



भारतसरकार
GOVERNMENT OF INDIA
केंद्रीयलोकनिर्माणविभाग
CENTRAL PUBLIC WORKS DEPARTMENT

Name of work : Upgradation of 1No. HIG office, 2Nos. HIG Quarters and 2Nos. MIG Quarters at OCR Complex, SIB, Salem.

NOTICE INVITING TENDER

O/०. EXECUTIVE ENGINEER, CCD, CPWD,
COIMBATORE - 641002

NOTICE INVITING TENDER

NIT No : 33/EE/CCD/2026-27

Name of work: Upgradation of 1No. HIG office, 2Nos. HIG Quarters and 2Nos. MIG Quarters at OCR Complex, SIB, Salem.

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Certified that this NIT contains pages from 01 to 144 (One Hundered and forty four only including the cover page)

Assistant Engineer(P)

Executive Engineer

PART - A

**CENTRAL PUBLIC WORKS DEPARTMENT
NOTICE INVITING e –TENDER**

The Executive Engineer, Coimbatore Central Division, CPWD, Coimbatore-641002 (Telephone No.0422-2547980, Fax No.0422-2547981) for and on behalf of President of India invites online Percentage rate bids from eligible registered contractors of CPWD for the following work on single bid system.

NIT No. 33/EE/CCD/2026-27

Name of work: Upgradation of 1No. HIG office, 2Nos. HIG Quarters and 2Nos. MIG Quarters at OCR Complex, SIB, Salem.

Estimated cost	Rs.43,64,331/- (Civil Rs.41,10,987/- + Electrical Rs.2,53,344/-)
Earnest Money	Rs.87,287/- (To be refunded after receipt of performance guarantee)
Performance Guarantee (PG)	a) 5% of Estimated cost put to tender (ECPT) or tendered/Accepted Cost 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.
Security Deposit	2.5% of Tendered Amount
Period of Completion	180 days
Last Time & Date of submission of Bids	Up to 03.00 PM on <u>06/10/2026</u>
Time & Date of opening of bid	03.30 PM on <u>06/10/2026</u>

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

**Executive Engineer,
Coimbatore Central Division,
CPWD, Coimbatore-641002.**

Name of work: Upgradation of 1No. HIG office, 2Nos. HIG Quarters and 2Nos. MIG Quarters at OCR Complex, SIB, Salem.

Name of the Bidder : -----

Registration class / Department : -----

Validity of Registration : -----

Address of the Bidder : -----

Contact telephone no. : -----

Mobile No. : -----

**Executive Engineer
Coimbatore Central Division
CPWD, Coimbatore - 641 002.**

☐ -----

Signature of the Contractor : -----

Name of Contractor : -----

INFORMATION AND INSTRUCTIONS FOR BIDDERS

Name of work: Upgradation of 1No. HIG office, 2Nos. HIG Quarters and 2Nos. MIG Quarters at OCR Complex, SIB, Salem.

The contractor submitting the tender should read the schedule of quantities, additional conditions, additional specifications, particular specifications and other terms and special conditions given in the NIT and architectural drawings. The Bidder should also read the **General Conditions of Contract 2023 for Maintenance Works with amendments/modification up to the last date of submission of tender**, which is/will be 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 with **The Executive Engineer, Coimbatore Central Division, CPWD, Coimbatore-641002 (Telephone No.0422-2547980, Fax No.0422-2547981)**. The contractor should also visit the site of work and get acquainted himself with the site conditions before tendering. The following conditions, which already form part of the tender conditions, are specially brought to his notice for compliance while filling the tender. They are requested to comply following instructions.

1. **Tenders with any condition including that of conditional rebates shall be rejected. Rates of such tenders shall not be entered in the tender opening register at the time of opening of tender.**
2. **The successful Bidder shall be required to submit a Performance Guarantee of 5% (Five Percent) of the Estimated cost put to tender (ECPT) or tendered/Accepted Cost whichever is higher within 7 days of issue of letter of intent. This period can be further extended by Engineer-in-Charge upto a maximum period of 7 more days on the written request of the contractor subject to payment of late fee @ 0.1% per day of Performance Guarantee amount.**
3. **A bid will be treated as abnormally low if the quoted bid amount is lesser than 80% of the estimated cost put to tender.**
4. **Requirement of Additional Performance Guarantee (APG): In case of abnormally low bids as defined above, the bidder shall be required to submit Additional Performance Guarantee (APG) in addition to the Standard Performance Guarantee (PG). The amount of Additional Performance Guarantee (APG) shall be equivalent to the difference between the 80% amount of ECPT and quoted amount. (e.g. if ECPT is A and quoted amount is 0.7A then the amount of APG shall be 0.8A-0.7A).**
5. **The Additional Performance Guarantee (APG) shall be in the prescribed format of Performance Guarantee and has to be submitted within the time frame prescribed for submission Performance Guarantee.**
6. **GST as applicable and Labour Cess @ 1% shall be borne by the contractor himself. The contractor shall quote his rates considering all such taxes.**

7. It will be obligatory on the part of the 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.
8. The Bid document consisting of plans, specifications, schedule of quantities of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen in the office of **The Executive Engineer, Coimbatore Central Division, CPWD, Coimbatore-641002 (Telephone No.0422-2547980, Fax No.0422-2547981)** during the office hours on all days except on Second Saturday, Sundays & Public holidays and also can be downloaded free of cost from website <https://etender.cpwd.gov.in> or <https://eauction.cpwd.gov.in>
9. Applicants are advised to keep visiting the above mentioned web-sites from time to time (till the deadline for Tender submission) for any updates in respect of the tender documents, if any. Failure to do so shall not absolve the applicant of his liabilities to submit the applications complete in all respect including updates thereof, if any. An incomplete application may be liable for rejection.
10. Those contractors, who are not registered or have not updated their profile on the website mentioned above, are required to get registered / update their profile beforehand. The necessary training materials including the videos with step to step process are available on download section of <https://etender.cpwd.gov.in>.
11. The intending bidder must have valid Class-III digital signature certificate with encryption key (combo type) to perform any operations / transactions on the e-tendering portal / website and the bidder should download and install the eMsigner on their system as per instructions available on download section.
12. The intending Bidders has to fill all the details such as Banker's name, number, amount & date of Earnest Money in the form of Insurance Security Bonds, Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee (as prescribed) issued by a Commercial bank (Drawn in favour of the **Executive Engineer, Coimbatore Central Division, CPWD, Coimbatore-641002 (Telephone No.0422-2547980, Fax No.0422-2547981)**) shall be scanned and uploaded to the e-tendering website within the period of Bid submission. In case of submission of EMD in the form of FDR, it is in the tenderer's own interest to keep the FDR valid as long as it is required. A part of earnest money is acceptable in the form of bank guarantee also. In such case, 50% of earnest money or Rs 20 Lakhs, whichever is less, will have to be deposited in shape prescribed above, and balance in shape of Bank Guarantee issued by a Scheduled Bank valid for a period of 120 days or more which is to be scanned and uploaded by the intending Bidders.
13. EMD shall be made / issued only from the account of the bidder / tenderer the submitting bid/tender. EMD made/ issued from the account other than that of the bidder/ tenderer submitting the bid, shall not be accepted.
14. The original EMD receiving authority releases the EMD to unsuccessful bidders after the expiry of stipulated bid validity Period or immediately after acceptance of the successful bidder, whichever is earlier, after verification from the e-tendering portal website (<https://etender.cpwd.gov.in>> closed Tender>all) that the Particular contractor is not L-1 tenderer and work is awarded
15. **The original EMD should be deposited either in the office of Executive Engineer inviting bids or Division office of any Executive Engineer, CPWD within the period of bid submission. The EMD receiving Executive Engineer (including NIT issuing Executive**

Engineer) shall issue a receipt of deposition of earnest money deposit to the bidder in a prescribed format (as given in CPWD-6) uploaded by tender inviting Executive Engineer in the NIT. This receipt shall also be uploaded to the e-tendering website by the intending bidder up to the specified bid submission date and time.

16. Contractor shall not divert any advance payments or part thereof for any other purpose other than needed for completion of the contracted work. All advance payments received as per terms of the contract (i.e. mobilization, secured advance against materials brought at site, secured advance against plant & machinery and / or for work done during interim stages, etc.) are required to be re-invested in the contracted work to ensure advance availability of resources in terms of materials, labour, plant & machinery needed for required pace of progress for timely completion of work.
17. The intending Bidders must read the terms and conditions of **CPWD-6** carefully. He should only submit his Tender if he considers himself eligible and he is in possession of all the documents required.
18. Information and instructions for Bidders posted on website shall form part of Tender Document.
19. If any information furnished by the applicant is found incorrect at a later stage, he shall be liable to be debarred from tendering/taking up of works in CPWD. The department reserves the right to verify the particulars furnished by the applicant independently.
20. Contractor can upload documents in the form of **JPG format** and **PDF format**.
21. **Contractor must ensure to quote Percentage rate (s) of each sub works, in case, if a bidder does not quote any percentage above/below on the total amount of the tender or any section/subhead in percentage rate tender, the tender shall be treated as invalid and will not be considered as lowest bidder.**
22. Contractor must ensure to quote rate in the prescribed column(s) meant for quoting rate in figures appears in yellow colour and the moment rate is entered, it turns sky blue. In addition to this, while selecting any of the cells a warning appears that if any cell is left blank the same shall be treated as "0". Therefore, if any cell is left blank and no rate is quoted by the bidder, rate of such item shall be treated as "0" (ZERO). However, if a tendered 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 tendered.
23. After ascertaining the eligibility of participated bidders the Technical bids shall be opened first on due date and time as mentioned above in case of two bid system. In single bid system, the financial bids will be opened only after ascertaining the eligibility of participated contractors.
24. On opening date, the contractor can login and see the bid opening process. After opening of bids, he will receive the competitor bid sheets.

**Executive Engineer
Coimbatore Central Division,
CPWD, Coimbatore-641002**

A. List of Documents to be submitted by the Bidders in various forms to be scanned and uploaded in JPG format or PDF format within the period of Tender submission:**

1.	Insurance Security Bond, Account Payee Demand draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee (as prescribed) issued by commercial Bank drawn in favor of Executive Engineer, Coimbatore Central Division, CPWD, Coimbatore against EMD.
2.	Copy of receipt for deposition of Original EMD issued from the division office of any Executive Engineer, Central PWD, including NIT issuing along with Office Stamp-In the proforma prescribed in Annexure-1
3.	Enlistment Order of the Contractor in appropriate Category and valid on the date of opening of tender. Enlistment order issued by enlistment authority, with validity duly extended, in favor of the CPWD contractor shall only be considered.
4.	GST registration certificate of Tamil Nadu, if already obtained by the bidder. If the bidder has not obtained GST registration as applicable, then he shall scan & upload following undertaking along with bid documents. "If work is awarded to me, I / we shall obtain GST registration certificate as applicable, within one month from date of receipt of award letter or before release of any payment by CPWD, whichever is earlier, falling which I / we shall be responsible for any delay in payments which will be due towards me / us on account of work executed and/or any action taken by CPWD or GST department in this regard."
5.	GST filed return acknowledgement of JUNE 2026 or thereafter
6.	Certificate issued through LMS (Learning Management System) in ERP after completing compulsory ERP training through any of the CPWD RTI at Delhi, Mumbai, Chennai and Kolkata, NCA Ghaziabad as per circular.No.DG/Enlist.Rules-2023/10 Issued by the Authority of Director General, CPWD Dated :22.04.2024.
7.	Undertaking for site inspection Intending bidders must upload undertaking that they have inspected and examined the site and its surrounding before submitting their bids - as prescribed in Annexure-3
8.	Notarized Affidavit of 'Non-black listing' and "on-Suspension of Business" by CPWD/State/Central departments/PSU/Autonomous bodies - as prescribed in Annexure-4
9.	Undertaking on structural stability and soundness of already completed buildings and infrastructure projects - as prescribed in Annexure-6
10.	Any other Document as specified elsewhere in the press notice and NIT as mandatory.
(B)Document to be submitted after acceptance of Bid	

	Copy of applicable licenses/registration Certificates 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 Associated Contractors, if any engaged by the contractor for the said work and Programmed Chart (Time and Progress).
	AFFIDAVIT - Form 'C' (Undertaking to keep the validity of the bank guarantee intact) as prescribed in Annexure-7).

**** However, the successful L1 bidder has to submit the original hardcopy of the above uploaded documents to the Engineer-in-charge for the purpose of verification within a week time.**



**CPWD- 6 FOR e-TENDERING
GOVERNMENT OF INDIA
CENTRAL PUBLIC WORKS
DEPARTMENT**



The Executive Engineer, Coimbatore Central Division, CPWD, Coimbatore-641002 (Telephone No.0422-2547980, Fax No.0422-2547981) on behalf of the President of India invites online Percentage rate bids from eligible registered contractors of CPWD for the following work namely **Upgradation of 1No. HIG office, 2Nos. HIG Quarters and 2Nos. MIG Quarters at OCR Complex, SIB, Salem.** The Estimated cost of the work is **Rs.43,64,331/- (Civil Rs.41,10,987/- + Electrical Rs.2,53,344/-)** This estimate, however, is given merely as a rough guide.

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 bids is extended, the enlistment of contractor should be valid upto the extended date of submission of bids.
2. 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.
3. Agreement shall be drawn with the successful Bidders on prescribed **Form No. CPWD7** which is available as a Govt. of India Publication and also available on website <https://etender.cpwd.gov.in> or <https://eauction.cpwd.gov.in>. Bidder shall quote his percentage rate(s) as per various terms and conditions of the said form which will form part of the agreement.
4. The time allowed for carrying out the work will be **180 days** 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.
 - (i) *The site for the work is available and provided by the client.*
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 & conditions of the contract to be complied with and other necessary documents can be seen on website <https://etender.cpwd.gov.in> or <https://eauction.cpwd.gov.in> at free of cost. The Scope of the work can be discussed at the **office of the Executive Engineer, Coimbatore Central Division, CPWD, Coimbatore-641002 (Telephone No.0422-2547980, Fax No.0422-2547981)**
6. The standard publications like General Conditions of Contract, Applicable Delhi Schedule of Rates for Civil and Electrical, Applicable Specifications for Civil and Electrical works and Applicable Delhi Analysis of Rates for civil and electrical with amendments / correction slips up to the last date of submission of Bids can be seen free of cost from website **www.cpwd.gov.in**.
7. 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.
8. 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.

9. When bids are invited in three stage system and if it is desired to submit revised financial bid then it shall be mandatory to submit revised financial bid. If not submitted, then the bid submitted earlier shall become invalid.
10. Earnest Money of **Rs.87,287/-** can be paid in the form of **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** (drawn in favour of Executive Engineer, Coimbatore Central Division, CPWD, Coimbatore-641002 (Telephone No.0422-2547980, Fax No.0422-2547981) **Payable at Coimbatore shall be scanned and uploaded to the e-tendering website within the period of Bid submission.**
11. 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 in prescribed format which is to be scanned and uploaded by the intending Bidders.
12. The original EMD should be deposited either in the office of Executive Engineer inviting bids or division office of any Executive Engineer, CPWD within the period of bid submission. The EMD receiving Executive Engineer (including NIT issuing Executive Engineer) shall issue a receipt of deposition of earnest money deposit to the bidder in a prescribed format(given below) as uploaded by tender inviting Executive Engineer in the NIT. This receipt shall also be uploaded to the e-tendering website by the intending bidder up to the specified bid submission date and time.
13. **Copy of Enlistment Order 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, within a week physically in the office of tender opening authority.**
14. Online bid documents submitted by intending bidders shall be opened only of those bidders, whose submitted EMD deposited with any division office of CPWD and other documents scanned and uploaded are found in order.
15. 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 06/10/2026

The Bid submitted shall become invalid if:

- (i) The Bidder is found ineligible.
- (ii) The bidder does not deposit original EMD with division office of any Executive Engineer, CPWD.
- (iii) The bidder does not upload all the documents (including GST registration) as stipulated in the bid documents including the copy of receipt for deposition of original EMD.

- (iv) **If any discrepancy is noticed between the documents as uploaded at the time of submission of bid and the certified hard copies as submitted physically by the lowest**

tender in the office of tender opening authority within a week.

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/subhead in percentage rate tender, the tender shall be treated as invalid and will not be considered as lowest bidder.

16. The contractor whose bid is accepted will be required to furnish **Performance Guarantee of 5% (Five Percent)** of the **estimated cost put to tender (ECPT) or tendered/Accepted Cost whichever is higher** within the period specified in **Schedule F**. This guarantee shall be in the form of cash (in case guarantee amount is less than Rs.10,000/-) **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 **Commerical** Bank in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the period as indicated in **Schedule 'F'**, including the extended period if any, the department will be at liberty to suspend the agency/contractor for one year and shall not be eligible to bid for CPWD tenders from date of issue of suspension order. **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 Associate sub-contractors, if any engaged by contractor for the said work and Programme Chart (Time and Progress) within the period specified in Scheduled F.**
17. Intending Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent upon 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 tender 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.
18. The competent authority on behalf of the President of India does not bind itself to accept the lowest or any other tender and reserves to itself the authority to reject any or all the tenders received without the assignment of any reason. All tenders in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidder shall be summarily rejected.
19. Canvassing whether directly or indirectly, in connection with Bidder is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.
20. The competent authority on behalf of President of India reserves to himself the right of accepting the whole or any part of the Tender and the Bidders shall be bound to perform the same at the rate quoted.

21. The contractor shall not be permitted to bid for works in the CPWD Zone Circle (Division in case of contractors of Horticulture/Nursery category) responsible for award and execution of contracts, in which his near relative is posted a Divisional Accountant or as an officer in any capacity between the grades of Chief Engineer/Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any Gazetted officer in the Central Public Works Department or in the Ministry of Urban Development. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Department.
22. 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.
23. The Bid for the works shall remain open for acceptance for a period of **Thirty (30) Days from the date of opening Bids**. (i) If any tendered withdraws his tenders or makes any modifications in the terms & condition 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 any prejudice to any other right or remedy, be at liberty to forfeit 50% of the said Earnest Money absolutely irrespective of letter of acceptance of the work is issued or not. (ii) If any tendered withdraws his tenders or makes any modifications in the terms & condition of the tender which is not acceptable to the department after expiry of 7 days after last date of submission of bid, then the Government shall without any prejudice to any other right or remedy, be at liberty to forfeit 100% of the said Earnest Money absolutely irrespective of letter of acceptance of the work is issued or not. (iii) Further, in case of forfeiture of EMD in any one manner as above, the Bidders shall not be allowed to participate in the rebidding process of the same work. (As per OM Nod/MAN/393 Dated 03.01.2020).

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

- a. The Notice Inviting Bid, all the documents including Special Conditions, General Specifications/ Particular Specifications and drawings, if any, forming part of the Bid as uploaded at the time of invitation of Bid and the rates quoted online at the time of submission of Bid and acceptance thereof together with any correspondence leading thereto.
- b. Standard C.P.W.D. Form 7 (GCC for CPWD Maintenance Works 2023) with amendments up to the last date of submission of Tender.**
24. Percentage Rate quoted shall include all GST, royalties, terminal taxes, Octroi duties, Central or Provincial Excise Tax, Sales Tax and any other taxes leviable under the state or Central Government rules and transit insurance, cartage and stacking at required places etc., The CPWD will not entertain any claim whatsoever in this respect.

25. The department reserves the right to reject any prospective application without assigning any reason and to restrict the list of qualified contractors to any number deemed suitable by it, if too many bids are received satisfying the laid down criterion.
26. Criteria of eligibility for submission of bid documents - Joint ventures and Special Purpose Vehicles are not accepted.
27. The contractor shall download the Integrity Pact , which is a part of tender documents, affix his signature in the presence of a witness, and upload the same while submitting online bids for all works of estimated cost put to tender equal or more than the threshold value given in Schedule- F. In the event of his failure to sign and upload the Integrity Pact along with other bid documents, his bid documents, his bid shall be rejected.

Contractor

**Executive Engineer,
Coimbatore Central Division,
CPWD, Coimbatore 641002.**

ANNEXURE-IFORMAT FOR RECEIPT OF ORIGINAL EMD

<i>Receipt of deposition of Original EMD</i> <i>(Receipt No..... Dated.....)</i>	
(1)	Name of Work : Upgradation of 1No. HIG office, 2Nos. HIG Quarters and 2Nos. MIG Quarters at OCR Complex, SIB, Salem.
(2)	NIT No: 33/EE/CCD/2026-27
(3)	Estimated Cost: Rs.43,64,331/- (Civil Rs.41,10,987/- + Electrical Rs.2,53,344/-)
(4)	Amount of Earnest Money Deposit Rs.87,287/-
(5)	Last date of Submission of Bid: Upto 03.00 PM on 06/10/2026
(* To be filled by NIT approving authority/EE at the time of issue of NIT and uploaded along with NIT)	
(1)	Name of the Contractor#:
(2)	Form of EMD#:
(3)	Amount of Earnest Money Deposit#:
(4)	Date of Submission of EMD#:
Signature, Name and Designation of EMD receiving Officer /EE along with Office Stamp	
# To be filled by EMD receiving officer/EE	

ANNEXURE-2

**Undertaking regarding obtaining GST registration Certificate of
The State, in which work is to be taken up
(Affidavit to be furnished on a 'Non-Judicial' stamp paper worth Rs.100/-)**

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

NOTE: Affidavit to be furnished on a 'Non-Judicial' stamp paper worth Rs.100/-

Signature of Notary with seal

Signature of Bidder(s) or an authorized Officer of the firm with stamp

ANNEXURE-3DECLARATION ABOUT SITE INSPECTION

To,

**The Executive Engineer,
Coimbatore Central Division,
Central PWD, Coimbatore.**

Sub: NIT No: 33/EE/CCD/2026-27 for the work : Upgradation of 1No. HIG office, 2Nos. HIG Quarters and 2Nos. MIG Quarters at OCR Complex, SIB, Salem.

Dear Sir,

It is hereby declared that as per **CPWD-6 for e-Bidding**, I/ We the bidder inspected and examined the subject site and its surrounding and satisfy myself/ ourselves as to the nature of the ground and sub-soil(so far as is practicable),the forms and nature of the site/ ourselves before submitting the bid, the accommodation which may require and all necessary information as to risks, contingencies and other circumstances which may influence or affect our bid have been obtained. I/We the bidder shall have full knowledge of the site and no extra charge consequent upon any misunderstanding or otherwise shall be claimed in later date.

I /We bidder shall be responsible for arranging and maintaining at 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 me/us implies that I / We have read this notice and all other contract documents and has made myself /ourselves aware of the scope and specifications of the work to be done and local conditions and other factors having a bearing on the execution of the work.

Yours faithfully

(Duly authorized signatory of the bidder)

ANNEXURE-4**AFFIDAVIT**

**Notarized Affidavit of 'Non-black listing' and "Non Suspension of Business" by
CPWD/State/Central Departments/ PSUs/ Autonomous bodies**

NIT No: 33/EE/CCD/2026-27

Name of work: Upgradation of 1No. HIG office, 2Nos. HIG Quarters and 2Nos. MIG Quarters at OCR Complex, SIB, Salem.

I/we undertake and confirm that our firm/partnership firm has **neither been blacklisted/nor been suspended for doing business** by any state/Central Departments/PSUs/Autonomous bodies during the last 7 years of its operations. Further that, if such information comes to the notice of the department then I/we shall be debarred for bidding in CPWD in future forever. Also, if such information comes to the notice of department on any day before date of start of work, the Engineer-in-charge shall be free to cancel the agreement and to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee **(Scanned copy of this notarized affidavit to be uploaded at the time of submission of bid).**

NOTE: Affidavit to be furnished on a 'Non-Judicial' stamp paper worth Rs.100/-

**Signature of Bidder(s) or an authorized
Officer of the firm with stamp**

Signature of Notary with seal

ANNEXURE-6**FORM 'F'****Undertaking on structural stability and soundness of already completed buildings and infrastructure projects.***(Affidavit to be furnished on a 'Non-Judicial' stamp paper worth Rs.200/-)***NIT No: 33/EE/CCD/2026-27****Name of work: Upgradation of 1No. HIG office, 2Nos. HIG Quarters and 2Nos. MIG Quarters at OCR Complex, SIB, Salem.**

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

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

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

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

**Signature of Notary
with seal**

**Signature of Bidder(s) or
an authorized Officer of the
firm with stamp**

**NOTE: Affidavit to be furnished on a 'Non-Judicial' stamp paper of Rs.200/-)
(Scanned copy of the notarized affidavit to be uploaded at the time of submission of bid)**

ANNEXURE – 7**AFFIDAVIT****Undertake to keep the validity of the bank guarantee intact**

I/We have submitted a bank guarantee for the work _____ (Name of work) Agreement No. _____ Dated _____ from _____ (Name of the Bank with full address) to the Executive Engineer _____ with a view (Name of the Division) **to seek exemption from payment of performance guarantee in cash. This Bank guarantee expires on _____ I / We undertake to keep the validity of the bank guarantee intact by getting it extended from time to time at my / our own initiative upto a period of _____ months after the recorded date of completion of the work or as directed by the Engineer in charge.**

I / We also indemnify the Government against any losses arising out of non encasement of the bank guarantee if any.

(Deponent)
Signature of Contractor

Note: The affidavit is to be given by the Executants before a first class Magistrate

*Latest issued as per DG/CON/311 dtd 20.10.2020,
File No. CSQ/CM/17(1)/2020 e-file No. 9085478*

On Non judicial stamp paper of minimum Rs. 100

**(Guarantee offered by Bank to CPWD in connection with the execution of contracts)
Form of Bank Guarantee for Earnest Money Deposit /performance Guarantee/Security
Deposit/Mobilization Advance**

Whereas the Executive Engineer..... (name of division) CPWD on behalf of the President of India (hereinafter called "The Government") has invited bids under(NIT number).....dated.....for.....(name of work)..... The Government has further agreed to accept irrevocable Bank Guarantee for Rs. (Rupees.....only) valid upto(date)*..... as **Earnest Money Deposit** from (name and address of contractor)....., (hereinafter called "the contractor") for compliance of his obligations in accordance with the terms and conditions of the said NIT.

OR**

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

We, (indicate the name of the bank).....(herein after referred to as "the Bank"), hereby undertake to pay to the Government an amount not exceeding Rs..... (Rupees..... only) on demand by the Government within 10 days of the demand.

We,(indicate the name of the Bank)....., do hereby undertake to pay the amount due and payable under this guarantee without any demur, merely on a demand from the Government stating that the amount claimed is required to meet the recoveries due or likely to be due from the said contractor. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs..... (Rupeesonly)

We,(indicate the name of the Bank)....., further undertake to pay the Government any money so demanded notwithstanding any dispute or disputes raised by the contractor in any suit or proceeding pending before any court or Tribunal, our liability under this Bank Guarantee being absolute and unequivocal. The payment so made by us under this Bank Guarantee shall be a valid discharge of our liability for payment there under and the contractor shall have no claim against us for making such payment.

We, (indicate the name of the Bank)....., further agree that the Government shall have the fullest liberty without our consent and without affecting in any manner our obligation here under to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor from time to time or to postpone for any time or from time to time any of the powers exercisable by the Government against the said contractor and to forbear or enforce any of the terms

Corrections : Nil, Deletions : Nil, Insertions : Nil, Overwriting : Nil,

AE (P)

EE

and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said contractor or for any forbearance, act of omission on the part of the Government or any indulgence by the Government to the said contractor or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

We,(indicate the name of the Bank)....., further agree that the Government at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor at the first instance without proceeding against the contractor and notwithstanding any security or other guarantee the Government may have in relation to the Contractor's liabilities.

This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor.

We,.....(indicate the name of the Bank).... undertake not to revoke this guarantee except with the consent of the Government in writing.

This Bank Guarantee shall be valid up to Unless extended on demand by the Government. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs..... (Rupees..... Only) and unless a claim in writing is lodged with us within the date of expiry or extended date of expiry of this guarantee, all our liabilities under this guarantee shall stand discharged.

Date:

Witnesses:

Signature.....

Name and address

Designation

Staff code no.

Bank seal

Authorized signatory

Name

Signature.....

Name and address

*Date to be worked out on the basis of validity period of 240 days where only financial bids are invited and 240 days for two/three bid system from the date of submission of tender.

**In paragraph 1, strike out the portion not applicable. Bank Guarantee will be made either for earnest money or for performance guarantee/security deposit/mobilization advance, as the case may be.

**GOVERNMENT OF INDIA
CENTRAL PUBLIC WORKS DEPARTMENT**

STATE : Tamil Nadu
BRANCH : B & R

ZONE: CE, Madurai
DIVISION: Coimbatore

CPWD-7
PERCENTAGE RATE TENDER & CONTRACT FOR WORKS

Tender for the work of : Upgradation of 1No. HIG office, 2Nos. HIG Quarters and 2Nos. MIG Quarters at OCR Complex, SIB, Salem.

To be submitted / Uploaded up to 03.00 PM on 06/10/2026 uploaded at www.etender.cpwd.gov.in

To be opened in the presence of Bidders who may be present at 03.30 PM on 06/10/2026, in the office of the Executive Engineer, Coimbatore Central Division, CPWD, Coimbatore-641002 (Telephone No.0422-2547980, Fax No.0422-2547981)

TENDER

I/We have read and examined the notice inviting tender, schedule, A, B, C, D, E & F Specifications applicable, Drawings & Designs, General Rules and Directions, Conditions of Contract, of 2023 with amendments up to the last date of submission of tenders, clauses of contract, Special conditions, Schedule of Rates & 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 of 2023 with amendments up to the last date of submission of tenders 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 **Thirty (30) Days from the last date of receipt of bids** and not to make any modification in its terms and conditions.

A sum of **Rs.87,287/-** will be deposited by me/us with EE calling the tenders in cash/receipt treasury challan / deposit at call receipt of a scheduled bank/fixed deposit receipt of scheduled bank/demand draft of a scheduled bank/ bank guarantee issued by a scheduled bank as earnest money.

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 **Commerical** 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

Corrections : Nil, Deletions : Nil, Insertions : Nil, Overwriting : Nil,

AE (P)

EE

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.

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 cancel the agreement and to forfeit the entire amount of Earnest Money Deposit/ Performance Guarantee

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

Dated:**

Signature of Contractor **

Postal Address **

Witness: **

Address: **

Occupation: **

**To be filled in by EE*

*** To be filled in by the contractor*

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

Signature*

Designation*

Dated: *.....

PART – B

(CIVIL WORKS)

PROFORMA OF SCHEDULES

(Separate Performa for Civil, Elect & Hort. Works in case of Composite Tenders)
(Operative Schedule to be supplied separately to each intending Bidder)

SCHEDULE 'A' :

Schedule of quantities for **Civil works** attached.

SCHEDULE 'B' :

Schedule of materials to be issued to the contractor

S. No.	Description of item	Quantity	Rates in figures & words at which the material will be charged to the contractor	Place of issue
_____ NIL _____				

SCHEDULE 'C'

Tools and plants to be hired to the contractor

S. No.	Description	Hire charges per day	Place of Issue
_____ NIL _____			

SCHEDULE 'D'

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

Civil work:

Particular specifications and special conditions: *As per part B of tender document*

SCHEDULE 'E'

Reference to **General Conditions of Contract: General Conditions of Contract 2023 for Maintenance Works** with amendments up to Previous day of last date of submission of bids.

Name of Work : Upgradation of 1No. HIG office, 2Nos. HIG Quarters and 2Nos. MIG Quarters at OCR Complex, SIB, Salem.

Estimated cost of work: Rs.43,64,331/- (Civil Rs.41,10,987/- + Electrical Rs.2,53,344/-)

(i)	Earnest Money	Rs.87,287/-
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(ii)	Performance Guarantee	b) 5% of Estimated cost put to tender (ECPT) or tendered/ Accepted Cost 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.
(iii)	Security Deposit	2.5% of bid value

SCHEDULE 'F' (GENERAL RULES & DIRECTIONS)

Officer inviting bid: Executive Engineer,
Coimbatore Central Division,
Coimbatore-641002
Telephone No.0422-2547980
Mail ID: nirmankovai@yahoo.co.in
Definitions:

2(v)	Engineer-in-Charge (i) Civil Work	Executive Engineer, Coimbatore Central Division, CPWD, Coimbatore-641002 or any other authority to be notified by the CPWD directorate from time to time.
2(viii)	Accepting Authority	Executive Engineer, Coimbatore Central Division, CPWD, Coimbatore-641002 or any other authority to be notified by the CPWD directorate from time to time.
2(x)	Percentage on cost of materials and Labour cover all to overheads and profits	15%
2(xi)	Standard Schedule of Rates Civil Work	DSR 2023 (Civil works) Market Rates for Non DSR Items. All the above with correction slips upto the last date of receipt of tenders.
2(xii)	Department	Central Public Works Department
9(ii)	Standard CPWD Contract Form GCC 2023,	CPWD Form 7 & GCC Maintenance Works 2023 read along with all correction slip issued up-to the last date of submission of bid.

Clause 1

(i)	Time allowed for submission of Performance Guarantee, Programme Chart (Time and Progress).	07 (SEVEN) days
-----	--	-----------------

(ii)	Time allowed for submission of, Program chart(Time and progress) and applicable labour licenses, registration with EPFO, ESIC & BOCW Welfare board or proof of applying thereof from the date of issue of letter of acceptance intent.	07 (SEVEN) days
(iii)	Maximum allowable extension for submitting PG with late fee @ 0.1% per day of Performance Guarantee amount beyond the period provided in (i) above	07(SEVEN) days

Clause 1A

Whether clause 1A shall be applicable: **Yes**

Clause 2

a)	Authority for fixing compensation under clause 2	<i>Chief Engineer, CPWD, Madurai or any other authority to be notified by the CPWD directorate from time to time.</i>
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Clause 5

	Number of days from the date of issue of letter of acceptance for reckoning date of start	10 (TEN) days or date of handing over of site whichever is later.
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Clause 5.2.

	Mode of recording hindrance	<i>Online through Contractor Login TAB available in www.cpwd.gov.in in compliance to the directions and detailed procedures contained in OM issued vide: DG/MAN/394 dated 28.01.2020 issued vide F.No: CSQ /CM/16(1)/2020 e file No:9081700 and any subsequent amendment made from time to time by the directorate."</i>
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Clause 5.4

The form of application by the contractor for seeking rescheduling of milestones or seeking extension of time : **Annexure –8 & 9 to be submitted combinedly**

Schedule of rate of recovery for delay in submission of modified programme : **Rs.2500/- per week or part basis**

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

Name of Work : Upgradation of 1No. HIG office, 2Nos. HIG Quarters and 2Nos. MIG Quarters at OCR Complex, SIB, Salem.

MILE STONE(S) AS PER TABLE GIVEN BELOW FOR CIVIL PORTION

Sl. No.	Description	Time allowed in days from date of start of work	Amount to be withheld in case of non-achievement of Mile(s) Stone
1	Completion of 25 % of Tendered amount	45 Days	In the event of not achieving the necessary progress as assessed from the running payment, an amount @ 1.25 % of the bid value of work will be withheld for non-achievement of each milestone.
2	Completion of 50 % of Tendered amount	90 days	
3	Completion of 75 % of Tendered amount	135 days	
4	Completion of 100 % of Tendered amount	180 days	

Note: - The withheld amount shall be released, if and when subsequent milestone is achieved within respective time specified. The main contractor will ensure that electrical components of the work are executed in time without giving any chance for slippage of milestone an account of delay in execution of associated electrical works by him. However, in case milestones are not achieved by the contractor for the work, the amount shown against milestone shall be withheld by the Engineer-in-charge of the respective components.

Time allowed for execution of work: **180 days.**

Authority to decide:

(i)	Extension of time	Engineer – in – charge
(ii)	Rescheduling of mile stones	Chief Engineer, CPWD, Madurai
(iii)	Shifting of date of start in case of delay in handing over of site	Engineer – in – charge

Proforma of schedules Clause 5 Schedule of handing over of site.

Part	Portion of site	Description	Time Period for handing over reckoned from date of issue of letter of intent.
Part - A	Portion without any hindrance	Site Fully Available	Site readily Available
Part - B	Portions with encumbrances	Nil	Nil
Part - C	Portions dependent on work of other agencies.	Nil	Nil

Clause 6

Computerized Measurement Book (CMB)/ Electronic Measurement Book (EMB)	Electronic Measurement Book (EMB) through CPWD ERP portal
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Clause 7

Gross work to be done together with net payment /adjustment of advances for material collected, if any, since the last such payment for being eligible to interim payment	Rs.11 lakhs -/-
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Clause: 7A

Whether Clause 7A shall be applicable

: **Yes**

No Running account bill shall be paid for the work till the applicable labour licenses, registration with EPFO, ESIC and BOCW Welfare Board, whatever applicable are submitted by the contractor to the Engineer-in-charge.

Clause 8 A

Whether clause 8A shall be applicable

: **Yes****Clause 9**

Whether clause 9 shall be applicable	Yes
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Clause 10A

List of testing equipment to be provided by the contractor at site lab	As per list attached in NIT
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Clause 10B (ii) & (iii)

Whether clause 10 B (ii) & (iii) shall be applicable	Not Applicable
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Clause 10C

Payment on Account of Increase in Prices/ Wages due to Statutory Order(s)	Not Applicable
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Clause 10CC

Payment due to Increase / Decrease in Prices/ Wages after Receipt of Tender for Works	Not Applicable
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Clause 11

Specifications to be followed for execution of work	Civil work: CPWD Specifications 2019 volume- I & II with corrections slips issued up to the last date of submission of bid.
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Clause 12

Corrections : Nil, Deletions : Nil, Insertions : Nil, Overwriting : Nil,

AE (P)

EE

Type of work:**Maintenance work**

12.2.&12.3	Deviation limit beyond which Clauses 12.2 &12.3 shall apply (All Works)	No limit
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Clause 16

Competent Authority for deciding reduced rates.	Chief Engineer, O/o CE Madurai CPWD, Madurai-17 <i>any other authority to be notified by CPWD from time to time.</i>
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Clause 17

Defect liability period	12 (Twelve) months <i>from the date of handing over of the completed work</i>
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Clause 18: Applicable

List of Mandatory machinery tools & plants to be deployed by the contractor at site:

As per TABLE-2 (PLANT AND EQUIPMENT REQUIRED TO BE OWNED/ TAKEN ON LEASE BY THE CONTRACTOR)

Clause 25

Procedure for conciliation and arbitration for settlement of Disputes will be dealt as per OM No. issued vide DG/SOP/22, Dated: 02.08.2021

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

Sl. No.	Minimum Qualification of Technical Representative	Discipline	Designation	Minimum Experience	Nos.	Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of clause 32	
						Figures (in Rs.)	Words
1.	Graduate Engineer (Or) Diploma Engineer	Civil	Project manager cum Planning/Quality/Site/Billing Engineer	2 Yrs for Degree holder (or) 5 Yrs for Diploma holder respectively	1No.	15,000/- per month	(Rupees Fifteen Thousand only) per Month

Retired Engineer Assistant Engineers retired from Government services, who are holding Diploma will be treated at par with Graduate Engineers. Diploma holders with minimum 10 year relevant experience with a reputed construction company can be treated at par with

Graduate Engineers for the purpose of such deployment subject to the condition that such diploma holders should not exceed 50% of requirement of degree engineers.

The contractor shall submit a certificate of employment of the technical representative(s) (in the form of copy of Form -16 or CPF deduction issued to the Engineers employed by him) along with every running account bill/final bill and shall produce evidence if at any time so required by the Engineer-in-charge.

Clause 36	<i>The contractor shall not be permitted to tender for work in CPWD Zones/Circles (Division in case of horticulture/nursery categories) 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.</i>
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Clause 38

(i) (a) Schedule / statement for determining theoretical quantity of cement & bitumen on the basis of Delhi Schedule of Rates 2023 issued by C.P.W.D. with correction Slips up to the last date of submission of bids.

(ii) Variations permissible on theoretical quantities

(a) Cement for works with estimated cost put to:2% plus/minus
tender more than **25 lakhs**

(b) Bitumen for all works :2.5% plus only & nil on minus Side

(c) Steel Reinforcement and structural : 2% plus/minus
steel sections for each diameter, section and category

(d) All other materials : Nil

Contractor

**Executive Engineer
Coimbatore Central Division,
CPWD, Coimbatore – 641002.**

(TABLE-1)

Equipment for Testing of Materials & Concrete at Site Laboratory

All necessary equipment for conducting all necessary tests shall be provided at the site in the well-furnished site laboratory of minimum size 50 feet X 15 feet by the contractor at his own cost. The following minimum laboratory equipments shall be set up at site office laboratory:-

Sl. No.	Equipment	Numbers (Minimum)
1.	100MT compression testing machine, electrical-cum-manually operated)	1
2.	Slump cone, steel plate, tamping rod, steel scale, scoop	1
3.	Megger & earth resistance tester	1
4.	Graduated glass measuring cylinder	As per requirement
5.	Sets of sieves of 450mm internal dia for coarse aggregate	1
6.	Sets of sieves of 200mm internal dia for fine aggregate [4.75mm; 2.36mm; 1.18mm; 600 microns; 300 microns & 150 micron, with lid and pan]	1
7.	Cube moulds size 150mmx150mmx150mm	24
8.	Electronic balance 600gx0.1g, 10kg and 50 kg	2
9.	Digital thermometer up to 150°C	2
10.	Measuring jars 100ml, 200ml, 500ml	1 No each size
11.	Gauging trowels 100mm & 200mm with wooden Handle	1
12.	Spatula 100mm & 200mm with long blade wooden Handle	1
13.	Vernier calipers 12" & 6" size	1 each
14.	GI tray 600x450x50mm, 450x300x40mm, 300x250x40mm	1 each
15.	Screw gauge 0.1mm-10mm, least count 0.05	1
16.	Water testing kit	2
17.	Pruning Rods 2 Kg weight length 40 cm and ramming face 25 mm ²	1
18.	Extra Bottom plates for 15 cm cube mould	As per requirement
19.	Dial type spring balance preferable with zero correction knob capacity 100 kgs reading to ½ kg.	1
20.	Counter scale capacity 1 kg and 10 kg	1 each
21.	Iron Weight of 5 kg, 2 kg, 1 kg, 500 gm, 200 gm, 100 gm	2 each
22.	Brass Weight of 50 gm, 20 gm, 10 gm, 5 gm, 2 gm, 1 gm	2 each
23.	Measuring cylinder TPX or Poly propylene capacity 100 ml, 500 ml, 250 ml, 100 ml	1 each
24.	Pyrex, corning or Borosil beakers with cover capacity 500 ml, 200 ml, 50 ml	As per requirement

25.	Wash Bottles capacity 500 ml	1
26.	Thermometers 1-100 degree centigrade's / max. and Min/ Dry and wet with table	1
27.	Set of box spanner ratchet	1
28.	Hammer 1lb& 2lb	2 each
29.	Rubber Hammer	2
30.	Hacksaw with 6 blades	As per requirement
31.	Measuring tape 2 mtr	5
32.	Depth gauge 20cm	1
33.	Shovels& Spade	3
34.	Steel plates 5 mm thick 75x75 cm	As per requirement
35.	Plastic or G.I. Buckets 15 ltr, 10 ltr, 5 ltr	1 each
36.	Wheel Barrow	4
37.	Floor Brushes, hair dusters, scrappers, wire brush, paint brushes, shutter steel plat oil, kerosene with stove etc.	3 each
38.	Megger for Electrical Division	1
39.	Any other equipment for site tests as outlined in BIS codes and as directed by the Engineer-in-charge.	As per requirement

Note: The above list is only indicative and not exhaustive. The contractor may be required to deploy more T&P as per requirement of work and as per the direction of the Engineer-in-charge.

(TABLE- 2)

PLANT AND EQUIPMENT REQUIRED TO BE OWNED/TAKEN ON LEASE BY THE CONTRACTOR

Sl. No.	Equipment	Numbers (Minimum)
1.	Centralized concrete batch mix plant of 3 bags capacity per hour(fully automatic)	1 No
2.	Excavator cum loader (JCB 3D model or equivalent).	1 No
3.	DG set minimum capacity.	1 No
4.	Mini batching plant (6 cum./hr.).	Nil
5.	Concrete pump	1 No
6.	Needle Vibrators.	4 Nos
7.	Screed leveler.	2 Nos
8.	Plate Vibrator	2 Nos
9.	Reinforcement bending machine.	1 No
10.	Reinforcement cutting machine.	A per requirement
11.	Power driven earth rammer (Soil compactor).	1 No
12.	Auto level & staff.	1 No
13.	Welding machine 400 Ampere	1 No
14.	Screener for coarse sand and fine sand	2 Nos
15.	Centrifugal mono block water pump minimum capacity 2 HP	3 Nos
16.	Drilling machine	2 Nos
17.	Double steel scaffolding and staging materials	1000sq.mt.
18.	Air compressor	2 Nos
19.	Floor grinding/polishing machines	2 Nos
20.	Granite cutting machine	2 Nos
29.	Ceramic tile cutting machine	2 Nos
30.	Granite polishing machine	2 Nos
31.	Granite hand polishing machine	2 Nos
32.	Computer for billing	1 No
33.	Any other machinery required for completion of the work as per decision of Engineer-in-charge.	As per Actual requirement

Note: The above list is only indicative and not exhaustive. The contractor may be required to deploy more T&P as per requirement of work and as per the direction of the Engineer-in-charge.

(TABLE-3)

RECOVERY RATES FOR QUANTITIES BEYOND PERMISSIBLE VARIATION			
S.No	Description of Item	Rates in figures and words at which recovery shall be made from the Contractor	
		Excess beyond permissible variation	Less use beyond permissible variation
1.	Portland Pozzolana Cement (PPC)	Nil	Not Permitted
2.	Steel Reinforcement TMT Bar of all diameters	Nil	Not Permitted
3.	Structural steel (Primary Producer/Manufacturer)	Nil	Not Permitted

ANNEXURE-8**Form of Application by the Contractor for seeking Extension of Time**

1. Name of Contractor :
2. Name of work as given in the agreement :
3. Agreement No. :
4. Estimated amount put tender :
5. Date of commencement of works as per agreement :
6. Period allowed for completion of work as per agreement :
7. Date of completion stipulated in agreement :
8. Period for which extension of time if has been given by :
authority in Schedule 'F' "Previously

	EE's Letter No. and date	Extension granted	
		Months	Days
1 st Extension			
2 nd Extension			
(c) 3 rd Extension			
Total extension previously given			

9. Reasons for which extension have been previously given
(copies of the previous applications should be attached) :
10. Period for which extension if applied :
11. Hindrances on account of which extension is applied for which
dates on which hindrances occurred and the period for which
these are likely to last:
 - a) Serial no.
 - b) Nature of hindrance
 - c) Date of occurrence
 - d) Period for which it is likely to last
 - e) Period for which extension required for this particular hindrance
 - f) Overlapping period if any, with reference to item. (g) Net extension applied for
 - g) Remarks, if any.

Total period on account of hindrance mentioned aboveMonths.....Days

12. Extension of time required for extra work

Corrections : Nil, Deletions : Nil, Insertions : Nil, Overwriting : Nil,

AE (P)

EE

13. Details of extra work and the amount involved:

- a. Total value of extra work.
- b. Proportionate period of extension of time based on estimated amount put
to tender on account of extra work.

14. Total extension of time required for Sl.No: 11 & 12

Submitted to the Sub Divisional Officer.....

Signature of Contractor

Dated

ANNEXURE-9**Form of Application of the Contractor for seeking Rescheduling of the Milestones**

1. Name of Contractor :
2. Name of work as given in the agreement :
3. Agreement No. :
4. Estimated amount put tender :
5. Date of commencement of works as per agreement :
6. Period allowed for completion of work as per agreement :
7. Date of completion stipulated in agreement :
8. Rescheduling of milestones done previously :

Milestone No. Already Rescheduled	EE's Letter No. and date	Rescheduling of Milestones Done	
		Original Date	Reschedule date
1 st Milestone			
2 nd Milestone			

Rescheduling of Milestone applied for

Milestone No. for which Rescheduling is applied	Original/Rescheduled Date	Details and Period of Hindrances	Comments of Executive Engineer	Proposed Rescheduled Date of
(A) 1 st Milestone				
(B) 2 nd Milestone				
----- --				

Submitted to the Sub Divisional Officer

Signature of Contractor**Dated**

MATERIAL AND QUALITY ASSURANCE

1. The contractor shall ensure quality control measures on different aspects of construction including materials, workmanship and correct construction methodologies to be adopted. He shall have to submit quality assurance program within two weeks of the award of work. The quality assurance program should include method statement for various items of work to be executed along with check lists to enforce quality control.
2. The contractor shall get the source of all materials, approved from the Engineer-in-Charge. The contractor shall stick to the approved source unless it is absolutely unavoidable. Any change shall be done with the prior approval of the Engineer-in-Charge for which tests etc. shall be done by the contractor at his own cost. Similarly, the contractor shall submit brand/ make of various materials not specified in the agreement, to be used for the approval of the Engineer-in-Charge along with samples and once the sample is approved, he shall adhere to the approved sample.
3. The contractor shall submit shop drawings of staging and shuttering arrangement, aluminum work, and other works as desired by Engineer-in-Charge for his approval before execution. The contractor shall also submit bar bending schedule for approval of Engineer-in-Charge before execution.

4. Test Laboratories:

Testing of Materials: The contractor shall establish temporary field laboratory of adequate size with all necessary facilities.

Field laboratory shall be equipped with the testing equipment for conducting routine field tests as per this contract. It will also have copies of standards, BIS codes, IRC codes, relevant publications.

All the tests in field Lab setup at construction site shall be carried out by the QA Staff deployed by the contractor and shall be witnessed by the Engineer-in-Charge or his authorized subordinates as specified in NIT.

The contractor shall provide all necessary facility to them for witnessing the tests in the field laboratory.

In general, contractor shall carry out 90% of field tests in site laboratory and 10% tests shall be got carried out from outside laboratory as 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.

Contractor shall endeavour to obtain test reports for tests conducted from outside laboratory in a reasonable time.

A. Laboratory at site:

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

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

The laboratories shall be decided by the Engineer-in-Charge. However, for the tests to be carried out by the external laboratories, the contractor shall supply free of charge all the materials required for testing, including transportation.

If the tests which were to be conducted in the site laboratory are conducted in other laboratories for any reasons attributable to contractor the cost of such tests shall be borne by the contractor.

B. Other Laboratories:

For all testing, the contractor shall supply free of charge (except if specifically provided otherwise in the document elsewhere) all the sample materials required for testing, necessary facilities, manpower, including transportation to required labs, all necessary follow up, report collection from lab to its submission to Engineer-in-Charge. Nothing shall be payable on above account.

Sampling of Materials:

- i. Sample of building materials fittings and other articles required for execution of work shall be got approved from the Engineer-in-Charge. Articles manufactured by companies of repute and approved by the Engineer-in-Charge shall only be used. Articles bearing BIS certification mark shall be used. In case the above are not available, the quality of samples brought by the contractor shall be judged by standards laid down in the relevant specifications. All materials and articles brought by the contractor to the site for use shall conform to the samples approved by the Engineer-in-Charge which shall be preserved till the completion of the work.
- ii. The contractor shall ensure quality construction in a planned and time bound manner.
- iii. BIS marked materials except otherwise specified shall be subjected to quality test at the discretion of the Engineer-in-Charge besides testing of other materials as per the specifications described for the item/materials. Wherever BIS marked materials are brought to the site of work, the contractor shall if required, by the Engineer-in-Charge furnish manufacturers test certificate to establish that the material produced by the contractor for incorporation in the work satisfies the provisions of BIS codes relevant to the material and/or the work done.
- iv. The contractor shall procure all the materials in advance so that there is sufficient time to testing and approving of the materials and clearance of the same before use in work.

- v. All materials brought by the contractor for use in the work shall be got checked from the Engineer-in-Charge or his authorized representative of the work on receipt of the same at site before use.
- 5. The day to day receipt and issue accounts of different grade/brand of cement shall be maintained separately in the standard Proforma decided by the Engineer-in-Charge or his authorised representative of work and which shall be duly signed by the contractor or his authorized representative.
- 6. The contractor shall render all help and assistance in documenting the total sequence of this project by way of photography, slides, audio-video recording etc. Nothing extra shall be payable to the contractor on this account.
- 7. The contractor shall be fully responsible for the safe custody of materials brought by him and issued to him even though the materials are under double lock key system.
- 8. Separate cement registers showing the receipt of the OPC and PPC shall be maintained at site. The contractor shall construct separate godowns for storage of OPC & PPC at site and nothing extra on this account shall be payable.
- 9. Cement issued shall be for consumption at site only. No cement for factory made items and those not manufactured at site shall be issued.
- 10. In case there is any discrepancy in frequency of testing as given in the list of mandatory tests and that in the individual sub-head of work as per CPWD Specification 2019 Vol. 1 & 2 the higher of the two frequencies of testing shall be adopted.
- 11. Samples of such other materials the Engineer-in-charge may review and approvals in accordance with clause 10A of GCC before actual use

12. Maintenance of Registers:

- i. All the registers for tests of material to be carried out at construction site or in outside laboratories shall be maintained by the contractor. These register shall be issued to the contractor by Engineer-in-Charge.
- ii. The Registers to be issued to the contractor are :
 - a. Materials at site account register.
 - b. Cement register.
 - c. Material test register.
 - d. Cube test register.
 - e. Paint register.
 - f. Any other register as required.
- iii. All the entries in the register will be made by the designated engineering staff of the contractor and same should be regularly reviewed by Engineer-in-Charge and/or his authorized representatives.
- iv. Contractor shall be responsible for safe custody of all the registers.

- v. Submission of copy of all test registers, material at site register along with each running account bill and final bill shall be mandatory. The contractor shall submit all these registers alongwith the final bill to the Engineer-in-Charge.

Maintenance of Register of Test

(a) All the entries in the register of test are to be made by the designated QA Engineers of the contractor and same is inbe regularly reviewed by the field officers. as well as the Engineer-in-charge. The contractor shall allow inspection of such records any time as desired by Engineer-in-Charge or his authorized representative.

(b) All the tests carried out at construction site or outside laboratories are to be maintained by the contractor in the prescribed format in the test registers provided by the contractor and duly authenticated by Engineer-in-Charge. The test reports shall also be maintained in hard file.

(c) Contractor is responsible for maintenance and safe custody of all the test registers and test records.

(d) Mandatory test conducted as per approved proforma shall be attached with each Running bill submission of copy of all test and material at site register along with each alternate Running Account Bill and with Final Bill is mandatory

General Terms and Conditions

1 **A.** The order of preference in case of any discrepancy may be read as the following:

- i. Additional Specifications, Particular Specifications, Special / Additional Conditions, if any as defined in the contract documents.
- ii. Drawings
- iii. CPWD Specifications 2019 Vol-I & II, CPWD Manual on Accessible Built Environment 2019 & Handbook on Barrier Free and Accessibility.
- iv. BIS Specifications (Latest version), if CPWD Specifications not available.
- v. NBC 2016, if BIS not available.
- vi. Manufacturer's Specifications, if BIS/NBC Specifications not available.
- vii. International Codes for sound Engineering practices.
- viii. Sound engineering practices and Standard Textbooks.
- ix. If none of the above is available, decision of Engineer-in-Charge will be Final.

A reference made to any Indian Standard Specification in these documents, shall imply to be the latest version of that standard including such revision/amendments as are issued by the bureau of Indian standard upto last date of receipt of tender. The contractor shall keep at his own cost all such publications of relevant Indian standard applicable to the work at site all time.

Except for the items, for which particular specifications are given in this tender document or where it is specifically mentioned otherwise, the work shall generally be carried out in accordance with the "CPWD Specifications 2019 Vol. 1 and Vol. 2 (with corrections slips issued upto last date as specified in Schedule-F for the amendment dates applicable to GCC/CPWD Specifications/etc) and instructions of Engineer-in-Charge. Wherever CPWD specifications are silent, the latest IS codes/specification shall be followed.

B. In case of discrepancy between the tender conditions detailed in this document and the applicable General Conditions of Contract, the tender conditions mentioned in this tender document shall prevail.

- 2 Except for the items, for which particular specifications are given in this tender document, the work shall generally be carried out in accordance with the "CPWD Specifications 2019 Vol. 1 and Vol. 2 (with corrections slips issued upto the last date of submission of tender). (Hereinafter to be referred to as CPWD Specifications) and instructions of Engineer-in-Charge. Wherever CPWD Specifications are silent the latest IS codes/specification shall be followed
- 3 The contractor (s) shall study the soil investigation report given by the department for the project work site, and satisfy himself about complete characteristics of soil and other parameters of site. However, the contractor has to acquaint himself completely about the soil conditions and characteristics and no claim whatsoever on the alleged inadequacy of the soil report/data provided shall be entertained.

- 4 Existing roads of campus may be used for transport purpose, upto the point where the same is available and allowed with the specific permission of **SIB, Salem** may be imposed by the security personals regarding route available, speed, honking, ply timing etc which shall be strictly observed. Also no claim whatsoever shall be made on this account by the contractor.
- 5 On account of security considerations, there could be some restrictions on the working hours, movement of vehicles for transportation of materials, movement of labour and location of labour camp. The contractor shall be bound to follow all such restrictions/instructions and adjust the programme for execution of work accordingly and nothing extra shall be payable on account of the same. Tssshe contractor has to obtain pass/identity card for his each labour/ personal for entry in the campus from client. They will have restricted movement inside the campus and should not move to locations inside the campus which do not concern this contract. The contractor shall be fully responsible for any unlawful act, misbehavior done by its labour and staff at the campus. The contractor shall issue Identity card to all labourers and engineers/staff engaged by him and nothing extra shall be paid on this account. These Identity cards will also be countersigned by the Engineer-in-Charge or his authorized representative(s), which can include client also. Nothing extra shall be paid on this account.
- 6 The contractor(s) shall give to the Municipality, Police and other authorities all necessary notices etc. that may be required by law and obtain all requisite Licenses for temporary obstructions, enclosures etc. and pay all fee, taxes and charges which may be leviable on account of these operations in executing the contract. He shall make good any damage to the adjoining property whether public or private and shall supply and maintain light and other illumination on for cautioning the public at night.
- 7 The contractor shall fully comply with all legal orders and directions of the Public or local authorities, municipality, client and adhere by their rules and regulations and pay all fees and charges for which he may be liable in this regard. Nothing extra shall be paid/reimbursed for the same.
- 8 It shall be ensured by the contractor that no electric live wire is left exposed or unattended to avoid any accidents in this regard.
- 9 The contractor shall maintain in perfect condition, all portions executed till completion of the entire work allotted to him. Where phased delivery of work is contemplated, these provisions shall apply separately to each phase.
- 10 The contractor shall submit the list of engineers / technical staff with charter of duties / responsibilities of each one related to execution of the work.
- 11 **PROGRAMME CHART:** The contractor shall prepare and submit an integrated programme chart for the execution of work and the detailed provision in GCC.
- 12 **Defects Liability Period (DLP)**
Defects liability period shall be taken as **Twelve (12)** months from the date of completion of the work for building as a whole, wherein all the defects shall be rectified by the contractor at his own cost.

- 12.1 Defects of serious nature causing inconvenience such as leakage, reverse floor slopes affecting the drainage (ponding of water), warping and opening of joints in doors and window shutters etc shall be undertaken by the contractor immediately on receipt of the complaint but not exceeding one week time, failing which the defects will be got removed at his risk and cost plus 25% as supervision and establishment charges.
- 12.2 All other defects notified to the contractor during the DLP shall be rectified to the entire satisfaction of Engineer-in-Charge or item replaced as soon as possible but not later than one month in any case. Failure to do so in a reasonable period the Engineer-in-Charge shall get it done at his cost plus 25% as supervision and establishment charges after final notice of 10 days. The decision of Engineer-in-Charge regarding a defect being of serious nature or otherwise shall be final and binding.

Note: The above list is illustrative for civil work and not exhaustive. The rectification will include all civil works including internal and external services without any exclusion.

13 Safety measures:

All workers of contractor and associate agencies, invariably and at all the times, must follow all safety norms, adopt safe construction practices and use all required safety gadgets in their working throughout the project duration. The contractor has to engage one safety officer who will ensure that above safety measures is being implemented in letter and spirit. Moreover, he will also check the temporary arrangement made by the contractor during construction work and ensure that it is safe and stable. He will also guide all the workers for adopting safety measures every morning i.e before start of the work.

For the safety of all labour directly or indirectly employed in the work for the performance of the contractor's part of this agreement, the contractors shall, in addition to the provisions of CPWD safety code and directions of the Engineer-in-Charge make all arrangements to provide facility as per the provisions of Indian Standard Specifications (Codes) listed below and nothing extra shall be paid on this account.

1. IS 3696 Part I Safety Code for scaffolds and ladders
2. IS 3696 Part II Safety Code for scaffolds and ladders Part II ladders
3. IS 3764 Safety Code for excavation work
4. IS 4081 Safety Code for Blasting and related Drilling operations
5. IS 4138 Safety Code for working in compressed air.
6. IS 7293 Safety Code for working with construction machinery
7. IS 7969 Safety Code for handling and storage of building materials

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

of any such services the same shall be repaired promptly by the contractor at his own cost and also keep the department indemnified at all times against any claim whatsoever generated by a third party on above account .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.

- 15 The contractor shall be responsible for the watch and ward/guard of the buildings, safety of all fittings and fixtures including sanitary and water supply fittings and fixtures provided by him against pilferage and breakage during the period of installations and thereafter till the building is physically handed over to the department. No extra payment shall be made on this account.
- 16 The contractor shall take instructions from the Engineer-in-Charge for stacking of materials. No excavated earth or building materials etc. shall be stacked / collected in areas where other buildings, roads, services, compound walls etc. are to be constructed.
- 17 No extra payment will be made for operation/activity mentioned at Sl. No. 1 to 17 above unless specifically mentioned otherwise.

GREEN BUILDING AND SUSTAINABILITY MEASURES

1. Fly ash bricks/blocks of recycled C&D Waste/AAC blocks are to be used mandatorily in masonry work for non-structural members.
2. 20% recycled sand and 20% recycled aggregate conforming to IS: 383-2016 may be used in non- structural elements.
3. RMC plants shall be mandated for using 20% recycled sand and 20% recycled aggregate conforming to IS: 383-2016 in RMC supply for non-structural elements.
4. Precast tiles manufactured by using 20% of recycled materials from C&D plants containing recycled sand and aggregate conforming to IS: 383-2016.
5. RMC plant will be approved which have MoU/ agreement with the C&D waste processing plant, for use of recycled coarse and fine aggregates conforming to IS: 383-2016 in the manufacturing of lean concrete.
6. For sand filling (e.g. sand filling under floors, behind retaining walls, approach roads etc.), only manufactured sand obtained from C&D waste processing plant conforming to IS: 383-2016 will be used.
7. CC blocks, Paver blocks, Kerb Stones, Concrete tiles on footpaths etc. to be used in the works, will utilize recycled materials obtained from C&D waste processing plants conforming to IS: 383-2016.
8. For cement plaster, the manufactured sand obtained from C&D waste processing plant conforming to IS: 383-2016 will be used.
9. Quarterly demands should be shared in advance with operators for planning and scheduling plant operations by the contractors.

SPECIAL CONDITIONS

A. GENERAL

1. Before tendering, the contractor shall inspect the site of work and shall fully acquaint himself about the conditions prevailing at site, availability of materials, availability of land and suitable location for construction of godowns, stores and camp, transport facilities, the extent of lead and lifts involved in the work (over the entire duration of contract) including local conditions, as required for satisfactory execution of the work and nothing extra whatsoever shall be paid on this account.

2. The contractor shall at his own expense and risk arrange land for accommodation of labour, setting up of office, the storage of materials, erection of temporary workshops, and erection of temporary barricade and construction of approach roads to the site of the work including land required for carrying out of all jobs connected with the completion of the work. However, the departmental land, to the extent available may be allowed to be used for the purpose free of rent without accepting any responsibility for the delay, if any, on this account. The contractor shall have to abide by the regulations of the authorities concerned and the directions of the Engineer-in-charge for the use of the land available at the site of work. If during construction it becomes necessary to remove or shift the stored materials shed workshop, access roads, etc. to facilitate execution of any other work by any other agency, the contractor shall do as directed by the Engineer-in-charge and no claim whatsoever, shall be entertained on this account.

3. It shall be deemed that the contractor shall satisfied himself as to the nature and location of the work, transport facilities, availability of land for setting up of camp etc. The department will bear no responsibility for lack of such knowledge and the consequences thereof.

4. The contractor shall have to make approaches to the site, if so required and keep them in good condition for transportation of labour and materials as well as inspection of works by the Engineer-in-charge. Nothing extra shall be paid on this account.

5. The contractor shall be responsible for the true and proper setting out of the work in coordination with the Engineer-in-charge or his authorized representatives and for the correctness of the positions, levels, dimensions and alignments of all parts of the structure and for the provisions of all necessary instruments appliances and labour in connection therewith. If at any time, during the progress of work, any error appears or arises in the position, levels, dimensions or alignment of any part of the work, the contractor on being asked to do so by the Engineer-in-charge, shall rectify such error to the entire satisfaction of Engineer-in-charge. The checking by the Engineer-in-charge or his authorized representative shall not relieve the contractor of his responsibility for the correctness of any setting out of any line or level. The contractor shall carefully protect and preserve all bench marks pegs and pillars provided for the setting out of works.

6. All setting out activities concerning establishment of benchmarks, Theodolite stations centre line pillars etc. including all materials, tools, plants, equipments, Theodolite and all other instruments, labour etc. required for performing all the functions necessary and ancillary thereto at the commencement of the work, during the progress of the work and till the completion of the work shall be carried out by the contractor and nothing extra shall be paid on this account.

7. The contractor shall at his own cost submit samples of all materials sufficiently in advance and obtain approval of the Engineer-in-charge. Subsequently, the materials to be used in the actual execution of the work shall strictly conform to the quality of samples approved by the Engineer-

in-charge and nothing extra shall be paid on this account. The acceptance of any sample or material on inspection shall not be a bar to its subsequent rejection, if found defective.

8.The contractor shall at his cost, make all arrangements and shall provide necessary facilities as the Engineer-in-charge may require for collecting, preparing, packing forwarding and transportation of the required number of samples for tests & for analysis at such time and to such places as directed by the Engineer-in-charge, and bear all charges and cost of testing unless specifically provided for otherwise elsewhere in the contract or specifications.

9.The necessary tests shall be conducted in the laboratory approved by the Engineer-in-charge. The samples for carrying out all or any of the tests shall be collected by the Engineer-in-charge or on his behalf by any other officer of CPWD. The contractor or his authorized representative shall associate himself in collection, preparation, packing and forwarding of such samples for the prescribed tests and analysis. In case he or his authorized representative is not present or does not associate himself, the results of such tests and consequences thereon shall be binding on the contractor.

10.Materials used on work without prior inspection and testing (where testing is necessary) and without approval of Engineer-in-charge are liable to be considered unauthorized, defective and not acceptable. The Engineer-in-charge shall have full powers to require removal of any or all of the materials brought to site by contractor which are not in accordance with the contract, specifications or do not conform in character or quality to the samples approved by the Engineer-in-charge. In case of default on the part of the contractor in removing rejected materials, the Engineer-in-charge shall be at liberty to have them removed at the risk and cost of the contractor.

11.The contractor shall make his own arrangement for the water required for execution of work and get the water tested at his own cost with regard to its suitability for use in the works and get written approval from the Engineer-in-charge before he proceeds with the use of same for execution of work. Nothing extra shall be paid to the contractor on this account.

12.The work shall be carried out in such a manner so as not to interfere/or effect or disturb other works being executed by other agencies, if any.

13.Any damages done by the contractor to any existing work or work being executed by other agencies shall be made good by him at his own cost.

14.The work shall be carried out in the manner complying in all respects with the requirement of relevant rules and regulations of the local bodies under the jurisdiction of which the work is to be executed and nothing extra shall be paid on this account.

15.For completing the work in time, the contractor might be required to work in two or more shifts and no claims whatsoever shall be entertained on this account, 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 amount for any other reasons.

16.There is no electric power supply at the site of work. The contractor will have to make his own arrangement for obtaining electric connection from the state electricity board and make necessary payments directly to the department concerned and/or install generators at the site of work, if required and nothing extra whatsoever will be payable on this account.

17.The contractor shall maintain in good condition all work executed till the completion of the entire work entrusted to the contractor under this contract and nothing extra shall be paid on this account.

18.No payment will be made to the contractor for damage caused by rain, floods and other natural calamities whatsoever during the execution of the works and any damage to the work on this account shall have to be made good by the contractor at his own cost and nothing whatsoever ' shall be paid on this account.

19.The rates for all items of work, unless clearly specified otherwise, shall include the cost of all labour materials, de-watering and other inputs involved in the execution of the items.

20.Unless otherwise provided in the schedule of quantities or CPWD specifications the rates tendered by the contractor shall be all-inclusive and shall apply to all heights, depths, leads and lifts.

21.No claim whatsoever for idle labour, additional establishments, costs of hire and labour charges for tools and plants etc. would be entertained under any circumstances.

22.For the safety of all labour directly or indirectly employed in the work for the performance of the contractor's part of this agreement, the contractors shall, in addition to the provisions of CPWD safety code and directions of the Engineer-in-charge make all arrangements to provide facility as per the provisions of Indian Standard Specifications (Codes) listed below and nothing extra shall be paid on this account.

1. IS 3696 Part I Safety Code for scaffolds and ladders.
2. IS 3696 Part II Safety Code for scaffolds and ladders Part II ladders.
3. IS 764 Safety Code for excavation work.
4. IS 4081 Safety Code for Blasting and Drilling operations.
5. IS4138 Safety Code for working in compressed air.
6. IS 7293 Safety Code for working with construction machinery.
7. IS 7969 Safety Code for storage and handling of building materials.

23.The contractor shall take all precautions to avoid all accidents by exhibiting necessary caution boards and by providing red flags, red lights and barriers. The contractor shall be responsible for any accident at the site of work and consequences thereof.

24.Royalty/ Seignior age charges at the prevalent rates and all other incidental expenditure shall have to be paid by the contractor, on all the boulders, metal stone aggregate, sludge, earth, sand, bajri, Brick bats etc. collected by him for the execution of the work direct to the concerned Revenue Authority of the State or Central Government and the amount paid shall not be reimbursed in any form whatsoever. The proof of making payment of the royalty/ seignorage charges shall be produced to the **EE-CCD/CPWD/COIMBATORE** along with each bill.

25.In case of specifications the following hierarchy will be followed:

- (1) Nomenclature of the item.
- (2) Additional Specifications, particular specifications, special / additional conditions if any as defined in the contract documents.
- (3) Drawings
- (4) CPWD Specification.
- (5) BIS Specification (Latest version) if CPWD specification not available.
- (6) Manufacturers specifications if BIS specification not available.
- (7) Sound engineering practices. Standard Text books.

(8) If none of the above is available decision of Engineer-in-Charge will be Final.

26.All Stone aggregates, sand, stone dust, etc shall be obtained only from the quarry or other source approved by the Engineer in charge before they are actually procured and used in the work. The rate for the items mentioned in the schedule of quantities includes all charges and nothing-extra payable on any account.

27.All GST as applicable, **Labour Cess @ 1% etc.**, shall be borne by the contractor himself. The contractor shall quote his rates considering all such taxes and the same shall be recoverable from the bills and necessary TDS Certificate shall be issued. Any change in the rate of recovery towards GST is notified by the competent authority, the same shall be effected and no claim what so ever shall be entertained by CPWD. The contractor shall quote his rates accordingly.

28.The work shall be carried out without causing inconvenience to the officials working in the office during office hours.

29.The construction materials like bricks, sand & steel bar required for the work shall be stacked neatly on the location identified by the Engineer-in-charge to avoid any inconveniences to the people using the premises.

30.Necessary barricading shall be provided to avoid the direct vision of materials from the main road

31.Crushed Stone Sand conforming to coarse sand / fine sand as that of CPWD specification 2019 Vol. I/II with up to date correction slips shall be allowed in the work in place of River sand/ Pit sand. The bidders shall quote their rate accordingly.

32.Main agencies including associated agencies which are doing works related with this project will also simultaneously execute the works and thus the agency shall have to cooperate for the same. The agency may sometime have to wait until for completion of main work at some work location or have to bear interferences of main agency during the midst of his work at some locations. The agency shall have to leave necessary holes, openings etc. The agency may sometime have to do their finishing works after the other agencies completed their work at some location as required. Nothing extra over the agreement rates shall be paid for the same.

34. Safety at the Site

The contractor must appoint a full time qualified person as safety-in-charge for taking care of implementation of the safety system. The contractor shall submit the Project Safety Plan stating the methodology of implementation of systems to ensure the safe and environment friendly work place.

The Safety Plan must include the following:

34.1 Organization Chart

Reporting relationship of the safety function in a flow chart

34.2 Safety Committee

Structure – Chairman, secretary and committee members – Roles & Responsibilities, Applicable Statutory requirements, standards and codes related to safety and its adherence.

34.3 General safety rules and regulations concerning

Use of personal protective equipment and safety devices relevant to site activities

Awareness and Training Programs

Motivational schemes and programs

Access, Egress and workstation safety Safe use of construction power supply and upkeep / maintenance of installations

Work permit systems

Use, maintenance and inspection of Plant & machinery

Scaffold & formwork norms

Use, maintenance and inspection of Lifting Tools

Fire Protection and prevention

Emergency preparedness

Status of Safety implementation at site shall be discussed in the Weekly Review meeting. Contractor must submit the safety statistics every month in the enclosed format.

The General Guidelines governing the safety implementation shall include the following Rules, while preparing the safety plan.

34.3.1 No child labor shall be employed in the work. A display board depicting **“NO CHILD LABOUR UNDER THE AGE OF 18 IS ENGAGED AS LABOUR AT THIS SITE”** is to be kept in the construction site.

34.3.2 All the workmen shall undergo Safety Induction, screening before engaging them on the job. Physical fitness of the person to certain critical jobs like working at height or other dangerous locations should be ensured before engaging the person on work.

34.3.3 Smoking is strictly prohibited at workplace.

34.3.4 Nobody is allowed to work without wearing safety helmet. Chinstrap of safety helmet shall be always on. Drivers, helpers and operators are no exception.

34.3.5 No one is allowed to work at or more than three meters height without wearing safety belt and anchoring the lanyard of safety belt to firm support preferably at shoulder level.

34.3.6 No one is allowed to enter into workplace and work at site without adequate foot protection.

34.3.7 Usage of eye protection equipment shall be ensured when workmen are engaged for grinding, chipping, welding and gas-cutting. For other jobs as and when site safety co-ordinator insists eye protection has to be provided.

34.3.8 All PPE like Safety shoes, Safety helmet, Safety belt, Safety goggles etc. shall be arranged before starting the job.

34.3.9 All excavated pits shall be barricaded & barricading to be maintained till the backfilling is done. Safe approach to be ensured into every excavation.

- 34.3.10 Adequate illumination at workplace shall be ensured before starting the job at night.
- 34.3.11 All the dangerous moving parts of the portable / fixed machinery being used shall be adequately guarded.
- 34.3.12 Ladders being used at site shall be adequately secured at bottom and top. Ladders shall not be used as work platforms.
- 34.3.13 Erection zone and dismantling zone shall be barricaded and nobody will be allowed to stand under suspended loads.
- 34.3.14 Contractors should spray water using Water browser periodically in the site to reduce the dust rising due to wind.
- 34.3.15 Horseplay is completely prohibited at workplace. Running at the site is completely prohibited, except in the case of emergency.
- 34.3.16 Material shall not be thrown from the height. If required, the area shall be barricaded and one person shall be posted outside the barricading for preventing the trespassers from entering the area.
- 34.3.17 **Other than electricians, with red helmet, no one is allowed to carry out electrical connections, repairs on electrical equipment or other jobs related thereto.**
- 34.3.18 All electrical connections shall be made using 3 or 4 core cables, having an earth wire.
- 34.3.19 Proper Earthing pits at site to be constructed and the sensitivity must be maintained at less than 1 ohm
- 34.3.20 Main panel boards should have MCBs and RCCB / ELCBs (30 mA sensitivity).
- 34.3.21 Inserting of bare wires for tapping the power from electrical sockets is completely prohibited.
- 34.3.22 All major, minor accidents and near misses to be recorded and reported to the E-in-C and the contractor must take necessary steps to avoid the recurrence.
- 34.3.23 Scaffoldings used should be of proper construction. No Casuarinas pole / bamboo scaffolding is permitted. It should be inspected by competent person(s) before use.
- 34.3.24 All tools and tackles shall be inspected before use. Defects to be rectified immediately. No lifting tackle to be used unless it is certified by the competent authority.
- 34.3.25 All tools and tackles shall be tested and have a Identification no., SWL and date of next test marked on them.
- 34.3.26 A tools and tackles inspection register must be maintained and updated regularly.
- 34.3.27 **Good housekeeping to be maintained. Passages shall not be blocked with materials. Materials like bricks shall not be stacked to the dangerous height at workplace.**

- 34.3.28 All the Earth moving vehicles and Equipments used at site should have reverse horn.
- 34.3.29 Debris, scrap and other materials to be cleared from time to time from the workplace and at the time of closing of work every day.
- 34.3.30 Adequate firefighting equipment shall be made available at workplace and persons are to be trained in firefighting techniques with the co-ordination of site safety coordinator.
- 34.3.31 All unsafe conditions, unsafe acts identified by contractors, reported by site supervisors and / or safety personnel to be corrected on priority basis.
- 34.3.32 No children shall be allowed to enter the workplace.
- 34.3.33 Other than the Driver / operator, no one shall travel in a tractor / tough rider etc.
- 34.3.34 All the lifting tools and tackles shall be stored properly when not in use.
- 34.3.35 Clamps shall be used on Return cables to ensure proper earthing for welding works.
- 34.3.36 Return cables shall be used for earthing.
- 34.3.37 All the pressure gauges used in gas cutting apparatus shall be in good working condition.
- 34.3.38 Proper eye washing facilities shall be made in areas where chemicals are handled.
- 34.3.39 Connectors and hose clamps shall be used for making welding hose connections.
- 34.3.40 Proper warning boards and caution notices to be displayed at required areas inside the site.
- 34.3.41 All cranes must have a trained signal man for signaling.
- 34.3.42 All underground cables for supplying construction power shall be routed using conduit pipes.
- 34.3.43 Spill trays shall be used to contain the oil spills while transferring / storing them.
- 34.3.44 Tapping of power by cutting electric cables in between must be avoided. Proper junction boxes must be used.
- 34.3.45 A monthly site safety statistic shall be submitted by the contractor on the first week of Succeeding month to the Engineer in charge, in the required Performa.
- 34.3.46 In case, the night work is inevitable, the contractor concerned shall intimate in advance to the Engineer-in-Charge and security-in-charge of the **National Insurance Company**, regarding the purpose of night work, the total number and category of labour and required to be employed in the night work along with material vehicle if any to be used in detail. Having furnishing the details the contractor shall obtain necessary permission for the above work from security wing.
- 34.3.47 The contractor shall ensure that, the material vehicles received by them shall be permitted to use only the designated routs identified by the authorities of **National Insurance Company**, further they must ensure that the vehicles while returning after unloading the

materials, not to dump or washout or through any surplus / waste materials inside the campus. If any notices, the necessary penalty will be imposed and the contractor.

34.3.48.1 The contractor shall give prior cautionary advice to the drivers of the vehicles carrying men and materials required for the project regarding plying the vehicles with safety speed limit prescribed by the authorities of **National Insurance Company** to avoid any mishaps as the complex is habitat for deer's, monkeys and other animals.

34.3.48.2 Batching plant meant for production of reinforced cement concrete in larger quantity will not be permitted to setup inside the campus.

Due to the limited space available an account of environmental protection reasoning, mass storage of steel shall be avoided, the quantity required may be procured in phase wise as per the agreement condition and prior approval of Engineer-in-Charge.

INSURANCE TO BE TAKEN BY THE TENDERER AND EMPLOYER TO BE INDEMNIFIED.

Workmen's Insurance

CPWD shall not be liable for any payment in respect of any damage or compensation payable according to law in respect or in consequence of any accident or injury or loss of life to any workman other person in the employment of the contractor or his agent / representative. The contractor shall insure against such liability with an insurer approved by the Engineer-in-Charge for sum as per established norms during the entire period till completion including maintenance period.

Directives on Air Pollution from construction and demolition activity: (DG/TAS/MISC/06 dated 16.02.2017)

1. The contractor shall not store / dump construction material or debris on metalled road.
2. The contractor shall get prior approval from Engineer-in-charge for the area where the Construction material or debris can be stored beyond the metalled road. This area shall not cause any obstruction to the free flow of traffic / inconvenience to the pedestrians. It should be ensured by the contractor that no accidents occur on account of such Permissible storage.
3. The contractor shall ensure that all the trucks or vehicle of any kind which are used for construction purposes / or are carrying construction material like cement, sand and other allied material are fully covered. The contractor shall take every necessary precaution that the vehicles are properly cleaned and dust free to ensure that en-route their destination, the dust, sand or any other particles are not released in air /Contaminate air.
4. The contractor shall provide mask to every worker working on the construction site and involved in loading, unloading and carriage of construction material and Construction debris to prevent inhalation of dust particles.

5. The contractor shall provide all medical help, investigation and treatment to the Workers involved in the construction of building and carry of construction material and debris relatable to dust emission.
6. The contractor shall ensure that C&D waste is transported to the C&D Waste site only and due record shall be maintained by the contractor.
7. The contractor shall compulsory use of wet jet in grinding and stone cutting.
8. The contractor shall comply all the preventive and protective environmental steps as Stated in the MOEF guidelines, 2010.
9. The contractor shall carry out on-Road-Inspection for black smoke generating Machinery. The contractor shall use cleaner fuel.
10. The contractor shall ensure that all DG sets comply emission norms notified by MOEF.
11. The contractor shall use vehicles having pollution under control certificate. The Emissions can be reduced by a large extent by reducing the speed of a vehicle to 20kmph. Speed bumps shall be used to ensure speed reduction. In cases where speed reduction cannot effectively reduce fugitive dust, the contractor shall divert traffic to nearby paved areas.
12. The contractor shall ensure that the construction material is covered by tarpaulin. The Contractor shall take all other precaution to ensure that no dust particles are permitted to pollute air quality as a result of such storage.
13. The contractor shall comply the Construction and Demolition Waste Management Rules 2016 issued by M/o Environment and forests, GOI without any extra cost.

36. Testing Charges:

All expenditure to be incurred for testing for samples example package, sealing, loading unloading & testing charges shall be borne by the contractor. Testing should be done only in the approved laboratory, which is approved by SDG.

RIVER SAND / M. SAND

River Sand or M.Sand conform to CPWD Specifications shall be used in this work. On account of using River sand/M.Sandor both only agreement rates will be paid and nothing extra will be payable.

No Part rate is allowed for Extra item and Deviated quantities beyond the deviation limit in running bills.

No Advance payment shall be made more than 20% of tender value.

ADDITIONAL CONDITIONS

1. The contractor shall make his own arrangements for obtaining electric connections if required and make necessary payments directly to the department concerned.
2. Other agencies doing works related with this project will also simultaneously execute the works and the contractor shall afford necessary facilities for the same. The contractor shall leave such necessary holes, openings etc. for laying / burying in the work of pipes, cables, conduits, clamps, boxes and hooks for fan clamps etc. as may be required for other agencies. Conduits for electrical wiring/cables will be laid in a way that they leave enough space for concreting and do not adversely affect the structural members. Nothing extra over the agreement rates shall be paid for the same.
3. Some restrictions may be imposed by the security staff etc., on the working and for movement of labour, materials etc. The contractor shall be bound to follow all such restrictions/instructions and nothing extra shall be payable on this account.
4. The building work will be carried out in the manner complying in all respects with the requirements of relevant byelaws of the local body under the jurisdiction of which the work is to be executed or as directed by the Engineer-in-Charge and nothing extra will be paid on this account.
5. The work of water supply, internal sanitary installations and drainage work etc. shall be carried out as per local Municipal Corporation or such local body-by-laws and the contractor shall produce necessary completion certificate from such authorities after completion of the work.
6. Water tanks, taps sanitary, water supply and drainage pipes, fittings and accessories should conform to byelaws and specifications of the Municipal Body/Corporation where C P W D specifications are not available. The contractor should engage licensed plumbers for the work and get the materials (fixtures/ fittings) tested by the Municipal Body/ Corporation authorities wherever required at his own cost.
7. The contractor shall comply with proper and legal orders and directions of the local or public authority or municipality and abide by their rules and regulations and pay all fees and charge, which he may be liable.
8. The contractor shall give a performance test of the entire installation(s) as per standing specifications before the work is finally accepted and nothing extra whatsoever shall be payable to the contractor for the test.
9. Any cement slurry added over base surface (or) for continuation of concreting for better bond is deemed to have been in built in the items and nothing extra shall be payable (or) extra cement considered in consumption on this account.
10. The contractor shall take instructions from the Engineer-in-Charge for stacking of materials in any place. No excavated earth or building material shall be stacked on areas where other buildings, roads, services compound walls are to be constructed.
11. If as per Municipal / Local body rules the huts for labour are not be erected at the site of work by the contractors, the contractors are required to provide such accommodation as is acceptable to local bodies and nothing extra shall be paid on this account.
12. Wherever Hindi version also exists, and if there be variations between Hindi and English version in any part of the tender documents, the English version alone shall prevail.
13. The percentage rate quoted by the bidder for RCC works include cost of concreting in sloped & curved roof, chajjas& beams & no extra rate shall be payable.

14. The percentage rate quoted by the bidder for Centering & shuttering under concrete items include cost of Centering & shuttering in curves & arches up to 20 degrees.

15. The Contractor should construct proper mortar bands of lean mix with adequate depth & smaller size over the curved roof for flooding with water & proper curing. In case of Arches, wet gunny bags shall be used for a period of two weeks.

16. Contractor shall quote the rates for the respective items according to these samples, which are approved

17. The contractor shall produce all the materials in advance so that there is sufficient time for testing and approving the material and clearance of the same before use in work.

18. Measurement Book (EMB) through CPWD ERP portal and monthly Bills to be submitted by the Contractor.

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 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 entries in Electronic Measurement Book and level books in the ERP shall be submitted in by the contractor for RFI by JE/AE/EE alongwith intimation to the Engineer-in-charge by 20th day of every calendar month.

In case of EMB, the contractor shall record measurement online on ERP Portal and shall raise RFI (Request for Inspection) online for approval by Engineer-in-Charge or his/her authorised representative. The contractor shall create EMB for the approved RFIs and take printout of EMB having pages of A-4 size duly bound with its pages machine numbered. This online printed EMB shall be submitted in triplicate through letter of transmittal to the Engineer-in-Charge giving details of number of EMB and there number of pages by 20th day of every calendar month.

All such monthly measurements and levels recorded by the contractor or his authorized representative from time to time, during the progress of the work, shall be got checked by the contractor from the Engineer-in-Charge or his/her authorized representative as per interval or program fixed in consultation with Engineer-in-Charge or his/her authorized representative.

The contractor shall, without extra charge, provide all assistance with every appliance, labour and other things necessary for checking of measurements/levels by the Engineer-in- Charge or his/her representative.

Except where any general or detailed description of the work expressly shows to the contrary, measurements shall be taken in accordance with the procedure set forth in the specifications notwithstanding any provision in the relevant Standard Method of measurement or any general or local custom. In the case of items which are not covered by specifications, measurements shall be taken in accordance with the relevant standard method of measurement issued by the Bureau of Indian Standards and if for any item no such standard is available then a mutually agreed method shall be followed.

Mode of Measurements: -

The measurements shall be recorded and entered in Electronic format in ERP the first instance by the contractor, and a hard copy shall be submitted to the Department. All entries shall be made exactly as per the existing procedure laid down in ERP portal. Contract shall register themselves in the ERP portal and get familiarize with it for recording measurements.

These measurements shall then be 100% checked by the Junior Engineer, and test checked by the Assistant Engineer and the Executive Engineer as per the procedure. If Junior Engineer is not available, the Assistant Engineer shall perform 100% check of the measurements.

The contractor shall incorporate all such changes or corrections, as may be done during these checks/test checks, to his draft Electronic measurements, and submit to the department the final Electronic measurements in the form of a book, duly hard bound in red colour on the lines of the conventional measurement books now in use, and with its pages machine numbered.

The Junior Engineer, Assistant Engineer and the Executive Engineer shall check these Electronic measurements to ensure that all the changes or corrections made by them earlier in the draft measurements are correctly incorporated in the final measurements. This book shall be treated as a Electronic Measurement Book.

The Junior Engineer, Assistant Engineer and the Executive Engineer shall record the necessary certificates for their checks and test checks as per the existing procedure in this Electronic Measurement Book through RFI module in ERP.

The contractor shall give not less than seven days' notice to the Engineer-in- Charge or his/her authorized representative in Charge of the work before covering up or otherwise placing beyond the reach of checking and/or test checking the measurement of any work in order that the same may be checked and/or test checked and correct dimensions thereof be taken before the same is covered up or placed beyond the reach of checking and/or test checking measurement and shall not cover up and place beyond reach of measurement any work without consent in writing of the Engineer-in-Charge or his/her authorized representative in charge of the work who shall within the aforesaid period of seven days inspect the work, and if any work shall be covered up or placed beyond the reach of checking and/or test checking measurements without such notice having been given or the Engineer-in-Charge's consent being obtained in writing the same shall be uncovered at the Contractor's expense, or in default thereof no payment or allowance shall be made for such work or the materials with which the same was executed.

Engineer-in-Charge or his/her authorized representative may cause either themselves or through another officer of the department to check the measurements/levels recorded by contractor and all provisions stipulated herein above shall be applicable to such checking of measurements or levels.

It is also a term of this contract that checking and/or test checking the measurements / levels of any item of work in the measurement book and/or its payment in the interim, on account of final bill shall not be considered as conclusive evidence as to the sufficiency of any work or material to which it relates nor shall it relieve the contractor from liabilities from any over measurement or defects noticed till completion of the defects liability period.

The Electronic Measurement Book shall be allotted a serial number as per the Register of Electronic Measurement Books by Engineer-in-charge.

10. Cutting or over-writing in the Electronic M.B. not allowed.

Computerized Bill to be submitted by the contractor

i) The Electronic Measurement Book is to be initiate by the contractor in ERP and initiate Request For Inspection (RFI) by JE/AE/EE.

It is the responsibility of the Junior Engineer, Assistant Engineer and the Executive Engineer to ensure that the checks and test checks done by them in the initial draft measurements are correctly incorporated in the Electronic Measurement Book before they record their certificates. In case of any error, the Electronic Measurement Book shall be cancelled, and the contractor shall resubmit a fresh Electronic Measurement Book.

This should be done before the corresponding Electronic bill is submitted to the Division for payment.

The contractor shall submit as many copies (minimum of 2 Nos.) of Electronic Measurement Books as may be required, and as are specified in the NIT/contractor, for the purpose of reference and record in the various offices of the department.

v) The contractor shall submit his running and final bills in a computerized form in the same format as the existing conventional bills, with all the pages machine numbered, and hard bound, and with all the entries made as per the existing procedure.

vi) The contractor shall submit as many copies of the computerized bills as may be required for the purpose of reference and record in the various offices of the department.

The bill shall be carried forward from the previous running account bill as per the existing procedure.

These computerized bills shall be processed by the various offices for payment, as per the existing procedure.

22.PROGRESS REPORT

22.1 Progress Reports – Submission by the Contractor

The contractor has 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) Project information, giving the broad features of the contract.
- (ii) Introduction, giving a brief scope of the work under the contract, and the broad structural or other details.
- (iii) Construction schedule of the various components of the work through a bar chart for the next 3 quarters (or as may be specified), showing the milestones, targeted tasks and up to date progress.
- (iv) Progress chart of the various components of that are planned and achieved, for the month as well as cumulative up to the month, with reasons for deviations, if any, in a tabular format.
- (v) Plant and machinery statement, indicating those deployed in the work, and their working along with their designations.
- (vi) Manpower statement, indicating individually the names of all the staff deployed in the work, along with their designations.
- (vii) Financial statement, indicating the broad details of all the running account payments received up to date, such as gross value of work done, advances taken, recoveries effected, amounts withheld, net payments, details of cheque payments received, etc.
- (viii) A statement showing the extra and substituted items submitted by the contractor, and the payment received against them, items pending for sanction/decision by the Department, broad details of the bank guarantees, indicating clearly their validity periods, broad details of the insurance policies taken by the contractor, if any, the advances received and adjusted from the department, etc.
- (ix) Progress photographs, in colour, of the various items/components of the work done up to date, to indicate visually the actual progress of the work.
- (x) Quality assurance and quality control tests conducted during the month, with the results thereof.

22.2. PROGRESS REPORT TO BE SUBMITTED BY CONTRACTOR

The progress report submitted by the contractor has to be checked and certified by the Junior Engineer or Assistant Engineer, and has to be reviewed by the Executive Engineer and the Superintending Engineer, over their dated signatures.

A. Physical

Name of Item	Quantity as per Agreement	Quantity executed during the month	Total up to date quantity executed	Anticipated balance quantity
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B. Financial

Total tendered amount	Work done during the month	Total amount of work done up to date	Anticipated amount of balance work
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The contractor has to submit the progress report to the Sub Division office in quadruplicate by **5th day of every month** as per the above proforma along with photographs of the work done during that month. The contractor shall be charged at **Rs.2500/-** (Rupees Two thousand Five Hundred only) in the event of non-receipt of monthly progress report on due date (i.e. on 5th day of every month) to the Sub Division office in the manner prescribed above. In case 5th day happens to be a closed holiday then the progress report will be submitted on the next working day.

**PARTICULAR SPECIFICATION AND SPECIAL CONDITIONS FOR CEMENT,
STEEL AND ALUMINIUM BROUGHT BY THE CONTRACTOR**

1.0.CEMENT

1.1.The contractor shall procure **Pozzolana Portland Cement** , as required in the work, from reputed manufacturers of having a production capacity of *one million tonnes per annum or more*, such as ACC, Ultra Tech, J.P.Rewa, Vikram, Shree Cement, Birla Jute and Cement Corporation of India, Coromondal, Chettinad etc., as approved by the Ministry of Industry, Government of India, and holding license to use ISI certification mark for their product whose name shall be got approved from the Engineer-in-Charge. Supply of cement shall be taken in 50 kg bags bearing manufacturer's name and ISI marking. Samples of cement arranged by the contractor shall be got tested in accordance with provisions of relevant BIS codes. In case, test results indicate that the cement arranged by the contractor do 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.

1.2.The cement shall be brought at site in bulk supply of approximately **50 tonnes** or as decided by the Engineer-in-Charge.

1.3.The cement go-down of the capacity to store a minimum of 2000 bags of cement shall be constructed by the contractor at site or work for which no extra payment shall be made. Double lock provision shall be made to the door of the cement go-down. The keys of one lock shall remain with the Engineer-in-Charge or his authorized representative and the key of the other lock shall remain with the contractor. The contractor shall be responsible for the watch and ward and safety of the cement go-down. The contractor shall facilitate the inspection of the cement godown by the Engineer-in-Charge at any time.

1.4.The contractor shall supply free of charge the cement required for testing. The frequency and the details of the tests shall be decided by the Engineer-in-Charge depending on the quantum of supply in each batch.

1.5.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 the contract and shall be governed by conditions laid therein. Items for which standard coefficients for cement consumption are not available in **DSR 2023**, the same shall be decided by the Engineer-in-Charge.

1.6.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.

1.7.The cement bags shall be stacked on proper floors consisting of two layers of dry bricks laid on well-consolidated earth at a level of at least one foot above ground level. The stacks shall be in rows of 2 and 10 bags high with minimum of 0.60 m clear space around. The bags should be placed horizontally continuous in each line. Actual size/shape of godown shall be as per site requirements and nothing shall be paid on this account. The decision of Engineer-in-Charge regarding capacity shall be final.

1.8.Cement register for the cement shall be maintained at site. The account of daily receipts and issues of cement shall be maintained in register in the pro forma prescribed and signed daily by contractor or his authorized agent.

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

shall be worked out as per procedure prescribed in Clause 42 of GCC and shall be governed by conditions therein.

In case Cement consumption is less than theoretical consumption including permissible variation, recover at the rate so prescribed shall be made after ensuring structural soundness and stability on the basis of testing. In case of excess consumption, no adjustment to be made.

1.10. The cement brought to site and the cement remained unused after completion of the work shall not be removed from the site without written permission of the Engineer-in-Charge.

1.11. The damaged cement shall be removed from the site immediately by the contractor on receipt of a notice in writing from the Engineer-in-Charge. If he does not do so within 3 days of receipt of such notice, the Engineer-in-Charge shall get it removed at the cost of contractor.

2. STEEL

2.1. The contractor shall procure steel from primary manufacture only. i.e. RINL, SAIL, TISCO & JSW steel Ltd., JINDAL Steel & Power Ltd. conforming to the manufacturer's specification from main producers only as approved by the Ministry of steel for TMT (Fe 500-D) bars, conforming to relevant BIS code. Procurement shall be made from main producers. The contractor shall have to obtain and furnish test certificates to the Engineer-in-charge in respect of all supplies of steel brought by him to the site of work. 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 BIS Codes, the same shall stand rejected and shall be removed from the site of work by the contractor at his cost within a week's time from written orders from the Engineer-in-charge to do so.

2.2. The steel reinforcement shall be brought to the site in bulk supply of 10 tonnes or more or as decided by the Engineer-in-Charge.

2.3. The steel reinforcement shall be stored by the contractor at site of work in such a way as to prevent distortion and corrosion and nothing extra shall be paid on this account. Bars of different sizes and lengths shall be stored separately to facilitate easy counting and checking.

2.4 For checking nominal mass, tensile strength, bend test, re-bend test, etc. specimen of sufficient length shall be cut from each size of the bar at random at frequency not less than specified 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

2.5 The Actual issue and consumption of steel on work shall be regulated and proper accounts maintained as provided in the contract. The theoretical consumption of steel shall be worked out as per procedure prescribed in the contract and shall be governed by conditions laid therein.

Steel brought to site and steel remaining unused shall not be removed from site without the written permission of the Engineer-in-Charge.

(Modification is made vide circular DG/CPWD Works Manual/350 dt.29.06.2017)

The guidelines for use of reinforcement bars in structures will be dealt as per**(Modification is made vide circular OM No.DG/SOP/24 dt: 03.09.2021)**

SPECIAL CONDITIONS FOR STEEL

Sl.No	Item	Checkpoint	Remarks
1	Steel Producer having manufacturing facilities at Plant	a Factory address and Registration no	
		b Certificate of manufacturing process	
		c Refining process of steel producer	
		c.1 BF-BOF route	
		c.2 Corex – BOF route	
		c.3 DRI – EAF route	
		With documentary evidence either for BOF or EAF	
		D Steel plant having infrastructure for producing sponge iron, billete and TMT Rebar's	
		E Production and Quality Flow Chart	
		f Plant Evaluation and Process Verification	
		G List of Plant & Machinery	
2	Established	Document verification for:	
		a Govt. / PSU Approvals	
		b Supply orders of TMT Re-bars in govt. Projects (Minimum-5 years)	
		c Verification of direct supply orders to any state/central govt. Department.	
		D Users Certificate issued by any Govt. Department directly	
3	Indigenous	Documentary evidence like:	
		a Certificate or incorporation	
		b Memorandum of Articles of Association	
		c Credit rating of the company from CARE/CRISIL/ICRA should not be C/D grade (minimum last 3 year)	
4	Reliable	a Test results from Govt/ NABL accredited laboratories	
		b In-house testing facility for physical/Chemical tests (NABL accredited)	
		d Calibration Certificates	
		e List of Lab Equipment's	
		e.1 Spectrometer	
		e.2 Computerized UTM	
5	Use of Iron-Ore/Processes Iron are as basic raw materials	Verification of Iron-Ore/Process iron ore invoices	

6	In-house rolling facility	Plant verification to identify in-house rolling facilities production of liquid steel & crude steel	
7	Licences & Certificates	a ISO 9001: 2008 Certification	
		b ISO 14001: 2004 Certification	
		c OHSAS 18001: 2007 Certification	
		d IS 1786: 2008 (TMT Re-bars)	
8	Product Range	e IS 2830 1992 (Billets)	
		TMT Re-bars FE	
		415/415D/500/500D500/550D	
		CRS (Corrosion Resistant) & EQR (Earthquake Resistant) TMT Re-bars, Size 8 to 36 mm dia	

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

BF-BOF-> Blast Furnace – Basic Oxygen Furnace ,

COREX-BOF->COREX Furnace – Basic Oxygen Furnace

The standard section weights referred to as standard tables in Para 5.3.3 in CPWD Specifications, 2002 to be considered for conversions of length of various sizes of MS bars and cold twisted bars/high yield strength deformed bars / thermo-mechanically treated bars into weight are as under:

DIAMETER IN mm	WEIGHT IN KG/M
6	0.222
8	0.395
10	0.617
12	0.888
16	1.579
18	1.999
20	2.467
22	2.985
25	3.855
28	4.836
32	6.316

For steel, measurement will be regulated on sectional weight basis, weight being calculated with help of above tables. The weight shall be taken as per actual basis, if found lower than the standard weight but within tolerance limit as per relevant BIS codes. Steel reinforcement having actual weight less than the standard weight as well as exceeding the tolerance limit on the minus side as specified in the relevant BIS codes shall be rejected and shall not be used in the work. Nothing extra shall be paid for overweight of steel sections than given in the table. The mild steel to be used shall conform to IS: 432 – Cold Twisted Bars/High Yield Strength deformed bars shall conform to IS: 1786-2008 & thermo-mechanically treated bars shall conform to relevant BIS codes. The contractor shall submit challan /bill/gate pass/cash memo in support of material purchased from manufacturers/their authorized dealers.

Corrections : Nil, Deletions : Nil, Insertions : Nil, Overwriting : Nil,

AE (P)

EE

Over theoretical quantities of materials, so computed, a variation shall be allowed as specified in schedule 'F'.

If the quantities of materials actually used are less than the theoretical quantities including authorized variation on the minus side, the cost at market rates including cartage to the site of such quantities of materials, less used at site, as determined by Engineer-in-Charge which shall be final and binding, shall be recovered from the contractor without prejudice to department rights/remedies available under the contract, for action against substandard work. Nothing extra is payable if the quantities of materials actually used are more than the theoretical quantities including variation allowed in Schedule "F".

PARTICULAR SPECIFICATIONS – ALUMINIUM WORK

1. The material for the work shall be procured from the approved manufacturer as per the list attached with the tender documents. The Contractor shall procure and submit samples of various materials to be used in the work for the approval of Engineer-in-Charge and no work shall commence before such samples are approved. Samples of un-anodized as well as polyester powder coated aluminum sections, microwave cured EPDM gaskets, glass, stainless steel screws, anchor fasteners, hardware and any other material or components requiring approval of samples, in opinion of Engineer-in-Charge, shall be submitted for the approval as mentioned above. The above samples shall be retained as standards of materials and workmanship.

2. The Contractor shall prepare the shop drawings for the aluminum windows giving details of the various aluminum sections, microwave cured EPDM gaskets, cleats, anchor fasteners, hardware, sealants, glass etc. and submit the same for the approval of Engineer-in-Charge.

3. Only after the approval of the samples and the shop drawings by the Engineer-in-Charge, the Contractor shall procure the material for the work. All materials brought to the site by the Contractor, for use in the work, as well as fabricated components shall be subject to inspection and approval by Engineer-in-Charge. The Contractor shall produce manufacturer's test certificates for any material or particular batch of materials supplied by him.

4. The Contractor shall prepare a finished sample of the aluminum window along with glazing panel and fittings etc. for approval of workmanship and material. Nothing extra shall be payable on this account.

5. Aluminum sections to be used for various works shall be appropriate to meet technical, structural, functional and aesthetic considerations. The polyester powder coating shall be carried out in an approved factory / workshop as specified in the tender documents.

6. Fabrication

6.1 All joints shall be accurately fabricated and be hairline in appearance. The finished surface shall be free from visible defects. All the aluminum windows/ventilators/doors shall be factory made and shall be brought to site for assembly and fixing.

6.2 All hardware used shall conform to the relevant specifications and as per samples approved by the Engineer-in-Charge. Design, quality, type, number and fixing of hardware shall be generally in accordance with architectural drawings and as approved by the Engineer-in-Charge before use.

6.3 All doors, windows, ventilators and glazing etc. shall be made water tight with microwave cured EPDM gaskets and weather silicone sealants to the satisfaction of the Engineer-in-Charge, for which nothing extra shall be payable.

6.4 The frames shall be strictly as per Architectural drawings, the corners of the frame being fabricated to the true right angles. Both the fixed frames and Openable shutter frames shall be fabricated out of sections cut to required length, mitered and mechanically jointed for satisfactory performance. All members shall be accurately machine milled and fitted to form hairline joints. The jointing accessories such as aluminum cleats, stainless steel screws etc. shall not to cause any bi-metallic reaction by providing separators, wherever required. 6.5 Vertical members of the aluminum frame work shall be embedded in the floors, wherever required, by cutting and making good of the floor.

7. FIXING OF ALUMINIUM FRAME WORK

7.1 The screws used for fixing fixed aluminum frames of the aluminum windows to masonry walls / RCC members and aluminum members to other aluminum members shall be of stainless steel of approved make and quality and of stainless steel grade 304. Threads of machine screws used shall conform to requirement of IS 4218.

7.2 For the aluminum windows, the gap between the aluminum frames and the R.C.C / Masonry and also any gaps in the various sections shall be filled with weather silicone sealant DC 795 of Dow Corning or equivalent in the required bite size, to ensure water tightness including providing and fixing backer rod, wherever required. The weather silicone sealant shall be of such approved colour and composition that it would not stain or streak the masonry / R.C.C. work. It should not sag or flow and shall not set hard or dry out under any conditions of weather and shall be tooled properly. The weather silicone sealant shall be used as per the manufacturer's specifications and shall be of approved colour and shade. Any excess sealant shall be removed / cleared. Nothing extra shall be payable for the above.

1.3 Fixing of glass panes shall be designed in such a way that replacing damaged / broken glass panes is easily possible without having to remove or damage any members or interior finishing materials.

8. PROTECTIONS AND CLEANING:

8.1 All glass panes shall be retained within aluminum framing by use of exterior grade microwave cured EPDM gaskets. Use of glazing or caulking compounds around the perimeter of glass will not be permitted. There shall be no whistling or rattling. Before installation of glass, Contractor shall ensure the following:

8.1.1. All glazing rebates shall be square, to plumb, true to plane, dry and free from dust.

8.1.2. Glass edge shall be clean and cut to exact size and grounded

8.2 Low 'E' – Heat strengthened glass of specified thickness in doors, windows, ventilators and fixed glazing etc. shall be of approved make and standard quality conforming to C.P.W.D. Specifications.

8.3. 4 mm thick glass panes shall be provided for openings not exceeding 0.5 sqm. For openings exceeding 0.5 Sqm in area, 5.0 mm thick glass panes shall be provided unless specified otherwise.

9 MEASUREMENT AND RATES:

9.1 Aluminum frame work shall be measured as per CPWD specifications.

9.2 For glazing, the actual area of the glass panels excluding the portion in the beading shall be measured in Sqm upto two decimal places, for payment.

9.3 Stainless steel adjustable heavy duty friction hinges and the aluminum handles for the openable side hung windows shall be of "Earl Bihari "Ebco, make or equivalent as approved by the Engineer-in-Charge. 2 nos. friction hinges shall be provided per shutter.

9.4 The cost of designing and preparation of shop drawings, all the samples, mock up of window etc. is deemed to be included in the cost of the relevant items. Nothing extra shall be payable on this account.

9.5 The item for aluminum for fixed portions for aluminum windows and frame work for partitions shall include cost of all inputs of labour, polyester power coated (anodized aluminum sections, including cleats, other fixtures, weather silicone sealants, stainless steel screws, nuts, bolts, rawl plugs, backer rods, polyethylene tapes etc. which shall be required for fabrication and erection of aluminum work) T & P, all incidental charges, wastages etc. involved in the work. However, for the purpose of payment, the weight of aluminum sections for the fixed window frame and frame work for partitions shall be measured in Kg. The aluminum cleats, stainless steel screws, nuts, bolts, separators etc. shall not be measured separately for payment and their cost is deemed to be included in the cost of this item. The item for aluminum for frame work for fixed partitions shall also include cost of providing and fixing stainless steel anchor fasteners as required.

1.6 The item of aluminum for the openable aluminum shutters for windows and doors etc., shall include cost of all inputs of labour, material (polyester powder coated aluminum sections, including such as cleats / angles, other fixtures, stainless steel screws nuts, bolts, stainless steel hinges, weather silicone sealant etc. which shall be required for fabrication of aluminum work) T & P, all incidental charges, wastages etc. involved in the work. However, for the purpose of payment, the weight of aluminum sections for the window shutter (sash frame) shall be measured in Kg. The aluminum cleats, stainless steel anchor fasteners, screws, nuts, bolts, separators, stainless steel hinges, etc. shall not be measured separately for payment and their cost is deemed to be included in the cost of this item. The anodized aluminum snap beading for fixing glass panels in the openable shutters of the windows shall be measured separately (on weight basis) and paid under this item of aluminum frame work for window shutters.

9.7 The glass shall be paid for separately under relevant item. The cost providing and fixing Microwave cured EPDM gasket, felt etc. is included in the cost of this item and shall not be measured separately for payment.

9.8 The item for the aluminum frame work includes cost of making provision for fixing fittings, wherever required, as per the item description (The cost for providing fitting (handle, lock and buffer) shall be paid for separately).

10.0. GUARANTEE FOR ALUMINIUM WORK

10.1 The contractor shall be fully responsible for and shall guarantee proper design and performance of his installed system for a period of 10 years from the date of completion of work.

10.2. The design and installation shall be to the best international standards and shall specially take account of wind and seismic loads, storms, thermal stresses, building movements and the like.

10.3. In additional 10 year guarantee (to be furnished in non-judicial stamp paper of value Rs.100/-) in prescribed Performa shall be given for performance of glazed units, anodizing, EPDM/silicon gaskets and sealants. All the Guarantees shall be submitted before final payment and shall not in any way limit any other rights to correct which the Employer may have under the Contract.

10.4. In addition 2% (two percent) of the cost of all the items under sub-head ALUMINIUM WORK, as mentioned in schedule of quantities, shall be withheld from the bills towards guarantee as specified above. This amount to be withheld towards guarantee shall be in addition to the other amounts to be

withheld as mentioned elsewhere in the contract agreement. However, half of this amount (withheld) would be released after five years from the date of completion of the work, if the performance, as required, is satisfactory. The remaining withheld amount shall be released after 10 years from the date of completion of work, if the performance, as required, is satisfactory. If any defects is noticed during the guarantee period, it shall be rectified by the contractor within seven days of issue of notice to the contractor, temporarily, to the satisfaction of the CPWD / Client Department or any other authorized representative of client department and within a period of one month the permanent rectification of the defects/replacement of defective materials should be carried out by the contractor. If not attended to, the same shall be got done through other agency at the risk and cost of the contractor and the cost, which shall be final and binding on the contractor, shall be recovered from the amount withheld towards the guarantee as mentioned above or any other amount due to the contractor. However, the amount withheld as guarantee can be released in full, irrevocable bank guarantee, from a Schedule/Nationalized Banks, of the same amount, for the guarantee period is submitted by the contractor in favour of CPWD. The defects, if any, shall be rectified in a workmanlike manner, retaining the same aesthetics and other functional parameters of the original work.

3.0—PARTICULAR SPECIFICATION AND ADDITIONAL CONDITIONS FOR WATER PROOFING WORK

The work shall be got executed as per CPWD Specifications and as per the manufacturer's specification through specialized agency as approved by the Engineer-in-Charge.

The contractor shall furnish the following particulars immediately after the issue of letter of acceptance by the Department.

The name of the specialized firm.

The trade names of the product, which would be used.

List of works where the treatment has been used.

Quantity of chlorides and sulphides used in the product.

4.0 GUARANTEE FOR WATER PROOFING TREATMENT

The contractor shall be fully responsible for and shall guarantee proper performance of the entire waterproofing system for a period of 10 (Ten) years from the final completion of works. In addition, specific 10 years written guarantee (to be furnished in a non-judicial stamp paper of value not less than Rs.100/-) in approved proforma shall be submitted for the performance of the system, before final payment and shall not in any way limit any other rights the Employer may have under the contract. Guarantee for water proofing shall comprises of all the items described above in particular specification.

All water-proofing work shall be carried out through approved specialist agency as per method of working approved by the Engineer-in-charge. However the Contractors shall be solely responsible for waterproofing treatment until the expiry of the above guarantee period.

Ten years guarantee in prescribed proforma attached shall be given by the contractor for the water proofing treatment. Towards that 10% (ten percent) of the cost of these items of water proofing under this sub head shall be retained as guarantee to watch the performance of the work executed. However, half of this amount (withheld) would be released after five years from the date of completion of the work, if the performance of the waterproofing works is satisfactory. The remaining withheld amount shall be released after completion of ten years from the date of completion of work, if the performance of the waterproofing work is satisfactory. If any defect is noticed during the guarantee period, it should be rectified by the contractor within seven days of issuing of notice by the Engineer-in-Charge and, if not attended to, the same shall be got done through other agency at the risk and cost of the contractor and

recovery shall be effected from the amount retained towards guarantee. In any case, the contractor and the specialist agency, during the guarantee period, shall inspect and examine the treatment once in every year and make good any defect observed and confirm the same in writing. The security deposit can be released in full, if bank guarantee of equivalent amount, valid for the duration of guarantee period, is produced and deposited with the Department.

5.0UPVC WINDOWS:

All openable and fixed window system shall have minimum 3 hollow chambers from front to back. The sliding system frames shall have minimum 3 chambers from front to back. All sections of the frame and sash shall be reinforced in accordance with the system supplier's recommendations using galvanized mild steel in a single continuous length.

GENERAL REQUIREMENTS- Profile

The profile is to be extruded from a compound that has been blended to ensure quality and consistency. The material shall be white or of approved shade, high impact modified window grade UPVC and shall be colorfast and conform to BS EN 12608:2003 as below:

Description of Material	Required Value
Flexural modulus of Elasticity	Shall not be less than 2200 N/mm ²
Resistance to impact by falling mass at – 10 °C for Class II(falling mass 1000g ; falling height 1500mm - as per BS EN 12608:2003)	not more than 1 test specimen shall show rupture in wall
Mean Breaking Stress for welded corners	Shall not be less than 35N/mm ² for compression bending test or 25N/ mm ² for tensile bending test

The profile shall be a hollow 3-chamber (across depth) profile with an outer wall thickness not less than 2.4 mm. The profile shall be of first grade/quality uniform and free from foreign bodies, cracks or marks.

Fabrication of window

The window units shall be designed with all corner joints, transom joints and mullion joints being mitred and fusion welded.

All excess material is to be neatly trimmed and neatly feature grooved/raised nib finish at corners, transom joints and mullion joints.

There will be no mechanical joining of the profile.

No polishing flush of any joints will be permitted.

The window units shall be designed so that the route of drainage is prevented from passing through the reinforcement chamber.

The finished product shall be free from all sharp edges, burrs and the like that may be hazardous to the user.

The dimensional tolerances on the finished outer frame height and width shall be + 3mm. Frame assemblies shall be such that they can be installed square within a maximum difference in the diagonals of 4mm. Minimum overlap of sash on frame shall be 8mm

In all window units, adequate drainage should be provided to permit the escape of water from platforms or horizontal members beneath each sealed unit. The drainage slots shall not penetrate into the reinforcement chambers. Rain water Stop to be provided wherever necessary to provide barrier to excess rain water.

6.0 STANDARD OF ACCEPTANCE

Standard of acceptance shall be as specified in CPWD Specification 2019 Field laboratory: The contractor shall at his own cost, equip and establish a field laboratory at the site of work with requisite man power for carrying out all mandatory tests for RCC works. The apparatus, instrument and equipment to be provided in the laboratory, is as per the drawings and directions of the Engineer – in – Charge.

FORMS FOR GUARANTEE BONDS
GUARANTEE BOND FOR REMOVAL OF DEFECTS OF WATER PROOFING WORKS.

This Agreement made this _____ day of _____ two thousand and _____ between _____ (Name of the contractor, hereinafter called the Guarantor on the one part) and President of India (hereinafter called the Government on the other part).

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

AND WHEREAS THE GUARANTOR agreed to give a guarantee to the effect that the said structures will remain water and leak proof for ten years from the date of completion of the work.

NOW THE GUARANTOR hereby guarantees that water proofing treatment given by him will render the structures completely leak proof and the minimum life of such water proofing treatment shall be ten years to be reckoned from the date of completion of the work as a whole.

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 water 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 water 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 defects being found, render the building water-proof at his cost to the satisfaction of the Engineer – in- Charge, and shall commence the work for such rectification within seven days from the date of issue of the notice from Engineer – in – Charge calling upon him to rectify the defects, failing which the work shall be got done by Department through 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 execute the necessary rectification of water proofing or commits breach there under, then the Guarantor will indemnify Engineer-in-Charge and his successors against all loss, damage, cost expense or otherwise which may be incurred by him by reasons of any default on the part of GUARANTOR in performance and observance of this supplementary agreement. As to the amount of loss and / or damage and / or cost incurred by the Government, the decision of the Engineer – in – Charge will be final and binding on the parties.

IN WITNESS WHEREOF these presents has been executed by the Obligator
_____ and by _____ and for an onbehalf 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 PRESIDENT OF INDIA BY in the presence of:

- 1.
- 2.

LIST OF APPROVED MAKE OF MATERIALS

Name of work: Upgradation of 1No. HIG office, 2Nos. HIG Quarters and 2Nos. MIG Quarters at OCR Complex, SIB, Salem.

List of Approved materials			
Sl.No	Material Description	Material	
		Brand	Make
1	Chloropyriphos	PIRAMID	AMVAC AGRI RASAYAN Pvt. Ltd.
		NOBAN	Chemtts Wets & Flows Pvt. Ltd.
		DURSBANTCT	DE-NOCIL Ltd.
		Premise Agenda	Bayer Ltd
		HILBAN	Hindustan Insecticides Ltd.
		Sarups Pest Control	Sarups Pest Control Ltd.
2	Ordinary Portland (43 grade) and Portland Pozzalona Cement.	ACC	ACC cements Ltd
		Ultra Tech	Ultra Tech Cement Ltd.
		Coromandal	India Cements Ltd.
		Birla	Birla Corportion Ltd.
		Chettinadu	Chettinadu Cements Corportion Ltd.
		Bharathi	Bharathi Cement Corportion Ltd.
		Dalmia	Dalmia Cement Bharat Ltd.
		Zuari	Zuari Cement Limited
		Jaypee Cement.	Jaypee Cement Ltd.
		Maha Cement	Myhome Industries Pvt.Ltd.
		J.K.Cement	J.K.Cement Pvt.Ltd.
		Ambuja Cement	Ambuja Cements Ltd.
		Penna Cement	Penna Cement Industries Ltd.
		Konark Cement	Konark Cement
		Century Cement	Birla Gold Cement
		Shree Cement	Shree Cement
		Ramco Cement	Ramco cements Ltd.
		Sagar Cement	Sagar Cements Ltd
		Emami Cement	Emami Cements Ltd
3	Damp Proof material	MAPEI	MAPEI Construction Products India P Ltd.
		Ferrous Crete	Ferrous Crete (India) Pvt Ltd
		Impermo	Snowcem Paints
		Duraseal	Apurva India Pvt. Ltd.
		ACCO Proof	ACC Cement Ltd.
		Dr. Fixit	Pidilite Industries
		Fosroc	Fosroc Chemicals India Pvt. Ltd.

		CICO	CICO Industries
		SIKA	Sika India Pvt. Ltd
		PIDILITE	Pidilite Industries Ltd.
		BASF	BASF India Ltd
		MYK	MYK LATICRETE India Pvt. Ltd
		Asian Paint smartcare	Asian Paints Ltd
		WeatherCoat Roofguard	Berger paints
		Polytancrreteiwl	Sunanda speciality coatings Pvt Ltd.
		Wallshield2K	Berger paints
4	TMT bars Fe-500D & more	SAIL	Steel Authoirty of India Ltd.
		TISCO	TATA STEEL Ltd
		VIZAG	Rastriya Ispat Nigam Ltd.
		JINDAL PANTHER	Jindal Steel & Power Limited
		JSW	JSW Steel Ltd
5	Plasticiser & Super Plasticiser	Contrament, Power flow	MC Bauchemie (India) Pvt. Ltd
		Sunanda Chemicals	Sunanda Chemicals Ltd.
		MYK Schomburg	MYK Arments range of products
		Plastiment, Sikament	Sika Inida Pvt Ltd.,
		Conplast SP430	FOSROC India
		Chryso-HP / Delta / Optima	Chryso India Pvt. Ltd.,
		BASF	BASF India Ltd
		CICO	CICO Industries
		Endura	H.R.Jhonsons
		Smart Care Techno Plast/Smart Care Maximo Plast	Asian Paints Ltd
6	Expansion Joint Bitumen board	Dura board HD100	Supreme Industries
		STP	Shalimar Tar Products
		DURAFILL	Supreme Industries
7	Post tensioning System	CRUX	Crux Processing systems Pvt Ltd.,
		VSL	VSL India Pvt Ltd.
		Ultracon	Ultracon Structural Systems Pvt Ltd
		BBR	BBR (India) Pvt . Ltd
8	PT Strands	DP wires	D.P Wires Ltd.
		TATA wiron	TATA Steel Ltd.,
		Usha Martin	Usha Martin Ltd

9	Adhesive	Dunlop	India Tyre & Rubber Co (India) Ltd.
		Vamorganic	Vamorganic Ltd.,
		Sika	Sika India Pvt. Ltd
		Fevicol	Pidilite Industries
		CICO	CICO Industries
		Proofex of adhesive	FOSROC India Ltd
		Kerabond Plus	MAPEI Construction Products India P. Ltd.
		Asian Paint	Asian Paints Limited
10	Grout	Ardex	Ardex Endura Adhesive India Pvt. Ltd
		Ferrous Crete	Ferrous Crete (India) Pvt Ltd
		LATA POXY	MYK LATICRETE India Pvt. Ltd
		BASF	BASF India Ltd
		FosrocGP2	Fosroc India Ltd
		MYK Schomburg	MYK Arments range of products
		Fugabella, Porcelana	Kerakoll India Pvt. Ltd
		Dr. Fixit	Pidilite Industries
		Kerapoxy	MAPEI Construction Products India P. Ltd.
		Weber	Saint-Gobin India Pvt. Ltd
11	Ready Mix Concreate	Ultra Tech ACC RMC (India) Lafarge	Ultra Tech Concrete ACC Ltd RMC (India) Pvt. Ltd. Lafarge India Pvt. Ltd
12	AAC Blocks	Xtralite	UITRATECH Cement Ltd
		Areocon	HIL
		Siporex	SIPOREX
		Nucon	Green way building materials India Pvt. Ltd
		NCL	NCL VEKA Ltd.
		Renacon	Renaatus Procon Pvt. Ltd.
13	Wooden Flush door	Jayna Flush Doors	Jain Wood Industries

	shutters	Raavella door	Raavella Industrials (P) Ltd
		Kailash	Kailash Hi tech Timber Industries India Pvt. Ltd
		Indian Timber Products	Indian Timber Products
		Shakthi	Shree Shakthi Modern Flush doors
		Greenlam	Greenlam Ply Industries Ltd.
		Mayur	Mayur Ply Industries
		MP Ply wood products	MP Wood products
		Kitply	Kitply Industries Ltd.
		Duro Flushdoors	Duro Ply Industries Ltd.
		Kenwood	Kenwood Ply & Board
		Century	Century Flush Doors
		BLACK COBRA	Punjab Plywood Industries
		Jain Doors Pvt Limited	Jain Doors Pvt Limited
		A - 1 TEAK PRODUCTS	A - 1 Teak Products Pvt Ltd.
		DEC	D.E.C Industries Private Limited.
14	Water Proof Plywood, Commercial Ply, Fire retardant Ply and Block Boards	Jayna ply	Jain Wood Industries
		Green ply	Green Ply Industries Ltd.
		Kit ply	Kit Ply Industries Ltd
		Duroply	Duro Ply Industries Ltd.
		Archid ply	Archid ply industries Ltd.
		Century Ply	Century Flush Doors
		Wuud Ply	M/s Prime Veneers Ltd
15	Laminate	Green Lam	Green lam Industries Ltd.
		Centuary	Centuray laminates
		Merino	Merino laminates
		Archidply	Archid ply industries Ltd.
		Sonear	Sonear Laminates
		Royal touche	Royal touche laminates
		Kitmica	Kitply Industries Ltd.
		Sunmica	Sunmica Industries
		Vidya Ply	Vidya Ply and Board Pvt Ltd
		Formica	Formica Laminates (India) Pvt Ltd.
		Decolam	Decolam India Pvt Ltd.
	Laminate 1.00 mm thick	HERITAGE	DECO MICA Limited.
16	Prelaminated particle board, Exterior Grade.	Merino	Marino laminates
		Kitlam	Kit Ply Industires Ltd,
		TESA Action Co.	TESA Action Co.
		Ecoboard	Ecoboard Industries Ltd.

		Associate	Associate Décor Limited
		Archid ply	Archid ply industries Ltd.
		Centuary	Centuary MDF
		Green Lam	Green lam Industries Ltd.
17	High Density (HDF) Prelaminated board	Pergo	Red Floor India
		Green Ply	Green Ply Industries Ltd.
18	Gypsum board	Gyproc Saint Gobain	Saint Gobain Gyprock India Ltd.,
		Lafarge	Lafarge Gypsum India Pvt. Ltd
		USG Boral Board	USG Board India (P) Ltd.
		Armstrong	Armstrong world Industries
19	Glass door hardware	Dorma	Dormakaba India Pvt Ltd
		Kich	Kich Architectural Products Ltd.
		Classic	Classic hardware
		Squash	Squash glass doors
		Hafele	Hafele India Pvt. Ltd
		Ozone	Ozone Hardware.
		Geze	Geze GMBH
		Dorset	Dorset Industries Pvt Ltd
20	Hydraulic door closers/ Floor springs	Garg	D.P.Garg Pvt Ltd, Delhi
		Godrej	Godrej locking solution & systems
		Hardwyn	Hardwyn hardware
		MAGNUM KIT	Mukund Overseas
		Dorma	Dormakaba India Pvt Ltd.
		Everite	Everite agencies
		Dorset	Dorset Industries Pvt Ltd
		Geze	Geze GMBH
21	Locks & Latches	Garg	D.P.Garg Pvt Ltd, Delhi
		Dorset	Dorset Industries Pvt Ltd
		Godrej	Godrej locking solutions & systems
		Hitech	Globe Locks India
		Hafele	Hafele India Pvt. Ltd
		Harrison	Harrison locks
		Plaza	Bharat lock House
		Yale	ASSA ABLOY India (P) Ltd.
		Geze	Geze GMBH
		Garg	D.P.Garg Pvt Ltd, Delhi
22	Metalic / Steel Fire Door	Link	Link Locks
		Promot	Promot fire & Insulation (P) Ltd.
		MPP Schodders	MPP Technology Pvt.Ltd.
		NAVAIR	NAVAIR International Pvt Ltd

		Signumfire Protection	Signumfire Protection Pvt. Ltd
		Sukri	Sukri Fire doors Pvt.Ltd
		Kenwood	Kenwood Ply & Board
		Godrej	Godrej Security solutions
		Shakthi Hormann	Shakthi Hormann Pvt Ltd,
23	Fire Smoke Seal	Hilti	Hilti India Pvt Ltd.
		Promat	Promat fire & Insulation (P) Ltd.
		Atroflame	Atroflame Ltd.
		Raven	Raven Global
24	Fire rated hardware	Dorma	Dormakaba India Pvt. Ltd
		Ingersolrand	Ingersolrand (India) Ltd,
		Dorset	Dorset Industries Pvt Ltd
		Backers FS	Backers FS
		Geze	Geze GMBH
		Garg	D.P.Garg Pvt Ltd, Delhi
		Shakthi Hormann	Shakthi Hormann Pvt Ltd,
25	Non Metallic Fire door	NAVAIR	NAVAIR International Pvt Ltd
		Promat	Promat fire & Insulation (P) Ltd.
		Godrej	Godrej Security solutions
		kenwood	Kenwood Ply & Board
26	Stainless steel screws	Kundan	Kundan Industries Ltd.
		Alloy	Alloy ltd
		GKW	GKW Limited
		Nettlefold	Nettlefold screws
		Pooja	Pooja Steel Corportion
		Atul	Atul fasteners Ltd.
27	Butt Hinges for openable window shutters	Hafela	Hafele India Pvt. Ltd
		Earlt Bihari	Earlt Bihari India Pvt .Ltd.
		Dorma	Doormakaba India Pvt. Ltd
		Dorset	Dorset Industries Pvt Ltd
		Alu Alpha	Alu Alpha India
		Garg	D.P.Garg Pvt Ltd, Delhi
28	Mild Steel Butt Hinges / Piano hinges	Jolly	Jolly Engineering works
		Supreme	Supreme
		Saswat	Saswat
		Deepak	Deepak
		Swift	Swift screws
		Garg	D.P Garg & Company
		Amit	Lovely metal industries Pvt Ltd.
		Jyoti	Jypti Architectural Pvt Ltd.
29	Stainless steel Butt hinges	Prayag	Prayag Polymers (P) Ltd
		Ozone	Ozone Hardware.
		Dorma	Dormakaba India Pvt Ltd
		Geze	Geze GMBH

		Garg	D.P.Garg Pvt Ltd, Delhi
30	Concealed tower bolt	Dorma	Dormakaba India Pvt Ltd
		Ingersolrand	Ingersolrand (India) Ltd,
		DOORSET	Doorset Industries Pvt Ltd
		Alu Alpha	Alu Alpha India
		Garg	D.P.Garg Pvt Ltd, Delhi
31	uPVC doors, frames and windows	Fenesta	Fenesta DCM Shriman
		Encraft	Encraft India Pvt. Ltd.
		LG	LG India Pvt Ltd
		Rehau	Rehau Unlimited Polymer solution
		Aluplast	Alu Alpha India
		Komarling	Profine India Window technology Pvt Ltd.
		Duroplast	Duroplast extrusion Pvt Ltd
		Qute	qute Extrusions Pvt. Ltd.
		NCL VENKA	NCL VENKA Ltd.
32	PVC Doors and Frames	Accucel	Accura Polytech Pvt.Ltd
		Duroplast	Duroplast extrusion Pvt Ltd
		Polyline	Polyline Extrusion Pvt. Ltd.
		Rajshri	Rajshri Productions Pvt. Ltd.
		Qute	Qute Extrusions Pvt. Ltd.
33	Stainless Steel friction hinges	Hetich	Hetich India Pvt .Ltd.
		Haffle	Haffle India Pvt .Ltd.
		Securistyle	Securistyle India Pvt .Ltd.
		Earl Bihari	Earl Bihari India Pvt .Ltd.
		EBCO	EBCO
		ROTO	ROTO Frank Asia
34	Float Glass	Saint Gobain,	Saint Gobain India Pvt .Ltd. ,
		Asahi/AIS	Asahi India glass .Ltd.
		Pilkinton	Pilkinton India Pvt .Ltd.
		Modiguard	Gujarat Guardian Ltd.
35	Reflective glass	Saint Gobain,	Saint Gobain India Pvt .Ltd. ,
		Asahi/AIS	Asahi India glass .Ltd.
		Pilkinton	Pilkinton India Pvt Ltd
		Modifloat	Gujarat Guardian Ltd.
		Glaverbel	Glaverbel India
36	Tempered reflective/clear glass	Saint Gobain,	Saint Gobain India Pvt .Ltd.
		FUSO	FUSO Glass India Pvt .Ltd.
		Asahi/AIS	Asahi India glass .Ltd.

		Modiguard	Gujarat Guardian Ltd.
		Gurind	Gurind India
		Impact safety	Impact safety glass works Pvt Ltd
37	Fire rated glass	Contra flam/ Pyroswiss of Sanit Gobain	Saint Gobain India Pvt Ltd.
		Promat	Promat fire & Insulation (P) Ltd.
		Pyran of Schott	Schott glass India Pvt .Ltd.
		Pilkinton	Pilkinton India
38	Anchor/SS stone Cladding Clamps/Dash fasteners	Hilti	Hilti India Pvt .Ltd.
		Fischer	Fischer India
		Anchor	Anchor Ltd
		Nutech	Nutech Construction Chemicals
		Canon	Cannon
		Wurth	Wuerth India Pvt. Ltd
		Trixel	Axel India Pvt.Ltd
		Helfen	Helfen Anchoring System
		BOSCH	BOSCH Ltd
39	Structural Steel	SAIL	SAIL
		TISCO	TATA STEEL
		VIZAG	RINL
		JSW	JSW
		Apollo	APL Apollo
40	M.S.Pipe, Tubes	SAIL	SAIL
		TISCO	TATA STEEL
		Apollo	APL Apollo
		Kalinga	Kalinga Tubes
		JINDAL	JSW
		Nezone	Nezone Tubes Limited
41	Stainless steel	Salem	SAIL
		Connect	Connect ltd.
		Ark Product Pvt. Ltd	Ark Product Pvt. Ltd
		Jindal	JSW
		SAIL	SAIL
		KINGSTON	KINGSTON Brass
42	Stainless steel Bolts, washers, nuts	Kundan	Kundan Industires Ltd
		Pooja	Pooja Steel Corporation
		Atul	Atul fasteners Ltd
		Hilti	Hilti India Pvt. Ltd
43	Stainless steel pressure plate screws	Kundan	Kundan Industires Ltd
		Pooja	Pooja steel corporation
		Atul	Atul fasteners Ltd
44	Welding rods	Advani	Advani oerlikon Ltd.

		ESAB	ESAB India Pvt. Ltd
45	Metal Deck Sheet	TATA	TATA STEEL
		SAIL	SAIL
46	Shear Stud/ Connector	KOCO	KOSTER & Co.
47	Vitrified tiles	AGL	Asian Granite India Ltd
		Marbito	Marbito tiles
		NITCO	NITCO Ltd
		RAK	RAK Ceramic India Pvt Ltd.
		Restile	Restile Ceramic Ltd.
		Kajaria	Kajaria Ceramic Ltd
		Somany	Somany Ceramic Ltd
		Jhonson	Prism Jhonson Ltd
		Varmora Granito	Varmora Granito Granite Pvt. Ltd
		Naveen	Murudeshwar Ceramics Ltd.
		Viero	Aparna Tiles
		Aparna Vitero	Aparna Enterprises Ltd
48	Glazed Ceramic tiles (Also wall tiles)	AGL	Asian Granite India Ltd
		NITCO	NITCO Ltd
		RAK	RAK Ceramic India Pvt Ltd.
		Kajaria	Kajaria Ceramic Ltd
		Somany	Somany Ceramic Ltd
		Jhonson	Prism Jhonson Ltd
		Varmora Granito	Varmora Granito Granite Pvt. Ltd
		Naveen	Murudeshwar Ceramics Ltd.
49	Synthetic Sports flooring	Armstrong	Armstrong flooring
		LG	LG Hausys India
		Wondorfloor	RMG Polyvinyl India Ltd.
50	Linoleum sports flooring	Armstrong	Armstrong flooring India Pvt Ltd.
		Forbo	Forbo flooring India Pvt. Ltd.
		Gerflor	Gerflor flooring
51	False floor	Hewetson	Hewetson India
		Access floor system	Access Floor System
		Unifloor	Unifloor India Ltd
		Unitile	Unitile office systems Pvt. Ltd
		PINNACLE	PINNACLE
		Kebao	Inner Space (Distributors)
52	Engineered wood floor	Armstrong	Armstrong flooring
		Mikasa Real wood floors	Green Lam Industries
		New wood	New Wood india ltd
		Werner	Werner Floors
		Pergo	Redfloor India
53	Floor spring (For non	Dorma	Dormakaba India Pvt Ltd

	DSR items)	Ingersolrand	Ingersolrand India Pvt Ltd
		OZONE	Ozone Hardware.
		Geze	Geze GMBH
		Garg	D.P.Garg Pvt Ltd, Delhi
54	Cement concrete parking tiles	NITCO	NITCO Ltd
		Poddar	Poddar Udyog
		Eurocon	Eurocon tiles India
		Dazzle	Dazzle Designer tiles Pvt Ltd
		NTC	NTC Parking tiles
		Hindustan tiles	Hindustan tiles, Ranchi Pune
		Ultra	Ultra tile private Ltd.
		Dalal Tiles Private Limited	Dalal Tiles Private Limited
55	Synthetic Carpet tiles	TOLI	TOLI corporation
		Hollitex	Hollitex carpet tiles
		Standard Carpets	Standard Carpets
56	Vitrified paving tiles	PAVIT	PAVIT ceramics Pvt Ltd.
57	Glass mosaic tiles	Italia	Tile Italia mosaics Pvt Ltd.
		Coral	Coral tiles
		Mridul	Mridul tiles
		Palladio	Palladio Mosaics
		Bisazza	Bisazza Italy
		Birla White	Birla Corportion Ltd.
		JK White	JK Cement ltd.
		PAVIT (Eco Tile)	PAVIT Ceramics Pvt Ltd.
58	Thermal Insulation treatment	Pidilite	Pidilite industries
		Elastospray	BASF
		Rock India Pvt.LTd	Rock India Pvt.Ltd
		Weathercoat Kool & Seal	Berger paints
59	Acoustic Insulation	Twingerinsul	U.P.Twiga fiber glass Ltd
		Lloyd Insulation	Lloyd Insulation (India) Ltd
		Saint Gobain Gyproc	Saint Gobain Gyproc India
		Himalyan Acoustics	Himalyan Acoustics
		Knauf	Knauf Gypsum India Pvt. Ltd.
		Anutone	Anutone Acoustics Ltd.
60	UPVC Pipes and fittings (Rain water pipes)	Supreme	Superme Industries Ltd.
		Prince	Prince pipes and fittings Ltd.
		Finolex	Finoles Industries Ltd.
		Prepoly	Premier PVC Industry
		Astral	Astral Polytechnik Ltd.,
		Ashirwad	Ashirwad PVC Pipes
		Flow Guard	Flow Guard
		Truflow	HSIL Ltd of Hindware
		D.E.C	D.E.C Industries Private Limited.

		Prayag	Prayag Polymers Private Limited.
61	Sandwich PUF panelled roofing sheets	Lloyd Insulation	Lloyd Insulation (India) Ltd
		JINDAL MEC TEC/ JINDAL	Mectec Pvt. Ltd
		Danpalon	Danapal Light architecture
		GE Plastic	GE Silicones
62	Polycorbanate Sheet	LEXAN	LEXAN Ltd
		MG Polyplast	MG Polyplas
		GE Lexon	GE Silicones
		Danpalon	Danapal Light architecture
		Alcox	Hindeggan Alcox Ltd.
		Polygal	Polygal India Pvt Ltd.
63	False ceilings	Aerolite	Andhra Polimers Pvt. Ltd/Aerolite Industries Pvt Ltd
		Anutone	Anutone Accoustics Ltd.
		Armstrong	Armstrong World Industries
		Gridsquare	Gridsquare Ceilings
		Knauf	Knauf Gypsum India Pvt. Ltd.
		USG Boral	USG Boral
		Hunter Dougals	Hunter Dougals
		Saint Gobain Gyproc	Saint Gobain Gyproc India
64	False Ceiling Members (Perimeter, Ceiling section, intermediates, angles etc.,)	Armstrong	Armstrong World Industries
		Aerolite	Andhra Polimers Pvt. Ltd/Aerolite Industries Pvt Ltd
		Gridsquare	Gridsquare Ceilings
		Gypframe steel	British Gypsum
		Knauf	Knauf Gypsum India Pvt. Ltd.
		Lloyd	Lloyd Insulation (India) Ltd
		Saint Gobain	Saint Gobain Gyproc
65	Synthetic enamel Paint	Premium gloss enamel	Asian paint Ltd
		Dulex	ICI dulex Ltd
		Nerolac	Nerolac Paints Ltd
		Berger	Berger Paints
		Nippon	Nippon Paint India Ltd.
66	Pink primer	Wood primer	Asian paint
		Dulex	ICI dulex
		Nerolac	Nerolac Kansia Nerolac Paints Ltd.,
		Berger	Berger Paints
		Nippon	Nippon
67	Red Oxide Zinc Chromate primer	High performance yellow metal primer	Asian paint
		Dulex	ICI dulex
		Nerolac	Nerolac
		Berger	Berger Paints

		Nippon	Nippon
68	Oil Bound Distemper	Tractor Aqalock	Asian paint
		Dulux (Maxilite)	Dulux
		mG Polyplast	Nerolac
		Berger (Bisom)	Berger Paints
69	Acrylic emulsion	Premium emulsion	Asian paints Limited
		Dulux (Super Cover)	ICI Dulux
		Nerolac (Beauty Gold)	Nerolac
		Berger (BISM)	Berger Paints
70	Water Proof Cement paint	Asian exterior wall primer	Asian paints Limited
		Berger	Berger Paints
		Surfa	Surfactoats (India) Pvt. Ltd.
		ICI DULUX	ICI DULUX
		Cem Colour	Snowcem Paints
71	Acrylic smooth exterior paint	Apex	Asian paints Limited
		Dulux	ICI dulux
		Nerolac	Nerolac
		Berger	Berger
		Nippon	Nippon
72	Premium Acrylic smooth exterior paint with silicon additives	ULTIMA	Asian paints Limited
		Dulux	ICI dulux
		Nerolac	Nerolac
		Berger	Berger
		Surfex Rain Shield	Surfactoats
73	Cement based wall putty	J.K.wall putty	J.K. Cement Ltd.
		Birla wall care	Birla Cements Ltd.,
		Asian paints	Asian paints Limited
		Altek	NCL Alltek & seccold Ltd.
		Berger	Berger
		Ardex Endura	Ardex Endura India Pvt Ltd
		Ferrous Crete	Ferrous Crete (India) Pvt. Ltd.
74	Acrylic textured Paint	Apex Duracast	Asian paints Limited
		Spectrum paints	Spectrum paints Ltd.
		Heritage	Heritage Rajkamal Group
		Asian Paint	Asian paints Limited
		Nerolac	Nerolac
75	Ready mix cement plaster	Readi Plast	Ultratech cements Ltd.
		Gyproc Plasters	Saint Gobain Gyproc India
		Ultra tech	Ultra tech Cement Ltd.

		Ferrous Crete	Ferrous Crete (India) Pvt. Ltd.
76	Melamine Polish	Asian paints	Asian paints Limited
		Melamine Gold wudfin	Pidilite industries
		Polycure	Polycure malaysia
77	Fire retardant paint	Jotun	Jotun paints
		Hilti	Hilti India
		Akzonobel	Dulex Akzonobel Paints
		Asian Paints	Asian paints Limited
		STPL Ltd.	STPL Ltd.
78	Anticorrosive bitumastic paint	Berger	Berger paints India Ltd.
		IS 158 bituminous black	Asian paints Limited
		Shalimar	Shalimar paints India Ltd.
79	Cement Primer	Asian paint	Asian paints Limited
		JK Primaxx	JK Cement Ltd.
		Berger	Berger paints India Ltd.
80	Epoxy paint	Asian Paint	Asian paints Limited
		Berger	Berger paints India Ltd.
		Shalimar	Shalimar paints
		STP Ltd.	Shalimar Tar Products
		Ardex Endura	Ardex Endura India Pvt Ltd
		Mapecoat L24	MAPEI Construction Products India P Ltd.
		Sun Epoxy Paint	Sunanda speciality coating Pvt Ltd.
		Nerolac	Nerolac
81	Epoxy coating	BASF	BASF India Ltd.
		Fosroc	Fosroc India
		Laticrete	MYK Laticrete India
		Ardex Endura	Ardex Endura India Pvt Ltd
		Mapecoat DW25	MAPEI Construction Products India P Ltd.
		Ferrous Crete	Ferrous Crete (India) Pvt. Ltd.
		Sun Epoxy Paint	Sunanda speciality coating Pvt Ltd.
82	Sililcon coating	Dow corning	Dow corning India
		BASF	BASF India Ltd.
		GE	GE Silicones
		Wacker	Wacker silicones.
83	Interlocking Concrete Paver Blocks	Dazzle	Dazzle designer tiles (P) Ltd.
		Ultra	Ultra tiles Pvt Ltd.,
		Shree	Shree Bharat Paver blocks

		Hindustan tiles	Hindustan tiles, Ranchi Pune
		Vyara tiles	VYARA TILES Pvt Ltd., / Surat
		NITCO (ROCKARD)	NITCO
		BHARAT (NILSAN)	Bharat
		REGENCY	Regency
		Basant Betons	Basant Betons
		Dalal Tiles Private Limited	Dalal Tiles Private Limited
84	Solar studs/ Median markers	3M	3M Science
		Avery Dennison	Avery Dennison India Pvt Ltd.
		Nikkalite	Nippon carbide Industires (USA)
85	Polycarbonate Convex mirrors, Rubberised road hump	Unique safety solutions	Unique safety solutions
86	Mirror	Modi Guard	Gujarat Guardian Ltd.
		Saint Gobain	Saint Gobain Glass India Ltd.,
		AIS mirror	Asahi India glass Ltd,
		Atul	Atul glass Industries Ltd.,
87	Vitreous Commodes/ Washbasin	Hindware	HSIL Ltd,
		Roca	ROCA Bath room products
		Parryware	ROCA Bath Pvt. Ltd.,
		Kohler	Kohler world wide
		CERA	CERA Sanitaryware Ltd.,
		Jaquar	Jaquar Group
		Bathsense	Asian paints Limited
88	Flushing Cistern	Parryware	ROCA Bath Pvt. Ltd.,
		Kohler	Kohler world wide
		CERA	CERA Sanitaryware Ltd.,
		Jaquar	Jaquar Group
		Hindware	HSIL Ltd,
		Bathsense / TECE	Asian paints Limited
		Prayag	Prayag Polymers Private Limited.
89	SWR PVC Pipes & fittings	Supreme	Superme Industires Ltd.
		Astral	Astral polytechnik Ltd.
		Finolex	Finolex Industries Ltd.,
		Flowgard	Ashirwad PVC Pipes
		Truflow	HSIL Ltd of Hindware
		Prince	Prince Pipes and fittings
		D.E.C	D.E.C Industries Private Limited.

		Prayag	Prayag Polymers Private Limited.
90	Stainless Steel Kitchen sink	Jhonson	Prision Jhonson Ltd.,
		Diamond	Pheonix Appliances Pvt. Ltd.
		Jindal	Centuary polytech
		Nilkanth	Nilkant
		Nirali	Jyoti (India) matel Industries Pvt Ltd.
		Hindware	HSIL Ltd
		Silver shine	Blue stone sanitary Industries Pvt. Ltd.
		Joyna	Joyna
		Navkar	Shri Navkar Metals Ltd.
		Franke	Franke India Ltd.
		Futura	Futura Kitchen Sinks India Pvt. Ltd.
		Kingston / COBRA	Plastocraft Sanitary (India) Private Limited.
		Prayag	Prayag Polymers Private Limited.
91	Centrifugally Cast (Spun) Iron Soil Pipes	Neco	Jayaswal Neco Ltd
		SKF brand	SKF Industries
		Bengal Iron Corporation	Bengal Iron Corporation
		HEPCO	Hepco
		Neco	Jayaswal Neco Ltd
		HIF	M/s Babulal Bajaj Iron Foundry
		RPMF	Raj Pattern Makers and Founders Pvt. Ltd.
92	PE-AL-PE Composite pipes	Kitec	Kitec Industries (India) Pvt. Ltd.
93	G I Pipes	TATA	TATA Steel Ltd.,
		Zenith	Zenith Birla (India) Ltd.
		HISSAR	HISSAR
		Apollo	APL Apollo
		Jindal	Jindal Pipes Ltd.,
94	G I Pipe fittings	Zoloto	Zoloto Industries
		Unik	Unik malleables
		HB	HB Industries
		ICS	Sgree samarth Engineers
		NVR	AVN Manufacturing Company.
95	Water supply Valves	Zoloto	Zoloto Industries
		leader	leader valves Ltd.,
		ARCO	Arco valves Pvt. Ltd.,

		Nanda	Nanda Miller company
96	CPVC pipes and fittings	Supreme	Supreme Industries Ltd.
		Finolex	Finolex Industries Ltd.
		Astral	Astral Polytechnik Ltd.,
		Prince	Prince Pipes and fittings Ltd.,
		Truflo	HISL Ltd of Hindware
		Birla Aerocon	HIL Ltd.
		Ashirwad	Ashirwad PVC Pipes
		Flowgard	Flowgaurd
		D.E.C	D.E.C Industries Private Limited.
		Prayag	Prayag Polymers Private Limited.
97	PVC / HDPE water storage tanks	Vectus	Vectus Industries Ltd.
		Supreme	Supreme Industries Ltd.
98	DI Pipes	Electrosteel	Electrosteel
		Jindal	Jindal
		Tata Ductura	Tata Ductura
		Kapilansh	Kapilansh
		Keshoram	Keshoram
99	DI Fittings	Electrosteel	Electrosteel
		Jindal	Jindal
		Tata Ductura	Tata Ductura
		Kapilansh	Kapilansh
		Keshoram	Keshoram
100	Watersupply fixtures like bibcock, Shower panels	Jaquar	Jaquar Group
		Parryware	Roca bath room products Pvt. Ltd,
		Metro	Metro sanitations Pvt. Ltd.,
		Waterman	Kewal brothers
		Seiko	Seiko Sanitations
		Prayag	Prayag polymers Pvt Ltd.,
		Kingston	Plastocraft Sanitary (India) Private Limited.
		Johnson	Prism Jhonson Ltd
		MARC	MARK Showers
		HINDWare	HSIL Ltd.
		Ess Ess/Bathsense/Royale	Asian Paints Limited
101	Air release valve	Kirloskar	Kirloskar brothers Ltd.,
		RBM	AFS Ltd.,
		Kartar	Kartar valves private Ltd.,
102	Centrifugally Cast (Spun) iron Pipes	Lanco/Sripipes	Electrosteel castings Ltd.
		Jindal	Jindal saw Ltd.
		Kesoram	Kesoram Industries Ltd.
		Electrosteel	Electrosteel castings Ltd.

		RPMF	Raj Pattern Makers and Founders Pvt. Ltd.
103	Spun cast iron fittings	Neco	Jayaswal Neco Ltd.
		Kartar	Kartar Valves Private Ltd.
		Electrosteel	Electrosteel castings Ltd.
		Kapilansh Centrifugal	Kapilansh Dhatu Udyog(P)Ltd.
		SKF brand	SINGHALIRON FOUNDARY Pvt. Ltd.,
		RPMF	Raj Pattern Makers and Founders Pvt. Ltd.
104	CI double flange sluice valve	Kirloskar	Kirloskar brothers Ltd.,
		RBM	AFS Ltd.,
		Kartar	Kartar valves private Ltd.,
		IVS	Indian valves private Ltd.,
		Zoloto	Zolota Industries
		BURN	BURN
		Leader	Leader valves Ltd.
		NVR	MAC International.
105	CI double flanged non return valve	Kirloskar	Kirloskar Brothers Ltd.,
		Fluidtech	Fluidtech
		Zoloto	Zolota Industries
		NVR	MAC International.
106	Gun metal Valves	Zoloto	Zolota Industries
		Leader	Leader valves Ltd.
		Sant	Sant valves Pvt Ltd,
		Audco	L&T Valves
107	PTMT/PVC water supply sanitary fittings, bibcocks, pillar cock, Angle valve, Stop Valve	PEARL	Precision Products
		Prayag	Prayag Polymers (P) Ltd
		Supreme	Supreme Industries
108	RCC Pipes	Indian Hume Pipe	Indian Hume Pipe Ltd.,
		Madurai spun pipe	Madurai spun pipe company
		Lakshmi Sood & Sood	Lakshmi Sood & Sood Pipe Co.
		Jain & Co	Jain spun pipes Co.,
109	CI Manhole cover	Neco	Jayaswal Neco Ltd.,
		HEPCO	Binay Udyog Pvt Ltd
		BIC	Bengal iron corporation
110	SFRC Cover and grating	KK	KK Manhole and gratings Co Pvt Ltd.,
		Advent	Advent concrete vision
		Kutty	Kutty Industries

		Nu-TEC	Nu-Tech concrete products (P) Ltd.,
		DEC	D.E.C Industries Private Limited.
111	Plastic Encapsulated Foot Rest	KK India	KK Manhole and gratings Co Pvt Ltd.,
		KGM	KGM Exports .
		Accurate Buildcon	Accurate Buildcon company.
112	Spun cast iron covers & gratings	Neco	Jayaswal Neco Ltd
		Jagannath	Sri Jagannath Iron Foundry Pvt. Ltd.
		Kapilansh Centrifugal	Kapilansh Dhatu Udyog(P)Ltd.
		SKF brand	SINGHAL IRON FOUNDARY Pvt. Ltd.,
113	Aluminium doors/windows sections	Hindalco	Hindalco Industries Ltd.,
		jindal	jindal Aluminium Ltd.,
		Bhoruka	Bhoruka Extrusions Private Limited
		Padmavathi Extrusion	Padmavathi Extrusion Private Ltd
		Omalco Extrusion	Omalco Extrusion Pvt Ltd
		Hyd	Hydro Extrusion
		Indal	Indian Aluminium Ltd.,
114	Aluminium systems/ Anodised aluminium fittings for doors/windows	Define	Define Overseas Pvt. Ltd.
		Schueco	Schueco India Pvt. Ltd.,
		Bhoruka	Bhoruka Extrusions Private Limited
		Kawneer	Kawneer India
		Hardima	Hardima sales corporation
		Everite	Everite Agencies
		Jyothi	Jyothi Industries
		Sigma	Sigma Corporation
115	Friction stay hinges	Earl Bihari	Earl Bihari Pvt. Ltd.
		KINLONG	KINLONG Industries
		Garg	D.P.Garg Pvt Ltd, Delhi
116	EPDM Gaskets	Anand	Anand NVH products (P) Ltd.,
		Roop	Roop Polymers Ltd.,
		Bohra	Bohra rubber Pvt Ltd.,
		Hanu	Hanu Industries
		Ame Rubber	Ame Rubber Industries Pvt Ltd.
117	Silicon Gaskets	Sree Gaurav	Sree Gaurav Rubber products
118	Masking Tapes	3M	3M
		Sun	Sun

		Wonder polymer	Wonder Tape Industries
		Roop	Roop Polymers Ltd.,
119	Water proofing compound	Fosroc	Fosroc India
		Ferrous Crete	Ferrous Crete (India) Pvt Ltd
		Sika	Sika India
		MYK Schomburg	MYK Arments range of products
		Penetron	Penetron India Pvt Ltd
		Dr. Fixit	Pidilite Industires
		Accoproof	ACCCEments Ltd
		Cementmix Plus/Advanced Latex Plus	Berger paints
		Accoproof	ACC cements Ltd.,
		Ardex Endura	Ardex Endura (India) Ltd
		Shalplast LW+	STP Ltd
		Mapecure AS/Mapecure E30/Mapecure ASE	M/s MAPEI Constructions Product India Pvt Ltd
		Alchemica	Alchemica Ltd.
		Asian Paint Smartcare	Asian Paints Limited
120	Membrane Water proofing system	BASF	BASF India Ltd.,
		Ferrous Crete	Ferrous Crete (India) Pvt Ltd
		STP Ltd	Shalimar Tar Products
		MYK Schomburg	MYK Arments range of products
		Maoplan TU S20/Planiseal 88/Planiseal 288	M/s MAPEI Constructions Product India Pvt Ltd
		Elasto roof PU/Sun roof PU/Sunkote	Sunanda speciality coatings Pvt Ltd.
		Dr. Fixit	Pidilite Industires
		Alchemica	Alchemica Ltd.
		Ardex Endura	Ardex Endura ltd
		Hydro tech	Hydro tech Ltd
		Asian Paint Smartcare	Asian Paints Limited
121	Chemical water proofing system	BASF	BASF India Ltd.,
		Ferrous Crete	Ferrous Crete (India) Pvt Ltd
		MC-Bauchemie	MS-Bauchemie India Ltd.,
		Sika	Sika India
		Sunanda speciality coating	Sunanda speciality coating Pvt Ltd.
		Perma construction Aid	Perma construction Aid Pvt Ltd,
		Fosroc	Fosroc India
		Latex shield 2K/Trank shield PW	Berger Paints

		Dr. Fixit	Pidilite Industries
		Asian Paint Smartcare	Asian Paints Limited
122	Water stops	Hydrotite	Sika India
		BASF	BASF India Ltd.,
		Dr. Fixit	Pidilite Industries
		Ardex Endura	Ardex Endura Ltd
		Ferrous Crete	Ferrous Crete (India) Pvt Ltd
		Hydroswell	Sika India
		Asian Paint Smartcare	Asian Paints Limited
123	Aluminium composite panels	Alucobond	3A Composites India Pvt.Ltd.
		Eurobond	Eurobond Pvt Ltd, Delhi
		Aludecor	M/S Aludecor Lamination Pvt. Ltd.
		Reynobond	Reynobond
		Alpolic	Alpolic
		Hynadecor	Hynadecor AC panels, Delhi.
		Alstone	Alstone, New Delhi.
		Alstrong	Alstrong
		ALEX	ALEXIA PANELS
124	PVC Perforated Pipes	Rex Polyextrusion	Rex Polyextrusion Ltd,
		Akash Enterprises	Akash Enterprises
		Zenplas Pipes	Zenplas Pipes Pvt. Ltd.,
		Supreme	Supreme Industries
125	Play Equipments	Koochie Play	Koochie Play Systems Pvt. Ltd,
		Playworld Systems	Playworld Systems India
126	Structural Sealant	Dow Corning	Dow Corning India
		Wacker	Wacker Silicones.
		GE	GE Silicones
		STP Ltd.	Shalimar Tar Products
		Smart Care Sealant	Asian Paints Limited
		Fosroc	Fosroc India
		BASF	BASF India Ltd.,
127	Poly-sulphide sealant	Dr. Fixit	Pidilite Industries Ltd,
		Ferrous Crete	Ferrous Crete (India) Pvt Ltd
		MYK Schomburg	MYK Arments range of products
		Pidilite	Pidilite Industries
		STP Ltd.	Shalimar Tar Products
		Fosroc	Fosroc India
		Techseal	Choksey Chemical Pvt. Ltd,
		Asian Paint Smartcare	Asian Paints Limited

128	Bitumen Impregnated Board	Shalitex	Shalimar Tar Products
129	Polyethylene backer rod	Supreme	Supreme Industries
130	Epoxy	Fosroc	Fosroc India
		Ferrous Crete	Ferrous Crete (India) Pvt Ltd
		Shalibons	Shalimar Tar Products
		Ardex	Ardex Endura (India) Pvt. Ltd.,
		Asian Paint	Asian Paints Limited
131	Weather Silicon Sealent	Dow corning	Dow corning India
		Momentive (GE)	GE Silicones
132	GRC Jali	Terrafirma	Terrafirma GRC Industries
		Ecovision	Ecovision Industries Pvt. Ltd.,
		Mahesh GRC	Mahesh Prefab Pvt Ltd.,
		Dalal Tiles Private Limited	Dalal Tiles Private Limited
133	Air transfer grills	Cool grills	Cool grills, Pune
		Systemair India	Systemair India Pvt. Ltd.,
134	Ready made/Gypsem Plaster	Ferrous Crete	Ferrous Crete (India) Pvt Ltd
		Gyproc Cute 100	Gyproc India
		Ultratech	Ultratech cements Ltd.
135	Steel Windows/Pressed Steel Frames	Madhu Industries,	Madhu Industries
		San Harvic,	San Harvic
		NCL	NCL Industries
136	PVC Flooring	LG Hausys	LG Hausys
		Ger flor	Gerflor flooring
		Armstrong	Armstrong World Industries
137	Grass Paver	Unistone	Unistone
		Ultra	Ultra Ltd.
138	FRP Door Shutters & Frames	Meena Fibre Glass,	Meena Fibre Glass
		Duroplast	Duroplast extrusion Pvt Ltd
		Cactus	Cactus
		Polyline.	Polyline
		Jain Doors Pvt Limited.	Jain Doors Pvt Limited.
		JAYANA	Jain Wood Industries, New Delhi.
139	Non Metallic Floor Surface Hardners	Ironite	Ironite
		Hardonite,	Hardonite
		FOSROC	Fosroc India

		SIKA	SIKa India
		BASF	BASF India Ltd.,
		CICO,	CICO Technologies Ltd.,
		Pidilite	Pidilite Industries Ltd,
140	PU Enamel Metallic Paints on MS Structure & Epoxy paint (Premium Quality)	SKK	SKK Ltd.
		Akzonobel	Akzonobel
		Berger,	Berger paints India Ltd .
		MRF	MRF Paints
		Asian Paint	Asian Paints Limited
141	Rockwool/ Glasswool insulation	Twigafiber ,	Twigaifiber glass ltd
		Llyod Insulation	Llyod Insulation Ltd.
		Supereme	Supereme Industries ltd
142	Actactic Polypropylene (APP) Modified Water proof Membrane	STP	Shalimar Tar Products
		Ferrous Crete	Ferrous Crete (India) Pvt Ltd
		Bitumat Co. Ltd,	Bitumat Co. Ltd,
		Pidilite	Pidilite Industries Ltd,
		Ardex Endura	Ardex Endura
		Hydrotech Ltd.	Hydro tech Ltd
		Proshield	Berger paints India Ltd
		IWL India Limited	IWL India Limited
		Asian Paint Smartcare	Asian Paints Limited
143	Structural Glazing	Modi	Modi Guard
		Saint Gobain	Saint Gobain Glass India Ltd.,
		Asahi / AIS	Asahi India glass Ltd,
		Glaverbel.	Glaverbel India
144	Sensor Based Auto flush Systems	AOS Systems,,	AOS Systems
		TOTO	TOTO Ltd
		Parryware,	Parryware
		Hindware,	HSIL Ltd
		Grohe,	Grohe
		Jaquar	Jaquar Group
		Kochier	Kochier
145	Float Valve (Ball Valve)	Prayag,	Prayag Polymers (P) Ltd
		Leader,	Leader valves Ltd.
		Zoloto,	Zolota Industries
		IBP	IBP Industries
		Arco	Arco valves Pvt. Ltd.,
146	Spider Patch Fittings	Dorma	Dorma kaba India Pvt. Ltd

	for Structural Glazing	Sevax	Saint Gobain Glass India Ltd
		Kich	Kich India
		Ozone	Ozone Ltd
		Hafele	Hafele Ltd
147	Multi Walled Polycarbonate Roofing Sheets	Danpalon	Danapal Light architecture
		Lexan GE	GE Lexan
148	Adhesive for AAC Block/ Tiles	Ultrtech	Ultratech cements Ltd.
		Ardex Endura/Gold Star	Ardex Endura
		Ferrous Crete	Ferrous Crete (India) Pvt Ltd
		Tile Adhesive Plus	Berger Paints
		Asian Paint Smartcare	Asian Paints Limited
149	Aluminium Formwork	MFE(MIVAN)	MIVAN
		S-Form	S-Form
		MFS	MFS
150	EPDM Water Proofing Membrane	Asian Paint Smart Care	Asian Paints Limited
		Ferrous Crete	Ferrous Crete (India) Pvt Ltd
		Pidilite	Pidilite Industries
		STP	Shalimar Tar Products
		Fosroc	Fosroc India
151	PU Coating (UV Resistant Liquid Applied Coating)	Pidilite	Pidilite Industries
		BASF	BASF
		Fosroc	Fosroc India
		SIKA	SIKa India
		PU Roofcoat	Berger Paints
		Asian Paint Smartcare	Asian Paints Limited
152	Polyurea Ultroh	Ferrous Crete	Ferrous Crete (India) Pvt Ltd
		BASF	BASF
		SIKA	SIKa India
		Pidilite	Pidilite Industries
		Asian Paint Smartcare	Asian Paints Limited
153	Modular Kitchen / Wardrobes/ Hardware and Accesseries	Sleek	Asian Paints Limited
		Godrej	Godrej & Boyce Co.
		Spacewood	Spacewood
		Evoke	Evoke

154	High end Exterior Textures	Asian Paint (Allura/Graniza Range)	Asian Paints Limited
		SKK Brand	SKK Ltd.
		Berger	Berger paints India Ltd.
155	Acrylic Exterior Textures	Asian paint	Asian Paints Limited
		Berger	Berger paints India Ltd.
		Akzonobel	Akzonobel
		Ebco	Ebco
		Neroloc	Nerolac Paints Ltd
156	Puff Insulations	Llyod Insulation	Llyod Insulation (India) Ltd.
		Asian Paint Smart Care	Asian Paints Limited
		Fosroc	Fosroc India
		BASF	BASF
		Pidilite	Pidilite Industries Ltd.
		Supreme	Supreme ltd
157	GP Grouts	Asian Paint Smart Care (GP Grout Grey)	Asian Paints Limited
		BASF	BASF
		Pidilite	Pidilite Industries Ltd.
		Care	Care
		Mapectfill GPIN	MAPEI construction products India Pvt Ltd
		Home shield super grout	Berger Paints
		SIKA	SIKA India
158	Galvolume Sheet for roofing, cladding, Sandwich Panel	Llyod Metal Craft	Llyod Insulations
		Tata Blue Scope	Tata Blue Scope
		Bhushan	Bhushan steel
		JSW	JSW
		Essar	Essar group
159	Mechanical coupler for Reinforcement	Dextra	Dextra
		Sanfield	Sanfield India Ltd
160	GRP/SMC PANEL Tank (New Product in the market Performance is yet to be established)	PIPECO Tanks	PIPECO Tanks
		FLOSTO Tanks	devi Polymer Pvt Ltd, Chennai
		VIVANTA	VIVANTA Enterprises, Mumbai
		AMITEX	AMITEX Enterprises, Delhi

161	Wood Polymer Composite material for Door frames and shutters, plain/pre laminated boards for wall linings etc	Alstone	Alstone Industries Pvt Ltd, Jaipur, Rajasthan.
		Ecoste	Ecoste wood polymer composite, Delhi
		Echon	Kumar Arch Tech Pvt Ltd, Rajasthan.
		Rajasree	Rajeswari Products Pvt Ltd, Madhya Pradesh.
		Qute	Qute Extrusions Pvt. Ltd, Chennai.
162	Bamboo Wood Flooring and Wall Panelling	Epitome Bamboowood Products	Mutha Industries Pvt Ltd, Mumbai
		Floor India	Flooring India Company, Panipat, Haryana.
		Ecogreen Flooring	Jupiter Traders, Bangalore.
163	Carbon Steel cast billet ingots, billets, blooms and slabs for re-rolling into steel for general structural purposes.	SUGNA TMT	SUGNA TMT, Banjara Hills, Hyderabad.
	High strength deformed steel bars and wires for concrete reinforcement		
164	Pre cast cement concrete tiles and paver	Asttra Tiles and pavers	M/SAsttra Tiles and pavers
165	Low Alloy steel reinforcement bars - TMT bars of Fe-550D grade conforming to IS 1786-2008(with up to xdate amendment)	JR Metal Chennai Limited	M/s JR Metal Chennai Limited
166	uPUV Windows and Doors Type A) Sliding Hardware 1.Touch Lock 2.Crescent Lock 3. Popup Handles 5.D handle 6. Espangnolette 7. Espangnolette with cylinder set 8. Window Rollers 9. Aluminium Track 10. Weather Strip/Wool,Pile	RAY	M/S RAY Industries
167	B) Casement	RAY	M/S RAY Industries

	Hardware 1. Window Handle 2. Cockspur handle 3. Door Handle/Door set 4. Espangnolette 5. Espangnolette with cylinder lock set 6. Friction stay Hinges 7. 2D Hinges 8. Concealed Hinges 9. 3D Hinges 10. Towerbolt		
168	Toilet Seat Covers	Prayag	Prayag Polymers Private Limited.
169	HDPE Pipe & Water Storage Tanks	Prayag	Prayag Polymers Private Limited
170	S.S. Door Hinges & Hardware	Prayag	Prayag Polymers Private Limited
171	C.P. Brass Faucets and Fixtures	Prayag	Prayag Polymers Private Limited
172	uPVC Extruded Profiles for uPVC Windows & Doors Systems	Sudhakar	Sudhkar PVC Product Private Limited
173	Water Storage Tanks	Sudhakar	Sudhkar PVC Product Private Limited

Note: Equivalent material and finishes of any other specialized make may be used, in case it is established that the brands specified above are not available in the market but only after approval of the alternate by the Competent Authority/NIT Approving authority.

Executive Engineer

SCHEDULE OF QUANTITY (Civil)					
Name of work: Upgradation of 1No. HIG office, 2Nos. HIG Quarters and 2Nos. MIG Quarters at OCR Complex, SIB, Salem,					
SL.NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
I	Earth work				
1	Earth work in surface excavation not exceeding 30 cm in depth but exceeding 1.5 m in width as well as 10 sqm on plan including getting out and disposal of excavated earth upto 50 m and lift upto 1.5 m, as directed by Engineer-in- Charge:				
1.1	All kinds of soil	40	Sqm	151.60	6064
II	CONCRETE WORK				
2	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :				
2.1	1:2:4 (1 cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 20 mm nominal size derived from natural sources)	13	Cum	9198.95	119586
2.2	1:5:10 (1 cement : 5 coarse sand (zone-III) derived from natural sources : 10 graded stone aggregate 40 mm nominal size derived from natural sources)	14	Cum	7611.10	106555
III	REINFORCED CEMENT CONCRETE				
3	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement —All work up to plinth level :				
3.1	1:1.5:3 (1 cement : 1.5 coarse sand (zone—III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	0.5	Cum	10561.80	5281
4	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases above plinth level up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement with 1:1.5:3 (1 cement : 1.5 coarse sand(zone-III)derived from natural sources : 3 graded stone aggregate 20 mm nominal sizederived from natural sources).	1	Cum	13433.80	13434
5	Centering and shuttering including strutting, propping etc. and removal of form for				

5.1	Suspended floors, roofs, landings, balconies and access platform	15	Sqm	1082.65	16240
6	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.				
6.1	Thermo-Mechanically Treated bars of grade Fe-500D or more.	105	Kg	125.95	13225
IV	MASONRY WORK				
7	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:				
7.1	Cement mortar 1:6 (1 cement : 6 coarse sand)	0.6	Cum	8327.60	4997
8	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level.				
8.1	Cement mortar 1:4 (1 cement :4 coarse sand)	15	Sqm	1312.15	19682
V	CLADDING WORK				
9	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing of edges to give high gloss finish etc. complete at all levels.				
9.1	Granite stone slab of colour black, Cherry/Ruby red				
9.1.1	Area of slab over 0.50 sqm	16	Sqm	5997.15	95954
10	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	44	Sqm	1480.45	65140

VI	WOOD AND PVC WORK				
11	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately).				
11.1	Second class teak wood	1.02	Cum	166908.05	170246
12	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters:				
12.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	43	Sqm	2793.65	120127
13	Extra for providing lipping with 2nd class teak wood battens 25 mm minimum depth on all edges of flush door shutters (over all area of door shutter to be measured).	43	Sqm	539.85	23214
14	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete.				
14.1	Fixed to openings /wooden frames with rawl plugs screws etc.	490	Kg	278.30	136367
15	Providing 40x5 mm flat iron hold fast 400 mm long including fixing to frame with 10 mm diameter bolts, nuts and wooden plugs and embedding in cement concrete block 300x100x150 mm 1:3:6 mix (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	156	Each	267.20	41683
16	Providing and fixing aluminium sliding door bolts, ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868), transparent or dyed to required colour or shade, with nuts and screws etc. complete :				
16.1	300x16 mm	26	Each	354.05	9205
17	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :				
17.1	300x10 mm	26	Each	151.90	3949
17.2	150x10 mm	26	Each	96.40	2506

18	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :				
18.1	125 mm	52	Each	77.35	4022
19	Providing and fixing aluminium hanging floor door stopper, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete.				
19.1	Twin rubber stopper	26	Each	84.50	2197
20	Providing & Fixing decorative high pressure laminated sheet of plain / wood grain in gloss / matt/ suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 Type S, including cost of adhesive of approved quality.				
20.1	1.0 mm thick	2.5	Sqm	1047.70	2619
21	Providing and fixing fly proof stainless steel grade 304 wire gauge, to windows and clerestory windows using wire gauge with average width of aperture 1.4 mm in both directions with wire of dia. 0.50 mm all complete.				
21.1	With 12 mm mild steel U beading	16	Sqm	1433.80	22941
22	Providing and fixing factory made uPVC glazed/wire mesh windows/doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever required) extruded profiles having minimum wall thickness of 1.70 mm for Series R1 and R2 profiles and 2.10 mm for Series R3 and R4 profiles conforming to EN: 12608 in any shape, colour and design duly reinforced with galvanized mild steel section made of required shape & size as per CPWD Specification, uPVC extruded glazing beads, interlocks and Inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware,				

	SS 304 grade fasteners of minimum 8 mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 : Part 1 to 14, plastic packers, plastic caps and necessary stainless steel screws etc. Profile of frame, sash & mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size				
	and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer- in- Charge. Section of steel reinforcement and cross section of uPVC profiles to be as per design approved by Engineer-in-Charge. Wire mesh / Glazing of plain / toughened / laminated / double glass unit with / without high performance coating as per design requirements and conforming to IS:3548 & IS: 16231 shall be paid separately				
	Note: Structural design prof checked from a Government Engineering Institute, to be provided by the manufacturer for: (i) Sites with basic wind speed > 45 m/sec as per IS 875-part 3 (ii) Sites with structure height more than 20m for all wind speeds.				
22.1	Two and half track three panels sliding window with two glazed & one wire mesh panels with Aluminium channel for roller track, wool pile, nylon rollers with SS 304 body				
22.1.1	Using R3 series with frame (85 mm & above) x (40 mm & above) & glazed sash (30 mm & above) x (55 mm & above) & fly screen sash (20 mm & above) x (50 mm & above) with zinc alloy (zamak) powder coated handle on every glazed panel along with multi-point locking system. (Height upto 1.8 metre).	29	Sqm	11639.45	337544
22.2	Casement window single panel with S.S. 304 friction hinges as per size and weight of sash, multi-point locking system, zinc alloy (zamak) powder coated handles.				
22.2.1	Using R3 series with frame (55mm & above) x (45mm & above) & sash (55mm & above) x (65mm & above). (Height upto 1.8 metre)	1.3	Sqm	15630.85	20320
VII	Steel Work				

23	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete.				
23.1	Hot finished welded type tubes	200	Kg	227.00	45400
VIII	FLOORING				
24	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS:15622, of approved brand & manufacturer, in all colours and shade, laid on 20 mm thick cement mortar 1:4 (1 cement: 4 coarse sand) jointing with grey cement slurry @3.3 kg/sqm including grouting the joints with white cement and matching pigments etc. The tiles must be cut with the zero chipping diamond cutter only .Laying of tiles will be done with the notch trowel, plier, wedge, clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily.				
24.1	Double charge vitrified tile polished finish of size				
24.1.1	Size of Tile 600 x 600 mm	217	Sqm	1697.30	368314
24.2	Glazed Vitrified tiles Matt/Antiskid finish of size				
24.2.1	Size of Tile 600 x 600 mm	32	Sqm	1710.35	54731
25	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joint with white cement & matching pigments etc. complete.				
25.1	Size of Tile 600x600 mm	30	Sqm	1895.05	56852
IX	ROOFING				
26	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1 m x1 m x 400 micron, finished with 12 mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement, rounding the edges and making and finishing the outlet complete.	20	Each	348.25	6965

27	Providing and fixing M.S. holder bat clamps of approved design to UPVC / C.I. or S.C.I. rain water pipes embedded in and including cement concrete blocks 10x10x10 cm of 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) and cost of cutting holes and making good the walls etc. :				
27.1	100 mm diameter	80	Each	423.65	33892
28	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes.				
28.1	110 mm diameter	60	Metre	440.65	26439
29	Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion.				
29.1	Bend 87.5°				
29.1.1	110 mm bend	20	Each	175.55	3511
29.2	Shoe (Plain)				
29.2.1	110 mm Shoe	20	Each	153.95	3079
30	Providing and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-Charge) of total coated thickness 0.50mm (base metal of minimum 0.45mm thickness with total coating thickness of 0.05mm) with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	12	Sqm	862.45	10349
X	FINISHING				
31	12 mm cement plaster of mix :				
31.1	1:6 (1 cement: 6 fine sand)	75	Sqm	389.20	29190
32	15 mm cement plaster on the rough side of single or half brick wall of mix :				

32.1	1:6 (1 cement: 6 fine sand)	20	Sqm	447.20	8944
33	12 mm cement plaster finished with a floating coat of neat cement of mix :				
33.1	1:3 (1 cement: 3 fine sand)	20	Sqm	512.85	10257
34	6 mm cement plaster of mix :				
34.1	1:3 (1 cement: 3 fine sand)	14	Sqm	350.80	4911
35	Distempering with 1st quality acrylic distemper (ready mixed) having VOC content less than 50 gram/litre, of approved manufacturer and of required shade and colour all complete to achieve even shade and colour :				
35.1	Two or more coats over and including water thinnable priming coat with cement primer having VOC content less than 50 gram/litre	330	Sqm	216.75	71528
36	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :				
36.1	Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture	380	Sqm	264.15	100377
37	Wall painting with acrylic emulsion paint, having VOC (Volatile Organic Compound) content less than 50 grams/ litre, of approved brand and manufacture, including applying additional coats wherever required, to achieve even shade and colour.				
37.1	Two coats	1140	Sqm	160.50	182970
38	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade				
38.1	Old work (Two or more coats applied @ 1.43 ltr/ 10 sqm) over existing cement paint surface	2160	Sqm	153.30	331128
XI	REPAIRS TO BUILDING				
39	Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sq.meters and under, including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete, including disposal of rubbish to the dumping ground, all complete as per direction of Engineer-in-Charge.				
39.1	With cement mortar 1:4 (1 cement : 4 fine sand)	35	Sqm	639.15	22370
XII	DISMANTLING AND DEMOLISHING				
40	Demolishing lime concrete manually/ by mechanical means and disposal of material within 50 metres lead as per direction of Engineer- in-charge.	56	Cum	994.20	55675

41	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50metres lead as per direction of Engineer - in- charge.	2.2	Cum	4146.45	9122
42	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.				
42.1	In cement mortar	2.4	Cum	2405.50	5773
43	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead :				
43.1	Of area 3 sq. metres and below	54	Each	428.75	23153
44	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead.				
44.1	For thickness of tiles 10 mm to 25 mm	581	Sqm	85.70	49792
45	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	110	Cum	308.20	33902
XIII	ROAD WORK				
46	Providing and laying matt finished vitrified tile of size 300x300x9.8 mm having with water absorption less than 0.5% and conforming to IS: 15622 of approved make in all colours and shades in for outdoor floors such as footpath, court yard, multi modals location etc., laid on 20 mm thick base of cement mortar 1:4 (1 cement : 4 coarse sand) in all shapes & patterns including grouting the joints with white cement mixed with matching pigments etc. complete as per direction of Engineer-in-Charge.	280	Sqm	1699.60	475888
XIV	SANITARY INSTALLATIONS				
47	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS:13983 with C.I. brackets and stainless steel plug 40 mm, including painting of fittings and brackets, cutting and making good the walls wherever required :				
47.1	Kitchen sink with drain board				
47.1.1	510x1040 mm bowl depth 225 mm	3	Each	8774.10	26322
47.2	Kitchen sink without drain board				
47.2.1	610x510 mm bowl depth 200 mm	2	Each	5768.90	11538

48	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.				
48.1	Semi rigid pipe				
48.1.1	40 mm dia	5	Each	136.25	681
XV	ALUMINIUM WORK				
49	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item):				
49.1	With float glass panes of 4.0 mm thickness (weight not less than 10 kg/sqm)	33	Sqm	1374.05	45344
XVI	WATER PROOFING				
50	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations:				
	(a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment.				
	(b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement :5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs.				
	(c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/ sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge.				

	(d) Finishing the surface with 20 mm thick jointless cement mortar of mix 1:4 (1 cement :4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep.				
	(e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test.“All above operations to be done in order and as directed and specified by the Engineer-in-Charge :				
50.1	With average thickness of 120 mm and minimum thickness at khurra as 65 mm.	333	Sqm	1966.95	654994
51	Credit for dismantled old unserviceable Steel window shutter. The dismantled material shall be removed from the site by the contractor at his own cost.	245	Kg	-38.95	-9543
52	Credit for dismantled doors, windows and cleretory windows (Steel or wood) shutter. The dismantled material shall be removed from the site by the contractor at his own cost.	25	each	-238.35	-5959
				Total	4110987

Contractor

**Executive Engineer
CCD/CPWD/Coimbatore**

PART- C

SCHEDULE 'A'

Schedule of Quantities (as per PWD-3) – Particular Condition and Specification enclosed

SCHEDULE 'B'

Schedule of materials to be issued to the contractor:

S.No.	Description of item	Quantity	Rates in figures & words at which the material will be charged to the contractor	Place of issue
1	2	3	4	5
-----NIL -----				

SCHEDULE 'C'

Tools and plants to be hired to the contractor:

S. No.	Description	Hire charges per day	Place of issue
1	2	3	4
-----NIL -----			

SCHEDULE 'D'

Extra schedule for specific requirements / document for the work, if any:	As attached intender form
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Name of work: Upgradation of 1No. HIG office, 2Nos. HIG Quarters and 2Nos. MIG Quarters at OCR Complex, SIB, Salem.

SCHEDULE 'E'

Reference to General Conditions of Contract:	General Conditions of contract for CPWD-2023 for Maintenance works with all amendments up to last date receipt of tender including extension, if any
i. Estimated cost of work:	
Electrical Items of Work	Rs. 2,53,344/-
ii. Earnest money:	As per civil
iii. Performance Guarantee:	As per civil
iv. Security deposit:	As per civil

GENERAL RULES & DIRECTIONS:

Officer inviting tender:	<i>Executive Engineer Civil , CPWD, Coimbatore</i>
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	<i>See below</i>
* To be filled in by Executive Engineer	

SCHEDULE 'F'

2(v)	Engineer-in-Charge For Electrical Items of Work	<i>Executive Engineer (E) (Coimbatore), CPWD, Coimbatore.</i>
2(vii)	Accepting Authority	<i>Executive Engineer Civil , CPWD Coimbatore or successor thereof</i>
2(x)	Percentage on cost of materials and labour to cover all overheads and profits	<i>15%</i>
2(xi)	Standard Schedule of Rates: Electrical Items of Work	DSR (E&M) 2025 with correction slips up to last date of submission of tender including extension, if any.
2(xii)	Department	<i>Central Public Works Department</i>
9(ii)	Standard CPWD contract Form:	General Conditions of contract for CPWD-2023 for Maintenance works with all amendments up to last date receipt of tender including extension, if any
Clause 1	i. Time allowed for submission of Performance Guarantee, Programme Chart (Time and Progress) and applicable labour licenses, registration with EPFO, ESIC and BOCW Welfare Board or proof of applying thereof from the date of issue of letter of acceptance.	<i>As per civil portion</i>
	ii. Maximum allowable extension with late fee @ 0.1% per day of Performance Guarantee amount beyond the period provided in (i) above	<i>As per civil portion</i>
Clause 2	Authority for fixing Compensation under Clause 2	<i>CE Madurai , CPWD or successor thereof</i>

Clause 5	Number of days from the date of issue of letter of acceptance for reckoning date of start		
Clause 5	Description of milestone(physical)	Time allowed from date of start	Amount to be withheld for non-achievement of milestone
	<i>As per civil portion</i>		
Authority to decide:			

	(i) Extension of time	EE, CPWD, Coimbatore or his successor thereof
	(ii) Rescheduling of milestones	CE, CPWD, Coimbatore or his successor thereof
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	8,00,000 /-
Clause 7A	Whether Clause 7A shall be applicable	<i>Yes</i>
Clause 7B	Whether Clause 7B shall be applicable	<i>Yes</i>
Clause 8A	<i>Authority to decide compensation on account if the contractor fails to submit Completion Plans</i>	<i>EE (E) Coimbatore</i>
	<i>The amount to be payable by the contractor , if he fails to submit completion plans</i>	<i>5000/- for Electrical works</i>

Clause 10A	List of testing equipment's to be provided by the contractor at site lab	As per direction of Executive Engineer (Elect.)
Clause 10 B (ii)	Whether clause 10-B (ii) shall be applicable.	<i>Not applicable</i>
Clause 10 C	Component of labour expressed as percent of value of work	<i>20%</i>
Clause 10 CA		<i>Not applicable</i>
Material covered under this clause	Nearest Materials (other than cement, reinforcement bars and the structural steel) for which All India Wholesale Price Index to be followed	Base Price excluding GST of Materials, covered under clause 10 CA
<i>Not applicable</i>		
Clause 10 CC	Clause 10CC to be applicable in contracts with stipulated period of completion exceeding the period shown in next column	<i>Not applicable</i>
	Schedule of component of other Material, labour, POL etc. for price escalation.	
	i) Component of E&M construction Material, expressed as percent of total value of component work	<i>Not applicable</i>
	ii) Component of Labour, expressed as percent of total value of component work.	<i>Not applicable</i>
	NOTE: Payment under this clause is admissible when contractor submits proof of having paid wages due to	

	every worker through bank or ECS or online transfer to his bank account.						
	iii) Component of P.O.L, expressed as percent of total value of component work.		<i>Not applicable</i>				
Clause 11	Specification to be followed for execution of work - For Electrical Items of Work	1. CPWD General Specifications for Electrical Works Part I Internal – 2023 -with amendments as on date. 2. CPWD General Specifications for Electrical Works Part II External – 2023. Amended up to date- with amendments as on date.					
All above Specifications shall be applicable with correction slips up to the last date of submission / uploading of bid.							
Clause 12							
12.2 C	Deviation limit beyond which clauses 12.2 C shall apply for building work	No Limit					
12.4	(i) Deviation limit beyond which clauses 12.2 c shall apply for foundation work(except items mentioned in earth work subhead in DSR and related items)	NA					
	(ii) Deviation Limit for items mentioned in earth work subhead of DSR and related items	NA					
Clause 16	Competent Authority for Deciding reduced rates - For Electrical Items of Work	CE(Madurai), CPWD Or successor thereof					
Clause 18	List of mandatory machinery, tools& plants to be deployed by the contractor at site	As mentioned					
Clause 19C	Authority to decide for each default	Engineer-in-Charge					
Clause 19D	Authority to decide for each default	Engineer-in-Charge					
Clause 19G	Authority to decide for each default	Engineer-in-Charge					
Clause 32		Requirement of Technical Representative(s) and Recovery Rate					
Sl. No.	Minimum Qualification of Technical Representative	Discipline	Designation (Principal Technical/Technical representative)	Minimum experience	number	Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of Clause 32 Per person	
						Figures (Rs. Per person)	Words (Rs. Per person)

1.	i) Graduate Engineer or Diploma Engineer	Electrical	Project manager / Site Engineer	5 Years or 10 years respectively	1	25,000/- per month per person	Twenty five Thousand per month per person
2	i) Graduate Engineer or Diploma Engineer	Electrical	Project Planning / quality / Site / Billing Engineer	2 Years or 5 years respectively	1	15,000/- per month per person	Fifteen Thousand per month per person

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

Diploma holder with minimum 10 year relevant experience with a reputed construction co. can be treated at par with Graduate Engineers for the purpose of such deployment subject to the condition that such diploma holders should not exceed 50% of requirement of degree engineers.

Clause 25

i) Conciliator	The Special Director General, Region Chennai, CPWD, Chennai
ii) Arbitrator Appointing Authority	CE , Madurai or his successor.
iii) Place Of Arbitration	Madurai.

Clause 38

(i)	(a)	Schedule/statement for determining theoretical quantity of cement, bitumen etc on the basis of Delhi Schedule of Rates	<i>Not applicable</i>
(ii)		Variations permissible on theoretical quantities:	
	(a)	Cement	<i>Not applicable</i>
	(b)	Bitumen for all works	<i>Not applicable</i>
	(c)	Steel Reinforcement and structural steel sections for each diameter, section and category	<i>Not applicable</i>
	(d)	All other materials	NIL

RECOVERY RATES FOR QUANTITIES BEYOND PERMISSIBLE VARIATION

S. No	Description of items	Rates in figures and words at which recovery shall be made from the contractor	
		Excess beyond permissible variation	Less use beyond the permissible variation
NIL			

~~* To be filled in by Executive Engineer~~

SPECIAL CONDITIONS

The 1st lowest tenderer have to submit the following documents for association of electrical contractor at least 7 days after to depositing performance guarantee.

1. The applicant should submit the willingness from an eligible electrical contractor to get associated with the applicant for execution of the electrical component of works in wholesome manner and as per the conditions set out in the MOU to be entered into, between the one who is awarded the work and the associated eligible electrical contractor.
2. In support of the eligibility conditions of the proposed associated electrical contractor, copy of their registration documents, Electrical Contractor's License, GST Documents duly attested by the applicants (Main Contractor) shall be submitted to the EE(E). Each such electrical contractor will certify that they are not debarred as on the day of application for sale of tender.
3. The main contractor will submit MOU signed on non-judicial paper with eligible registered electrical contractor of CPWD) only. The MOU in the enclosed form shall be signed by both the parties i.e. main contractor as 1st party and associated electrical contractor as 2nd party.
4. In the event of the concerned E&M agency not performing satisfactorily or failure of associate sub-contractor to complete the E&M work, the main contractor on the written direction of the department, shall remove the Associate/sub-contractor deployed on the work and shall submit name of new associate who fulfill the conditions mentioned in NIT to execute the leftover work without any loss of time or variation in cost to the department in this regard. Such associates shall also enter into tripartite Agreement/Contract along with the main tenderer and the departmental officer and shall meet all the guarantee for the equipment's already supplied for which payment has been released by the Deptt. in part. If any equipment supplied for the work, during the currency of the earlier Associate/sub-contractor and paid partly by the Deptt. , becomes redundant /not in a position to be installed and commissioned and put to beneficial use due to change in agency for execution of E&M work, the main contractor shall be liable for replacement of the equipment(s) at no cost to Department. No change of Electrical Contractor will be allowed without prior approval of the department.
5. Executive Engineer (E) shall be the Engineer-in-charge as far as electrical works are concerned. Separate tender schedule abbreviated CPWD-8 and Special Conditions for Electrical Work are appended with this tender It will be obligatory on the part of the contractor/tenderer to sign the tender documents for all the component parts.
6. The main contractor shall be responsible and liable for proper and complete execution of the Electrical work and ensure coordination and completion of both civil and electrical work.
7. The associate or sub-contractor shall sign a tripartite Agreement/Contract along with the main tenderer and the departmental officer, for technical compliance of specification, guarantee etc.
8. The associate or sub-contractor shall attend the inspection of the work by the Engineer-in-Charge of E&M works as and when required.

MEMORANDUM OF UNDERSTANDING [M.O.U] BETWEEN
(TO BE SUBMITTED BEFORE START OF WORK)

- 1] M/S [Name of the firm with full address]
 Enlistment Status
 Valid Up to:
 [Henceforth called the main contractor]
 And
- 2] M/S [Name of the firm with full address]
 Enlistment Status
 Valid Upto:
 [Henceforth, called Associated Electrical Contractor or Electrical Contractor]

Name of Work:-Upgradation of 1No. HIG office, 2Nos. HIG Quarters and 2Nos. MIG Quarters at OCR Complex, SIB, Salem. Of an estimated cost of **Rs. 2,53,344/-** as per schedule, specifications, terms and conditions of the tender.

We state that M.O.U's. between us will be treated as an agreement and has legality as per Indian Contract Act (amended upto date) and the department (CPWD) can enforce all the terms and conditions of the agreement for execution of the above work. Both of us shall be responsible for the execution of work as per the agreement to the extent of the MOU allows.

We have agreed as under:

- 1- The associated electrical contractor will execute all electrical works in the wholesome manner as per terms and conditions of the agreement. Any type of internal transaction between the electrical contractor and main contractor shall be as per their convenience and mutual understanding without involving the department. Security deposit shall be deducted as per agreement.
- 2- The electrical contractor shall be liable for disciplinary action and other legal actions as per agreement if he fails to discharge obligation as per this agreement besides forfeiture of the security deposit.
- 3- All the machinery and equipments, tools and tackles required for execution of the electrical works. As per agreement shall be the responsibility of the electrical contractor.
- 4- The site staff required for the electrical work shall be arranged by the electrical contractor as per terms and conditions of the agreement.

SIGNATURE OF MAIN CONTRACTOR

SIGNATURE OF ASSOCIATED
ELECTRICAL CONTRACTOR

Date

Date

Place

Place

WILLINGNESS CERTIFICATE
(To be submitted before start of work)

Name of Work: Upgradation of 1No. HIG office, 2Nos. HIG Quarters and 2Nos. MIG Quarters at OCR Complex, SIB, Salem.

I hereby give my willingness to work as electrical contractor for the above mentioned work.

I will execute the work as per specifications and conditions for the agreement and as per direction of the Engineer-in-charge. Also I will employ full time technically qualified supervisor for the works. I will attend inspection of officers of the department as and when required.

Date:

Signature of Contractor

ADDITIONAL CONDITIONS OF CONTRACT & SPECIFICATIONS FOR E&M WORKS FOR DEVELOPMENT OF SITE AND BULK SERVICES FOR Upgradation of 1No. HIG office, 2Nos. HIG Quarters and 2Nos. MIG Quarters at OCR Complex, SIB, Salem. (SH: - E&M Portion, Part-C).

1.0. GENERAL AND COMMERCIAL CONDITIONS:

- 1.1. This section covers the various commercial conditions applicable and to be read in connection with the conditions of contract of the standard form (CPWD-7 / 8) of the department (CPWD) forming part of the tender papers. In the event of any discrepancy between these two, the requirements of the former will be followed.
- 1.2. These additional conditions and additional specifications are applicable to all E&M works in general. For specific tenders some of the E&M services may not be a part of the particular tender. In such cases the conditions and specifications which are not related to the works or components thereof mentioned in the schedule of work shall not apply for that particular tender.
- 1.3. All the E & M works shall be carried out as per direction and to the entire satisfaction of the Engineer-in-charge.
- 1.4. Unless otherwise specified in the following conditions, the work shall, in general, be carried out as per following specifications:
 - a) CPWD General Specifications for Electrical Works – Part-I (Internal), 2023 amended up to date.
 - b) CPWD General Specifications for Electrical Works – Part-II (External), 2023 amended up to date.
 - c) *CPWD Specifications for Heating, Ventilation & Air-Conditioning (HVAC)-2024 - with amendments as on date.*
 - d) ~~CPWD General Specifications for Electrical Works – Part-V (Wet Riser and Sprinkler System), 2020 amended up to date.~~
 - e) ~~CPWD General Specifications for Electrical Works Part VI Fire Detection and Alarm System – 2018.~~
 - f) ~~CPWD General Specifications for Electrical Works (Part-III LITS & Escalators) – 2003~~
 - g) Relevant BIS specifications amended up to date.
 - h) Indian Electricity Act 2013 and Indian Electricity Rules 1956 amended up to date.
 - i) Local Fire Regulations applicable at the place of installation.
 - j) Relevant and applicable foreign standards and specifications amended up to date.
 - k) Any other relevant act or rules and local byelaws.
 - l) Commercial and additional conditions and specifications for E & M works for this tender.
- 1.5.1. The work shall be carried out by CPWD enlisted contractor of appropriate Class as per Composite category with valid Electrical license and supervisor license only and other criteria as per norms. In case the main contractor is not fulfilled the criteria, he should engage an suitable agency as associated contractor, for execution of this work. Name of

electrical agency shall be given in consent letter Performa along with enlistment details of the agency

- 1.5.2. Executive Engineer (Elect.) shall be the Engineer-in-Charge as far as electrical works are concerned. It will be obligatory on part of the main contractor to sign the tender documents for all the component. The main contractor has to enter in agreement (MOU) with the Contractor associated by him for execution of minor component. Copy of such agreement shall be submitted to EE/DDH of minor component as well as EE in charge of major component
- 1.5.3. Running payment for Electrical/Mechanical components shall be made by the EE (E) directly to the main Contractor. The main contractor shall make the payment to associated Contractor within 15 days of receipt of each running account payment
- 1.5.4. The main contractor shall be responsible for coordinating the activities of all works and will ensure progress of works as per laid down program.
- 1.5.5 Normally, there shall be no change in associated contractor for minor component work during the execution of the work. If at all, a change is necessitated, the same should be acceptable to the department and such acceptable contractor shall fulfill the conditions laid down for the selection of the associated contractor in the tender document.
- 1.6. If the specifications for any item or its component are not available in the CPWD specifications cited above, relevant BIS specification as amended up to date shall be followed, whether or not the specific reference of a particular BIS specification has been made in this specification / tender document.
- 1.7. Wherever any reference to any Indian Standard specification occurs in the document relating to this contract the same shall be inclusive of all amendments issued thereto or revisions thereof, if any, up to the date of opening of tenders.
- 1.8. All materials should conform to relevant BIS specifications wherever the same exists in absence of stipulation in this tender document.
- 1.9.1. Where manufacturers furnishes specific instructions / recommendations relating to the materials used in this job and/or their installation, covering points not specifically mentioned in these documents, these instructions shall be followed in all cases and shall be deemed to be included in the schedule of work whether they have been specifically mentioned or not.
- 1.9.2. Manufacturer's catalogue / literature on installation, testing, maintenance and troubleshooting of major equipment's shall be submitted to the department while handing over the installation.

1.10. MATERIALS TO BE USED IN THE WORK:

- 1.10.1. All materials used in the work shall be new and of good quality, conforming to the relevant specifications as per good engineering practice.
- 1.10.2. All the materials proposed to be used in the work should be got approved from Engineer in Charge before use in work.

- 1.10.3. The materials to be supplied / provided by the contractor in execution of the work should be ISI marked, wherever applicable and of make as specified in the agreement. Where the make of any particular material is not specified in the contract document, the material shall be supplied as per makes desired by the engineer-in-charge.
- 1.10.4. It will be the responsibility of the contractor / bidder to ensure use of genuine materials in the work. The department reserves the right to get (any / all materials / components) inspected by the manufacturer or their authorized representatives at any stage of the execution of work. If any of the materials, equipments supplied and used in work is found spurious at any stage, then the department reserves the right to ask the contractor to replace it by genuine one and make suitable recovery and / or withheld suitable amount till it is done, even if any payment against that material is already made.
- 1.10.5. The department may ask for any valid document like manufacturer's test certificate, document for purchase of the material, document for import / shipment of imported materials etc. as deemed fit by the engineer-in-charge to ascertain genuinity of material supplied by / used in the work by the contractor. The contractor shall remain bound to submit all such documents to the department failing which payment may not be made or if already paid may be recovered / withheld from subsequent running account payment.
- 1.10.6. Copies of all purchase documents for all equipment's, accessories, fittings, fixtures etc. which carry guarantee / warrantee shall be handed over to the department in suitable form so that proper guarantee of materials are available to the department.
- 1.10.7. All the equipment's and their components and all the materials to be used in the work shall be suitable for the environmental conditions at the location of the work.
- 1.10.8. The materials to be supplied in this work shall be scheduled in such a way that miles stones are achieved and no shortfall is there. At the same time materials should be brought at sight in phases in such a manner so that they are not brought much in advance at site and dumped in work site for long period before installation and guarantee / warrantee of the materials are available for full period as per tender conditions. If the materials / equipment's are supplied at site much before actual use in work, the department shall not remain bound to make payment for such items of work involving the said materials / equipment's. The decision of the engineer in charge will be final and binding on all.
- 1.10.9. Dismantle materials, if any, should be returned to the department unless otherwise anything in contrary has been specifically stated in the tender document / BOQ.

1.11. RATES:

- 1.11.1. Unless otherwise provided in the schedule of quantities of the work the rates tendered by the contractor shall be all inclusive and shall apply to all heights, lifts, leads and depths of the building and nothing extra shall be payable to him on this account.
- 1.11.2. The rates for all items of work shall, unless clearly specified otherwise, include cost of all labours, materials and other inputs involved in the execution of the item

irrespective of whether they have been specifically mentioned in the tender document or not.

- 1.11.3. This being an indivisible works contract, GST etc. are not payable separately. The rates tendered shall be firm and inclusive of all taxes, duties, cess and levies as applicable, and all charges for packing, forwarding, insurance, freight and delivery, installation, testing and commissioning at site, watch and ward etc. including temporary constructional storage, risks, over head charges, general liabilities / obligations and clearance from local bodies and State Fire Services, as applicable. Nothing extra shall be paid. However, fees payable to the local bodies / authorities for such clearance etc. shall be borne by the department.
- 1.11.4. In case the same item (s) appear more than once in the schedule of work / BOQ under the same sub head or among the different subhead of works, the lowest rate quoted for that item (s) shall be considered for the particular item (s) wherever appeared in any part of BOQ / Schedule of works for the purpose of tender evaluation although web generated e-price bid may incorporate different quoted rate for same item (s) as per the quoting pattern of the tenderer. The tendered amount thus worked out shall be final & shall be binding on the contractor. (Applicable for item rate tender).

1.12. ACCIDENT:

- 1.12.1. The department (CPWD) shall not have any responsibility or liability in case of any accident injury to the personnel to the contractor at work site or to the general public at the work site due to mishandling equipments by the personnel of the contractor or any other similar reason. The responsibilities and liabilities for such accidents and incidents shall be borne in full by the contractor.

1.13 AFTER SALES SERVICE:

- 1.13.1. The contractor shall ensure adequate and prompt after sales service in the form of maintenance personnel and spares as and when required with a view to minimize the break down period. Particular attention shall be given to ensure that all spares are easily available during the normal life of the installation.

1.14 REMOVAL OF SURPLUS MATERIALS AND TOOLS:

- 1.14.1. **After completion of work the agency shall remove his men, materials and debris etc. from site.**

1.15 QUALITY OF WORK AND WORKMANSHIP:

- 1.15.1. The contractor shall be entirely responsible and answerable for all the works done by him regarding quality, adherence to the laid down specifications, terms and conditions, warranty/guarantee etc. and he shall be liable to bear any compensation that may be levied by the department under any of the clauses of the agreement.
- 1.15.2. Clause 1.15 of CPWD General Specifications for Electrical Works, Part – IV, Substation 2013 shall be applicable
- 1.15.3. The materials having ISI mark shall have precedence over the one conforming to IS Specifications.
- 1.15.4. The contractor is advised to visit the site before quoting for his tender to apprise himself about the site environments and other conditions. Drawings and inventories can be seen in the office of the Engineer – in – charge.

1.16 SITE ORDER BOOK:

- 1.16.1. The contractor or his authorized representative shall sign the site order book and comply with the remarks entered therein by the representative of the department.

1.17 WATCH AND WARD:

- 1.17.1. The contractor will make his own storage of his own materials. The watch and ward of the materials and of the installations would be responsibility of contractor till the work is completed / handed over to the department. Nothing extra shall be paid to the contractor on this account.
- 1.17.2. Making payment to the contractor in any form against supply of materials / equipment's / components or execution thereof shall not absolve the contractor of his responsibility of watch and ward of the equipment's / materials etc. and their satisfactory functioning until the same is taken over by the department after successful installation, testing, commissioning and running in period.
- 1.17.3. No separate storage space will be provided to the contractor for storage of his materials and equipment's to be brought at site and used in execution. The available open site space may however be used by the contractor for storage purposes in which case he may build up temporary store at available site space at his own cost.

1.18 VARIATION IN QUANTITY:

- 1.18.1. Quantities shown against each item of work or supply are tentative which may vary on either side (plus or minus). This variation shall, in general, be governed by clause no. 12 of the clauses of contract of CPWD form 7 / 8. The contractor should ensure from the Engineer-in-charge and from the site condition the actual quantity required / to be used / to be supplied before bringing the materials at site. In case the actual quantity of material required at the site is less than the stipulated quantity, the contractor cannot claim to supply entire quantity stipulated in the schedule of quantities of work (Schedule – A) as well as cannot demand for payment thereof. The contractor shall therefore, be very careful about the quantity of materials to be supplied / brought at site. The decision of the Engineer-in-charge in this regard shall be final and binding on the part of the contractor. Even if initial payment for supply of materials is made in any form for bringing material at site and if it is found at later stage that the actual requirement is less as per site requirement or as per decision of the Engineer-in-charge, the contractor shall have to take back the additional quantity brought / supplied at site and necessary adjustment shall be made from his next bill on this account. No claim in this regard shall be entertained.

1.19 NATURAL CALAMITY:

- 1.19.1. No payment will be made to the contractor for any damage caused by rain, snow fall, floods, dampness, fire, sun or any other natural cause whatsoever during the execution of work. The damage to the work due to above reason, if any, shall have to be made good by the contractor at his own cost and no claim on this account shall be entertained.

1.20. INSPECTION AND TESTING:

- 1.20.1. The Engineer-in-charge or his authorized representative may inspect any material at manufacturers' works and may witness routine tests as per relevant

Indian Standard Specifications or other relevant specifications at manufacturers' works.

- 1.20.2. The contractor shall give in writing advance notice to the Engineer-in-charge and arrange for such inspection / presence for testing at manufacturers work. The TA/DA etc. of the departmental personnel who will be deputed to witness the tests etc. shall be borne by the Department.
- 1.20.3. The Engineer-in-charge or his authorized representatives shall have, at all the reasonable times, access to the contractor's premises or works or other works where manufacturing / fabrication shall be done and shall have the power, at all reasonable times, to inspect and examine the materials and workmanship during its manufacture or fabrication.
- 1.20.4. Inspection of imported materials at foreign works shall however not be carried out by the department. These materials shall be inspected and tested at site. Manufacturers' original test certificates and document of import / shipment should be provided to the department along with the materials without which no payment should be made to the contractor.
- 1.20.5. The contractor shall arrange for all the materials and labour required in connection with inspection of equipment or for any testing to be carried out at his works / manufacturers' works or at site of installation. Notice of such inspection / presence for testing shall be given by the contractor to the Engineer-in-charge at least fifteen days in advance.
- 1.20.6. Notwithstanding approval for such tests / inspection of equipment's / components by the Engineer-in-charge or his authorized representative, the contractor shall be required to perform site tests as desired by the Engineer-in-charge and prove the correctness of ratings and performance of equipment's / components and materials supplied and / or installed by him as per contract specifications and conditions at his own cost.
- 1.20.7. The Engineer-in-charge reserves the right to reject any equipment / machinery / material should it, on tests after installation, be found not to comply with contract specifications or its performance is not satisfactory.
- 1.20.8. Final inspection and testing will be done by the engineer-in-charge or his representative as per details to be indicated by the engineer-in-charge.
- 1.20.9. It shall be the responsibility of the contractor to get the installation inspected and passed by the local authorities concerned, as may be required by the local bye laws. The contractor will extend all help including test facilities to the representatives of the local bodies. In case the contractor fails to make desired facilities available during inspection, the department reserves the right to provide the same at the risk and cost of the contractor. The observation of the local authorities will be promptly attended by the contractor. The installation will be accepted by the department only after receiving clearance from the local bodies / fire authorities. The inspection charges leviable by the local / statutory authorities for the inspection shall however, be borne by the department.

1.21. COMPLETION DRAWING AND MANUAL :

- 1.21.1. In addition to the mode and form of submission of completion drawings and manuals as stipulated in the relevant CPWD Specifications for various sub-heads of E&M works, the contractor shall also submit soft copy of the completion drawings in CD / DVD.

1.22. POWER SUPPLY AND WATER SUPPLY :

- 1.22.1. No Power & Water Supply shall be provided by the department for the purpose of execution of the E&M work, except for testing and commissioning of installations. The contractor shall make his own arrangement in this regards. The power supply for testing and commissioning will be given at one point inside the premises and the contractor shall have to make arrangement for required cabling work and switch gears for extension of the power to the required location for testing. This will be applicable to all sub-heads of E&M works.

1.23 WORKS TO BE DONE BY THE CONTRACTOR :

- 1.23.1. Unless otherwise mentioned in the tender documents, the following works shall be done by the contractor and therefore, their cost shall be deemed to be included in their tendered cost – whether specifically indicated in the schedule of quantity / work or not:
- a. Foundations for equipments / structures / fuel tank / pumps including vibration isolation spring / pads.
 - b. All minor building works necessary for installation of equipments such as making of openings in walls / floors, either of RCC or brick masonry, foundation trench for fuel line and cable, making of opening in walls or in floors and restoring them to their original condition / finish and necessary grouting etc. as required.
 - c. Dismantling of brick wall, if any, for inserting / positioning / placement of equipments, Control panel / Diesel Tanks or for taking ducting / cable tray / pipes and rebuilding / making good the same to its original position / finish.
 - d. Making good all damages caused to the structure during installation and restoring the same to their original finish.
 - e. Supply and installation of all necessary angle / channel / flat iron supports and brackets etc. for installation of the substation equipments, D.G. Sets / Diesel Tanks / Exhaust Piping / Water and fuel piping / Cabling / electric Panels / bus-trunking / pumps / air-conditioning ducts / air-conditioning equipments and their sub assemblies / accessories on floor / wall / Shaft / terrace and at other places, as may be necessary including their installations in position.
 - f. Responsibility to ensure safety of all materials against pilferage and damage till the installation is handed over to the department.
 - g. All scaffolding as may be necessary for installation of Exhaust piping / Cabling / Electric Panels / exhaust pipe / wet riser and sprinkler pipes / ducts and all other equipments and their sub assemblies / accessories on floor / wall / Shaft / terrace and at other places during erection work and subsequent removal.

- h. Painting of all exposed metal surfaces of equipments and components with appropriate / approved colour as required and as desired by the Engineer – in - charge.
- i. All electrical works including cables / wires, earthing etc as specified in Schedule of work.
- j. Small wiring, inter-connection etc. inclusive of all materials and accessories necessary to comply with the regulations as well as proper and trouble free operation of the equipment.
- k. Closing of the cable entry points in sub-station/electrical panel rooms etc where ever applicable against seepage of water rodents etc.
- l. Approval / clearance of the complete installation shall be obtained by the contractor from CPCB / State Pollution Control Board / Local Bodies / Central Electricity Authority (CEA) / other licensing authorities wherever required. However, application shall be made by the Department and any statutory fee, as applicable, shall be paid by the department directly to the government authorities concerned.

1.24. DATE OF TAKING OVER OF THE INSTALLATION & DATE OF ACCEPTANCE :

- 1.24.1. The date of taking over of the installations under any sub-head of E&M works shall be the date of taking over the complete building (s) after due completion of the entire composite work and after complete test and trial run of all the major equipments under all sub-heads of E&M works to the entire satisfaction of the engineer-in-charge.
- 1.24.2. Subject to the guarantee clause, date of taking over the installation after stipulated period of trouble free operation of all the E&M works shall be the date of acceptance.

1.25. ORDER OF PREFERENCE :

Should there be any difference or discrepancy between the description of items as given in the Schedule of Quantities, technical specifications for individual items of work (including additional and commercial conditions) and IS Codes etc., the following order of preference shall be followed:

- 1. Schedule of quantities
- 2. Additional and Commercial Conditions
- 3. Technical specifications specified in the tender
- 4. General Conditions of Contract for CPWD Works
- 5. Drawings
- 6. CPWD General Specifications
- 7. Relevant IS or any other International code in case IS code is not available.

- 1.26. Relevant IS or any other International code in case IS code is not available. The responsibility of execution of Specialized E&M works under scope of NIT shall lie with Main composite Contractor only. He is required to furnish the documents/certificates in support of his experience to execute the mentioned specialized E&M works given in Table-1 below after award of work. If the main agency does not have required experience, they must associate

Specialized Agency/Agencies to execute the mentioned E&M components of the work having requisite experience as per table-1, However, the composite 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 get it installed from authorized agency/service provider of the manufacturer or specialized agency as per criteria mentioned in NIT.

Sl. No.	Sub head of work	Eligibility criteria –The agency should have successfully completed, works as mentioned during last seven years ending previous day of last date of submission of Bid.			Definition of similar work
		One similar works each of value not less than (Rs.)	Two similar works each of value not less than (Rs.)	Three similar work each of value not less than (Rs.)	
	Major work (E & M)				
1	SH:I IEI works	NOT APPLICABLE , Only CPWD enlisted agency of appropriate class with valid Electrical license issued by competent authority			

Note: -

1. All amounts rounded off to a convenient figure. The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum; calculated from the date of completion to the ending previous day of last date of the month previous to the one in which tenders are invited

2. While considering any similar work executed by applicant firm under joint venture, the experience of the applicant firm in that work shall be restricted to its share/responsibilities as reflected in the Memorandum of Understanding (MoU), signed between the parties, while forming joint venture for that work, attested copy of which shall be submitted.

3. **Completion Certificate (Duly attested) issued by the client department by an Officer of the rank not below the Executive Engineer or equivalent giving the list of major equipment installed are to be furnished along with the application clearly indicating satisfactory completion, date of completion, scope and value of the work**

In this connection, it is mentioned that the composite contractor and the associated specialized agencies shall give required affidavit to confirm their association to the Engineer-in-charge. Tender accepting authority may approve change of sub-agency in case it is required during the currency of the contract.

In case building category contractor does not fulfill the prescribed eligibility criteria respectively for these work(s), or, He does not directly procure the equipment of approved make from manufacturer and get it installed from authorized agency/service provider of the manufacturer or specialized agency as per criteria mentioned in NIT, they must associate Specialized Agency/Agencies to undertake the specialized component/components of the work having requisite experience for individual works as mentioned below:

2. ADDITIONAL CONDITIONS AND SPECIFICATIONS FOR THE WORK OF INTERNAL & EXTERNAL ELECTRICAL INSTALLATIONS :

- 2.1. The wires / cables used for point wiring, circuit wiring, sub-main wiring, power wiring and other wirings shall be done by FRLS grade PVC insulated copper conductor single core cable of 1100 V grade and of makes as specified in the list of accepted makes of materials.
- 2.2. All the wires should be terminated to the switch box / DB / MCB etc. by crimping with suitable size tinned copper lugs, unless the wire is single stranded. For termination to switches soldering is permissible. Nothing extra shall be paid on this account.
- 2.3. Hidden / concealed items and earthing work shall be done in the presence of the Engineer-In-charge of the work or his authorized representative only. The contractor shall give due notice for such work in advance to the department.
- 2.4. The wireman / electrician engaged shall possess valid electrical workman permit in appropriate category as per rule.
- 2.5. The drawing showing layout of the main board, allied equipment, if any, shall be got approved by the contractor from the engineer-in-charge before fabrication and execution.
- 2.6. All hardware, fastening material viz nuts, bolts, washer and screws etc. to be used on work shall be of zinc / cadmium plated iron.
- 2.7. The contractor shall have to furnish the insulation test report, earth test report, along with all required detailed of electrical load on the prescribed Performa for the electric connection from the supply company.
- 2.8. The contractor shall submit the completion certificates and completion plan as per clause 1.26 of General specification for Electrical work (Part-I internal)-2013
- 2.9. The chases in wall shall be done by chase cutting machines, for which the contractor shall arrange adequate numbers of chase cutting machines (chase cutters) for cutting chases in wall etc. for laying of conduit within the scope of work nothing extra shall be paid.
- 2.10. The contractor shall be entirely responsible and answerable for all the works done by him regarding quality, adherence to the laid down specifications, terms and conditions, warranty/guarantee etc. and he shall be liable to bear any compensation that may be levied by the department under any of the clauses of the agreement.
- 2.11. The contractor is advised to visit the site before quoting for his tender to apprise himself about the site environments and other conditions. Drawings and inventories can be seen in the office of the Engineer – in – charge.
- 2.12. The contractor will make his own storage of his own materials. The watch and ward of the materials and of the installations would be responsibility of contractor till the work is completed / handed over to the department. Nothing extra shall be paid to the contractor on this account.

- 2.13. The contractor should use only the approved makes of materials in the work specified in the NIT.
- 2.14. The agency will provide lay out drawing prepared by his Engineer with consultation with Engineer-In-Charge or his representative for approval before execute of work.
- 2.15. All multi data meters specified in item shall be suitable to measure voltage, current, PF, Kwh, frequency etc.
- 2.16. The department reserves the right to send such materials to the manufacturers / authorized test laboratory to verify the genuineness and quality of the product.
- 2.17. The work shall be carried out in engineering like manner and bad workmanship shall be rejected summarily. For redoing the job, no claim of the contractor shall be entertained on this account.
- 2.18. Payment terms: On account payments for part work (after stipulated and statutory deductions) as assessed by the Engineer – in-charge for the applicable items in the Contract shall be payable at part rates not exceeding the percentage indicated against the stages of work mentioned below:

a) Items of LED fittings, fans, DB, MCB, AC etc.

S.N	Stage of work	Percentage of Rate
a	On initial inspection of material and delivery at site in good condition on pro-rata basis	80%
b	On completion of installation on pro-rata basis	10%
c.	On completion of testing and commissioning	5%
d	At the time of payment of final bill	5%

b) Items connected with point wiring, circuit wiring, sub-main wiring, power point wiring and light plug wiring

SL	Stage of work	Percentage of Rate
a	On laying of conduits with accessories, switch boxes, etc. on pro-rata basis	40%
b	On drawing of wires including terminations, switches, sockets etc. on pro-rata basis	40%
c.	On completion of item and after testing and commissioning	15%
d	At the time of payment of final bill	5%

c) For other items, the part rates will be decided by the Engineer-In-Charge of the work and shall be binding on the contractor.

2.19. LUMINAIRES:

- 2.19.1. A sample of each item of schedule of supply shall be handed over by the bidder in the office of the Engineer – in – charge (Electrical) before procurement of the fittings. These samples shall be returned back afterwards.
- 2.19.2. The make of luminaries shall be strictly as per the tender conditions. The contractor must submit technical literature & photometric data, LM 79 and LM 80 type test certificates along with write up of the luminaries to be supplied by him.
- 2.19.3. Copy of type test certificate for all types of luminaries as per BIS, including type test certificate from a Central / State government or public sector laboratory or a laboratory recognized / accredited by the Central / State Government for such tests for the light fittings shall be submitted before acceptance of the fittings.
- 2.19.4. Contractors should obtain an undertaking from the manufacturer that they have a system of quality control to ensure consistent good quality of the finished product and as such has a scheme of inspection of the light fittings. They should agree for inspection of the light fittings and testing as per relevant IS and other standards in their labs.
- 2.19.5. **GUARANTEE:** All the electrical light fittings with all its components (Except LED luminaries) shall be guaranteed for a minimum period of one year or for a period for which the manufacturer gives their normal guarantee whichever is longer from the date of completion / acceptance of the installation. All the LED type of luminaries including all accessories and drivers shall be guaranteed for a minimum period of 5 years or for the normal period of guarantee provided by the manufacturer whichever is longer from the date of completion / acceptance of the installation. The contractor shall remain responsible for replacement / repair of the fittings free of cost if they are found not operating / glowing during maintenance / warrantee period.
- 2.20. It will be the obligatory on the part of the contractor to get all the light fittings and fixtures and their components / accessories inspected by authorized engineer / personnel of the manufacturer of the fittings at site after the materials are received at site and obtain certificate that the materials reached at site are genuine and manufactured by them.
- 2.21. All MCCBs with Ics = 100% Icu shall only be provided except mentioned.
- 2.22. All the MCCBs / RCCBs/ MCBs/ MCB DBs shall be of similar make. MCBs shall be of 10 KA rating. For incomer MCCBs in panel's earth leakage protection shall be provided. The KA rating for MCCB shall be as per the item.
- 2.23. The contractor will have to arrange for insulation and other tests like cable test etc. as per rules in the presence of the representative of Engineer-in-Charge as and when required by him and submit the test report in triplicate before the work can be considered as complete.
- 2.24. The contractor shall be responsible for the safe custody of the electrical installation in the building, including fitting and fixtures till the installations handed over to the department. He should make his own arrangement for proper watch and ward at his risk and cost. No claim will be entertained on this account.

- 2.25. The work is to be carried out in workman like manner and generally in accordance with the plans. However, the contractor will be bound to carry out the work with minor deviation over the plan supplied if desired by the Engineer-in-Charge of the work.
- 2.26. Stage payment to the contractor for various minor components of work shall be regulated as per CPWD Specifications. For works for which the % payment is not specially mentioned in the specification, the rate of stage payment shall be decided by Engineer-in-Charge.
- 2.27. Any Damage done to the building during the execution of electrical work shall be made good immediately at his own cost to the entire satisfaction of the Engineer-in-Charge.
- 2.28. All PVC insulated copper conductor cables used for the work shall be FRLS type with ISI mark and of make as per approved list.
- 2.29. Wherever makes of LT panels/Feeder pillars are not specifically mentioned in schedule/particular sub work specification, the same shall be fabricated by panel builders with in house facilities for seven or more tank treatment process and powder coating. They also shall have approval from CPRI for panels with rating not less than the bus bar rating of the item.
- 2.30. Drawings of all panels and fabricated equipments shall be submitted to the Engineer-In Charge got approved before fabrication.
- 2.31. The connections, inter-connections, earthing and inter-earthing shall be done by the contractor wherever required to be done for energization of the installation and nothing extra shall be paid on this account.
- 2.32. General arrangement of Feeder Pillar shall be got approved before fabrication work starts. Drawing with details shall be submitted to the Engineer-in-Charge and got approved before fabrication.
- 2.33. Cable route and pole locations shall be marked in drawing / site and got approved by the Engineer-in-charge or his representative before commencement of work.

Clause-18

List of mandatory machinery, tools and plants to be deployed by the contractor at site

1.	Steel/Aluminum Ladder 1.5 m to 8 m.	2 Nos.
2.	Chase cutting machines.	2 Nos.
3.	Electrical wire drawing equipment.	2 Set.
4.	Torque wrench for nut/bolt/screws.	2 Nos.
5.	Conduit die set.	2 Set.
6.	Pipe vice.	1 No.
7.	Bench vice.	1 No.
8.	L.T. Meggar 500/1000 volts.	1 No.
9.	Tong Tester.	1 No.
10.	Multimeter.	1 No.
11.	Hydraulically operated & hand operated crimping machine.	1 No.
12.	Earth tester.	1 No.
13.	Portable Ordinary drilling machine.	2 Nos.
14.	Portable Hammer drilling machine.	2 Nos.
15.	Overhead conduit puller.	1 No.

LIST OF MAKE OF MATERIALS:-

S.NO	Name of the Product	Approved Makes
1	PVC insulated copper conductor FRLS copper ISI Marked	Havells/RR Kabel/KEI/ Polycab
2	MCB / ELCB/RCCB / DB/ Isolator	Legrand/Siemens/Schneider/ L&T/ABB
3	XLPE UG Aluminium/Copper LT Cable	Havells/ KEI/ RR Kabel/ Polycab
4	Cable glands and cable lugs	Jainsons / Comet / Dowells / Prabath/ Polycab/ Gripwel/ Raychem.
5	DWC/ HDPE	Gemini / Rex /Duraline/prince/supreme
6	PVC Conduit (ISI Marked) medium class	Avonplast/AKG/Precision/Modi
7	GI Pipe (ISI Marked)	Jindal / TATA / SAIL.
8	Modular Switches & Sockets, Fan Regulator, RJ-45 Data Socket / GI Boxes/TV/Telephone sockets	Legrand-Myrius/ Northwest-NOWA / Schneider (opale)
9	BLDC Fans (Ceiling Fans)	Atomberg –Efficio /Havells /Crompton /Orient
10	Exhaust Fan/WallFans / Pedestal Fans	Crompton/Orient/Havells/Almonard
11	All types of LED Fittings (Indoor / Outdoor Light Fittings)	Crompton /Phillips/Wipro/ Havells
12	Moulded Case Circuit Breaker/ Motor protection circuit breaker Electric	Legrand/Siemens/Schneider/ L&T/ABB
13	Telephone cable	Havells/RR Kabel/Finolex/ Polycab
14	CMS	Legrand/OBO/MK

Note : In case make of any equipment or material is not specified in the NIT the decision of Engineer-In-Charge in this regard will be final

EXECUTIVE ENGINEER (E)
(COIMBATORE)

Schedule of Work						
Name of Work: - Upgradation of 1No. HIG office, 2Nos. HIG Quarters and 2Nos. MIG Quarters at OCR Complex, SIB, Salem.						
Sl. No	Description of Item	Qty		Rate	Amount	DSR / MR No
1	Wiring for light/ power plug with 2X4 sq. mm FRLS/HFFR PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit along with 1 No. 4 sq. mm FRLS/HFFR PVC insulated copper conductor single core cable for loop earthing as required.	180	meter	373.00	67,140.00	1.12
2	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.					1.24
2.1	5/6 A switch	5	each	121.00	605.00	1.24.1
2.2	15/16 A switch	5	each	176.00	880.00	1.24.3
2.3	3 pin 5/6 A socket outlet	5	each	136.00	680.00	1.24.4
2.4	6 pin 15/16 A socket outlet	5	each	219.00	1,095.00	1.24.5
3	Supplying and fixing two module stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	5	each	402.00	2,010.00	1.25
4	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 A modular socket outlet and 5/6 A modular switch, connections etc. as required.	2	each	545.00	1,090.00	1.31
5	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 A modular socket outlet and 15/16A modular switch, connections etc. as required.	2	each	659.00	1,318.00	1.32
6	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 2 nos. 3 pin 5/6 A modular	2	each	757.00	1,514.00	1.56

Corrections : Nil, Deletions : Nil, Insertions : Nil, Overwriting : Nil,

AE (P)

EE

	socket outlet and 2 nos. 5/6 A modular switch, connections etc. as required. (For light plugs to be used in non residential buildings).					
7	Supplying and fixing DP sheet steel enclosure on surface/ recess along with 25/32A, 240V, "C" curve DP MCB complete with connections, testing and commissioning etc. as required.	2	each	1,258.00	2,516.00	2.16
8	Brush Less Direct Current (BLDC) Motor Supply, Installation, Testing and Commissioning of ceiling fan with Brush Less Direct Current (BLDC) Motor, class of insulation: B, 3 nos. metal(Aluminium alloy) blades, 30 cm long down rod, 2 nos. canopies, shackle kit, safety rope, copper winding, steel/Al body Power Factor not less than 0.9, Service Value (CM/M/W) minimum as below, 350 RPM (tolerance as per IS : 374-2019), THD (Total Harmonic Distortion) less than 10%, suitable for operation with regulator for speed control and all remaining accessories including safety pin, nut bolts, washers, temperature rise=75 degree C (max.), insulation resistance more than 2 mega ohm, suitable for 230 V, 50 Hz, single phase AC Ceiling Fan compliant to IS 374:2019 fan Supply, earthing etc. complete as req.					9.2
8.1	1200mm, service value $\geq$ 6.0 CM/Min/Watt, air delivery 210	2	each	2,695.00	5,390.00	9.2.3
9	Supply, Installation Testing and Commissioning of 300mm sweep, 1400RPM, Medium Duty Metallic Exhaust fan including aluminium louver/shutter of suitable size in the existing opening including making good the damage, including connections, etc. as required.	1	each	4,081.00	4,081.00	MR
10	Supply, Installation Testing and Commissioning of 1x22W fitting with 1nos of 1200 mm LED tubes of polycarbonate body with each tube lumens not less 2100 with all accessories directly on wall / ceiling connection with 1.5 sq mm FRLS PVC insulated, copper conductor	6	each	1,311.00	7,866.00	MR

Corrections : Nil, Deletions : Nil, Insertions : Nil, Overwriting : Nil,

AE (P)

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	single core cable and earthing etc. as required.					
11	Supplying and fixing of LED Bulk Head fitting of Pressure Die cast housing with IP65 Protection and IK08 impact resistance, lumens not less than 700, suitable for surface/wall mounting applications including connections, testing etc. as required.	2	each	1,064.00	2,128.00	MR
12	Supplying and fixing of 10W LED Mirror light Engineering plastic batten with lumens not less than 1000 (600mm Long) THD <10%, PF >0.9, suitable for surface/wall mounting applications including connections, etc. as required.	1	each	711.00	711.00	MR
13	Supplying, Installation, Testing and Commissioning of 25W LED Post Top Lantern light fitting (IP65 & IK 07) minimum 3500 lumens, Housing Material Aluminium die-cast, protection against surge voltage upto 4 KV ,THD <10%, pf >0.9,complete with all accessories directly on existing post, including connection with 1.5 sqmm FRLS PVC Insulated Copper conductor up to cable junction box, single core cable and earthing the fitting etc as required.	20	each	7,716.00	1,54,320.00	MR
				Total Rs.	2,53,344.00	

GENERAL ABSTRACT FOR QUOTING RATE (ON PERCENTAGE BASIS)				
Name of work: Upgradation of 1No. HIG office, 2Nos. HIG Quarters and 2Nos. MIG Quarters at OCR Complex, SIB, Salem.				
NIT No. : 33/EE/CCD/2026-27.				
Tender Schedule of Quantities				
Name of contractor:				
Sl. No.	NAME OF COMPONENT	Estimated cost of each package (Rs)	Percentage above or below or at par ECPT	Total Amount (Rs)
1	2	3	4	5
1	Civil	41,10,987		
2	Electrical	2,53,344		
	GRAND TOTAL	43,64,331		

IMPORTANT NOTE:

1. The Column No.4 is mandatory to be filled by the bidders. If this column is left as blank, then the bid will become invalid.
2. The amount in figure in column No.5 shall appear automatically corresponding to the percentage quoted in Column No.4.
3. The bidder needs to quote the percentage only either above or below or at par ECPT to cover the rate of all the items under the respective package.
4. The percentage shall be quoted (written) upto 2 (two) places of decimal only.
5. If the percentage selection in column No 4 is "at par", by default the percentage will be considered as "Zero" only.

Signature of Contractor

Executive Engineer
Coimbatore Central Division,
CPWD, Coimbatore.