

**INSTITUTE WORKS DEPARTMENT  
INDIAN INSTITUTE OF TECHNOLOGY  
ROORKEE**

**E-TENDER DOCUMENT**

**For**

**“Electrical General maintenance, Renovation & Water supply work at GNEC  
campus, IIT Roorkee.”**



**Indian Institute of Technology Roorkee  
Roorkee-247667, Tel.no. 01332-284955/284858**

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**INSTITUTE WORKS DEPARTMENT  
INDIAN INSTITUTE OF TECHNOLOGY ROORKEE**

No. IWD/DI/GM/GNEC/98/RT-2/110

Dated: 06.11.2024

**NOTICE INVITING TENDER**

On behalf of BOG, I.I.T. Roorkee, online Tenders (Percentage Rate) are invited in two Bid systems (Technical and Financial) from eligible bidders registered with CPWD, state PWD, MES or working contractors of IIT Roorkee having experience of working in Central / State Government, Public Sector Undertaking/Autonomous Organization of Central/State Government who fulfill the PQ criteria for the following work:

Name of the Work	Estimated Cost	Completion Period (Months)
<b>“Electrical General maintenance, Renovation &amp; Water supply work at GNEC campus, IIT Roorkee.”</b>	<b>Rs. 36.14 Lacs (including GST@ 18% &amp; Cess @1%)</b>	<b>12 Months</b>

- Interested eligible Bidders may obtain further information from IIT Roorkee website: [www.iitr.ac.in](http://www.iitr.ac.in) (<http://mm.iitr.ac.in/mmweb/tenders>) or from Central Public Procurement Portal (CPPP) <https://eprocure.gov.in/eprocure/app>.
- Intending bidders are advised to visit IIT Roorkee website [www.iitr.ac.in](http://www.iitr.ac.in) (<http://mm.iitr.ac.in/mmweb/tenders>) and Central Public Procurement Portal (CPPP) <https://eprocure.gov.in/eprocure/app> regularly till closing date of BID submission of tender for any corrigendum / addendum/ amendment.

**Critical Data Sheet**

Sr. No.	Name of Organization	Indian Institute of Technology Roorkee
1	Tender Type (Open/Limited/EOI/Auction/Single)	Open
2	Tender Category (Services/Goods/Works)	Works
3	Type/Form of Contract (Work/Supply/ Auction/ Service/ Buy/ Empanelment/ Sell)	Work Contract
4	Product Category (Civil Works/Electrical Works / Fleet Management / Computer Systems)	Electrical Works
5	Date of Issue/Publishing Original Tender	<b>06.11.2024 (12:00 Hrs)</b>
6	Document Download / Sale Start Date	<b>06.11.2024 (12:00 Hrs)</b>
7	Pre-bid Meeting	NA
8	Seek Clarification Start Date	<b>06.11.2024 (12:00 Hrs)</b>
9	Seek Clarification End Date	<b>14.11.2024 (12:00 Hrs)</b>
10	Bid Submission Start Date	<b>18.11.2024 (12:00 Hrs)</b>
11	Bid Submission Closing Date	<b>26.11.2024 (12:00 Hrs)</b>
12	Bid Opening Date	<b>27.11.2024 (12:00 Hrs)</b>
13	Tender Fee	<b>Rs.1000.00+18% GST (non-refundable). Payment of Tender Fee can be made by RTGS, NEFT in below mentioned account no. 1. Account Name- NON MHRD GOVERNMENT</b>

		<p><b>FUND IIT ROORKEE</b>  2. Address- <b>IIT Roorkee, Haridwar.</b>  a. Account No.- <b>0000032685865515</b>  <b>4. Account Description- Regular SB Chq-Entities.</b>  <b>5. Branch- IIT Roorkee,</b>  6. CIF No- <b>86531323246</b>  7. IFS Code. - <b>SBIN001069,</b>  8. MICR Code. - <b>247002094</b></p>
14	EMD (2%)	<p><b>Rs. 73,000.00/-</b> Payment of EMD can be made by RTGS, NEFT in below mentioned account no. The bidders shall be required to upload the scanned copies of transaction of payment of tender EMD / Tender Fee including e-receipt (clearly indicating UTR No. &amp; Tender Reference i.e. NIT No. must be entered in the remark at the time of online transaction of payment, failing which payment may not be considered) at the time of online bid submission on e-tendering website. Tender fee /EMD may be submitted online as per details given below.</p> <p><b>1. Account Name- NON MHRD GOVERNMENT FUND IIT ROORKEE</b>  <b>2. Address- IIT Roorkee, Haridwar.</b>  a. Account No.- <b>0000032685865515</b>  <b>4. Account Description- Regular SB Chq-Entities.</b>  <b>5. Branch- IIT Roorkee,</b>  6. CIF No- <b>86531323246</b>  7. IFS Code. - <b>SBIN001069,</b>  8. MICR Code. - <b>247002094</b></p>
15	<b>Performance Guarantee (5%)</b>	5% of awarded value shall be submitted in the form of Bankers Cheque / DD / FDR / Bank Guarantee in the name of Institute Engineer, IIT Roorkee after issue of Letter of Acceptance (LOA).
16	<b>Security Deposit (5%)</b>	5% of awarded value shall be submitted in the form of Bankers Cheque / DD/FDR / Bank Guarantee in the name of Institute Engineer, IIT Roorkee after issue of Letter of Acceptance (LOA).
17	No. of Covers (1/2/3/4)	02 (Cover-1 for Technical+ Cover-2 for Financial)
18	Bid Validity Days (180/120/90/60/30)	90 days (from last date of opening of financial bid)
19	<b>Documents to be uploaded on CPP Portal (<a href="http://eprocure.gov.in/eprocure/app">http://eprocure.gov.in/eprocure/app</a>)(related to eligibility criteria) on or before due date of submission of tender.</b>	<ol style="list-style-type: none"> <li>1) Affidavit (on Rs.10 non judicial stamp with notarized) regarding establishment of proprietorship firm or partnership deed or letter of incorporation for private ltd &amp; ltd firm.</li> <li>2) Written power of attorney for authorized signatory. If the bidder is not the owner or proprietorship firm.</li> <li>3) Self-certified copy of work orders along with work completion certificate as per eligibility criteria.</li> <li>4) Proof of online deposit of tender fee and EMD.</li> <li>5) As per the tender document Annexure-A, Annexure-B, Annexure-C and Annexure-D.</li> <li>6) Solvency certificate, Turnover certificate from CA preferably with UDIN Number, GST registration certificate, PAN Card, ESI registration certificate &amp; EPF registration certificate.</li> <li>7) Valid Electrical Contractor License Class-A. and Proof of registered contractor with CPWD, state PWD, MES or working contractors of IIT Roorkee</li> </ol>

20	Price Bid	To be uploaded only on CPP Portal ( <a href="http://eprocure.gov.in/eprocure/app">http://eprocure.gov.in/eprocure/app</a> ) in excel sheet.
21	Address for communication	<b>Executive Engineer (E/M), Institute Works Department, James Thomson Building, IIT Roorkee, Roorkee-247667 (India), Tel. No. 01332-284955 / 4858</b>
22	Email Address	<a href="mailto:tntiwari.eem2019@iitr.ac.in">tntiwari.eem2019@iitr.ac.in</a> , <a href="mailto:pradeepelectenggaad@iitr.ac.in">pradeepelectenggaad@iitr.ac.in</a>

**Note: -**

1. Bidders are advised to keep visiting the above-mentioned websites from time to time (till the deadline for bid submission) for any updates in respect of the tender documents, if any. Failure to do so shall not absolve the applicant of his liabilities to submit the applications complete in all respect including updates thereof, if any. An incomplete application may be liable for rejection.
2. In case any information furnished by the Bidder is found to be false / forged / incorrect at any stage, their bid shall be rejected and further action e.g. debarring from participating in future tenders, blacklisting etc. may be taken.
3. Clarification of Bids/ Shortfall Documents: IIT Roorkee may, at its discretion, ask the Bidder for clarifications / shortfall documents related to his bid. The request for clarification shall be given in writing. Depending on the reply of the Bidder, his bid shall be ignored or considered further.
4. Only 'Class-I local supplier' and 'Class-II local supplier', as defined in the Public Procurement (Preference to Make in India), Order 2017 shall be eligible to bid in the tender. For more details, please refer to: Order No.: P-45021/2/2017-PP (BE-II), DPIIT, Ministry of Commerce and Industry issued Dated: 16th Sept. 2020. A self- certificate must be provided in this regard that the item offered meets the local content requirement for 'Class-I local supplier' & 'Class-II local supplier'.
5. Before quoting the Bid, the Bidder may inspect the site to get the required information related to site condition and requirements.
6. IIT Roorkee reserves the right to reject any quotation wholly or partly without assigning any reason.
7. The decision of the institute in all matters relating to eligibility, acceptance, or rejection of the Bid will be final and binding on the applicants.
8. **Deputed workers by the vendor shall wear safety helmets, safety shoes (reputed make and ISI marked) and a reflective safety jacket shall be provided by the bidder on the work site.**

**No additional cost will be paid for the same, so it's instructed that the bidder include the charges for PPE kits as per site requirement. Failing which, institute will provide the same with risk and cost to bidder and bidder may be penalized in any manner like debarring / blacklisting Penalty of Rs. 200 per violation will also be imposed by the EIC etc.**

**Sd-  
Institute Engineer**

## **INSTRUCTIONS FOR ONLINE BID SUBMISSION**

As per the directives of Department of Expenditure, this tender document has been published on the Central Public Procurement Portal (URL: <https://eprocure.gov.in/eprocure/app> ). The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submit their bids online on the CPP Portal. More information useful for submitting online bids on the CPP Portal may be obtained at: <https://eprocure.gov.in/eprocure/app> .

### **1.0 Registration**

- 1.1 Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <https://eprocure.gov.in/eprocure/app> ) by clicking on the link “Click here to Enroll”. Enrolment on the CPP Portal is free of charge.
- 1.2 As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- 1.3 Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- 1.4 Upon enrolment, **the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify/TCS/nCode/eMudhra etc.) with their profile.**
- 1.5 Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible for ensuring that they do not lend their DSCs to others which may lead to misuse.
- 1.6 The bidder then logs in to the site through the secured log-in by entering their user ID/password and the password of the DSC/eToken.

### **2.0 Searching for Tender Documents**

- 2.1 There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, organization name, location, date, value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords etc. to search for a tender published on the CPP Portal.
- 2.2 Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective ‘My Tenders’ folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- 2.3 The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

### **3.0 Preparation of Bids**

- 3.1 Bidders should take into account any corrigendum published on the tender document before submitting their bids.
- 3.2 Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and 4 content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- 3.3 The bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF/XLS/RAR/DWF formats. Bid documents may be scanned with 100 dpi with black and white option.
- 3.4 To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use “My Space” area available to them to upload such documents. These documents may be directly submitted from the “My Space” area while submitting a bid and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.
- 3.5 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, the 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.

#### **4.0 Submission of Bids**

- 4.1 The bidder should log into the site well in advance for bid submission so that he/she uploads the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 4.2 The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 4.3 Bidder shall submit tender fee as per critical data sheet.
- 4.4 A standard BOQ format has been provided with the tender document to be filled in by all the bidders. Bidders are requested to note that they should submit their financial bids in the format provided and no other format is acceptable. Bidders are required to download the BOQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as the name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BOQ file is found to be modified by the bidder, the bid will be rejected.
- 4.5 The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- 4.6 All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128-bit encryption technology. Data storage encryption of sensitive fields is done.
- 4.7 The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 4.8 Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 4.9 Kindly add scanned PDF of all relevant documents in a single PDF file of compliance sheet.

#### **5.0 Assistance to Bidders**

- 5.1 Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority to the address provided in Critical Data Sheet for a tender or the relevant contact person indicated in the tender.
- 5.2 Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is 0120-4001062 / 0120-4001002 / 0120-4001005 / 0120-6277787

#### **6.0 General Instructions to the Bidders**

- 6.1 The tenders will be received online through portal <http://eprocure.gov.in/eprocure/app>. In the Technical Bids, the bidders are required to upload all the eligibility criteria documents in .pdf format.
- 6.2 Possession of a Valid Class II/III Digital Signature Certificate (DSC) in the form of smart card/etoken in the company's name is a prerequisite for registration and participating in the bid submission activities through <https://eprocure.gov.in/eprocure/app>. Digital Signature Certificates can be obtained from the authorized certifying agencies, details of which are available in the web site <https://eprocure.gov.in/eprocure/app> under the link "Information about DSC".
- 6.3 Tenderer are advised to follow the instructions provided in the 'Instructions to the Tenderer for the e- submission of the bids online through the Central Public Procurement Portal for e Procurement at <https://eprocure.gov.in/eprocure/app>.

## INFORMATION AND INSTRUCTIONS TO BIDDERS

On behalf of BOG, I.I.T. Roorkee, online Tenders (Percentage Rate) are invited in two Bid systems (Technical and Financial) from eligible bidders registered with CPWD, state PWD, MES or working contractors of IIT Roorkee having experience of working in Central / State Government, Public Sector Undertaking/Autonomous Organization of Central/State Government for the work of “**Electrical General maintenance, Renovation & Water supply work at GNEC campus, IIT Roorkee.**”

The work is estimated to cost as mentioned in the NIT. The estimate, however, is given merely as a rough guide.

- 1.1 Intending bidder is eligible to submit the bid provided, if 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:

### **1.1.1 Criteria of eligibility for submission of bid documents:**

- (a) Intending bidder should not be a joint venture (Self Certified copy of relevant documents clearly establishing the status of bidder to be uploaded in Cover-1).
- (b) Should have successfully completed works during last seven years ending last day of the month previous to the one in which applications are invited. The works completed up to previous day of last date of submission of tenders shall also be considered.

Three similar completed works costing not less than the amount equal to 40% of the estimated cost put to tender,

or

Two similar completed works costing not less than the amount equal to 60% of the estimated cost put to tender.

or

One similar completed work of aggregate cost not less than the amount equal to 80% of the estimated cost.

(Self-Certified photocopy of work order along with work completion certificate to be uploaded as proof of eligibility criteria in Cover-1)

The work completion certificate should have been issued by an officer not less than the rank of Executive Engineer / equivalent and must contain name of the work, date of start, date of actual completion and amount of work executed.

**Explanation:** The value of executed works shall be brought to the current costing level by enhancing the actual value of work at simple rate of 7% per annum; calculated from the date of completion to last date of receipt of applications for this tender.

Similar work means “**Electrical General maintenance**”.

- (c) Average annual financial turnover should be at least 50% of the estimated cost during last three consecutive financial years duly audited by a Chartered Accountant (Self Certified copy of certificate from CA to be uploaded in Cover-1). The year in which no turnover is shown would also be considered for working out the average.
  - (d) Should have valid solvency certificate of the amount at least 40% of the estimated cost of the work issued by a scheduled bank which is not more than **one-year-old** from the last date of tender submission (including extension time). Certified copy of original solvency certificate to be uploaded in Cover-1.
2. Agreement shall be drawn up with the successful bidder on prescribed format.
  3. The time allowed for carrying out the work will be as per the NIT from the date of start as defined in Award of Work or from the first date of handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in tender documents.
  4. The site for the work is available / shall be made available for start of the work.
  5. The Tender document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen / downloaded from IIT Roorkee website: [www.iitr.ac.in](http://www.iitr.ac.in) (<http://mm.iitr.ac.in/mmweb/tenders>) or from Central Public Procurement Portal (CPPP) <https://eprocure.gov.in/eprocure/app>.
  6. While submitting the bids, the bidder can revise the rate, but before last date and time of submission of bids as notified. In this case, the last submitted bid before the last date and time will only be considered.



7. The scanned copies of documents as per critical data sheet shall be uploaded under Cover-1 on the e-tendering website.
8. Online Financial Bids submitted by intending bidders shall be opened only to those bidders whose bid is found technically qualified.
9. The bid submitted shall become invalid and the cost of the bid & tender processing fee shall not be refunded if: (i) the bidder is found ineligible. (ii) The bidder does not provide all the documents (including PAN No., GST registration etc.) as stipulated in the bid document.
10. 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 Tender. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent upon any misunderstanding or otherwise shall be allowed. The bidder shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a tender by a bidder implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Institute and local conditions and other factors having a bearing on the execution of the work. The cost of the site visit shall be borne by the bidder.
11. All tenders in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidder shall be summarily rejected.
12. Canvassing, whether directly or indirectly, in connection with bidders is strictly prohibited and the Tenders submitted by the bidders who resort to canvassing will be liable to rejection.
13. The bidder shall not be permitted to tender for works in the IWD, IIT Roorkee, if his near relative is posted as an officer in any capacity between the grades of Dean Infrastructure and Junior Engineer (both inclusive). Any breach of this condition by the bidder would render him liable to be removed from the Tendering process.
14. 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 act as a bidder within 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 bidder 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 tender or engagement in the bidder's service.
15. The notice inviting bid shall form part of the contract document. The successful bidder, on acceptance of his bid by the Accepting Authority, have to sign the contract consisting of "The Notice Inviting bid, all the documents including Special Conditions, General Specifications/ Particular Specifications and drawings, if any, forming part of the bid as submitted at the time of invitation of bid and the rates quoted online at the time of submission of bid and acceptance thereof together with any correspondence leading thereto within 15 days from the stipulated date of start of the work.
16. The bid for the works shall remain open for acceptance for a period of 90 days from the date of opening of financial bids. If any bidder withdraws his bid before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the bid which are not acceptable to the Indian Institute of Technology Roorkee, then Indian Institute of Technology Roorkee, without prejudice to any other right or remedy, be at liberty to forfeit of the said earnest money as aforesaid. Further, the bidder(s) shall not be allowed to participate in the re-bidding process of the work.
17. **Composite Tender (if applicable)**
  - 17.1 The competent authority is calling this bid for the composite work. The Earnest money is fixed with respect to the combined estimated cost put to tender for the composite tender.
  - 17.2 The eligible bidders have to quote rates for all items given in the schedule of quantity.
  - 17.3 After acceptance of the bid by competent authority, **Institute Engineer, IWD, IIT Roorkee** shall issue letter of Acceptance (LoA) on behalf of the Institute. After issue of LoA, the bidder will have to enter into one agreement with **Institute Engineer**.
  - 17.4 Entire work under the scope of composite tender including major and all minor components shall be executed under one agreement.
  - 17.5 Security Deposit will be worked out separately for each component corresponding to the quoted/accepted cost of the respective component of works. The Earnest Money will become part of the security deposit of the respective

- projects under the head Mega projects in ratio of the corresponding estimated value of these projects.
- 17.6 The bidder may associate agency(s) for minor component(s) conforming to eligibility criteria as defined in the tender document and must submit detail of such agency(s) to Dean Infrastructure. The name of the agency(s) to be associated shall be approved by Dean Infrastructure. Before engaging such associate agencies bidder has to inform to Dean Infrastructure along with his past experience and all credential's and got the approval of the same from him.
- 17.7 In case the bidder intends to change any of the above agency/ agencies during the operation of the contract, he shall obtain prior approval of respective Dean Infrastructure. The new agency/ agencies shall also have to satisfy the laid down eligibility criteria. In case Dean Infrastructure is not satisfied with the performance of any agency, he can direct the bidder to change the agency, and this shall be binding on the bidder.
- 17.8 The main bidder has to enter into an agreement with bidder(s) associated by him for execution of minor component(s). Copy of such agreement shall be submitted to the Engineer-in-charge in case of change of associate bidder, the main bidder has to enter into agreement with the new bidder associated by him.
- 17.9 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. The final bill of the whole work shall be finalized by IWD, IIT Roorkee.
- 17.10 It will be obligatory on the part of the bidder to sign the tender documents for all components before the first payment is released.
- 18. Tender will be awarded on L-1 basis.**
- 19. If any deviation is required as per site conditions the bidder will be bound to execute the work on same terms and conditions. Payment will be made as per actual measurement basis.**

## **A: GENERAL INSTRUCTIONS**

### **1. Scope of Tender.**

- 1.1 Indian Institute of Technology Roorkee (referred to as Owner in these documents) invites Tender as defined in these documents and referred to as “the works” detailed in the table given in the Notice Inviting Tenders (NIT).
- 1.2 The successful Bidder shall complete the works within the completion date specified in the Notice Inviting Tenders (NIT).

### **2. Non-Association / Relation**

- 2.1 All bidders shall provide in the bid tender and Qualification Information, a statement that the Bidder is not associated, nor has been associated in the past, directly or indirectly, with the Indian Institute of Technology Roorkee or any other entity that has prepared the design, specifications, and other documents for the Project.

### **3. Qualification of the Bidder**

- 3.1 All Bidders shall provide tender qualification information.
- 3.2 All Bidders shall include the following information by submitting relevant documents and certificate with their tenders: The Bidder must be registered with the GST Department and should submit the registration certificate of GST, ESI, EPF, Labour License (if applicable) etc.

### **4. Cost of tendering**

- 4.1 The Bidder shall bear all costs associated with the preparation and submission of his tender, and the Owner will in no case be responsible and liable for those costs.
- 4.2 The Bidder, at its own responsibility and risk is encouraged to visit and examine the Site of Work and its surroundings and obtain all information that may be necessary for preparing the tender. The costs of visiting the Site shall be at the Bidder’s own expense.

## **B: DOCUMENTS INVITING TENDERS**

### **5. Invitation:** Tenders are hereby invited on behalf of Indian Institute of Technology Roorkee.

### **6. Contents of documents as mentioned in the relevant clauses mentioned:**

The Bidder shall be deemed to have examined all instructions, forms, terms, and specifications in the Documents. Failure to furnish the information required in the Tender Document or submission of a Bid not substantially responsive to the Tender Documents in every respect will be at the Bidder’s risk and may result in the rejection of the bid.

The several documents forming the contract are to be taken as mutually explanatory of one another, detailed drawings being followed in preference to small scale drawing and figured dimensions in preference to scale and Special Conditions in preference to General Conditions.

In case of any discrepancy between the Schedule of Quantities, the specifications and/ or the drawings, given in the tender document the following order of preference shall be observed:

1. Description of Schedule of Quantities.
2. Specification and Special condition, if any.
3. Drawings.
4. C. P. W. D. specifications/ IWD, IIT ROORKEE specification.
5. Latest edition Indian Standard Specifications of B. I. S.

### **7. Amendment of Tendering Documents**

- 7.1 Before the deadline for submission of bids, the Indian Institute of Technology Roorkee may modify the Tender documents by issuing addenda/corrigendum.
- 7.2 Any addendum thus issued shall be part of the Tendering documents and shall be uploaded on e-Tendering website <https://eprocure.gov.in/eprocure/app> and Institute website <http://mm.iitr.ac.in/mmweb/tenders>.
- 7.3 To give prospective Bidders reasonable time in which to take an addendum / corrigendum into account in preparing their bid, the IIT Roorkee may extend if necessary the deadline for submission of tenders.

## C: PREPARATION OF DOCUMENT

8. **Earnest Money Deposit (EMD):** EMD as per critical data sheet must be submitted. Bids not accompanying EMD will be summarily rejected. The EMD of the unsuccessful Bidders will be discharged / returned within Thirty days. (30) days from the date of opening of the financial bids. The EMD of the successful Bidder may be converted as Security deposit. The EMD may be forfeited and further the bidder shall not be allowed to participate in the re-bidding process of the work, if the Bidder withdraws his bid during bid validity period or in case successful Bidder fails to sign the contract / fail to deposit security amount and performance guarantee.
9. **Period of validity of bid:** The bids shall remain valid for a period of 90 days after the date of financial bid / price bid opening. A bid valid for a shorter period shall be rejected by the Indian Institute of Technology Roorkee as non-responsive.
10. **Language of Bid:** The document shall be written in English/Hindi language. The total amount should be written in the same language.
11. **Document comprising the E-Tender:** No page of this tenders document shall be removed, and the set must be submitted as it is. Each page of the tenders document form is to be signed by the Bidder and must bear the Seal of the Company/Firm.

**The tender submitted by the Bidder shall comprise as mentioned above in the relevant sections.**

### **12. Tender Prices**

- 12.1 The contract shall be for the whole works as described in priced Schedule of Quantities submitted by the Bidder.
- 12.2 The tender submitted on behalf of firm shall be signed by a person who has the proper legal authority on behalf of the firm to enter into the contract; otherwise, the bid is liable to be rejected. Each page of the tender document and each drawing accompanying is required to be signed by the authorized person submitting the bid, with the company seal as the token of their having examined and acquainted themselves with the General conditions of contract, drawings, specifications, special conditions of contract etc. The forms of tender are to be filled in completely. Any bid with any of the documents not signed is liable to be rejected.
- 12.3 The notation R.O. written against items of BOQ means 'rate only' and the bidder is to quote only unit rate in such cases.
- 12.4 The Bidder shall fill in the percentage rate/in rates for items of the Works described in the Schedule of Quantities along with total bidding price. In case if the rates are not filled for any of the Items of Schedule of Quantities, in such cases the tender shall be summarily rejected. Failure to comply with either of these conditions will make the bid liable for rejection.
- 12.5 **Taxes:** All duties, taxes, and other levies payable by the Bidder under the contract, or for any other cause, shall be included in the rates, prices and total Bidding Price submitted by the Bidder. Bidders must include in their rates, the cost of transportation of materials to site, GST, labour cess as per Building & other construction workers cess act, excise duty, octroi, and any other tax and duty levied by the Central / State Government. None of the above taxes & levies will be entertained by the Owner and no tax exemption forms will be issued by the Owner.  
Estimate has been prepared on current applicable GST rate. However actual payment will be done on the basis of prevailing GST rates at the time of execution of work and its payment.
- 12.6 **Labor Cess or BOCWW Cess:** Labour cess @1% shall be deducted from each bill.
- 12.7 The work shall be carried out by the Bidder in a manner complying in all respect with the requirement of relevant bye-laws/orders of the Local/Municipal bodies and paying all fees and charges which may be leviable at his own cost. The completion/ occupancy certificates including clearance from the fire committee, or any other statutory obligation shall be arranged by the bidder. Any official fees shall be paid by the Owner. All other cost of liasoning shall be borne by the bidder.
- 12.8 Bidder should also take a Group Insurance Policy for his Workmen, Supervisors and Engineers working on site for an adequate insurance cover. Indian Institute of Technology Roorkee shall not be responsible for any accident or happening of any untoward/unforeseen event involving workmen, labour, supervisor or engineer or any person directly or indirectly associated with the execution of work. The insurance policy to

be obtained by the successful Bidder must be comprehensive and shall cover all associated risks (known and unknown).

- 12.9 The rates quoted in the tender shall include cost of electrical power supply, water supply, cost of all materials, labour, telephone, rent and call charges, water and meter rent charges, temporary electric wiring /lighting for execution of work at site, hire for any tools and plants, shed for materials, marking out and clearing of site, transportation complete in all respects. The rates quoted in the tender shall be treated as rate for finally completing the item of work.
- 12.10 The quantities furnished in the schedule of quantities are only probable quantities and are liable to alterations, by omission, deductions or additions to any extent at the discretion of Indian Institute of Technology Roorkee. Payments will be regulated on the actual quantities of work done at accepted rates.
- 12.11 Errors in the Schedule of Quantities shall be dealt with in the following manner:
- i. In the event of a discrepancy between the rates quoted in words and the rates in figures, rate quoted in words shall be *considered* to be correct.
  - ii. In the event of an error occurring on account of arithmetical calculations the same shall be corrected according to rates written in words and quantities in B.O.Q.
  - iii. All the errors in totaling in the amount column and in carrying forward the totals shall be corrected. The tender total shall be accordingly amended. If the bidder doesn't accept the corrected amount, then his bid will be rejected.
- 12.12 The calculations made by the bidder should be based upon quantities of the items of work which are furnished in the Schedule of Quantities, but it must be clearly understood that the contract is not a lump sum contract. The Owners do not in any way assure, represent or guarantee that the said probable quantities are correct or that the work would correspond thereto. The items of work irrespective of the quantities which may vary shall be carried out at the same accepted bidding tender rates and no escalation in the rates will be entertained whatsoever. Any item of work may be omitted from the schedule of quantities and may be awarded to another agency at any time / stage of the work.
- 12.13 The bidders must obtain for themselves on their own responsibility and their own expenses all the information which may be necessary, including risks, contingencies and other circumstances to enable them in making a proper bid and for entering into a contract, and must examine the drawings, specifications and conditions and inspect the site of the work, nature of the work, availability of power, water, shelter for workmen and all the matters pertaining thereto before submitting the bid. They can also get any clarifications required from the Owner, before tendering, by contacting them at their office during working hours.

**13. Format and signing of Tender document.**

- 13.1 The bid shall be typed or written in indelible ink and shall be signed by a person or persons duly authorized to sign on behalf of the Bidder. All pages of the tender where entries or amendments have been made shall be initialed by the person or persons signing the tender.
- 13.2 The tender shall contain no alterations or additions, except those to comply with instructions issued by the Owner, or as necessary to correct errors made by the Bidder, in which case such corrections shall be initialed by the person or persons signing the bid. ANY CONDITIONAL BID WILL BE SUMMARILY REJECTED.

**D: MODE OF SUBMISSION OF BID DOCUMENT**

**14. Sealing and marking of bids.**

- 14.1 The entire document to be put in cover-1 and 2 should be scanned and uploaded under cover-1 and 2 respectively on the e-tendering website. No hard copy of any document (financial or technical) should be submitted. In case any hardcopy is submitted then the same will not be accepted by the department.

**15. Deadline for submission of bid: - As per Critical Data Sheet.**

**E: TENDER OPENING AND EVALUATION**

- 16. Tender opening:** The tender will be opened on the date and the place specified in the critical data sheet. In case of

any unavoidable circumstances or unforeseen event on the specified date and time of tender opening, the bids will be opened at the appointed time and location on the next working day.

- 17. Clarification of Tenders:** To assist in the examination, evaluation and comparison of bids, the Owner may, at his discretion, ask any Bidder for clarification of his bid, including breakdowns of unit rates. The request for clarification and the response shall be in writing or by fax, but no change in the price or substance of the tendering shall be sought, offered, or permitted.
- 18. Examination of Bids and Determination of Responsiveness:**
- 18.1 Prior to the detailed evaluation of bids, the Owner will determine whether each bid
- Meets the eligibility criteria defined
  - Has been properly signed and meets the requirements mentioned
  - is accompanied by the required securities and;
  - is responsive to the requirements of the tendering documents.
- 18.2 A responsive bid is one which conforms to all the terms, conditions and specifications of the tendering documents, without material deviation or reservation. A material deviation or reservation is one
- Which affects in any substantial way the scope, quality, or performance of the works;
  - which limits in any substantial way, inconsistent with the tender documents, the Indian Institute of Technology Roorkee rights or the Bidders' obligations under the contract; or
  - Whose rectification would affect unfairly the competitive position of other Bidders presenting responsive bids.
- 18.3 If a bid is not responsive, it will be rejected by the Indian Institute of Technology Roorkee, and may not subsequently be made responsive by correction or withdrawal of the nonconforming deviation or reservation.
- 19. Evaluation and Comparison of Bids:**
- 19.1 The Owner along will evaluate and compare only the bids determined to be substantially responsive.
- 19.2 In evaluating the bids, the Owner will determine for each bid the evaluated bids Price by adjusting the bid. Price as follows:
- Making any correction for errors; or
  - Making an appropriate adjustment for any other acceptable variations, deviations; and
  - Making appropriate adjustments to reflect discounts offered.
- 20. The Owner reserves the right to accept or reject any variation, deviation, or alternative offer and other factors which are more than the requirement of the tender.**

## **F: AWARD OF TENDER**

- 21. Award criteria:**
- 21.1 The acceptance of bid will rest with the Owner, which does not bind itself to accept the lowest bid and reserves to itself the authority to reject completely / partially, any or all of the bid/s received without the assignment of a reason.
- 21.2 The owner reserves to itself the right to accept the whole or any part of the Bid and the Bidder shall be bound to perform the same at the rate quoted.
- 21.3 The Owner reserves to itself the right of omission of any item of work from the awarded tender at any time / stage during the execution of work and awards the same to another agency / bidder.
- 22. Notification of award:** The successful Bidder will be issued a Letter of Acceptance (LoA) by the Owner. The issuance of LoA shall not constitute an award of work.
- 23. Performance Guarantee:** Within ten (10) days of LoA the successful Bidder shall furnish the performance guarantee @ 5% of value of work in the form of DD/FDR/ Bankers cheque /Bank Guarantee from Scheduled bank provided in the tender document. The Performance Guarantee must be valid two months beyond the work completion period (Part-A). It may be further extended. The Performance guarantee shall be returned / refunded to the bidder on completion of the work (Part-A) and recording of the completion certificate. In case the bidder fails to deposit it the said performance guarantee within the period as indicated, the Earnest Money deposited by the bidder shall be forfeited automatically without any notice to the bidder.

- 24. Signing of contract form:** On the acceptance of LoA and Performance Bank Guarantee of the successful Bidder whose tender has been accepted in writing, the Indian Institute of Technology Roorkee will sign an agreement. Article of agreement shall be as per IIT Roorkee.

#### **G: DURING EXECUTION**

- 25. During Execution:** The Bidder shall carry out all the works strictly in accordance with the drawing, details and instructions of the Owner. If in the opinion of the Owner, changes have to be made in the design, and they desire the bidder to carry out the same, the Bidder shall be bound to comply. The Owner decisions in such cases shall be final.

The Bidder is bound to carry out any items of work necessary for the completion of the job even though such items are not included in the schedule of quantities and rates. Schedule of instructions in respect of such additional items and their quantities with the prior consent from the Owner. Rates for such items of work will be approved by the Owner on the basis of Analysis of Rates which will be derived from actual prevailing market rates of similar item along with 15% as bidder's profit & overhead (or service charge as quoted by the bidder). The rates approved by the Owner in such cases will be final.

The Bidder shall get the quality of work done inspected for material and workmanship at different stages of execution as per instructions given by the Owner or their representative from time to time. Any item of work done which is found not conforming to the Contract shall be rejected by the Owner. The decision of the Owner in such cases shall be final.

The Owner may instruct at any stage of execution for testing of samples of any material taken at random. The Owner will decide the testing laboratory / agency and the cost of testing including the expenses for sending the samples to the laboratory / agency and receipt of test reports shall be borne by the Bidder. The material shall be rejected if the test reports are not within the permissible limits.

The Bidder shall have to present the invoice for purchased material from the manufacturer or from the dealer along with the certificate from the manufacturer. In case material is found to be of substandard quality, the same shall be rejected by the Owner. The decision of the Owner in such cases shall be final.

The Bidder shall not be entitled to any compensation for the Loss suffered by him on account of delays in commencing or executing the work whatever the cause of delay may be, including delays arising out of modifications to the work entrusted to him or in any subcontracts connected therewith or delays in awarding contracts for other trades of the project or in commencement or completion of such other works or in procuring Government controlled or other building materials for any other reasons whatsoever. The Owner shall not be liable for any sum besides the e-tender amount, subject to such variations as are provided for herein and as instructed by the Owner. However, the necessary time extension will be given if the delays are not attributed to the Bidder.

**QUALIFYING INFORMATION**

Please furnish the following information along with documentary evidence only in this format (as eligibility criteria)

1.	Name of the bidder		
2.	Legal Status of the bidder		
3.	Place of registration and registration of the bidder		
4.	Year of establishment of the firm.		
5.	Permanent Address		
6.	Email id		
7.	Contact Numbers		
8.	Principal place of the registration		
9.	PAN No.		
10.	GST No.		
11.	EPF		
12.	ESI		
13.	Tender fee details		
14.	Solvency certificate details		

16. The average annual financial turnover during the last 3 years, ending 31<sup>st</sup> March of the previous financial year, should not be less than 50% of the estimated cost. CA certificate is enclosed as documentary proof. Copies of balance sheets duly certified by **CA preferably with UDIN Number** to be submitted.

Sl. No.	Financial Year	Amount (in Lakhs)
1	2021-2022	
2	2022-2023	
3	2023-2024	

17. **PROFORMA FOR LIST OF WORKS EXECUTED BY THE BIDDER DURING THE LAST 5 YEARS AND ABOVE**

Sl. No	Name of work/ project with address	Name & postal address of the owner & contact person	Contract Value	Date of Start	Date of Completion	Actual Date of Completion

**Note: Bidder may furnish the above information in separate sheet if the space is not sufficient.**



18. PROFORMA FOR LIST OF WORKS IN HAND

Sl. No	Name of work/ project with address	Name & postal address of the owner & contact person	Published Value	Date of Start	Stipulated date of completion	Present Progress

**Note: Bidder may furnish the above information in separate sheet if the space is not sufficient**

19. DETAILS OF KEY PERSONNEL

Sl. No	Name & Designation	Qualification	Experience	Nature of Works Handled	Date from which employed in your organization

**Note: Bidder may furnish the above information in separate sheet if the space is not sufficient.**

20. List of equipments, tools and tackles (in applicable).

## **GENERAL CONDITIONS OF CONTRACT(GCC)**

### **A: GENERAL**

#### **1.0 Definitions:**

1.1 In this contract, the following terms shall be interpreted as indicated:

- a. "The Contract" means the agreement entered into between the Owner and the Bidder, as recorded in the contract form signed by the parties, including all the attachments and appendices thereto and all documents incorporated by reference therein.
- b. "The Contract Value" means the amount payable to the Bidder under the contract for the full and proper performance of its contractual obligations.
- c. "Contract Data" means any information provided in the tender document and agreed to by the Bidder.
- d. "The Work" means all labour, materials, tools and plant, equipment including government taxes and transport that may be required in preparation of and for and in the full and entire execution and completion of "the Work".
- e. "Services" means services ancillary to the execution of the work such as transportation and insurance, and any other incidental services, such as installation, commissioning, provision of technical assistance, training and other obligations of the Bidder covered under the contract.
- f. "GCC" mean the General Conditions of Contract contained in this section.
- g. "SCC" means the Special Conditions of Contract.
- h. "The Owner" means the Indian Institute of Technology Roorkee or its representative.
- i. "The Owner" means the Owner/Project Management Consultant appointed by the Owner for preparing all the drawings, details and specifications of items required for the execution of the work and supervise and monitor the execution at site along with checking and verifying Bidder's bill. The Bidder shall offer the Engineer or any representative of Owner every facility and assistance for examining the works and materials. The Engineer or any representative of the Owner shall have power to give notice to the Bidder or to his staff, of non-approval of any work or materials and such work shall be suspended or the use of such materials shall be discontinued until the decision of the Owner. Such examinations shall not in any way exonerate the bidder from the obligations to remedy any defects which may be found to exist at any stage of the work or after the same is completed.
- j. "The Bidder" means the individual or the firm executing the work.
- k. "The Project Site" where applicable, means the place or places named in SCC.
- l. "Day" means calendar day.
- m. "Engineer-in-charge (EIC)" means Assistant Executive Engineer.

#### **2.0 Interpretation and Application**

- 2.1 These general conditions apply to the extent that provisions in other parts of the contract do not supersede them.
- 2.2 In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Owner will provide instructions clarifying queries about the Conditions of Contract.
- 2.3 If sectional completion is specified in the Contract Data, references in the Conditions of Contract to the Works, the Completion Date, and the Intended completion date are for the whole of the Works.

#### **3.0 Standards**

- 3.1 The works executed by the Bidder should be carried out in most professional manner, both as regards material and otherwise, in every respect, in strict accordance with the Technical Specifications. All materials and workmanship shall so far as procurable be of the respective kinds described in the priced schedule of quantities and/ or specifications and in accordance with the Owner's instructions, and the Bidder shall upon the request of the Owner, furnish them with all invoices, accounts; receipts and other vouchers to prove that the material.

procured complies therewith. When no applicable standard is mentioned, the work shall be carried out as per the directions of the Owner. The Bidder shall at his own cost arrange for and/or carry out any test of materials which the Owner may require. In case of discrepancies in tender wording as regards the specifications of materials, workmanship etc., written instructions will supersede the tender wording unless otherwise mentioned.

**3.2** The Owner in their absolute discretion from time to time shall issue further drawings and/ or written instructions, details, directions and explanations which are hereafter collectively referred to as “the Owner’s instructions” in regard to: -

- a. The variation or modification of the design quality or quantity of works or the addition or omission or submission on any work.
- b. Any discrepancy in the drawings or between the schedule of quantities and / or drawings and /or specifications/ dimensions etc.
- c. The removal and / or re-execution of any works executed by the Bidder.
- d. The removal from the site of any materials brought thereon by the Bidder and the substitution of any other materials therefore / or rejection of the material brought on site.

#### **4.0 Use of Contract Documents and Information**

- 4.1** The Bidder shall not, without the Owners’ prior written consent, disclose the contract or any provision thereof, or any specifications, plan, drawing, pattern, sample, or information furnished by or on behalf of the Owner in connection therewith, to any person other than a person employed by the Bidder in performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far, as may be necessary for purposes of such performance.
- 4.2** The Bidder shall not, without the Owner’s prior written consent, make use of any document or information enumerated in Para 4.1 except for the purposes of performing the contract.
- 4.3** All documents included but not limited to the contract agreement shall remain the property of the Owner and shall be returned (in all copies) to the Owner on completion of the Bidder’s performance under the contract, if so required by the Owner.

**5.0 Owner’s Decisions:** Except where otherwise specifically stated, the Owner will decide contractual matters between the Owner and the Bidder, in the role of representing the Owner.

**6.0 Performance Guarantee:** The proceeds of the performance guarantee shall be payable to the Owner as compensation for any loss or dues resulting from the Bidder’s failure to complete its obligations under the contract.

#### **7.0 Program and Reporting**

- 7.1** The bidder shall furnish to the Indian Institute of Technology Roorkee a bar chart laying down weekly financial and physical targets to complete the project within stipulated time for approval within fifteen days from the date of receipt of notification of award. A weekly progress report shall be furnished to the owner showing the progress.
- 7.2** The bidder must submit every week the following information to the Owner in writing:
  - i. Number of men employed trade wise.
  - ii. Progress achieved.
  - iii. Expected dates for completion of work;
  - iv. Any actual or potential delay in completion schedule.

#### **8.0 Assignment and Sub-contracting**

- 8.1** The whole of the works included in the Contract shall be executed by the bidder and the bidder shall not directly or indirectly transfer, assign or underlet the contract or any part, share or interest therein without the written consent of the Owner.
- 8.2** No sub-contracting shall relieve the Bidder from the full and entire responsibility of the Contract or from the active superintendence of the work during their progress.

#### **9.0 Bidder to provide everything necessary for proper execution of work**

- 9.1** The Bidder shall provide everything necessary for the proper execution of the works according to the intent and meaning of the drawings, priced schedule of quantities and specifications taken together whether the same may or may not be particularly shown or described therein provided that the same can reasonably be inferred there from. If the Bidder finds any discrepancy therein, he shall immediately and in writing refer the same to the Owner whose decision shall be final and binding. Further, if any sample(s) of material(s), fittings, fixtures or finished item(s), to be used in the construction work, has/have been called for from the bidder, no work related to it/these shall be executed unless the same has/ have been approved by the Owner failing which no payment shall be made to the bidder on this account. Any sample, duly approved by the Owner shall become part of the supply to be used in “the works”.
- 9.2** IIT Roorkee will provide water and power supply at site free of cost for the entire work.
- 9.3** The Bidder shall supply fix and maintain at his cost, during the execution of any works, all the necessary power supply, water supply, centering, scaffolding, watching and lighting by night as well as by day, required not only for the proper execution but also for protection of the public and the safety of any adjacent roads, streets, pavements, walls houses, building and other erections, matters or things. The Bidder shall take down and remove any or all such centering, scaffolding, staging, planking, timbering, strutting, shoring pumping, fencing, hoarding, watching, and lighting by night as well as by day, required not only for the proper execution but also for protection of the public and the safety of any adjacent roads, streets, pavements, walls houses, building and other erections matters or things. The bidder shall take down and remove any or all such centering, scaffolding, staging, planking, timbering, strutting, shoring etc. as occasion shall require or when ordered so to do so and shall fully reinstate and make good all matters and things disturbed during the execution of the works, to the satisfaction of the Owner.
- 9.4** Throughout the execution of the work, the Bidder or his representative duly authorized and fully responsible and technically conversant with the work under this agreement, acting on his behalf shall be available at the site for supervising the work. The Bidder shall make adequate arrangements for watchmen to guard the materials brought by them to the site and shall ensure the safety, breakage and any theft of materials fixed or unfixed by him. Any material, T & P brought to the site for bonafide use of the Project shall not be removed/ shifted from the site without the prior written permission of the Engineer/Owner.
- 9.5** The bidder must provide at his cost leveling pipe, steel/ metallic tapes etc. required by the supervising staff of the Owner’s/Owner’ representative during execution of the work.
- 9.6** Whenever required by the Owner, the Bidder shall provide electrical drawings / details before execution of work and get them approved by the Owner.
- 9.7** Wherever the specification of any item indicates the usage of approved equivalent of any material, the Bidder shall get the sample of the equivalent material approved from the Owner before execution. The approval of the equivalent material is entirely at the discretion of the Owner.

**10.0 Infrastructure:** For storage of materials, the bidder must provide at his own cost sufficient fenced and covered appropriate area on site for storage of the above materials with lock and key arrangement. For arranging meetings, a suitable sized table and chairs shall be provided by Bidder. Temporary space shall be provided to the Bidder for construction of stores for storage of materials /site office/ labour hutments for the project period.

**11.0 Site Establishment:** The bidder shall provide all stores, workmen and materials. All materials likely to deteriorate in the open shall be stored under suitable cover. The security of the bidder’s equipment and materials is his own responsibility. The Owner accepts no liability for loss or damage to the bidder’s plant tools or materials. The materials issued to the bidder by the Owner will remain under the custody of bidder as a trustee. However, title on the same will remain with the Owner. The bidder will be responsible for loss or damage to such materials and shall

preserve them in good working conditions as required for the contract and good construction practices till such time that they are incorporated in the works and erected, aligned and fully installed in position and handed over to the Owner. In case the Owner feels that arrangements made by the bidder are not adequate he shall advise the bidder and the bidder shall promptly take corrective action. In case the bidder fails to take corrective action, the Owner shall take such corrective action and recover the cost thereof from the bidder's bills. Accounts of such material on completion of work shall be rendered and surplus material returned to the Owner as per instructions of Owner. The bidder shall clear away periodically or as instructed by the Owner any rubbish, scrap materials, etc. and dump the same in the authorized dump sites notified by local authority/area indicated by the Owner. All construction materials shall be neatly stacked in an orderly manner as directed by the Owner and care shall be taken to allow proper access to workmen and easy movement of men, vehicles, cranes and materials. The bidder shall maintain all the drawings carefully mounted on the board of appropriate size and well protected from the ravages of weather, termites and other insects. The bidder shall not permit the entry to the site of any person not directly connected/concerned with the work without first having obtained the written permission of Owner. The bidder shall submit a list of plants, equipments, tools, tackles, etc. which he will use, to perform the work. These tools, etc. shall not be removed from the site till the completion of job. A gate pass must be obtained from the Indian Institute of Technology Roorkee, chief proctor office, in order to remove from site any plant equipment, tools and materials. All items such as instructions and other pertinent data regarding erection/commissioning and maintenance should be typed and classified for transmittal in a manner approved by the Owner. For all employees of Owner, the bidder shall conform for no misconduct from any of his workforce; failure of this will be sufficient cause for removal of such person from the site.

**12.0 Messing & Accommodation:** The bidder will make his own arrangements for messing and accommodation. No accommodation and messing shall be provided by the Owner.

### **13.0 Procurement, Consumption and Storage of Materials**

- 13.1** The bidder shall, at his own expenses, provide all materials including cement & steel required for the works. Adequate stocks of all materials required for the work are to be maintained at site. No material (unless provided elsewhere in this document) shall be supplied by the Owner.
- 13.2** All materials to be provided by the bidder shall be in conformity with the detailed specifications laid down in the contract and the bidder have to prove that the materials conform to the laid down specifications, if requested by the Indian Institute of Technology Roorkee.
- 13.3** All materials required for execution of work must be approved by the site representative of the Owner before they are actually put to use. All facilities for prior inspection of materials and subsequent inspection of work by the Site Engineer must be made available.
- 13.4** The bidder shall, at his own expenses and without delay, supply to the Owner samples of materials proposed to be used in the work. The Owner shall within seven days of supply of samples, or within such further period as Owner may require and intimate the bidder in writing, whether samples are approved by Owner, or not. If samples are not approved, the bidder shall forthwith arrange to supply, for their approval, fresh samples complying with the specification laid down in the contract.
- 13.5** The Owner shall have full powers to require removal of any or all the materials brought to site by the bidder which are not in accordance with the contract specifications or do not conform in character or quality to the samples approved by the Owner. In case of default on the part of the bidder in removing rejected materials, the Owner shall be at liberty to have them removed by other means. The Owner shall have full powers to direct other proper materials to be substituted for rejected materials and in the event of the bidder refusing to comply. The owner may cause the same to be supplied by other means. All risks and costs which may attend upon such removal and/or substitution shall be borne by the bidder.
- 13.6** Bidder shall be responsible for procurement of all materials/ equipments etc. No delay due to the non-availability of any material equipment will be entertained by Owner.

#### **14.0 Method of storing the materials**

- 14.1** The bidder shall at his own cost, provide for all necessary storage on the site in specified areas for all materials such as steel, cement and such other materials which are likely to deteriorate by the action of sun, wind, rain, dampness or other natural causes due to exposure in the compounds or in stores in such a manner that all materials, tool etc. shall be duly protected from damage by weather or any other cause.
- 14.2** Materials required for the works, by the bidder be stored by the bidder only at places approved by the Owner. Storage and safe custody of materials shall be the responsibility of the bidder. All the materials including bidder's Tools & Plants brought by the bidder to the site shall become and remain the property of the Owner and shall not be removed off the site without prior written approval of the Owner/Owner. But whenever the works are finally completed and advances, if any, in respect of such materials are fully recovered, the bidder shall at own expenses forthwith remove from the site all surplus materials supplied by him and upon such removal, the same shall revert in and become the property of the bidder.

**15.0 Shuttering and Scaffolding Materials:** It shall be desirable to have adequate amount of shuttering and scaffolding materials to complete the work speedily and Owner decision so as to the quantum of these desirable/ resources of the site shall be final and binding.

**16.0 Completion of Work:** Before finally leaving site, all the Bidders stores, plants, tools and rubbish shall be removed, and the site left clean and tidy. The space allocated by the Owner shall be vacated and handed over to the Owner.

**17.0 Water and Electricity for Construction work:** Water & Electricity as per relevant section's mentioned above

#### **18.0 Employment of Labour**

- 18.1** The bidder shall comply with the requirement of statutory provisions and shall be solely responsible for fulfillment of all legal obligations under Contract Labour (R&A) Act, Inter State Migrant Workmen (Registration of Employment and condition of Service Act, Payment of Wages Act., Minimum Wages Act, Workmen's Compensation Act, Factories Act, Employee's Provident Fund & Miscellaneous Provisions Act, Payment of Bonus Act, Payment of Gratuity Act, Industrial Disputes Act and all other Industrial/Labour enactments and Rules made there under as applicable from time to time. In case Owner incurs any liability towards payment of any dues, compensation, cost of any other liability of any kind whatsoever, due to non-fulfillment of statutory provisions under any industrial/labour laws by the bidder, the same shall be made good by the bidder and Owner shall have full right to recover and claim the same against the bidder from his outstanding bills or otherwise. No labour to stay at site.
- 18.2** The bidder will be expected to employ on the work only his regular skilled employees with experience of this particular work. The permission of the Owner must be obtained before tradesman are recruited locally for the work. This rule does not apply to unskilled labour. No female labour shall be employed in dark hours/ i.e. hours prohibited under the applicable law. No person below the age of eighteen years shall be employed at any point of time. The bidder shall pay, to each person, the wages as per minimum Wages Act of the State Government.
- 18.3** All traveling expenses including provision of all necessary transport to and from site, lodging allowances and other payments to the bidder's employees are his own responsibility. The hours of work on the site shall be decided by the Owner and bidder shall adhere to the same. All bidders employees shall wear safety helmet and such identifications marks as may be provided by bidder on work site and duly approved by Owner. All notices displayed on the site and any instructions issued by the Owner shall be strictly adhered to by the Bidder's and/or his sub-bidders employees. The bidder shall be required to maintain employment records as covered in relevant Acts and produce documentary evidence to the effect that he has discharged his obligations under the Employees Provident Fund Act 1952, and ESI Act, 1948 Group Insurance and other Acts for the workmen working at site.
- 18.4** The bidder shall comply with the provisions of the Apprentices Act 1961, and the rules and orders issued there under from time to time. If he fails to do so, his failure will be a breach of the contract and the Dean Infrastructure/Executive Engineer may in his discretion, without prejudice to any other right or remedy

available in law, cancel the contract. The bidder shall also be liable for any pecuniary liability arising on account of any violation by him of the provisions of the said Act.

**19.0 Working and Safety Regulations:** The bidder shall observe all statutory safety and legal requirements regulations issued by Central and State Governments applicable to the work as well as any local regulations applicable to the site issued by the Owner or any other authority.

**20.0** Particular attention is drawn to the following: In case of accident, the Owner shall be informed in writing forthwith and First-Aid, Hospitalization shall be provided by the Bidder. The bidder shall strictly follow regulations laid down by Govt. and State authorities in this regard and all cases are to be defended by the bidder. The Owner shall not refund any insurance claims. Bidder shall fence his plant, platforms, excavations etc. Compliance with all electricity regulations. Compliance with statutory requirements for inspection and test of all lifting appliances and auxiliary lifting gear. Staircase, doors or gangways shall not be obstructed in any way that will interfere with means of access of escape. Where it is necessary to provide and/or store petroleum products or petroleum mixtures and explosive, the bidder shall be responsible for carrying out such provision and/or storage in accordance with the rules and regulation laid down in Petroleum Act 1934. Explosive Act 1948 and Petroleum and Carbide of Calcium Manual Published by the Chief Inspector of Explosive of India. All such storage shall have prior approvals of the Owner. In case any approval or clearance from Chief Inspector of Explosive or any statutory authorities is required, the bidder shall be responsible for obtaining the same.

The bidder shall have his own Fire Fighting Extinguishers and Equipment. The bidder shall be responsible for the provision of all safety notices safety equipments including the safety gadgets for his workmen required by both the relevant legislation and such as the Owner may deem necessary. While working at heights, safety belts and safety helmets shall necessarily be used.

**21.0 Owner's and Bidder's Risks:** The Owner carries the risks, which this Contract states are The Owner risks, and the Bidder carries the risk, which this Contract states are The Bidder's risks.

**21.1** Owner's Risks: The Owner is responsible for the accepted risks which are:

- a. In so far as they directly affect the execution of the Works. These include war, hostilities, invasion, act of foreign enemies, rebellion, revolution, insurrection of military or usurped power, civil war, riot commotion or disorder (unless restricted to the Bidder's Employees), and contamination from any nuclear fuel or nuclear waste or radioactive toxic explosive, or
- b. A cause due solely to the design of the Works, other than the Bidder's design.

**21.2** Bidder's Risks: All risks of loss or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the Contract other than the accepted risks of the owner.

**21.3** The Bidder shall be responsible for all injury to persons, animals or things, and for all damages to the structural and/or decorative part of property which may arise from the operations or neglect of himself or of any sub-bidder or of any of his or sub-bidder's employees whether such injury or damage arises from carelessness accident or any other causes whatsoever in any way connected with the carrying out to the Contract. This clause shall be held to include inter alia any damage to buildings, whether immediately adjacent or otherwise and any damage to roads, footpaths, or ways as well as all damage caused to the buildings and the work forming the subject to this Contract by frost, rain or other inclemency of the weather. The Bidder shall indemnify the Owner and hold him harmless in respect of all and any expenses arising from any such injury or damage to persons or property as aforesaid and also in respect of any claim made in respect of injury or damage under any acts of Government or otherwise and also in respect of an award of compensation or damages consequent upon such claim. The bidder shall make good all damages of every sort mentioned in the Clause, as to deliver up the whole of the Contract works complete and perfect in every respect and so as to make good or otherwise satisfy all claims for damage to the property of third parties.

## **22.0 Insurance**

- 22.1** The Bidder shall provide, in the joint names of the Owner and the Bidder, insurance cover from the Start Date to the end of the Defects Liability Period, in the amounts and deductibles stated in the Contracted Data for the following events which are due to the Bidder's risks and shall be covered under respective policies as under:
- a. Workmen Compensation Policy;
  - b. Bidder's All Risk Policy;
  - c. Third Party Insurance.
- 22.2** Policies and certificates for insurance shall be delivered by the Bidder to the Owner for approval before the Date of Start of work i.e. dates of execution of the contract. All such insurance shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.
- 22.3** If the Bidder does not provide any of the policies and certificates required, the Owner may affect the insurance which the Bidder should have provided and recover the premiums the Owner has paid from payments otherwise due to the Bidder or if no payment is due, the payment of the premiums shall be a debt due.
- 22.4** Alterations to the terms of the insurance shall not be made without the approval of the Owner.
- 22.5** Both parties shall comply with the conditions in the insurance policy.

**23.0 Setting out Works:** The bidder shall set out the works and responsible for the true and perfect setting out of the same and for the correctness of the positions, levels, dimensions and alignment of all parts thereof, if at any time any error shall appear during the progress of any part of works the bidder shall at his own expenses rectify such error, if called upon to the satisfaction of the Owner.

**24.0** Bidder to remove all offensive matter, non-suitable material etc immediately.

- 24.1** All debris, excavated soil, filth or other matter of an offensive nature taken out of any trench, sewer, drain cesspool or other place shall not be deposited on the surface but shall be at once carted away by the bidder out of the premises/ site under intimation to concerned authorities.
- 24.2** Any material brought on site if found unsuitable shall be removed from site at once by the Bidder under intimation to the concerned authorities.

## **25.0 Inspections by Owner**

- 25.1** The representative of the Owner at all times have free access to the works and /or to the workshops, factories or other places where materials are being prepared or constructed for the Contract and also to any place where materials are lying or from which they are being obtained. No person except the representatives of Public authorities shall be allowed on the work at any time without the written permission of the Owner. If any work is to be done at a place other than the site of the works, the Bidder shall obtain written permission of the Owner for doing so.
- 25.2** The Owner and their representatives shall have the right to test and/ or inspect the works to confirm their conformity to the contract, at all times, whenever in progress either on the site on the Bidder's premises wherever situated or any firm or company where work in connection with this contract may be in hand. All records, registers or documents relating to the works including materials used on works shall be kept open to the inspection of the Owner or his Authorized representative when so called for in writing.
- 25.3** The Bidder shall get the quality of work done inspected for material and workmanship at different stages of execution as per instructions given by the Owner or their representative from time to time. Any item of work done which is found not conforming to the Contract shall be rejected by the Owner. The decision of the Owner in such cases shall be final.
- 25.4** The inspections and tests may be conducted on the premises of the Bidder or at the Project site. When carried out on the premises of the Bidder or its sub-Bidder(s), all reasonable facilities and assistance including access to drawings and production data shall be furnished to the inspectors at no charge to the Owner.
- 25.5** Should any inspected items of work fail to conform to the specifications, the Owner shall communicate them and the Bidder shall either replace them or make all alterations necessary to meet specification requirements free of cost to the Owner.



**25.6** The Bidder shall permit the Owner/Architect to inspect the Bidder's accounts and records relating to the performance of the Bidder and to have them audited by auditors appointed by the Owner, if so required.

#### **26.0 Covering Up/Uncovering of Works**

- 26.1** No part of the works shall be covered up without the approval of the Owner and the Bidder shall afford full opportunity for examination and inspection by the Owner. The bidder shall give due notice to the EIC about the work to be covered up for its measurements and examination. The EIC shall within a reasonable time attend for the purpose of examining such work, unless the EIC specifically advises the Bidder in writing of his unwillingness not to attend for such examination in which case the Bidder may proceed further with the Contract work.
- 26.2** Should the Owner consider it necessary in order to satisfy himself as to the quality of the work, the Bidder shall at any time during the continuance of the contract pull down or cut into any part of the work and make such opening into and to such an extent through the same, as the Engineer may direct and the Bidder shall make good the whole to the satisfaction of the Engineer, should the work prove to be faulty or in any respect not in accordance with the terms of the contract documents, the Engineer shall be at liberty to order such further removal as he may consider necessary and the whole of the expenses incurred shall be borne by the bidder. If however, the work proves to be sound and in accordance with the contract document, the actual expenses incurred in such examination will be borne by the Owner.
- 26.3** Rates charged by the Bidder for works performed under the contract shall not vary from the rates quoted by the Bidder in its bid, with the exception of any price adjustments authorized in SCC or in the Owner's request for bid validity extension, as the case may be.
- 26.4** If requested by the Owner, the Bidder shall provide the Owner with a detailed cost breakdown of any rate in the Schedule of Quantities.
- 26.5** The Owner may at any time / stage of execution demand for the Analysis of Rates for any item / items of work which in their opinion is / are abnormally high / low rates or required for the Analysis of Rates of other Publish / extra item / items. The Bidder is bound to present the same and if the Bidder is unable to present a justified Analysis of Rates for any item / items, the rate / rates for such item may be adjusted accordingly and the decision of the Owner in such cases shall be final.

#### **27.0 Change in the order/ Extra items of work.**

- 27.1** The Owner may at any time, by written order given to the Bidder, make alterations in, omissions from, additions to, or substitutions for, in drawings, designs or specifications or quantities of the items of work.
- 27.2** Owner reserves to itself the right of omission of any item of work from the awarded Publish at any time / stage during the execution of work and award the same to another agency / bidder.
- 27.3** The Owner may at any time by written order given to the Bidder, increase the scope of work or include any new item of work. The Bidder shall be bound to carry out such works, the rates for which shall be arrived as below:
- a. In the case of Extra Item(s) being the schedule item(s) (Delhi Schedule of Rates item), these shall be paid as per the schedule rate (at the time of tender) plus/minus percentage above/below quoted contract amount. Payment of Extra Item(s) in case of non-schedule item (Non-DSR item) shall be made as per the prevailing market rate.
  - b. In the case of Substituted item(s) being the schedule item(s) (Delhi Schedule of Rates item), these shall be paid as per the schedule rate (at the time of tender) plus/minus percentage above/below quoted contract amount. Payment of substitute in case of non-schedule item (Non-DSR item) shall be made as per the prevailing market rate.

#### **28.0 Payment**

- 28.1** The method and conditions of payment to be made to the Bidder under the contract shall be specified in SCC.
- 28.2** Payment shall be made promptly by the Owner within thirty (30) days of certification of the bill by the Owner.
- 28.3** All intermediate running payments to the bidder shall be regarded as payments by way of advance against the final payment and shall not preclude the requiring of bad, unsound and imperfect or unskillful work to be removed, taken away and reconstructed or re-erected.

**29.0 Variations and Provisional Cost (If applicable):**

- 29.1 Where work cannot be measured and valued properly, the Bidder shall be allowed day work rates on the prices prevailing when such work is carried out (unless otherwise provided in the contract): a. At the rates if any inserted by the Bidder in the priced Schedule of Quantities or b. If no such rates have been inserted then at the rates prevailing in the market for material and labour and at the control rates for the controlled materials including in all cases the rate for delivery of the material at the work.
- 29.2 Provided that in any case voucher specifying the time daily spent upon the work (and if required by the Owner the workman's names) and the materials used shall be delivered for verification to the Owner, or his authorized representative not later than the end of the week following that in which the work has been executed. Effect shall be given to the measurement and valuation of variations in interim Certificates and by adjustment of the total Contract Value.

**30.0 Claims for Extra or for Deductions**

- 30.1 The Owner shall not be responsible for the payment of any claim for extra work not included in the contract nor the Bidder shall be entitled to claim any addition to the contract sum in respect of any changes or alterations in the materials used unless the same shall have been ordered or sanctioned, as the case may be, in writing by the Owner.
- 30.2 The Bidder has to submit a monthly return by 10th of the ensuing month for any extra work which in his opinion is not covered by the contract agreement through the Owner's/ Owner's representatives and obtain a receipt from the authorized signatory of the Owner. Failing this, he shall have no right to any such claim, whatsoever may be the circumstances, later on.
- 30.3 In the event of any dispute arising either as to validity of the claim or as to the account to be paid or allowed in respect thereof, the decision of the Owner shall be final and binding on the bidder. In the meantime, the Bidder may either proceed with the work in question or suspend the same as may be determined by the Owner.
- 30.4 All extra works (those permitted by Owner) of every description shall be executed by bidder on site of work in pursuance of any of the provision of the contract, shall be measured up, and shall be paid according to actual quantities ascertained by such measurements and the prices as finalized by the Owner based on the priced schedule of quantities so that such priced schedule of quantities shall include all such operations and accessories as appear in the said schedule of prices or specification to be or shall in the opinion of the Owner the contingencies upon the works mentioned in such schedule of prices or required to make such works perfect and fit for use.
- 30.5 Provided also that if any work shall be ordered by the Owner and executed by the Bidder for the payment of which no provision in the opinion of the Owner have been made in the priced schedule of quantities or the specifications, the Owner shall fix and determine such prices for the same based on the prices appearing in the priced schedule of quantities, such allowance being made as may seem to the Owner sufficient for any difference in the character of conditions of the work. However, rates for extra items shall be fixed on the basis of actual rate analysis.
- 30.6 If, it shall appear that the work has been executed with unsound, imperfect or unskilled workmanship, or with material of any imperfect or any inferior quantity or otherwise not in accordance with the contract documents the Bidder shall at his own cost rectify, reform, remove, or reconstruct the same, wither in the whole or in part, as may be directed by the EIC, whether or not the value of any such work or materials shall have been included in any payment made to the Bidder.
- 30.7 The Bidder shall remove all malba etc., wash and clean the floors and hand over the site quite clean on the completion of the work.

**31.0 Delay in the Bidder's performance**

- 31.1 Execution of the work and performance of the services shall be done by the Bidder in accordance with the time schedule specified by the Owner in the Notice inviting tender.
- 31.2 If, at any time during performance of the contract, the Bidder should encounter conditions impeding timely execution of the works and performance of services, the Bidder shall promptly notify the Owner in writing of the fact of the delay, its likely duration and its cause(s). As soon as possible, after receipt of the Bidder's notice, the Owner shall evaluate the situation and may, entirely at its discretion, extend the Bidder's time for performance with or without liquidated damages

**32.0 Liquidated Damages:** If the Bidder fails to execute any or all of the works or to perform the services within the period(s) specified in the contract, the Owner shall deduct from the contract value, as liquidated damages, a sum specified in the SCC for each week or part thereof delay until actual completion or performance, up to a maximum deduction of the percentage specified in SCC. Once the maximum is reached, the Owner may consider termination of the contract.

### **33.0 Termination by Default**

The Owner may without prejudice to any other right or remedy, by written notice (of fifteen days) of default sent to the Bidder, terminate the contract in whole or part: a) if the Bidder fails to complete any or all of the works within the period(s) specified in the NIT or any amendment thereof, or within any extension thereof granted by the Owner, or for any cause including unsatisfactory performance or violation of the terms and conditions of the contract whatsoever or b) if the Bidder fails to perform any other obligation(s) under the contract.

In the event, the Owner terminates the contract in whole or in part, the Owner may procure, upon such terms and in such manner as it deems appropriate, works or services like those unexecuted and the Bidder shall be liable to the Owner for any excess costs for such similar work or services. However, the Bidder shall continue the performance of the contract to the extent not terminated.

The owner may terminate the contract bond without prejudice due to financial malpractice/ misbehavior/ verbal or physical assault/ poor quality of work etc. Further to this the bidder shall be debarred for two years for participating in any tender of IIT Roorkee.

Termination of the contract shall not relieve the agency/bidder from any of his obligations imposed by the contract with respect to the work performed by them prior to such termination.

In case of termination of the contract, IIT Roorkee reserves the right to get the work done by deploying other agencies. Cost incurred for the same will be recovered from agency's bill /PBG/pledged FDR.

For any above-mentioned cause including unsatisfactory performance or violation of the terms and conditions of the contract whatsoever, the contract is liable to be terminated and the agency is liable to be blacklisted and security deposit/ Performance Bank Guarantee submitted by the agency shall be forfeited and bank guarantee will be encashed.

### **34.0 Force Majeure**

**34.1** The Bidder shall not be liable for forfeiture of its performance guarantee, liquidated damages or termination by default, if and to the extent that, its delay in performance or other failure to perform its obligations under the contract is the result of an event of Force Majeure.

**34.2** For purposes of this clause, "Force Majeure" means an unforeseeable event beyond the control of the Bidder and is not because of the Bidder's fault or negligence. Such events may include acts of the Owner either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics.

**34.3** If a Force Majeure situation arises, the Bidder shall promptly notify the Owner in writing of such conditions and the cause thereof. Unless otherwise directed by the Owner in writing, the Bidder shall continue to perform its obligations under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

**35.0 Termination for Insolvency:** The Owner may at any time terminate the contract by giving written notice to the Bidder, if the Bidder becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Bidder, provided such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the Owner.

**36.0 Termination for Convenience:** The Owner, by written 30 days prior notice sent to the Bidder may terminate the contract, in whole or in part, at any time for its convenience. The notice shall specify that the termination is for Owner's convenience, the extent to which performance of the Bidder under the contract is terminated, and the date upon which such termination becomes effective. The items of work that are complete and ready within (1) month after the Bidder's receipt of notice of termination shall be accepted by the Owner at the contract terms and values. For the remaining works, the Owner may elect;

a) to have any portion completed at the contract terms and value and/or

b)to cancel the remainder and pay to the Bidder an amount, finalized by the Owner, for partially completed works and for materials and parts previously procured by the Bidder.

### **37.0 Resolution of Disputes**

**37.1** The Owner and the Bidder shall make every effort to resolve amicably by direct informal negotiations any disagreement or dispute arising between them under or in connection with the contract. If, after thirty (30) days from the commencement of such informal negotiations, the Owner and the Bidder have been unable to resolve amicably a contract dispute, either party may require that the dispute be referred for resolutions to the formal mechanisms specified in the SCC. These mechanisms may include but are not limited to, Arbitration in accordance with rules of Arbitration Act and award made in pursuance thereof shall be binding on both the parties.

**37.2** All disputes should be under the Jurisdiction of civil court Roorkee.

**38.0 Governing language:** The contract shall be written in Hindi or English language. All correspondence and other documents pertaining to the contract that are exchanged by the parties shall be written in the same language.

**39.0 Governing law:** The contract shall be governed by the laws of The Union of India for the time being in force. All disputes are subject to jurisdiction of courts at Roorkee or Honorable High Court Uttarakhand at Nainital.

**40.0 Notices:** Any notice given by one party to the other pursuant to this contract shall be sent to the other party in writing by e-mail or letter and confirmed in writing to the other party's address specified in SCC. A notice shall be effective on the date on which it is delivered, or on the notice's effective date, whichever is later.

**41.0 Discoveries:** Anything of historical or other interest or of significant value unexpectedly discovered on the Site is the property of the Owner. The Bidder is to notify the Owner of such discoveries and carry out the Owner's instructions for dealing with them.

**42.0 Dismissals of workmen:** The bidder on request from the Owner, immediately dismiss from the works any person employed by him who may be found in the opinion of the client to be unsuitable or incompetent or who has shown misconduct.

**43.0 Working Hours:** Normal working hours shall be from 08:45 a.m. to 05:30 p.m. No construction work of an important structural nature shall be carried out on Sundays, Holidays and during nights. However, working hours can be extended in case of urgency with prior approval of IIT Roorkee.

## **B. TIME CONTROL**

### **44.0 Program**

**44.1** Within the time stated in the Contract Data the Bidder shall submit to the Owner for approval a Program showing the general methods, arrangements, order, and timing for all the activities in the works, along with weekly cash flow forecast.

An update of the Program shall be a program showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work including any changes to the sequence of the activities.

**44.2** The Bidder shall submit to the Owner, for approval, an updated Program at intervals no longer than the period as stated in clause no. 7.1. If the Bidder does not submit an updated Program within this period, the Owner may withhold the amount stated in the Contract Data from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue program has been submitted.

**44.3** The Owner's/Owner's approval of the Program shall not alter the Bidder's obligations. The Bidder may revise the Program and submit it to the Owner again at any time. A revised Program is to show the effect of Variations at any stage of work, Owner award any item/part of item of work to bidder's workman/ external agency, if in their opinion, the progress of work is suffering because of that. The work done will be added to the Bidder's bill and the amount paid for the job will be deducted from the Bidder's account.

#### **45.0 Delay and Extension of time**

If in the opinion of the Owner the work be delayed

- a) by force majeure or
- b) by reason of any exceptionally inclement weather or
- c) by reason of proceedings taken or threatened by or disputes with adjoining or neighboring owners or public authorities or
- d) by delays of other bidder or Tradesmen engaged by the Owner or the Owner and the works not referred to in the Schedule of Quantities and/or specification or
- e) by reasons of Owner's instruction or
- f) by reason of civil commotion, local combination of workmen or strike or lockout affecting any of the building trades or
- g) in consequence of the bidder not having received in due time necessary instructions from the Owner for which he shall have specially applied in writing or
- h) from other cause which the Owner may certify as beyond the control of the bidder or
- i) by reason of nonpayment of interim certificate at specified time, the Owner shall grant for approval by the Owner a fair and reasonable extension of time for completion of the Contract. In case of strike or lockout the bidder shall as soon as be given written notice thereof to the Owner, but the bidder shall nevertheless constantly use his endeavours to prevent delay and shall do all that may reasonably be required to the satisfaction of Owner to proceed with the work.

### **C. QUALITY CONTROL**

**46.0 Identifying Defects:** The Owner shall check the Bidder's work and notify the Bidder of any Defects that are found. Such checking shall not affect the Bidder's responsibilities. The Owner may instruct the Bidder to search for a Defect and to uncover and test any work that the Owner considers may have a Defect.

#### **47.0 Correction of Defects**

- 47.1** The Owner shall give notice to the Bidder of any Defects before the end of the Defects Liability Period, which begins at Completion and is defined in the Contract Data. The Defects Liability period shall be extended for as long as Defects remain to be corrected.
- 47.2** Every time notice of Defect is given; the Bidder shall correct the notified Defect within the length of time specified by the Owner' notice.

**48.0 Uncorrected Defects:** If the Bidder has not corrected a Defect within the time specified in the Owner' notice. In case it is felt by the Owner that undue delay is being done by the bidder, the same will be got done by the Owner at the risk and cost of the contractor.

### **D. COST CONTROL**

#### **49.0 Schedule of Quantities**

- 49.1** The Schedule of Quantities shall contain items for the construction work, installation, testing, and commissioning work to be done by the Bidder.
- 49.2** The Schedule of Quantities is used to calculate the Contract Price. The Bidder is paid for the quantity of the work done at the rate in the priced Schedule of Quantities for each item.

**50.0 Variations:** All variations in the program pursuant to clause no. 7.0 of GCC shall be included in the updated program produced by the Bidder.

#### **51.0 Payments for Variations**

- 51.1** The Bidder shall provide the Owner with a quotation (with breakdown of unit rates) for carrying out the Variation when requested to do so by the Owner. The Owner shall assess and finalize the quotation, which shall be given within seven days of the request or within any longer period stated by the Owner and before the Variation is ordered.

- 51.2 If the Bidder's quotation is unreasonable, the Owner may order the Variation and make a change to the Contract Price which shall be based on Owner's own forecast of the effects of the Variation on the Bidder's costs.
- 51.3 If the Owner decides that the urgency of varying the work would prevent a quotation being given and considered without delaying the work, no quotation shall be given and shall be treated as a Variation.
- 51.4 The Bidder shall not be entitled to additional payment for costs, which could have been avoided by giving early warning.

## **E. FINISHING THE CONTRACT**

- 52.0 Completion Certificate:** The Bidder shall request the Owner to issue a Certificate of Completion of the Works will do so upon deciding that the Work is completed.
- 53.0 Taking Over:** The Owner shall take over the Site and the Works within seven days of the Owner issuing a certificate of Completion. Before handing over the site, the bidder must obtain a site clearance certificate from the Owner.
- 54.0 Final Account:** The Bidder shall supply to the Owner a detailed account of the total amount that the Bidder considers payable under the Contract before the end of the Defects Liability Period. The owner shall issue a Defect Liability Certificate and certify any final payment that is due to the Bidder within 5-6 days of receiving the Bidder's account if it is correct and complete. If it is not, the Owner shall issue within 5-6 days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Owner shall decide on the amount payable to the Bidder and issue a payment certificate within 5-6 days of receiving the Bidder's revised account.

## **SPECIAL CONDITIONS OF CONTRACT (SCC)**

The following Special Conditions of Contract are supplementary to the General Conditions of Contract. Whenever there is a conflict, the provisions herein shall prevail over those in the General Conditions of Contract. The corresponding clause number of the General Conditions of Contract is indicated in parentheses.

### **1. Definition (SCC clause 1.0)**

- a) Owner means: IIT Roorkee.
- b) Site means the project site situated in IIT Roorkee GNEC Campus / Main Campus.

### **2. (i) Security Deposit: As per Critical Data Sheet.**

(ii) **Release of Security Deposit:** Release of Security Deposit: Security Deposit will be released after completion of Defect Liability Period i.e. 12 months from date of work completion.

### **3. Performance Guarantee: As per Critical Data Sheet. The performance guarantee shall be valid for a period of 60 days from the completion of the contract.**

### **4. Warranty (Defective Liability Period):**

- i) The minimum warranty period will be one Year. Equipment warranty certificates as per OEM will be submitted to the department.
- ii) During the warranty period, all elements of the system which fail due to manufacturing defects or operational wear & tear shall be replaced / repaired by the bidder without any charges. In case it is felt by the department that undue delay is being caused by the bidder in doing this, the same will be got done by the department at the risk and cost of the bidder. The decision of Dean Infrastructure in this regard shall be final.
- iii) The bidder shall warranty the performance of the system. If it is not achieved, the necessary additions/modifications shall be done by the bidder without charging any extra price. However, the owner reserves the right to have this job done by other manufacturers if the bidder does not get the work done within 15 days of issuing the notice to the bidder. The cost for the same shall be borne by the bidder.

### **5. Payment:**

**5.1** No advance payment shall be made.

**5.2** Part of the payment can be withheld by the department.

**5.3** Payments will be made on execution of at least 25% of the contract value or quarterly according to submission of bill OR as approved by Dean, Infrastructure.

**5.4** Payment shall not be released against 1st R/A bill until submission of following documents by bidder to the Owner:

- a) Measurements
- b) GST Invoice with revenue stamp.
- c) EPF & ESI deposit proof.
- d) Insurance – Bidder's All Risk (CAR) Policy, Workmen compensation policy and Third-Party Liability Insurance.

#### **5.5 Basis of Payment in RA bills**

Payment in RA bills shall be based on quantity of work executed at site (as per the item of work) & verified by Owner as per the item rate in work orders. The owner is authorized to allow payment for part rate/reduced rate/full rate for any item(s) in the Schedule of Quantity. Further owner is authorized to allow different part rates/ reduced rate for different item(s).

#### **5.6 Disallowance of payment**

If payment has been made in RA bill for any item of work but later some defect is noticed, Owner/Architect is authorized to disallow the payment in the subsequent bills till rectification of the work.

## 5.7 Final bill

The final bill complete in all respect shall be submitted by the bidder within 60 days from the date of completion of work. The total quantity may vary as per actual work execution/site requirement/and user suggested changes during execution.

The bill should be accompanied by the following documents.

- a) Work completion certificate.
- b) Site clearance status (if applicable)
- c) Indemnity certificate for labour payment and all statutory payments.
- d) Certificate of test on materials etc. (if applicable/ if conducted).
- e) Certificate of measurement sheets.
- f) Original quality control record (if applicable), measurement records and any other joint site records maintain at site (if applicable). No claim shall be entertained after receipt of the final bill.
- g) Warranty certificate (if applicable).

Settlement of the final bill shall be made subject to deduction of all dues payable by the bidder, settlement of all disputes and furnishing of all required documents/clarifications and grant of extension of time, if any, by Owner's competent authority.

## 6. Liquidated Damages

The quantum of work with stipulated time (as per discretion of EIC) will be communicated to the firm via email, hard copy or telephonically. In case of delay/partial completion, 0.5% per week of balance / unattended work subject to a maximum of 5% (Five percent) of the Contract value from the stipulated date of completion.

## 7. Resolution of Disputes

In case the parties don't agree to the advice of the owner, then the Director, IIT Roorkee shall appoint a sole arbitrator within 30 days of receipt of request forthwith. The arbitration shall be governed by the Arbitration and Reconciliation Act 1996.

## 8. Notices

For the purpose of all notices, the following shall be the address of the Owner and the Bidder.

Owner: Dean Infrastructure,  
Institute Works Department,  
Indian Institute of Technology  
Roorkee

Bidder: \_\_\_\_\_

(To be filled in at the time of Signing of the Contract)

## 9. Resolution of Disputes & Arbitration

Except where otherwise provided in the contract all questions and disputes relating to the meaning of the specifications, design, drawings and instructions here in before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the works or the execution or failure to execute the same whether arising during the progress of the work or after the cancellation, terminations, completion or abandonment thereof shall be dealt with as mentioned hereinafter.



If the bidder considers any work demanded of him to be outside the requirements of the contract or disputes any drawings, record or decision given in writing in connection with or arising out of the contract or carrying out of the work, he shall promptly within 15 days request the Owner in writing for written instruction or decision.

If the Bidder is dissatisfied with this decision, the Bidder shall within a period of 30 days from receipt of the decision, give written notice to the IIT Roorkee for appointment of Arbitrator failing which the said decision shall be final binding and conclusive and not referable to adjudication by the Arbitrator.

Except where the decision has become final, binding and conclusive in terms of Sub Para (i) above disputes or difference shall be referred for adjudication through arbitration by a sole arbitrator appointed by The Director, IIT Roorkee. If reason whatsoever another sole arbitrator shall be appointed in the manner aforesaid. Such a person shall be entitled to proceed with the reference from the stage at which it was left by his predecessor. It is a term of this contract that the party invoking arbitration shall give a list of disputes with amounts claimed in respect of each dispute along with the notice for appointment of arbitrator. It is also a term of this contract that no person other than a person appointed by IIT Roorkee as aforesaid should act as arbitrator and if for any reason that is not possible, the matter shall not be referred to arbitration at all.

It is also a term of this contract that if the contractor does not make any demand for appointment of arbitrator in respect of any claims in writing as aforesaid within 30 days of receiving the intimation from the Owner that the final bill is ready for payment, the claim of the bidder shall be deemed to have been waived and absolutely barred and IIT Roorkee shall be discharged and released of all liabilities under the contract in respect of these claims. The arbitration shall be conducted in accordance with the provisions of the Arbitration and Conciliation Act, 1996 (26 of 1996) or any statutory modifications or reenactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceedings under this clause.

#### **10. Protection of environment**

8.1 The Bidder shall take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising because of his methods of operation.

8.2 During continuance of the contract, the Bidder and his sub-bidders shall at all times abide by all existing enactment on environmental protection and rules made there under, regulations, notifications and bye-law of the State or Central Government, or local authorities and any other law, by-law, regulations that may be passed or notification that may be issued in this respect in future by the State or Central Government or the local authority.

8.3 Salient features of some of the major laws that are applicable are given below:

The Water (Prevention and Control of Pollution) Act, 1974 This provides for the prevention and control of water pollution and the maintaining and restoring of wholesomeness of water. 'Pollution' means such contamination of water or alteration of the physical, chemical or biological properties of water or such discharge of any sewage or trade effluent or of any other liquid, gaseous or solid substance into water (whether directly or indirectly) as may, or is likely to create a nuisance or render such water harmful or injurious to public health or safety, or to domestic, commercial, industrial agricultural or other legitimate uses, or to the life and health of animals or plants or of aquatic organisms.

The Air (Prevention and Control of Pollution) Act, 1981, This provides for prevention, control and abatement of air pollution, 'Air Pollution' means the presence in the atmosphere of any air pollutant', which means any solid, liquid or gaseous substance (including noise) present in the atmosphere in such concentration as may be or tend to be injurious to human beings or other living creatures or plants or property or environment.

The Environment (Prevention and Control of Pollution) Act, 1986 This provides for the protection and improvement of the environment and for matters connected to herewith, and the prevention of hazards to human beings. Other living creatures, plants and property, 'Environment' includes water, air and land and the interrelationship which exists among and between water, air and land, and human beings, other living creatures, plants, micro-organism and property.

The Public Liability Insurance Act 1991. This provides for public liability insurance for the purpose of providing immediate relief to the persons affected by accident occurring while handling hazardous substance

means any substance or preparation which is defined as a hazardous substance under the Environment (Protection) Act 1986 and exceeding such quantity as may be specified by notification by the Central Government.

**11. Specifications to be followed for execution of works are:**

**For Civil Works:** CPWD Specifications 2009 Vol. 1 and Vol. 2 with up to date correction slips. (Hereinafter called CPWD specifications also) and Specification mentioned in This Publish document for each project.

**For Electrical Works:** CPWD General Specifications for Electrical Works, Part-I (Internal) 2023 and CPWD General Specifications for Electrical Works, Part-I (External) 2023 and Specification mentioned in this bid document for each project.

12. If the bidder wants to offer any unconditional rebates on their offer that should be clearly mentioned.
13. In case any information furnished by the bidder is found to be false / forged / incorrect at any stage, their bid shall be rejected, and the bidder shall not be allowed to participate in the re-bidding process of the work.
14. **Clarification of Bids/ Shortfall Documents:** IIT Roorkee may, at its discretion, ask the bidder for clarifications / shortfall documents related to his bid. The request for clarification shall be given in writing. Depending on the reply of the bidder, his bid shall be ignored or considered further.
15. Tender will be awarded on an overall L1 basis.
16. **Abnormally High and Low Bids:**
- a) Tender evaluation committee (TEC) will observe the rates and seek justifications if that are abnormally high/low. Threshold value over which the rates would be judged high/low shall be decided by the TEC looking into the nature of work and their specification on case-to-case basis
  - b) If required, necessary for high bids negotiation will be done with the approval of the Competent Authority. However, if the rates will be found abnormally low additional security shall be got deposited as per the following formula:
    - i) Up to 30% less than the estimated cost: nil
    - ii) Above 30% and less than up to 50%: 20%
    - iii) Above 50% and less than up to 70%: 40%
17. Working/Running Contractor who have completed their work upto/ above the awarded value of contract bond duly verified by the Engineer-in-charge shall be considered as work completed and such contractors shall be allowed to participate in tenders.
18. Only 'Class-I local supplier' and 'Class-II local supplier', as defined in the Public Procurement (Preference to Make in India), Order 2017 shall be eligible to bid in the tender. For more details, please refer to: Order No.: P-45021/2/2017-PP (BE-II), DPIIT, Ministry of Commerce and Industry issued Dated: 16th Sept. 2020. A self-certificate has to be provided in this regard that the item offered meets the local content requirement for 'Class-I local supplier' & 'Class-II local supplier' (as per Annexure-C).
19. The estimate is based on DSR-2022 (E&M) / DSR 2021(Civil) / Nonscheduled rates with 18% GST and 1% BOCWW Cess.
20. In case the GST rate is changed by the GOI then the item rate in the estimate shall be changed on pro-rata basis.

**Undertaking**

(On Non-Judicial stamp paper of Rs. 100/- & duly notarized)

Name of the address of the bidder: .....

NIT No.....

Name of the work: .....

Due Date: .....

I/We have read and examined the Tender document for the work. I/We hereby submit bid for the execution of the work specified for the Institute within the time specified in NIT of quantities and in accordance with the specifications, designs, drawing and instructions in writing referred to 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 Bid open for ninety (90) days from the due date of its opening and not to make any modification in its terms and conditions.

Earnest Money as mentioned in the critical data sheet is hereby forwarded in Bankers' Cheque / Demand Draft / Fixed Deposit Receipt issued by scheduled bank. If I/We, fail to furnish the prescribed performance guarantee within prescribed period. I/We agree that the Institute has to right to forfeit the said earnest money absolutely. Further, if I/We fail to commence work as specified, I/We agree that the Institute has to right 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 NIT. 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 bidder on back-to-back basis. Further that, if such a violation comes to the notice of owner, then I/we shall be debarred for tendering in IWD, IIT Roorkee in future forever. Also, if such a violation comes to the notice of the owner before the date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee.

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

I/We hereby declare that I/We have no near relative connection by marriage to any staff of the Institute.

The information given in the tender form is correct and to the best of my knowledge.

Dated: Signature of Bidder

Witness: Postal Address

Occupation:

## PERFORMANCE GUARANTEE BOND

*In consideration of the Indian Institute of Technology Roorkee having agreed under the terms and conditions of agreement No..... dated..... made between .....*

*And..... (hereinafter called "the contractor(s)") ..... for the work..... (hereinafter called "the said agreement") having agreed to production of an irrevocable Bank Guarantee for..... (Rupees..... only) as a security/guarantee from the contractor(s) for compliance of his obligations in accordance with the terms and conditions in the said agreement,*

*1. We .....( hereinafter referred to as "the Bank") hereby undertake to pay to IIT Roorkee (Indicate the name of the bank) an amount not exceeding Rs..... (..... only) on demand by the Indian Institute of Technology Roorkee.*

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

*3. We, the said bank further undertakes to pay to the Institute any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any court or tribunal relating thereto, our liability under this present being absolute and unequivocal.*

*The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the contractor(s) shall have no claim against us for making such payment.*

*4. We .....further agree that the guarantee herein contained shall ..... (Indicate the name of the Bank) remain in full force and effect during the period that would be taken for performance of the said agreement, and it shall continue to be enforceable till all the dues of the Indian Institute of Technology Roorkee under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till Engineer-in-charge on behalf of the Institute certified that the terms and conditions of the said agreement have been fully and properly carried out by the said contractor(s) and accordingly discharges this guarantee.*

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

*6. This guarantee will not be discharged due to the change in the constitution of the Bank or the contractor(s).*

*7. We ..... (Indicate the name of the Bank) lastly undertake not to revoke this guarantee except with the previous consent of the Indian Institute of Technology Roorkee in writing.*

*8. This guarantee shall be valid up to..... unless extended on demand by Indian Institute of Technology Roorkee. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to .....(Rupees..... only) and unless a claim in writing is lodged with us within six months of the date of expiry or the extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharged. Dated the..... day of..... for..... (Indicate the name of the Bank).*

## **SCOPE OF WORK / RESPONSIBILITIES OF THE BIDDER:**

1. Day to day electrical maintenance of all residential and non-residential buildings.
2. Complete maintenance of street/ outdoor lighting.
3. Repairing of all electrical fittings etc.
4. Complete maintenance renovations, re-wiring related to H.T. /L.T. systems, power transformers, feeder pillars, UG cables etc.
5. Other than all the above work any work related to electrical repair or maintenance may also be done by the agency.
6. All work shall be done as per the schedule given by EIC.
7. The contractor shall be bound to complete the work within the stipulated timeline as instructed by EIC. No excuses shall be entertained for the delay of contract time or award time due to machine is not working, manpower is short on site, strike of the employees, heavy rain, hot sun in summer etc.
8. Contractor or representative (with power of attorney) are bound to attend the periodic meeting (as and when called by EIC) for contract management (or any other issue related to contract) at IIT Roorkee.
9. IIT Roorkee is a Tobacco free campus, therefore instance consumption/possession of tobacco or alcoholic substance by the manpower deployed than EIC shall impose penalty for each violation on the contractor.
10. The personnel deployed shall be of good health and moral character, well behaved, obedient, experienced and skillful in their respective tasks. The Successful Bidder(s) should provide necessary uniform/apron to their labours at their own cost. The cost of Identity Cards to the staff shall also be borne by the Successful Bidder(s).
11. The personnel employed by the Successful Bidder(s) shall compulsorily wear the prescribed uniform while on duty and shall always carry his / her Identity Cards. Necessary penalty as per the assessment of EIC shall be imposed if at any instance the manpower not wearing uniform or not carrying identity card.
12. Successful Bidder(s) shall be solely responsible for accommodation, remuneration, omissions / commissions of personnel deployed at the Institute premises.
13. In case of theft of any material takes place from the office/residences on account of the negligence on the part of the personnel deployed by the Successful Bidder(s). Amount for loss/theft will be recovered from the Successful Bidder(s) while settling the bill.
14. If the described electrical work is not done as per satisfaction of EIC or any higher officer, the penalty will be imposed as per assessment of EIC. The penalty imposed by EIC will be final.
15. The bidder shall execute the required work within the time limit after the email / written instruction from IIT Roorkee side. Failure to this a penalty of 0.5% of ordered amount per day will be imposed by the EIC. In the event of continuous noncompliance of instructions, the Institute has all the right to execute the work from the other source on the total risk and cost of the bidder. In addition, action may be taken for blacklisting / debarring bidder in respect of future works / tenders.
16. The bidder should have their registered office / branch in Roorkee / Haridwar / Dehradun / equivalent distance. If not, an office should be opened in Roorkee within 30 (thirty) days of award of work, where an empowered person must be posted, who can take decision on any situation relating to the performance of the agency's obligation under this contract. The above office shall remain open till all the contractual obligations are fulfilled.
17. The bidder will depute his supervisor /Engineer to take care of site related matters.
18. The bidder shall ensure to MII compliances as per DPIIT's public procurement (preference to make in India) orders 2017.
19. Successful bidder shall pay the minimum wages as per current prevailing rates to the deployed manpower on daily wages basis and bidder will be paid accordingly.
20. Quantities are purely variable. It may be increased or decreased as per the institute's requirement.

21. **Vendor will arrange safety gears such as safety shoes, safety helmets, gloves, sleeveless jacket etc. of reputed make for the manpower deployed at his own cost. If the manpower is found not wearing safety gears, a penalty of Rs. 200 per violation per person will be imposed by the EIC.**

**Institute Engineer**

(to be submitted by the vendor/firm on its official letter head)

Self-Certificate for Local Content

**Tender No:**

**Dated**

We hereby certify that the items quoted by us against above mentioned tender no. has the local content as per below:

**Local Content (in %):** .....

**Local Supplier Class:** .....

The details of the Make in India items/parts used in the quoted products is/areas under:

- 1.
- 2.
- 3.

The details of the location(s) at which the local value addition made/manufactured is/areas under:

- 1.
- 2.
- 3.

We also understand, false declarations will be in breach of the code of integrity under rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151(iii) of the General Financial Rules along with such other actions as may be permissible under law.

**Signature:**

**Name:**

**Designation:**

**Seal of the Firm/Organization:**

## Annexure-D

### PERFORMA FOR DIRECT PAYMENT/ TRANSFER TO BANK ACCOUNT BY IIT ROORKEE

S. No.	Particulars	Information
1	Firm (Beneficiary) Name	
2	Address	
3	Complete Bank Account No. of the Firm (Beneficiary) (In case of change in Bank Account vendor write to Account Office)	
4	Bank Name	
5	Branch Address	
6	IFSC Code No.	
7	Permanent Account No.	
8	Mobile No. (for SMS)	
9	Email ID (For Information)	
10	Enrolment No. (for student)	

We undertake that all the information provided above is correct and IIT Roorkee will not be responsible in case of any error on the part of firm.

Verification by Bank (one time only)  Information given at 1,4,5,6&7 verified by Bank	
Seal and Signature of the Bank	Seal and Signature of the Firm



## List of Approved Makes

<b>S.No.</b>	<b>Materials/ Equipments</b>	<b>Manufacturer/ Make</b>
<b>A</b>	<b>I.E.I., MCBDB &amp; MCB, Cables &amp; Wires</b>	
1	MCB, Isolator, Industrial Plug Socket, RCCB, RCBO'S	Schneider Electric / Legrand / L&T / ABB / Siemens
2	MCBDB & Loose Wire Box	Legrand/ L&T/ Schneider / ABB / Siemens
3	Change Over Switches	Asco/ Russel/ Socomac/ ABB/ L&T/ Schneider / Havells
4	Automatic Transfer Switch (ATS)	Asco/ Russel/ Socomac/ ABB/ L&T/ Schneider / Havells
5	FRLS PVC insulated copper conductor single core cable for wiring. (ISI marked)	Finolex/ RR Kabel/ KEI/ Havells/ Polycab
6	MS Conduit (ISI marked) with heavy duty MS Conduit pipe accessories	BEC/ NIC/ AKG/ RMCON / MK(Honeywell) (Note: The make of accessories will be same that of conduit pipe & will comply to IS:4768 part 2 2003)
7	PVC Conduit/ Batten (ISI marked) with heavy duty PVC conduit pipe accessories	AKG/ BEC/ Precision/ MK(Honeywell)
8	Modular Switch, Socket/ Telephone Socket/ Cable TV Socket/ Data Outlet Socket/ Fan Regulator/ G.I. Boxes Etc. (Wiring accessories)/ Regulator etc.	Havells (Murano)/ Legrand (Arteor)/ Schindler Electric ( Zencelo)/ Honeywell-MK (Blenzeplus)/ ABB (Tvisha)
9	Selector Switch & Toggle Switch	Salzer (Larsen & Toubro)/ Siemens/ Kaycee
10	PVC Trunking	Legrand/ schneider/ MK(Honeywell)/ AKG/ Precision
11	G.I. Pipe	Tata/ Jindal (Hissar)/ Prakash Surya
12	Paints	Asian/ Berger/ Dulux/ Narolac
13	Terminals Blocks and Connectors	Elmax/ Wago/ Hensel/ Connectwell
14	Phenolic Laminated Sheet/ Bakelite Sheet	Hylam/ Formica/ (P-I Grade)/ Mylam/ Greenlam
15	Piano Type Switch/ Socket	Anchor/ Kinjal/ Cona
16	Ceiling Rose/ Holder/ Call Bell/ Buzzer etc.	Anchor/ Kinjal/ Cona
<b>B</b>	<b>Fans &amp; Fitting</b>	
1	LED Fittings	Wipro/ Phillips/ Crompton Greaves/ Havells
2	Exhaust Fan	Havells/ Crompton Greaves/ Usha/ Almonard/ Orient / Atomberg
3	Ceiling Fan	Havells/ Crompton Greaves/ Usha/ Almonard/ Orient / Atomberg
4	Geysers	Racold/ CG/ Havells/ Usha/ Jaquar
5	Sensor based LED Light Fittings	OCTIOT/Wipro/ Phillips/ Crompton Greaves/ Havells
<b>C</b>	<b>Street Lighting</b>	
1	Ornamental C.I. pole (Factory Finish)	Phillips/ Crompton Greaves/ Wipro/ Bajaj

2	Hot Dipped Galvanized Octagonal Pole (Factory Finish)	Crompton Greaves/ Phillips/ Bajaj/ Wipro
3	Polycarbonate Junction Box/ Enclosure	Hensel/ Spelsberg/ Neptune- Bals/ Cape Electric
4	XLPE insulated PVC Sheathed Alum. / Copper conductor Armoured cable of 1.1KV Grade	Finolex/ Universal/ Polycab/ RPG Cable/ KEI/ Havells/ Grandley/ Gemscap
<b>D</b>	<b>Sub Station Equipments</b>	
1	LT Panel/ Meter Panel Board/ Outdoor Feeder Pillar/ APFC Panel (less than 200 kVAR)/ Bus Ducts	Tricolite Electrical Industries/ Control & Switchgears Pvt. Ltd./ Sterling & Wilson/ Milestone/ Adlec Control System Pvt. Ltd./ Advance Panels & Switchgears Pvt. Ltd./ S.S. Enterprises/ A.R. Engineers
2	Air Insulated Rising Main	C&S/ L&T/ Schneider/ Legrand
3	Sandwich type Bus Trunking	C&S/ L&T/ Schneider/ Legrand
4	Moulded Case Circuit Breaker (MCCB) Thermal Release/ Microprocessor Based (Ics=Icu=100%)	Schneider Electric (NSx Series)/ Siemens (VL Series)/ L&T (D-Shine)/ Legrand (DPX3)/ ABB (Tmax)/ C & S (Winbreak-1/2)
5	Power/ Aux. Contactor 3/4 pole	Schneider Electric/ L&T/ Siemens/ Legrand/ ABB/ C&S
6	Potential Transformer/ Current Transformer	Automatic Electric/ Gilbert & Maxwell/ Matrix/ Precise/ L&T/ Kappa/ Rishabh / CGL
7	LED type indicating lamps/ Push Button	Schneider Electric/ L&T/ Siemens/ C&S/ GE
8	Overload relays with built-in Single-Phase Preventer	Schneider Electric/ L&T/ Siemens/ C&S/ ABB
9	Conventional/ Electronic Digital Meters (A/V/PF/Hz/KW/KWH)	Conzerv/ Larsen & Toubro/ Secure/ AE/ C&S/ Siemens/ Schneider/ ABB/ Rishabh
10	Timer	Siemens/ L&T/ Legrand/ ABB/ Schneider Electric/ C&S
11	Fasteners/ G.I. Clamps	Hilti/ Fischer/ Chillil/ GMGR
12	D.W Corrugated HDPE Pipe (ISI marked)	REX/ Dura plast/ Zenduct/ Triputi/ Duraline
13	Transformer (Oil/ Dry type)	Crompton/ ABB/ Schneider/ Voltamp/ Kirloskar (only oil type)
14	HT Panel/ Ring Main Unit	Siemens/ ABB/ L&T/ Schneider
15	H.T Cable (ISI marked)	CCI/ Polycab/ Universal/ KEI/ Havells/ RPG Cables
16	HT End Termination Cable Joint Kit	Reychem/ Cab Seal/ 3M
17	ACBs (with display)	Siemens/ L&T/ ABB (Emax)/ C&S / Legrand/ Schnieder
18	Rubber Mat	Jyoti/ Deep Joyti/ Premier (duly ISI marked)
19	Fire Extinguishers	Minimax/ New Age/ Safex/ Ansul/ Ceasefire/ Amerex
20	Capacitors & Reactors/ APFC Relay	EPCOS/ L&T/ ABB/ Siemens/ Schneider
21	APFC Panel (200 KVAR & Above) (Accessories make will be as per manufacture's standards)	L&T/ Schneider/ ABB/ Siemens/ Legrand/ C&S

22	Cable Glands Double Compression with earthing links	Comet/ Cosmos/ Dowells/ Gripwell/ Jainson / Hax Brass (Copper Alloy India)
23	Bimetallic Cable Lugs	Comet/ Dowells (Biller India)/ Hax Brass (Copper Alloy India)/ Jainson/ Action
24	MS / GI Cable Tray	Pilco/ Slotco/ Pasco/ MEM/ BEC/ Steelways/ Legrand
25	Programmable Logic Controller (PLC)	Siemens / Woodward/ Allen Bradley / Delta / Mitsubishi
<b>E</b>	<b>DG Sets</b>	
1	Diesel operated power Generating Engine	Cummins India/ Caterpillar/ Ashok Leyland/ Kirloskar/ Mahindra/ Perkins
2	Alternator	Stamford/ Lerroy Sommer/ Kirloskar Electric Caterpillar/ Crompton Greaves/ Toyo Denki
3	DG Set Canopy/ Enclosure & AMF Panel	As per OEM/ OEA of respective DG Set Manufacturer
4	Alarm Annunciator	As per OEM/ OEA of respective DG Set Manufacturer
<b>F</b>	<b>Fire Fighting Equipments</b>	
1	MS Pipe	Tata/ Jindal (Hisar)/ Prakash Surya
2	GI Pipe	Tata/ Jindal (Hisar)/ Prakash Surya
3	Forged Steel Fitting/ Flanges	Johnson Industries/ VS Forge/ JK Forging/ Trueforge
4	Forged Steel Fitting & Flanges (for welding joints)	VS Forge/ Rohini/ Kanwal Forge/ Johnson/ Trueforge
5	Pipe Hangers	Chilli/ Hilti/ GMGR/ Fischer
6	Gun Metal/ Brass Valve (ISI marked) (Full way Globe valve/ Non-Return Valve)	Sant/ Leader/ Advance/ Zoloto/ Kirlosker
7	Butterfly/ Sluice Valve (ISI marked)	Audco/ Advance/ Kirloskar/ Sant/ Leader/ Zoloto
8	Check Valve (ISI marked)	Sant/ Leader/ Advance/ Audco/ Zoloto/ Kirlosker
9	Foot Valve (Cast Iron/ Gun Metal)	Sant/ Leader/ Advance/ Audco/ Zoloto/ Kirlosker
10	Y-type Strainer	Sant / Audco / Kirloskar / Leader / Zoloto
11	Fire/ Sprinkler Pump/ Terrace Fire Pump	Kirloskar/ KSB/ Grundfos/ Mather & Platt/ Wilo
12	Electrical Motor	ABB/ Siemens/ Kirloskar/ Grundfos/ Crompton/ NGEF
13	Diesel Enginer for Fire Pump	Kirloskar/ Ashok Leyland/ Cummins
14	Coupling (Tyre-Type)	Lovejoy/ Fenner/ Dunlop
15	Anti Vibration Mountings	Kanwal Industrial Corporation/ Dunlop/ Resistoflex
16	Pressure Switch (ISI marked)	System Sensor/ Indfoss/ Danfoss/ Switzer
17	Pressure Gauge (ISI marked)	H Guru/ Fiebig/ Dwyer
18	Double/ Single Headed Landing Valve (ISI marked)	Minimax/ New Age/ Safex/ Ansul/ Ceasefire/ Amerex

19	Male Female Fire House Coupling (SS 304) (ISI Marked)	Minimax/ New Age/ Safex/ Ansul/ Ceasefire/ Amerex
20	First Aid House Drum/ Fire Hose Reels/ Shut off Nozzle (Gunmetal/ ABS) (ISI marked)	Minimax/ New Age/ Safex/ Ansul/ Ceasefire/ Amerex
21	SS 304/ Gun metal Branch Pipe & Nozzle (ISI Marked)	Minimax/ New Age/ Safex/ Ansul/ Ceasefire/ Amerex
22	Fireman Axe	Minimax/ New Age/ Safex/ Ansul/ Ceasefire/ Amerex
23	Water Flow Switch (FM/ UL listed)	System Sensor/ Switzer/ Potter/ Siemens/ Honeywell
24	Rust preventive polymeric 4mm thick tape for pipes directly buried in ground Pipe Protection Wrapping (ISI marked)	Pypcoat/ Makphalt/ Rustech/ Safex
25	Level Controller & Indicator (Water)	Auto Pump/ Cirrus Engineering/ Techtrol/ L&T/ Entes
26	Fire Brigade Inlet Connection (ISI marked)	Minimax/ New Age/ Safex/ Ansul/ Ceasefire/ Amerex
27	Thermoplastic pipe for First Aid Hose Reel (ISI marked)	Minimax/ New Age/ Safex/ Ansul/ Ceasefire/ Amerex
28	Fire Sealant	Promat/ Birla 3 M/ Hilti
29	Overload relays with built-in Single-Phase Preventer	Schneider Electric/ L&T/ Siemens/ ABB/ C&S
30	Power/ Aux. Contactor 3 / 4 Pole	Schneider Electric/ Larsen & Toubro/ BCH/ Siemens/ Legrand/ ABB/ C&S
31	LED type indicating lamps/ Push Button	Schneider Electric/ L&T/ Siemens/ C&S
32	LT Jointing Kit/ Termination	Raychem/ Cab Seal/ 3M
33	RRL Hose Pipe (ISI marked)	Minimax/ New Age/ Safex/ Ansul/ Ceasefire/ Amerex
34	Dry Battery	Exide/ Standard/ Amar Raja/ Rocket/ HBL/ Pulse/ Amco
35	Battery Charger	Statcon/ Amarraja/ CDC/ AE/ Expofyn/ Thycon India
36	Epoxy Paint	Dulux/ Berger/ Asian/ Nerolac
37	Air Release Valve	Rb/ Tbs/ Cimbrio/ Zoloto
38	Analogue/ Digital Measuring Instruments (Voltmeter/ Ammeter/ Energy)	AE/ Rishab/ L&T/ C&S/ Conzerve/ Secure
39	Aluminium/ Copper power cable / Control Cable (Armoured/ Unarmoured)	Finolex/ Universal/ Polycab/ RPG Cables/ KEI/ Havells
40	Cable Glands & Lugs	Comet/ Dowells/ Jainson/ Cosmos/ Gripwell
41	Solenoid Valve/ Spray Nozzle	Parker/ HD Fire Protect/ Tyco/ Emersion
42	Sprinkler	HD Fire Protect/ Tyco/ Reliable/ Wormald/ Viking
43	Sprinkler Heads/ Water Curtain Nozzle	Tyco/ Viking/ Omex/ Newage
44	Steel Flexible Extension	Omex/ Newage/ Tyco
45	Vibration Eliminator	Resistoflex/ D waren/ Kanwal
46	Welding Electrodes	Advani/ ESAB/ L&T

47	Deluge Valve	Tyco/ Viking/ HD
48	Cast Iron Valve	Kirloskar/ Kartar/ Kalpana
<b>G</b>	<b>Fire Alarm System</b>	
1	Addressable manual call box	Notifier(Honeywell)/ Johnson Control(Simplex)/ Siemens/ Bosch/Edwards/Advanced/Apollo
2	Addressable type fault isolator	Notifier(Honeywell)/ Johnson Control(Simplex)/ Siemens/ Bosch/Edwards/Advanced/Apollo
3	Strobe lights cum hooter	Notifier( Honeywell)/ Johnson Control(Simplex)/ Siemens/ Bosch/Edwards/Advanced/Apollo
4	Addressable control modules for hooter	Notifier( Honeywell)/ Johnson Control(Simplex)/ Siemens/ Bosch/Edwards/Advanced/Apollo
5	Addressable monitor module for flow switch	Notifier( Honeywell)/ Johnson Control(Simplex)/ Siemens/ Bosch/Edwards/Advanced/Apollo
6	Addressable type fire alarm control panel	Notifier( Honeywell)/ Johnson Control(Simplex)/ Siemens/ Bosch/Edwards/Advanced/Apollo
7	Network repeater panel	Notifier( Honeywell)/ Johnson Control(Simplex)/ Siemens/ Bosch/Edwards/Advanced/Apollo
8	Addressable multi sensing fire detector (Combination of optical type smoke detector and ROR type heat detector)	Notifier( Honeywell)/ Johnson Control(Simplex)/ Siemens/ Bosch/Edwards/Advanced/Apollo
9	Response Indicator (Addresable)	Notifier(Honeywell)/ Johnson Control(Simplex)/ Siemens/ Bosch/Edwards/Advanced/Apollo
<b>H</b>	<b>Water Supply System</b>	
1	Mono Submersible pump Set	KSB/ CG/ Kirloskar/ Grundfos/ Amrut
2	Submersible Pump Set	KSB/ CG/ Kirloskar/ Grundfos/ Amrut
3	G.I. Pipe	Tata / Jindal Hisar (ISI mark) / Prakash Surya
4	Sluice Valve/ Check Valve/ Butterfly Valve/ Non Return Valve etc.	Zoloto/ Bharat/ Kalpana/ Kirloskar/ Sant/ KSB
5	Submersible Cable	Finolex/ Polycab/ Havells/ KEI
6	G.I. Fittings (e.g. union, plug, elbow, tee, socket etc.)	Unik/ AVR/ Zoloto/ Eye/ HB/ KKR/ Prakash Surya (ISI mark)
7	PPR/ CPVC/ UPVC Pipe and Fittings	Astral/ Supreme/ Ashirwad/ Finolex/ Ajay Flow Guard/ Prince/ SFMC (ISI mark)/KPT
8	Starter and Motor Controller	L&T/ ABB/ Siemens
9	Water Flow Meter	ABB/ L&T/ Siemens/ Supreme Technology
<b>I</b>	<b>Air Conditioner &amp; Water Purifier</b>	
1	Split/Window/Cassette Air Conditioner	Mitshubshi Electric/ Mitshubshi Heavy Industries/ Toshiba/ O-General/ Daikin/Carrier/Hitachi
2	R.O./ Water Purifier	Kent/ Ion Exchange/ Aquaguard/Blue Star
3	Drinking Water Cooler/Dispenser	Voltas/ Blue Star/ Usha/ Climatrol (Sidwal)/Eureka Forbes

J	Solar Water Heating System	
1	Solar Water Heating System	Racold/ Electrotherm/ V-Guard/ Bosch/EMVEE/Photon energy /
<b>K</b>	<b>Lift</b>	
1	Lift	OTIS/ KONE/ Mitsubishi/ Schindler/ECE
L	Uninterrupted Power Supply (UPS)	
1	Online/ Offline UPS	Numeric/ Eaton/ APC/ Vertiv/ Peagusus
M	Solar Power Generation System	
1	Solar PV Module	Waaree/ Vikram/ Adani/Tata Solar Power
2	Junction Box	As per OEM of SPV Modules
3	SPV Inverter	Delta/ SMA/ Solaredge/ Fronius
4	Module Mounting Structure	As per MNRE/ Manufactures Standards
5	Solar Cable XLPO Insulated (DC)	RR Kabel/ Polycab/ Havells/ Finolex
<b>N</b>	<b>a. VRV / VRF AC &amp; TFA</b>	
1	Variable Refrigerant Volume System	As per existing system
2	TFA Unit	As per existing system
	<b>b. Ducting &amp; Grilles</b>	
1	Grilles/ Diffusers	Airflow/ Systemair Company/ Mapro/ Tristar/ Servex/ Dynacraft
2	Fire Dampers	Airflow/ Systemair Company/ Mapro/ Tristar/ Servex/ Dynacraft
3	Fire Dampers motors	Belimo/ Siemens/ Honeywell
4	G.I. Sheet Metal for duct	Jindal/ Tata/ SAIL
5	Factory fabricated duct (TDC)	
5.1	Rectangular	Rolastar/ Techno Aircon/ Ductofab/ RSP Air/ Zeco
5.2	Round	GP Spiro/ Atco/ Zeco
6	Self Adhesive Sealing Gasket for Ducts	Prima Seal/ Air Flow/ Trocellen
7	Stick Pins	Prima Seal/ Air Flow/ Trocellen
8	VCD/ Gravity louvers/ Exhaust & fresh air louvers	Air Flow/ Airflow/ Ravistar
9	Electronic controller/ actuator for smoke exhaust fan	Belimo/ Siemens/ Honeywell
10	Smoke detector	Apollo/ System sensor/ Edward/ Siemens
11	Round Flexible Duct	Atco/ UP Twiga/ Carryaire
	<b>c. Pipes &amp; Fittings</b>	
1	PVC Drain Pipe	Supreme/ Finolex/ Astral/ Polycab
2	Refrigerant Copper Pipe	Rajco Metal/ Mandev/ Maxflow / Uniflow
3	Copper Fittings(Y-Joints)	AS per OEM of VRF/ VRV
	<b>d. Insulation</b>	

1	Expanded Polystyrene (TF Quality) (Pre-moulded pipe section / slab)	Beard Sell / Armacell/ K-flex/ Kaimann
2	Cross Linked Polyethylene (Fire resistant quality)	Trocelene/ Supreme/ Paramount / K-flex/Kaimann/ Aerolam
3	Glass Wool	Owens Corning/ U.P. Twiga/ Lloyd insulation
4	Closed Cell Elastomeric Thermal Insulation (Nitrile rubber)	Beard Sell / Armaflex/ K-flex/ Kaimann
5	Pre-moulded PUF section for pipe & pipe supports	Epack/ Lloyd / Kingspan Jindal
6	Aluminium Tape	Johnson/ Hindalco/ 3M
7	Protective Coating over Closed Cell Elastomeric – Fiber glass Woven cloth	Polybond/ UP Twiga/ Owens Corning
	<b>e. Accessories/ Controls</b>	
1	Filters	Airtech/ Purolater/ Spectrum/ Thermodyne
2	Pressure Gauges	H.Guru/ Dwyer/ Emerald
3	Thermometers (with brass encasing)	Emerald/ Taylor/ Japsin
4	Room Thermostat/ AHU& FCU Thermostat	Honeywell/ Siemens/ Danfoss
5	Humidistat	Honeywell/ Siemens/ Danfoss
6	VFD with sensors	ABB/ DANFOSS/ Siemens
	<b>f. Fans</b>	
1	Inline Fans	System air/ Nicotra/ Kruger/ Greenheck/ Airflow/ Caryaire
2	Propeller	Alstom/ Khaitan/ Crompton Greaves/ Nicotra/ Kruger/ Caryaire/ GE

**INSTITUTE WORK DEPARTMENT**  
**INDIAN INSTITUTE OF TECHNOLOGY ROORKEE**

Schedule of Quantities

Name of Work: Electrical General maintenance, Renovation & Water supply work at GNEC campus, IIT Roorkee.

Tender No: IWD/DI/GM/GNEC/97/RT-2/110

Dated:05.11.2024

Sl. No.	Item Description	Quantity	Units	Estimated Rate including GST@18% & 1% Cess in <b>Rs. P</b>	TOTAL AMOUNT including GST @18% & Cess @1% in <b>Rs. P</b>	TOTAL AMOUNT In Words
<b>1</b>	<b>2</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>53</b>	<b>55</b>
1	Supplying and Wiring for light point/fan point/exhaust fan point/call bell point with 1.5 mm <sup>2</sup> FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit ISI 16 gauge with modular type switch, modular plate,suitable GI box and earthing the point with 1.5 mm <sup>2</sup> FRLS PVC insulated copper conductor single core cable etc as required.	10	Each	1335.972652	<b>13359.73</b>	INR Thirteen Thousand Three Hundred & Fifty Nine and Paise Seventy Three Only
2	Supplying and fixing suitable size G.I. box with modular plate and cover in front on surface or in recess, including providing and fixing 5 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection, painting etc. as required.	10	Each	512.266041	<b>5122.66</b>	INR Five Thousand One Hundred & Twenty Two and Paise Sixty Six Only
3	Supplying and fixing suitable size G.I. box with modular plate and cover in front on surface or in recess including providing and fixing 6 pin 15/16 & 5/6 amps modular socket outlet and 15/16 amps modular type switch, connection, painting etc. as required..	10	Each	629.324738	<b>6293.25</b>	INR Six Thousand Two Hundred & Ninety Three and Paise Twenty Five Only



4	Supplying and Wiring for circuit/ submain line with 2x1.5 mm <sup>2</sup> FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit ISI 16 gauge along with 1 no 1.5 mm <sup>2</sup> FRLS PVC insulated copper conductor single core cable for loop earthing as required.	5	Meter	351.176091	<b>1755.88</b>	INR One Thousand Seven Hundred & Fifty Five and Paise Eighty Eight Only
5	.....do..... but 2x2.5 mm <sup>2</sup> + 1x2.5 mm <sup>2</sup> earth wire	50	Meter	396.281277	<b>19814.06</b>	INR Nineteen Thousand Eight Hundred & Fourteen and Paise Six Only
6	.....do..... but 2x4 mm <sup>2</sup> + 1x4 mm <sup>2</sup> earth wire	50	Meter	459.643324	<b>22982.17</b>	INR Twenty Two Thousand Nine Hundred & Eighty Two and Paise Seventeen Only
7	.....do.....but 2x6 mm <sup>2</sup> + 1x6 mm <sup>2</sup> earth wire	50	Meter	632.546537	<b>31627.33</b>	INR Thirty One Thousand Six Hundred & Twenty Seven and Paise Thirty Three Only
8	.....do..... but 2x10 mm <sup>2</sup> + 1x6 mm <sup>2</sup> earth wire	10	Meter	762.49243	<b>7624.92</b>	INR Seven Thousand Six Hundred & Twenty Four and Paise Ninety Two Only
9	.....do..... but 2x16 mm <sup>2</sup> + 1x6 mm <sup>2</sup> earth wire	10	Meter	1011.644886	<b>10116.45</b>	INR Ten Thousand One Hundred & Sixteen and Paise Forty Five Only
10	.....do..... but 4 X 4 mm <sup>2</sup> + 2 X 4 mm <sup>2</sup> earth wire	5	Meter	727.052641	<b>3635.26</b>	INR Three Thousand Six Hundred & Thirty Five and Paise Twenty Six Only
11	.....do..... but 4 X 6 mm <sup>2</sup> + 2 X 6 mm <sup>2</sup> earth wire	10	Meter	992.314092	<b>9923.14</b>	INR Nine Thousand Nine Hundred & Twenty Three and Paise Fourteen Only
12	.....do..... but 4 X 10 mm <sup>2</sup> + 2 X 6 mm <sup>2</sup> earth wire	10	Meter	1252.205878	<b>12522.06</b>	INR Twelve Thousand Five Hundred & Twenty Two and Paise Six Only
13	.....do..... but 4 X 16 mm <sup>2</sup> + 2 X 6 mm <sup>2</sup> earth wire	5	Meter	1766.619785	<b>8833.10</b>	INR Eight Thousand Eight Hundred & Thirty Three and Paise Ten Only
14	Supplying and drawing 2 x 1.5 sq mm sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/PVC conduit as required with connection complete.	20	Meter	75.17531	<b>1503.51</b>	INR One Thousand Five Hundred & Three and Paise Fifty One Only
15	.....do..... but 3 X 2.5 sq mm	20	Meter	147.128821	<b>2942.58</b>	INR Two Thousand Nine Hundred & Forty Two and Paise Fifty Eight Only

16	.....do..... but 3 X 4 sq mm	20	Meter	221.230198	<b>4424.60</b>	INR Four Thousand Four Hundred & Twenty Four and Paise Sixty Only
17	.....do..... but 2 X 6 sq mm	20	Meter	231.969528	<b>4639.39</b>	INR Four Thousand Six Hundred & Thirty Nine and Paise Thirty Nine Only
18	.....do..... but 3 X 6 sq mm	20	Meter	326.475632	<b>6529.51</b>	INR Six Thousand Five Hundred & Twenty Nine and Paise Fifty One Only
19	.....do..... but 2 X 10 sq mm	20	Meter	326.23	<b>6524.60</b>	INR Six Thousand Five Hundred & Twenty Four and Paise Sixty Only
20	.....do..... but 2 X 16 sq mm	20	Meter	496.92	<b>9938.40</b>	INR Nine Thousand Nine Hundred & Thirty Eight and Paise Forty Only
21	.....do..... but 2 X 25 sq mm	10	Meter	689.83	<b>6898.30</b>	INR Six Thousand Eight Hundred & Ninety Eight and Paise Thirty Only
22	.....do..... but 1 X 35 sq mm	5	Meter	490.86	<b>2454.30</b>	INR Two Thousand Four Hundred & Fifty Four and Paise Thirty Only
23	.....do..... but 1 X 50 sq mm	5	Meter	684.78	<b>3423.90</b>	INR Three Thousand Four Hundred & Twenty Three and Paise Ninety Only
24	S/F of PVC Batten/casing capping of 20X12 MM size including suitable size of PVC cover and others all accessories as required.	20	Meter	98.98	<b>1979.60</b>	INR One Thousand Nine Hundred & Seventy Nine and Paise Sixty Only
25	.....do..... but 25X12 MM size	20	Meter	104.03	<b>2080.60</b>	INR Two Thousand & Eighty and Paise Sixty Only
26	.....do..... but 32X12 MM size	10	Meter	111.1	<b>1111.00</b>	INR One Thousand One Hundred & Eleven Only
27	Supplying and fixing of Batten / Angle Holder on existing round sheet or on round block including connections etc. as required.	5	Each	118.13263	<b>590.66</b>	INR Five Hundred & Ninety and Paise Sixty Six Only
28	Supplying and fixing 5/6 amps modular type switch on existing modular type plate & switch box including connections but excluding modular plate etc. as required.	10	Each	110.615099	<b>1106.15</b>	INR One Thousand One Hundred & Six and Paise Fifteen Only
29	.....do..... but 2-way 5/6 amp switch	1	Each	158.942084	<b>158.94</b>	INR One Hundred & Fifty Eight and Paise Ninety Four Only

30	.....do..... but 15/16 amp switch	5	Each	167.533548	<b>837.67</b>	INR Eight Hundred & Thirty Seven and Paise Sixty Seven Only
31	.....do..... but 5 pin 5/6 amp socket outlet	5	Each	131.019826	<b>655.10</b>	INR Six Hundred & Fifty Five and Paise Ten Only
32	.....do..... but 6 pin 15/16 amp socket outlet	5	Each	211.564801	<b>1057.82</b>	INR One Thousand & Fifty Seven and Paise Eighty Two Only
33	.....do..... but stepped type electronic fan regulator	5	Each	396.281277	<b>1981.41</b>	INR One Thousand Nine Hundred & Eighty One and Paise Forty One Only
34	.....do..... but modular blanking plate.	10	Each	42.95732	<b>429.57</b>	INR Four Hundred & Twenty Nine and Paise Fifty Seven Only
35	Supplying and fixing 1 or 2 module size/ modules, PVC box along with modular base & cover plate for modular switches in recess/surface etc as required.	1	Each	161.6	<b>161.60</b>	INR One Hundred & Sixty One and Paise Sixty Only
36	.....do.....but 3 module	5	Each	185.84	<b>929.20</b>	INR Nine Hundred & Twenty Nine and Paise Twenty Only
37	.....do.....but 4 module	2	Each	207.05	<b>414.10</b>	INR Four Hundred & Fourteen and Paise Ten Only
38	.....do.....but 6 module	5	Each	253.51	<b>1267.55</b>	INR One Thousand Two Hundred & Sixty Seven and Paise Fifty Five Only
39	.....do.....but 12 /16 module	2	Each	538.33	<b>1076.66</b>	INR One Thousand & Seventy Six and Paise Sixty Six Only
40	Supplying and fixing 1 or 2 module Modular base & cover plate on existing modular metal boxes etc. as required.	1	Each	142.833089	<b>142.83</b>	INR One Hundred & Forty Two and Paise Eighty Three Only
41	.....do.....but 3 module	5	Each	162.163883	<b>810.82</b>	INR Eight Hundred & Ten and Paise Eighty Two Only
42	.....do.....but 4 module	2	Each	169.681414	<b>339.36</b>	INR Three Hundred & Thirty Nine and Paise Thirty Six Only
43	.....do.....but 6 module	5	Each	195.455806	<b>977.28</b>	INR Nine Hundred & Seventy Seven and Paise Twenty Eight Only
44	.....do.....but 8 module	2	Each	226.599863	<b>453.20</b>	INR Four Hundred & Fifty Three and Paise Twenty Only
45	.....do.....but 12/18 module	2	Each	292.109776	<b>584.22</b>	INR Five Hundred & Eighty Four and Paise Twenty Two Only

46	Providing and fixing 125 amp, 16 KA, rating and breaking capacity TP MCCB in existing cubicle panel board including drilling holes in cubicle panel, making connections etc. as required.	1	Each	5177.430993	<b>5177.43</b>	INR Five Thousand One Hundred & Seventy Seven and Paise Forty Three Only
47	...do- but 150 / 160 amp 35 KA	1	Each	6435.006536	<b>6435.01</b>	INR Six Thousand Four Hundred & Thirty Five and Paise One Only
48	.....do..... but 250 amp 35 KA MCCB	1	Each	14907.26397	<b>14907.26</b>	INR Fourteen Thousand Nine Hundred & Seven and Paise Twenty Six Only
49	.....do..... but 400 amp 35 KA MCCB	1	Each	23181.91774	<b>23181.92</b>	INR Twenty Three Thousand One Hundred & Eighty One and Paise Ninety Two Only
50	.....do..... but 630 amp 50 KA MCCB	1	Each	29919.77338	<b>29919.77</b>	INR Twenty Nine Thousand Nine Hundred & Nineteen and Paise Seventy Seven Only
51	Providing and fixing 125 amp, 36 KA, rating and breaking capacity 4P MCCB in existing cubicle panel board including drilling holes in cubicle panel, making connections etc. as required.	1	Each	8815.915997	<b>8815.92</b>	INR Eight Thousand Eight Hundred & Fifteen and Paise Ninety Two Only
52	.....do..... but 250 amp 36 KA MCCB	1	Each	18804.56683	<b>18804.57</b>	INR Eighteen Thousand Eight Hundred & Four and Paise Fifty Seven Only
53	.....do..... but 400 amp 50 KA MCCB	1	Each	45819.35145	<b>45819.35</b>	INR Forty Five Thousand Eight Hundred & Nineteen and Paise Thirty Five Only
54	.....do..... but 630 amp 50 KA MCCB	1	Each	46277.92084	<b>46277.92</b>	INR Forty Six Thousand Two Hundred & Seventy Seven and Paise Ninety Two Only
55	Supplying and fixing of 12-way, double door prewired SP&N MCB distribution board of steel sheet for 240 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)	5	Each	2486.154895	<b>12430.77</b>	INR Twelve Thousand Four Hundred & Thirty and Paise Seventy Seven Only

56	Supplying and fixing 4 way (4+12), double door, 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)	1	Each	4393.459903	<b>4393.46</b>	INR Four Thousand Three Hundred & Ninety Three and Paise Forty Six Only
57	do... but 6 way (6 + 18), double door TPN DB	1	Each	5341.742742	<b>5341.74</b>	INR Five Thousand Three Hundred & Forty One and Paise Seventy Four Only
58	do... but 8 way (4 + 24), double door TPN DB	1	Each	6408.158211	<b>6408.16</b>	INR Six Thousand Four Hundred & Eight and Paise Sixteen Only
59	Supplying, installation, testing and commissioning of surface/ recess mounting, vertical type, 415 volts, prewired, TPN MCB distribution board of sheet steel, dust protected, duly phosphatized and powder painted, inclusive of 200 amps tinned copper busbar, common neutral link, earth bar, din bar for mounting MCB's , detachable gland / knock out plate and superior make terminal connectors for all incommining and outgoing circuits, duly prewired with adequate size of FRLS PVC insulated copper conductor upto the terminal connector/ neutral link and ready for installation of 4 ways (4+12) double door (but with out MCB's and incommer MCCB) as required.	1	Each	8067.384696	<b>8067.38</b>	INR Eight Thousand & Sixty Seven and Paise Thirty Eight Only
60	..do.. but 8 way (4 + 24), double door VTPN DB	1	Each	10916.52895	<b>10916.53</b>	INR Ten Thousand Nine Hundred & Sixteen and Paise Fifty Three Only
61	Supplying and fixing 5 amps to 32 amps rating single pole, 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.	5	Each	274.926848	<b>1374.63</b>	INR One Thousand Three Hundred & Seventy Four and Paise Sixty Three Only
62	.....do..... but 40 to 63 amp SP MCB	5	Each	652.46	<b>3262.30</b>	INR Three Thousand Two Hundred & Sixty Two and Paise Thirty Only

63	.....do..... but 5 to 32 amp DP MCB	2	Each	704.500048	<b>1409.00</b>	INR One Thousand Four Hundred & Nine Only
64	.....do..... but 40 to 63 amp DP MCB	2	Each	1347.34	<b>2694.68</b>	INR Two Thousand Six Hundred & Ninety Four and Paise Sixty Eight Only
65	.....do..... but 5 to 32 amp TP MCB	2	Each	1081.450531	<b>2162.90</b>	INR Two Thousand One Hundred & Sixty Two and Paise Ninety Only
66	.....do..... but 40 to 63 amp TP MCB	2	Each	1954.35	<b>3908.70</b>	INR Three Thousand Nine Hundred & Eight and Paise Seventy Only
67	.....do..... but 5 to 32 amp 4P MCB	1	Each	1318.789724	<b>1318.79</b>	INR One Thousand Three Hundred & Eighteen and Paise Seventy Nine Only
68	.....do..... but 40 to 63 amp 4P MCB	1	Each	2403.8	<b>2403.80</b>	INR Two Thousand Four Hundred & Three and Paise Eighty Only
69	Supplying and fixing 25 amps rating, double pole, (single phase and neutral), 240 volts, residual current circuit breaker (RCCB), having a sensitivity current upto 300 milliamperes in the existing MCB DB complete with connections, testing and commissioning etc. as required.	1	Each	2177.936124	<b>2177.94</b>	INR Two Thousand One Hundred & Seventy Seven and Paise Ninety Four Only
70	.....do.....but 40 amps DP RCCB	1	Each	2837.330986	<b>2837.33</b>	INR Two Thousand Eight Hundred & Thirty Seven and Paise Thirty Three Only
71	.....do.....but 63 amps DP RCCB	1	Each	2923.245626	<b>2923.25</b>	INR Two Thousand Nine Hundred & Twenty Three and Paise Twenty Five Only
72	Supplying and fixing 40 amps rating, four pole, (three phase and neutral), 415 volts, residual current circuit breaker (RCCB), having a sensitivity current upto 300 milliamperes in the existing MCB DB complete with connections, testing and commissioning etc. as required.	1	Each	3423.698404	<b>3423.70</b>	INR Three Thousand Four Hundred & Twenty Three and Paise Seventy Only
73	.....do.....but 63 amps 4P RCCB	1	Each	3084.335576	<b>3084.34</b>	INR Three Thousand & Eighty Four and Paise Thirty Four Only
74	Supplying and fixing 2P / 4P MCB sheet steel enclosure on surface/ recess for 415 volts complete with suitable bus bar for neutral including connections, testing and commissioning etc. as required.	1	Each	874.66	<b>874.66</b>	INR Eight Hundred & Seventy Four and Paise Sixty Six Only

75	Supplying and fixing TP/4P MCCB sheet steel enclosure on surface/ recess for 415 volts MCCB upto 250Amps complete with suitable bus bar for neutral including connections, testing and commissioning etc. as required.	1	Each	4959.1	<b>4959.10</b>	INR Four Thousand Nine Hundred & Fifty Nine and Paise Ten Only
76	Supply and fixing of SPN Automatic Changeover switches with Current Limiter (ACCL) 400V, 30A/9-30A capacity on board/DB's etc complete with connections in all respects.	1	Each	3335.02	<b>3335.02</b>	INR Three Thousand Three Hundred & Thirty Five and Paise Two Only
77	SITC of Motorised Automatic Changeover/ATS switch 4 pole, 125 Amps in existing panel chamber alongwith all accessories complete with all connections as required.	1	Each	77849.79	<b>77849.79</b>	INR Seventy Seven Thousand Eight Hundred & Forty Nine and Paise Seventy Nine Only
78	SITC of Motorised Automatic Changeover/ATS switch 4 pole, 250 Amps in existing panel chamber alongwith all accessories complete with all connections as required.	1	Each	101365.62	<b>101365.62</b>	INR One Lakh One Thousand Three Hundred & Sixty Five and Paise Sixty Two Only
79	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure/ HDPE FRP Chamber with cover plate having locking arrangement and watering pipe of 2.7 Meter long etc. with charcoal/ coke and salt as required.	1	Set	8024.427376	<b>8024.43</b>	INR Eight Thousand & Twenty Four and Paise Forty Three Only
80	Supplying and laying 25 mm X 5 mm G.I strip at 0.50 Meter bellow ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm)	1	Meter	154.646352	<b>154.65</b>	INR One Hundred & Fifty Four and Paise Sixty Five Only
81	Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure/ HDPE FRP Chamber with cover plate having locking arrangement and watering pipe of 2.7 Meter long etc. with charcoal/ coke and salt as required.	1	Set	14861.08485	<b>14861.08</b>	INR Fourteen Thousand Eight Hundred & Sixty One and Paise Eight Only

82	Supplying and laying 25 mm X 5 mm copper strip on surface/recess as strip earth electrode, including connection/terminating with nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of brass nut bolt & spring washer spaced at 50mm)	1	Meter	1247.910146	<b>1247.91</b>	INR One Thousand Two Hundred & Forty Seven and Paise Ninety One Only
83	Providing and fixing earth bus of 50 mm X 5 mm copper strip on surface for connections etc. as required.	2	Meter	2269.220429	<b>4538.44</b>	INR Four Thousand Five Hundred & Thirty Eight and Paise Forty Four Only
84	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade upto 35 mm <sup>2</sup> size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required.	10	Meter	415.612071	<b>4156.12</b>	INR Four Thousand One Hundred & Fifty Six and Paise Twelve Only
85	.....do.....but above 95 mm <sup>2</sup> and upto 185 mm <sup>2</sup>	10	Meter	453.199726	<b>4532.00</b>	INR Four Thousand Five Hundred & Thirty Two Only
86	...do.....but above 185 mm <sup>2</sup> and upto 400 mm <sup>2</sup>	10	Meter	509.044242	<b>5090.44</b>	INR Five Thousand & Ninety and Paise Forty Four Only
87	Laying/Removal of one number PVC insulated and PVC sheathed/ XLPE power cable of 1.1 KV grade of size upto 35 mm <sup>2</sup> direct in ground including excavation and refilling the trench etc as required. but excluding sand cushioning and protective covering.	10	Meter	214.7866	<b>2147.87</b>	INR Two Thousand One Hundred & Forty Seven and Paise Eighty Seven Only
88	.....do..... but 35 mm <sup>2</sup> to 95 mm <sup>2</sup> cable	10	Meter	233.043461	<b>2330.43</b>	INR Two Thousand Three Hundred & Thirty and Paise Forty Three Only
89	.....do..... but 95 mm <sup>2</sup> to 185 mm <sup>2</sup> cable	10	Meter	251.300322	<b>2513.00</b>	INR Two Thousand Five Hundred & Thirteen Only
90	.....do..... but 185 mm <sup>2</sup> to 400 mm <sup>2</sup> cable	10	Meter	308.218771	<b>3082.19</b>	INR Three Thousand & Eighty Two and Paise Nineteen Only
91	Supplying and making end termination with brass compression gland and aluminium lugs for 4 core 10 mm <sup>2</sup> (25mm) size of PVC insulated and PVC sheathed/ XLPE aluminium conductor cable of 1.1 kV grade as required.	2	Each	288.887977	<b>577.78</b>	INR Five Hundred & Seventy Seven and Paise Seventy Eight Only



92	..do...but for 4 core 25 mm <sup>2</sup> (28mm) PVC cable.	2	Each	338.288895	<b>676.58</b>	INR Six Hundred & Seventy Six and Paise Fifty Eight Only
93	..do...but for 3 ½ core 50 mm <sup>2</sup> (35 mm) PVC cable	2	Each	443.534329	<b>887.07</b>	INR Eight Hundred & Eighty Seven and Paise Seven Only
94	..do...but for 3 ½ core 95 mm <sup>2</sup> (45 mm) PVC cable	2	Each	631.472604	<b>1262.95</b>	INR One Thousand Two Hundred & Sixty Two and Paise Ninety Five Only
95	..do...but for 3 ½ core 150 mm <sup>2</sup> (50 mm) PVC cable	2	Each	748.531301	<b>1497.06</b>	INR One Thousand Four Hundred & Ninety Seven and Paise Six Only
96	..do...but for 3 ½ core 300 mm <sup>2</sup> (70 mm) PVC cable	2	Each	1283.349935	<b>2566.70</b>	INR Two Thousand Five Hundred & Sixty Six and Paise Seventy Only
97	Supplying and making straight through joint with heat shrinkable kit including ferrules and other jointing materials for 3 ½ core 50 mm <sup>2</sup> PVC cable size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.	1	Each	2661.205974	<b>2661.21</b>	INR Two Thousand Six Hundred & Sixty One and Paise Twenty One Only
98	.....do.....but for 3 ½ core 95 mm <sup>2</sup> PVC cable	1	Each	3777.022361	<b>3777.02</b>	INR Three Thousand Seven Hundred & Seventy Seven and Paise Two Only
99	.....do.....but for 3 ½ core 120-185 mm <sup>2</sup> PVC cable	1	Each	4873.507954	<b>4873.51</b>	INR Four Thousand Eight Hundred & Seventy Three and Paise Fifty One Only
100	.....do.....but for 3 ½ core 240 mm <sup>2</sup> PVC cable	1	Each	5282.676427	<b>5282.68</b>	INR Five Thousand Two Hundred & Eighty Two and Paise Sixty Eight Only
101	Supplying and making indoor cable end termination with heat shrinkable jointing kit complete with all accessories including lugs suitable for 3 core 120-185 mm <sup>2</sup> , XLPE aluminium conductor cable of 11 kV(UE) grade as required.	1	Each	16074.62914	<b>16074.63</b>	INR Sixteen Thousand & Seventy Four and Paise Sixty Three Only
102	Supplying and making outdoor cable end termination with heat shrinkable jointing kit complete with all accessories including lugs suitable for 3 core 120-185 mm <sup>2</sup> , XLPE aluminium conductor cable of 11 kV(UE) grade as required.	1	Each	21586.0533	<b>21586.05</b>	INR Twenty One Thousand Five Hundred & Eighty Six and Paise Five Only

103	SITC of Thermoplastic Cable Junction Box IP 65 Dimensions (LXBXH) 155 x 210 x 92 mm with metric knockouts for cable entry suitable for 10-16 sq.mm PVC sheathed armoured cable with 5 pole Terminal Set and one no. 5-32A SP MCB 'C' Curved for cable connections fixed on support (DIN Rail) with provision of continuity of loop earthing between I/C & O/G cables as required, equivalent to Hensel Cat No.KF1616G (Make-Hensel / Siemens)	10	Each	3812.75	<b>38127.50</b>	INR Thirty Eight Thousand One Hundred & Twenty Seven and Paise Fifty Only
104	Disconnection, dismantalling & Shifting of old Electric panel / Feeder pillar. After dismantalling the panels to be sent to central / zonal store, as per direction of site incharge.	1	Each	1737.2	<b>1737.20</b>	INR One Thousand Seven Hundred & Thirty Seven and Paise Twenty Only
105	Supplying and fixing of Digital Ammeter equivalent to Make: Secure & Model DPM I310 in existing panel/DB complete with all connections, testing and commissioning etc as required.	2	Each	1990.71	<b>3981.42</b>	INR Three Thousand Nine Hundred & Eighty One and Paise Forty Two Only
106	Supplying and fixing of Digital Voltmeter equivalent to Make: Secure & Model DPM V310 in existing panel/DB complete with all connections, testing and commissioning etc as required.	2	Each	1990.71	<b>3981.42</b>	INR Three Thousand Nine Hundred & Eighty One and Paise Forty Two Only
107	Supplying and fixing of Digital Multifunction Meter equivalent to Make: Secure & Model Elite 102 in existing panel/DB complete with all connections, testing and commissioning etc as required.	2	Each	5443.9	<b>10887.80</b>	INR Ten Thousand Eight Hundred & Eighty Seven and Paise Eighty Only
108	SITC of 100/5- 600/5 CT burdan 15 VA, tap wound and ring type CL -1 complete with all connections including all mounting accessories in all respect.	3	Each	671.65	<b>2014.95</b>	INR Two Thousand & Fourteen and Paise Ninety Five Only
109	SITC of 800/5- 1200/5 CT tap wound and ring type CL -1 complete with all connections including all mounting accessories in all respect.	3	Each	916.07	<b>2748.21</b>	INR Two Thousand Seven Hundred & Forty Eight and Paise Twenty One Only

110	SITC of LED Indicator 230V, AC complete with all connections including all mounting accessories in all respect.	3	Each	207.05	<b>621.15</b>	INR Six Hundred & Twenty One and Paise Fifteen Only
111	SITC of Wall mounting fan 400 mm Sweep revolving type with speed regulator.	1	Each	2453.29	<b>2453.29</b>	INR Two Thousand Four Hundred & Fifty Three and Paise Twenty Nine Only
112	SITC of 240 V, 450 MM sweep, 900 RPM heavy duty exhaust fan in existing opening including making good finish the damage with plaster and all masonry work, connection with 1.5 sqmm PVC insulated, copper conductor, single core etc.	5	Each	5054.04	<b>25270.20</b>	INR Twenty Five Thousand Two Hundred & Seventy and Paise Twenty Only
113	Supply, Installation, Testing and Commissioning of 1200 mm sweep, BEE 5 star rated, ceiling fan with Brush Less Direct Current (BLDC) Motor, Service Value not less then 7, class of insulation: B, 3 nos. blades, 30 cm long down rod, 2 nos. canopies, shackle kit, safety rope, copper winding, 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 Supply, earthing etc. complete as required.	5	Each	3453.19	<b>17265.95</b>	INR Seventeen Thousand Two Hundred & Sixty Five and Paise Ninety Five Only
114	SITC of LED light fitting 600mm length minimum 1000Lumen with mounting rail box / aluminium extruded Batten suitable for surface, wall and conduit mounting with accessories and prewired with both side end cap equivalent to Havells Cat no. LUMILINE+BS10WLED865SPCSS. Minimum Two years warranty should be provided.	2	Each	650.44	<b>1300.88</b>	INR One Thousand Three Hundred and Paise Eighty Eight Only

115	SITC of LED light fitting 1200mm length minimum 2000Lumen with mounting rail box / aluminium extruded Batten suitable for surface, wall and conduit mounting with accessories and prewired with both side end cap equivalent to havells cat no. LUMILINE+BS20WLED865SPCSS. Minimum Two years warranty should be provided.	50	Each	894.86	<b>44743.00</b>	INR Forty Four Thousand Seven Hundred & Forty Three Only
116	SITC of Round recess/surface mounted LED slim/sleek down light fitting with LED Driver minimum 1000 lumen suitable for Armstrong/Grid ceiling equivalent to Havells cat no. EDGEPRONEORDDL12WLED857S. Minimum Two years warranty should be provided and certificate should be endorsed by OEM or his representative	20	Each	1602.87	<b>32057.40</b>	INR Thirty Two Thousand & Fifty Seven and Paise Forty Only
117	SITC of Round recess/surface mounted LED slim/sleek down light fitting with LED driver minimum 2000 lumen suitable for Armstrong/Grid ceiling equivalent to Havells cat no. EDEGPRONEORDDL18WLED8587S . Minimum Two years warranty should be provided and certificate should be endorsed by OEM or his representative	50	Each	2055.35	<b>102767.50</b>	INR One Lakh Two Thousand Seven Hundred & Sixty Seven and Paise Fifty Only
118	SITC of 2'x2' fully diffused recess/surface mounting LED luminaire, minimum 3600 lumen as light source, suitable for Armstrong/Grid Ceiling complete as required including all connections equivalent to Havells no. VENUSNEO2X2PLR36WLED857STTR. Minimum Two years warranty should be provided. Warranty certificate should be endorsed by OEM or his representative.	20	Each	4576.31	<b>91526.20</b>	INR Ninety One Thousand Five Hundred & Twenty Six and Paise Twenty Only

119	SITC of LED street light made up of pressure die cast aluminium housing with toughened glass / polycarbonate covers and individual high power LEDs with secondary optics, minimum 4000 lumen, 3600/5700 K, warm/cool as required. IP66 protection, impact resistance of IK07 & 10 KV external SPD on pole, equivalent to Havells Cat No.ENDURASUNDOWNSL40WLED765PASYBOPC. Minimum Two years warranty should be provided. Warranty certificate should be endorsed by OEM or his representative.	2	Each	4139.99	<b>8279.98</b>	INR Eight Thousand Two Hundred & Seventy Nine and Paise Ninety Eight Only
120	SITC of LED street light made up of pressure die cast aluminium housing with toughened glass / polycarbonate covers and individual high power LEDs with secondary optics, minimum 7000 lumen, 3600/5700 K, warm/cool as required. IP66 protection, impact resistance of IK07 & 10 KV external SPD on pole, equivalent to Havells Cat No.ENDURASUNDOWNSL70WLED765PASYBOTG. Minimum Two years warranty should be provided. Warranty certificate should be endorsed by OEM or his representative.	2	Each	6038.79	<b>12077.58</b>	INR Twelve Thousand & Seventy Seven and Paise Fifty Eight Only
121	SITC of LED Integral Flood light fitting, Energy saving, environmental friendly, long life, made up of aluminium pressure die cast housing with toughened glass / polycarbonate cover, minimum 10000 lumen output and individual high power LEDs with secondary optics, IP66 protection, impact resistance of IK07 & 10 KV external SPD equivalent to Havells Cat No. JETAQUANTOPLUSFLP100WLED757SYM along with mounting brackets assembly. Minimum Two years warranty should be provided. Warranty certificate should be endorsed by OEM or his representative.	2	Each	7687.11	<b>15374.22</b>	INR Fifteen Thousand Three Hundred & Seventy Four and Paise Twenty Two Only

122	SITC of 120 watt LED midbay / highbay luminair with aluminium heat sink for efficient heat dissipation and highly effective optics for maximum illumination for varied industrial applications, minimum 12000 Lumens, equivalent to Havell's Cat No. GAZELLAHBP120WLED857PBOTG along with mounting brackets assembly. Minimum Two years warranty should be provided. Warranty certificate should be endorsed by OEM or his representative.	20	Each	10816.09	<b>216321.80</b>	INR Two Lakh Sixteen Thousand Three Hundred & Twenty One and Paise Eighty Only
123	Supply and Fixing of M.S. tubular pole SP-5, 7.5 Meter length with suitable canopy and cross arm single/ double as required. The pole shall be grouted in cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) foundation including excavation and refilling as required.	1	Each	21495.83	<b>21495.83</b>	INR Twenty One Thousand Four Hundred & Ninety Five and Paise Eighty Three Only
124	Supply and Fixing of M.S. tubular pole SP-32, 9.0 Meter length with suitable canopy and cross arm single/ double as required. The pole shall be grouted in cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) foundation including excavation and refilling as required.	1	Each	31268.59	<b>31268.59</b>	INR Thirty One Thousand Two Hundred & Sixty Eight and Paise Fifty Nine Only
125	Providing and making of steel / rail pole collar with cement concrete (1 cement : 3 coarse sand : 6 stone aggregate 20mm) of specified size and shape including form work, plastering if required, curing etc. as required (volume of pole/pipe not to be deducted).	1	Cu. M	8736.444955	<b>8736.44</b>	INR Eight Thousand Seven Hundred & Thirty Six and Paise Forty Four Only
126	Dismantling of pole/ street light standard/ strut embedded in brick ballast foundation etc. as required.	1	Each	2858.809646	<b>2858.81</b>	INR Two Thousand Eight Hundred & Fifty Eight and Paise Eighty One Only
127	Earth work in excavation in soft soil by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m inwidth or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.	1	Cu.M	276.77699	<b>276.78</b>	INR Two Hundred & Seventy Six and Paise Seventy Eight Only
128	Providing Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in Cement mortar 1:6 (1 cement : 6 coarse sand)	1	Cu. M	7583.721425	<b>7583.72</b>	INR Seven Thousand Five Hundred & Eighty Three and Paise Seventy Two Only

129	12 mm Cement Plaster of Mix 1:6 ( 1 Cement : 6 Fine Sand)	1	Sq. m	354.451055	<b>354.45</b>	INR Three Hundred & Fifty Four and Paise Forty Five Only
130	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 Meters lead of area beyond 3 sq.meters	1	Each	534.574075	<b>534.57</b>	INR Five Hundred & Thirty Four and Paise Fifty Seven Only
131	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 Meters lead as per direction of Engineer - in- charge	1	Cu.M.	3776.044125	<b>3776.04</b>	INR Three Thousand Seven Hundred & Seventy Six and Paise Four Only
132	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade Two or more coats on new work	1	Sq. m	240.571625	<b>240.57</b>	INR Two Hundred & Forty and Paise Fifty Seven Only
133	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete	1	Sq. m	165.927965	<b>165.93</b>	INR One Hundred & Sixty Five and Paise Ninety Three Only
134	Demolishing brick work in mortar manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 Meters lead as per direction of Engineer-in-charge.	1	Cu.M.	2190.61066	<b>2190.61</b>	INR Two Thousand One Hundred & Ninety and Paise Sixty One Only
135	Re-lettering with black Japan paint of approved brand and manufacture.	2000	Per letter per cm height	6.539295	<b>13078.59</b>	INR Thirteen Thousand & Seventy Eight and Paise Fifty Nine Only
136	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	20	P/Kg	142.16321	<b>2843.26</b>	INR Two Thousand Eight Hundred & Forty Three and Paise Twenty Six Only
137	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	1	Cu.M.	280.658035	<b>280.66</b>	INR Two Hundred & Eighty and Paise Sixty Six Only

138	Spray Painting of double coat of Electric Panel/Feeder after removal of old layer of paint, rusting etc. and providing the red oxide paint over the surface uniformly if required before spray painting including etc.The work shall be completed in all respect including repair including repair by welding/Denting and black paint on base chanel and MS frame as required (Only painted surface shall be measured for payment).	100	sq-ft	83.83	<b>8383.00</b>	INR Eight Thousand Three Hundred & Eighty Three Only
139	Painting of electric pole and number making if required (5 mtr. to 8 mtr. long pole) with 1 coat of aluminium paint over redoxide primer after proper cleaning of rusted surface as required complete in all respects.	20	Each	804.97	<b>16099.40</b>	INR Sixteen Thousand &Ninety Nine and Paise Forty Only
140	Painting of electric pole and number making if required (5 mtr. to 8 mtr. long pole) with 1 coat of aluminium paint after proper cleaning of rusted surface as required complete in all respects.	20	Each	447.43	<b>8948.60</b>	INR Eight Thousand Nine Hundred & Forty Eight and Paise Sixty Only
141	Painting of electric pole and number making if required (2.4 mtr. to 4.5 mtr. long pole) with 1 coat of aluminium paint over redoxide primer after proper cleaning of rusted surface as required complete in all respects.	10	Each	327.24	<b>3272.40</b>	INR Three Thousand Two Hundred & Seventy Two and Paise Forty Only
142	Painting of electric pole and number making if required (2.4 mtr. to 4.5 mtr. long pole) with 1 coat of aluminium paint after proper cleaning of rusted surface as required complete in all respects.	10	Each	229.27	<b>2292.70</b>	INR Two Thousand Two Hundred & Ninety Two and Paise Seventy Only
143	Supply and laying of Aluminium conductor, XLPE insulated, Un-armuored, PVC sheathed cable, 1100V grade, 4 core 25 mm <sup>2</sup> at a depth of 750mm below ground level including excavation and refling the trench over a cushion of 75mm thick sand alround and protected with burnt bricks on sides and on top as directed by the Engineer-Incharge, complete in all respects. The armouring of the cable shall be properly connected with the earth conductor by clamps etc. The cable shall be laid by boring the road as required and compaction of soil & repairing of surface in prior shape shall be done properly.	25	meter	705.99	<b>17649.75</b>	INR Seventeen Thousand Six Hundred & Forty Nine and Paise Seventy Five Only



144	Supply and laying of copper conductor, XLPE insulated, armoured, PVC sheathed cable, 1100V grade, 3 core 1.5 mm <sup>2</sup> at a depth of 750mm below ground level including excavation and reffing the trench over a cushion of 75mm thick sand around and protected with burnt bricks on sides and on top as directed by the Engineer-Incharge, complete in all respects. The armouring of the cable shall be properly connected with the earth conductor by clamps etc. The cable shall be laid by boring the road as required and compaction of soil & repairing of surface in prior shape shall be done properly.	100	meter	539.34	<b>53934.00</b>	INR Fifty Three Thousand Nine Hundred & Thirty Four Only
145	Do -- But 4 core 10 sqmm Aluminium armoured cable.	10	meter	606	<b>6060.00</b>	INR Six Thousand & Sixty Only
146	Do -- But 4 core 70 sqmm Aluminium armoured cable.	10	meter	1141.3	<b>11413.00</b>	INR Eleven Thousand Four Hundred & Thirteen Only
147	Do -- But 4 core 150 sqmm Aluminium armoured cable.	10	meter	1796.79	<b>17967.90</b>	INR Seventeen Thousand Nine Hundred & Sixty Seven and Paise Ninety Only
148	Do -- But 4 core 240 sqmm Aluminium armoured cable.	10	meter	2707.81	<b>27078.10</b>	INR Twenty Seven Thousand & Seventy Eight and Paise Ten Only
149	Do -- But 4 core 300 sqmm Aluminium armoured cable.	10	meter	3288.56	<b>32885.60</b>	INR Thirty Two Thousand Eight Hundred & Eighty Five and Paise Sixty Only
150	Do -- But 4 core 400 sqmm Aluminium armoured cable.	10	meter	4050.1	<b>40501.00</b>	INR Forty Thousand Five Hundred & One Only
151	Do -- But 3 core 1.5 sqmm Copper armoured cable in existing RCC/ HUME pipe/ tray etc.	10	meter	185.84	<b>1858.40</b>	INR One Thousand Eight Hundred & Fifty Eight and Paise Forty Only
152	Do -- But 6 core 1.5 sqmm Copper armoured cable in RCC/Hume/ Metal pipe	10	meter	295.93	<b>2959.30</b>	INR Two Thousand Nine Hundred & Fifty Nine and Paise Thirty Only
153	Do -- But 4 core 10 sqmm Aluminium armoured cable in RCC / Hume/ Metal pipe.	5	meter	252.5	<b>1262.50</b>	INR One Thousand Two Hundred & Sixty Two and Paise Fifty Only
154	Do -- But 4 core 35 sqmm Aluminium armoured cable in RCC / Hume/ Metal pipe.	5	meter	452.48	<b>2262.40</b>	INR Two Thousand Two Hundred & Sixty Two and Paise Forty Only
155	Do -- But 4 core 50 sqmm Aluminium armoured cable in RCC / Hume/ Metal pipe.	5	meter	595.9	<b>2979.50</b>	INR Two Thousand Nine Hundred & Seventy Nine and Paise Fifty Only
156	Do -- But 4 core 150 sqmm Aluminium armoured cable in RCC / Hume/ Metal pipe.	5	meter	1448.34	<b>7241.70</b>	INR Seven Thousand Two Hundred & Forty One and Paise Seventy Only

157	Supply, erection, testing and commissioning of factory fabricated metal clad dust and vermin proof- floor/wall mounted/ recessed/ surface feeder pillar / Panel double/ Single door , 150-200 mm depth duly powder coated spray painted with separate chamber for instruments (e.g. Ampere meter, Volt meter, frequency meter, KWH meter etc.) & switch gears (like I/C & O/G MCB's/MCCB's, C/o switch with extentionable/rotary handle etc.) as required. The feeder pillar/ panel shall have nonhygroscopic supports with detachable side with hinge and locking. The panel/ feeder pillar should be made with 1.6 CRCA sheet. The panel shall be comprised of indicator and feeder nomenclature (if required) as per direction of site-in-charge.	10	sq-ft	2347.24	<b>23472.40</b>	INR Twenty Three Thousand Four Hundred & Seventy Two and Paise Forty Only
158	Supply, erection, testing and commissioning of factory fabricated metal clad dust and vermin proof- floor mounted 800A cap 440 V, 50 HZ,3 phase and neutral electric feeder pillar single/ double door 400 mm depth duly powder coated spray painted with separate chamber for instruments (e.g. ampere meter, volt meter, frequency meter, KWH meter etc.) & switch gears (like I/C & O/G MCB's/MCCB's, C/o switch with extentionable/rotary handle etc.). The feeder pillar/ panel shall have 500Amp, 415V TPN electrolyte aluminium bus bar as per IS 8623 insulated with heat shrink sleeve and mounted on nonhygroscopic supports with detachable side with hinge and locking. The switches shall be completed with lug and cable gland of suitable size of cables with connection as required. The feeder pillar should be made with 2 mm CRCA sheet. The feeder pillar should be fixed on M.S. channel 75mm X 40mm X 6mm size and mounted on M.S. angle iron 50mm X 50mm X 5mm size frame 450mm height with cross support completed as per direction of site in charge. The panel shall be comprised of indicator and feeder nomenclature as per direction of site-in-charge.	10	sq-ft	5568.13	<b>55681.30</b>	INR Fifty Five Thousand Six Hundred & Eighty One and Paise Thirty Only
159	SITC of 240 V, 450 MM sweep, heavy duty air circulator wall fan including making good finish the damage with plaster and all masonry work, connection with 1.5 sqmm PVC insulated, copper conductor, single core etc.	2	Each	7176.05	<b>14352.10</b>	INR Fourteen Thousand Three Hundred & Fifty Two and Paise Ten Only

160	SITC of New Float cum boost charger (Fcbc), with VRLA, Ni-Cd batteries. Usage for Substation DC supply. Input AC Voltage (220, +/-10%) and output DC Voltage (24V ,25A). Voltage not less than 24 V. With AC input voltmeter (with selector switch, Output voltmeter (0-250V DC), Oupput Ammeter (0-75A DC), Battery Ammeter (60-0-60 A). Indications-input ON Lamp, Output ON Lamp, Charger ON Float LED, Charger ON Boost LED. With Soft starting charging and Protection.	1	Each	139815.31	<b>139815.31</b>	INR One Lakh Thirty Nine Thousand Eight Hundred & Fifteen and Paise Thirty One Only
161	Shifting of 200kVA DG Set including Connection/ Disconnection, Installation, termination and complete with all connection, testing etc as per required.	1	Each	61675.65	<b>61675.65</b>	INR Sixty One Thousand Six Hundred & Seventy Five and Paise Sixty Five Only
162	Supply and laying of aluminium conductor, XLPE insulated, armoured, PVC sheathed cable, 1100V grade, 1.0CX800 sqmm at a depth of 750mm below ground level over a cushion of 75mm thick sand alround and protected with burnt bricks on sides and on top. On surface, the cable run shall be fixed on M.S. clamps etc. of suitable size or as directed by the Engineer-Incharge, complete in all respects. The armouring of the cable shall be properly connected with the earth conductor by clamps etc. The cable shall be laid by boring the road as required and compaction of soil & repairing of surface in prior shape shall be done properly..	200	Meter	2328.05	<b>465610.00</b>	INR Four Lakh Sixty Five Thousand Six Hundred & Ten Only
163	SITC of spring charge motor/ motorized operating Mechanism with electrical closing 220-240V AC 50/60Hz V for existing ACB with complete connection as required. Make: siemens, 3WT9831-1JK00	2	Each	119036.58	<b>238073.16</b>	INR Two Lakh Thirty Eight Thousand & Seventy Three and Paise Sixteen Only
164	SITC of Shunt Release or closing coil suitable for continuous operation 220-240V AC 50/60Hz V for existing ACB with complete connection as required. Make: siemens, 3WT9831-1JK00	2	Each	10194.94	<b>20389.88</b>	INR Twenty Thousand Three Hundred & Eighty Nine and Paise Eighty Eight Only
165	SITC of under voltage (U/V) release instantaneous 380-415 V AC 50/60Hz for existing ACB, with complete connection as required. Make siemens.	2	Each	21183.74	<b>42367.48</b>	INR Forty Two Thousand Three Hundred & Sixty Seven and Paise Forty Eight Only

166	SITC of Auxiliary terminal block for drawout circuit breaker for existing ACB, with complete connection as required. Make siemens.	2	Each	14897.5	<b>29795.00</b>	INR Twenty Nine Thousand Seven Hundred & Ninety Five Only
167	SITC of Auxiliary switch block 2 change over, with complete connection as required. Make siemens.	2	Each	11396.84	<b>22793.68</b>	INR Twenty Two Thousand Seven Hundred & Ninety Three and Paise Sixty Eight Only
168	SITC of Position signal switch for withdrawable breaker, 3NO+3NC, 2NO+2NC, 1NO+1NC, with complete connection as required. Make siemens.	2	Each	46086.3	<b>92172.60</b>	INR Ninety Two Thousand One Hundred & Seventy Two and Paise Sixty Only
169	SITC of 5 digit operating cycle counter, with complete connection as required. Make siemens.	2	Each	38474.94	<b>76949.88</b>	INR Seventy Six Thousand Nine Hundred & Forty Nine and Paise Eighty Eight Only
170	SITC of Blocking Device for preventing opening of cubical door in service position: for withdrawable breaker, with complete connection as required. Make siemens.	1	Each	35770.16	<b>35770.16</b>	INR Thirty Five Thousand Seven Hundred & Seventy and Paise Sixteen Only
171	SITC of Castell lock Mounting kit (to prevent unauthorized closing of the circuit breaker), with complete connection as required. Make siemens.	1	Each	33006.8	<b>33006.80</b>	INR Thirty Three Thousand & Six and Paise Eighty Only
172	SITC of Castell lock , with complete connection as required. Make siemens.	1	Each	14079.4	<b>14079.40</b>	INR Fourteen Thousand & Seventy Nine and Paise Forty Only
173	SITC of Door Sealing frame , with complete connection as required. Make siemens.	1	Each	8968.8	<b>8968.80</b>	INR Eight Thousand Nine Hundred & Sixty Eight and Paise Eighty Only
174	SITC of External current sensor for N-conductor with copper connectors( for 3P ACB with neutral or E/F protection) , with complete connection as required. Make siemens.	1	Each	94647.1	<b>94647.10</b>	INR Ninety Four Thousand Six Hundred & Forty Seven and Paise Ten Only
175	SITC of ACB Mounting Base for existing ACB, replacement existing ACB Mounting Base for ACB with complete connection as required. Make siemens.	1	Each	35977.21	<b>35977.21</b>	INR Thirty Five Thousand Nine Hundred & Seventy Seven and Paise Twenty One Only
176	SITC of 3 phase fully automatic star delta motor starter 7.5 to 10 HP, relay range 6 to 14 Amp (with single phase preventer), with water level controller alongwith all accessories complete with all connections as required.	2	Each	18362.81	<b>36725.62</b>	INR Thirty Six Thousand Seven Hundred & Twenty Five and Paise Sixty Two Only

177	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) for size 25 mm nominal outer dia pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing as required. This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer in Charge.	10	metre	377.89682	<b>3778.97</b>	INR Three Thousand Seven Hundred & Seventy Eight and Paise Ninety Seven Only
178	do- but 40 mm nominal outer dia Pipes	10	metre	598.691065	<b>5986.91</b>	INR Five Thousand Nine Hundred & Eighty Six and Paise Ninety One Only
179	do- but 50 mm nominal outer dia Pipes	10	metre	844.526025	<b>8445.26</b>	INR Eight Thousand Four Hundred & Forty Five and Paise Twenty Six Only
180	do- but 80 mm nominal outer dia Pipes	10	metre	2303.479955	<b>23034.80</b>	INR Twenty Three Thousand & Thirty Four and Paise Eighty Only
181	P/F G.I. Pipe 15 mm dia 'B' class ISI mark completed with G.I. fittings including trenching and Refilling etc i/c cutting and makin good the wall etc.	10	metre	342.542095	<b>3425.42</b>	INR Three Thousand Four Hundred & Twenty Five and Paise Forty Two Only
182	P/F G.I. Pipe 20 mm dia 'B' class ISI mark completed with G.I. fittings including trenching and Refilling etc i/c cutting and makin good the wall etc.	10	metre	391.93238	<b>3919.32</b>	INR Three Thousand Nine Hundred & Nineteen and Paise Thirty Two Only
183	P/F G.I. Pipe 25 mm dia 'B' class ISI mark completed with G.I. fittings including trenching and Refilling etc i/c cutting and makin good the wall etc.	10	metre	497.358575	<b>4973.59</b>	INR Four Thousand Nine Hundred & Seventy Three and Paise Fifty Nine Only
184	P/F G.I. Pipe 32 mm dia 'B' class ISI mark completed with G.I. fittings including trenching and Refilling etc i/c cutting and makin good the wall etc.	10	metre	574.50099	<b>5745.01</b>	INR Five Thousand Seven Hundred & Forty Five and Paise One Only
185	P/F G.I. Pipe 40 mm dia 'B' class ISI mark completed with G.I. fittings including trenching and Refilling etc i/c cutting and makin good the wall etc.	10	metre	656.109265	<b>6561.09</b>	INR Six Thousand Five Hundred & Sixty One and Paise Nine Only
186	P/F G.I. Pipe 50 mm dia 'B' class ISI mark completed with G.I. fittings including trenching and Refilling etc i/c cutting and makin good the wall etc.	10	metre	810.394095	<b>8103.94</b>	INR Eight Thousand One Hundred & Three and Paise Ninety Four Only

187	P/F G.I. Pipe 80 mm dia 'B' class ISI mark completed with G.I. fittings including trenching and Refilling etc i/c cutting and makin good the wall etc.	10	Meter	1107.63961	<b>11076.40</b>	INR Eleven Thousand & Seventy Six and Paise Forty Only
188	Making connection of G.I. distribution branch with G.I. main of 25 to 40 mm nominal bore sizes by providing and fixing tee, including cutting and threading the pipe etc. complete	10	each	969.62327	<b>9696.23</b>	INR Nine Thousand Six Hundred & Ninety Six and Paise Twenty Three Only
189	Making connection of G.I. distribution branch with G.I. main of 50 to 80 mm nominal bore sizes by providing and fixing tee, including cutting and threading the pipe etc. complete	10	each	1898.362655	<b>18983.63</b>	INR Eighteen Thousand Nine Hundred & Eighty Three and Paise Sixty Three Only
190	Fixing water meter and stop cock or making connection 15 mm to 20 mm size in G.I. pipe line including cutting and threading the pipe and making long screws etc. complete (cost of water meter and stop cock to be paid separately).	10	each	863.71859	<b>8637.19</b>	INR Eight Thousand Six Hundred & Thirty Seven and Paise Nineteen Only
191	.....do.....but G.I. Pipe 100 mm dia.	10	Meter	1939.522998	<b>19395.23</b>	INR Nineteen Thousand Three Hundred & Ninety Five and Paise Twenty Three Only
192	Providing and fixing gun-metal gate valve 25mm dia with C.I.wheel of approved quality (screwed end).	1	each	661.79792	<b>661.80</b>	INR Six Hundred & Sixty One and Paise Eighty Only
193	Providing and fixing gun-metal gate valve 40mm dia with C.I. wheel of approved quality (screwed end).	1	each	878.39213	<b>878.39</b>	INR Eight Hundred & Seventy Eight and Paise Thirty Nine Only
194	Providing and fixing gun-metal gate valve 50mm dia with C.I. wheel of approved quality (screwed end).	1	each	1091.636945	<b>1091.64</b>	INR One Thousand & Ninety One and Paise Sixty Four Only
195	Providing and fixing gun metal non- return valve of approved quality (screwed end) : 50 mm nominal bore Horizontal type.	1	each	1457.99696	<b>1458.00</b>	INR One Thousand Four Hundred & Fifty Eight Only
196	Providing and fixing gun metal non- return valve of approved quality (screwed end) : 50 mm nominal bore Vertical type.	1	each	1536.627995	<b>1536.63</b>	INR One Thousand Five Hundred & Thirty Six and Paise Sixty Three Only
197	Providing and placing on terrace (at all floor levels) polyethylene water storage tank, IS : 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.	1	per ltr	11.6963	<b>11.70</b>	INR Eleven and Paise Seventy Only

198	Providing and fixing PTMT Ball cock of approved quality, colour and make complete with Epoxy coated aluminium rod with L.P./ H.P.H.D. plastic ball 20 mm nominal bore, 120 mm long, weighing not less than 198 gms.	1	each	273.90608	<b>273.91</b>	INR Two Hundred & Seventy Three and Paise Ninety One Only
199	do but 25 mm nominal bore, 152mm long, weighing not less than 440 gms.	1	each	556.95654	<b>556.96</b>	INR Five Hundred & Fifty Six and Paise Ninety Six Only
200	do but 40 mm nominal bore, 206mm long, weighing not less than 690 gms.	1	each	783.86476	<b>783.86</b>	INR Seven Hundred & Eighty Three and Paise Eighty Six Only
201	do but 50 mm nominal bore, 242mm long, weighing not less than 1240 gms.	1	each	1463.047635	<b>1463.05</b>	INR One Thousand Four Hundred & Sixty Three and Paise Five Only
202	Providing and fixing ball valve ( CPVC) of approved quality, high or low pressure, with plastic floats complete 25 mm nominal bor complete in all respect.	1	each	289.87	<b>289.87</b>	INR Two Hundred & Eighty Nine and Paise Eighty Seven Only
203	Providing and fixing ball valve ( CPVC) of approved quality, high or low pressure, with plastic floats complete 50 mm nominal bor complete in all respect.	1	each	1299.87	<b>1299.87</b>	INR One Thousand Two Hundred & Ninety Nine and Paise Eighty Seven Only
204	Supply of PVC insulation Tape	50	Each	14.14	<b>707.00</b>	INR Seven Hundred & Seven Only
205	Supply of Single Phase kwh electronic energy meter 10-60A capacity class-1, counter/LCD display	1	Each	1443.29	<b>1443.29</b>	INR One Thousand Four Hundred & Forty Three and Paise Twenty Nine Only
206	Supply of Three Phase four wire kwh electronic energy meter 10-60A capacity class-1, direct base counter/LCD display.	1	Each	3103.73	<b>3103.73</b>	INR Three Thousand One Hundred & Three and Paise Seventy Three Only
207	Supply of SMF Battery Exide Make 12V, 18Ah.	24	Each	2500.76	<b>60018.24</b>	INR Sixty Thousand & Eighteen and Paise Twenty Four Only
208	Supply of socket set ( 17 socket + 6 Accessories) with box.	1	Each	2586.61	<b>2586.61</b>	INR Two Thousand Five Hundred & Eighty Six and Paise Sixty One Only
209	Supply of Double Ended Spanner Sets. size 1/8x3/16, 3/16x1/4, 1/4x5/16, 5/16x3/8, 3/8x7/16, 7/16x1/2, 1/2x9/16, 9/16x5/8, 5/8x3/4. Model DW-09 Taparia Make.	1	Each	891.83	<b>891.83</b>	INR Eight Hundred & Ninety One and Paise Eighty Three Only
210	Supply of Allen Key Sets, 9 pics set (Size- 1.5,2,2.5,3,4,5,6,8,10), model-KM9V make: Taparia	1	Each	254.52	<b>254.52</b>	INR Two Hundred & Fifty Four and Paise Fifty Two Only
211	Supply of Hand Operated Crimping Tools 10-95mm	1	Each	9720.24	<b>9720.24</b>	INR Nine Thousand Seven Hundred & Twenty and Paise Twenty Four Only

212	Supply of Hand Operated Insulation tester (up to 1000 Volt, 0-200 Mega Ohms), Eddy current dynamometer, Polycarbonate body,	1	Each	2541.16	<b>2541.16</b>	INR Two Thousand Five Hundred & Forty One and Paise Sixteen Only
213	Supply of Digital Earth Resistance Tester (0-10-1000 Ohms)	1	Each	3211.8	<b>3211.80</b>	INR Three Thousand Two Hundred & Eleven and Paise Eighty Only
214	Supply of Electrical Safty Rubber Insulating Hand gloves Full fingures, cuff length 6 to 10 inch upto 33 KV.	1	set	597.92	<b>597.92</b>	INR Five Hundred & Ninety Seven and Paise Ninety Two Only
215	Supply of digital LED Emergency exit/ lift signage Board double side display.	1	Each	1986.67	<b>1986.67</b>	INR One Thousand Nine Hundred & Eighty Six and Paise Sixty Seven Only
216	Supply of High Di-electric strenth Insulating Rubber Chequered mat upto 33 kV , size 1 mtr x 2 mtr x 3 mm thick.	10	Each	3267.35	<b>32673.50</b>	INR Thirty Two Thousand Six Hundred & Seventy Three and Paise Fifty Only
217	Supply of Combination Pliers minimum 165 mm length taparia make (Item code:1621-6).	1	Each	276.74	<b>276.74</b>	INR Two Hundred & Seventy Six and Paise Seventy Four Only
218	Supply of Long Nose Pliers ( Flat or Round Nose. item code:1421-6N, 1431-6) minimum 165 mm length, Taparia Make.	1	Each	285.83	<b>285.83</b>	INR Two Hundred & Eighty Five and Paise Eighty Three Only
219	Supply of Screw Driver Sets (6.0x0.8, 3.5x0.5 phillips 0 square poker, Phillips 1+Extension Rod. Taparia Make Item Code:840.	1	Each	367.64	<b>367.64</b>	INR Three Hundred & Sixty Seven and Paise Sixty Four Only
220	Supply of Line Testers Yellow/ Green, minimum Lenght 125 mm, Taparia Make Item code: 814.	1	Each	55.55	<b>55.55</b>	INR Fifty Five and Paise Fifty Five Only
221	Supply of screw Driver kits (Blister Packing) consisting of 8 screw drivers 713, 922, 725, 828, 912, 712, 937 I, P5 861 75. Taparia Make Item code 1013.	1	Each	709.02	<b>709.02</b>	INR Seven Hundred & Nine and Paise Two Only
<b>Total in Figures</b>					<b>3614794.22</b>	INR Thirty Six Lakh Fourteen Thousand Seven Hundred & Ninety Four and Paise Twenty Two Only

Note:

1. Vendor will arrange safety gears such as safety shoes, safety helmets, gloves etc. for the manpower deployed at his own cost. If the manpower is found not wearing safety gears, a penalty of Rs. 200 per violation will be imposed by the EIC.