMAR, NEROLAC, ASIAN
78.	POLYMER MODIFIED SELF CURING PLASTER	MYK LATICRETE, FERROUS CRETE, ARDEX ENDURA, ULTRATECH READYPLAST
	ROAD WORK	
79.	CC/SFRC PRECAST DRAIN COVER/KERB STONE/CHANNEL	KK, NITCO, DALAL TILES, CHELSEA, PAVECON, KJS CONCRETE, UNISTONE,
80.	FRP DRAIN AND MANHOLE COVER	DUDHI, ASHIRVAD, KK FRP
81.	CC PAVERS/ GRASS PAVER/ KERB STONE	NITCO, UNISTONE, ULTRA TILES, KJS CONCRETE, PAVECON, CHELSEA, NATIONAL TILES CORPORATION, SARAL IMPEX, BALAJI TILES, METRO PAVERS, MGM INFRA, KRISHNA TILES
82.	THERMOPLASTIC PAINT/ROAD MARKING PAINT	NEROLAC, ASIAN, SHALIMAR, BERGER, STP LTD
	WATER SUPPLY & FITTINGS	
83.	C.P. BRASS FAUCETS, FITTINGS FOR TOILETS I/C WELLNESS PRODUCTS AND ACCESSORIES LIKE TOWEL ROD, TOILET PAPER HOLDER, ROB HOOK, SOAP DISH HOLDER, LIQUID SOAP CONTAINER ETC	JAQUAR, KOHLER, GROHE, ROCA, HINDWARE QUEO, KEROVIT, EURONICS
84.	PTMT FITTINGS	PRAYAG, POLYTUF, PRIMA, SUPREME, JINDAL SANITARYWARE
85.	FERRULES FOR WATER SUPPLY	HIND METAL WORKS, KRITIKA, DRP, SHAKTI
86.	SS PIPES & FITTINGS FOR WATER SUPPLY	JINDAL LIFESTYLE, VIEGA, J PRESS, ALFA PRESS
87.	G. I. PIPES	TATA, JINDAL HISAR, SAIL, APL APOLLO, Prakash Surya
88.	G. I. FITTINGS	UNIK, ICS, KS, SANT, ZOLOTO
89.	DI PIPES & FITTINGS	KESORAM, ELECTROSTEEL, TATA
90.	BRASS/GUNMETAL- ALL/ GATE/ GLOBE/ NRV/ FOOT/ PRV- VALVES	LEADER, SANT, ZOLOTO, KIRLOSKAR
91.	CI-BUTTERFLY/ SLUICE/NRV/ FOOT/AIR RELEASE- VALVES	LEADER, SANT, ZOLOTO, KIRLOSKAR
92.	FLOAT VALVE (BALL TYPE)	PRAYAG, LEADER, ZOLOTO, IBP, ARCO
93.	Y TYPE STRAINER	EMERALD, SANT, ZOLOTO, LEADER

SI No	DETAILS OF MATERIALS	MANUFACTURERS/ MODEL/ MAKE NAME
94.	FORGED STEEL FITTINGS/FLANGES	JOHNSON, VS FORGE, JK FORGING, TRUE FORGE, INDUS, MEC (JAINSONS)
95.	PIPE HANGERS/ SUPPORTS/ CLAMPS	HILTI, FISCHER, EUROCLAMP, GMGR, NECO, EASYFLEX, WUERTH
96.	MS PIPES	JINDAL HISAR, TATA, Prakash Surya, APL APOLLO
97.	C.I./D.I. MANHOLES COVERS, GRATINGS	RIF, ACO, SWASTIKA ENTERPRISES, BENGAL IRON CORPORATION, NECO, BINAY UDYOG, CHANDERANCHAL
98.	PVC WATER STORAGE TANKS	SINTEX, SHEETAL, SUPREME, POLYPLAST, VECTUS, PRAYAG, JINDAL SANITARYWARE
99.	CPVC/ UPVC PIPES & FITTINGS	ASHIRWAD, FINOLEX, SUPREME, ASTRAL, PRINCE, KISAN, PRAYAG, JINDAL SANITARYWARE
100.	GALVANISED STEEL SHEETS (UNCOATED & PRE-COATED)	SAIL, TATA, JINDAL, NCL
101.	ROOFING SHEETS (GALVALUME)	CRIL, LLOYDS, INTERACH, MULTICOLOR, BHUSHAN POWER STEEL, TATA, JINDAL(JSW)
	SANITARY INSTALLATIONS	
102.	VITREOUS CHINA SANITARYWARE	KOHLER, JAQUAR, GROHE, ROCA, HINDWARE QUEO, EURONICS
103.	STAINLESS STEEL SINKS	NILKANTH, NIRALI, ROCA, HAFELE, EURONICS JINDAL SANITARYWARE
104.	EXPOSED PVC CISTERN	KOHLER, JAQUAR, GROHE, ROCA, HINDWARE QUEO, EURONICS JINDAL SANITARYWARE
105.	CENTRIFUGAL CAST (SPUN) IRON (S&S) / HUBLESS PIPES AND FITTINGS	NECO, BIC, PAM-SAINT GOBAIN, NECO, BENGAL IRON, DURGAPUR ISPAT UDYOG, SINGHAL IRON FOUNDRY (SKF), KAPILANSH DHATU UDYOG PVT. LTD.
106.	CENTRIFUGALLY CAST (SPUN) IRON PIPES (CLASS LA)	NECO, BIC, PAM-SAINT GOBAIN, NECO, BENGAL IRON, DURGAPUR ISPAT UDYOG, SINGHAL IRON FOUNDRY (SKF), KAPILANSH DHATU UDYOG PVT. LTD.
107.	C.P. BOTTLE TRAPS	JAQUAR, ROCA, KOHLER, EURONICS
108.	SS/CP BRASS ANTI COCKROACH TRAP/GRATING FOR DRAINAGE PIPES	VIKING, JAYNA, CHILLI, KICH, EURONICS
109.	STRUCTURAL GLAZING	ALCOB, ALUPRO, ALUPLAX, SP FABRICATORS, SAINT GOBAIN, GLAVERBEL.
110.	FAÇADE GLASS OPENABLE FITTINGS	ALUALPHA, SAVIO, HOPPE, ALUTECH
111.	GLASS FAÇADE/ GLASS CANOPY WITH SS SPIDER FITTINGS	ALCOB, ALUPRO, ALUPLAX, SP FABRICATORS, SAINT GOBAIN, GLAVERBEL.
112.	FRAMELESS GLAZING WITH SS PATCH FITTINGS	DORMA, ASSA ABLOY, GEZE, D-LINE, KICH
113.	ALUMINIUM COMPOSITE PANEL	ALUCOBOND, VIRGO, ALUDECOR, ALUTECH

SI No	DETAILS OF MATERIALS	MANUFACTURERS/ MODEL/ MAKE NAME
114.	STONEWARE PIPES & GULLY TRAPS PERFECT	TAYA, PARRY, BURN, ANAND, HIND
115.	RCC PIPES	LAKSHMI, SOOD & SOOD, JAIN 7 CO, PRAGATI CONCRETE, KK, USHA, DIWAN SPUN PIPE
116.	HDPE PIPES	ASHIRVAD, SUPREME, ASTRAL, JINDAL SANITARYWARE
117.	PVC PIPES	REX POLYEXTRUSION, SUPREME, PRINCE, SUPREME, ASHIRVAD, JINDAL SANITARYWARE
118.	CI/ PLASTIC ENCAPSULATED/ PLAIN FOOT REST	KK INDIA, KGM, ACCURATE BUILDCON, NECO
	ALUMINIUM	
119.	ALUMINIUM HARDWARE FITTINGS FOR SAVIO, HOPPE ALUMINIUM WINDOWS & DOORS, FRICTION SCHUCO STAY HINGES	ALUALPHA, GEZE, ROTO, DR HANN, SECURISTYLE, STAC, PULSE.
120.	ALUMINIUM EXTRUDED SECTIONS FOR DOORS & WINDOWS ETC.	JINDAL, HINDALCO, NALCO, BALCO
121.	ALUMINIUM SYSTEM WINDOWS/ DOORS FABRICATORS	KALCO, SCHUCO, TECHNAL, SAPA, SHANKAR FENESTRATIONS & GLASS (PABROS)
122.	ALUMINIUM GLASS PARTITION SYSTEM	DORMAKABA, LINDNER. KUBIK, BOTTOMLINE, KALCO. ENOX
123.	EPDM GASKET	HANU, ANAND, ALP, MONA
124.	SILICON GASKET	DORSET, HAFELE, JAQUAR, GODREJ, SAINT
125.	FLOAT GLASS	GOBAIN MODIGUARD, SAINT GOBAIN, ASAHI
126.	MASKING TAPE	SISECAM (TURKEY) 3M, SUN, WONDER POLYMER
127.	REFLECTIVE GLASS/ TOUGHNED GLASS GOLDPLUS	SAINT GOBAIN, ASAHI (INDIA), PILKINGTON, GUARDIAN, MODI,
128.	LOOKING GLASS / MIRROR	ATUL, MODI GUARD, GOLDEN FISH, SAINT GOBAIN
129.	ADHESIVE TAPE/STRUCTURAL SEALANT TAPE	NORTON, 3M, PENTA GUN
130.	SILICON SEALANT	GE MOMENTIVE, DOW CORNING, WACKER, MAPEI, MC- BAUCHEMIE
131.	ROCK WOOL/GLASS WOOL	U.P TWIGA, ROCK WOOL INDIA LTD., LLYOD LTD., ROXUL ROCKWOOL INDIA
132.	FROSTED FILM	LG, 3M, GARWARE, DUPONT
133.	AUTOMATIC SLIDING DOOR	SCHUCO, SAPA BUILDING SYSTEMS, EUROPEAN FAÇADE PRODUCT (EPF), DORMA KABA, ENOX

SI No	DETAILS OF MATERIALS	MANUFACTURERS/ MODEL/ MAKE NAME
	WATER PROOFING	
134.	PVC WATER STOP/ SWELLABLE WATER BAR	SIKA, FOSROC, PENETRON, BASF, VELOSIT
135.	PU/EPOXY/CEMENTITIOUS GROUTING COMPOUND	LATICRETE, WEBER, MAPEI, SIKA, FOSROC, CHRYSO (SAINT GOBAIN), VELOSIT
136.	HIGH PERFORMANCE EPOXY BASED RESIN ANCHOR SYSTEM	FOSROC, FISHER, HILTI, WUERTH
137.	EPOXY MORTAR/PUTTY	FOSROC, SIKA, BASF, LATICRETE, MAPEI, ARDEX ENDURA, CHRYSO (SAINT GOBAIN)
138.	WATER REPELLANT SILANE CHEMICAL	PIDILITE, FERROUS CRETE, ARDEX ENDURA, ASIAN PAINTS SMARTCARE, ULTRATECH WEATHERPRO
139.	SOLVENT BASED SILICONE REPELLENT COATING	FAIRMATE, WACKER, WEBER, LATICRETE, MAPEI, DOW CHEMICALS
140.	CRYSTALLINE WATER PROFFING COMPOUND (At their recommended doses)	XYPEX, PENETRONE, KRYTON
141.	LIQUID APPLIED PU/POLYUREA, HYBRID POLYUREA/ELASTOMERIC WATER PROOFING MEMBRANE (1 COMPONENT/2 COMPONENT)	SIKA, FOSROC, BASF, MAPEI
142.	HDPE/PVC BASED DRAINAGE BOARD	DANODRAIN, SIKA, FOSROC, BASF
143.	HDPE WATERPROOFING MEMBRANE	SIKA, FOSROC, BASF, MAPEI, GRACE
144.	APP/PVC/SBR BITUTHENE/BITUMINOUS MEMBRANES (INCLUDING SELF ADHESIVE TYPE)	FOSROC, SIKA, BASF, STP, GRACE
145.	PU/EPOXY SEALANT FOR CRACKS	SIKA, FOSROC, BASF, LATICRETE, MAPEI, WEBER, CHRYSO (SAINT GOBAIN)
146.	FASTENERS.	HILTI/ FISCHER/ CHILLI/ GMGR WUERTH
147.	DRY STONE CLADDING SYSTEM	WESTERN OR EQUIVALENT

* Batch test certificate of Paints and Primer shall be supplied along with each lot.

Note: The Superintending Engineer, Jammu Circle, CPWD, Jammu reserves the right to add or delete any materials and brands in the list of preferred materials/ brands.
Any materials/ brands bearing ISI mark can be used in the work with the prior approval of Superintending Engineer, Jammu Circle, CPWD, Jammu.

केन्द्रीय लोक निर्माण विभाग

कार्यालय ज्ञापन

No. DG/CON/Maintenance 2023/12

ISSUED BY AUTHORITY OF DIRECTOR GENERAL, CPWD

NIRMAN BHAWAN, NEW DELHI

Dated: 03.01.2025

Subject: Modifications in General Rules and Directions of GCC 2023 for Maintenance Works.

The following amendments are made in the General Rules and Directions of GCC 2023 for Maintenance Works:

Existing provision	Modified provision
Applicable for Item Rate Tender only (CPWD - 8) 4 The rates rupee one. In case the lowest tendered amount (worked out on the basis of quoted rate of Individual items) of two or more contractors is same, then such lowest contractors may be asked to submit sealed revised offer quoting rate of each item of the schedule of quantity for all sub sections/sub heads as the case may be, but the revised quoted rate of each item of schedule of quantity for all sub sections/sub heads should not be higher than their respective original rate quoted already at the time of submission of tender. The lowest tender shall be decided on the basis of revised offer. If the revised their tenders. In case of any be forfeited. In case all lowest contractors. Contractor of the work.	Applicable for Item Rate Tender only (CPWD - 8) 4 No change In case the lowest tendered amount (worked out on the basis of quoted rate of Individual items) of two or more contractors is same, then such lowest contractors may be asked to submit revised price bid online using e-tender website, quoting rate of each item of the schedule of quantity for all sub sections/sub heads as the case may be, on the revised template which has been sent to them by the Tender Inviting Authority (TIA), but the revised quoted rate of each item of schedule of quantity for all sub sections/sub heads should not be higher than their respective original rate quoted already at the time of submission of tender. The lowest tender shall be decided on the basis of revised offer. No change
Applicable for Percentage Rate Tender only [CPWD- 7] 4B In case the lowest tendered amount (estimated cost + amount worked on the basis of percentage above/below) of two or more contractors is same, such lowest contractors will be asked to submit sealed revised offer in the form of letter mentioning	Applicable for Percentage Rate Tender only [CPWD- 7] 4B In case the lowest tendered amount (estimated cost $\pm$ amount worked on the basis of percentage above/below) of two or more contractors is same, such lowest contractors will be asked to submit revised price bid online quoting percentage above/


 R K SINGH
 EE(Manual)

1

Correction – Nil

Insertion – Nil

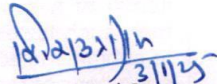
Deletion – Nil

A.E (P)

E.E.

percentage above/ below on estimated cost of tender including all sub sections/sub heads as the case may be, but the revised percentage quoted above/below on tendered cost or on each sub section/ sub head should not be higher than the percentage quoted at the time of submission of tender. The lowest tender shall be decided on the basis of revised offers.	below on estimated cost of tender including all sub sections/sub heads as the case may be on the revised template which has been sent to them by the Tender Inviting Authority (TIA), but the revised percentage quoted above/below on tendered cost or on each sub section/ sub head should not be higher than the percentage quoted at the time of submission of tender. The lowest tender shall be decided on the basis of revised offers.
In case of any be forfeited. If the revised their tenders. In case all process of the work.	No change

This issues with the approval of DG, CPWD.


(दिनेश कुमार उज्जैनिया)
अधीक्षण अभियंता (सी.एंड एम.)

**Issued from file No. CSQ/CM/17(1)/ Maintenance/2024
e-file 9185053 (DFA/9307326)**

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


R K SINGH
EE(Manual)

केन्द्रीय लोक निर्माण विभाग
कार्यालय ज्ञापन

No. DG/CON/Maintenance 2023/13

ISSUED BY AUTHORITY OF DIRECTOR GENERAL, CPWD

NIRMAN BHAWAN, NEW DELHI

Dated: 31.01.2025

Subject: Modifications in Clause 7A of GCC 2023 for Maintenance Works

The following amendments are made in the Clause 7A of GCC 2023 for Maintenance Works:

Existing provision	Modified provision
Clause 7A No Running Account Bill shall be paid for the work till the applicable labour licenses, registration with EPFO, ESIC and BOCW Welfare Board, whatever applicable are submitted by the contractor to the Engineer-in-Charge.	Clause 7A (a) No Running Account Bill/Final Bill shall be paid for the work till the applicable labour licenses, registration with EPFO, ESIC and BOCW Welfare Board, whatever applicable are submitted by the contractor to the Engineer-in-Charge. (b) The following documents shall also be part of the bill submitted by the contractor (these documents shall be owned by the contractor) before making payment:- 1. Details of person employed with date of their employment up to previous month. 2. Documents of payment made to the employees directly into their bank accounts up to previous month. 3. Documents of attendance through biometric attendance or other mode up to previous month. 4. Documents of deposition of EPF and ESI deductions in the employee's accounts up to previous month. 5. Any penalty imposed on the agency for delay in disbursing payment and deposition of EPF and ESI deductions in the employee's accounts up to previous month. 6. Any other document(s) required as per statutory requirements and/or as directed by Engineer-in-Charge. (c) In case, any of the documents submitted by the contractor is found false/forged at a later date, action for debarment of contractor will be taken by the SE/CE concerned.

This issues with the approval of DG, CPWD.

Issued from file No. CSQ/CM/17(1)/2023/Maintenance e-file 9184028 (DFA/9313089)
केलोनिवि तथा लोनिवि दिल्ली के सभी अधिकारियों को आवश्यक सूचना एवं कार्यवाही हेतु।
(केलोनिवि वेबसाईट के माध्यम से)

R K SINGH
EE(Manual)

**Central Public Works Department
Office Memorandum**

No. DG/CON/Maintenance 2023/14

ISSUED BY AUTHORITY OF DIRECTOR GENERAL, CPWD

NIRMAN BHAWAN, NEW DELHI

Dated: 10.02.2025

Subject: Modifications in Clauses 7, 8, 9 and Schedule F of clause 8 of GCC 2023 for Maintenance Works.

The following amendments are made in the Clauses 7, 8, 9 and Schedule F of clause 8 of GCC 2023 for Maintenance Works:

Existing provision	Modified provision
Clause 7 Existing provisions No provision	Clause 7 No change In case of correction / rejection / short documents, it will be mandatory for Engineer-in-Charge to give recorded reasons for correction / rejection / submission of additional documents within seven days after submission of running bill by the contractor.
Clause 8 Completion Certificate Within ten days of the completion of the work, the contractor shall give notice of such completion to the Engineer-in-Charge and within thirty days of the receipt of such notice, the Engineer-in-Charge shall inspect the work and if there is no defect in the work, shall furnish the contractor with a final certificate of completion, otherwise a provisional certificate of physical completion indicating defects (a) to be rectified by the contractor and/or (b) for which payment will be made at reduced rates, shall be issued. But no final certificate sum actually realized by the sale thereof.	Clause 8 Completion Certificate Within ten days of the completion of the work, the contractor shall give notice of such completion to the Engineer-in-Charge and the Engineer-in-Charge within seven days of receipt of intimation of completion from contractor will inspect the work and satisfy himself about completion of work, then intimate to the concerned authorities as mentioned in Schedule F for issuance of completion certificate. The concerned authorities will inspect the work and issue completion certificate within thirty days of the receipt of such intimation. The Engineer-in-Charge shall furnish to the contractor a final certificate of completion as the case may be, indicating defects (a) to be rectified by the contractor and/or (b) for which payment will be made at reduced rates. No change.


R K SINGH
EE(Manual)

Page 1 of 3

Correction – Nil

Insertion – Nil

Deletion – Nil

A.E (P)

E.E.

Clause 9 Payment of Final Bill	Clause 9 Payment of Final Bill
The final bill shall be submitted by the contractor in the same manner as specified in interim bills within three months of physical completion of the work or within one month of the date of the final certificate of completion furnished by the Engineer-in-Charge whichever is earlier. No further claims shall be made by the contractor after submission of the final bill and these shall be deemed to have been waived and extinguished. Payments of those items of the bill in respect of which there is no dispute and of items in dispute, for quantities and rates as approved by Engineer-in-Charge, will, as far as possible be made within the period of three months the period being reckoned from the date of receipt of the bill by the Engineer-in-Charge or his authorized Asstt. Engineer, complete with account of materials issued by the Department and dismantled materials.	i. The final bill shall be submitted by the contractor to the Engineer-in-Charge in the same manner as specified in interim bills within three months of physical completion of the work or within one month of the date of the final completion certificate furnished by the Engineer-in-Charge whichever is earlier. At the time of submission of the final bill, receipt will be given by the O/o Engineer-in-Charge. ii. In case of correction / rejection / short documents, it will be mandatory for Engineer-in-Charge to give recorded reasons for correction / rejection / submission of additional documents within fifteen days after submission of final measurement and/or final bill by the contractor. iii. Final bill will be accepted with all pre-requisite documents such as sanctioned copies of extra items and deviation in quantities, escalation statements, recovery statement, theoretical statement, completion certificate, final extension of time case, mandatory tests statement, dismantled materials account and other documents as mentioned in clause-7 A etc. iv. An undertaking along the final bill will be submitted by the contractor that "I / we hereby under take that all the measurements/claims payable under this contract have been included in the final bill and will not submit any other bill/claims in future under this agreement thereafter". v. No further claims shall be entertained from the contractor after submission of the final bill and these shall be deemed to have been waived and extinguished. Payments of those items of the bill in respect of which there is no dispute and of items in dispute, for quantities and rates as approved by Engineer in

[Signature]
10.2.25
R K SINGH
EE (Manual)

If the final bill is submitted by the contractor within the period specified above and delay in payment of final bills is made by the department after prescribed time limit, a simple interest @ 5 % (five percent) per annum shall be paid to the contractor from the date of expiry of prescribed time limit, provided the final bill submitted by the contractor is found to be in order.	charge, will, be made within the period of three months. The period of three months will be reckoned from the date of receipt of the bill in complete shape after necessary corrections / additional documents, by the Engineer-in-Charge. vi. In case of foreclosure / determination of contract, if the contractor fails to submit the EOT case, final measurement /bills within 30 days of foreclosure/ determination, the final bill will be prepared and decided by the department. The final bill shall only be paid after withholding amount equivalent to maximum compensation to be levied on the contractor. vii. If the final bill, in complete shape, is submitted by the contractor within the period specified above and delay in payment of final bills is made by the department after prescribed time limit, a simple interest @5% (five percent) per annum may be paid to the contractor from the date of expiry of prescribed time limit, provided the final bill submitted by the contractor contains all the documents as mentioned in para – (iii) & (iv) above.
Schedule F Clause 8 No Provision	Schedule F Clause 8 Competent Authorities to inspect and issue completion certificate (To be filled by NIT approving authority).

This issues with the approval of DG, CPWD.

(दिनेश कुमार उज्जैनिया)
अधीक्षण अभियंता (सी.एंड एम.)

Issued from file No. CSQ/CM/17(1)/2025/Maintenance
e-file 9190123 (DFA/9315616)

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

R K SINGH
R K SINGH
EE(Manual)

Page 3 of 3

मिसिल सं० 7/1/2023/W-II/DG/Vol-III/15
 भारत सरकार
 महानिदेशालय
 केंद्रीय लोक निर्माण विभाग
 ई-मेल: eepwacpwd@gmail.com फ़ोन: 23062362

निर्माण भवन, नई दिल्ली
 दिनांक: 18/फ़रवरी/2025

कार्यालय ज्ञापन

विषय: Advisory for reiterating the existing provisions of clause 29 of GCC for construction /Maintenance works and clause 28 of GCC for EPC Works.

There are some incidents of non-adherence to the clause – 29 of GCC for construction/Maintenance works and clause 28 of GCC for EPC Works respectively in case of recovery of sum money from contractor are observed. The extract of the clause is as under:—

“Any sum of money due and payable to the contractor under the contract may be withheld or retained by way of lien by the Engineer-in-charge against any claim of the Engineer-in-charge or Government in respect of payment of a sum of money arising out of or under any other contract made by the contractor with the Engineer- in-charge or the Government or with such other person or persons. It is an agreed term of the contract that the sum of money so withheld or retained under this clause by the Engineer-in-charge or the Government will be kept withheld or retained as such by the Engineer-in-charge or the Government or till his claim arising out of the same contract or any other contract is either mutually settled or determined by the arbitration clause or by the competent court, as the case may be and that the contractor shall have no claim for interest or damages whatsoever on this account or on any other ground to the contractor.”

In view of above, all the officers are advised to adhere to the provisions of the clause – 29 of GCC for construction/Maintenance works and clause 28 of GCC for EPC Works in case of recovery of a sum of money arising out of or under any other contract made by the contractor with the Engineer- in-charge or the Government or with such other person or persons.

This issue with the approval of DG, CPWD.


 कार्यपालक अभियंता (परिष्कार का प्रशासक)-II

To,

All concerned
 (Through CPWD website)

केन्द्रीय लोक निर्माण विभाग
कार्यालय ज्ञापन

No. DG/CON/ Maintenance 2023/15

ISSUED BY AUTHORITY OF DIRECTOR GENERAL, CPWD

NIRMAN BHAWAN, NEW DELHI

Dated: 03.03.2025

Subject: Modifications in Clause 14 of GCC 2023 for Maintenance Works.

The following amendments are made in the Clause 14 of GCC 2023 for Maintenance Works:

Existing provision	Modified provision
Clause 14 Carrying out part work at risk & cost of contractor If contractor: (iii) The Engineer- in-Charge without invoking action under clause 3 may, without prejudice to any other right or remedy against the contractor which have either accrued or accrue thereafter to Government, by a notice in writing to take the part work / part incomplete work of any item(s) out of his hands and shall have powers to : (a) Take possession of the site and any materials, constructional plant, implements, stores, etc., thereon; and/or (b) Carry out the part work / part incomplete work of any item(s) by any means at the risk and cost of the contractor.	Clause 14 Carrying out part work at risk & cost of contractor If contractor: (iii) The Engineer- in-Charge without invoking action under clause 3 may, without prejudice to any other right or remedy against the contractor which have either accrued or accrue thereafter to Government, by a notice in writing to take the part work / part incomplete work of any item(s) out of his hands and shall have powers to : (a) Take possession of the site and any materials, constructional plant, implements, stores, etc., thereon; and/or (b) Carry out the part work / part incomplete work of any item(s) by any means at the risk and cost of the contractor. The contractor, from whom a part work / part incomplete work of any item(s), has been taken out of his hands, shall not be allowed to participate in the tendering/quotation process of part work / part incomplete work of any item(s).

This issues with the approval of DG, CPWD.

(आर. के. सिंह)

कार्यपालक अभियन्ता (एम.)

Issued from file No. CSQ/CM/17(1)/2023/ Maintenance e-file-9184028 (DFA/9319526)

केलोनवि तथा लोनवि दिल्ली के सभी अधिकारियों को आवश्यक सूचना एवं कार्यवाही हेतु।

(केलोनवि वेबसाईट के माध्यम से)

R K SINGH
EE(Manual)

केन्द्रीय लोक निर्माण विभाग
कार्यालय ज्ञापन

No. DG/CON/ Maintenance 2023/16

ISSUED BY AUTHORITY OF DIRECTOR GENERAL, CPWD

NIRMAN BHAWAN, NEW DELHI

Dated: 16.06.2025

Subject: Modifications in Clause 25.2(b) and 25.6 of GCC 2023 for Maintenance Works.

The following amendments are made in the Clause 25.2(b) and 25.6 of GCC 2023 for Maintenance Works:

Existing provision	Modified provision
Clause 25.2 (b) Qualification of Arbitrators: It is a term of this contract that each member of the Arbitral Tribunal shall be Graduate Engineer with experience in execution of public works engineering contracts, and he should have worked earlier at a level not lower than the Chief Engineer (equivalent to level of Joint Secretary to the Government of India). The aforesaid educational qualification and work experience shall be mandatory for appointment as Arbitrator. The age of Arbitrator at the time of appointment shall not exceed 75 years. An Arbitrator may be appointed notwithstanding the total number of active arbitration cases with him. Clause 25.6 Fee payable to Arbitrator(s): The fee payable to the arbitral tribunal shall be as per CPWD OM No.2/2006/SE(TLC)/CSQ/137 dated 19.11.2019 (or latest amendment), and shall be shared equally by both the parties.	Clause 25.2 (b) Qualification of Arbitrators: It is a term of this contract that each member of the Arbitral Tribunal shall be Graduate Engineer (in Civil or Electrical or Mechanical Engineering) with experience in execution of public works engineering contracts and he should have worked earlier at a level not lower than the SAG (Level 14 of 7th CPC) of the Government of India). The aforesaid educational qualification and work experience shall be mandatory for appointment as Arbitrator. The age of Arbitrator at the time of appointment shall not exceed 70 years. Clause 25.6 Fee payable to Arbitrator(s) for arbitration cases, shall be as per the fee given in the fourth schedule of the Arbitration & Conciliation Act, 1996 (or latest amendment), and shall be shared equally by both the parties.

This issues with the approval of DG, CPWD.

चन्द्र पाल
(चन्द्र पाल) 16/06/2025

अधीक्षण अभियंता (सी. एंड एम.)

Issued from file No. CSQ/CM/17(1)/2025 / Maintenance e-file 9135700 (TLC File)

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

R K SINGH
16.06.25
R K SINGH
EE(Manual)

केन्द्रीय लोक निर्माण विभाग
कार्यालय ज्ञापन

No. DG/CON/Maintenance-2023/17

ISSUED BY THE AUTHORITY OF DIRECTOR GENERAL, CPWD

Nirman Bhawan, New Delhi

Dated: 06.11.2025

Subject: Modification of Clause 19L of GCC-2023 for Maintenance Works.

The clause 19L in GCC-2023 for Maintenance Works is being modified:

Existing Provision	Modified Provision
Clause 19 L Contribution of EPF and ESI The ESI and EPF contributions on the part of employer in respect of this contract shall be paid by the contractor. These contributions on the part of the employer paid by the contractor shall be reimbursed by the Engineer-in-charge to the contractor on actual basis. The verification of deployment labour will be done through biometric attendance system or any other suitable method by the Engineer in Charge. The applicable and eligible amount of EPF & ESI shall be reimbursed preferably within 7 days but not later than 30 days of submission of documentary proof of payment provided same are in order	Clause 19 L Contribution of EPF and ESI It will be mandatory for all the agencies to register with ESI and EPFO departments within 30 days of the award of the work unless exempted by the provisions of ESI and / or EPFO and as amended time to time. The ESI and EPF contributions on the part of employer in respect of this contract shall be paid by the contractor. These contributions on the part of the employer paid by the contractor shall be reimbursed by the Engineer-in-charge to the contractor on actual basis. The verification of deployed labour will be done through biometric attendance system or any other suitable method by the Engineer in Charge. The agency shall submit an affidavit on a stamp paper of Rs. 100 that the employees were engaged fully and exclusively on the work for which the claim is being made. The applicable and eligible amount of EPF & ESI shall be reimbursed preferably within 7 days but not later than 30 days of submission of documentary proof of payment provided same are in order

This is issued with the approval of DG CPWD.

अधीक्षण अभियंता (सी.एंड.एम.)
(चन्द्र पाल, सी.एंड.एम.)
Chander Pal, SE (C&M)
06.11.2025

Issued from file No. CSQ/CM/17(1)/2024/ Maintenance e-file 9195855 (DFA/9350595)
के.लो.नि.वि. तथा लो.नि.वि. दिल्ली के सभी अधिकारियों को आवश्यक सूचना एवं कार्यवाही हेतु (के.लो.नि.वि.वेबसाईट के माध्यम से)।


D.P. Jindal
EE (Contract)

**केन्द्रीय लोक निर्माण विभाग
कार्यालय ज्ञापन**

No. DG/CON/ Maintenance 2023/18

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 Maintenance Works

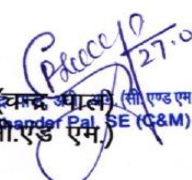
The following modifications are made in the General Rules & Directions, Clause 1 and Schedule E of GCC 2023 Maintenance Works.

Existing provision	Modified provision
General Rules & Directions 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.	General Rules & Directions 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.
Clause 1 Performance Guarantee (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.	Clause 1 Performance Guarantee (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.
Sl. No. (ii) to (v)	No change
SCHEDULE 'E' Reference to General Conditions of contract Sl. No. (i)	SCHEDULE 'E' Reference to General Conditions of contract No change


 D.P. Jindal
 EE (Contract)

(ii) Performance Guarantee : 5% of tendered value.	(ii) Performance Guarantee : (a) 5% of tendered value or Estimated Cost Put to Tender (ECPT) (whichever is higher). (b) Where the tendered amount is less than eighty percent (80%) of the 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.
Sl. No. (iii)	No change

This issues with the approval of DG, CPWD.


 27.02.2026
 चन्द्रपाल, अधीक्षक (सी.एड.एम.)
 Chandar Pal, SE (C&M)
 अधीक्षण अभियंता (सी.एड.एम.)

Issued from file No. CSQ/CM/17(1)/2026/ Maintenance e-file 9212995 (DFA/ 9365660)

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


 D.P. Jindal
 EE (Contract)

केन्द्रीय लोक निर्माण विभाग
कार्यालय ज्ञापन

No. DG/CON/Maintenance 2023/19

ISSUED BY THE AUTHORITY OF DIRECTOR GENERAL, CPWD

Vidyut Bhawan, New Delhi

Dated: 25.03.2026

Subject: Modifications in Clause 6 and Schedule 'F' of GCC 2023 Maintenance Works

The following modifications are made in the Clause 6 and Schedule 'F' of GCC 2023 for maintenance works, for annual repair and maintenance works, special repair works, comprehensive maintenance works and upgradation works amounting upto Rs. 10 crores in Delhi only.

Existing provision	Modified provision
Clause 6: Computerized Measurement Book (CMB)/ Electronic Measurement Book (EMB) through CPWD ERP portal Engineer-in-Charge with the contract. All measurements and levels of work done during the period covering latter half of the preceding calendar month and first half of the calendar month shall be recorded by the contractor and compiled in the shape of the Computerized Measurement Book (CMB) / Electronic Measurement Book (EMB) through CPWD ERP portal / Computerized Level Book (CLB) respectively having pages of A-4 size as per the format of the department so that a complete record is obtained of all the items of works executed under the contract during the said period. The proforma Computerised Measurement and level books (along with soft copy) shall be submitted in triplicate through letter of transmittal to the Engineer-in-charge giving details of number of CMBs / CLBs and their number of pages by 20th day of every calendar month. In case of EMB, calendar month.	Clause 6: Computerized Measurement Book (CMB)/ Electronic Measurement Book (EMB) through CPWD ERP portal Engineer-in-Charge with the contract. All measurements and levels of work done during the period covering latter half of the preceding calendar month and first half of the calendar month shall be recorded either by contractor or jointly by department and contractor as specified in Schedule F and compiled in the shape of the Computerized Measurement Book (CMB) / Electronic Measurement Book (EMB) through CPWD ERP portal / Computerized Level Book (CLB) respectively having pages of A-4 size as per the format of the department so that a complete record is obtained of all the items of works executed under the contract during the said period. The proforma Computerised Measurement and level books (along with soft copy) shall be submitted in triplicate through letter of transmittal to the Engineer-in-charge giving details of number of CMBs / CLBs and their number of pages by 20th day of every calendar month.. No change.

Page 1 of 3

17/3/26
D.P. Jindal
EE (Contract)

All such monthly his/her authorized representative.	No change.
In case of CMB/CLB, corrected and authorized proforma CMB / CLB.	No change.
In case of EMB, record of measurements available on ERP Portal.	No change.
Once the Engineer-in-charge number of the CMB / CLB / EMB to the Contractor.	No change.
If the contractor fails Clause 25 of this GCC.	No change.
Resources deployed shall be sent to the contractor for his record.	No change.
The contractor the Engineer-in-Charge or his/her representative.	No change.
Except where any is available then a mutually agreed method shall be followed.	No change.
The contractor shall the same was executed.	No change.
Engineer-in-Charge or to such checking of measurements or levels.	No change.
It is also a term of defects liability period.	No change.
PROFORMA OF SCHEDULES (Separate Performa for Civil, Elect.& Hort. Works in case of Composite Tenders)	PROFORMA OF SCHEDULES (Separate Performa for Civil, Elect.& Hort. Works in case of Composite Tenders)
Clause 6 : Computerised Measure Book (CMB) / Electronic Measurement Book (EMB)	Clause6: Computerised Measurement Book (CMB) / Electronic Measurement Book (EMB)

1.7/25/3/21
D.P. Jindal
EE (Contract)

Page 2 of 3

Mode of measurement : CMB / EMB Note:- One option to be kept by NIT approving authority	(a) Mode of measurement: CMB/ EMB (b) Measurement to be recorded either by contractor or jointly by department and contractor. Note:-Only one option to be kept by NIT approving authority in (a) and (b)
--	--

This issues with the approval of DG, CPWD.

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

Issued from file No. CSQ/CM/17(1)/2023/Maintenance
e-file 9195855 (DFA/ 9355745)

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

1-251316

D.P. Jindal
EE (Contract)

केन्द्रीय लोक निर्माण विभाग
कार्यालय ज्ञापन

No. DG/CON/Misc./47

ISSUED BY AUTHORITY OF DIRECTOR GENERAL, CPWD

VIDYUT BHAWAN, NEW DELHI

Dated: 20.04.2026

Sub: Suggestions on 19L in GCCs for registration of all principal employers on EPFO portal.

For timely and ease of reimbursement of EPFO contribution made by contractor to EPFO in respect of workers/ staff engaged by contractor for the works, it has been felt that a standard procedure be developed to track the contribution paid by contractors to the EPFO department. For tracking the contribution made by the contractor to EPFO, the Engineer-in-Charge of work to get himself registered on EPFO website for which link is available on EPFO portal.

All the Engineer-in-charge of CPWD/PWD are requested to explore the feasibility of registering themselves with EPFO for tracking the details of workers and staffs registered with EPFO, contribution made for them by contractor with EPFO and send comments/suggestions on the proposed changes in Clause 19L in GCCs by 11.05.2026 on email id secm@nic.in in pdf and soft copy.

This issues with the approval of competent authority.

(चन्द्र पाल)
अधीक्षण अभियन्ता (सी0 एंड एम0)

**Issued from file No. CSQ/CM/17(1)/2026/GCC
e-file no. 9210866 (DFA/ 9360958)**

To,
All the officers of CPWD and PWD Delhi for information and necessary action please. (Through CPWD website)

केन्द्रीय लोक निर्माण विभाग
कार्यालय ज्ञापन

No. DG/CON/Maintenance 2023/20

ISSUED BY THE AUTHORITY OF DIRECTOR GENERAL, CPWD

Vidyut Bhawan, New Delhi

Dated: 18.08.2026

Sub: Modification in Clause 19K: Deployment of Skilled/Semi-Skilled Tradesmen for GCC 2023 Maintenance Works.

Following modification is made in Clause 19K: Deployment of Skilled/Semi-Skilled Tradesmen for GCC 2023 Maintenance Works.

Existing Provision	Modified Provision
Clause 19 K Employment of skilled/ semi-skilled workers The contractor shall, at all stages of work, deploy skilled/semi-skilled tradesmen who are qualified and possess certificate in particular trade from CPWD Training Institute/Industrial Training Institute/ National Institute of construction Management and Research (NICMAR)/ National Academy of Construction, CIDC or any similar reputed and recognized Institute managed/ certified by State/Central Government. The number of such qualified tradesmen shall not be less than 20% of total skilled/semi-skilled workers required in each trade at any stage of work. The contractor shall submit number of man days required in respect of each trade, its scheduling and the list of qualified tradesmen along with requisite certificate from recognized Institute to Engineer in charge for approval. Notwithstanding such approval, if the tradesmen are found to have inadequate skill to execute the work of respective trade, the contractor shall substitute such tradesmen within two days of written notice from Engineer-in- Charge. Failure on the part of contractor to obtain approval of Engineer-in Charge or failure	Clause 19 K Deployment of skilled/semi-skilled workers The Contractor shall, at all stages of work, deploy skilled and semi-skilled tradesmen who are duly qualified and hold certificates in their respective trades, from the CPWD Training Institute, or from awarding bodies recognized under the aegis of National Council for Vocational Education and Training (NCVET), Ministry of Skill Development and Entrepreneurship (MSDE), or any institute recognized/certified by the State or Central Government for this purpose. The number of such qualified tradesmen shall not be less than 20% of the total skilled/semi-skilled workers required in each trade at any stage of work. The Contractor shall submit, for approval of the Engineer-in-Charge, the number of man-days required for each trade, the proposed scheduling, and the list of qualified tradesmen along with requisite certificates issued by any of the above recognized institutes. To make up any shortfall below the prescribed minimum limit of 20% of skilled/semi-skilled tradesman, the Contractor shall arrange skilling of

Page 1 of 2

L. S. Meena
AE (C-IT) 2020

EE (Contract)

Correction – Nil

Insertion – Nil

Deletion – Nil

A.E (P)

E.E.

to deploy qualified tradesmen will attract a compensation to be paid by contractor at the rate specified in schedule 'F' per such tradesman per day. Decision of Engineer in Charge as to whether particular tradesman possesses requisite skill and amount of compensation in case of default shall be final and binding. Provided always, that the provisions of this clause, shall not be applicable for works with estimated cost put to tender being less than Rs. 5 crores. For work costing more than Rs. 10 Crores, and upto Rs. 50 Crores, the contractor shall arrange on site training as per National Skill Development Corporation (NSDC) norms for at least 20% of the unskilled workers engaged in the project in co-ordination with the CPWD Regional Training Institute & National Skill Development Corporation (NSDC) for certification at the level of skilled/semi-skilled tradesmen. For work costing more than Rs. 50 Crores, the contractor shall arrange on site training as per National Skill Development Corporation (NSDC) norms for at least 30% of the unskilled worker engaged in the project in coordination with the CPWD Regional Training Institute & National Skill Development Corporation (NSDC) for certification at the level of skilled/semi-skilled tradesmen. The cost of such training as stated above shall be born by the Government. The necessary space and workers shall be provided by the contractor and no claim what so ever shall be entertained.

workers at site under the Recognition of Prior Learning (RPL) program, conducted by awarding bodies recognized under NCVET or any institute recognized/certified by the State or Central Government for this purpose. The cost of such recognition/training, including the infrastructure required at site, shall be borne by the Contractor. The tradesmen undergoing training shall be paid their wages by the contractor for period during the training, and no reimbursement in this respect shall be made by the Government.

This provision shall not be applicable for works with an estimated cost put to tender of less than ₹5 Crore in case of construction works and less than ₹50 Lakh in case of maintenance works.

In the event, the contractor fails to provide the mandatory training to the tradesmen, a penalty of ₹1,000 per day per tradesman falling short of the required 20% target shall be imposed on the Contractor. Decision of Engineer in Charge shall be final and binding in this regard.

This issues with the approval of DG CPWD.

(चन्द्र प्रताप)
अधीक्षण अभियंता (सी.एंड.एम.)
18.08.26

Issued from file No. CSQ/CM/17(1)/2026/ Maintenance e-file 9196031 (DFA/ 9388060)

के.लो.नि.वि. तथा लो.नि.वि. दिल्ली के सभी अधिकारियों को आवश्यक सूचना एवं कार्यवाही हेतु (के.लो.नि.वि.वेबसाइट के माध्यम से)।

Page 2 of 2

L. S. Mehta
AE (C-II)
18/8/2026
EE (Contract)

SCHEDULE OF QUANTITY

Name of Work: A/R & M/O to Audit General Office at Shakti Nagar, Jammu. SH: Supply of material to attend day to day complaints.

S. No.	DESCRIPTION OF ITEM	QTY	UNIT	Rate	AMOUNT
1	15 mm PTMT bib cock with flange (fancy)	150.00	each	128.95	₹ 19,342.00
2	15 mm PTMT bib cock long body with flange	150.00	each	143.87	₹ 21,581.00
3	15 mm dia PTMT stop cock (male thread)	100.00	each	88.23	₹ 8,823.00
4	PTMT pillar cock	50.00	each	169.67	₹ 8,483.00
5	PTMT grating 100 mm dia	50.00	each	23.08	₹ 1,154.00
6	125 mm grating with waste hole	50.00	each	36.66	₹ 1,833.00
7	PTMT - Waste Coupling 31/32 mm	50.00	each	47.51	₹ 2,375.00
8	PTMT Ball Cock 15mm complete with Epoxy Coated Aluminium Rod & H.D. Ball	200.00	each	107.24	₹ 21,447.00
9	PTMT Ball Cock 20mm complete with Epoxy Coated Aluminium Rod & H.D. Ball	20.00	each	162.88	₹ 3,258.00
10	PTMT Ball Cock 25mm complete with Epoxy Coated Aluminium Rod & H.D. Ball	20.00	each	400.40	₹ 8,008.00
11	PTMT Angle Stop cock with Flange 15 mm	50.00	each	124.87	₹ 6,243.00
12	PTMT Swiveling shower 15 mm	50.00	each	95.02	₹ 4,751.00
13	PTMT Liquid Soap Container of 400 ml capacity	50.00	each	139.81	₹ 6,990.00
14	PTMT - Urinal Spreader 15 mm	20.00	each	81.44	₹ 1,629.00
15	P.T.M.T. extension nipple 15 mm dia	50.00	each	40.72	₹ 2,036.00
16	15 mm nominal bore and 30 cm length PVC connection pipe with P.T.M.T. Nuts	100.00	each	54.29	₹ 5,429.00
17	15 mm nominal bore and 45 cm length PVC connection pipe with P.T.M.T. Nuts	100.00	each	74.65	₹ 7,465.00
18	Flushing Cistern P.V.C. 10 litre capacity (low level) (White) (with fittings, accessories and flush pipe)	10.00	each	842.88	₹ 8,429.00
19	M.S. Wire nails	5.00	kg	78.72	₹ 394.00

Correction –Nil

Insertion –Nil

Deletion –Nil

A.E (P)

E.E.

S. No.	DESCRIPTION OF ITEM	QTY	UNIT	Rate	AMOUNT
20	Rectangular shape 600x450 mm precast R.C.C. manhole cover with frame - L.D.- 2.5	20.00	each	1008.48	₹ 20,170.00
21	G.I. Union 15 mm nominal bore	50.00	each	54.29	₹ 2,715.00
22	G.I. Union 20 mm nominal bore	20.00	each	81.44	₹ 1,629.00
23	G.I. Union 25 mm nominal bore	20.00	each	169.67	₹ 3,393.00
24	G.I. Union 32 mm nominal bore	20.00	each	217.17	₹ 4,343.00
25	G.I. Union 40 mm nominal bore	10.00	each	352.90	₹ 3,529.00
26	G.I. Union 50 mm nominal bore	10.00	each	447.91	₹ 4,479.00
27	Semi Rigid PVC waste pipe for sink and wash basin 32 mm dia with length not less than 700 mm i/c PVC waste fittings	200.00	each	36.66	₹ 7,332.00
28	Semi Rigid PVC waste pipe for sink and wash basin 40 mm dia with length not less than 700 mm i/c PVC waste fittings	50.00	each	48.87	₹ 2,443.00
29	C.P. Brass bibcock 15 mm	70.00	each	447.91	₹ 31,354.00
30	C.P. Brass long body bibcock 15 mm	70.00	each	719.37	₹ 50,356.00
31	C.P. Brass stop cock (concealed) 15 mm	10.00	each	604.00	₹ 6,040.00
32	C.P. Brass angle valve 15 mm	60.00	each	513.05	₹ 30,783.00
33	15 mm C.P. brass tap	50.00	each	403.12	₹ 20,156.00
34	C.P. brass waste 32 mm	50.00	each	127.59	₹ 6,379.00
35	C.P. brass waste 40 mm	50.00	each	149.31	₹ 7,465.00
36	Aluminium washer 2 mm thick 15 mm dia	5.00	100 Nos	14.94	₹ 75.00
37	White plastic seat (solid) with lid C.P. brass hinges and rubber buffers	15.00	each	612.15	₹ 9,182.00
38	Vitreous china flat back wash basin 630x450 mm	20.00	each	1083.12	₹ 21,662.00
39	Aluminium hanging floor door stopper with twin rubber & stopper	50.00	each	59.72	₹ 2,986.00
40	Hydraulic door closer tubular type Aluminium section body	50.00	each	814.38	₹ 40,719.00
41	Soft closing stainless steel hinges	1.00	10 Sets	2375.27	₹ 2,375.00
42	SS sliding door bolt of size 200x16mm	50.00	each	169.67	₹ 8,483.00
43	SS tower bolt (plate type) size 200x10mm	100.00	each	126.24	₹ 12,624.00

Correction –Nil

Insertion –Nil

Deletion –Nil

A.E (P)

E.E.

S. No.	DESCRIPTION OF ITEM	QTY	UNIT	Rate	AMOUNT
44	SS handle 125mm	100.00	each	95.02	₹ 9,502.00
45	Stainless steel screws 30 mm x4 mm	5.00	100 Nos	57.01	₹ 285.00
46	Stainless steel screws 25 mm x4 mm	5.00	100 Nos	62.43	₹ 312.00
47	Chromium plated Brass screws 50 mm	1.00	100 Nos	373.26	₹ 373.00
48	Chromium plated Brass screws 40 mm	1.00	100 Nos	344.75	₹ 345.00
49	Chromium plated Brass screws 30 mm	2.00	100 Nos	309.47	₹ 619.00
50	Chromium plated Brass screws 25 mm	1.00	100 Nos	240.25	₹ 240.00
51	Chromium plated Brass screws 20 mm	2.00	100 Nos	206.31	₹ 413.00
52	Stainless steel screws 50 mm	5.00	100 Nos	434.33	₹ 2,172.00
53	Stainless steel screws 40 mm	5.00	100 Nos	366.48	₹ 1,832.00
54	Stainless steel screws 30 mm	5.00	100 Nos	346.11	₹ 1,731.00
55	Stainless steel screws 20 mm	5.00	100 Nos	237.53	₹ 1,188.00
56	H.P. or L.P. ball valve with polythene floats: 20 mm dia	30.00	each	358.32	₹ 10,750.00
57	U-PVC pipes (working pressure 4 kg / cm ²) Single socketed pipe 110 mm dia	150.00	metre	192.74	₹ 28,911.00
58	uPVC single equal Tee (with door) 110x110x110 mm	15.00	each	133.01	₹ 1,995.00
59	UPVC bend 87.5° 110 mm bend	40.00	each	85.51	₹ 3,421.00
60	UPVC pipe clip 110 mm	150.00	each	21.72	₹ 3,258.00
61	Chlorinated Polyvinyl - chloride (CPVC) pipe 15 mm nominal dia	30.00	metre	58.37	₹ 1,751.00
62	Chlorinated Polyvinyl - chloride (CPVC) pipe 20 mm nominal dia	100.00	metre	80.09	₹ 8,009.00
63	Chlorinated Polyvinyl - chloride (CPVC) pipe 25 mm nominal dia	30.00	metre	128.95	₹ 3,868.00
	Total (A)				₹ 5,21,317.00

S. No.	DESCRIPTION OF ITEM	QTY	UNIT	Rate	AMOUNT
64	GI Nipple 15mm X5 cm	100.00	each	27.15	₹ 2,715.00
65	GI Nipple 15mm X10 cm	100.00	each	54.29	₹ 5,429.00
66	GI Nipple 15mm X 15 cm	100.00	each	81.44	₹ 8,144.00
67	GI Nipple 20mm x 5 cm	50.00	each	32.57	₹ 1,629.00
68	GI Nipple 20mm x 10 cm	50.00	each	65.15	₹ 3,258.00
69	GI Nipple 20mm x 15 cm	20.00	each	97.72	₹ 1,954.00
70	GI Elbow 15mm	50.00	each	47.51	₹ 2,375.00
71	GI Socket 15mm	50.00	each	40.72	₹ 2,036.00
72	GI Socket Reducer 15mm X 20mm	50.00	each	74.65	₹ 3,733.00
73	GI Socket Reducer 15mm 25mm	20.00	each	108.58	₹ 2,172.00
74	M-SEAL (Packets 100 gm)	20.00	packet	40.72	₹ 814.00
75	Tank Nipple 15mm GI	50.00	each	149.31	₹ 7,465.00
76	Water Tank cover with frame for 500 litre and 1000 litre capacity	80.00	each	407.19	₹ 32,575.00
77	Phase for bib cock	200.00	each	162.88	₹ 32,575.00
	TOTAL (B)				₹ 1,06,874.00
	TOTAL (A+B)				₹ 6,28,191.00

Assistant Engineer(P),
Jammu Division,
CPWD, Satwari, Jammu.

Executive Engineer,
Jammu Division,
CPWD, Satwari, Jammu.