

EWSS/2017-18/EL/Wi-Fi/ /02

Date 21.12.2017

**ELECTRIC & WATER SUPPLY SERVICES  
BANARAS HINDU UNIVERSITY  
VARANASI**

**Name of work : Electrical, cabling & Earthing work for providing power supply to the core switch room, distribution switch rooms & access switches at various locations under the Wi-Fi project for BHU campus, Varanasi.**

**NIT**

**Superintending Engineer  
EWSS, Banaras Hindu University, Varanasi**

**ABSTRACT OF COST**

**Name of work : Electrical, cabling & Earthing work for providing power supply to the core switch room, distribution switch rooms & access switches at various locations under the Wi-Fi project for BHU campus, Varanasi.**

Sl. No.	Details of Sub-Head	Total Amount (in Rupees)
1	Electrical, cabling & Earthing work for providing power supply to the core switch room, distribution switch rooms & access switches at various locations under the Wi-Fi project for BHU campus, Varanasi	16,32,000/-

Assistant Engineer(I)  
EWSS,BHU

Executive Engineer  
EWSS,BHU

Superintending Engineer  
EWSS,BHU

**This NIT containing pages as per Index amounting to Rs. 16,32,000/- (Rupees Sixteen lacs thirty two thousand only) is hereby approved.**

**Superintending Engineer  
EWSS, Banaras Hindu University, Varanasi**

**ELECTRIC & WATER SUPPLY SERVICES  
BANARAS HINDU UNIVERSITY**

**Name of work : Electrical, cabling & Earthing work for providing power supply to the core switch room, distribution switch rooms & access switches at various locations under the Wi-Fi project for BHU campus, Varanasi.**

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Executive Engineer  
EWSS, BHU

**ELECTRIC & WATER SUPPLY SERVICES  
BANARAS HINDU UNIVERSITY**

**Name of work : Electrical, cabling & Earthing work for providing power supply to the core switch room, distribution switch rooms & access switches at various locations under the Wi-Fi project for BHU campus, Varanasi**

**PART- A**

**ELECTRIC & WATER SUPPLY SERVICES  
BANRAS HINDU UNIVERSITY  
VARANASI**

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

The Superintending Engineer, Electric & water supply services, Banaras Hindu University, on behalf of Registrar of Banaras Hindu University, Varanasi, India invites online, item rate Bids from Firms/Contractors of repute in Single Bid system for following work :-

S.NO	Description	
1	NIT No.	<b>EWSS/2017-18/EL/Wi-Fi/ /02 dtd. 21.12.2017</b>
2	Name of Work & Location	Electrical, cabling & Earthing work for providing power supply to the core switch room, distribution switch rooms & access switches at various locations under the Wi-Fi project for BHU campus, Varanasi
3	Total Estimated cost put to tender	<b>Rs. 16,32,000/-</b>
4	Earnest Money	<b>Rs. 81,600/-</b>
5	Period of Completion	<b>75 days</b>
6	Last Date & Time of Submission of Technical And Financial Bids	18.01.2018 by 04.00 PM
7	Date of opening of BID	20.01.2018 at 3.00 PM

1. Contractors who fulfill the following requirements shall be eligible to apply. **Joint ventures are not accepted.**
  - (a) Should have satisfactorily completed the electrical work as mentioned below during the last Seven years ending 31<sup>st</sup> March 2017: -
    - (i) Three similar works each costing not less than **Rs. 6.53 lacs**, or two similar Job each costing not less than **Rs. 9.79 lacs**, or one similar Job costing not less than **Rs. 13.06 lacs**.
    - And
    - (ii) One completed Job of similar nature (either part of (i) above or a separate one) costing not less than **Rs. 6.53 lacs** with some Central Govt. Department/ State Government Department / Central Autonomous Body/ State Autonomous Body/ Central Public Sector Undertaking/ State Public Sector Undertaking /City development Authority/ Municipal Corporation of City formed under any Act by Central/ State Government and published in Central/ State Gazette.
  - (iii) **While considering any similar job executed by applicant firm under joint venture, the experience of the applicant firm in that job shall be restricted to its share/responsibilities as reflected in the Memorandum of Understanding (MoU), signed between the parties, while forming joint venture for that job, attested copy of which shall be submitted along with the technical bid.**
  - (b) Should have had average annual financial turnover of ` Rs. **4.90 lacs** on similar works during the last three consecutive financial years ending 31<sup>st</sup> March 2017 (**scanned copy of certificate from CA to be uploaded**)
  - (c) Should not have incurred any loss in more than two years during the last five years ending **31<sup>st</sup> March, 2017**.
  - (d) Should have a solvency certificate of **Rs. 6.53 lac** issued by Bank during the last six months (**Scanned copy of original solvency to be uploaded**)
2. The intending bidder must read the terms and conditions carefully. He should only submit his bid if he considers himself eligible and he is in possession of all the documents required.

The agency should also enclose along with the documents a separate annexure showing the details of the works which he intends to be considered for deciding his fulfillment of eligibility criteria as per the requirements of the NIT provisions.

3. Information and Instructions for bidders posted on website shall form of bid document.
4. The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website [www.eprocure.gov.in](http://www.eprocure.gov.in) or [www.bhu.ac.in](http://www.bhu.ac.in) free of cost.
5. But the bid can only be submitted after giving the details of the mandatory documents such as Demand-Draft or Fixed Deposit Receipts of any Scheduled Bank towards cost of bid document and EMD in favor of **Superintending Engineer, Electric&Water supply services, Banaras Hindu University, Varanasi** and other scanned documents as specified.
6. Those contractors not registered on [www.eprocure.gov.in](http://www.eprocure.gov.in) website, are required to get registered beforehand. If needed they can be imparted training on online bidding process as per details available on the website.
7. The intending bidders must have valid Class-III digital signature to submit the bid.
8. On opening date of the financial bid, the contractor can login and see the bid opening process. After opening of bids he will receive the competitor bid sheets.
9. Contractor can upload documents in the form of JPG format and PDF format.
10. Contractor must ensure to quote rate of each item.  
In addition to this, while selecting any of the cells a warning appears that if any cell is left blank the same shall be treated as "0".  
Therefore, if any cell is left blank and no rate is quoted by the bidder, rate of such item shall be treated as "0" (ZERO).
11. The department reserves the right to reject any prospective application without assigning any reason whatsoever and to restrict the list of qualified contractors to any number deemed suitable by it, if too many bids are received satisfying the laid down criterion.
12. It shall be mandatory to sign the Integrity Pact by the bidder / contractor failing which tenderer / bidder will stand disqualified from the tendering process and the bid of the bidder would be summarily rejected in case of manual tendering. However; where e-tendering is followed, Integrity Pact of the bid document shall be signed between Superintending Engineer in-charge of work and the successful bidder after acceptance of the bid.
13. The EMD can be paid in the form of Demand Draft or Fixed Deposit Receipts or Bank Guarantee of any Scheduled Bank. The intending bidder has to fill all the details such as Banker's name, Demand Draft/Fixed Deposit Receipt/ Bank Guarantee, amount and date/ bank Guarantee.

**List of Documents to be scanned and uploaded up to date and time mentioned above:**

1. Category/ Enlistment order of the contractor.
2. Electrical contractor's License 'A class'
3. Certificates of Work Experience.
4. Certificate of Financial Turnover from CA.
5. Certificate of Registration for GST/IT.
6. Bank Solvency Certificate issued by any scheduled bank.
7. Affidavit as per provision of Clause-1.2.2 of **EWSS e-TENDER**
8. Any Other document as specified in Eligibility Criteria and/or in EWSSe-TENDER

**SUPERINTENDING ENGINEER  
ELECTRIC & WATER SUPPLY SERVICES  
BANRAS HINDU UNIVERSITY  
VARANASI**

## EWSS e-TENDER

1. The Superintending Engineer, EWSS,BHU invites the online Bids from approved and eligible contractors of EWSS and those of appropriate list of C.P.W.D., M.E.S., Railways, Telecom (BSNL) and other central govt. agencies for the following works:

**“Electrical, cabling & Earthing work for providing power supply to the core switch room, distribution switch rooms & access switches at various locations under the Wi-Fi project for BHU campus, Varanasi.”**

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

- 1.1 The work is estimated to cost **Rs. 16.32 lacs inclusive of all taxes & duties**. This estimate, however, is given merely as a rough guide.
- 1.1.1 The authority competent to approve NIT for the combined cost and belonging to the major discipline will consolidate NITs for calling the tenders.
- 1.2 Intending bidder is eligible to submit the bid provided he has definite proof from the appropriate authority, which shall be to the satisfaction of the competent authority, of having satisfactorily completed similar jobs of magnitude specified below:-
- 1.2.1 Criteria of eligibility for submission of bid documents:

**Joint ventures are not accepted.**

- (a) Should have satisfactorily completed the works as mentioned below during last seven years ending 31st March, 2017:

- (i) Three similar works each of value not less than **Rs. 6.53 lac** or two similar works each of value not less than **Rs 9.79 lac** or one similar work of value not less than **Rs. 13.06 lac**.

And

- (ii) One completed work of any nature (either part of (i) above or a separate one) costing not less than **Rs. 6.53 lac** with some Central Govt. Department/ State Government Department / Central Autonomous Body/ State Autonomous Body/ Central Public Sector Undertaking/ State Public Sector Undertaking/ City development Authority/ Municipal Corporation of City formed under any Act by Central/ State Government and published in Central/ State Gazette.

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

Similar job means **“Electrical/ cabling/ Earthing/ wiring work executed for providing power supply to various equipments etc. in any organization.”**

- (iii) **While considering any similar work executed by applicant Firm under joint venture, the experience of the applicant Firm in that work shall be restricted to its share/ responsibilities as reflected in the Memorandum of Understanding (MoU), signed between the parties, while forming joint venture for that work, attested copy of which shall be submitted along with the technical bid.**
- (b) Should have had average annual financial turnover of **Rs. 4.90 lac** on similar works during the last three consecutive financial years ending 31<sup>st</sup> March, 2017 (**Scanned copy of certificate from CA to be uploaded**). This should be duly audited by a Chartered Accountant. The year in which no turnover is shown would also be considered for working out the average.
- (c) Should not have incurred any loss in more than two years during the last five years ending 31<sup>st</sup> March, 2017.
- (d) Should have a solvency certificate of **Rs. 6.53 lac** issued by Bank during the last six months. (**Scanned copy of original solvency certificate to be uploaded**).

- 1.2.2 **To become eligible for issue of tender, the contractors shall have to furnish an affidavit as under:-**

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

2. Award of work contract/ order shall be placed on the successful tenderer on prescribed Format.
3. The time allowed for carrying out the Job Work will be 75 days from the date of start as defined in schedule 'F' or from the first date of handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in the tender documents.
4. The site for the work is available.
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 except Standard General Conditions of Contract Form can be seen from website [www.eprocure.gov.in](http://www.eprocure.gov.in) or [www.bhu.ac.in](http://www.bhu.ac.in) free of cost.
6. After submission of the tender the contractor can re-submit revised tender any number of times but before last time and date of submission of tender as notified.
7. While submitting the revised bid, contractor can revise the bid price, but before last time and date of submission of tender as notified.
8. The quoted base price shall remain FIRM till the completion of work.
9. a) Earnest Money **Rs 81,600/-** can be paid in the form of Demand Draft or Fixed Deposit Receipt (**drawn in favor of Superintending Engineer, EWSS, BHU, Varanasi, payable at Varanasi**) or Bank Guarantee of any Scheduled Bank wherever applicable in accordance with the Form annexed hereto having validity for 6 months or more from the last date of receipt of tenders shall be scanned and uploaded to the e-tendering website within the period of tender submission.

**b) Cost of Tender Document – NIL**

Demand Draft or FDR against EMD, Cost of Tender Document Fee shall be placed in single sealed envelope superscripted as "Earnest Money, Cost of Tender Document" with name of work and due date of opening of the tender also mentioned thereon.

10. Copy of certificate of work experience, copy of category/ enlistment order, Audited Balance Sheet, Bank Solvency Certificate and other documents mentioned in the PQ Document shall be scanned and uploaded to the e-tendering website within the period of tender submission and certified copy of each shall be deposited in a separate envelope marked as "Eligibility Documents"

Both the envelopes shall be placed in another envelope with due mention of Name of work, date & time of opening of tenders and to be submitted in the office of **Superintending Engineer, EWSS, BHU, Varanasi** before last date & time of submission of bid and up to **04.00 PM on 18.01.2018**. The documents submitted shall be opened at **03:00 PM on 20.01.2018**.

***Online Bid Documents submitted by intending bidders shall be opened only for those bidders, whose Earnest Money deposit and other documents placed in the envelope are found in order.***

11. The bid submitted shall become invalid and cost of bid & e-Tender processing fee shall not be refunded if:
  - (i) The bidders is found ineligible.
  - (ii) The bidders does not upload all the documents (including GST/IT Registration) as stipulated in the bid document.
  - (iii) If any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted physically in the office of tender opening authority.
12. The Earnest Money of the successful bidder shall be retained as performance guarantee/ security deposit till the performance guarantee period of work after completion.
13. Intending bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. A tenderer 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 tenderer 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 tenderer implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work.



14. The competent authority on behalf of the University does not bind itself to accept the lowest tender or any other tender and reserves to itself the authority to reject any or all the tenders received without assigning any reason whatsoever. 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 tenderer shall be summarily rejected.
15. Canvassing whether directly or indirectly, in connection with tenderers is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.
16. The competent authority on behalf of university reserves to himself the right of accepting the whole or any part of the bid and the bidders shall be bound to perform the same at the rate quoted.
17. The contractor shall not be permitted to tender for jobs in the EWSS, if his near relative is posted as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive).. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Department.
18. No Engineer of gazetted rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of eight months after his retirement from Government service, without the previous permission of the Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India as aforesaid before submission of the tender or engagement in the contractor's service.
19. The bid for the works shall remain open for acceptance for a period of (120) one hundred twenty 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 department, then the Government shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the bidders shall not be allowed to participate in the re-bidding process of the work.
20. This notice inviting bid shall form a part of the contract document. The successful bidder/contractor, on acceptance of his bid by the Accepting Authority shall within 15 days from the stipulated date of start of the work, sign contract/ work order consisting of: -
  - a) The Notice Inviting bid, all the documents including Special Conditions, General Specifications/ Particular Specifications and drawings, if any, forming part of the bid as uploaded at the time of invitation of bid and the rates quoted online at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.
  - b) Standard EWSS Contract/ work order and/ or other Standard EWSS form.
21. The tenderers shall quote price for each item strictly as per price schedule (BOQ). Any discount to be considered by the tenderers shall be included in the basic price in the price schedule (BOQ). Hence basic price shall be determined by the tenderers after considering the discount if any.
22. Bids will be evaluated for each item and the work Contract/ order will be awarded to the successful Bidder on the basis of total price for all the items.

### **23.0 For Composite Tenders**

- 23.1 The Superintending Engineer will call bids for the composite work. The cost of bid document and Earnest Money will be fixed with respect to the combined estimated cost put to tender for the composite tender.
- 23.2 The bid document will include following four components:
 

Part A:- **EWSS e-TENDER , EWSS FORM-1** including schedule A to F for the major component of the work, Standard General Conditions of Contract for EWSS as amended upto date.

Part B:- General / specific conditions, specifications

Part C: Schedule A to F for minor component of the work. (Superintending Engineer of major component shall also be competent authority under clause 2 and clause 5 as mentioned in schedule A to F for major components)

Part D:- schedule of quantities applicable to Providing and laying of DI pipe work.
- 23.3 The bidders must associate with himself, agencies of the appropriate class worked with EWSS and eligible to bid for each of the minor component individually.
- 23.4 The eligible bidders shall quote rates for all items of major component as well as for all items of minor components of the bid.
- 23.5 After acceptance of the bid by competent authority, the superintending engineer/ executive engineer shall issue the letter of intent/contract order on behalf of the University.
- 23.6 Entire work under the scope of composite tender including major and all minor components shall be executed under the contract order.

- 23.7 The main contractor has to associate agency(s) for minor component(s) conforming to eligibility criteria as defined in the tender document and has to submit detail of such agency(s) to Engineer-in-charge of minor component(s) within prescribed time. Name of the agency(s) to be associated shall be approved by Engineer-in-charge of minor component(s).
- 23.8 In case the main contractor intends to change any of the above agency/ agencies during the operation of the contract, he shall obtain prior approval of respective Engineer-in-charge/ DDH of the agreement. The new agency/ agencies shall also have to satisfy the laid down eligibility criteria. In case Engineer-in-charge of respective discipline is not satisfied with the performance of any agency, he can direct the contractor to change the agency executing such items of work and this shall be binding on the contractor.
- 23.9 The quantities of work indicated in 'Bill of Quantities' (BOQ) are approximate only and may vary  $\pm$  10% during actual execution of work. However, payment shall be made on item rate basis for the actual quantities of work executed at site & duly verified by the Engineer Incharge. No extra payment will be admitted for incidental and contingent work, labour and /or materials for successful completion of the work. No idle labour/idle equipment charges for any reason shall be admitted.
- 23.10 **Scheduled completion Period:**
- (a) The entire work shall be completed within 75 days from the date of site clearance given by the purchaser after technical & commercially clear contract order to be issued by the purchaser.
  - (b) 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.
- 23.11 **Terms of Payment:**
- a) The contractor shall not be paid any advance in any form or deposit for work.
  - b) Payment alongwith all applicable taxes & duties shall be made as running bill on prorata basis after satisfactory completion of the executed portion of work to be certified by Engineer Incharge of EWSS.
- 23.12 It will be obligatory on the part of the tenderer to sign the tender documents for all components before the first payment is released.
- 23.13 **Performance Guarantee:**
- The Contractor shall guarantee the entire work under his scope & materials supplied (including bought-out equipment) by him for a period of 12 months from the date of final acceptance/commissioning against inadequacy in design, defective material, error in detailing work, faulty workmanship etc.

In the event of any inadequacy, defect, error, fault occurring during the guarantee period, it shall be the responsibility of the contractor to rectify the same with no extra cost to the University

**SUPERINTENDING ENGINEER  
ELECTRIC & WATER SUPPLY SERVICES  
BANRAS HINDU UNIVERSITY  
VARANASI**

**INTEGRITY PACT**

To,

.....\*.....  
.....\*.....  
.....\*.....

**Sub: NIT No. ----- For the Electrical, cabling & Earthing work for providing power supply to the core switch room, distribution switch rooms & access switches at various locations under the Wi-Fi project for BHU campus, Varanasi.**

Dear Sir,

It is here by declared that EWSS is committed to follow the principle of transparency, equity and competitiveness in public procurement / work.

The subject Notice Inviting Tender (NIT) is an invitation to offer made on the condition that the Tenderer will sign the integrity Agreement, which is an integral part of tender/tender documents, failing which the tenderer will stand disqualified from the tendering process and the tender of the tenderer would be summarily rejected.

This declaration shall form part and parcel of the Integrity Agreement and signing of the same shall be deemed as acceptance and signing of the Integrity Agreement on behalf of Registrar, Banaras Hindu University.

Yours faithfully

Superintending Engineer

\*To be filled in by the S.E

INTEGRITY PACT

To,

Superintending Engineer,  
Electric & water supply services,  
Banaras Hindu University,  
Varanasi.

**Sub: Submission of Tender for the Electrical, cabling & Earthing work for providing power supply to the core switch room, distribution switch rooms & access switches at various locations under the Wi-Fi project for BHU campus, Varanasi.**

Dear Sir,

I/We acknowledge that EWSS is committed to follow the principles thereof as enumerated in the Integrity Agreement enclosed with the tender/tender document.

I/We agree that the Notice Inviting Tender (NIT) is an invitation to offer made on the condition that I/We will sign the enclosed integrity Agreement, which is an integral part of tender documents, failing which I/We will stand disqualified from the tendering process. I/We acknowledge that THE MAKING OF THE TENDER SHALL BE REGARDED AS AN UNCONDITIONAL AND ABSOLUTE ACCEPTANCE of this condition of the NIT.

I/We confirm acceptance and compliance with the Integrity Agreement in letter and spirit and further agree that execution of the said Integrity Agreement shall be separate and distinct from the main contract, which will come into existence when tender/tender is finally accepted by EWSS. I/We acknowledge and accept the duration of the Integrity Agreement, which shall be in the line with Article 1 of the enclosed Integrity Agreement.

I/We acknowledge that in the event of my/our failure to sign and accept the Integrity Agreement, while submitting the tender/tender, EWSS shall have, absolute and unfettered right to disqualify the tenderer and reject the tender in accordance with terms and conditions of the tender.

Yours faithfully

(Duly authorized signatory of the Tenderer)

INTEGRITY PACT

**To be signed by the tender and samesignatorycompetent/ authorized to sign the relevantcontractonbehalfof Registrar, Banaras Hindu University .**

INTEGRITY AGREEMENT

This Integrity Agreement is made at .....\*..... on this .....\*..... day of .....\*..... 2017

BETWEEN

**Superintending Engineer, Electric & Water Supply Services, Banaras Hindu University, Varanasi**

AND

.....\*.....  
(Name and Address of the Individual/firm/Company)

through .....\*..... (Hereinafter referred to as the  
(Details of duly authorized signatory)

“Tenderder/Contractor” and which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

Preamble

WHEREAS the Principal / Owner has floated the Tender (NIT No. - - - ) (hereinafter referred to as “Tender/Tender”) and intends to award, under laid down organizational procedure, contract **Electrical, cabling & Earthing work for providing power supply to the core switch room, distribution switch rooms & access switches at various locations under the Wi-Fi project for BHU campus, Varanasi.**

hereinafter referred to as the “Contract”.

AND WHEREAS the Principal/Owner values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relation with its Tenderer(s) and Contractor(s).

AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Integrity Agreement (hereinafter referred to as “Integrity Pact” or “Pact”), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Tender documents and Contract between the parties.

NOW, THEREFORE, in consideration of mutual covenants contained in this Pact, the parties hereby agree as follows and this Pact witnesses as under:

\*To be filled in by the S.E.

## INTEGRITY PACT

### Article 1: Commitment of the Principal/Owner

- 1) The Principal/Owner commits itself to take all measures necessary to prevent corruption and to observe the following principles:
  - (a) No employee of the Principal/Owner, personally or through any of his/her family members, will in connection with the Tender, or the execution of the Contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
  - (b) The Principal/Owner will, during the Tender process, treat all Tenderer(s) with equity and reason. The Principal/Owner will, in particular, before and during the Tender process, provide to all Tenderer(s) the same information and will not provide to any Tenderer(s) confidential / additional information through which the Tenderer(s) could obtain an advantage in relation to the Tender process or the Contract execution.
  - (c) The Principal/Owner shall endeavour to exclude from the Tender process any person, whose conduct in the past has been of biased nature.
- 2) If the Principal/Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code (IPC)/Prevention of Corruption Act, 1988 (PC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Principal/Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

### Article 2: Commitment of the Tenderer(s)/Contractor(s)

- 1) It is required that each Tenderer/Contractor (including their respective officers, employees and agents) adhere to the highest ethical standards, and report to the Government / Department all suspected acts of fraud or corruption or Coercion or Collusion of which it has knowledge or becomes aware, during the tendering process and throughout the negotiation or award of a contract.
- 2) The Tenderer(s)/Contractor(s) commits himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the Tender process and during the Contract execution:
  - a) The Tenderer(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal/Owner's employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the Tender process or during the execution of the Contract.
  - b) The Tenderer(s)/Contractor(s) will not enter with other Tenderer(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of tenders or any other actions to restrict competitiveness or to cartelize in the tendering process.

## INTEGRITY PACT

- c) The Tenderer(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act. Further the Tenderer(s)/Contract(s) will not use improperly, (for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Principal/Owner as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
  - d) The Tenderer(s)/Contractor(s) of foreign origin shall disclose the names and addresses of agents/representatives in India, if any. Similarly Tenderer(s)/Contractor(s) of Indian Nationality shall disclose names and addresses of foreign agents/representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could tender in a tender but not both. Further, in cases where an agent participate in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of another manufacturer along with the first manufacturer in a subsequent/parallel tender for the same item.
  - e) The Tenderer(s)/Contractor(s) will, when presenting his tender, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.
- 3) The Tenderer(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
  - 4) The Tenderer(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice means a willful misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the University interests.
  - 5) The Tenderer(s)/Contractor(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his/ her reputation or property to influence their participation in the tendering process).

### Article 3: Consequences of Breach

Without prejudice to any rights that may be available to the Principal/Owner under law or the Contract or its established policies and laid down procedures, the Principal/Owner shall have the following rights in case of breach of this Integrity Pact by the Tenderer(s)/Contractor(s) and the Tenderer/ Contractor accepts and undertakes to respect and uphold the Principal/Owner's absolute right:

- 1) If the Tenderer(s)/Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article 2 above or in any other form, such as to put his reliability or credibility in question, the Principal/Owner after giving 14 days notice to the contractor shall have powers to disqualify the Tenderer(s)/ Contractor(s) from the Tender process or

## INTEGRITY PACT

terminate/determine the Contract, if already executed or exclude the Tenderer/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Principal/Owner. Such exclusion may be forever or for a limited period as decided by the Principal/Owner.

- 2) Forfeiture of EMD/Performance Guarantee/Security Deposit: If the Principal/Owner has disqualified the Tenderer(s) from the Tender process prior to the award of the Contract or terminated/determined the Contract or has accrued the right to terminate/determine the Contract according to Article 3(1), the Principal/Owner apart from exercising any legal rights that may have accrued to the Principal/Owner, may in its considered opinion forfeit the entire amount of Earnest Money Deposit, Performance Guarantee and Security Deposit of the Tenderer/Contractor.
- 3) Criminal Liability: If the Principal/Owner obtains knowledge of conduct of a Tenderer or Contractor, or of an employee or a representative or an associate of a Tenderer or Contractor which constitutes corruption within the meaning of IPC Act, or if the Principal/Owner has substantive suspicion in this regard, the Principal/Owner will inform the same to law enforcing agencies for further investigation.

### Article 4: Previous Transgression

- 1) The Tenderer declares that no previous transgressions occurred in the last 5 years with any other Company in any country confirming to the anticorruption approach or with Central Government or State Government or any other Central/State Public Sector Enterprises in India that could justify his exclusion from the Tender process.
- 2) If the Tenderer makes incorrect statement on this subject, he can be disqualified from the Tender process or action can be taken for banning of business dealings/ holiday listing of the Tenderer/Contractor as deemed fit by the Principal/ Owner.
- 3) If the Tenderer/Contractor can prove that he has resorted / recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal/Owner may, at its own discretion, revoke the exclusion prematurely.

### Article 5: Equal Treatment of all Tenderers/Contractors/Subcontractors

- 1) The Tenderer(s)/Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact. The Tenderer/Contractor shall be responsible for any violation(s) of the principles laid down in this agreement/Pact by any of its Sub-contractors/sub-vendors.
- 2) The Principal/Owner will enter into Pacts on identical terms as this one with all Tenderers and Contractors.



## INTEGRITY PACT

The Principal/Owner will disqualify Tenderers, who do not submit, the duly signed Pact between the Principal/Owner and the tenderer, along with the Tender or violate its provisions at any stage of the Tender process, from the Tender process.

### Article 6-Duration of the Pact

This Pact begins when both the parties have legally signed it. It expires for the Contractor/Vendor 75 days after the completion of work under the contract or till the continuation of defect liability period, whichever is more and for all other tenderers, till the Contract has been awarded.

If any claim is made/lodged during the time, the same shall be binding and continue to be valid despite the lapse of this Pacts as specified above, unless it is discharged/determined by the Competent Authority, EWSS.

### Article 7-Other Provisions

- 1) This Pact is subject to Indian Law, place of performance and jurisdiction is the Head quarters of the Division of the Principal/Owner, who has floated the Tender.
- 2) Changes and supplements need to be made in writing. Side agreements have not been made.
- 3) If the Contractor is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a Company, the Pact must be signed by a representative duly authorized by board resolution.
- 4) Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- 5) It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Agreement / Pact, any action taken by the Owner/Principal in accordance with this Integrity Agreement/ Pact or interpretation thereof shall not be subject to arbitration.

Article 8-LEGAL AND PRIOR RIGHTS

All rights and remedies of the parties hereto shall be in addition to all the other legal rights and remedies belonging to such parties under the Contract and/or law and the same shall be deemed to be cumulative and not alternative to such legal rights and remedies aforesaid. For the sake of brevity, both the Parties agree that this Integrity Pact will have precedence over the Tender/Contact documents with regard any of the provisions covered under this Integrity Pact.

IN WITNESS WHEREOF the parties have signed and executed this Integrity Pact at the place and date first above mentioned in the presence of following witnesses:

.....\*.....  
(For and on behalf of Principal/Owner)

.....\*.....  
(For and on behalf of Tenderer/Contractor)

WITNESSES:

1. ....\*.....  
(signature, name and address)

2. ....\*.....  
(signature, name and address)

Place: Dated :

\* To be filled in by the Superintending Engineer & tenderer as the case may be

BANARAS HINDU UNIVERSITY  
ELECTRIC & WATER SUPPLY SERVICES

**ITEM RATE TENDER & CONTRACT FOR JOB WORK**

Tender for the work of: **Electrical, cabling & Earthing work for providing power supply to the core switch room, distribution switch rooms & access switches at various locations under the Wi-Fi project for BHU campus, Varanasi.**

(Time)

(Date)

- (i) To be submitted by **04.00 P.M. on 18.01.2018** in the office of  
Superintending Engineer, Electric & water supply services, BHU, Varanasi.
- (ii) To be opened in presence of tenderers who may be present at **3.00 P.M  
on 20.01.2018** in the office of the Superintending Engineer, Electric & Water supply services  
, BHU, Varanasi

**TENDER**

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

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

We agree to keep the tender open for 120 (one hundred twenty) days from the due date of its opening and not to make any modification in its terms and conditions.

A sum of **Rs. 81,600/-** is hereby forwarded in fixed deposit receipt of scheduled bank/demand draft of a scheduled bank as earnest money. If I/We, fail to furnish the prescribed performance guarantee within prescribed period. I/We agree that the university 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 university 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 Clause 12.2 and 12.3 of the tender form. Further, I/We agree that in case of forfeiture of Earnest Money or Performance Guarantee as aforesaid, I/We shall be debarred for participation in the re-tendering process of the work.

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

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

Dated:

Signature of Contractor

Witness:

Postal Address

Address: Occupation:

# ACCEPTANCE

The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by me on behalf of the Registrar, Banaras Hindu University for a sum of ` ..... (Rupees

.....  
...  
.....).

The letters referred to below shall form part of this contract/ work order

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

For & on behalf of Registrar, Banaras  
Hindu University

.....

Dated:

Designation .....

### PROFORMA OF SCHEDULES

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

#### SCHEDULE 'A'

Schedule of Job work.

#### SCHEDULE 'B'

Schedule of materials to be issued to the contractor on returnable basis

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

#### SCHEDULE 'C'

Tools and plants to be hired to the contractor

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

#### SCHEDULE 'D'

Extra schedule for specific requirements/document for the work, if As attached in tender form any.

#### SCHEDULE 'E'

Reference to General Conditions of contract.

Name of Work: <b>Electrical, cabling &amp; Earthing work for providing power supply to the core switch room, distribution switch rooms &amp; access switches at various locations under the Wi-Fi project for BHU campus, Varanasi.</b>	
Total Estimated cost of the work:	<b>Rs. 16,32,000/-</b>
Earnest money	<b>Rs. 81,600/-</b> (To be retained only for successful tenderer till the performance guarantee period of work after completion.)

## SCHEDULE 'F'

## GENERAL RULES &amp; DIRECTIONS:

Officer inviting tender	Superintending Engineer Electric & Water Supply Services Banaras Hindu University Varanasi
Maximum percentage of quantity of items of work to be executed beyond which rates are to be determined in accordance with Clause 12.2.& 12.3	NA

## Definitions:

2(v) Engineer-in-Charge	
For all items of work	Superintending Engineer E W S S ,BHU., Varanasi.
2(vii) Accepting Authority	Superintending Engineer E W S S ,BHU., Varanasi.
2(x) Percentage on cost of materials and labour to cover all overheads and profits	NA
2(xi) Standard Schedule of Rates: for all Items of Work:	NA
2(xii) Department:	Electric & Water Supply Services

Clause 1	Time allowed submission of Performance Guarantee from the date of issue of letter of acceptance	NA
Clause 2	Number of days from the date of issue of letter of acceptance for reckoning date of start	NA

## Mile stone/Bar Chart(s)-

	Work completion Period	75 days
Authority to decide Extension of time	Engineer-in-Charge	
Rescheduling of mile stone	Engineer-in-Charge	
Shifting of date of start in case of delay in handing over of site	Engineer-in-Charge	
Clause 6, 6A	Clause applicable	Clause 6
A		
Clause 7	Gross work to be done together with net payment/Adjustment of advances for material collected, if any, since the last such payment for being eligible to interim payment	NA
Clause 10A	List of testing equipment to be provided by the contractor at site lab.	Refer page No. 38
Clause 10 B (ii)	Whether clause 10-B (ii) shall be applicable.	NA
Clause 10 C	Component of labour expressed as percentage of value of work	NA
Clause 10 CA	Materials covered under this clause.	Nearest material (other than cement*,reinforcement bars and structural steel) for which All India Wholesale Price Index is to be followed. NA
Clause 10 CC	Clause 10CC to be applicable in contracts with stipulated period of completion exceeding the period shown in next column Schedule of component of other Materials, Labour, POL etc. for price escalation	NA



Clause 11 Specification to be followed for execution of work:

For all items of work/job As per Jal Nigam norms.

Clause 12		
12.2 & 12.3	Deviation limit beyond which clause 12.2 & 12.3 shall apply for Job work	NA

Clause 16	Competent Authority for Deciding reduced rates:	
	For all items of work	Superintending Engineer E W S S ,BHU., Varanasi.
Clause 18	List of mandatory machinery, tools & plants to be deployed by the contractor at site.	As per standard practices.

Clause 25

Constitution of Dispute Redressal Committee (DRC)	Competent Authority to appoint DRC
DRC shall constitute one Chairman and two members	Superintending Engineer E W S S ,BHU., Varanasi.

## **GENERAL RULE & DIRECTIONS**

1. All work proposed for execution by contract will be notified in a form of invitation to tender pasted in public places and signed by the officer inviting tender or by publication in News papers as the case may be.

This form will state the work to be carried out, as well as the dated of submitting and opening tenders and the time allowed for carrying out the work, also the amount of earnest money to be deposited with the tender, and the amount of the security deposit and Performance guarantee to be deposited by the successful tenderer and the percentage, if any, to be deducted from bills. Copies of the specifications, designs and drawings and any other documents required in connection with the work signed for the purpose of identification by the officer inviting tender shall also be open for inspection by the contractor at the office of officer inviting tender during office hours.

2. In the event of the tender being submitted by a firm, it must be signed separately by each partner thereof or in the event of the absence of any partner, it must be signed on his behalf by a person holding a power holding a power-of attorney authorizing him to do so, such power of attorney to be produced with the tender, and it must disclose that the firm is duly registered under the Indian Partnership Act, 1952.
3. Receipts for payment made on account of work, when executed by a firm, must also be signed by all the partners, except where contractors are described in their tender as a firm, in which case the receipts must be signed in the name of the firm by one of the partners, or by some other person having due authority to give effectual receipts for the firm.
4. Any person who submits a tender (applicable for item rate tender only) shall fill up the usual printed form, stating at what rate he is willing to undertake each item of the work. Tenders, which propose any alteration in the work specified in the said form of invitation to tender, or in the time allowed for carrying out the work, or which contain any other conditions of any sort, including conditional rebates, will be summarily rejected. No single tender shall include more than one work, but contractors who wish to tender for two or more works shall submit separate tender for each. Tender shall have the name and number of the works to which they refer, written on the envelopes.

The rate(s) must be quoted in decimal coinage. Amounts must be quoted in full rupees by ignoring fifty paisa and considering more than fifty paisa as rupee one.

In case the lowest tendered amount (worked out on the basis of quoted rate of individual items) of two or more contractors is same, then such lowest contractors may be asked to submit sealed revised offer quoting rate of each item of the schedule of quantity for all sub sections/sub heads as the case may be, but the revised quoted rate of each item of schedule of quantity for all sub sections/sub heads should not be higher than their respective original rate quoted already at the time of submission of tender. The lowest tender shall be decided on the basis of revised offer.

In the revised tender amount (worked out on the basis of quoted rate of individual items) of two or more contractors received in revised offer is again found to be equal, then the lowest tender, among such contractors, shall be decided by draw of lots in the presence of SE & the lowest contractors those have quoted equal amount of their tenders.

In case of any such lowest contractor in his revised offer quotes rate of any items more than their respective original rate quoted already at the time of submission of tender, then such revised offer shall be treated invalid. Such case of revised offer of the lowest contractor or case of refusal to submit revised offer by the lowest contractor shall be treated as withdrawal of his tender before acceptance and 50% of his earnest money shall be forfeited.

In case all the lowest contractors those have same tendered amount (as a result of their quoted rate individual items), refuse to submit revised offers, then tenders are to be recalled after forfeiting 50% of EMD of each lowest contractors.

Contractor, whose earnest money is forfeited because of non-submission of revised offer, or quoting higher revised rate(s) of any item(s) than their respective original rate quoted already at the time of submission on his bid shall not be allowed to participate in the re-tendering process of the work.

4A. In case of Percentage Rate Tenders, tenderer shall fill up the usual printed form, stating at what percentage below/above (in figures as well as in words) the total estimated cost given in Schedule of Quantities at Schedule- A, he will be willing to execute the work. The tender submitted shall be treated as invalid if:

- (i) The contractor does not quote percentage above/below on the total amount of tender or any section/sub head of the tender.
- (ii) The percentage above/below is not quoted in figures & words both on the total amount of tender or any section/sub head of the tender.
- (iii) The percentage quoted above/below is different in figures & words on the total amount of tender or any section/sub head of the tender:

Tenders, which propose any alteration in the work specified in the said form of invitation to tender, or in the time allowed for carrying out the work, or which contain any other conditions of any sort including conditional rebates, will be summarily rejected. No single tender shall include more than one work, but contractors who wish to tender for two or more works shall submit separate tender for each. Tender shall have the name and number of the works to which they refer, written on the envelopes.

In case the lowest tendered amount (estimated cost + amount worked on the basis of percentage above/below) of two or more contractors is same, such lowest contractors will be asked to submit sealed revised offer in the form of letter mentioning percentage above/below on estimated cost of tender including all sub sections/sub heads as the case may be, but the revised percentage quoted above/below on tendered cost or on each sub section/sub head should not be higher than the percentage quoted at the time of submission of tender. The lowest tender shall be decided on the basis of revised offers.

In case any of such contractor refuses to submit revised offer, then it shall be treated as withdrawal of his tender before acceptance and 50% of earnest money shall be forfeited.

If the revised tendered amount of two more contractors received in revised offer is again found to be equal, the lowest tender, among such contractors, shall be decided by draw of lots in the presence of SE & the lowest contractors those have quoted equal amount of their tenders.

In case all the lowest contractors those have quoted same tendered amount, refuse to submit revised offers, then tenders are to be recalled after forfeiting 50% of EMD of each contractor. Contractor(s), whose earnest money is forfeited because of non-submission of revised offer, shall not be allowed to participate in the retendering process of the work.

5. The officer inviting tender or his duly authorized assistant will open tenders in the presence of any intending contractors who may be present at the time, and will enter the amounts of the several tenders in a comparative statement in a suitable form. In the event of a tender being accepted, a receipt for the earnest money shall thereupon be given to the contractor who shall thereupon for the purpose of identification sign copies of the specifications and other documents mentioned in Rule-I. In the event of a tender being rejected, the earnest money shall thereupon be returned to the contractor remitting the same, without any interest.
6. The officer inviting tenders shall have the right of rejecting all or any of the tenders and will not be bound to accept the lowest or any other tender.
7. The receipt of an accountant or clerk for any money paid by the contractor will not be considered as any acknowledgment or payment to the officer inviting tender and the contractor shall be responsible for seeing that he procures a receipt signed by the officer inviting tender or a duly authorized Cashier.
8. The memorandum of work tendered for and the schedule of materials to be supplied by the department and their issue-rates, shall be filled and completed in the office of the officer inviting tender before the tender form is issued. If a form is issued to an intending tenderer without having been so filled in and incomplete, he shall request the officer to have this done before he completes and delivers his tender.
9. The tenderers shall sign a declaration under the officials Secret Act 1923, for maintaining secrecy of the tender documents drawings or other records connected with the work given to them. The unsuccessful tenderers shall return all the drawings given to them.

9A Use of correcting fluid, anywhere in tender document is not permitted. Such tender is liable for rejection.

10. In the case of Item Rate Tenders, only rates quoted shall be considered. Any tender containing percentage below/above the rates quoted is liable to be rejected. Rates quoted by the contractor in item rate tender in figures and words shall be accurately filled in so that there is no discrepancy in the rates written in figures and words. However, if a discrepancy is found, the rates which correspond with the amount worked out by the contractor shall unless otherwise proved be taken as correct. If the amount of an item is not worked out by the contractor or it does not correspond with the rates written either in figures or in words, then the rates quoted by the contractor in words shall be taken as correct. Where the rates quoted by the contractor in figures and in words tally, but the amount is not worked out correctly, the rates quoted by the contractor will unless otherwise proved be taken as correct and not the amount. In event no rate has been quoted for any item(s), leaving space both in figure(s), word(s), and amount blank, it will be presumed that the contractor has included the cost of this/these item(s) in other items and rate for such item(s) will be considered as zero and work will be required to be executed accordingly.

- 10A. In case of Percentage Rate Tenders only percentage quoted shall be considered. Any tender containing item rates is liable to be rejected. Percentage quoted by the contractor in percentage rate tender shall be accurately filled in figures and words, so that there is no discrepancy.
11. In the case of any tender where unit rate of any item/items appear unrealistic, such tender will be considered as unbalanced and in case the tenderer is unable to provide satisfactory explanation, such a tender is liable to be disqualified and rejected.
12. All rates shall be quoted on the price schedule in .xls from (BOQ).  
The amount for each item should be worked out and requisite totals given. Special care should be taken to write the rates in figures as well as in words and the amount in figures only, in such a way that interpolation is not possible. The total amount should be written both in and in words. In case of figures, the word 'Rs.' should be written before the figure of rupees and word 'P' after the decimal figures, e.g. 'Rs. 2.15 P' and in case of words, the word, 'Rupees' should precede and the word 'Paise' should be written at the end. Unless the rate is in whole rupees and followed by the word 'only' it should invariably be upto two decimal places. While quoting the rate in schedule of quantities, the word 'only' should be written closely following the amount and it should not be written in the next line.
- 12A. In Percentage Rate Tender, the tenderer shall quote percentage below/above (in figures as well as in words) at which he will be willing to execute the work. He shall also work out the total amount of his offer and the same should be written in figures as well as in words in such a way that no interpolation is possible. In case of figures, the word 'Rs.' should be written before the figure of rupees and word 'P' after the decimal figures, e.g. 'Rs. 2.15P' and in case of words, the word 'Rupees' should precede and the word 'Paisa' should be written at the end.
13. On acceptance of the tender, the name of the accredited representative(s) of the contractor who would be responsible for taking instructions from the Engineer-in- Charge shall be communicated in writing to the Engineer-in- Charge
14. The contractor shall give a list of both gazetted and non-gazetted University employees related to him.
15. The tender for the work shall not be witnessed by a contractor or contractors who himself/themselves has/have tendered or who may and has/have tendered for the same work. Failure to observe this condition would render, tenders of the contractors tendering, as well as witnessing the tender, liable to summary rejection.
16. The tender for composite work includes, in addition to building work, all other works such as sanitary and water supply installations drainage installation, electrical work, horticulture work, roads and paths etc. The tenderer apart from being a registered contractor (B&R) of appropriate class, must associate himself with agencies of appropriate class which are eligible to tender for sanitary and water supply drainage, electrical and horticulture works in the composite tender.

17. The contractor shall submit list of works which are in hand (progress) in the following form:-

Name of Work	Name and particulars of Divn. Where work is being executed	Value of Work	Position of works in Progress	Remarks
--------------	--	---------------	-------------------------------	---------

18. The contractor shall comply with the provisions of the Apprentices Act 1961, and the rules and orders issued thereunder from time to time. If he fails to do so, his failure will be a breach of the contract and the Superintending Engineer/Executive Engineer may in his discretion, without prejudice to any other right or remedy available in law, cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provisions of the said Act.
19. The contractor shall comply with the provisions of the U.P state construction and labor laws
20. The contractor shall have to submit, if required his valid labour license & employees provident fund registration documents before commencement of work
21. All the statutory deductions viz. Income Tax, Sales Tax on works contracts etc. if required, shall be made from the contractor's bills as per rules/regulations/acts in force

## **SALIENT/ MANDATORY REQUIREMENT FOR THE TENDER**

**Name of Work: Electrical, cabling & Earthing work for providing power supply to the core switch room, distribution switch rooms & access switches at various locations under the Wi-Fi project for BHU campus, Varanasi.**

The tenderer is advised to read and examine the tender documents for the work and the set of drawings available with Engineer-in-charge. He should inspect and examine the site and its surroundings by himself before submitting his tender.

- 1 Separate schedule of quantity is included in this tender for job work. The contractor shall quote the item rates in figures and words accurately so that there is no discrepancy in rates written in figures and words.
- 2 Period of completion is 75 days.
- 3 The contractor(s) shall submit a detailed programme of activities of work within ten days from the date of issue of award letter/order.
- 4 Quality of the job work is of utmost importance. This shall be adhered to in accordance with the provisions of EWSS specifications and guidelines given in the relevant paras.
- 5 The contractor (s) shall make his own arrangements for Transportation required for providing the job work.
- 6 Contractor has to deploy required tools & Plants and machinery in the job work. In case the contractor fails to deploy the plant and machinery whenever required and as per the direction of the Engineer-in-charge, he (Engineer-in-charge) shall be at a liberty to get the same deployed at the risk and cost of the contractor.
- 7 The contractor shall submit the running bills in the standard format.
- 8 The contractor shall submit list of works which are in hand (progress) in the following form

Name of work	Name and particulars of Divn. where work is being executed	Value of work	Position of works in progress		Remarks
			Stipulated	Actual	
1	2	3	4	5	6

- 9 The contractor 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 Superintending Engineer/Executive Engineer may in his discretion, without prejudice to any other right or remedy available in law, cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provisions of the said Act.

# PART-B



QUALITY ASSURANCE OF THE WORK

1. The contractor shall ensure quality control measures on different aspects of Job work including materials, workmanship and correct maintenance methodologies to be adopted. He shall have to submit quality assurance programme within two weeks of the award of work. The quality assurance programme should include method statement for various items of work to be executed along with check lists to enforce quality control.
2. The contractor shall get the source of all other materials, not specified elsewhere in the document, approved from the Engineer-in-Charge. The contractor shall stick to the approved source unless it is absolutely unavoidable. Any change shall be done with the prior approval of the Engineer-in-Charge for which tests etc. shall be done by the contractor at his own cost. Similarly, the contractor shall submit brand/ make of various materials not specified in the agreement, to be used for the approval of the Engineer-in-Charge along with samples and once approved, he shall stick to it.

The representatives of the department shall be at liberty to inspect the testing procedure at site and conduct testing at random in consultation with Engineer in charge. The contractor shall provide all necessary facilities for the purpose.

**B) Other Laboratories :**

1. The contractor shall arrange carrying out of all tests required under the contract order through the laboratory as approved by the Engineer-in-Charge and shall bear all charges in connection therewith including fee for testing.
2. However, no testing charges will be payable to the contractor for the tests .

**C) Sampling of Materials :**

1. Maintenance of register of tests and material at site registers-
  - (i) All the registers of tests carried out at construction site or in outside laboratories shall be maintained by the contractor which shall be issued to the contractor by Engineer-in-Charge in the same manner as being issued to EWSS field staff.
  - (ii) All the MAS Registers shall be maintained by contractor which shall be issued to the contractor by Engineer-in-Charge in the same manner as being issued to E W S S field staff:

## ADDITIONAL TERMS AND CONDITIONS

- 1 Till the work is almost completed to the satisfaction of Engineer-in-Charge-
  - (i) Contractor shall not divert any advance payments or part thereof for any purpose other than needed for completion of the contracted work. All advance payments received as per terms of the contract (i.e. mobilization, secured against materials brought at site, secured against plant & machinery and/required to be re-invested in the contracted work to ensure advance availability resources in terms of materials, labour, plant & machinery needed for required pace of progress for timely completion of work.
  - (ii) All running account bills preferred by the contractor for advance payments shall be processed only if Engineer-in-charge is satisfied that upto date investments (excluding security deposit & performance guarantee, which are not considered as investments) made by the contractor against contracted work are more than the payments received. Accordingly, all running account bills shall be supported with an account of upto date payments received vis-à-vis upto date investments made on the work to enable Engineer-in-charge to check to his satisfaction that the payments made by Engineer-in-charge are properly utilized only on the work and nowhere else.
- 2 Unless otherwise provided in the Schedule of Quantities/Specifications, the rates tendered by the contractor shall be all inclusive and shall apply to all heights, lifts, leads and depths of the work and nothing extra shall be payable to him on account of the same.
- 3 The contractor shall make his own arrangement for obtaining electric connection(s) if required and make necessary payments directly to the department concerned.
- 4 Other agencies doing works related with this project may also simultaneously execute their works and the contractor shall afford necessary facilities for the same. The contractor shall leave such necessary holes, openings etc. for laying/burying in the work, pipes cables, conduits, clamps, boxes and hooks for fan clamps etc. as may be required for the other agencies. Nothing extra over the Agreement rates shall be paid for doing these.
- 5 Some restrictions may be imposed by the security staff etc. on the working and for movement of labour, materials etc. The contractor shall be bound to follow all such restrictions/instructions and nothing extra shall be payable on account of the same.
- 6.1 The contractor shall fully comply with all legal orders and directions of the Public or local authorities or municipality by their rules and regulations and pay all fees and charges for which he may be liable in this regard. Nothing extra shall be paid/reimbursed for the same.
- 7 The contractor shall give a performance reports of the entire installation(s) as per standing specifications before the work is finally accepted by making his own arrangements for water supply work etc. and nothing extra whatsoever shall be payable for the same.
- 8 If as per local Municipal regulations, huts for labour are not to be erected at the site of work, the contractor shall be required to provide such accommodation at a place as is acceptable to the local body and nothing extra shall be paid on this account.
- 9 The control and power drawings shall at all times be properly co-related before executing any work.
- 10 For the final bill, however, full nomenclature of all the items shall be adopted in preparing abstract in the bill forms
- 11 The contractor shall take instructions from the Engineer-in-charge for stacking of materials and carryout the work.
- 12 It shall be ensured by the contractor that no electric live wire Bus is left exposed or unattended to avoid any accidents in this regard.

- 13.1 The contractor shall bear all incidental charges for cartage, storage and safe custody of materials issued by the departments as to be safe against damage by sun, rain, dampness, fire, theft etc. at his own cost and also employ necessary watch and ward establishment for the purpose, at his own cost. Materials to be charged directly to work and stipulated for issue free of cost shall also be issued to the contractor as soon as those are received at site or at the stipulated place of issue. The provision of this para shall apply equally and fully to those as well.
- 13.2 All materials obtained from the EWSS stores shall be got checked by the Engineer-in-charge of the work or his representatives before use.
14. Final bill of whole work shall be finalized and paid by Executive Engineer. Assistant Engineer (Electrical) will prepare and pass the final bill for Job work and will pass on the same to Executive Engineer for including in the final bill for composite work.
15. The work shall be carried out completely in the neat manner & all the installation shall meet the requirement of the latest amendment/revision of the Indian Electricity Rules and other statutory regulations as applicable to BHU as far as safety, earthing etc. are concerned.
16. All safety rules & codes shall have to be followed without any exception.
17. The entire work shall have to be supervised by competent supervisors of the contractor.
18. Safe keeping of equipment & materials (both free supply items issued to the contractor & the items in his scope of supply) shall be the responsibility of the contractor till the same is handed over to the purchaser without any extra cost. The University shall in no way be responsible for any loss/damage to the materials on any account.
19. All loading, unloading, handling & transportation of materials /equipment in contractor's own transport from EWSS's store/yard/shops to site shall be contractor's responsibility & to be done at his own cost.
20. The contractor shall be responsible for quality of workmanship/material supplied by them. Any defect/deficiencies pointed out by the Engineer incharge during or after erection shall be made good as directed without any extra cost to the purchaser.
21. The successful tenderer shall be responsible for the repair jobs of any damages made by him during execution of work.
22. All necessary tools, tackles and equipment required for execution of the work including arranging welding m/cs, hand drilling m/cs, gas cutting, grinding m/c etc. shall be supplied and maintained by the contractor at his own cost.
23. The tenderer shall also include in his scope such materials which are not categorically mentioned in the bill of material but are required for the completeness of the work.
24. The unit prices in the bill of quantities against the item of work shall be inclusive of all installation accessories, services, consumables, e.g. saddle, flats, fasteners, paints, welding, wire termination with Cu lugs of suitable sizes etc. necessary to complete the said work within the contemplation of contract.
25. The acceptance of all equipment/materials in the scope of contractor's supply are subject to inspection & approval at destination/site by EWSS and the rejected materials shall immediately be removed by the contractor from site at his own cost. The equipment/materials shall only be installed after receipt of clearance to this effect from the Engineer In charge of EWSS.
26. Throughout the execution of the work, the contractor shall perform clean-up on a day-to-day basis. Contractor shall be responsible for regular removal and cleaning of spillage/debris/ fall-outs etc., if any, from the operational, maintenance areas etc. consequent to and arising out of his work by removing & disposing spillage/accumulation as may be necessary and/or directed by EWSS at his own cost and arrangement to dumping site for refuse etc.

### **Special condition for Materials:**

1. The contractor shall at his own expense procure and provide all consumable materials
2. The contractor shall procure all the materials in advance so that laying work could not get hampered.
3. All materials brought by the contractor for use in the work shall be got checked from the Engineer-in-Charge or his authorised representative of the work on receipt of the same at site before use.
4. The contractor shall also employ necessary watch and ward establishment for the safe custody of materials at his own cost.

**LIST OF MACHINERY, TOOLS & PLANTS TO BE DEPLOYED BY THE  
CONTRACTOR AT SITE AS & WHEN REQUIRED**

Sl. No.	Name of Equipment	Numbers
1.0	Equipment for hoisting & lifting, Cable Jacks, shafts, turn tables etc.	As required
2.0	Drilling machine	As required
3.0	Welding machine	As required
4.0	Excavation equipment	As required
4.0	Common hand tools & Machine tools	As required

Form of Earnest Money Deposit Bank  
Guarantee Bond

WHEREAS, contractor..... (Name of contractor) (hereinafter called "the contractor")  
has submitted his tender dated ..... (date) for the construction of  
.....  
..... (name of work)  
(hereinafter called "the Tender")

KNOW ALL PEOPLE by these presents that we ..... (name of  
bank) having our registered office at ..... (hereinafter called "the Bank")  
are bound unto .....  
.....  
(hereinafter called "the Engineer-in-Charge") in the sum of `.  
..... ( in words ..... ) for which payment well  
and truly to be made to the said Engineer-in-Charge the Bank binds itself, his successors and  
assigns by these presents.

SEALED with the Common Seal of the said Bank this ..... day of ..... 20..... .

THE CONDITIONS of this obligation are:

- (1) If after tender opening the Contractor withdraws, his tender during the period of validity of tender (including extended validity of tender) specified in the Form of Tender;
- (2) If the contractor having been notified of the acceptance of his tender by the Engineer-in-Charge:
  - (a) fails or refuses to execute the Form of Agreement in accordance with the Instructions to contractor, if required;

OR

(a) fails or refuses to furnish the Performance Guarantee, in accordance with the provisions of tender document and Instructions to contractor,

OR

(b) fails or refuses to start the work, in accordance with the provisions of the contract and Instructions to contractor,

OR

(c) fails or refuses to submit fresh Bank Guarantee of an equal amount of this Bank Guarantee, against Security Deposit after award of contract.

We undertake to pay to the Engineer-in-Charge either up to the above amount or part thereof upon receipt of his first written demand, without the Engineer-in-Charge having to substantiate his demand, provided that in his demand the Engineer-in-Charge will note that the amount claimed by him is due to him owing to the occurrence of one or any of the above conditions, specifying the occurred condition or conditions.

This Guarantee will remain in force up to and including the date .....\* ..... after the deadline for submission of tender as such deadline is stated in the Instructions to contractor or as it may be extended by the Engineer-in-Charge, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this Guarantee should reach the Bank not later than the above date.

DATE .....

SIGNATURE OF THE BANK

WITNESS .....

SEAL

(SIGNATURE, NAME AND ADDRESS)

\*Date to be worked out on the basis of validity period of 75 days from last date of receipt of tender

## SCOPE OF WORK & SPECIFICATION

### Scope of work:-

**Electrical, cabling & Earthing work for providing power supply to the core switch room, distribution switch rooms & access switches at various locations under the Wi-Fi project for BHU campus, Varanasi as detailed below:**

SI No.	Description of work	Quantity
1.0	Supply, installation, testing /commissioning of the following equipments	
1.1	440V AC LT Feeder Pillar for Computer Center as per technical specifications detailed in enclosed Annexure –I	01 No.
1.2	440V AC Power Distribution Board for Computer Center as per technical specifications detailed in enclosed Annexure –II	01 No.
1.3	440V AC Power Distribution Board for UPS as per technical specifications detailed in enclosed Annexure-III	01 No.
2.0	Providing & fixing of Philips make industrial Batten luminaries (Fluorescent Tube fittings) Type TMS 122 M 2 x TL5 28 W EBT complete with lamps 2 x TL5 28 W	25 Nos.
3.0	Supply & Installation including laying & dressing of the following LT power cables on ready cable trenches/in air/concrete wall. Supply of installation/Laying accessories & consumable required for Installation/Laying work shall be in the contractor's scope. Standard Aluminum conductor, PVC insulated, colour coded, cores laid up, wrapped PVC/thermoplastic tape inner sheathed, single layer of galvanized flat steel strip/round steel wire armored and overall PVC outer sheathed power cable conforming to IS-1554(part-1)/1988 with latest amendments of the following sizes. Make of cables: KEI/ Gloster/ Universal/ Nicco/ National	
3.1	1.1KV grade 3 ½ core × 95 sqmm, AYFY cable,	80 Mtrs.
4.0	Excavation of earth cable trench minimum 900mm deep and 450mm wide and providing & underground laying/dressing of the following LT power cables. The LT power cable shall be stranded aluminium conductor, PVC insulated, color coded, cores laid up, wrapped PVC/thermoplastic tape inner sheathed, single layer of galvanized flat steel strip/round steel wire armored and over all PVC outer sheathed power cable confirming to IS-1554(part-I)/1988 with latest amendments. The work shall include filling of trench with dry river sand at bottom & top of the cable with 75mm thick layer, covering with 'A' class burnt red bricks at sides and on top (approximate 18 bricks per meter) for protection of cables back filling the cable trench after laying of cables with good soil and ramming. Supply of LT power cables, sand, bricks and cable tag are in the contractor's scope. Wherever the cable trench crosses the road, the contractor shall make good the damages in the road during excavation work including back filling the trench with excavated earth and laying of above bricks of at least 2 layers on the road at no extra cost. The work also includes providing suitable cable tags at suitable intervals along the cable route for identification. Make of cables: KEI/ Gloster/ Universal/ Nicco/ National	
4.1	1.1 KY grade 3 ½ core x 185sqmm, AYFY cable,	600 mtrs
4.2	1.1 KY grade 3 ½ core x 95sqmm, AYFY cable,	125 mtrs.
5.0	Supply, fabrication & erection of equipment foundation/ mounting frames, cable brackets/supports etc. complete with supply of standard steel section consumables, welding rods etc. Fabricated/erected steel structures shall be painted with one coat of primer followed by two cotes of synthetic enamel paints of approved make including supply of paint & primer.	100 kg
6.0	Supply & installation of cu strips of the following size complete with fabrication, jointing & tapping of earth conductors by brazing/welding & including all installation accessories & consumables. The cu earth conductors shall be installed partly on wall/ steel structure/ concrete trench etc. with suitable clamps or welded/brazed to structure at suitable intervals wherever applicable & partly buried underground at a depth of 300mm from ground level including excavation of earth, backfilling and ramming. All the welded/brazed joints of earth conductors shall be painted with anti-corrosive compound if required.	
6.1	25mm x 3mm Cu. strips	200mtrs.



SI No.	Description of work	Quantity
7.0	Construction of the following earth stations with GI earth electrodes of min. 10 feet length B class medium guage as per IS : 3043. The GI pipes shall be of QST/Jinda/ ISI approved make and shall have perforation & suitable holes for connection of earth strips. The top portion of the electrodes shall be enclosed in a 300mm x 400mm x 400mm brick masonry enclosure and provide with RCC top cover slab, GI strainer etc. Earth station shall be complete with back filling & compacting with a homogeneous mixture of sand, charcoal & salt up to the level as per standard norms. All the materials required for earth station viz GI pipes, bricks, strainer, sand, charcoal, salt, concrete materials etc. shall be supplied by the contractor & shall be included in the prices.	
7.1	Earth stations with 40mm dia single electrode in normal soil.	06 nos
8.0	Supply & installation of GI earth Flats of the following size complete with fabrication, jointing & tapping of earth conductors by welding & inclusive of all installation accessories & consumables. The earth conductors shall be buried underground at a depth of 400mm from the finished ground level including excavation of earth, backfilling and ramming. All the welded joints of earth conductors buried in ground shall be painted with anti-corrosive compound	
8.1	25mm x 5mm GI Flat in normal soil.	200 mtrs.
9.0	End termination of 1.1 KV grade SWA PVC conductor cable of the following sizes including supply of compression type cable glands & crimping type cu/Al. sockets/lugs & all other consumables & accessories required for the termination.	
9.1	3 ½ c x 185/150Sqmm. AYFY	04 nos.
9.2	3 ½ c x 120/95 Sqmm. AYFY	06 nos.
10.0	Supply & installation of CI cable markers for HT/LT cables including masonry work, providing concrete materials etc.	70 nos.
11.0	Straight through joints of the following LT cables including supply of straight through jointing kit heat shrinkable of RacheM/Birla3M make, other consumables & accessories required for the work.	
11.1	Straight through joint of 1.1 KV grade 3 ½ c 185Sqmm. PVC Al. armoured cable.	02 nos
11.2	Straight through joint of 1.1 KV grade 3 ½ C x 95Sqmm. PVC Al. armoured cable.	02 nos

**Technical Specification of 440V AC L.T. Feeder Pillar for Computer Center**

The 440V L.T. Feeder Pillar (F.P.) shall be floor mounted, free standing, double front, dust damp & vermin proof, 2 mm sheet steel enclosed cubicle type with compartmentalized feeder units and shall be used in out door application. All the incoming, interconnector & outgoing feeder units of F.P. shall be TPN fuse-switch units complete with HRC fuses. The F. P. shall have IP 55 enclosure and shall be suitable for operation at 440V, 50Hz 3phase, 4 wire AC system at 50<sup>0</sup> C ambient temperature & shall be rated for not less than 35KA at 440V for 1sec.

The approximate dimensions of the F.P. shall be 950 (L) x 1250 (H) x 700 (D) mm without rainhood (canopy) and F. P. shall have 600 mm long Pedestal made up of M.S. channel from which 300 mm long length shall be used for grouting purpose.

The F.P. shall essentially comprise the following feeders.

- i) 02 Nos. 440V TPN 250A Switch-Disconnecter fuse unit complete with 250A HRC fuses as incoming & interconnector feeders.
- ii) 02 No. 440V TPN 200A Switch-Disconnecter fuse unit complete with 200A HRC fuses as outgoing feeder.
- iii) 02 Nos. 440V TPN 160A Switch-Disconnecter fuse unit complete with 160A HRC fuses as outgoing feeders.
- iv) 02 Nos. 440V TPN 100A Switch-Disconnecter fuse unit complete with 100A HRC fuses as outgoing feeders.

The main TPN bus-bars shall be rated at 300A and shall be vertical, PVC taped/ sleeved and uniform in cross section throughout its length. The bus-bar shall be made up of electrolytic grade copper. All the phases and neutral bus-bars shall be housed in a separate air insulated vertical bus-bar chamber. The front and rear cover of this bus-bar chamber shall be hinged & bolted type. The bus-bars & its insulating supports shall be designed to with stand the thermal and magnetic stress corresponding to short-circuit fault level of 35KA at 440V for 1sec.

The vertical section shall be divided into functional feeder units for having incoming, outgoing & interconnector feeders. All the switch-disconnector fuse units of F.P. shall be front mounted & front connected and the feeder units shall be isolated from each other. The feeder units shall have front access front hinged door with locking arrangement & insulated thumbscrews. The feeder pillar (F.P.) shall have suitable pedestal (MS angle iron frame of MS channel bars) for grouting in the RCC

The F.P. shall comprise of canopy on top with minimum 10<sup>0</sup> slope extended 80 mm outside panel front, rear and sides. Door type for front & rear access centre opening double leaf & centre

lock with insulating rubber grip handle. The L.T. feeder pillar shall have front and rear access. Front compartment shall be suitable for Switch-disconnector fuse units and rear for cable terminations. The F.P. shall have centre lift up type & shall be comprises of aluminium earth bus suitably fitted in the compartment at bottom/top and at least 50mm projected at both sides. F.P. shall be supplied with suitable size of detachable gland plates of non-magnetic materials at bottom of the rear compartment for cable entry & sufficient space shall be provided for bending the cables.

Each doors of the F.P. shall be suitably earth connected by flexible PVC Cu wire 2.5 Sq.mm green colour.

Name plate shall be fixed at front top left side showing purchaser name, manufacturer name, month & year of manufacturing, Nos. of ways. Marking for panel earth black letter "E" on riveted Al. label at both sides. Danger board in English & Hindi riveted on front & rear doors Red colour back ground with black lettering on 1.6mm thick Aluminium plate. All incoming , interconnector & outgoing units shall be provided with inscription plates. The inscription plates shall be black anodized aluminium plates with white engraving. The inscription plates shall be riveted to the panels.

L.T. feeder pillar (F.P.) shall be fabricated 2 mm thick CRCA sheet and all the metal surface shall be chemically cleaned, degreases and pickled in acid to produce a smooth clean surface, free of scale, grease & rust. After cleaning, the surface shall be given a phosphate coating followed by a high quality zinc oxide primer and baking in oven. The FBA (Factory built Assembly) shall be painted powder coated grade A polyester paint with min. thickness 60 microns, paint shade-538 as per IS : 5- post office red. Fluorescent strip painting on F.P. 50 mm wide horizontal strip of fluorescent paint around panel in the middle of panel.

Sufficient quantity of touch-up paint shall be furnished for applicable at site.

Cable size for 02 Nos. 250A feeder units shall be 1.1KV grade 1 x 3½ C x 185 Sq.mm AYFY cable each.

Cable size for 02 No. 200A feeder unit shall be 1.1KV grade 1 x 3½ C x 120Sq.mm AYFY cable.

Cable size for 02 Nos. 160A feeder units shall be 1.1KV grade 1 x 3½ C x 95 Sq. mm AYFY cable each.

Cable size for 02 Nos. 100A feeder units shall be 1.1KV grade 1 x 3½ C x 70 Sq. mm AYFY cable each.

F. P. shall be tested power frequency high voltage with stand capacity for one minute at 2KV. Insulation Resistance valve for phase and neutral bus bar minimum 100 M Ω with 500V megger and the temperature rise above ambient 45<sup>0</sup> C as per IS 13947-1

A rough sketch showing the general arrangement of the L.T. Feeder pillar (F.P.) is enclosed herewith for Tenderer's reference.

**Standards .:**

All components used in the manufacture of the L.T. Feeder Pillar shall confirm to the relevant Indian standard specification and especially to the following.

IS : 4237/1982	General arrangement for switch gear & central gear for voltage not exceeding 1000V with enclosure Box.
IS : 12063/1987	Degree of protection provided by enclosures of electrical equipment.
IS : 6005/1998	Code of practice for phosphating Iron & steel.
IS : 5/2004	Colour for ready mixed paints and enamel.
IS : 5039/1983	Distribution pillar for voltage not exceeding 1000V.

A rough sketch showing the General Arrangement of the L.T. Feeder Pillar is enclosed herewith at page no. 49 for Tenderer's reference.

**The Make of component of the L.T. Feeder Pillar shall be as follow:**

Switch Disconnector Fuse Unit	Siemens / GE/L&T/ Schneider
Fuse Base & Holder/HRC fuses	Siemens / L&T/ GE/ Schneider

**NOTE:**

1. The Tenderers shall confirm make of components as indicated in the above technical specification.
2. A sketch showing tentative layout of the L.T. Feeder pillar (F.P.) indicating approximate dimension , location & size of bus-bar chamber etc. shall be furnished alongwith the Quotations.
3. GA/Dimension drawings giving details of foundation/mounting arrangement, components layout of the FP, SLD etc. shall be submitted within 15days from the date of receipt of order for our approval.
4. The FP shall be inspected at the works of the successful Tenderer before dispatch by EWSS Engineer who shall be given 15days notice in advance.

**Technical Specification for Erection of Feeder Pillar**

Erection / Installation / Fixing of above L.T. Feeder Pillar. The work shall include the excavation of earth in 1000mm depth, 1300mm length & 900mm width and making of four nos. RCC Pillar as an foundation of each 225mm thick, 1300mm height & 900mm width. The four nos. RCC Pillar shall be separated by 925mm (centre-to-centre) from each other & should be interlock at bottom through C.C.. The RCC Pillar shall be projected 300mm from the leveled earth / ground. Red dry river sand shall be used for the construction of foundation & in the ratio of 1:4 cement: sand mixture. White sand shall be used for plastering purpose in suitable ratio with cement. The L.T. Feeder Pillars shall be supplied with grouting stand & shall be used for grouting within the RCC Pillar foundation with suitable mixture of cement / sand along with gravels in suitable size. The work shall also include the leveling / alignment & fixing / installation and Testing etc. After installation / fixing of L.T. Feeder Pillar, the excavated earth shall be back filling / ramming by the contractor at no-extra cost. Contractor shall also be provided all the Tools & plants and other fixing materials i.e. hardware & consumables etc. for the execution of work at no - extra cost. The projected surfaces of brick foundation shall be painted with water proof good quality paint of post – office red colour in two coats at no-extra cost. Danger board shall be mounted wherever required to meet the relevant clause of Indian electricity rules and proper barricading wherever required shall also done by the contractor during execution of work at no-extra cost. Any damage done by contractor during the execution of work shall be made good by the contractor at no-extra cost. Any discrepancies come to the notice of EWSS regarding wrong installation/fixing/laying during the execution of work or even after completion of work, for which contractor shall be responsible to correct it/them without any extra cost. The work which is not included in the scope but necessary for the successful completion of job shall be done by the contractor at no-extra cost.

**Technical Specifications of 440V AC Power Distribution Board for Computer Center**

The Power Distribution Board (PDB) shall be floor mounted, free standing, single front, dust damp & vermin proof, 2mm sheet steel enclosed cubicle type with compartmentalized feeder units and shall be complete with 75mm base channel. All the incoming and outgoing feeder units of PDB shall be respectively non-drawout type TPN MCCB & TPN fuse-switch units complete with HRC fuses. The PDB shall have IP 52 enclosure and shall be suitable for operation at 440V, 50Hz, 3phase, 4 wire AC system at 45<sup>0</sup> ambient temperature & shall be rated for not less than 35KA at 440V for

1 sec. The approximate dimensions of the PDB shall be 2000(L) x 2100 (H) x 450(D)mm including MS channel stand.

**The PDB shall essentially comprise the following feeders:**

- i) 2 Nos. 440V 4P 250A moulded case circuit breakers (MCCB) as incomer feeders. All the MCCB feeders shall be non-drawout type with static type overload, Short circuit & earth fault protection with all adjustable setting ranges and front operating handle. The MCCB shall have short circuit breaking capacity of 50KA at 415V AC.

All the incomer feeders shall be provided with the following:

- Voltmeter of 0-500V range & 96mm x 96mm size with phase selector switch & protective HRC fuses.
- CT operated ammeter of range 0-400A & 96mm x 96mm size with phase selector switch. CTs shall be of CTR -400/1A or 5A, 5VA, class 1.0 or 2.0
- Suitably rated CT operated 3 phase, 4 wire static/electronic type energy meter (KWH meter).

- ii) 1 No. 440V 4 Pole 250A On –Load changeover switch.
- iii) (a) 2 Nos. 440V TPN 200A switch-disconnector fuse unit complete with 200A HRC fuses as outgoing feeders.  
 (b) 2 Nos. 440V TPN 160A switch-disconnector fuse unit complete with 160A HRC fuses as outgoing feeders.  
 (c) 4 Nos. 440V TPN 100A switch-disconnector fuse unit complete with 100A HRC fuses as outgoing feeders.

The main TPN busbars shall be rated at 300A and shall be vertical, PVC taped/ sleeved and uniform in cross section throughout its length. The busbars shall be of electrolytic copper. All the phases & neutral busbars shall be housed in a separate air insulated vertical busbar chamber. The front & rear cover of the busbar chamber shall be hinged & bolted type. The busbars & its insulating supports shall be designed to withstand the thermal & magnetic stress corresponding to short circuit fault level of 35KA at 440V for 1 sec.

The vertical sections shall be divided into functional feeder units for housing changeover switch, incoming & outgoing feeders. The feeder units shall have front access, front hinged door with locking arrangement & insulated thumb screws. The rear cover of all the vertical sections shall be hinged & bolted type. Each section shall contain an isolated full height cable chamber covered by

a hinged door. The cable chamber shall be minimum 400mm wide. The front cover & the rear cover of the cable chamber shall be hinged & bolted type. The stud type power terminals of suitable size shall be provided in the cable chamber for cable termination of outgoing feeder units. The cable chambers shall have the facility for cable clamping also. The detachable bottom cable gland plates shall be provided in

the cable chamber for termination of outgoing cables and in the incoming feeder chamber for termination of incoming cables. The lowest power terminals shall be located at least 400mm above from the bottom plate. Removable protective guard/cover for main vertical busbars & power terminals shall be provided. Incoming & outgoing feeders shall accept PVC insulated PVC sheathed Armoured stranded Al. conductor cables of suitable sizes for cable terminations.

An earth bus of suitable size shall be provided all along the length of PDB with necessary termination arrangement at both ends. The PDB shall be duly painted with two coats of stoving type enamel paint in light gray shade as per IS: 5 shade 613. All the feeder units of the PDB shall have black anodized rivetted aluminium inscription plates with white engraving. Details of the inscription shall be furnished to the successful tenderer. Danger boards shall be affixed onto the front & rear cover of vertical main busbar chamber.

A rough sketch showing the General Arrangement of the PDB is enclosed herewith at page no. 50 for Tenderer's reference.

**The make of components of the PDB shall be as follows:**

MCCB	– L&T/ Schneider/ GE
Changeover switch	– L&T/ HPL Socomec
Switch Disconnecter Fuse Units	– Siemens / L&T/ Schneider/GE
Ammeter & voltmeter	– AE/IMP/MECO
Current transformer (CT)	– Pragati/ABB/Siemens/AE/Kappa.
Selector switches	–Siemens/Kaycee/ BCH
Energy meter (KWH meter)	–L&T/ Secure Meter
Control HRC fuse	– Siemens / L&T/ GE/ Schneider

**NOTE:**

1. The Tenderers shall confirm make of the components as indicated in the above technical specifications.
2. A sketch showing tentative layout of the PDB indicating approximate dimension, location & size of busbar chamber etc. shall be furnished alongwith the quotations.
3. GA/Dimensional drawings giving details of foundation/ mounting arrangement, components layout of the PDB, SLD etc. shall be submitted within 15 days from the date of receipt of the order for our approval.
4. The PDB shall be inspected at the works of the successful tenderer before dispatch by EWSS Engineers who shall be given 15 days notice in advance.

**Technical Specification for Erection of PDB**

Erection / Installation / Fixing of above electric panel electrics. The work shall also include the leveling / alignment & fixing / welding / installation and Testing etc. with supply of all hardware & consumables. Contractor shall also be provided all the Tools & plants and other fixing materials for the work at no - extra cost. Any damage done by contractor during the execution of work shall be made good by the contractor at no-extra cost. Any discrepancies come to the notice of EWSS regarding wrong installation/fixing/laying during the execution of work or even after completion of work, for which contractor shall be responsible to correct it/them without any extra cost. The work which is not included in the scope but necessary for the successful completion of job shall be done by the contractor at no-extra cost.

**Technical Specifications of 440V AC Power Distribution Board for UPS**

The Power Distribution Board (PDB) shall be floor mounted, free standing, single front, dust damp & vermin proof, 2mm sheet steel enclosed cubicle type with compartmentalized feeder units and shall be complete with 75mm base channel. All the incoming and outgoing feeder units of PDB shall be respectively non-drawout type TPN fuse-switch units complete with HRC fuses. The PDB shall have IP 52 enclosure and shall be suitable for operation at 440V, 50Hz, 3phase, 4 wire AC system at 45<sup>0</sup> ambient temperature & shall be rated for not less than 35KA at 440V for

1 sec. The approximate dimensions of the PDB shall be 1750(L) x 1300 (H) x 400(D)mm including MS channel stand.

**The PDB shall essentially comprise the following feeders:**

i) 2 Nos. 440V 4P 200A fuse switch unit with complete with HRC fuse.

All the incomer feeders shall be provided with the following:

- Voltmeter of 0-500V range & 96mm x 96mm size with phase selector switch & protective HRC fuses.
- CT operated ammeter of range 0-200A & 96mm x 96mm size with phase selector switch. CTs shall be of CTR -200/1A or 5A, 5VA, class 1.0 or 3.0
- Suitably rated CT operated 3 phase, 4 wire static/electronic type energy meter (KWH meter).

ii) 1 No. 440V 4 Pole 200A On –Load changeover switch.

iv) 2 Nos. 440V TPN 200A switch-disconnector fuse unit complete with 200A HRC fuses as outgoing feeders.

The main TPN busbars shall be rated at 250A and shall be vertical, PVC taped/ sleeved and uniform in cross section throughout its length. The busbars shall be of electrolytic copper. All the phases & neutral busbars shall be housed in a separate air insulated vertical busbar chamber. The front & rear cover of the busbar chamber shall be hinged & bolted type. The busbars & its insulating supports shall be designed to withstand the thermal & magnetic stress corresponding to short circuit fault level of 35KA at 440V for 1 sec.

The vertical sections shall be divided into functional feeder units for housing changeover switch, incoming & outgoing feeders. The feeder units shall have front access, front hinged door with locking arrangement & insulated thumb screws. The rear cover of all the vertical sections shall be hinged & bolted type. Each section shall contain an isolated full height cable chamber covered by

a hinged door. The cable chamber shall be minimum 350mm wide. The front cover & the rear cover of the cable chamber shall be hinged & bolted type. The stud type power terminals of suitable size shall be provided in the cable chamber for cable termination of outgoing feeder units. The cable chambers shall have the facility for cable clamping also. The detachable bottom cable gland plates shall be provided in the cable chamber for termination of outgoing cables and in the incoming feeder chamber for termination of incoming cables. Removable protective guard/cover for main vertical busbars & power terminals shall be provided. Incoming & outgoing feeders shall accept PVC insulated PVC sheathed Armoured stranded

Al. conductor cables of suitable sizes for cable terminations.

An earth bus of suitable size shall be provided all along the length of PDB with necessary termination arrangement at both ends. The PDB shall be duly painted with two coats of stoving type enamel paint in light gray shade as per IS: 5 shade 613. All the feeder units of the PDB shall have black anodized rivetted aluminium inscription plates with white engraving. Details of the inscription shall be furnished to the successful tenderer. Danger boards shall be affixed onto the front & rear cover of vertical main busbar chamber.

A rough sketch showing the General Arrangement of the PDB is enclosed herewith at page no. 51 for Tenderer's reference.

**The make of components of the PDB shall be as follows:**

Changeover switch	– L&T/ HPL Socomec
Switch Disconnecter Fuse Units	– Siemens / L&T/ Schneider/ GE
Ammeter & voltmeter	– AE/IMP/MECO
Current transformer (CT)	– Pragati/ABB/Siemens/AE/Kappa.
Selector switches	–Siemens/Kaycee/ BCH
Energy meter (KWH meter)	–L&T/ Secure Meter
Control HRC fuse	– Siemens / L&T/ GE/ Schneider

**NOTE:**

1. The Tenderers shall confirm make of the components as indicated in the above technical specifications.
2. A sketch showing tentative layout of the PDB indicating approximate dimension, location & size of busbar chamber etc. shall be furnished alongwith the quotations.
3. GA/Dimensional drawings giving details of foundation/ mounting arrangement, components layout of the PDB, SLD etc. shall be submitted within 15 days from the date of receipt of the order for our approval.

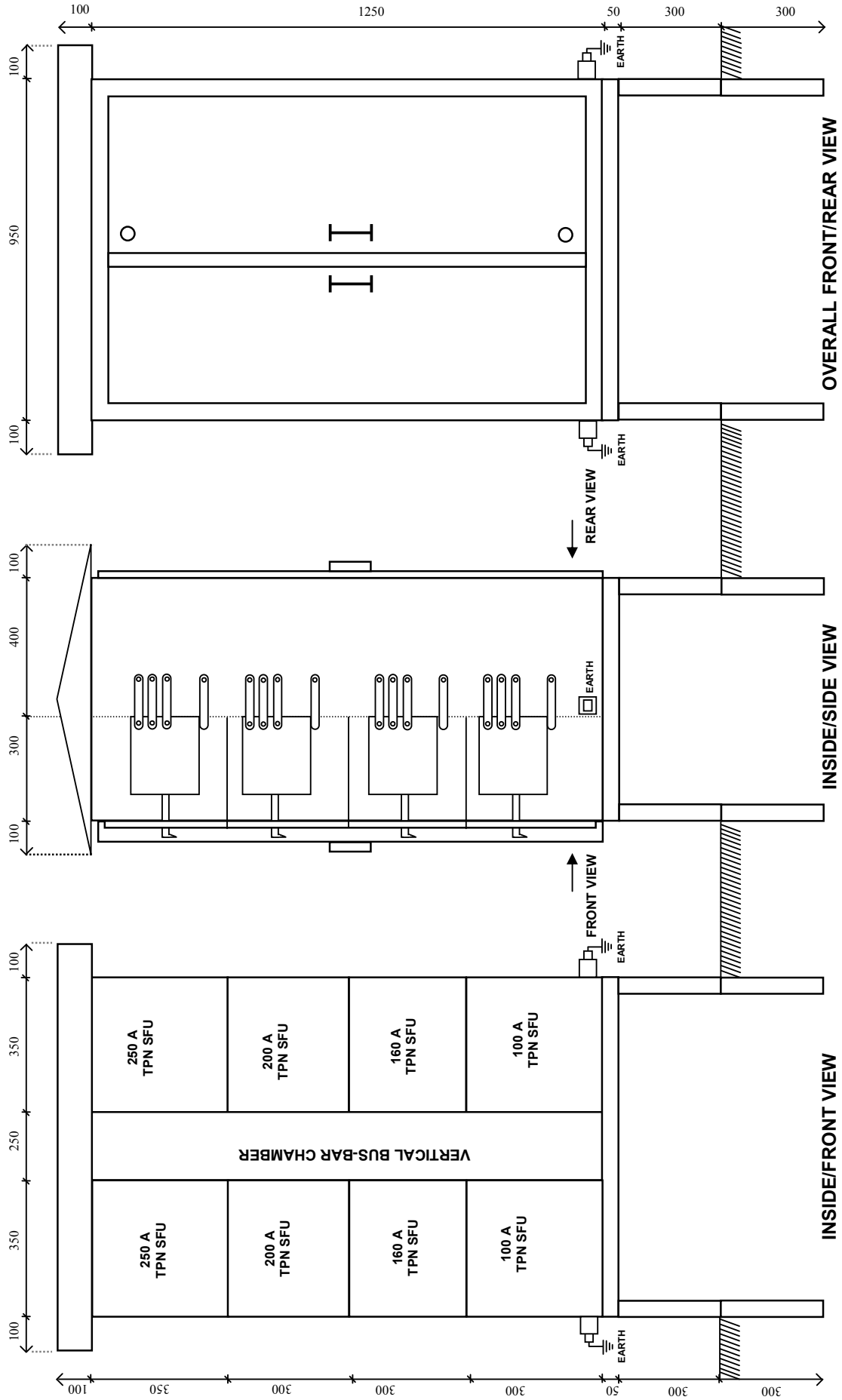
The PDB shall be inspected at the works of the successful tenderer before dispatch by EWSS Engineers who shall be given 15 days notice in advance.

**Technical Specification for Erection of PDB**

Erection / Installation / Fixing of above electric panel electrics. The work shall also include the leveling / alignment & fixing / welding / installation and Testing etc. with supply of all hardware & consumables. Contractor shall also be provided all the Tools & plants and other fixing materials for the work at no - extra cost. Any damage done by contractor during the execution of work shall be made good by the contractor at no-extra cost. Any discrepancies come to the notice of EWSS regarding wrong installation/fixing/laying during the execution of work or even after completion of work, for which contractor shall be responsible to correct it/them without any extra cost. The work which is not included in the scope but necessary for the successful completion of job shall be done by the contractor at no-extra cost.

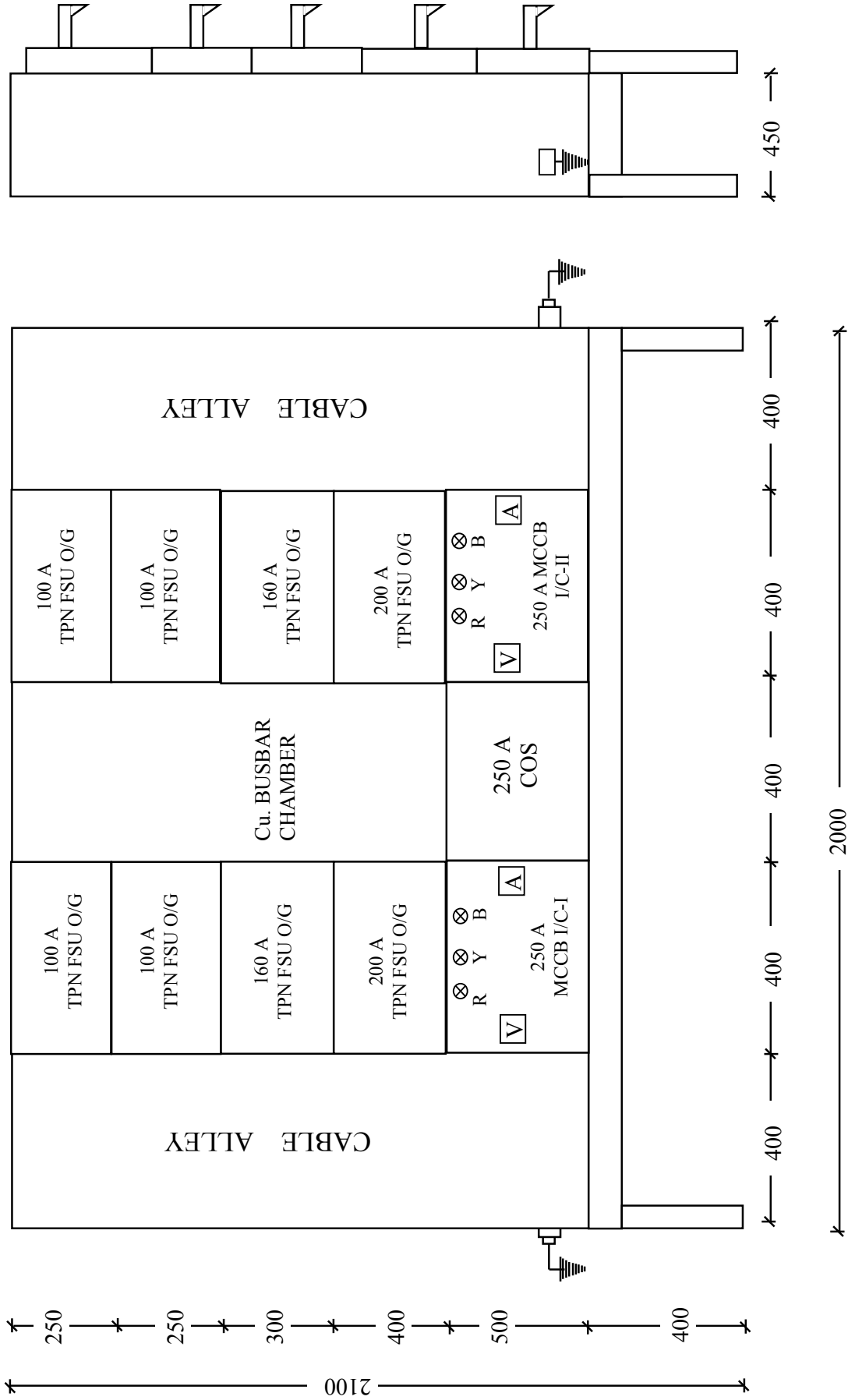


# 49 440 AC L. T. FEEDER PILLER FOR COMPUTER CENTER



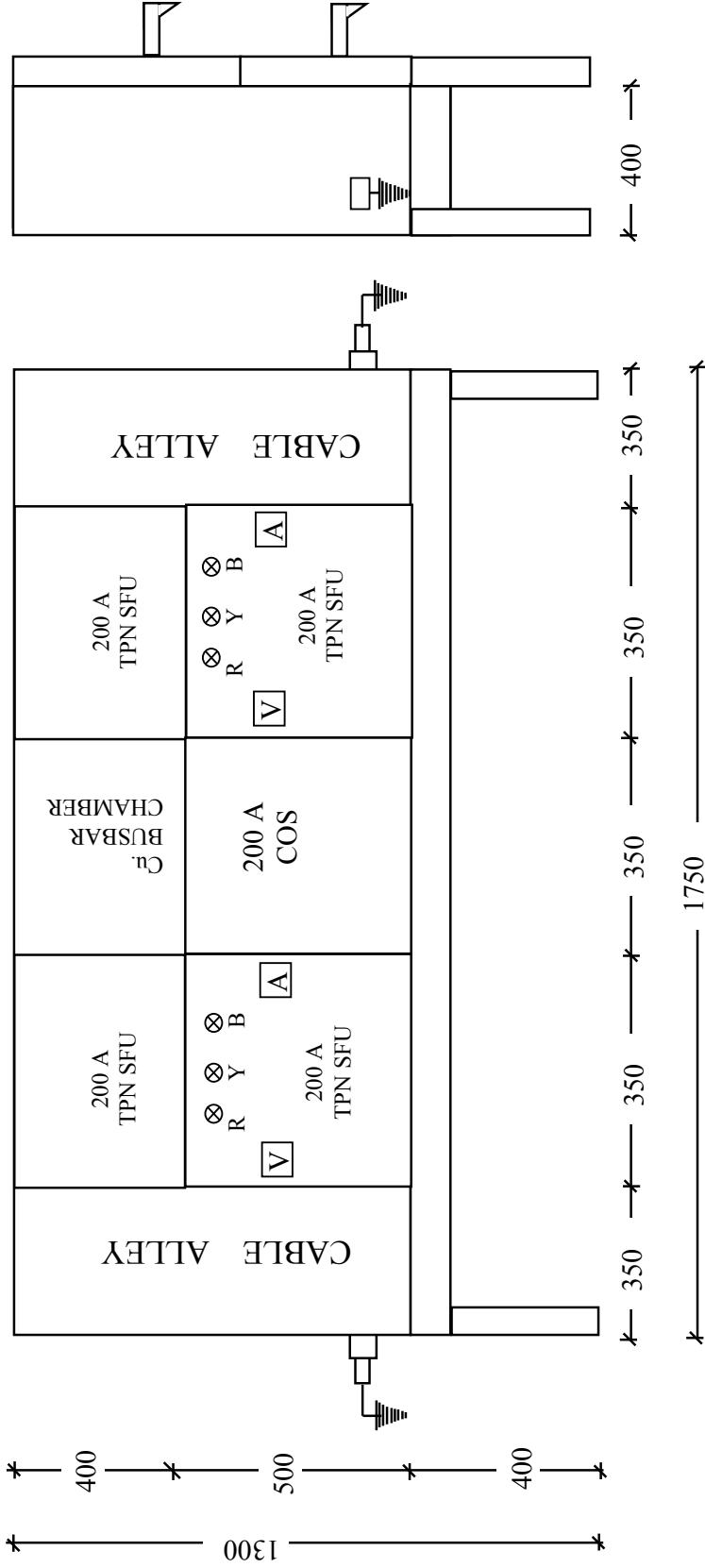
All Dimension in mm

# 440V AC POWER DISTRIBUTION BOARD FOR COMPUTER CENTER



ALL DIMENSIONS ARE IN MM

**440V AC POWER DISTRIBUTION BOARD FOR UPS**



ALL DIMENSIONS ARE IN MM