

GOVERNMENT OF INDIA
CENTRAL PUBLIC WORKS DEPARTMENT



BID DOCUMENT

(PART-A)

Name of work: **Construction of Canteen Service Facility at IIT (ISM) Dhanbad.(SH- Internal Electrical Installations , Fans & Fitting , Fire Alarm System, Fire Fighting System & Passenger Lifts.(Balance Work).**

EXECUTIVE ENGINEER & SM (E),

IIT(ISM), CPWD, DHANBAD

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GENERAL INDEX

Sl. No.	*Description*	*Sheet No.*
	Part A	1
1	Index	2
	(Notice Inviting e-Tender, Information and instructions to contractors, CPWD-6 & Eligibility criteria)	3-12
	Form of Bank Guarantee for Earnest Money Deposit /performance Guarantee/Security Deposit/Mobilization Advance	13
	(Section-I, CPWD -7, SCHEDULE A to F)	14-24
	Form of Bank Guarantee for Earnest Money Deposit /performance Guarantee/Security Deposit/Mobilization Advance	25-26
	Circulars	27-54
2	**Part B (Elect), Schedule A to F**	55
	Commercial and Additional conditions	56-60
	List of approved makes of Materials, Fixtures & Fittings etc.	61-73
3	**Part C**	
	Schedule of Quantities (Elect.) (Covering page)	74
	Schedule of Quantities (Elect.)	75-91

It is certified that this document contains pages serially numbered from Page No. 1 to 91

This Bid document is approved for Rs. 77,16,778/- (Rs. Seventy Seven Lakh Sixteen Thousand Seven Hundred & Seventy Eight only).

EXECUTIVE ENGINEER & SM (E)
IIT(ISM), CPWD, DHANBAD

Correction-Nil Deletion-Nil Insertion-Nil Overwriting-Nil

AE(E) EE(E)

NOTICE INVITING e-TENDER

CENTRAL PUBLIC WORKS DEPARTMENT

The **Executive Engineer & Senior Manager (E), IIT(ISM) Division, CPWD, Dhanbad** on behalf of President of India invites on line percentage rate tender in single bid system from approved and eligible CPWD contractors of appropriate category and class for the following work: -

NIT No:- 14/EE&SM(E)/IIT(ISM)/2026-27

Name of work: **Construction of Canteen Service Facility at IIT (ISM) Dhanbad.(SH- Internal Electrical Installations , Fans & Fitting , Fire Alarm System, Fire Fighting System & Passenger Lifts.(Balance Work).**

Estimated Cost :- **Rs. 77,16,778/-**

Earnest Money :- **Rs. 1,54,336/-**

Period of completion :- **45 (Forty Five) Days**

Last time and date of submission of bid :- 3.00 PM on **date-** 13/11/2026

The bid forms and other details can be obtained from the website CPWD eTendering (https://etender.cpwd.gov.in) or www.eprocure.gov.in. All corrigendum / addendum shall only be available on this website and shall not be published anywhere else.

Executive Engineer & SM (E)
IIT(ISM), CPWD, Dhanbad

Correction-Nil Deletion-Nil Insertion-Nil Overwriting-Nil

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

The Executive Engineer & SM (E), IIT(ISM), CPWD, Dhanbad on behalf of President of India Invites online percentage rate bids in single bid system from approved and eligible CPWD contractors of appropriate category and class for the following work :-

Sr.	NIT No	Name of work& Location	Estimated Cost put to tender	Earnest Money	Period of Completion	Last date and time of submission of bid, and other documents as specified in the notice/biddocument	Time & Date of opening ofBid
1	2	3	4	5	6	7	
1	**14/EE&SM(E)/IIT(ISM)/2026-27**	**Construction of Canteen Service Facility at IIT (ISM) Dhanbad. (SH- Internal Electrical Installations , Fans & Fitting , Fire Alarm System, Fire Fighting System & Passenger Lifts.(Balance Work)**	**Rs. 77,16,778/-**	**Rs. 1,54,336/-**	**45** (Forty Five) Days	Upto 3:00 PM on **13/11/2026**	On 3:30 PM on **13/11/2026**

1. The intending bidder must read the schedule of quantities, additional conditions, additional specifications, particular specifications, CPWD- 6 and other terms and conditions given in the NIT and drawings. The bidder should also read the General Conditions of Contract of 2023 for Construction Work of CPWD works with upto date correction slips, which is available as Government of India Publications; however, provisions included in the tender document shall prevail over the provisions contained in the standard form. The set of drawings and NIT shall be available in the office of **Executive Engineer & SM (E), IIT(ISM) Division, CPWD, Dhanbad .** The contractor should also visit the site of work and acquaint himself with the site conditions before tendering. He should only submit his tender if he considers himself eligible and he is in possession of all the required documents. The following conditions, which already form part of the tender conditions, are specially brought to his notice for compliance while submitting the tender online. They are requested to comply following instructions.

   (A) Tenders with any condition including that of conditional rebates shall be rejected forthwith.
   (B) The successful tenderer shall be required to submit a Performance Guarantee within 7 days of issue of letter of intent, computed as under: (a) 5% of composite tendered value or Estimated Cost Put to Tender (ECPT), whichever is higher; and (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. This period can be further extended by Engineer-in-Charge upto a maximum period of 7 days on the written request of the contractor subject to payment of late fee @ 0.1% per day of

Performance Guarantee amount.

(C) GST, Work Contract Tax, Labour-Cess etc. as applicable shall be borne by the contractor himself. The contractor shall quote his rates considering all such taxes and hence their quoted rates should be inclusive of all the tax components.

(D) It will be obligatory on part of the Contractor/ Bidder to tender for and sign the tender documents for all the component parts. The department reserves right to accept tender in full or in part without assigning any reasons.

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

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

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

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

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

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

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

6. Earnest Money in the form of Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee / e-Bank guarantee (for balance amount as prescribed) from any of the Commercial Banks (**drawn in favour of The Executive Engineer, ISMU-PD-I, CPWD, Dhanbad**) shall be scanned and uploaded to the e-Tendering website within the period of bid submission. The original EMD should be deposited either in the office of the Executive Engineer inviting bids or division office of any Executive Engineer, CPWD within the period of bid submission. The EMD receiving officer (EE/DDH) shall issue a receipt of deposition of earnest money deposit to the bidder in a prescribed format (enclosed) uploaded by tender inviting EE in the NIT.

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

7. The bids will be submitted upto **3:00 PM on** **13/11/2026** . The bid shall be opened at **3:30 PM on 13/11/2026**

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

9. The intending bidder must have valid class-III digital signature to submit the tender.

Correction-Nil Deletion-Nil Insertion-Nil Overwriting-Nil

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10. On opening date, the contractor can login and see the tender opening process. After opening of tenders he will receive the competitor's tender sheets.

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

12. Contractor must ensure to quote rate in the prescribed column(s) meant for quoting rate in figures appears in yellow colour and the moment rate is entered, it turns sky blue.

    In addition to this, while selecting any of the cells a warning appears that if any cell is left blank the same shall be treated as "0". Therefore, if any cell is left blank and no rate is quoted by the bidder, rate of such item shall be treated as "0" (ZERO).

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

13. The bidders are advised to visit the site before submitting his bid to have more clarity about the site conditions and availability of space for execution of the work.

14. Tenders with any condition including that of conditional rebates shall be rejected. Such tenders shall not be entered in the tender opening register at the time of opening of tender.

15. GST on all materials as well as GST on Work Contract etc., or any other taxes applicable in respect of this contract shall be payable by the Contractor. Percentage rate quoted by him shall be inclusive of such taxes, levies etc. and Government will not entertain any claim for reimbursement whatsoever in respect of the same. The percentage rates of the contract shall be inclusive of all taxes and levies and nothing extra shall be paid. Further the percentage rate quoted by the contractor shall be inclusive of labour welfare cess and the same shall be recovered from the contractors' bills and will be remitted by the department.

16. Applicants are advised to keep visiting the https://etender.cpwd.gov.in or https://eauction.cpwd.gov.in web-sites as applicable from time to time (till the deadline for bid submission) for any updates in respect of the tender documents, if any. Failure to do so shall not absolve the applicant of his liabilities to submit the applications complete in all respects including updates thereof, if any. An incomplete application may be liable for rejection.

17. List of mandatory documents to be scanned and uploaded within the period of bid submission:

i) Enlistment order of CPWD contractor in appropriate class and category

ii) EMD as per para 6 above.

iii) GST Registration Certificate if already obtained by the bidder.
If the bidder has not obtained GST registration as applicable, then he shall scan and upload following under taking along with bid documents.
"If work is awarded to me, I/we shall obtain GST registration certificate, as applicable, within one month from the date of receipt of award letter or before release of any payment by CPWD, whichever is earlier, failing which I/we shall be responsible for any delay in payments which will be due towards me/us on account of the work executed and/or for any action taken by CPWD or GST department in this regard".

iv) Copy of receipt for deposition of original EMD issued from any Division / office of Executive Engineer, CPWD.

v) Copy of valid Electrical Licence

vi) Certificate of training of ERP issued by competent authority.

Note:- Uploading documents as per S.No. (i) to (vi) are mandatory .

18. For specialized work (Fire Fighting System and VRV/VRF)

1. Mandatory Association Requirement

1. The work shall be carried out under the scope of composite tender which shall be executed under one agreement. Schedule for Electrical Works of the tender documents. The main contractor for civil work will Associate appropriate & eligible CPWD registered contractor for carrying out Electrical Component of work as given in Electrical Works of the tender documents. The eligible tenderers for major component in Association of Electrical Contractor will quote rates for Electrical Component also. The lowest tenderer would be decided based on quoted rates in respect of all the schedules attached in tender documents.

2. The main contractor will associate specialized agency for the remaining E&M works i.e. **SITC of Fire Fighting System Work**, he shall be allowed to execute the same after due verification & approval of the Executive Engineer & SM (E). If himself is eligible, they will submit eligible documents.

3. The composite category contractor is also be eligible to carry out himself/herself any or all of these works without associating any specialized agency provided,

    i) He fulfills the prescribed eligibility criteria respectively for these works as stipulated in NIT.

    OR

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

4. The composite contractor and the associated specialized agencies is required to give affidavit to confirm their association.

5. Tender accepting authority approves the change of sub-agency in case it is required during the currency of the contract.

6. The lowest tenderer is required to submit, along-with the performance guarantee after the acceptance of tender, an undertaking form the OEM regarding.

    a) Authorization certificate.
    b) The OEM shall unconditionally support the lowest tenderer technically throughout the execution of contract as well as for maintenance/comprehensive maintenance contract for the useful life of the system, and
    c) OEM shall provide all the spares required for healthy functioning of the equipment for at least seven years from the date of supply of equipment.
    d) Should have satisfactorily completed the works as mentioned below during the last 7 (seven) years ending last day of the month previous to the one in which tenders are invited.

(i) Three similar completed works each costing not less than

Rs.14.23 Lakh
Or

(ii) Two similar completed works each of value not less than

Rs.21.35 Lakh
Or

(iii) One similar completed work of value not less than

Rs.28.46 Lakh

Similar works shall mean "**Fire Fighting System**"

2. Mandatory Association Requirement

1. The work shall be carried out under the scope of composite tender which shall be executed under one agreement. Schedule for Electrical Works of the tender documents. The main contractor for civil work will Associate appropriate & eligible CPWD registered contractor for carrying out Electrical Component of work as given in Electrical Works of the tender documents. The eligible tenderers for major component in Association of Electrical Contractor will quote rates for Electrical Component also. The lowest tenderer would be decided based on quoted rates in respect of all the schedules attached in tender documents.

2. The main contractor will associate specialized agency for the remaining E&M works i.e. **SITC of VRV/VRF System Work**, he shall be allowed to execute the same after due verification & approval of the Executive Engineer & SM (E). If himself is eligible, they will submit eligible documents.

3. The composite category contractor is also be eligible to carry out himself/herself any or all of these works without associating any specialized agency provided,

   i) He fulfills the prescribed eligibility criteria respectively for these works as stipulated in NIT.

   OR

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

4. The composite contractor and the associated specialized agencies is required to give affidavit to confirm their association.

5. Tender accepting authority approves the change of sub-agency in case it is required during the currency of the contract.

6. The lowest tenderer is required to submit, along-with the performance guarantee after the acceptance of tender, an undertaking form the OEM regarding.

   a) Authorization certificate.
   b) The OEM shall unconditionally support the lowest tenderer technically throughout the execution of contract as well as for maintenance/comprehensive maintenance contract for the useful life of the system, and
   c) OEM shall provide all the spares required for healthy functioning of the equipment for at least seven years from the date of supply of equipment.
   d) Should have satisfactorily completed the works as mentioned below during the last 7 (seven) years ending last day of the month previous to the one in which tenders are invited.

   (i) Three similar completed works each costing not less than

   Rs.5.57 Lakh
   Or

   (ii) Two similar completed works each of value not less than

Rs.8.60 Lakh
Or

(iii) One similar completed work of value not less than

Rs.11.15 Lakh

Similar works shall mean **"VRV/VRF System"**

Executive Engineer & SM (E)
IIT(ISM), CPWD, Dhanbad

Correction-Nil Deletion-Nil Insertion-Nil Overwriting-Nil

AE(E) EE(E)

CPWD–6 FOR e-TENDERING

IR;esot;rs	**GOVERNMENT OF INDIA** **CENTRAL PUBLIC WORKS DEPARTMENT**	CPWD

The Executive Engineer & SM (E), IIT(ISM) Division, CPWD, Dhanbad on behalf of President of India invites online percentage rate bids in single bid system from approved and eligible CPWD contractors of appropriate category and class for the following work **Construction of Canteen Service Facility at IIT (ISM) Dhanbad.(SH- Internal Electrical Installations , Fans & Fitting , Fire Alarm System, Fire Fighting System & Passenger Lifts.(Balance Work).**

The enlistment of the contractors should be valid on the last date of submission of bids.

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

The work is estimated to cost **Rs. 77,16,778/- .** This estimate, however, is given merely as a rough guide.

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

1.1 Intending bidders is eligible to submit the bid provided he has definite proof from the appropriate authority, which shall be to the satisfaction of the competent authority, of having satisfactorily completed similar works of magnitude specified below:-

Criteria of eligibility for submission of bid documents:

i) The enlistment of the CPWD contractors in appropriate class & category should be valid on the last date of submission of bids.

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

2. Agreement shall be drawn with the successful bidder on prescribed Form No. CPWD-7 amended up to date which is available as a Govt. of India Publication and sample also available on **website www.cpwd.gov.in / www.etender.cpwd.gov.in.** Bidder shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.

3. The time allowed for carrying out the work will be **45 (Forty Five) 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.

4. (i) The site for the work is available with the client.

(ii) The architectural and structural drawings shall be made available in phased manner, as per requirement of the same as per approved programme of completion submitted by the contractor after award of work.

5. The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents except Standard General Conditions of Contract Form can be seen on website https://etender.cpwd.gov.in or www.cpwd.gov.in free of cost.

6. After submission of the bid, the contractor can re-submit revised bid any number of times but before last time and date of submission of bid as notified.

7. While submitting the revised bid, contractor can revise the rate of one or more item(s) any number of times (he need not re-enter rate of all the items) but before last time and date of submission of bid as notified.

8. Earnest Money in the form of Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee / e-Bank guarantee (for balance amount as prescribed) from any of the Commercial Banks (drawn in favour of **The Executive Engineer, ISMU-PD-I, CPWD, Dhanbad)** shall be scanned and uploaded on the e-Tendering website within the period of bid submission. The original EMD should be deposited either in the office of the Executive Engineer inviting bids or division office of any Executive Engineer, CPWD within the period of bid submission. The EMD receiving officer (EE/DDH) shall issue a receipt of deposition of earnest money deposit to the bidder in a prescribed format (enclosed) uploaded by tender inviting EE in the NIT.

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

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

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

The bid submitted shall be opened at 03:30 PM on **13/11/2026**

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

10. The bidder whose bid is accepted will be required to furnish performance guarantee at specified percentage of the tendered amount as mentioned in Schedule E and within the period specified in Schedule-F, **in favour of The Executive Engineer, ISMU-PD-I, CPWD, Dhanbad.** This guarantee shall be in the form of Insurance Surety Bonds, Account payee Demand Draft, Fixed Deposit Receipt or Bank Guarantee / e-Bank Guarantee from any of the Commercial Banks in accordance with the prescribed form. In case the Bidder fails to deposit the said performance guarantee within the period as indicated in Schedule-F including the extended period if any, the earnest money deposited by the contractor shall be forfeited automatically without any notice to the contractor. The

earnest money deposited alongwith bid shall be returned after receiving the aforesaid performance guarantee.The contractor whose bid is accepted will also be required to furnish either copy of applicable licenses/registrations or proof of applying for obtaining labour licenses, registration with EPFO, ESIC and BOCW Welfare Board including Provident Fund Code No. if applicable and also ensure the compliance of aforesaid provisions by the sub-contractors, if any engaged by the agency for the said work within the period specified in Schedule-F.

11. The description of the work is as follows:

Construction of Canteen Service Facility at IIT (ISM) Dhanbad.(SH- Internal Electrical Installations , Fans & Fitting , Fire Alarm System, Fire Fighting System & Passenger Lifts.(Balance Work).

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

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

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

14. The competent authority on behalf of President of India reserves to himself the right of accepting the whole or any part of the bid and the bidders shall be bound to perform the same at the rate quoted.

15. The contractor shall not be permitted to bid for works in the CPWD Circle (Division in case of contractors of Horticulture/Nursery category) responsible for award and execution of contracts, in which his near relative is posted as Divisional Accountant or as an officer in any capacity between the grades of Chief Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any gazette officer in the Central Public Works Department or in the Ministry of Housing & Urban Affairs. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Department.

16. No Engineer of Gazetted rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from Government service, without the previous permission of the Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India, as aforesaid, before submission of the bid or engagement in the contractor's service.

17. The bid for the works shall remain open for acceptance for a period of **30 (Thirty) days**

from the date of opening of bid. Further

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

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

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

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

(a) The Notice Inviting bid, all the documents including additional conditions, specifications and drawings,corrigendums, if any, forming the bid as issued at the time of invitation of bid and acceptance thereof together with any correspondence leading thereto.

(b) Standard CPWD Form-7 or other Standard CPWD Form as applicable.

~~**19. For Composite Bids**~~

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

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

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

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

~~**Part-B:** Elect. Work: General/ special conditions, particular specifications, Eligibility criteria for specialized E&M works, Term & condition and Technical specification for IEI work.~~

~~**Part-C:** Schedule of Quantity (Civil+Elect.) & Proforma for quoting the rate.~~

~~A The building & road category contractor shall have to associate other agency(s) for execution of each of the work(s), which fulfils the eligibility criteria as defined after taking prior approval. The Composite Contractor and the associated specialized agencies shall give required affidavit to confirm their association. Tender accepting authority may approve change of sub agency in case it is required during the currency of contract. However the building & road 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 getsit installed from authorized agency / service provider of the manufacturer or specialized agency as per criteria mentioned**~~

~~**Sl. No.**~~	~~**Specialized work(s)/item Of work(s)**~~	~~**Criteria of associated agencies**~~
~~i)~~	~~Electrical Works~~	~~a) Certificate of registration of CPWD in appropriate class of building & Road category.~~ ~~b) Electrical contractor licence **OR** undertaking that they will either obtain valid electrical licence at the time of execution of electrical work or associate contractor having valid electrical licence of appropriate class.~~

Correction-Nil Deletion-Nil Insertion-Nil Overwriting-Nil

AE(E) EE(E)

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

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

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

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

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

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

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

~~The main contractor has to enter into MoU with agencies contractor(s) associated by him. Copy of such MoU shall be EE/DDH in charge of each relevant component as well as to EE in-charge of major component. In case of change of associate contractor, the main contractor hasto enter into agreement with the new contractor associated by him.~~
~~Running payment for the major component shall be made by EE of major discipline to the main contractor. Running payment for minor components shall be made by the Engineer-in-Charge of the discipline of minor component directly to the main contractor. The EMB/CMB shall be maintained independently by Engineer-in Charge of major and minor components.~~

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

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

20. In case of reduction in scope of work no claim on account of reduction in value of work, loss ofexpected profit, consequential overheads etc. shall be entertained.

21. If any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted physically by the contractor, the bid shall become invalid and processing fee shall not be refunded.

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

i) Enlistment order of CPWD contractor in appropriate class and category

ii) EMD as per para 8 above on page -8.

iii) GST Registration Certificate if already obtained by the bidder.

If the bidder has not obtained GST registration as applicable, then he shall scan and upload following under taking along with bid documents.

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

iv) Copy of receipt for deposition of original EMD issued from any Division / office ofExecutive Engineer, CPWD.

v) Copy of Valid Electrical Licence.

vi) Copy of Certificate of training of ERP issued by competent authority.

23. Goods & Service Tax (GST), construction Worker's Welfare Cess, Education Cess, etc.shall be payable by the contractor and Government will not entertain any claim whatsoever in respect of the same.

24. GST or any other tax applicable in respect of inputs procured by the contractor for this contract shall be payable by the Contractor and Government will not entertain any claim whatsoever in respect of the same. However, component of GST at time of supply of service (as provided in CGST Act 20l7) provided by the contract shall be varied if different from that applicable on the last date of receipt of tender including extension if any.

25. The ESI and EPF contribution on the part of employer in respect of this contract shall be paid by the contractor. These contributions on the part of the employer paid by the contractor shall be reimbursed by the Engineer-in- Charge to the contractor on actual basis. The applicable and eligible amount of EPF & ESI shall be reimbursed preferably within 7 days but not later than 30 days of submission of documentary proof of payment provided same are in order.

26. The intending bidders are required to update their profile in CPWD e-tender portal and to upload their bids well in advance of last date of submission of tender. Any issue related to updating profile/uploading tender can be resolved through the concerned **Executive Engineer** (Phone No. 7992337097 email id eepeddhanbad@gmail.com or ERP help line no. 18001803286 or e-mail id cpwd.support@techmahindra.com. The e-tendering bidders are also advised not to wait to raise any issue till the last date of submission of bid in their own interest.

Executive Engineer & SM (E)
For & on behalf of The President of India

Correction-Nil Deletion-Nil Insertion-Nil Overwriting-Nil

AE(E) EE(E)

Information and instructions for Executive Engineer for e-tendering.

(i) The Executive Engineer of all divisions including NIT issuing division/sub division of CPWD should receive the original EMD for tender of other division.

(ii) The NIT approving authority / EE at the time of issue of NIT shall also fill and upload the following prescribed format of receipt of deposition of original EMD along with NIT.

(iii) The Executive Engineer receiving EMD in original form shall examine the EMD deposited by the bidder and shall issue a receipt of deposition of earnest money to the agency in a given format uploaded by tender inviting EE. The receipt may also be issued by the AE(P)/AE/AAO.

(iv) The Executive Engineer receiving original EMD shall also intimate tender inviting Executive Engineer about deposition of EMD by the agency by email/fax/telephonically.

(v) The original EMD receiving Executive Engineer shall release the EMD after verification from the e-tendering portal website that the particular contractor is not L-1 tenderer and work is awarded.

(vi) The tender inviting Executive Engineer will call for original EMD of the L-1 tender from EMD receiving Executive Engineer immediately.

(vii) The earnest money given by all the tenderers except the lowest tenderer should be refunded immediately after the expiry of stipulated bid validity period or immediately after acceptance of the successful bidder, whichever is earlier.

Receipt of deposition of original EMD

(Receipt No……../ date .....)*

Name of work: - **Construction of Canteen Service Facility at IIT (ISM) Dhanbad.(SH- Internal Electrical Installations , Fans & Fitting , Fire Alarm System, Fire Fighting System & Passenger Lifts.(Balance Work).**

NIT No:- 14/EE&SM(E)/IIT(ISM)/2026-27

Estimated Cost **Rs. 77,16,778/-**

Earnest Money: **Rs. 1,54,336/-**

Last date of submission of bid: **13.11.2026**

Period of completion: **45 (Forty Five) Days**

XXX To be filled in by the Executive Engineer

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

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

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

.

Correction-Nil Deletion-Nil Insertion-Nil Overwriting-Nil

AE(E) EE(E)

SECTION – I

BRIEF PARTICULARS OF THE WORK

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

Sr. No.	Name of Work	Estimated Cost	Period of completion
1.	**Construction of Canteen Service Facility at IIT (ISM) Dhanbad.(SH- Internal Electrical Installations , Fans & Fitting , Fire Alarm System, Fire Fighting System & Passenger Lifts.(Balance Work).**	**Rs. 77,16,778/-**	**45 (Forty Five) Days**

2. The work is situated at IIT(ISM) Campus, Dhanbad, under jurisdiction of Executive Engineer & Senior Manager (E), IIT(ISM), CPWD, Dhanbad.

Correction-Nil Deletion-Nil Insertion-Nil Overwriting-Nil

AE(E) EE(E)

CPWD FORM NO. 7

GOVERNMENT OF INDIA
CENTRAL PUBLIC WORKS DEPARTMENT

STATE:	**Jharkhand**	**REGION:**	**SE CUM PD, IIT(ISM), Dhanbad**
BRANCH:	**B&R**	**DIVISION:**	**EE & SM (E), IIT(ISM), Dhanbad**

COMPOSITE PERCENTAGE RATE TENDER & CONTRACT FOR WORKS

Tender for the work of*:* **Construction of Canteen Service Facility at IIT (ISM) Dhanbad.(SH- Internal Electrical Installations , Fans & Fitting , Fire Alarm System, Fire Fighting System & Passenger Lifts.(Balance Work).To be uploaded upto 3:00 PM on 13/11/2026 on website:- www.etender.cpwd.gov.in**

i) To be opened in presence of tenderers who may be present at 3:30 PM hours on 13/11/2026 in the office of The **Executive Engineer & SM (E), IIT(ISM) Division, CPWD, Dhanbad, Jharkhand.**

T E N D E R

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

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

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

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

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

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

I/We undertake and confirm that eligible similar work(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I/We shall be debarred for tendering in CPWD in future forever. Also, if such a

violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee.

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

Dated Signature of Contractor

Witness: Postal Address

Address:
Occupation:

A C C E P T A N C E

The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by me for and on behalf of the President of India for a sum of Rs. ……..... (Rupees ....)
The letters referred to below shall form part of this contract agreement:-

a)
b)
c)

For & on behalf of the President of India.

Signatures .....

Dated: Designation .....

Correction-Nil Deletion-Nil Insertion-Nil Overwriting-Nil

AE(E) EE(E)

PROFORMA OF SCHEDULES

SCHEDULE 'A' Schedule of quantities	Schedule of Quantities as per Part – C of this NIT.
SCHEDULE 'B' Schedule of materials to be issued to the contractor	NIL — No material shall be issued by the Department.
SCHEDULE 'C' Tools and plants to be hired to the contractor	NIL — No tools and plants shall be issued by the Department.
SCHEDULE 'D' Extra schedule for specific requirements / document for the work, if any.	Not Applicable

SCHEDULE 'E'

Reference to General Conditions of Contract	General Conditions of Contract-2023 Construction Work as modified & corrected upto the last date of submission of the tender.
Name of Work	Electrical renovation of Diamond Hostel at IIT(ISM), Dhanbad.
Estimated cost of work	Rs. 77,16,778/-
Earnest money	Rs. 1,54,336/- (to be returned after receiving Performance Guarantee)
Performance guarantee	(a) 5% of composite tendered value or Estimated Cost Put to Tender (ECPT), whichever is higher. (b) Where the tendered amount is less than eighty percent (80%) of the Estimated Cost Put to Tender (ECPT), the Performance Guarantee, in addition to the requirement under (a) above, shall be increased by an amount equal to the difference between eighty percent (80%) of the ECPT and the tendered amount.
Security deposit	2.5% of Tendered Value

SCHEDULE 'F'

GENERAL RULES & DIRECTIONS: Officer inviting tender	Executive Engineer & Senior Manager (E), IIT(ISM), CPWD, Dhanbad or successor thereof.
Definitions: Engineer-in-Charge	Executive Engineer & Senior Manager (E), IIT(ISM), CPWD, Dhanbad or successor thereof.
Accepting Authority	Executive Engineer & Senior Manager (E), IIT(ISM), CPWD, Dhanbad or successor thereof.
Percentage on cost of materials and labour to cover all overheads and profits:	15%
Standard Schedule of Rates	1. DSR-2025 (E&M) plus cost index with correction slip(s) issued upto the last date of submission of Bid. 2. Market Rates for Non-DSR Items.
Department	Central Public Works Department.
Standard CPWD Contract Form	General Conditions of Contract-2023 Construction Work, CPWD Form 7 as modified & corrected upto the last date of submission of the tender.

Clause 1

(i) Time allowed for submission of Performance Guarantee, Programme 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.	7 days
(ii) Maximum allowable extension with late fee at 0.1% per day of performance guarantee amount beyond the period provided in (i) above	3 days

Clause 2

Authority for fixing compensation under clause 2	Superintending Engineer & Project Director, IIT(ISM), CPWD, Dhanbad or successor thereof.

Clause 5

Number of days from the date of issue of letter of acceptance for reckoning date of start	10 days

Table of Milestones

No.	Description	Period of completion	Amount to be withheld in case of non achievement of milestone (% of tender amount)
1	Preparation of working drawings on AutoCAD — conduit layout, circuit distribution, distribution board schedules, single line diagram, earthing layout and LAN layout — and submission to the Engineer-in-Charge for approval; together with submission of the Material Assessment Statement in the proforma at Annexure-VI and the integrated programme chart (Time and	07 days	1 %

No.	Description	Period of completion	Amount to be withheld in case of non achievement of milestone (% of tender amount)
	Progress). The Engineer-in-Charge shall convey approval or observations within 07 days of submission.		
2	Placement of firm and irrevocable purchase orders upon the manufacturers or their authorised dealers for the entire quantity of all major materials as defined in Section B-2, and submission of attested copies of such orders together with the written acceptance of the manufacturer / authorised dealer; verification of the orders from the authorised dealer to the satisfaction of the Engineer-in-Charge.	10 days	1 %
3	Financial achievement of 30% of the total work amount, together with delivery at site of not less than 50% of the assessed quantity of all major materials, duly inspected and accepted by the Engineer-in-Charge.	5 days	1 %
4	Financial achievement of 70% of the total work amount, together with delivery at site of the entire assessed quantity of all major materials, duly inspected and accepted by the Engineer-in-Charge.	10 days	1 %
5	Financial achievement of 100% of the total work amount, completion of all testing and commissioning as per Section B-4, and submission of as-built drawings in AutoCAD, test results, CAT-6 certification reports and all completion documents.	13 days	1 %
	Total		5 %

Time allowed for execution of work:	45 Days
Authority to decide: (i) Authority to convey the decision of shifting of milestone and Extension of time	Executive Engineer & Senior Manager (E), IIT(ISM), CPWD, Dhanbad or successor thereof.
(ii) Authority to decide rescheduling of milestone and extension of time.	Superintending Engineer & Project Director, IIT(ISM), CPWD, Dhanbad or successor thereof.
(iii) Shifting of date of start in case of delay in handing over of site	Superintending Engineer & Project Director, IIT(ISM), CPWD, Dhanbad or successor thereof.

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	Entire site shall be handed over on the 1st day of the date of start of work. It is, however, expressly clarified that handing over of the site shall not entitle the contractor to work in any portion of the building without the prior shutdown permission of the Engineer-in-Charge as provided in Section B-3, and no claim for hindrance, idle labour, idle machinery or extension of time shall lie on this account.
Part B	Portions with encumbrances	Nil
Part C	Portions dependent on work of other	Nil

Part	Portion of site Description	Time Period for handing over reckoned from date of issue of letter of intent.
	agencies	

Clause 5 — Schedule of issue of designs

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	No design or drawing shall be issued by the Department. All working drawings — conduit layout, circuit distribution, distribution board schedules, single line diagram, earthing layout and LAN layout — shall be prepared by the contractor on AutoCAD at his own cost and submitted to the Engineer-in-Charge for approval within the period stipulated in Milestone No. 1. No claim for hindrance, idle labour, idle machinery or extension of time shall lie on account of non-issue of drawings by the Department.
Part B	Portions with encumbrances	Nil
Part C	Portions dependent on work of other agencies	Nil
5.4 Recovery per day basis in case of delay in submission of the revised programme		Rs. 2500/-

Clause 6

Clause applicable	Electronic Measure Book (EMB) through ERP Portal

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. 7.91 lakh works or part thereof as decided by Engineer-in-Charge.

Clause 7A

Whether Clause 7A shall be applicable	Yes Applicable

Clause 8A

Authority to decide compensation on account if contractor fails to submit completion plans.	Engineer-in-Charge

Clause 10A

List of testing equipments to be provided by the contractor at site	Applicable as per Annexure-IV.

Clause 10B(ii)

Whether clause 10B(ii) shall be applicable	Not Applicable

Clause 10C

Clause 10C (Applicable in only those contracts where clause 10CC is not applicable)	Applicable
Components of labour expressed as percent of value of work	25%

Clause 10CC

Whether clause 10CC shall be applicable	Not Applicable (the stipulated period of completion being 03 months)

Clause 11

Specifications to be followed for execution of work	1. CPWD General Specification for Electrical Works with correction slips issued upto last day of receipt of Bids: a) Part I Internal – 2023 b) Part II External – 2023 2. CPWD Specification 2019 (Vol-I & Vol-II) with upto date correction slips will be followed in general and where CPWD specification is silent, relevant BIS codes shall be followed. 3. Relevant Indian Standards, National Electrical Code and CEA (Measures relating to Safety and Electric Supply) Regulations.
Building Information Model (BIM) is applicable and BIM professional to be deployed by contractor	NO

Clause 12

Type of work	Construction Work
12.2(c) Deviation limit beyond which clause 12.2(c) shall apply for building work.	100%
(i) Deviation Limit beyond which clause 12.2(c) shall apply for foundation work (except items mentioned in earth work subhead in DSR and related items).	100%
(ii) Deviation Limit for items mentioned in earth work subhead of DSR and related items.	100%

Clause 16

Competent authority for deciding reduced rates.	Superintending Engineer & Project Director, IIT(ISM), CPWD, Dhanbad or successor thereof.

Clause 19

Clause 19C	Engineer-in-Charge
Clause 19D	Engineer-in-Charge
Clause 19G	Engineer-in-Charge
Clause 19K	Engineer-in-Charge

Clause 25

(i) Conciliator	Superintending Engineer & Project Director, IIT(ISM), CPWD, Dhanbad or successor thereof

(ii) Arbitrator Appointing Authority	Superintending Engineer & Project Director, IIT(ISM), CPWD, Dhanbad
(iii) Place of Arbitration	To be decided by Arbitrator in consultation with both the parties.

Clause 32

Requirement of technical representative(s) and recovery rate

Sl. No.	Minimum Qualification of Technical Representative	Designation of Technical Staff	Minimum experience (Years)	Number	Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of clause 32 (Figures)	Words
1	Graduate Engineer Or Diploma Engineer	Project/Site Engineer	2 Years or 5 Years Respectively	1	Rs. 15,000/- per month	Rupees Fifteen Thousand per month.

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

Diploma holder with minimum 10 years relevant experience with a reputed construction 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, in addition, engage licensed Electrical Supervisors and Wiremen holding valid licences issued by the competent Licensing Authority of the State Government, as required under the statutory provisions in force.

Clause 38

(i) (a) Schedule/statement for determining theoretical quantity of cement & bitumen	Not Applicable
(ii) Variations permissible on theoretical quantities:	Not Applicable

Sl. No	Description of item	Excess beyond permissible variation	Less use beyond the permissible variation
1	Cement (PPC)	Not Applicable	Not Permitted
2	Reinforcement bars (TMT) (a) Primary Producer	Not Applicable	Not Permitted
3	Structural steel	Not Applicable	Not Permitted

Executive Engineer & Senior Manager (E)
IIT(ISM), CPWD, Dhanbad

Correction –Nil Deletion-Nil Insertion-Nil Overwriting -Nil

EE(E)

AE(E)

ANNEXURE - I

On non judicial stamp paper of minimum Rs. 100.

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

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

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

OR**

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

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

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

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

5. We, ... (indicate the name of the Bank) ....., further agree that the Government shall have the fullest liberty without our consent and without affecting in any manner our obligation hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor from time to time or to postpone for any time or from time to time any of the powers exercisable by the Government against the said contractor and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said contractor or for any forbearance, act of omission on the part of the Government or any indulgence by the Government to the said contractor or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

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

Government may have in relation to the Contractor's liabilities.

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

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

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

Date: .....

Witnesses:	
Signature.....	Authorized signatory
Name and address	Name:
	Designation:
Signature.....	Staff code no:
Name and address	Bank seal:

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

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

Annexure-II

Sample letter for Acceptance of tender

By REGISTERED POST

No. Dated,

To

(Name and Address of the contractor)

Subject: Electrical renovation of Diamond Hostel at IIT(ISM), Dhanbad.

Dear Sir(s)

Your tender for the work mentioned above has been accepted on behalf of the President of India at your tendered / negotiated tender amount of Rs…… (Rupees…….) which is …….. % below / above the estimated cost of Rs…….. (Rupees……..)

1. You are requested to submit the performance guarantee of Rs. …… (Rupees……..) within 7 days of issue of this letter. The Performance Guarantee shall be in any of the prescribed forms as provided in Clause-1 of the General Conditions of Contract for CPWD Works and shall be valid upto …… On receipt of prescribed performance guarantee necessary letter to commence the work shall be issued and site of work shall be handed over to you thereafter.

2. Please note that the time allowed for carrying out the work as entered in the tender ..... days, will be reckoned from 10 days subject to maximum allowable extension under Clause 1(ii), from the date of issue of this letter.

Yours faithfully,

Executive Engineer & Senior Manager (E)
For & on behalf of President of India
IIT(ISM) Project Electrical Division, CPWD, Dhanbad

Correction –Nil Deletion-Nil Insertion-Nil Overwriting -Nil

EE(E)

AE(E)

Annexure-III

Sample letter for Commencement of works

By Registered Post

No. Date:

To

(Name and Address of the contractor)

Subject: Electrical renovation of Diamond Hostel at IIT(ISM), Dhanbad.

Ref: 1. Performance guarantee submitted by you vide your letter No ……. Dated …… for above work.
2. This office letter of intent / acceptance of tender No……. dt……

Dear Sir(s)

1. In continuation to the letters referred above, you are requested to attend this office to complete formal agreement within 7 days from stipulated date of start.

2. You are requested to contact the Assistant Engineer …… (complete address) for taking possession of site and starting the work on or before …… days from the date of letter of acceptance of tender. Please note that the time allowed for carrying out the work as entered in the tender ( ) days, will be reckoned from …… to ….. days subject to maximum allowable extension under Clause 1(ii), from the date of issue of acceptance letter.

Yours faithfully,

Executive Engineer & Senior Manager (E)
For & on behalf of President of India
IIT(ISM) Project Electrical Division, CPWD, Dhanbad

Correction –Nil Deletion-Nil Insertion-Nil Overwriting -Nil

EE(E)

AE(E)

Annexure-IV

FIELD TESTING EQUIPMENT AND INSTRUMENTS TO BE PROVIDED BY THE CONTRACTOR AT HIS OWN COST

A. Testing Equipment / Instruments (Minimum numbers specified against each of them)

Sl. No.	Description of Equipment / Instrument	Nos. required
1.	Insulation resistance tester (Megger) 500 V / 1000 V, digital type	01 No.
2.	Earth resistance tester (digital, 4-terminal)	01 No.
3.	Digital mustimeter	02 Nos.
4.	Tong tester / clamp meter	02 Nos.
5.	Phase sequence meter	01 No.
6.	Lux meter (digital)	01 No.
7.	LAN cable tester / certifier suitable for CAT-6 as per ANSI/TIA-568.2-D	01 No.
8.	Continuity tester	02 Nos.
9.	Steel measuring tape – 3 m and 30 m	02 Nos. each
10.	Vernier calliper	01 No.
11.	Micrometre screw gauge 25 mm	01 No.
12.	Wire gauge (circular type) disc	01 No.
13.	Spirit level, minimum 300 mm long with bubbles for horizontal and vertical	02 Nos.
14.	Plumb bob of good quality	02 Nos.
15.	Magnifying glass	01 No.

Note: Field testing equipment shall be arranged by the contractor as per the requirement of work. All instruments shall be duly calibrated and calibration certificates shall be produced to the Engineer-in-Charge on demand. The above list is only indicative and not exhaustive.

Correction –Nil Deletion-Nil Insertion-Nil Overwriting -Nil

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Annexure-V

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

Sl. No.	Equipment	Numbers (Tentative)
1.	Electric drilling machine, heavy duty, with masonry and metal bits	04 Nos.
2.	Wall chasing / groove cutting machine	02 Nos.
3.	Angle grinder / cutting machine	02 Nos.
4.	Pipe bending machine suitable for steel conduit upto 32 mm	01 No.
5.	Pipe threading and cutting set for steel conduit	01 set
6.	Hydraulic / mechanical crimping tool set for cable lugs and sockets	02 Nos.
7.	Cable pulling and drawing accessories including fish tape and draw wire	As per actual requirement
8.	CAT-6 crimping tool and punch-down (krone) tool	02 sets
9.	Aluminium extension ladder	04 Nos.
10.	Mobile scaffolding suitable for work at height	02 sets
11.	Portable DG set / power source of adequate capacity for tools	As per actual requirement
12.	Electrician's tool kit (complete set)	06 sets
13.	Personal protective equipment — helmets, insulated gloves, safety shoes, safety belts, insulated mats	As per actual requirement
14.	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.

Annexure-VI

PROFORMA FOR MATERIAL ASSESSMENT STATEMENT

(To be submitted by the contractor within 07 days from the date of start of work, vide Section B-2 of this NIT)

Name of Work : Electrical renovation of Diamond Hostel at IIT(ISM), Dhanbad.

Name of Contractor : _____ Agreement No. : _____

Date of Start of Work : _____ Date of Submission : _____

Sl. No.	Item No. & Description as per Schedule of Quantities	Qty required (incl. wastage)	Unit	Proposed Make & Model	Name & Address of Manufacturer (OEM)	Name, Address, Phone & E-mail of Authorised Dealer	Proposed date of order / delivery
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

DECLARATION BY THE CONTRACTOR

I/We hereby declare that the above material assessment covers all items of the Schedule of Quantities in full, that the makes and models proposed are strictly from the List of Approved Makes contained in the NIT, and that all materials shall be procured only from the manufacturers or their authorised dealers named above. I/We further undertake to place firm and irrevocable purchase orders for the entire quantity of all major materials within 03 (three) days from the date of approval of this statement by the Engineer-in-Charge, and to submit attested copies of such orders together with the written acceptance of the manufacturer or authorised dealer. I/We are aware that failure to comply with these time limits shall attract action under Clause 3 of the General Conditions of Contract.

Date : ……	Signature of the Contractor
Place : ……	Name & Address : ……

FOR OFFICE USE

Received on : ……	Approved / Approved with modifications / Returned
Remarks of Engineer-in-Charge :	
	Signature of Engineer-in-Charge with date

Correction –Nil Deletion-Nil Insertion-Nil Overwriting -Nil

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Form 'F'

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

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

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

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

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

Signature of notary with seal	Signature of bidder or an authorized person of the firm with stamp.

Note: 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)..

Correction –Nil Deletion-Nil Insertion-Nil Overwriting -Nil

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Central Public Works Department
Office Memorandum
No. DG/CON/Construction 2023/03
ISSUED BY THE AUTHORITY OF DIRECTOR GENERAL, CPWD

Nirman Bhawan, New Delhi Dated 06.12.2023

Subject: Modifications in Clause 12 and Schedule F for Clause 12 of GCC 2023 for Construction Works

The following amendments are made in the GCC 2023 Construction Works.

Existing provision	Modified provision
CONDITIONS OF CONTRACT **Definitions** 2. In the contract, the following expressions shall, unless the context otherwise requires, have the meanings, hereby respectively assigned to them:- (i) to (xv) (xvi) No provision (xvii) No provision	**CONDITIONS OF CONTRACT** **Definitions** 2. In the contract, the following expressions shall, unless the context otherwise requires, have the meanings, hereby respectively assigned to them:- (i) to (xv) **No change** **(xvi) Extra items** are those items which are not available in the contract. a. **Non Schedule Extra Items** are those items which are not available in the Standard Schedule of Rates specified in Schedule F. b. **Scheduled Extra Items** are those items which are available in the Standard Schedule of Rates specified in Schedule F. **(xvii) Completion cost: The completion cost includes gross amount of work done, amount of extra items and deviations and escalation admissible as per agreement etc.**
Clause 12 Deviations/ Variations Extent and Pricing The Engineer-in-Charge shall have power (i) to make alteration in, omissions from, additions to, or substitutions for the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the	**Clause 12 Deviations/ Variations Extent and Pricing** No Change

06/12/2023
R.K. JAIN
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progress of the work, and (ii) to omit a part of the works in case of non-availability of a portion of the site or for any other reasons and the contractor shall be bound to carry out the works in accordance with any instructions given to him in writing signed by the Engineer-in-Charge and such alterations, omissions, additions or substitutions shall form part of the contract as if originally provided therein and any altered, additional or substituted work which the contractor may be directed to do in the manner specified above as part of the works, shall be carried out by the contractor on the same conditions in all respects including price on which he agreed to do the main work except as hereafter provided.	
The completion cost of any agreement for Maintenance works including works of upgradation, aesthetic, special repair, addition/ alteration should not exceed 1.25 times of Tendered amount. Any further deviation beyond this limit upto 1.5 times of tendered amount shall be approved by the authority mentioned in schedule 'F' with recorded reason and in exceptional case, ADG shall have full power to approve the deviation beyond 1.50 times of tendered amount with recorded reason and take suitable corrective action.	**Deleted**
No provision	**The completion cost shall, in no case, exceed 1.5 times the contract amount.** **Contractor will devise a system to keep a watch on quantum of work taken up vis-a-vis balance items required to complete defined scope of work and will give the alerts to Engineer-in-Charge before taking up extra items, deviations so that completion cost does not exceed above limit. Work executed beyond above limit will neither be recorded nor be paid.**

06/11/2023
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Correction –Nil Deletion-Nil Insertion-Nil Overwriting -Nil

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	Engineer-in-Charge will verify and confirm the alerts before assigning deviations and / or extra items to the contractor. If additional work(s) is required to complete defined scope of work beyond above limit then Engineer-in Charge may take up such work(s) separately. The contractor will not have any claims whatsoever on this account.
12.1 The time for completion of the works shall, in the event of any deviations resulting in additional cost over the tendered value sum being ordered, be extended, if requested by the contractor, as follows : i. In the proportion which the additional cost of the altered, additional or substituted work, bears to the original tendered value plus ii. 25% of the time calculated in (i) above or such further additional time as may be considered reasonable by the Engineer-in-Charge	12.1 The time for completion of the works shall, in the event of any deviations **and extra items** resulting in additional cost over the **contract amount will** be extended, if requested by the contractor, as follows : i. In the proportion **to** the additional cost of work, bears to the original **contract amount** plus ii. 25% of the time calculated in (i) above.
12.2 Deviation, Extra Items and Pricing In the case of extra item(s) (items which are not available in the contract), the contractor may within fifteen days of the receipt of order or occurrence of the item(s), submit claim for market rate(s), supported with proper analysis of rate and manufacturer's specification for the work, invoices, vouchers, etc. (as applicable), failing which the rate(s) approved later by the Engineer-in-Charge shall be final and binding. Where the contractor submits claim for market rate(s) in the manner prescribed above, the Engineer-in-Charge shall, within 45 days of the receipt of the claims, after giving consideration to the analysis of	**12.2 Deviation, Extra Items and Pricing** **a) Non Schedule Extra Items** - The contractor may, within fifteen days of the receipt of order **to execute extra item** or occurrence of the item(s), submit **analysis of rate of extra item(s) based on the rates of materials available in basic rate of Standard Schedule of Rate mentioned in schedule F and market rates of the materials which are not available in standard schedule of rate mentioned in schedule F. For this purpose, the basic rate of materials available in Schedule of Rates mentioned in Schedule F will be enhanced or reduced by the applicable cost index, as the case**

06/12/2025
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rates and other documents submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined.	**may be.** **The rates of the materials which are not available in Standard Schedule of Rates, mentioned in Schedule F, shall be based on, tax paid bills for the material as defined in** manufacturer's specification. **Material rates from Standard Schedules of Rates shall be given priority in the analysis of rates.** **The rate of extra item will be:-** **i. Analyzed rates as above multiplied by (tender amount divided by estimated cost put to tender), if tendered amount is below the estimated amount put to tender.** **ii. Analyzed rate, if the tendered amount is above the estimated amount put to tender.** Failing which the rate(s) approved later by the Engineer-in-Charge shall be final and binding. Where the contractor submits **analysis of rate of extra items** in the manner prescribed above, the Engineer-in-Charge shall, within **60** days of the receipt of the **analysis of rate**, after giving consideration to the analysis of rates and other documents submitted by the contractor, determine the rate**(s) of extra items.** The contractor shall be paid in accordance with the rates so determined. **However provisional rates on the basis of invoice will be allowed by the Engineer-in-Charge. Invoice shall be accepted only for materials not available in the Standard Schedule of Rates mentioned in Schedule F. The extra items rate shall be finalized only after submission of tax paid bills by**

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Correction –Nil Deletion-Nil Insertion-Nil Overwriting -Nil

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	the contractor to the Engineer-in-Charge as required above. The Engineer-in-Charge may apply the discount available in the market on the rate of materials taken from tax paid bills.
(b) No Provision	**b) Scheduled Extra Items** **i. For percentage rate tenders, the extra item(s) shall be paid as per the Standard Schedule of Rates, mentioned in Schedule F, enhanced or reduced by the applicable cost index and further enhanced or reduced by percentage above/ below quoted by the contractor on estimated cost put to tender.** **ii. For item rate tenders, the extra item(s) shall be paid as per the said schedule rate enhanced or reduced by the applicable cost index and multiplied by (tender amount divided by estimated cost put to tender).**
The rate(s) of extra items so determined by the Engineer-in-Charge shall be final and binding on the contractor, and shall not be arbitrable.	**Deleted**

06/11/2023
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Correction –Nil Deletion-Nil Insertion-Nil Overwriting -Nil

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Deviation, deviated quantities, Pricing In the case of contract items which exceed the limit laid down in Schedule F, the contractor may within fifteen days of the receipt of order or occurrence of the excess, claim revision of the rates, supported with proper analysis of rate and invoices, vouchers, etc. (as applicable), for the quantity in excess of the above-mentioned limit. The Engineer-in-Charge shall within 45 days of receipt of the claims, after giving consideration to the analysis of rates and other documents submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined. The rate(s) so determined by the Engineer-in-Charge shall be final and binding on the contractor, and shall not be arbitrable.	**c) Deviation, deviated quantities, Pricing** In the case of contract items which exceed the limit laid down in Schedule F, the contractor may within fifteen days of the receipt of order or occurrence of the excess, claim revision of the rates, supported with proper analysis of rates **and other documents, as per procedure described in para 12.2(a) or 12.2(b)** (as applicable), for the quantities in excess of the above-mentioned limit. The Engineer-in-Charge shall within ~~45~~ **60** days of receipt of the claims, after giving consideration to the analysis of rates and other documents submitted by the contractor, determine the rates and the contractor shall be paid in accordance with the rates so determined. **In case, the contractor fails to submit his claim for revision of rates within 15 days of the receipt of order or occurrence of the excess, the Engineer-in-Charge shall determine the rate(s) of such items in accordance with para 12.2 (a) and 12.2 (b) without giving any notice to the contractor. The rates so determined by the Engineer-in-Charge shall be final and binding.** The rate(s) **of extra items and deviated items** so determined by the Engineer-in-Charge shall be final and binding on the contractor.
12.3 In the case of contract items which exceed the limit laid down in Schedule F, the Engineer-in-Charge shall after giving notice to the contractor within 30 days of submission of that bill by the contractor which contains such item(s), and after taking into consideration any reply received from the contractor within 15 days of the issue of such notice, reduce the rate for quantity in excess of the above-mentioned limit on the basis of market rates, within 30 days of the expiry	**Deleted**

06/11/2023
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Correction –Nil Deletion-Nil Insertion-Nil Overwriting -Nil

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of the said period of 15 days, and the contractor shall be paid in accordance with the rates so determined. The rate(s) so determined by the Engineer-in-Charge shall be final and binding on the contractor, and shall not be arbitrable	
12.4 The cost of any operation necessarily ..... admissible for such operations.	**12.3** The cost of any operation necessarily ..... admissible for such operations.
12.4 No provision	**12.4 Cost index** **Latest available Cost index at the time of beginning of execution of extra item and deviation shall be used in sub-clauses 12.2 (a), 12.2 (b) and 12.2 (c) for calculation of rates of extra items.**
12.5 No provision	**12.5 Labour rates** **Labour rates will be based on latest available circulars issued by Central Govt. or State Govt. whichever are higher as well as applicable for the work.**
PROFORMA OF SCHEDULES (Separate Performa for Civil, Elect.& Hort. Works in case of Composite Tenders) **SCHEDULE 'F'** **Clause 12** Authority to decide deviation upto 1.5 time of tendered amount	**PROFORMA OF SCHEDULES (Separate Performa for Civil, Elect.& Hort. Works in case of Composite Tenders)** **SCHEDULE 'F'** **Clause 12** Deleted
12.2 & 12.3 Deviation Limit beyond which clauses12.2 & 12.3 shall apply for building work	12.2 **(c)** Deviation Limit beyond which clauses12.2 **(c)** shall apply for building work .....

R.K. JAIN 06/12/2023
(EE (Contract)

Correction –Nil Deletion-Nil Insertion-Nil Overwriting -Nil

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12.4 (i) Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for foundation work (except items mentioned in earth work subhead in DSR and related items) ..... (ii) Deviation Limit for items mentioned in earth work subhead of DSR and related items	(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) ..... (ii) Deviation Limit for items mentioned in earth work subhead of DSR and related items .....

This OM is applicable for all NITs issued w.e.f. date of issue of this OM. This issues with the approval of DG CPWD.

06.12.2023

(V.P. Sahu)
Superintending Engineer (C&M)

Issued from file No. CSQ/CM/17(1)/Construction/2023 e-file no 9163323
All CPWD and PWD officers for information and necessary action.
(Through CPWD website.

06/12/2023
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Correction –Nil Deletion-Nil Insertion-Nil Overwriting -Nil

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केन्द्रीय लोक निर्माण विभाग

कार्यालय ज्ञापन

No. DG/CON/Construction 2023/04

ISSUED BY THE AUTHORITY OF DIRECTOR GENERAL, CPWD

Nirman Bhawan, New Delhi Dated: 08.12.2023

Subject: Modifications in Conditions of Contract, Clause 5 and schedule F in clause 5 of GCC 2023 Construction Works

The following amendments are made in the GCC 2023 for Construction works.

Existing Provision	Modified Provision
CONDITIONS OF CONTRACT **Definitions** 2. In the contract, the following expressions shall, unless the context otherwise requires, have the meanings, hereby respectively assigned to them:- (i) to (xvii) (xviii) No provision	**CONDITIONS OF CONTRACT** **Definitions** 2. No change:- (i) to (xvii) No Change **(xviii) Concurrent delay: Concurrent delays are those delays occurring in the work concurrently in any combination or combination of all delay fall under different sub clauses 5.2, 5.3 and 5.5.**
Clause 5 Time and Extension for Delay The time allowed for execution of the Works as specified in the Schedule 'F' or the extended time in accordance with these conditions shall be the essence of the Contract. The execution of the work shall commence from such time period as mentioned in schedule 'F' or from the date of handing over of the site, notified by the Engineer-in-Charge, whichever is later. If the Contractor commits default in commencing the execution of the work as aforesaid, the performance guarantee shall be forfeited by the Engineer in Charge and shall be absolutely at the disposal of the Government without prejudice to any other right or remedyavailable in law.	**Clause 5 Time and Extension for Delay** The time allowed for execution of the Works as specified in the Schedule 'F' or the extended time in accordance with these conditions shall be the essence of the Contract. The execution of the work shall commence from such time period as mentioned in schedule 'F' or from the date of handing over of the site, notified by the Engineer-in-Charge, whichever is later. If the Contractor commits default in commencing the execution of the work as aforesaid **and such default continues even after time period specified in the notice in writing by the Engineer-in-Charge then** the performance guarantee shall be forfeited by the Engineer-in-Charge and shall be absolutely at the disposal of the Government without prejudice to

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	any other right or remedy available in law. **The contract shall stand determined when such decision of forfeiture of the performance guarantee is issued to the contractor.**
5.1 As soon as possible but within 7 (seven) working days of award of work and in consideration of a. Schedule of handing over of site asspecified in the Schedule 'F' b. Schedule of issue of designs as specified in the Schedule 'F', i. the Contractor shall submit a Time and Progress Chart for each mile stone. The Engineer-in-Charge may within 7 (seven) working days thereafter, if required modify, and communicate the program approved to the contractor failing which the program submitted by the contractor shall be deemed to be approved by the Engineer-in- Charge. The Chart shall be prepared in direct relation to the time stated in the Contract documents for completion of items of the works. It shall indicate the forecast of the dates of commencement and completion of various trades of sections of the work and may be amended as necessary by agreement between the Engineer-in-Charge and the Contractor within the limitations of time imposed in the Contract documents. ii. In case of non-submission of construction programme by the contractor, the program approved by the Engineer-in-Charge shall be deemed to be final.	5.1 **The contractor** as soon as possible but within 7 (seven) days of **issue of letter of** award of work **shall submit a time and progress chart to the Engineer-in-Charge. Such chart shall be made in due** consideration of a. Schedule of handing over of site as specified in the Schedule 'F' b. Schedule of issue of design**(s) and drawing(**s) as specified in the Schedule 'F', i. The Contractor shall submit a Time and Progress Chart for each milestone. The Engineer-in-Charge may within 7 (seven) days **of receipt of such chart, make modifications thereafter,** if **any,** and communicate the approved **chart** to the contractor, failing which the **chart** submitted by the contractor shall be deemed to be approved by the Engineer-in- Charge. The Chart shall be prepared in direct relation to the time stated in the Contract documents for completion of items of the works. It shall indicate the forecast of the dates of commencement and completion of various trades of sections of the work and may be amended as necessary by agreement between the Engineer-in-Charge and the Contractor within the limitations of time imposed in the Contract documents. ii. In case of non-submission of **time and progress chart** by the contractor, the **chart prepared by the** Engineer-in- Charge shall be deemed to be final.

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Correction –Nil Deletion-Nil Insertion-Nil Overwriting -Nil

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iii. The approval by the Engineer-in-Charge of such programme shall not relieve the contractor of any of the obligations under the contract.	iii. The approval by the Engineer-in-Charge of such programme shall not relieve the contractor of any of the obligations under the contract.
iv. The contractor shall submit the Time and Progress Chart and progress report using the mutually agreed software or in other format decided by Engineer-in-Charge for the work done during previous month to the Engineer-in-charge on or before 5th day of each month failing which a recovery as per Schedule F to be decided by the NIT approving authority shall be made on per week or part basis in case of delay in submission of the monthly progress report	**iv.** The contractor shall submit the Time and Progress Chart **containing upto date progress of work** using the mutually agreed software or in **the** format decided by Engineer-in-Charge. **Such chart shall be submitted by the contractor on or before 5th day of each month failing which a recovery as mentioned in Schedule 'F' shall be made at the earliest from running account bill without any notice in this regard.**
v. **No provision**	**v. While recording the hindrances in the progress of the work, due consideration should be given to the cause of hindrance. The hindrances shall be segregated in following categories :** **a) delays due to reasons beyond the control of both parties (sub-clause 5.2)** **b) delays attributable to the Department and concurrent delays (sub-clause 5.3).** **c) delays solely attributable to the contractor (sub-clause 5.5)**
5.2 If the work(s) be delayed by:- i. force majeure, or ii. abnormally bad weather, or iii. serious loss or damage by fire, or iv. civil commotion, local commotion of workmen, strike or lockout, affecting any of the trades employed on the work, or v. delay on the part of other contractors or tradesmen engaged by Engineer-in-Charge in,	**5.2 Delays due to reasons beyond the control of both parties:** If the work(s) delayed by:- i. force majeure, or ii. abnormally bad weather, or iii. serious loss or damage by fire, or iv. civil commotion, local commotion of workmen, strike or lockout, affecting any of the trades employed on the work, or v. delay on the part of other contractors or tradesmen engaged by Engineer-in- Charge in

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executing work not forming part of the Contract, or vi. any other cause like above which, in the reasoned opinion of the Engineer-in-Charge is beyond the Contractor's control	executing work not forming part of the Contract, or vi. any other cause like above which, in the reasoned opinion of the Engineer-in-Charge is beyond the Contractor's control.
Then upon the happening of any such event causing delay, the contractor shall immediately give notice thereof in writing to the Engineer-in-Charge but shall nevertheless use constantly his best endeavours to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in-Charge to proceed with the works.	Then upon the happening of any such event causing delay, the contractor shall **within 03 (three) days** give **online** notice thereof **through ERP Portal** to the Engineer-in-Charge but shall nevertheless use constantly his best endeavors to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in-Charge to proceed with the work(s). **The contractor shall have no claim on account of any hindrance in case notice(s) are not given by the contractor through ERP portal.** **The Engineer-in-Charge, on receipt of such notice(s) after considering the factual ground situation, shall either acknowledge or reject the notice(s)** **In case of rejection, the reason(s) for rejection shall be communicated by Engineer-in-Charge to the agency.** **The decision of Engineer-in-Charge with regard to nature of event causing delay, its start date and end date, as has been finalized during acknowledgement of notice, shall be final and binding.** **The end date of such events shall be recorded by Engineer-in-Charge either during acknowledgment of notice or subsequent to acknowledgement if end date of hindrance is after the date of acknowledgement of notice.** **In absence of notice by the contractor, Engineer-in-Charge or his representative(s) may record the events causing delay within 05 (five)**

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Correction –Nil Deletion-Nil Insertion-Nil Overwriting -Nil

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	days of occurrence of hindrance on ERP portal provided further that not recording of events causing delay by the Engineer-in-Charge does not ipso facto entitle the contractor for any hindrance.
The contractor shall have no claim of damages for extension of time granted or rescheduling of milestone/s for events listed in sub clause 5.2.	**No change.**
5.3 In case the work is hindered in the opinion of the contractor, by the Department or for any reason / event, for which the Department is responsible, the authority as indicated in Schedule 'F' shall, if justified, give a fair and reasonable extension of time and reschedule the mile stones for completion of work.	**5.3 Delays attributable to the department** In case the work is hindered, in the opinion of the contractor, by the Department or for any reason / event, for which the Department is responsible, **then upon the happening of such event causing delay, the Contractor shall within 3 (three) days give online notice there of through ERP Portal to the Engineer-in-Charge but shall nevertheless use constantly his best endeavours to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in-Charge to proceed with the work.** **The contractor shall not be entitled for any hindrance in case notice(s) are not given by the contractor through ERP portal.** **The Engineer-in-Charge, on receipt of such notice(s) after considering the factual ground situation, shall either acknowledge or reject the notice(s).** **In case of rejection, the reason(s) for rejection shall be communicated by Engineer-in-Charge to the agency.** **The decision of Engineer-in-Charge with regard to nature of event causing delay, its start date and end date, as has been finalized during acknowledgement of notice, shall be final and binding.**

28/11/2023
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	The end date of such events shall be recorded by Engineer-in-Charge either during acknowledgment of notice or subsequent to acknowledgement if end date of hindrance is after the date of acknowledgement of notice. **In absence of notice by the contractor, Engineer-in-Charge or his representative(s) may record the events causing delay within 05 (five) days of occurrence of hindrance on ERP portal provided further that not recording of events causing delay by the Engineer-in-Charge does not ipso facto entitle the contractor for any hindrance.**
Such extension of time or rescheduling of milestone/s shall be without prejudice to any other right or remedy of the parties in contract or in law, provided further that for concurrent delays under this sub clause and sub clause 5.2 to the extent the delay is covered under sub clause 5.2 the contractor shall be entitled to only extension of time and no damages.	Such extension of time or rescheduling of milestone**(s)** shall be without prejudice to any other right or remedy of the parties in contract or in law, provided further that for concurrent delay(s) under this sub clause and sub clause 5.2 to the extent the delay is covered under sub clause 5.2, the contractor shall be entitled to only extension of time and **shall have** no **claim of** damages.
5.4 Request for rescheduling of Mile stones or extension of time, to be eligible forconsideration, shall be made by the Contractor in writing within fourteen days of the happening of the event causing delay on the prescribed forms i.e. Form of application by the contractor for seeking rescheduling of milestones or Form of application by the contractor for seeking extension of time (Appendix - XVI) respectively to the authority as indicated in Schedule 'F'. The Contractor shall indicate in such a request the period by which rescheduling of milestone/s or extension of time is desired.	5.4 **Rescheduling of milestone(s) and 'extended date of completion'** The request for rescheduling of Milestone**(s) and** extension of time, shall be made by the Contractor **through ERP Portal once in a month on the basis of hindrances accepted by Engineer-in-Charge under sub-clause 5.2 and sub-clause 5.3.** The Contractor shall indicate in such a request **number of days** by which rescheduling of milestone**(s) and/**or extension of time is desired.
With every request for rescheduling of milestones, or if at any time the actual progress of work falls behind the approved programme by more than 10% of the stipulated period of completion of contract, the contractor shall produce a revised programme without causing any delay in execution	**Deleted**

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of the work. A recovery as specified in Schedule 'F' shall be made on per day basis in case of delay in submission of the revised programme. **No provision**	**The authority as indicated in Schedule 'F', after examining the request, shall give a fair and reasonable extension of time for completion of work and simultaneously reschedule the milestone(s), if required so. The authority shall consider all the hindrances accepted as per sub-clauses 5.2, 5.3 and 5.5.** **The authority shall decide rescheduling of milestone(s) and extension of time within 21 (Twenty One) days of the request submitted by the contractor through ERP portal. In event of no request by the contractor for rescheduling of milestone(s) and extension of time, the authority as indicated in Schedule F, after affording opportunity to the contractor, may give fair and reasonable extension of time based on hindrances accepted by Engineer-in-Charge and reschedule the milestone(s) once in a month. Such justified extension of time shall determine the 'extended date' of completion of work.**
5.4.1 In any such case the authority as indicated in Schedule 'F' may give a fair and reasonable extension of time for completion of work or reschedule the mile stones. E-in-C shall finalize/ reschedule a particular mile stone before taking an	5.4.1 **Provided that the end date of any event causing delay shall not fall beyond the date of request for extension of time or rescheduling of milestone(s) by the contractor. In case end date of event falls beyond the date of submission of said request, then period for extension up to date of application shall be considered in the said request for events eligible for consideration and remaining period shall be applied in subsequent request of extension of time or rescheduling of milestone(s).** **Engineer-in-Charge** shall finalize/ reschedule a particular mile stone

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action against subsequent mile stone. Such extension or rescheduling of the milestones shall be communicated to the Contractor by the authority as indicated in Schedule 'F' in writing, within 21 days of the date of receipt of such request from the Contractor in prescribed form. In event of non-application by the contractor for extension of time E-in-C after affording opportunity to the contractor, may give, supported with a programme (as specified under 5.4 above), a fair and reasonable extension within a reasonable period of occurrence of the event.	before taking an action against subsequent mile stone. Such extension or rescheduling of the milestones shall be communicated to the Contractor by the authority as indicated in Schedule 'F' in writing, within 21 **(twenty one)** days of the date of receipt of such request from the Contractor **on ERP Portal.**
5.5 In case the work is delayed by any reasons, in the opinion of the Engineer- in-Charge, by the contractor for reasons beyond the events mentioned in clause 5.2 or clause 5.3 or clause 5.4 and beyond the justified extended date, without prejudice to right to take action under Clause 3, the Engineer-in-Charge may grant extension of time required for completion of work without rescheduling of milestones. The contractor shall be liable for levy of compensation for delay for such extension of time.	5.5 **Delays attributable solely to the contractor** **In case the work is delayed by reasons solely attributable to the contractor, then Engineer-in-Charge or his representative(s) may record the event causing delay within 05 (five) days of occurrence of delay in the ERP portal. Contractor shall take the notice of the same for necessary action. He may submit his version, if any within 05 (Five) days. Engineer-in-Charge, considering the version of the contractor, will take decision on such recording of the event and the decision of the Engineer-in-Charge shall be final and binding.** **The contractor shall be liable for levy of compensation for such delays (i.e. for the period beyond the justified extended date of completion as determined in sub clause 5.4 and this default of contractor shall be dealt in conjunction with clause 2 of the contract.** **In case the work is delayed, due to hindrances attributable solely to the contractor, beyond the justified extended date (as stated in sub clause 5.4), the authority indicated in Schedule 'F', without prejudice to provisions to take action under Clause 3, may grant extension of**

21 08/1/2023
R.K. JAIN
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	time required for completion of work without rescheduling of milestone(s) and extend the date of completion.
PROFORMA OF SCHEDULES (Separate Performa for Civil, Elect.& Hort. Works in case of Composite Tenders) **SCHEDULE 'F'** **Clause 5** **Authority to decide:**	**PROFORMA OF SCHEDULES (Separate Performa for Civil, Elect. & Hort. Works in case of Composite Tenders)** **SCHEDULE 'F'** **Clause 5**
i. Extension of time ..... (Engineer in Charge or Engineer in Charge of Major Component in case of Composite Contracts, as the case may be)	i. **Authority to convey the decision of shifting of milestone and** extension of time **.....** (Engineer-in-Charge or Engineer-in-Charge of Major Component in case of Composite Contracts, as the case may be)
ii. Rescheduling of mile stones ..... (Superintending Engineer/ PM/CPM in Charge or Superintending Engineer/ PM/CPM in Charge of Major Component in case of Composite Contracts, as the case may be)	**ii. Authority to decide rescheduling of milestone and** extension of time ..... (SE/**SE&PD/ CE/ CE&ED).**
iii. Shifting of date of start in case of delay in handing over of site ..... (Superintending Engineer/ PM/CPM in Charge or Superintending Engineer in Charge of Major Component in case of Composite Contracts, as the case may be)	iii. Shifting of date of start in case of delay in handing over of site ..... (SE/**SE&PD/CE/ CE&ED).**

This OM is applicable for all NITs uploaded after date of issue of this OM.

This is issued with the approval of DG CPWD.

08.12.2023

(वी. पी.साहू)

अधीक्षण अभियंता (सी.एंड एम.)

Issued from file No. CSQ/CM/17(1)/2023/ Construction e-file 9161772

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

R.K. JAIN
(Contact)

केन्द्रीय लोक निर्माण विभाग

कार्यालय ज्ञापन

No. DG/CON/Construction 2023/05

ISSUED BY AUTHORITY OF DIRECTOR GENERAL, CPWD

NIRMAN BHAWAN, NEW DELHI **Dated: 08.02.2024**

Subject: Modifications in Conditions of Contract and Clause 19 of GCC 2023 for Construction Works

The following amendments are made in the GCC 2023 for Construction Works:

Existing provision	Modified provision
CONDITIONS OF CONTRACT **Definitions** 2. In the contract, the following expressions shall, unless the context otherwise requires, have the meanings, hereby respectively assigned to them:-	**CONDITIONS OF CONTRACT** **Definitions** 2. In the contract, the following expressions shall, unless the context otherwise requires, have the meanings, hereby respectively assigned to them:-
(i) to (xviii)	**(i) to (xviii) No change**
(xix) No provision	**(xix) Adolescent Person: A person who has completed his/her fourteenth year of age but has not completed his eighteenth year.**
(xx) No provision	**(xx) Hazardous works: Hazardous process/works are the works as defined in the clause (cb) of the Factory Act, 1948.**
Clause 19 Labour Laws to be complied by the Contractor The contractor shall comply with the provisions of the Contract Labour (Regulation and Abolition) Act, 1970, and the Contract Labour (Regulation and Abolition) Central Rules, 1971. The contractor shall also obtain a valid licence under the said Act before the commencement of the work, and continue to have a valid licence until its completion. The contractor shall also comply with provisions of the Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979.	**Clause 19 Labour Laws to be complied by the Contractor** **No change** **No change** **No change**

The contractor shall also abide by the provisions of the Child and Adolescent Labour (Prohibition and Regulation) Act, 1986. The contractor shall also comply with the provisions of the building and other Construction Workers (Regulation of Employment & Conditions of Service) Act, 1996 and the building and other Construction Workers Welfare Cess Act, 1996. Any failure to fulfil these requirements shall attract the penal provisions of this contract arising out of the resultant non-execution of the work.	The contractor shall also abide by the provisions of the Child and Adolescent Labour (Prohibition and Regulation) Act, 1986, **amended by Amendment Act No. 35 of 2016 and thereafter time to time.** **No change** **No change**
Clause 19A No labour below the age of eighteen years shall be employed on the work.	Clause 19A No **person** below the age of **fourteen** years shall be employed on the work. **However Adolescent Persons can be employed on non-hazardous works/process.**
C.P.W.D. Contractor's Labour Regulations **2. DEFINITIONS** i. (c) Who is an out worker, that is to say, person to whom any article or materials are ..... premises under the control and management of the principal employer. No person below the age of 18 years shall be employed to act as a workman.	**C.P.W.D. Contractor's Labour Regulations** **2. DEFINITIONS** i. (c) No change. No person below the age of **fourteen** years shall be employed **on the work. However Adolescent Persons can be employed on non-hazardous works/process.**

This issues with the approval of DG CPWD.

08.02.2024

(वी. पी.साहू)

अधीक्षण अभियंता(सी.एंड एम.)

Issued from file No. CSQ/CM/17(1)/2023/Construction e-file 9169019

केलोनिवि तथा लोनिवि दिल्ली के सभी अधिकारियों को आवश्यक सूचना एवं कार्यवाही हेतु।

(केलोनिवि वेबसाईट के माध्यम से)

केन्द्रीय लोक निर्माण विभाग

कार्यालय ज्ञापन

No. DG/CON/Construction-2023/13

ISSUED BY THE AUTHORITY OF DIRECTOR GENERAL, CPWD

Nirman Bhawan, New Delhi Dated: 29.10.2024

Subject: Modifications in Conditions of Contract, Clause 10A of GCC Construction Works 2023.

Following amendments are made in the GCC Construction Works 2023:-

Existing Provision	Modified Provision
Clause 10A: Materials to be provided by the Contractor (i) The contractor shall, ... thereof and in case of default, the Engineer-in-Charge may cause the same to be supplied and all costs which may attend such removal and substitution shall be borne by the Contractor.	No Change
The contractor shall at his own expense, provide a material testing lab at the site for conducting routine field tests. The lab shall be equipped at least with the testing equipment as specified in schedule F.	**Field Laboratory:** The contractor shall at his own expense, setup a material testing lab equipped with the testing equipment as specified in schedule F at site for conducting routine field test.
No Provision	**External Laboratory:** Letter for submitting sample(s) for testing of material shall be sent through e-mail to the Lab by authorized representative of Engineer-in-Charge or Engineer-in-Charge of the work along with name(s) of test(s) to be done on the material. The contractor shall collect the sample(s) from the site and submit it to the lab; make necessary payment for the testing charges. He will inform on the same day through email to authorized representative of Engineer-in-Charge and Engineer-in-Charge regarding submission of sample (s) and

29.10.24

R K SINGH
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Correction-Nil Deletion-Nil Insertion-Nil Overwriting-Nil

AE(E) EE(E)

Appendix-XX

REGISTER OF MATERIAL AT SITE (MAS)

1. Division/Sub-division .....
2. Name of Work .....
3. Name of Article/Item .....
4. Estimated Requirements .....

S. No.	Date of Receipts (Details of Challans/ Bills, Specific location wherePlants and Materials received/ Vehicle No.	Received from/ Issued to	Quantity Received	Date of issue	Specific location where Plants& Materials Displayed / Delivered / issued	Quantity Issued	Balance Quantity	Signature of authorized representative of contractor	Signature of authorized representative of Engineer-in-Charge/ AE/EE/	Remarks
1	2	3	4	5	6	7	8		9	10

This issues with the approval of DG, CPWD.

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

Issued from file No. CSQ/CM/17(1)/ Construction/2024
e-file 9184028 (DFA//9301389)
केलोनिवि तथा लोनिवि दिल्ली के सभी अधिकारियों को आवश्यक सूचना एवं कार्यवाही हेतु।
(केलोनिवि वेबसाईट के माध्यम से)

09.10.24
R K SINGH
EE(Manual)

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Correction-Nil Deletion-Nil Insertion-Nil Overwriting-Nil

AE(E) EE(E)

केन्द्रीय लोक निर्माण विभाग
कार्यालय ज्ञापन

No. DG/CON/Construction 2023/12
ISSUED BY AUTHORITY OF DIRECTOR GENERAL, CPWD

NIRMAN BHAWAN, NEW DELHI Dated: 09.10.2024

Subject: Modifications in Clause 10A of GCC 2023 for Construction Works

The following amendment is made in the Clause 10A of GCC 2023 for Construction Works:

Existing provision	Modified provision
Clause 10A Materials to be provided by the contractor The contractor shall ..... as specified in Schedule F.	**Clause 10A Materials to be provided by the contractor** (i) No Change
No Provision	(ii) Maintenance of Material at Site (MAS) Register (a) MAS register of the key materials including Cement, Steel Bitumen, Paint, Primer, Distemper, Varnishes, Tile Adhesive, Admixture, Anti termite chemical Water proofing compound material and other items as required by Engineer-in-Charge, and shall be maintained as per proforma in Appendix-XX of GCC. All the entries in the MAS registers are made by the designated staff of the contractor and same is reviewed weekly by the authorized representative and fortnightly by the Engineer-in-Charge. However, contractor is responsible for maintenance and safe custody of MAS registers.
(b) No provision	(b)The self-attested copies of tax paid bill of all the materials entered in the MAS register shall be submitted by the contractor at the time of review by representative of Engineer-in-Charge. In case of any doubt, genuineness of the tax paid bills; it can be verified by the representative of the Engineer-in-Charge or the Engineer-in-Charge, however, onus of genuineness of tax paid bills rest with the contractor.

09.10.24
R K SINGH
EE(Manual)

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Correction-Nil Deletion-Nil Insertion-Nil Overwriting-Nil

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No Provision	payment made to the lab. If he either fails to collect or submit the sample(s) to the lab within 03 days or in time as prescribed in the specifications, whichever is earlier, the Engineer-in-Charge shall collect and submit the sample(s) and make necessary payment for testing charges to the lab. In such case, Engineer-in-Charge shall make recovery on account of collection and submission of sample(s) to the lab and paid testing charges etc. from the next R/A bill / Final bill of the contractor. This action of Engineer-in-Charge shall be final and binding. If the contractor fails three times in collection and/or submitting sample(s) and/or fails to make payment for testing charges, the contractor shall be debarred from tendering in CPWD for a period of two years.
Sl. no. (ii) (a) and (b)	No change

This OM is applicable for all NITs uploaded after date of issue of this OM.

This is issued with the approval of DG CPWD.

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

Issued from file No. CSQ/CM/17(1)/2024/Construction e-file- 9184436 (DFA/9303295)

केलोनिवि तथा लोनिवि दिल्ली के सभी अधिकारियों को आवश्यक सूचना एवं कार्यवाही हेतु।

(केलोनिवि वेबसाईट के माध्यम से)

R K SINGH
EE(Manual)

Correction-Nil Deletion-Nil Insertion-Nil Overwriting-Nil

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केन्द्रीय लोक निर्माण विभाग
कार्यालय ज्ञापन

No. DG/CON/Construction 2023/14
ISSUED BY AUTHORITY OF DIRECTOR GENERAL, CPWD

NIRMAN BHAWAN, NEW DELHI **Dated: 03.01.2025**

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

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

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

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Correction-Nil Deletion-Nil Insertion-Nil Overwriting-Nil

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

This issues with the approval of DG, CPWD.

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

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

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

03.01.25
R K SINGH
EE(Manual)

Correction-Nil Deletion-Nil Insertion-Nil Overwriting-Nil

AE(E) EE(E)

केन्द्रीय लोक निर्माण विभाग
कार्यालय ज्ञापन

No. DG/CON/Construction 2023/16
ISSUED BY AUTHORITY OF DIRECTOR GENERAL, CPWD

NIRMAN BHAWAN, NEW DELHI **Dated: 10.02.2025**

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

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

Existing provision	Modified provision
Clause 7 Existing provisions No provision	**Clause 7** No change **In case of correction / rejection / short documents, it will be mandatory for Engineer-in- Charge to give recorded reasons for correction / rejection / submission of additional documents within seven days after submission of running bill by the contractor.**
Clause 8 Completion Certificate (Issued vide OM No. DG/Construction-2023/09 dated 01.04.2024) Within ten days of the completion of the work or on part completion of one or more building(s) out of independent building in a project or infrastructure project, as per requirement of client or otherwise specified in schedule F, the contractor shall give notice of such completion to the Engineer-in-Charge and within thirty days of the receipt of such notice, the Engineer-in-Charge shall inspect the work and shall furnish the contractor with a part or final completion certificate as the case may be, indicating defects (a) to be rectified by the contractor and/or (b) for which payment will be made at reduced rates.	**Clause 8 Completion Certificate** Within ten days of the completion of the work or on part completion of one or more building(s) out of independent building in a project or infrastructure project, as per requirement of client or otherwise specified in schedule F, the contractor shall give notice of such completion to the Engineer-in-Charge and **the Engineer-in-Charge, within seven days of receipt of intimation of completion from contractor will inspect the work and satisfy himself about completion of part /full work, then intimate to the concerned authorities as mentioned in Schedule F for inspection and issuance of part / final completion certificate. The concerned authorities will inspect the work and issue part/final completion certificate within** thirty days of the receipt of such **intimation.** The Engineer-in-Charge shall furnish **to** the contractor a part / final completion certificate as the case may be, indicating defects (a) to

10.2.25
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Correction-Nil Deletion-Nil Insertion-Nil Overwriting-Nil

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

Correction-Nil Deletion-Nil Insertion-Nil Overwriting-Nil

AE(E) EE(E)

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

This issues with the approval of DG, CPWD.

10.2.25

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

Issued from file No. CSQ/CM/17(1)/2025/Construction e-file 9190123 (DFA/9315615)
केलोनिवि तथा लोनिवि दिल्ली के सभी अधिकारियों को आवश्यक सूचना एवं कार्यवाही हेतु।
(केलोनिवि वेबसाईट के माध्यम से)

10.2.25
R K SINGH
EE(Manual)

Correction-Nil Deletion-Nil Insertion-Nil Overwriting-Nil

AE(E) EE(E)

Government of India

Central Public Works Department

Name of work: **Construction of Canteen Service Facility at IIT (ISM) Dhanbad.(SH- Internal Electrical Installations , Fans & Fitting , Fire Alarm System, Fire Fighting System & Passenger Lifts.(Balance Work).**

PART B

(Electrical work)

SECTION B-1

SCOPE OF WORK AND GENERAL CONDITIONS FOR ELECTRICAL WORKS

1. The scope of work includes Supply, Installation, Testing and Commissioning of the complete internal electrical installation, earthing system and LAN cabling work in connection with the renovation / replacement and shifting of existing electrical wiring of Diamond Hostel at IIT(ISM), Dhanbad, with best industry standards and practices, as per CPWD Specifications, National Building Code 2016, relevant Indian Standards, the National Electrical Code, the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations and the Indian Electricity Rules and Acts, all as amended upto date.

2. The work involves renovation, replacement and shifting of the existing electrical wiring installation of an occupied hostel building. The contractor shall be deemed to have satisfied himself, before quoting, as to the existing condition of the installation, the extent of dismantling involved, the constraints of working in an occupied building and all other circumstances which may influence or affect his rates. No claim whatsoever shall be entertained on this account.

3. All working drawings, route plans, conduit layout plans, single line diagrams and earthing layouts for the electrical services shall be prepared and submitted by the contractor and shall be got approved from the Engineer-in-Charge before execution of the work. Nothing extra shall be payable on this account.

4. The Contractor shall prepare and submit to the Engineer-in-Charge an integrated programme chart (Time and Progress) within the period specified in Schedule 'F'. The integrated programme chart submitted by the contractor shall not have any discrepancy with the financial milestones attached in the contract agreement. The contractor shall execute the work according to the programme submitted to and approved by the Engineer-in-Charge.

5. The CPWD specifications to be followed, all as amended upto date, are as mentioned below: i. CPWD General Specifications for Electrical Works, Part-I (Internal) – 2013 & 2023. ii. CPWD General Specifications for Electrical Works, Part-II (External) – 1994 & 2023. iii. CPWD Specifications 2019 (Vol-I & Vol-II) for allied civil work, wherever applicable. iv. Relevant Indian Standard Specifications of the Bureau of Indian Standards.

6. In the case of discrepancy between the Schedule of Quantities, the Specifications and/or the Drawings, the following order of preference shall be observed: i. Description of Schedule of Quantities. ii. Particular Specification and Special Conditions, if any. iii. Drawings. iv. CPWD Specifications. v. Indian Standard Specifications of B.I.S.

7. The tenderer is advised not to leave blank or write irrelevant information in the schedules. In the event no rate has been quoted for any item(s), leaving space both in figure(s), word(s) and amount blank, it will be presumed that the contractor has included the cost of this/those item(s) in other items and the rate for such items will be considered as "zero" and the work will be required to be executed accordingly.

8. The competent authority on behalf of the President of India reserves to himself the right of accepting the whole or any part of the tender and the tenderers shall be bound to perform the same at the rate quoted. In such case, the Department also reserves the right to award the balance part of the tender and/or any other contracts to other agencies at the sole discretion of the Department. The decision of the Department in this regard shall be final and binding on the contractor and no claim of whatsoever nature shall be entertained from the contractor on this account.

9. The Contractor shall assume all liability, financial or otherwise, in connection with his contract and shall protect and indemnify the Department from any and all damages and claims that may arise on any account. The Contractor shall indemnify the Department against all claims in respect of patent rights, royalties, design, trademarks or other protected rights, damages to the building, its fixtures and furniture, adjacent buildings, roads or members of the public in the course of execution of work or any other reason whatsoever, and shall himself defend all actions arising from such claims and shall keep the Department

saved harmless and indemnified in all respects from such actions, costs and expenses. Nothing extra shall be payable on this account.

10. Before commencing the work, the Contractor shall, without in any way limiting his obligations and liabilities, insure at his own cost and expense against any damage or loss or injury which may be caused to any person or property, including the occupants of the hostel and their belongings. Nothing extra shall be payable on this account.

11. The Tenderer may, before submission of the tender, inspect the CPWD specifications in the office of the Engineer-in-Charge. The Department shall not bear responsibility for the lack of knowledge and also the consequences thereof to the Contractor. The information and data shown in the drawings and mentioned in the tender document have been furnished in good faith and for general information and guidance only. The Engineer-in-Charge in no case shall be held responsible for the accuracy thereof and/or interpretations or conclusions drawn therefrom by the Contractor, and all consequences shall be borne by the Contractor.

12. All incidental charges of any kind including cartage, storage, wastage and safe custody of material etc. shall be borne by the Contractor and no claim whatsoever shall be entertained on this account.

13. Storage and safe custody of all materials shall be the sole responsibility of the Contractor. The Department shall not be responsible for any loss, theft or damage to the materials of the contractor stored at site. Nothing extra shall be payable on this account.

14. The Contractor shall conduct his work so as not to interfere with or hinder the progress or completion of the work being performed by other contractors or by the Engineer-in-Charge, and shall as far as possible arrange his work and shall place and dispose of the materials being used or removed so as not to interfere with the operations of other contractors, or shall arrange his work with that of the others in an acceptable and coordinated manner and shall perform it in proper sequence to the complete satisfaction of others.

15. The Engineer-in-Charge shall not be precluded or estopped from taking any measurements, framing of estimates or detaining any certificates made either before or after the completion and acceptance of the work and payment, from showing the true amount and character of the works performed and materials furnished by the Contractor, and from showing that any such measurements, estimates or certificates are untrue or incorrectly made, and the Engineer-in-Charge shall not be precluded or estopped from recovering from the Contractor such damages as may be sustained by reason of his failure to comply with the terms and conditions of the contract.

16. The tenderers shall take into account the element of wastage(s) that are likely to be there in all elements of the work and quote his price taking that into account. The tenderers shall study all the items from the point of view of wastage(s) which are likely to take place.

17. 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.

18. All sundry equipment, fittings, assemblies, accessories, hardware items, screws, bolts, supports, termination lugs for electrical connection, cable glands, junction boxes, connectors, ferrules, and all other sundry items required for proper assembly and efficient working of the various equipment and components of the work shall be deemed to have been included in the scope of work, irrespective of the fact whether such items are specifically mentioned in the tender document or not.

19. All cutting of walls, floors and ceilings, making of holes and chases for recessed conduits, and finishing and making good the same to match the existing surface and finish, shall be the responsibility of the contractor. Any damage done to the building, its finishes, fixtures, furniture or fittings during the execution of the electrical work shall be made good immediately at his own cost to the entire satisfaction of the Engineer-in-Charge.

20. It is the responsibility of the contractor to arrange the required power supply and water supply for installation and testing purposes during the contract period. Nothing extra shall be paid on this account. The work will be considered as complete only after complete energisation and satisfactory operation of the entire installation and issue of test results as per CPWD specifications after completion of all work.

21. No T&P shall be issued by the Department and nothing extra shall be paid on account of this.

22. Any additional specifications/conditions are to be read in conjunction with the Schedule of Quantities for the work. However, nothing extra shall be paid on account of these additional specifications and conditions, as the same are to be read alongwith the Schedule of Quantities for the work.

Correction-Nil Deletion-Nil Insertion-Nil Overwriting-Nil

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SECTION B-2

SPECIAL CONDITIONS RELATING TO ASSESSMENT, PROCUREMENT AND VERIFICATION OF MATERIALS

(These conditions are mandatory and time-bound. Non-compliance shall attract action under Clause 3 of the General Conditions of Contract.)

1. Assessment of Materials — within 07 days of date of start

1.1 Within 07 (seven) days from the date of start of work as defined in Schedule 'F', the contractor shall carry out a complete assessment of all materials required for execution of the entire work as per the Schedule of Quantities, and shall submit to the Engineer-in-Charge a comprehensive material assessment statement.

1.2 The material assessment statement shall be submitted in the proforma prescribed at Annexure-VI to this NIT, and shall contain, for each item of the Schedule of Quantities, the following particulars:

(i) Item number and description as per the Schedule of Quantities;

(ii) Total quantity required for the work, including justifiable wastage;

(iii) Proposed make and model, strictly from the List of Approved Makes contained in this NIT;

(iv) Name and complete address of the manufacturer (OEM);

(v) Name, complete address, telephone number and e-mail of the authorised dealer/distributor from whom the material is proposed to be procured;

(vi) Proposed date of placement of order and proposed date of delivery at site.

1.3 The material assessment statement shall be got approved from the Engineer-in-Charge. The Engineer-in-Charge may direct such modifications in the makes, models, quantities or sources as he considers necessary, and the decision of the Engineer-in-Charge in this regard shall be final and binding on the contractor.

1.4 Submission of an incomplete, vague or partial material assessment statement, or one which does not cover all items of the Schedule of Quantities, shall be treated as non-submission for the purposes of this condition.

2. Placement of Orders — within 03 days thereafter

2.1 Within 03 (three) days from the date of approval of the material assessment statement by the Engineer-in-Charge, that is to say ordinarily within 10 (ten) days from the date of start of work, the contractor shall place firm and irrevocable purchase orders for the entire quantity of all major materials required for the work, upon the manufacturers or their authorised dealers/distributors only.

2.2 For the purposes of this condition, "major materials" shall mean and include:

(i) FRLS PVC insulated copper conductor single core cables of all sizes;

(ii) Steel conduits and accessories of all sizes;

(iii) Modular switches, socket outlets, modular plates and GI boxes of all modules;

(iv) MCB Distribution Boards, miniature circuit breakers and four pole isolators;

(v) CAT-6 UTP LAN cable and CAT-6 Information Outlets;

(vi) G.I. earth pipe electrodes, G.I. strips and G.I. wire;

(vii) Telephone cable; and

(viii) Any other item as may be specified by the Engineer-in-Charge in writing.

2.3 Attested copies of all purchase orders so placed, together with the written acceptance of the order by the manufacturer or the authorised dealer, shall be submitted to the Engineer-in-Charge immediately on placement and in any case not later than 02 (two) days from the date of placement of the order.

2.4 Purchase orders placed upon any person other than the manufacturer or his authorised dealer/distributor shall not be reckoned as compliance with this condition, and shall be treated as non-placement of order.

3. Verification of Orders from the Authorised Dealer

3.1 Every purchase order submitted by the contractor under Condition 2 above shall be subject to independent verification by the Department directly from the manufacturer or the authorised dealer upon whom the order is stated to have been placed. Such verification may be carried out by correspondence, by e-mail, telephonically, through the online dealer verification facility of the manufacturer, or by deputing a departmental representative to the premises of the dealer, as the Engineer-in-Charge may consider appropriate.

3.2 The contractor shall render all assistance necessary for such verification, and shall on demand furnish the dealer authorisation certificate issued by the manufacturer in favour of the dealer, the GST registration particulars of the dealer, and such other documents as may be called for by the Engineer-in-Charge.

3.3 If on verification any purchase order is found to be fictitious, forged, ante-dated, cancelled, materially altered, or placed upon a person who is not in fact an authorised dealer of the manufacturer, or if the order is subsequently withdrawn or cancelled by the contractor without the prior written approval of the Engineer-in-Charge, the order shall be treated as never having been placed, and the contractor shall be deemed to have failed to comply with Condition 2 above.

3.4 Submission of any forged or fabricated purchase order, dealer authorisation, invoice, test certificate or other document shall, in addition to action under Clause 3 of the General Conditions of Contract, render the contractor liable to action for breach of contract and to such other action, including debarment from tendering in CPWD, as the competent authority may decide, without prejudice to any criminal proceedings that may be initiated in accordance with law.

4. Consequence of Non-Compliance — Action under Clause 3

4.1 If the contractor fails to submit the material assessment statement within the period stipulated in Condition 1 above, or fails to place the purchase orders within the period stipulated in Condition 2 above, or if the purchase orders on verification are found not to satisfy the requirements of Condition 3 above, the same shall constitute a failure on the part of the contractor to proceed with the work with due diligence within the meaning of Clause 3 of the General Conditions of Contract, and action under Clause 3 shall be taken against the contractor.

4.2 Before taking action under Clause 3, the Engineer-in-Charge shall issue a notice in writing to the contractor calling upon him to make good the default within 03 (three) days. If the default is not made good within the said period, the Engineer-in-Charge shall be at liberty, without prejudice to any other right or remedy available to the Department, to take action under Clause 3 of the General Conditions of Contract, including rescission of the contract and forfeiture of the Performance Guarantee and Security Deposit, and the contractor shall have no claim whatsoever on this account.

4.3 The requirements of Conditions 1 and 2 above also constitute Milestone No. 1 and Milestone No. 2 respectively in the Table of Milestones under Clause 5 of Schedule 'F'. Accordingly, non-achievement of these requirements within the stipulated periods shall, in addition to action under Clause 3, attract withholding of the amount specified against the respective milestone in the said Table, in accordance with Clause 5 of the General Conditions of Contract. The amount so withheld shall be released only on full compliance being achieved to the satisfaction of the Engineer-in-Charge.

4.4 It is expressly agreed and understood that the time limits stipulated in Conditions 1 and 2 above are of the essence of the contract, having regard to the short stipulated period of completion of 03 (three) months and the fact that the work is to be executed in an occupied hostel building during a limited window of availability. No extension of these time limits shall ordinarily be granted, and any extension, if granted by the Engineer-in-Charge in writing for reasons to be recorded, shall not by itself entitle the contractor to any extension of the stipulated period of completion of the work.

5. Delivery, Stacking and Inspection of Materials

5.1 The contractor shall ensure that the entire quantity of all major materials is delivered at site in a phased manner in accordance with the approved programme chart, and in any case such that no item of work is held up for want of material at any stage.

5.2 All materials on receipt at site shall be got inspected from the Engineer-in-Charge or his authorised representative before being taken into use. Materials not conforming to the approved makes, models and specifications shall be rejected and shall be removed from the site by the contractor within 48 hours of such rejection at his own cost.

5.3 The contractor shall maintain at site a Material Receipt Register in a form approved by the Engineer-in-Charge, recording for each consignment the date of receipt, the item, quantity, make, batch number, invoice number and date, name of the dealer, and the signature of the departmental representative who inspected the consignment. The register shall be available at site at all times for inspection by the Engineer-in-Charge and by any superior officer of the Department.

5.4 The materials shall be procured only from the manufacturers and their authorised dealers, and documentary proof for such procurement and supply shall be produced by the contractor. The Department reserves the right to send such materials to the manufacturers or to an authorised/NABL accredited test laboratory to verify the genuineness and quality of the product. The Contractor shall make available, on request from the Department, for record, copies of challans, cash memos, receipts, warranty certificates, test certificates and other vouchers towards the quantity and quality of various materials procured. Nothing extra shall be payable on this account.

5.5 If the Department desires to send any samples of materials for testing in an accredited laboratory, the Contractor at his own expense shall supply all materials and labour for preparing and testing samples as required by the Engineer-in-Charge. The testing shall be carried out in the presence of the representative of the Engineer-in-Charge. The testing charges shall be borne by the Department only when the samples satisfy the provisions specified and conform to the requirement of the relevant specifications. If the results show that the samples do not satisfy the relevant specification, the testing charges shall be borne by the contractor.

5.6 All materials shall bear the ISI certification mark wherever such mark is applicable, and shall be accompanied by the manufacturer's test certificate and warranty certificate. Cables shall bear the manufacturer's name, voltage grade, size and ISI mark embossed at regular intervals on the outer sheath.

6. Deployment of Manpower and Mobilisation

6.1 The contractor shall mobilise at site, within 07 (seven) days from the date of start of work, the Technical Representative required under Clause 32 of the General Conditions of Contract, together with a minimum of one licensed Electrical Supervisor and such number of licensed Wiremen and other workmen as may be necessary to complete the work within the stipulated period.

6.2 The contractor shall submit to the Engineer-in-Charge, within 07 (seven) days from the date of start of work, a list of all technical personnel and workmen proposed to be deployed on the work, together with attested copies of their licences, qualifications and experience certificates, and shall obtain photo identity cards for all workmen from the Institute authorities before permitting them to work within the campus.

6.3 The contractor shall deploy the machinery, tools and plants listed at Annexure-V at site within 07 (seven) days from the date of start of work. Failure to deploy the required machinery, tools and plants shall attract a recovery of Rs. 1,000/- (Rupees One Thousand only) per item per day of default, without prejudice to any other action under the contract.

6.4 No workman below the age of 18 years shall be employed on the work in any capacity whatsoever. The contractor shall be solely responsible for compliance with the Child and Adolescent Labour (Prohibition and Regulation) Act, 1986 and all other labour laws in force.

SECTION B-3

SPECIAL CONDITIONS FOR WORKING IN AN OCCUPIED HOSTEL BUILDING

1. The work is to be carried out in Diamond Hostel, which is an occupied residential hostel building of the Institute. The contractor shall plan and execute the work so as to cause the minimum possible inconvenience to the residents and to the academic and administrative activities of the Institute.

2. The work shall be executed in such phases, blocks, floors or wings, and in such sequence, as may be directed by the Engineer-in-Charge in consultation with the Institute authorities. The contractor shall have no claim whatsoever on account of the work being executed in phases, in a piecemeal manner, or in a sequence other than that which he may consider most economical.

3. The contractor shall not take any shutdown of the existing electrical installation without the prior written permission of the Engineer-in-Charge. Applications for shutdown shall be made in writing not less than 48 hours in advance, specifying the portion of the installation to be shut down, the purpose, and the duration required. Shutdowns shall generally be permitted only during such hours and on such days as may be specified by the Engineer-in-Charge having regard to the convenience of the residents and the academic calendar of the Institute, and may be restricted to vacation periods, holidays or specified working hours.

4. The contractor shall ensure that no part of the hostel remains without electric supply for longer than the period expressly permitted in the shutdown approval. Wherever necessary, the contractor shall provide and maintain, at his own cost, temporary wiring, temporary lighting and temporary power arrangements of adequate capacity and conforming to safety requirements, so that the residents are not deprived of essential lighting, fan and power points. Nothing extra shall be payable on this account.

5. Working hours within the hostel shall be as permitted by the Engineer-in-Charge. Noisy operations such as wall chasing, grooving, drilling and cutting shall be carried out only during such hours as may be specified, and shall not be permitted during examination periods notified by the Institute, or during night hours, without specific written permission.

6. The contractor shall be responsible for the safety and security of the belongings of the residents in the rooms and areas where work is in progress. The contractor's workmen shall not enter any occupied room except in the presence of the resident or a representative of the Institute or of the Engineer-in-Charge. Any loss, theft or damage to the property of the residents or of the Institute attributable to the contractor's workmen shall be made good by the contractor at his own cost, and the Engineer-in-Charge shall be entitled to recover the assessed value thereof from any sum due or becoming due to the contractor.

7. The contractor shall provide adequate dust screens, floor protection sheets, tarpaulins and covers to protect the furniture, fixtures, flooring and belongings of the residents from dust and damage during chasing, drilling and allied operations. All debris, dust and surplus material generated in the course of the day's work shall be cleared from the working area on the same day, and the area shall be left in a clean and usable condition at the close of work each day.

8. The contractor shall provide and maintain adequate barricading, caution boards, danger notices and warning signage in English and Hindi at all locations where work is in progress, and shall ensure that open chases, exposed conductors, ladders and tools do not create a hazard to the residents. All temporary connections shall be protected by residual current devices of appropriate sensitivity.

9. All work on or in the vicinity of live installations shall be carried out only after proper isolation, locking out and tagging of the circuit, and after verification of the absence of voltage. The contractor shall provide his workmen with insulated hand tools, insulated gloves, safety helmets, safety shoes, safety belts and insulating mats, and shall ensure their use at all times. No live line work shall be permitted under any circumstances.

10. The contractor's workmen shall be provided with photo identity cards and shall wear them prominently at all times while within the Institute campus. The contractor shall furnish to the Engineer-in-Charge and to the Institute security a list of all workmen deployed, with their names, addresses, photographs and police verification particulars, before their deployment. The Institute reserves the right to refuse entry to, or to require the removal of, any workman without assigning any reason.

11. The contractor and his workmen shall abide by all rules and regulations of the Institute relating to entry, movement, working hours, security, discipline and conduct within the campus. Consumption of alcohol, smoking, gambling and use of any intoxicant within the campus is strictly prohibited. Any misconduct on the part of the contractor's workmen shall be viewed seriously, and the Engineer-in-Charge may direct the removal of any such workman from the work, which direction shall be binding on the contractor.

12. The contractor shall not use the sanitary facilities, water supply points or common rooms of the hostel meant for the residents, except such facilities as may be specifically allotted to him by the Institute. The contractor shall make his own arrangements for drinking water, sanitation and rest facilities for his workmen, unless otherwise specifically provided.

13. No labour hutment, storage of material or parking of vehicles shall be permitted within the hostel premises except at such places as may be specifically allotted by the Engineer-in-Charge in consultation with the Institute. The contractor shall vacate such allotted space and restore it to its original condition on completion of the work.

14. The existing installation and all dismantled material shall be handled with care. All dismantled material shall remain the property of the Department. Serviceable dismantled material shall be cleaned, sorted, listed and deposited by the contractor in the departmental store as directed by the Engineer-in-Charge, and proper account thereof shall be maintained and got verified. Unserviceable material and debris shall be removed from the campus by the contractor at his own cost and disposed of at an authorised disposal site. Nothing extra shall be payable on this account.

15. The contractor shall be responsible for maintaining the continuity of supply to essential services such as water pumps, lifts, corridor and staircase lighting, security lighting and fire safety systems at all times during the execution of the work. Any interruption to such services shall require the specific prior approval of the Engineer-in-Charge.

16. Fire safety shall be strictly observed. The contractor shall provide and maintain fire extinguishers of appropriate type and adequate number at the work site and at the material storage area. No naked flame, welding or hot work shall be carried out within the hostel without a written hot work permit issued by the Engineer-in-Charge.

SECTION B-4

TESTING, COMMISSIONING, COMPLETION AND DEFECT LIABILITY

1. Testing and Commissioning

1.1 On completion of the work, and also at such intermediate stages as the Engineer-in-Charge may direct, the contractor shall carry out at his own cost all tests prescribed in the CPWD General Specifications for Electrical Works and the relevant Indian Standards, including but not limited to:

Sl. No.	Test	Acceptance Criteria
1.	Insulation resistance test between conductors and between each conductor and earth	Not less than 1 Megohm, measured with a 500 V megger, for the installation as a whole and for each sub-circuit
2.	Polarity test of single pole switches and socket outlets	All single pole switches and fuses to be in the phase conductor only
3.	Earth continuity test of the entire earthing system	Resistance of the earth continuity conductor not to exceed 1 ohm
4.	Earth electrode resistance test for each earth electrode	Not more than 5 ohms for the electrode, and not more than 1 ohm for the combined earthing system, or as directed by the Engineer-in-Charge
5.	Continuity test of all circuits and sub-circuits	Satisfactory continuity throughout
6.	Load balancing and phase distribution check on all distribution boards	Load on each phase to be balanced as far as practicable, within 10%
7.	Operation test of all MCBs, isolators and distribution boards	Satisfactory operation, correct rating and correct labelling of all outgoing circuits
8.	Illumination level (lux) measurement in rooms, corridors and staircases	As per the relevant Indian Standard / National Building Code for the respective area, to be recorded in the presence of the Engineer-in-Charge
9.	Link / channel certification of all CAT-6 LAN outlets	To be certified as per ANSI/TIA-568.2-D using a calibrated certifying tester; printed test reports for every outlet to be submitted
10.	Continuity and insulation test of telephone cabling	Satisfactory continuity and insulation on all pairs

1.2 All tests shall be carried out in the presence of the Engineer-in-Charge or his authorised representative. The contractor shall provide, at his own cost, all instruments, appliances, labour and materials required for carrying out the tests, and all instruments used shall be duly calibrated with valid calibration certificates.

1.3 Test results shall be recorded in the proforma prescribed in the CPWD General Specifications for Electrical Works, shall be signed by the contractor and by the departmental representative, and shall be submitted in triplicate to the Engineer-in-Charge. No installation shall be energised for beneficial use until the test results have been found satisfactory by the Engineer-in-Charge.

1.4 If any test result is found unsatisfactory, the contractor shall rectify the defect at his own cost and shall re-test the installation, and this process shall be repeated until satisfactory results are obtained. No claim for extension of time or for extra payment shall be entertained on this account.

1.5 The contractor shall obtain, at his own cost, the approval of the Electrical Inspector or any other statutory authority wherever such approval is required under the statutory provisions in force, and shall furnish the approval to the Engineer-in-Charge before the work is treated as complete.

2. Documents to be provided on Completion of Work

Three sets of the following documents shall be furnished to the Department by the contractor on completion of the work, and the final bill shall not be paid until these have been submitted and found in order:

i. 3 sets of completion drawings (as built), showing the conduit layout, circuit distribution,

distribution board schedules, earthing layout and LAN layout;

ii. Soft copy of the as-built drawings in AutoCAD format;

iii. 3 sets of manufacturers' technical catalogues of all equipment and accessories used on the work;

iv. Operation and maintenance manual covering all major equipment, detailing all adjustments, operation and maintenance procedures;

v. All test results in the prescribed proforma, duly signed;

vi. Printed CAT-6 link/channel certification reports for every LAN outlet;

vii. Warranty certificates of all equipment and materials, in the name of the Department;

viii. Distribution board schedules, laminated and fixed inside the door of each distribution board;

ix. Completion certificate as per CPWD specifications;

x. Approval of the Electrical Inspector, wherever applicable.

3. Defect Liability Period

3.1 The Defect Liability Period for the entire installation shall be 12 (twelve) months from the date of taking over of the installation by the Department, against unsatisfactory performance and/or breakdown due to defective design, workmanship or material.

3.2 Any equipment or component, or any part thereof, found defective during the Defect Liability Period shall be forthwith repaired or replaced free of cost to the satisfaction of the Engineer-in-Charge. In case it is felt by the Department that undue delay is being caused by the contractor in doing this, the same will be got done by the Department at the risk and cost of the contractor. The decision of the Engineer-in-Charge in this regard shall be final and binding on the contractor.

3.3 The contractor shall attend to any complaint of defect during the Defect Liability Period within 24 hours of its being reported, having regard to the fact that the building is an occupied hostel, and shall rectify the defect within 72 hours or such further period as the Engineer-in-Charge may allow in writing.

3.4 The manufacturer's warranty in respect of all materials and equipment shall be assigned to the Department and shall run from the date of taking over of the installation, and shall in no case be less than the warranty period offered by the manufacturer for the product in the normal course of trade.

4. Public Procurement (Preference to Make in India) Policy

To encourage Make in India and promote manufacturing and production of goods and services in India with a view to enhancing income and employment, the Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, pursuant to Rule 153(iii) of the GFR 2017, have issued orders for procurement through local suppliers vide Order No. P-45021/2/2017-PP(BE-II) dated 04.06.2020 and latest amendments thereto. As per the provisions of these orders, purchase preference shall be given to locally manufactured goods and locally provided services as applicable in compliance with the NIT. The agency shall submit a list of makes of materials proposed to be used on the work from suppliers as per these orders, for approval of the Department, out of the approved makes kept in the tender.

SECTION B-5

PARTICULAR TECHNICAL SPECIFICATIONS

1. FRLS PVC Insulated Copper Conductor Single Core Cables

Applicable Standard	IS 694 : 2010 (as amended) — PVC insulated unsheathed and sheathed cables/cords with rigid and flexible conductor for rated voltages upto and including 450/750 V
Conductor	Annealed high conductivity bare electrolytic grade copper, stranded, conforming to IS 8130
Insulation	FRLS (Flame Retardant Low Smoke) PVC, Type A / Type C as applicable
Voltage grade	1100 V grade
Oxygen Index	Not less than 29 at 27 ± 2 °C
Temperature Index	Not less than 250 °C
Acid gas emission	Not more than 20% by weight
Smoke density	Not more than 60% light absorption
Colour coding	Red, Yellow, Blue for phases; Black for neutral; Green for earth. Colour coding shall be uniform throughout the installation.
Marking	Manufacturer's name / trade mark, voltage grade, size and ISI mark to be embossed at regular intervals not exceeding one metre

2. Steel Conduit and Accessories

Applicable Standard	IS 9537 (Part-2) : 1981 — Conduits for electrical installations, rigid steel conduits
Type	Heavy gauge, screwed type, welded mild steel conduit
Wall thickness	Not less than 1.6 mm for conduits upto 32 mm dia
Finish	Hot dip galvanised or stove enamelled black, inside and outside; for surface conduits, painted with two coats of synthetic enamel paint over a coat of primer to match the surroundings
Accessories	Bends, elbows, tees, junction boxes, inspection boxes, couplings, check nuts, saddles and clamps of the same make and finish as the conduit; all accessories screwed type
Bends	Made with a bending machine; the internal radius of the bend shall not be less than 2.5 times the outside diameter of the conduit; no bend shall reduce the internal cross-section
Number of bends	Not more than two right angle bends or their equivalent between two junction/inspection boxes
Capacity of conduit	The number of conductors drawn in a conduit shall not exceed the number permitted in Table of the CPWD General Specifications for Electrical Works, Part-I (Internal)
Earthing	Conduit system shall be electrically continuous and effectively earthed at the origin of the installation

3. Modular Switches, Socket Outlets, Plates and Boxes

Applicable Standards	IS 3854 for switches; IS 1293 for plugs and socket outlets; IS 14772 for enclosures
Switches	Modular type, rated 6 A / 16 A, 240 V AC, with silver alloy contacts, of the approved make and one uniform range throughout the installation
Socket outlets	Modular type, 3 pin 6 A and 6 pin 6/16 A, shuttered, with scrape-proof terminals
Boxes	GI boxes of not less than 1.2 mm thickness, of the size specified, with adequate earthing terminal
Cover plates	Unbreakable polycarbonate / ABS modular cover plates with matching base frame, of the same make and range as the switches
Mounting height	Switch boards at 1200 mm and socket outlets at 300 mm above finished floor

	level, unless otherwise directed by the Engineer-in-Charge
Uniformity	All modular accessories throughout the installation shall be of one and the same manufacturer and of the same range and finish

4. MCB Distribution Boards, Miniature Circuit Breakers and Isolators

Applicable Standards	IS/IEC 60898-1 for MCBs; IS/IEC 60947-3 for isolators; IS 8623 for distribution boards
Distribution Board	Sheet steel, horizontal type, three pole and neutral, 415 V, double door, dust and vermin proof, powder painted, complete with tinned copper bus bar, neutral bus bar, earth bar, DIN bar and interconnections
Sheet thickness	Not less than 1.2 mm for the enclosure and 1.6 mm for the gland plate
MCB	5 A to 32 A, 240/415 V, breaking capacity 10 kA, "C" curve, suitable for inductive load, of the approved make
Isolator	Four pole, 415 V, 40 A / 63 A rating as specified, complete with connections, testing and commissioning
Uniformity	MCBs, isolators and distribution boards shall be of the same manufacturer, and MCBs shall be of the make recommended by the manufacturer of the distribution board
Labelling	Every outgoing circuit shall be provided with a permanent engraved or laminated label indicating the area/circuit served; a typed and laminated circuit schedule shall be fixed inside the door of each distribution board
Earthing	Each distribution board shall be earthed with two distinct and separate earth connections

5. Earthing System

Applicable Standards	IS 3043 : 2018 — Code of practice for earthing; CEA (Measures relating to Safety and Electric Supply) Regulations
Earth electrode	G.I. earth pipe 4.5 metre long, 40 mm dia, medium class, with accessories, complete with masonry enclosure, cast iron cover plate with locking arrangement and watering pipe, with alternate layers of charcoal/coke and salt
Earth strip	25 mm x 5 mm G.I. strip, hot dip galvanised, laid in 40 mm dia G.I. pipe from the earth electrode, and on surface or in recess for connections
Loop earthing	6 SWG dia G.I. wire on surface or in recess
Joints	All joints in earth conductors shall be made by G.I. nut, bolt, spring washer and plain washer, and shall be tinned; welded or brazed joints where directed
Earth resistance	Resistance of each earth electrode shall not exceed 5 ohms and of the combined earthing system shall not exceed 1 ohm; if not achieved, additional electrodes shall be provided by the contractor at his own cost
Testing	Earth resistance shall be measured after the electrode has been in position for not less than 48 hours, and shall be recorded in the prescribed proforma

6. CAT-6 Structured LAN Cabling

Applicable Standards	ANSI/TIA-568.2-D; ISO/IEC 11801; IS 15895
Cable	UTP 4 pair CAT-6, 23 AWG solid bare copper conductor, LSZH/FRLS outer sheath, verified by ETL/UL verification programme
Information Outlet	CAT-6 copper Information Outlet (IO), 8P8C, with face plate of colour as per site requirement, with ETL/UL verification programme certificate for compliance with ANSI/TIA-568.2-D
OEM uniformity	All copper cable and passive components — cable, information outlets, patch panels, patch cords and face plates — shall be from the same OEM to maintain compatibility and interoperability
Bend radius	Not less than 4 times the cable outer diameter during and after installation
Pulling tension	Not to exceed 110 N (25 lbf); no cable shall be kinked, twisted or crushed

Separation	Minimum 300 mm separation from power cables running parallel; crossings at right angles only; LAN cable shall not be drawn in the same conduit as power cable
Untwist at termination	Not more than 13 mm at the point of termination
Certification	Every link shall be certified with a calibrated CAT-6 certifying tester for wire map, length, insertion loss, NEXT, PSNEXT, ACR-F, return loss and propagation delay; printed reports for every outlet to be submitted
Labelling	Both ends of every cable and every outlet shall be permanently labelled with a unique identifier as per an approved numbering scheme

7. Workmanship — General

7.1 All wiring shall be carried out on the distribution system with main and branch distribution boards at convenient physical and electrical load centres. All conductors shall run as far as possible along the walls and ceilings so as to be easily accessible for inspection.

7.2 The wiring shall be so arranged that on the completion of the work, every sub-circuit is connected to a separate way of the distribution board. All wires in a sub-circuit shall be of the same size.

7.3 No single pole switch, fuse or MCB shall be inserted in the neutral conductor of any circuit. All single pole switches shall be connected in the phase conductor only.

7.4 Every distribution board shall be provided with a circuit schedule, and the phase distribution shall be balanced as evenly as practicable.

7.5 Joints in the run of the wiring shall not be permitted. Wiring shall be continuous from outlet to outlet and terminations shall be made only at switch boxes, junction boxes, ceiling roses, socket outlets or distribution boards.

7.6 Where the existing wiring is being replaced, the contractor shall first draw the new wiring and prove it satisfactory before dismantling the old wiring, wherever this is physically possible, so as to minimise the period during which the residents are without supply.

7.7 All chases cut in the walls for recessed conduit shall be of minimum necessary width and depth, shall be cut with a chasing machine and not by chiselling wherever practicable, and shall be filled with cement mortar and finished to match the existing surface and finish, including painting of the patched portion to match the adjoining surface.

7.8 Conduits shall be laid in position and fixed before the wiring is drawn. Draw wires shall be provided in all conduits at the time of laying, and conduit ends shall be plugged to prevent ingress of mortar and debris.

7.9 All metallic bodies of switch boxes, distribution boards, conduits and other non-current-carrying metal parts shall be effectively earthed.

Executive Engineer & Senior Manager (E)
IIT(ISM), CPWD, Dhanbad

List of Acceptable Makes

LIST OF APPROVED MAKES — FOR E & M WORKS / SERVICES

Sl. No.	Material / Equipment	Approved Makes
1.	MS Conduit	BEC / AKG/ATUL/ STEEL KRAFT (Note : The make of accessories will be same that of conduit pipe & will comply to IS / 4768 part 2 2003)
2.	MS Conduit accessories	As per ISI mark BEC / AKG/ATUL/ STEEL KRAFT
3.	GI Pipe (ISI Marked)	Tata / Jindal (Hissar)
4.	MCCB, MCB	Siemens / ABB / Schneider Electric / Legrand / L&T/ C&S Electric
5.	MCBDB	Siemens (Betagard) / ABB (Elegance) / Schneider (Acti-9) / Legrand (Ekinox)/ L&T
6.	FRLS PVC insulated copper conductor (ISI Marked)	Polycab / Finolex/KEI
7.	Modular Switch / Socket/ Electronic stepped Regulator	Legrand / Schneider (Opale) / ABB (Ivie) / L&T (Englaze)
8.	TV & Telephone Cables / Wires (ISI Marked)	Havells / Finolex / Polycab
9.	LED light fitting / fixtures	Philips / LT/Trilux/Wipro
10.	Ceiling Fan (BLDC)	Philips / LT/Trilux/Wipro
11	LED Fittings	Usha / Orient / Bajaj/ Crompton
12	Wall Fan / Exhaust Fan	Usha / Orient / Bajaj/ Crompton
13	Split AC Unit	Hitachi / O-general / Daikin / Mitsubishi
14	Voltage Stabilizer	V-Guard / Hitachi / Servokon / Sen & Pandit / Microtek
15	Geyser	Jaquar / Racold / Venus / AO Smith/ Crompton/ Havells
16	LT Cables (ISI Marked)	Finolex / Polycab / Fort Gloster Industries limited/ KEI / RR Kabel
17	Cubical type LT Panel / Feeder Pillar	RST / SPC / ASES/ Masstech Switchgears / Industrial Switchgears/ Pristine /Precision/ Ultimate Power Control/ Stech Power Industries / RP control/ Aarnav Powertech/ D J enterprises (Only CPRI Approved)
18	Energy Meter	L&T / HPL / Secure / Bentec / Schneider/GENUS
19	Digital type Ammeter / Voltmeter / Multifunctional meter	ABB / Siemens / Schneider / Legrand / L&T / Automatic Electric / C&S Electric / Kappa
20	LED Type Indicating Lamps	ABB / Siemens / ASES /Schneider / Bajaj/ Legrand / L&T / C&S Electric
21	Selector Switch	ABB / Siemens / ASES /Schneider / Legrand / L&T / Kaycee / BCH/ C&S Electric
22	Control fuses with base	Siemens / BCH / L&T / GE/ C&S Electric
23	Push Buttons	ABB / Siemens / ASES /Schneider / Legrand / L&T / C&S Electric
24	CT / PT	As per manufacturer"s practice.
25	Octagonal Pole / Decorative Pole	Crompton / Transrail / Philips/ Royal Infra/ Surya / Volmont
26	Bracket / street light bracket	Crompton / Transrail / Philips/ Royal Infra/ Surya / Volmont
27	CAT 6 I/O Port, CAT 6 Cable	Digilink / Legrand / Polycab /HPL
28	PVC conduit Pipe	Supreme /Prince /Atul /AKG / NORPACK

Sl. No.	Material / Equipment	Approved Makes
29	DWC Pipe	Rex / Duraline / Konstruct / Jain Elegation
30	Cable gland	Comet / Jainsons/ Barco /Dowells
31	Thembles	Dowells/ Action/Comet/Barco
32	Cable Tray	Asawa / Dynamic/ Steel Kraft /AKG/DG Automation
33	Raceway	Legrand / MK / OBO
34	Commercial Refrigerator	Blue Star/ Voltas/ Godrej/ Haier
35	Fire Extinguisher and Accessories	Life Guard/ Getech/Omex/ Fire Shield/ KALPEX/ Kartar/ Minimax/ Ceasfire
36	Earthing items & accessories	Obo/True Power
37	Butterfly Valves/NRV	Advance/ Kirloskar/ Honeywell/ Audco/Zoloto/Sant/Kartar/Leader
38	Dual Plate Check Valves	Advance/ Kirloskar/ Honeywell/ Audco/Zoloto/Sant/Kartar/Leader
39	Gate/Globe/Swing Type Check Valves	Advance/ Kirloskar/ Honeywell/ Audco/Zoloto/Sant/Kartar/Leader
40	Pressure Gauge	Feibig/Emerald/H Guru/Bourdon/ Waree
41	Variable Frequency Drive for Pumps/Flow switch	Danfoss /Rockwell/Fuji/ABB /Schneider
42	MS Pipe	Jindal/SAIL/Tata
43	First Aid Hose Reel	Omex/ LIFEGUARD /Ceasfire/Safeguard/Secure guard/ Minimax
44	Fire Brigade Connection /Air vessel/ Fire Extinguisher	Newage/ Safex/ Minimax/ NewTech/ Honeywell/ Kartar/ LIFEGUARD/ Ceasefire/Omex
45	UPS	APC (Schneider Electric)/ Numeric (Legrand)/ Vertiv (Liebert)/ Delta Electronics/ Emerson.
46	Battery	Exide/ Amaron/ SF Sonic/ Tata Green Batteries

Note:

1. All materials shall conform to relevant Indian Standards and shall bear ISI certification mark wherever applicable.

2. The contractor shall obtain prior written approval of the Engineer-in-Charge for the particular make and model of each item before procurement.

3. In case any of the approved makes listed above is not available, the contractor may propose an equivalent make of equal or better specification, which shall be used only after written approval of the Engineer-in-Charge. Nothing extra shall be payable on this account.

4. For LAN cabling, all copper cable and passive components shall be of the same OEM to maintain compatibility and interoperability, and shall carry ETL/UL verification programme certificate for compliance with ANSI/TIA-568.2-D.

Government of India

Central Public Works Department

Name of work: **Construction of Canteen Service Facility at IIT (ISM) Dhanbad.(SH- Internal Electrical Installations , Fans & Fitting , Fire Alarm System, Fire Fighting System & Passenger Lifts.(Balance Work).**

SCHEDULE OF QUANTITY (ELECTRICAL WORK)

(SCHEDULE OF QUANTITIES (ELECT.)

Name of Work Construction of Canteen Service Facility at IIT (ISM) Dhanbad.(SH- Internal Electrical Installations , Fans & Fitting , Fire Alarm System, Fire Fighting System & Passenger Lifts.(Balance Work).

Sr. No	Description of Item	Qty	Unit	Rate	Amount
	Wiring				
a	Group C	48.00	Point	1,845.00	88,560.00
2	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed steel conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.**(Wire to be drawn and switch board to be fixed)**				
a	Group C	180.00	Point	1,015.00	182,700.00
3	Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed steel conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc. as required	4.00	Point	1,981.00	7,924.00
4	Wiring for light/ power plug with 2X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit alongwith 1 No. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	908.80	Mtr	433.00	393,510.40
5	Wiring for light/ power plug with 2X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit alongwith 1 No. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.**(Wire to be drawn)**	171.20	Mtr	195.00	
6	Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit alongwith 2 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	747.10	Mtr	662.00	494,580.20
7	Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit alongwith 2 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required..**(Wire to be drawn)**	232.90	Mtr	123.00	28,646.70
8	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as required**.**				
b	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	500.00	Mtr	369.00	

					184,500.00
c	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	600.00	Mtr	589.00	353,400.00
9	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as required**.**				
a	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	248.90	Mtr	327.00	81,390.30
d	4 X 10 sq. mm + 2 X 6 sq. mm earth wire	129.50	Mtr	1,166.00	150,997.00
c	4 X 16 sq. mm + 2 X 6 sq. mm earth wire	115.10	Mtr	1,645.00	189,339.50
10	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as required**.(Wire to be drawn)**				
a	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	251.10	Mtr	75.90	19,058.49
d	4 X 10 sq. mm + 2 X 6 sq. mm earth wire	20.50	Mtr	525.00	10,762.50
c	4 X 16 sq. mm + 2 X 6 sq. mm earth wire	34.90	Mtr	740.00	25,826.00
11	Supplying and drawing following pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.				
a	1 Pair	300.00	Mtr	31.00	9,300.00
12	Supplying and drawing co-axial TV cable RG-6 grade, 0.7 mm solid copper conductor PE insulated, shielded with fine tinned copper braid and protected with PVC sheath in the existing surface/ recessed steel/ PVC conduit as required.	100.00	Mtr	47.00	4,700.00
13	Supplying and fixing of following sizes of steel conduit along with accessories in surface/recess including painting in case of surface conduit, or cutting the wall and making good the same in case of recessed conduit as required.				
a	20 mm	82.40	Mtr	223.00	18,375.20
b	25 mm	164.50	Mtr	256.00	42,112.00
c	32 mm	200.00	Mtr	326.00	65,200.00
14	Supplying and fixing of following sizes of steel conduit along with accessories in surface/recess including painting in case of surface conduit, or cutting the wall and making good the same in case of recessed conduit as required.**(testing commissioning to be done)**				
a	20 mm	117.60	Mtr	45.00	5,292.00
b	25 mm	35.50	Mtr	220.50	7,827.75

15	Supplying and fixing metal box of following sizes (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including painting etc. as required.				
a	100 mm X 100 mm X 60 mm deep	15.00	Each	209.00	3,135.00
b	150 mm X 150 mm X 60 mm deep	15.00	Each	311.00	4,665.00
c	200 mm X 150 mm X 60 mm deep	15.00	Each	355.00	5,325.00
d	250 mm X 300 mm X 60 mm deep	10.00	Each	607.00	6,070.00
16	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				
a	15/16 amp switch	78.00	Each	156.00	12,168.00
b	6 pin 15/16 amp socket outlet	78.00	Each	197.00	15,366.00
c	Telephone socket outlet	4.00	Each	148.00	592.00
d	TV antenna socket outlet	5.00	Each	148.00	740.00
17	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.	43.00	Each	369.00	15,867.00
18	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	50.00	Each	40.00	2,000.00
19	Supplying and fixing following size/ modules, GI box along with modular base & cover plate for modular switches in recess etc as required.				
a	1 or 2 Module (75mmX75mm)	15.00	Each	298.00	4,470.00
b	6 Module (200mmX75mm)	39.00	Each	402.00	15,678.00
20	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 15/16 A modular switch, connections etc. as required.	58.00	Each	339.00	19,662.00
21	Supplying and fixing 3 pin, 5 amp ceiling rose on the existing junction box/ wooden block including connection etc as required.	81.00	Each	87.00	7,047.00
22	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc. as required.				
a	Upto 450 mm sweep	22.00	Each	450.00	9,900.00
23	Extra for fixing the louvers/ shutters complete with frame for a exhaust fan of all sizes.	22.00	Each	207.00	4,554.00
24	Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.				

a	1 run of cable	630.00	mtr	57.00	35,910.00
	MCCB, MCB & DB'S				
25	Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 volts, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)				
a	8 way (4 + 24), Double door(Power)	4.00	Each	5,967.00	23,868.00
26	Supplying and fixing of following ways surface/ recess mounting, vertical type, 415 volts, TPN MCB distribution board of sheet steel, dust protected, duly powder painted, inclusive of 200 amps tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCB's (but without MCB's and incomer) as required . (Note : Vertical type MCB TPDB is normally used where 3 phase outlets are required.)				
a	4 way (4 + 12), Double door (Light & Power)	2.00	Each	7,512.00	15,024.00
27	Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
a	Single pole	96.00	Each	256.00	24,576.00
28	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	16.00	Each	13.00	208.00
29	Supplying and fixing following rating, four pole, (three phase and neutral), 415 volts, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
a	40 amps	2.00	Each	3,188.00	6,376.00
b	63 amps	2.00	Each	2,872.00	5,744.00
30	Supplying and fixing DP sheet steel enclosure on surface/ recess along with 25/32amps 240 volts "C" curve DP MCB complete with connections, testing and commissioning etc. as required.	4.00	Each	1,169.00	4,676.00
31	Supplying and fixing Cable End Box (Loose wire box) (IP 43) suitable for following triple pole and neutral, sheet steel, MCB distribution board, 415 V, on surface/ recess, complete with testing and commissioning etc. as required.				
a	For 8 way, Double door TPN MCBDB	4.00	Each	1,340.00	5,360.00

32	Supplying and fixing Cable End Box (Loose Wire Box) suitable for triple pole and neutral, sheet steel, Vertical MCB distribution board, 415 Volts, on surface/ recess, complete with testing and commissioning etc. as required.	2.00	Each	1,170.00	2,340.00
	Earthing				
33	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	6.00	Each	7,472.00	44,832.00
34	Providing and fixing 25 mm X 5 mm G.I. strip in 40 mm dia G.I. pipe from earth electrode including connection with G.I. nut, bolt, spring, washer excavation and re-filling etc. as required.	30.00	Mtr.	706.00	21,180.00
35	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	200.00	Mtr.	244.00	48,800.00
36	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required.	100.00	Mtr.	70.00	7,000.00
37	Providing and fixing of lightning conductor finial, made of 25 mm dia 300 mm long, G.I. tube, having single prong at top, with 85 mm dia 6 mm thick G.I. base plate including holes etc. complete as required.	6.00	Each	518.00	3,108.00
38	Jointing copper / G.I. tape (with another copper/ G I tape, base of the finial or any other metallic object) by riveting / nut bolting/ sweating and soldering etc as required.	233	Each	113.00	26,329.00
39	Providing and fixing G.I. tape 20 mm X 3 mm thick on parapet or surface of wall for lightning conductor complete as required.(For horizontal run)	450.00	Mtr.	126.00	56,700.00
40	Providing and fixing G.I. tape 20 mm X 3 mm thick on parapet or surface of wall for lightning conductor complete as required.(For vertical run)	250.00	Mtr.	197.00	49,250.00
41	Providing and fixing testing joint, made of 20 mm X 3 mm thick G.I. strip, 125 mm long, with 4 nos. of G.I. bolts, nuts, chuck nuts and spring washers etc. complete as required.	6.00	Each	121.00	726.00
	Cabling Works				
42	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size in the existing RCC/ HUME/ METAL pipe as required.				
a	Above 35 sq. mm and upto 95 sq. mm	220.00	Mtr	57.00	12,540.00
43	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size in the existing masonry open duct as required.				
a	Above 35 sq. mm and upto 95 sq. mm	150.00	Mtr	45.00	6,750.00

44	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed /XLPE aluminium conductor cable of 1.1KV grade as required:				
a	3.5 X 95 sq. mm (45mm)	4	Set	588.00	2,352.00
b	3.5 X 50 sq. mm (35mm)	4	Set	413.00	1,652.00
c	3.5 X 35 sq. mm (32mm)	4	Set	369.00	1,476.00
d	4 X 16 sq. mm (28mm)	10	Set	309.00	3,090.00
	Fire Fighting System				
45	(A) Supplying, installation, testing and commissioning of electric driven terrace pump suitable for automatic operation and consisting of following, complete in all respects, as required: **(Terrace Pump)** (B) Horizontal type, multistage, centrifugal, split casing pump of cast iron body & bronze impeller with stainless steel shaft, mechanical confirming to IS : 1520 (C) Suitable HP squirell cage induction motor TEFC type suitable for operation on 415 volts, 3 phase, 50 Hz, AC supply with IP55 class of protection for enclosure, horiziontal foot mounted type with Class-'F' insulation, conforming to IS-325. (D) M.S.fabricated common base plate, coupling, coupling guard, foundation bolts etc.as required. (E) Suitable cement concrete foundation duly plastered and with anti vibration pads.				
a	450 lpm at 35 m Head	2	Set	86,203.00	172,406.00
46	Providing, laying, testing & commissioning of 'C' class heavy duty **MS pipe** conforming to IS 3589/IS 1239 including Welding, fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc. and fixing the pipe on the wall/ceiling with suitable clamp/support frame and painting with two or more coats of synthetic enamel paint of required shade complete as required.				
a	65 mm dia	60	Mtr.	1,614.00	96,840.00
b	80 mm dia	18	Mtr.	1,885.00	33,930.00
c	100 mm dia	18	Mtr.	2,555.00	45,990.00
47	Supplying, fixing, testing and commissioning of butterfly valve of PN 1.6 rating with bronze/gunmetal seat duly ISI marked complete with nuts, bolts, washers, gaskets conforming to IS 13095 of following sizes as required :				
a	80 mm dia	3	Nos.	4,982.00	14,946.00

48	Providing, installation, testing and commissioning of non-return valve of following sizes confirming to IS: 5312 complete with rubber gasket, GI bolts, nuts, washers etc.as required :				
a	80 mm dia	2	Nos.	7,691.00	15,382.00
49	Providing, installation, testing and commissioning of stainless steel Y-strainer fabricated out of 1.6 mm thick stainless steel, Grade 304, sheet with 3 mm dia holes with stainless steel flange.				
a	80 mm dia	1	Nos.	4,710.00	4,710.00
50	Supplying and fixing **first-aid Hose Reel** with MS construction spray painted in post office red, conforming to IS 884 complete with the following as required. 20 mm nominal internal dia water hose thermoplastic (Textile reinforced) type -2 as per IS: 12585 20 mm nominal internal dia gun metal globe valve & nozzle. Drum and brackets for fixing the equipmets on wall. Connections from riser with 25 mm dia stop gun metal valve & M.S. Pipe and socket.				
a	30 m	2	Set	8,675.00	17,350.00
51	Supplying and Fixing of Fire Brigade Connection of cast iron body with Gun Metal male instantaneous inlet couplings complete with cap and chain as required for suitable dia MS Pipe connection conforming to IS 904 as required.				
a	2 Way - 100 mm dia M.S. Pipe	1	Set	6,742.00	6,742.00
52	Supplying and Fixing Air Vessel made of 250 mm dia, 8 mm thick MS sheet, 1200 mm in height with air release valve on top and flanged connection to riser, drain arrangement with 25 mm dia Gun metal wheel valve with required accessories, pressure gauge and painting with synthetic enamel paint of approved shade as required.	1	Set	18,244.00	18,244.00
53	Providing & fixing of pressure switch in M.S. pipe line including connection etc. as required.	2	Nos.	1,546.00	3,092.00
54	Providing & fixing flow switch in following sizes M.S. pipe including connection etc as required.				
a	100mm dia	2	Nos.	7,514.00	15,028.00
	Total				**3345768.04**
	Add Multiplying Factor (GST from 12% to 18%) @ 0.0633				211787.12
	Total				**3557555.16**
	Applying correction factor @ 0.973 on account of GST as per OM issued vide File no. SE(TAS)/GST/2024/02-E dated 08/08/2025				3461501.17
	Add Cost Index@12%				415380.14

Correction-Nil Deletion-Nil Insertion-Nil Overwriting-Nil

AE(E) EE(E)

	Total of DSR 2022 Items				**3876881.31**
	Total				3876881.00
	<u>LED Light & BLDC Fan</u>				
55	Supplying, installation, Testing & Commissioning of LED surface mounted Batten light of following body material and construction as per IS : 10322 with driver (Replaceable) as per the requirement with Driver efficiency >85% ,Operating voltage AC 140-270 Volt, freq 50/60 hz, Operating temp range - 15 deg to 40 deg centigrade, internal surge protection of 2.5 KV with Short & Open circuit protection ,THD < 10% , P. F.≥0.95, IP20, CRI >80 , Flicker free (flicker should be below 5 %), life time (LED,Driver & electrical circuitry), of minimum 50000 Burning Hours with , 70% of initial Lumen maintained till life ends, CCT 3000°K / 4000°K / 5700°K /6000°K/ 6500°K (As per ANSI Bin), SDCM (Standard Deviation Color Matching) <3, Maximum power consumption should not more than the specified rating and Fixture shall be of relevant BIS standard and trade mark certificate (T.C.). Manufactures Word Mark/ Name Engraved/ Embossing/ Screen printing on housing. OEM must have its own in house NABL lab setup for all testing facilities for LED fixtures. complete in all respect i/c connections with 1.5 sq mm FRLS, PVC insulated copper conductor single core cable and earthing etc. as required with Minimum 5 year OEM warranty. System lumen efficacy >135 lm/Watt output . LM79 & LM80 Test report from NABL lab for all testing required for LED fixtures as per BIS shall be submitted. Shape size and CCT shall be as approved by Engineerin-Charge as per requirement. (Thermal management: heat sink of aluminum housing such that LED junction temperature shall not rise above 90°C).				
a	24 watt (Powder coated die cast /Extruded aluminum Body (Thickness ≥ 1.20 mm))	75	Nos	791.00	59,325.00
56	Supply, Installation, Testing and Commissioning of ceiling fan with Brush Less Direct Current (BLDC) Motor, class of insulation: B, 3 nos. metal (Aluminum 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				
a	1200mm, service value ≥ 6.0 CM/Min/Watt, air delivery 210 CM/Min (Minimum	43	Nos	2,230.00	95,890.00
	UPS				
57	Supplying, installation, Testing & Commissioning of of following capacity at full load (Unity Power Factor) at operating temperature 0 to 40 deg C, Relative humidity 0 to 95%, Online double conversion true sine wave Uninterrupted hot swappable (allow for the replacement or addition of battery modules without shutting down the entire system) modular Power Supply (UPS) system with N+1 modules (N denotes total number of moduels requird for rated capacity). The UPS shall include a Rectifier, inverter, battery bank suitable for 30 minutes back up (Battery VAH capacity shall not be less than 1600 VAH per KVA of UPS rating per Hour backup time) on full load (Battery shall be VRLA, SMF in ABS Container) and Static Bypass switch alongwith provision for manual bypass, suitable isolation transformer for additional protection against neutral faults etc. UPS shall have inbuilt phase sequence correction. The UPS systems offered are to be of the latest technology with Digital Control Microprocessor based for reliable operation using Insulated Gate Bipolar Transistor (IGBT)'s both for the rectifier & inverter (3 Level) with PWM (Pulse Width Modulation). The quality of design, manufacturing and inspection process should confirm to the relevant International standards such as IEC/EN/VDE. The operating efficiency of the UPS systems shall be >96% while operating on battery mode and delivering quality power to the 100% non-linear loads. Current total harmonic effect(ITHD) on the input grid shall be < 5% at 50 %load. (The required LC (inductor (L) and a capacitor (C)) filters shall be included in UPS cost), extreme power factor kit to be included to limit the input power factor (PF) to 0.99 and output power factor shall be unity (i.e. kw rating of the UPS shall be kva rating x 1), however UPS shall be suitable to take load at 0.7 laging to 0.7 leading power factor loads.				

	UPS shall be suitable for incoming supply AC : 3Phase 400V +/-20%, 50 Hz +/-5 Hz, AC Output voltage: 3Phase 415 Volt, 50 Hz +/- 0.2Hz, Overload capacity of 120% for 10 mins, Sine wave output.Non condensing, noise level less than 60db at 1 meter distance, protections:Input Under voltage over voltage, abnormal out voltage, battery overcharging, output over current, short circuit protection, battery deepdischarge protection, 10KV surge. UPS must comply with low voltage electromagnetic compatibility (EMC) achieved as per EN 6204, EN6204 Part I and Part 2, it shall be a Voltage and Frequency Independent (VFI)-type UPS. Communication RS232/RS485/SNMP port open protocol for BMS integration, all hardware & software for iOT Communication as per approved by Engineering in charge. Required battery racks and interconnectingcopper conductor cables of suitable size and connectors and all requiredaccoseries are inclusive of the cost). This system must provide a means forlogging and alarming of all monitored points plus email notification. Forcedair-cooling with integral inbuilt fans with redundancy (if one fan fail UPSshould be able to handle at least 80% of the load, Noise Level 65 DB at 1meter distance. The system shall be in compliance IEC 62040-1,2 & 3, IS:16242 and CPWD Specification. Display Panel (minimum) (In-build 5 inch ormore LC Display / LED) to display : a) Input: Voltage, current, Frequency. b)Bypass: Voltage, Frequency. c) Output: Voltage, frequency, Current.				
	d) Battery: Voltage, Capacity. e) Load: KVA, KW, Percentage. f)Temperature: STS, Inverter, PFC. g) Event Logging & Statistical Data (On LCD/LED): UPS should capture and display up to 3000 events like: Over temperature / DC Bus Fail / Fan Fail / Fuse Fail / Overload / Short-circuit / Device Fail / Inverter Fail / Rectifier Fail / Bypass Fail, etc. h) Statistical Data: No. of power failures / Transfers to Bypass / Total Running time, etc. i) Mains Mode of Operation /Battery Mode of Operation / Bypass feeding the load / UPS Fault /Battery charging and discharging, overload, battery voltage and battery capacity. j) Audible Alarms : Mains Failure, Battery Low Alarm, UPS Overload, Fault, Shutdown, Input Over, Under Voltage, Output Over, Under Voltage, Battery Over, Under Voltage, Over Load and short circuit, Over Temperature. The UPS should have QR code which should contain				

	drawing, test report OEM manual,Geo- Tag of manufacturing location etc.				
a	10KVA (Each Power module shall be < 10 KVA)	1	Nos	208,893.00	208,893.00
	VRV/VRF System				
58	Supply, Installation, Testing & Commissioning of Modular type Variable Refrigerant Flow/Variable Refrigerant Volume air cooled Outdoor units suitable for cooling/heating having 100% hermetically sealed inverter type twin Rotary/Scroll Compressor(s),minimum two compressors (with individual separate PCB) for above 14HP modules, microprocessor based Controller, top discharge type condensing unit(s), with R-410-A Refrigerant or equivalent, vibration Isolators with suitable foundation etc. complete as required. To have better efficiency condenser fan shall be capable to operate at different speed with respect to load. The unit shall deliver the rated capacity and in confirmation as per IS 18728:2024 and CPWD Specifications and work even at 50°C ambient temperature without tripping. The system shall be able to deliver 100% of the rated capacity upto 39 Degree Celcius.The unit shall be suitable to work on 400V +/- 10%, 3 Phase, 50Hz AC power supply and BMS compatible. The unit shall be filled with first charge of the refrigerant and ready for use as required. The condenser should be coated with a hydrophilic film to prevent water accumulation on the surface of the heat exchanger, enhance water dispersion, and reduce the risk of degradation, thereby improving overall performance and durability. The Indian Seasonal Energy Efficiency Ratio (ISEER) of the unit shall be as per Energy Conservation and Sustainable Building Code (ECSBC) 2024 as below and complete as per CPWD specification, connections, inter connections etc. as required. (For capacity <40 kWr ISEER 7.4, Capacity > 40 and <70 ISEER 7.5, Capacity > 70 ISEER 7.6 for Super ECSBC Building)				
a	10 HP to 12 HP	36	Per HP	22,761.00	819,396.00
59	Supply, Installation, Testing and Commissioning of following minimum capacity 4 way Cassette Type Indoor ceiling mounted unit equipped with synthetic washable media pre-filter, fan section with low noise fan / dynamically balanced blower, multispeed motor, coil section with DX Copper coil, electronic expansion valve, outer cabinet, drain pump, grill, necessary supports, vibration Isolation, Corded remote control etc., suitable for operation on single phase 230 V ± 10%, 50Hz AC supply, complete, as required. The Indoor units must shut down upon receiving a singal from the BMS System/Fire Signals. The system shall be capable to adjust air flow as per				

	room requirement in auto mode. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature. (Make will be same as of Outdoor) (2nos for Ground floor & 4nos for 1st floor)				
a	4.6TR	6	Nos	52,799.00	316,794.00
60	Supply, Installation, testing and commissioning including vaccumiazation and Nitrogen testing of following nominal sizes of soft/hard drawn copper refrigerant piping for VRV/VRF system, complete with fittings, with suitable adjustable ring type hanger supports, jointing/brazing including accessories, insulated with XPLE Class-O tubular insulation/with Class-O closed cell elastometric nitrile rubber tubular sleeves sections of 19 mm thick insulation as given below for Suction and Liquid lines, all accessories as per specifications etc. as required :				
a	31.8 mm dia (OD) (Hard drawn) with tube thickness 1.62 mm	30	Rmt	1,222.00	36,660.00
b	28.58 mm dia (OD) (Hard drawn) with tube thickness 1.2 mm	40	Rmt	1,157.00	46,280.00
c	22.2 mm dia (OD) (Hard drawn) with tube thickness 1.2 mm	40	Rmt	904.00	36,160.00
d	19 mm dia (OD) (Hard drawn) with tube thickness 1.2 mm	70	Rmt	739.00	51,730.00
e	15.86 mm dia (OD) (Soft drawn) with tube thickness 1.2 mm	60	Rmt	615.00	36,900.00
f	12.7 mm dia (OD) (Soft drawn) with tube thickness 1.2 mm	60	Rmt	487.00	29,220.00
g	9.5 mm dia (OD) (Soft drawn) with tube thickness 1.2 mm	40	Rmt	346.00	13,840.00
h	6.4 mm dia (OD) (Soft drawn) with tube thickness 1.2 mm	25	Rmt	256.00	6,400.00
	Total of DSR 2022 & 2025 Items				**5634369.00**
	NON-DSR/MARKET RATE ITEMS				
61	Supplying and fixing single port, information outlet Cat 6 UTP shuttered type with Modular base & cover plate including termination on existing modular metal boxes etc. as required.	6	Each	535.20	3,211.00
62	Providing and fixing following rating and breaking capacity MCCB in the existing vertical type Distribution Board including making connections etc as required.				
(a)	160 Amps 4 Pole 36 KA	1	Each	24,806.50	24,807.00
(b)	200 Amps 4 Pole 36 KA	1	Each	28,677.80	28,678.00
63	Supplying and fixing following TP, 415 volts. 'C' series miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete etc. as required.				
(a)	63 Amps	4	Each	2,052.35	8,209.00

(b)	40 Amps	4	Each	2,052.35	8,209.00
64	SITC of following type surface/recess mounted LED fittings with all necessary accessories i/c wiring, connection etc complete as required.				
a	1 X 12 Watt mirror LED batten light fitting with extruded aluminium housing with 1200lm or 100lm/W & driver & all necessary accessesories complete as required.	10	Each	841.85	8,419.00
b	10 watt, IP-66 Bulk head LED light fixture on surface including all fixing accessories and connection as required.	6	Each	2,412.65	14,476.00
65	Supplying of following size Exhaust fan with all necessary accessesories complete as required.				
a	230 mm sweep, AC light duty metallic	17	Each	1,689.30	28,718.00
b	450 mm sweep, Heavy Duty Double Ball Bearing	5	Each	7,236.15	36,181.00
66	Supplying & Laying / fixing of one number PVC insulated and XLPE sheathed armoured aluminium conductor cable of 1.1 KV grade of following size on wall surface/cable tray/in the existing masonry open duct etc complete as required and as per direction of Engineer in charge.				
a	3½ X 95 sq. mm (al.conductor armoured)	300	Mtr.	1,312.00	393,600.00
b	3½ X 35 sq. mm (al.conductor armoured)	310	Mtr.	608.95	188,775.00
c	4 X 16 sq. mm (al.conductor armoured)	300	Mtr.	424.85	127,455.00
67	Supplying and laying of one number following size of XLPE insulated and PVC sheathed Unarmoured conductor power/control cable of 1.1 KV grade as per IS 7098 (Part I) 1988 etc in existing masonary open duct/surface for connection etc tieing complete as required and as per direction of Engineer in charge.				
a	4C X 1.5 Sqmm CU conductor Unarmoured	100	Mtr.	292.25	29,225.00
68	Supplying, Installation, Testing & Commissioning of double door with rear openable, outdoor type totally enclosed, dust and vermin proof feeder pillar of suitable size. Construction as per CPWD specification and as per approved drawing of the Engineer - in - charge, made out of 2.0 mm thick CRCA sheet with locking arrangement, pre-paint treated, phosphetized and powder coated by approved Seimens grey paint, with 100 Amp. 4 strip aluminium bus bar, cable alley, connection interconnection and following panel mounting switch gears mounted there in it. The base of the feeder pillar made out of channel iron frame fabricated with 50 mm X 50 mm X 6 mm thick, installed on suitable size brick/ CC foundation i/c plastering etc. as reqd. (20x3 mm copper strip entire width of feeder pillar/ panel for earth				

	connection). 10 Amp. 3pin socket outlet with 10 Amp. switch and one brass batten holder to be provided in the feeder pillar. The enclosure shall have a degree of protection not less than IP 54.				
A	100 Amps, 4 Strip Aluminium bus bar				
B	Incomer - 63 Amps, 4P, 25 KA, MCCB T/M Release (O/C, S/C) with Rotary handle & Spreader link - 1 No.				
C	Outgoings for up to 7.5 KW DOL Feeder - 2 Nos.				
(i)	40 amps, 3 Pole MCB, 10 KA - 2 Nos.				
(ii)	18 amps, 3 Pole, AC3 duty contactor - 2 Nos.				
(iii)	Thermal over load relay- 2 Nos.				
(iv)	2 NO + 2 NC Aux Contact - 2 Nos.				
(v)	Single phase preventor Relay- 2 Nos.				
(vi)	OFF/ ON Indication Lamp - 4 Sets.				
(vii)	Start stop push button - 4 Sets.				
(viii)	Pressure Healthy LED Indicating Lamp -1 No.				
(ix)	Auto manual selector switch - 2 Nos				
D	Metering				
(i)	Digital Voltmeter (0-500) V with selector switch - 1 No.				
(ii)	Digital Ammeter (0-100) A with selector switch and CT's etc. - 2 Nos				
(iii)	RYB Indicating LED type Lamp - 1 Set				
E	2 Nos, 20 x 5 mm copper strip entire width of the feeder pillar - (Earth Bus)				
	Note - The necessary arrangements should be made to automatic start of pump in case of pressure drop from pre -set value.				
	A To E	1	set	91,529.30	91,529.00
69	Providing, Installation, Testing and Commissioning of ISI marked ABC Stored Pressure Type Fire Extinguisher of 6 Kg capacity consisting of welded cylinder, squeeze level discharge valve fitted with pressure indicating gauge, internal discharge tube, discharge nozzle, suspension bracket, conforming to IS:15683:2006 duly charged with ISI marked Mono Ammonium Phosphate base ABC powder conforming to IS: 14609 charged with purged water and pressurized with Nitrogen gas etc. complete with up to date test certificate as required.	10	Nos	2,031.90	20,319.00
	Total of MR item				**10,11,811.00**
	Total of agreement item (MR+ DSR)				**66,46,180.00**
	New work				
	Interior lighting				
70	Supply Installation testing and commissioning of IP20 LED surface mounted circular metal downlighter suitable for general lighting. Luminaire should have polycarbonate cover with diffused optics. The luminaire should have CRI > 80, SDCM<5 and CCT of 6500K. The	50	Nos	1,629.00	81,450.00

	fixture should have a minimum system efficacy of 110 lumen/Watt (±10%) and a minimum system lumen output of 1500 lumens and system wattage of 13.5 Watts. The product shall have internal surge protection of 2.5kV. The luminaire shall be designed so as to ensure 50K burning hrs. @ L70 @ ambient temp 45 deg C. The electronic driver used shall have a power factor >0.9 , THD <10% including connection etc. as complete as required.				
71	SITC of Architectural suspended luminaire in circular disc shape with height of 75MM. The luminaire housing shall be made of extruded aluminium & shall have prismatic diffuser. . The outer diameter of the ring shall be 600MM. The luminaire shall deliver minimum 2400 lumens with maximum system wattage of 40W. The LEDs used shall be from Signify/ Philips/APT Electronics/Osram/Nichia/Cree/Lumileds/Bridgelux/MLS. The LEDs shall be SMD type & shall have CCT 4000K, SDCM≤5, CRI≥80, LED life class 50K Hrs @ L70B50. The luminaire shall be IP20 & IK02 compliant. The luminaire shall have class I safety & Class B serviceability. The driver efficiency shall be ≥85%. The driver should have following compliances iTHD≤ 10% (@full load), PF≥ 0.90 (@full load), in-built surge protection of 2KV (CM) & Life of 50000hrs. The driver should be suitable for ambient temperature of -25°C to 50°C. The driver should have open load protection, short circuit protection and over power protection. The driver should be CCC / CE / ENEC certified/marked. The driver should be EMI/EMC compliant. The driver should be in metal casing. Luminaire manufacturer must have In-house NABL accredited lab to conduct LM79 as per 2019 standard, Type test as per IS10322, "FAT" before dispatch as per IS 10322 & IK Test. T. The LED Luminaire & it's driver both should be BIS registered. Successful bidder shall submit the following reports before supply of material for approvals LM79 as per 2019 standard issued by NABL accredited lab, LM80 issued by LED manufacturer, Type Test Certificate for luminaire as issued by NABL accredited lab, BIS certificate for LED Luminaire & Driver. etc. complete as required.	30	Nos	14,331.00	429,930.00
72	Supplying installation testing and commissioning of Suspended/Surface mounted Cylinderical Downlight, 10w, 1000 lm, CCT 4000K/5700K, SDCM<5, CRI≥80, Efficacy ≥100lm/W, Surge 4kV internal, THD ≤10% (At Full Load), pf ≥0.9. The luminaire housing shall be Extruded aluminum housing,Product Dia should be 80mm, Height 150mm, Life L70B50 @ 50K Hrs.@ 45 Degree Ambient temp. The product should have beam angle option of 24°, 36° and 60° beam angles to choose from as per the application. The operating temperature should be -10° to +45°; operating volateg range shall be 140-270V. The product shall be Class B serviceability. Manufacturer shall have inhouse lab approved by NABL or ministry of science of govt of India. LM 79 and LM80 reports need to be submitted from a NABL/UL accredited lab to verify above parameters. Both the fixture and Driver should have separate BIS approval including connection as required.	86		2,143.00	184,298.00

73	Supply installation testing and commissioning of slim, flexible semi outdoor rated IP20 LED luminaire for uniform white light. The luminaire housing should be of extruded silicone material and delivering a consistent >110°.Supply, Installation Testing and Commissioning of IP20 LED strip with a nominal system lumen output of1200 lm /m with system efficacy of 120lm/W. The luminaire shall have a rated system lifetime of 30,000 hours. The luminaire shall have a color temperature of 3000K and CRI>80with SDCM<3. luminaire is to operate on 24VDC.with working temperature rage of upto 35degC ambient. Luminaire must be supplied along with all the accessories such as driver, moutning tracks/ clips, end caps, diffuser, strip connectors etc as applicable. . Luminaire color temperature should be 3000K and CRI>80 . The operating temperature should range between minus 40degC to 50degC. The luminaire should withstand the mechanical impact with IK06 or more. The luminaire life should be more than 30000 hours @ L70 at 25degC. Luminaire should be BIS certified with connection etc complete as required.	200	RM	171.00	34,200.00
74	SUPPLY installation testing and commissioning of OF 2 WAY ACCENT LIGHTING WITH DIE CAST AL BODY IP65 LED INEGRATED 10W 950 LUMEN approx dimension 145x87x43 mm FOR WALL WASHING APPLICATION 3000K CCT including connection testing etc. complete as required .	20	Nos	3,228.00	64,560.00
75	SUPPLY installation testing and commissioning of 2 WAY ACCENT LIGHTING WITH DIE CAST AL BODY IP65 LED INEGRATED 7W 382lm LUMEN approx dimension 168x80x41mm FOR WALL WASHING APPLICATION 3000K CCT including connection testing etc. complete as required.	20	Nos	4,197.00	83,940.00
76	SITC of Pendant decorative made of SS & Borosil glass with Copper finish. Approx Dimensions in mm: 203x203x1500(suspension). Lamp max 20W with E27 holder including connection testing etc. complete as required.	20	Nos	4,480.00	89,600.00
77	SITC of Pendant decorative made of SS & Borosil glass with Copper finish. Approx Dimensions in mm: 304x304x1600(suspension). Lamp max 20W with E27 holder. Including connection testing etc. complete as required.	20	Nos	5,131.00	102,620.00
	TOTAL of New work				**1070598.00**
	TOTAL Agreement item and New Work				**7716778.00**
	Say				**7716778.00**

EXECUTIVE ENGINEER & SM (E),
IIT(ISM), CPWD, DHANBAD

Correction-Nil Deletion-Nil Insertion-Nil Overwriting-Nil

AE(E) EE(E)