

GRAMS: DRYLAND

E-mail: root@crida.ernet.in

FAX: 040-24531802

Web Site : <http://www.crida.ernet.in>

Phone : 040-24532265

040-24530163

040-24530161

040-24532243



Central Research Institute for Dryland Agriculture

Santoshnagar, Said bad Post, Hyderabad – 500 059

INVITATION TO TENDER AND INSTRUCTIONS TO TENDERERS

Tender Number: UG Cable/

Date:

Cost of Tender: Rs. 200-00

D.D.No. :

Dated:

Bank:

Branch:

To

Dear Sirs,

On behalf of the Director, Central Research Institute for Dryland Agriculture, I invite you to tender for works as per the details furnished in the Tender Form attached herewith. The conditions of contract for undertaking the work as per the details furnished here under will be of any contract applicable to the Order placed by Central Research Institute for Dryland Agriculture, Indian Council of Agricultural Research and Research Institutes under it and special conditions detailed in the tender form (attached herewith). If you are in a position to quote for the same as per the details furnished in accordance with the requirements stated please submit your quotations in the Annexures I, II and III enclosed to tender form, in original.

The complete set of the Tender form including Annexures I,II and III in original may be submitted to office after signing on all pages by the tenderer.

Yours faithfully

Assistant Administrative Officer

TERMS AND CONDITIONS OF TENDER – PART I

Only in exceptional cases and for adequate reasons telegraphic or letter quotations will be considered if they are received from firms who are in the approved list of contractors maintained by the Indian Council of Agricultural Research provided those telegraphic or letter quotations are complete in all respects with regard to price, (itemised prices where necessary), specification, delivery and other particulars essential to enable a purchase decision to be taken and provided also the quotations are confirmed within three days from the date of receipt of tender in the prescribed form.

1. **EARNEST MONEY:** Earnest Money deposit as mentioned in the tender schedule may be paid by way of Demand Draft drawn on any schedule bank in favour of **“ICAR UNIT ACCOUNT, CRIDA, Hyderabad”** payable at State Bank of India, Edi Bazar, Hyderabad. The DD towards EMD may please be enclosed to the tender form and the tender submitted to the Director, Central Research Institute for Dryland Agriculture, Saidabad Post, Santoshnagar, Hyderabad – 500 059. Any other mode of payment will not be accepted.

2. **THE TENDER SHALL NOT BE CONSIDERED IF THE DD OF EARNEST MONEY DEPOSIT IS NOT SENT WITH THE TENDER:** No request for transfer of any previous deposit of earnest money will be entertained. It is understood that the tender document has been issued to the tenderer and the tenderer is being permitted to tender in consideration of the stipulation of his part that after submitting his tender, he will not reside from his offer or modify the terms and conditions thereof. Should the tenderer fail to observe and comply with the forgoing stipulation; the aforesaid amount will be forfeited to the Central Research Institute for Dryland Agriculture, Indian Council of Agricultural Research. In the event of the offer made by the tenderer not being accepted the amount of earnest money deposited by the tenderer will be refunded to him after he has applied for the same in a manner prescribed by Central Research Institute for Dryland Agriculture, Indian Council of Agricultural Research. The Earnest Money should not on any account fall short of the amount actually required.

3. **PREPARATION OF TENDER :**
 - a) The complete set of tender form should be returned in tact **in original** and pages should not be detached but when the rates are not being tendered for the corresponding space should be defaced by words as “Not Quoting”.
 - b) If any modification of the schedule is considered necessary you should communicate the same by means of a separate letter sent with the Tender.
 - c) In the event of space on the schedule form being insufficient for the required purpose, additional pages may be added. Each such additional page must be numbered consecutively, bearing the Tender number and be fully signed by you. In such cases reference to the additional pages must be made in the tender form.

(SIGNATURE OF TENDERER)

4. **SIGNING OF TENDER:**

a) The tender is liable to be ignored if complete information is not given therein or of the particulars and date if any asked for in the Annexures to the tender are not fully filled in, **specific attention must be paid to the delivery dates and also to the general conditions** of the contract as the contract would be governed by them.

b) Individual signing the tender or other documents connected with the contract must specify whether he signs as:

(i) 'sole proprietor' of the firm or constituted attorney of such sole proprietor.

ii) A partner of the firm if it be a partnership, in which case he must have authority to refer to arbitration dispute concerning the business of the partnership either by virtue of the partnership agreement or a power of attorney.

iii) Constituted attorney of the firm if it is a company.

NOTE:

- 1) In case of (ii) a copy of the partnership agreement or general power of attorney, in either case attested by a Notary Public, should be furnished and affidavit on stamped paper of all the partners admitting execution of the partnership agreement or the general power of attorney should be furnished.
- 2) In the case of partnership firms, where no authority to refer disputes concerning the business of the partnership has been conferred on any partner, the tender and all other related documents must be signed by every partner of the firm.
- 3) A person signing the tender form or any documents forming parts of the contract on behalf of another shall be deemed to warrant that he has authority to bind, such other and it, on enquiry it appears that the person so signing had no authority to do so, the purchaser may, without prejudice to other civil and criminal remedies cancel the contract and hold the signatory liable for all costs and damages.
- 4) Each page of the tender, schedule to tender and annexure, if any, should be signed by the tenderer and returned to the institute in **original after filling.**
- 5) **DELIVERY OF TENDER:** The **original** copy of the tender is to be enclosed in a double cover. The inner cover should be sealed and the outer cover should bear only address of this office without any indication that there is a tender within.

(SIGNATURE OF THE TENDERER)

Right is reserved to ignore any tender which fails to comply with the above instructions. All tenders should be sent by registered posts or delivered in person to the Institute. A separate "tender box" has been kept for this purpose in the Institute. Only one tender should be included in a cover, all tenders so enclosed in one cover be liable to be ignored.

6. **LATEST HOUR FOR RECEIPT OF TENDERS:** Unless otherwise specified in the schedule to tender your tender must reach this office not later than hours on the date of opening of the tender. Tenders sent by hand delivery should be put in the Tender Box at this office not later than hours on the due date unless otherwise stipulated in the schedule to tender.

7. **PERIOD FOR WHICH THE OFFER WILL REMAIN OPEN:**

- i) Firms tendering should note that their offers should remain open for **acceptance for 90 days from the date of opening of tender.** If the firms are unable to keep their offers open for the specified period, they should specifically state in the tender form the period upto which they want their tenders to remain open for acceptance. In the absence of such specifications in the tender, it will be assumed that their offers will remain open for acceptance for a period of 90 days from the date of opening.
- ii) Quotations qualified by such vague and indefinite expressions such as **"subject to immediate acceptance"** will not be considered.

8. **OPENING OF TENDER :**

You are at liberty to be present or authorize a representative to be present at the opening of the tender at the specified time and date. The name and address of the representative who would be attending the opening of the tender on your behalf should be indicated in your tender. Please also state the name and address of your permanent representative, if any.

9. **SAMPLES:** QUOTATIONS WITHOUT SAMPLES WHERE SAMPLES ARE SPECIFICALLY CALLED FOR ARE LIABLE TO BE IGNORED.

- 10) **EXAMINATION OF PATTERNS OF CERTIFIED SAMPLES :**

When sealed patterns of stores are mentioned in the schedule to the tender form of specification in those of certified samples thereof, any be seen at the place stated in the schedule to tender and should be examined by the Competent person on your behalf (who should take this invitation with him) before the tender is submitted.

(SIGNATURE OF THE TENDERER)

11) **THE PRICE MUST BE QUOTED AS BELOW:**

Complete details of the proposed work shall be as per the details mentioned in the Annexures attached therein.

i) If it is decided to ask for **excise duty/sales tax or any other charges as extra**, the same must be **specifically** stated. In the absence of any such stipulation it will be presumed that the prices include all such charges and no claim for the same will be entertained. It may be mentioned here that the **Institute is not in a position to supply any 'C' or 'D' forms. Please avoid to write expression such as taxes etc., Please indicate exact amount/percentage of taxes, duties etc. payable by the Institute.**

ii) The prices quoted by the tenderers should be exclusive of sales tax (and should be clearly stated to be so) which will be paid by the purchaser, if legally leviable at the rate of ruling on the date of completion as specified in the acceptance of tender.

12) **TERMS FOR COMPLETION WORK:**

The time allowed completion of work is indicated in the Annexure – III enclosed and they he/they should be completed within the stipulated period, failing which penalty at the @ 1% per month of value of order will be imposed as per rules. This is only tentative time normally allowed. However, this may be reduced or enhanced by the Director keeping in view of the exigency of work. No extra charges for labour etc. shall be paid.

13) **RIGHT OF ACCEPTANCE :**

This office does not pledge itself to accept the lowest or any tender and reserves to itself, the right of accepting the whole or any part of the tender.

14) **COMMUNICATION OF ACCEPTANCE:**

Acceptance by the Institute will be communicated by telegram, express letter of acceptance or formal acceptance of tender. In cases where acceptance is communicated by telegram or express letter the formal acceptance of tender will be forwarded to you as soon as possible but the instructions contained in the telegram or express letter should be acted upon immediately. On approval of rates, an agreement is to be executed by the tenderer with the institute on Non-judicial stamp paper value of Rs.100/- the cost of which shall be met by the tenderer.

(SIGNATURE OF THE TENDERER)

15) **RESERVATION OF RIGHTS TO ORDER ADDITIONAL QUANTITY :**

The Director reserves the right to place order on the successful tenderer for additional work at the rates quoted by them.

16) **PRE-INSPECTION OF STORES:**

In case an order is placed on you as a result of this tender you should satisfy yourself that the work is in accordance with the terms of order and fully conform to the required specifications by carrying out through pre-inspection. Such precaution on your part should minimize the chance of rejection in inspection and consequences thereof.

The work should be carried out as per the specification. The material used should be of good and standard Quality and to the satisfaction of CRIDA. Failing to maintain standard Quality of work, the order given shall be liable for cancellation. In such cases no payment shall be allowed for the work already completed. In addition, the EMD shall be forfeited and suitable legal action shall be taken against the Contractor / Firm.

17) **OTHER CONDITIONS:**

- a) **The appropriate specifications (I.S.I., IRS., ISO., etc., as the case may be)** should be annexed to or quoted in the tender and that the articles supplied will be subject to inspection and/or tests prescribed in the specifications before acceptance.
- b) Late tenders (i.e., tenders received after the specified time of opening) delayed tenders (i.e., tenders received before the time of opening but after the due date and time of receipt of tenders) and post tenders offers will not be considered at all.

(SIGNATURE OF THE TENDERER)

TERMS AND CONDITIONS OF TENDER – PART II

1. CLIENT : Director, Central Research Institute for Dryland Agriculture, Santoshnagar, Hyderabad – 59.
2. The execution of work as per the details given in the tender schedule has to be completed within a period as specified in supply/work order. Please quote earliest possible guaranteed date by which you can complete the work.
3. Conditions of contract: As contained in special/general conditions of contract and schedule and annexures to the tender attached herewith.
4. Tenderers are bound to accept order for additional quantity at the rate quoted only if order is placed on them within 90 days from the date of issue of A/T.
5. In case the tenderer wants to furnish in a separate covering letter any additional information, particulars or quote conditions (e.g. those relating to allowance, discount, rebate, etc.) which cannot be accommodated in the tender form, an indication to that effect should be given in the tender form by means of a note. In the absence of such indication in the tender form the contents of the covering letter will be ignored in consideration of tender.
6. Firm should note that it is desired that their offer should remain open for acceptance for 90 days from the date of opening the tenders. In the absence of such an indication in the tender form, it will be assumed that their offers will remain open for acceptance for the period as specified.
7. The Director, CRIDA reserves right to accept/reject any tender.

TENDERERS MUST GIVE SPECIFIC ANSWERS AGAINST EACH OF THE FOLLOWING QUESTIONS. TENDERS CONTAINING EQUIVOCAL OR EVASIVE REPLIES WILL BE IGNORED.

- 1) Whether supply of stores in question confirm to particulars quoted in the schedule; if not, details of deviation must be stated here
- 2) I) Brand:
 - ii) Name and address of :
Manufacturer
 - iii) Guaranteed date by which the :
Supply can be completed

(SIGNATURE OF THE TENDERER)

- 3) Business name and constitution:
of tendering form
(is the firm registered under)
- i) The Indian Partnership Act, :
1932
 - ii) The Indian Companies Act, :
1956
 - iii) Any act, if not, who are owners:
(Please give full names)
- 4) Do you agree to the Arbitration Clause stipulated (Your acceptance or non-acceptance of this Clause will not influence the decision of the tender. It should, however be noted that as omission to answer the above question will be deemed as an acceptance of the Clause).

(FOR PARTNERSHIP FIRMS WHETHER REGISTERED OR NOT REGISTERED UNDER INDIAN PARTNERSHIP ACT, 1932)

Should the answer to this question by a partnership firm be in the affirmative, please state further:

- a) Whether by the partnership agreement, authority to refer disputes concerning the business of the partnership to arbitration has been conferred on the partner who has signed the tender.
- b) If the answer to (a) is in the negative whether there is any general power of attorney execute by all the partners tender to refer dispute concerning business of the partnership to arbitration:
- c) If the answer to either (a) or (b) is in the affirmative, have you already furnished a copy either the partnership agreement or the general power of attorney as the case may be, to this Institute. Please quote the references to the communication by which this was done.

NB.1) If a copy of neither the partnership agreement for general power of attorney has previously been furnished to this Institute please attach to the tender a copy of either documents on which reliance is placed for authority of partners of the partner signing the tender to refer disputes to arbitration. The copy should be admitted by Notary public to or its execution should be admitted by affidavit on a properly stamped paper by all the partners.

(SIGNATURE OF TENDERER)

2) Where authority to refer disputes to arbitration has not been given to the partners signing the tender, the tender must be signed by every partner of the firm.

5) **INDICATE FOLLOWING DETAILS :**

- I) What is your installed capacity
- ii) What is your working capacity
- iii) What is the existing load
- iv) What portion of your capacity
you prepared to reserve and allocate
to this Rate contract

6) Whether Earnest Money has been deposited:

Enclosures:

Annexure – I

Annexure – II

Annexure – III

(SIGNATURE OF TENDERER)

ANNEXURE (I) (ENCLOSURE TO TENDER FORM)

(To be returned by Tenderers along with Tender duly signed)

1. **CONDITIONS OF CONTRACT:**

Printed or cyclostyled or such terms and conditions of the tendering firms not appearing in the body of the tender will not be considered as forming part of their tender. Tendering firms should quote on the basis of the conditions referred to in para 1 of the invitation of tender and instructions to tenderers. In case any terms and conditions of contract applicable to this invitation to tender are not acceptable to the tendering firms, they should specifically state deviation there from in the body of their tender.

2. **DEVIATION FROM SPECIFICATION:**

It is in the interest of the tenderers to study the specifications, specified in the tender schedule thoroughly before quoting so that if any deviations are made by the Tenderers the same are prominently brought out in the body of their tender.

3. **PRICES:**

- a) Prices must be in terms of new coinage system, viz., rupees and paisa.
- b) The unit prices should be for the work in question indicated in the schedule to tender enquiry and not any other supply.
- c) Prices quoted should be invariably for undertaking work place mentioned in Annexure – III.
- d) Discount if any, should be indicated promptly.

4. **TRANSIT INSURANCE:**

The Client will not pay separately for transit insurance and the contract will be responsible till the entire supply is made.

5. **PRICE PREFERENCE FOR EARLIER DELIVERY:**

It should be noted that if a contract is placed on the tenderer as a result of this invitation to tender in preference to the lowest acceptable offer in consideration of offer of earlier supplies, the contractor will be liable to the Council the difference between the contract rate and that of the lowest.

(SIGNATURE OF TENDERER)

ACCEPTABLE TENDER, on the basis of duties and other incidentals in case of failure to completion of supply in terms of such contract within the date of completion specified in the tender and incorporated in the contract.

This is in addition to and without prejudice to other rights under the terms of the contract.

6. PAYMENT TERMS:

As indicated in Annexure III

7. ADDITIONAL PARTICULARS TO BE FURNISHED BY THE TENDERER:

Tenderers shall submit alongwith their tenders:

- i) An Income Tax clearance certificate (duly countersigned by the Income Tax Officer of the Circle concerned under the seal of his office)
- ii) Name and full address of their Banker:
- iii) Performance statement duly signed by them regarding work undertaken by them against contract for similar supplies for the past three years. In case the tenderer has not secured any contract during the past three years, he should give the performance against earlier contract placed on him, if any, samples of the supply work executed may please be enclosed to the tender.
- iv) The assignment, they possess for executing the supply work liable to be ignored.

8. JURISDICTION:

All questions, disputes or differences under, out or in connection with the contract, if concluded shall be referred to the sole arbitrator appointed by the Indian Council of Agricultural Research . The decision of the sole Arbitrator shall be final and binding on both the parties.

9. I/we have understood the instructions of Tenders and conditions of contract including in the General conditions of contract governing contracts placed by the Indian Council of Agricultural Research and Institute under it and in the special conditions of contract and have thoroughly examined the specification or pattern and nature of work quoted in the schedule hereto and an/are fully aware of the completion of the work and my/our offer is in accordance with the requirement.

10. Demand Draft No.....dt.....for Rs.....

(Rupees.....) is enclosed being EMD.

(SIGNATURE OF TENDERER)

12/-

ANNEXURE –II (ENCLOSURES TO TENDER FORM)

(Please quote rates on Annexure III (Schedule to Tender Form))

Full name & address of the
Tenderer in addition to
Post Box No. if any, should
be quoted in all communications
to this office

Tenderers Telegraphic
Address:

Telephone /Mobile No.
Code used :

From

To
The Director

Central Research Institute for
Dryland Agriculture
P.O.Saidabad
Santoshnagar
Hyderabad – 59.

Dear Sir,

I/We hereby offer for supply of stores as per the details furnished in the tender schedule (Annexure-III) hereto or such portion thereof as you may specify in the Acceptance of Tenderer at the price given in the said schedule and agree to hold this offer ninety days only. I/We shall be bound by a communication of Acceptance dispatched within the prescribed time and also execute agreement required in this regard.

(SIGNATURE OF TENDERER)

2. I/We have understood the instructions to Tenderers and conditions of contract included in the General conditions of contracts governing contracts placed by the CRIDA, Indian Council of Agricultural Research Institutes under it and in the special conditions of contract and have thoroughly examined the specification or pattern and nature of stores quoted in the schedule thereto and an/are fully aware of the completion of the supply and my/or offer is to in accordance with the requirement.
3. The following pages have been added to and from part.

SIGNATURE OF WITNESS:

(SIGNATURE OF TENDERER)

Name of Witness :

Name of Tenderer :

Mailing Address :

Mailing Address :

DATE:

(SIGNATURE OF TENDERER)



CENTRAL RESEARCH INSTITUTE FOR DRYLAND AGRICULTURE
SANTHOSHNAGAR, HYDERABAD – 500 059

ANNEXURE – III

Name of the work	: Laying of UG Cables
Place of work	: CRIDA Campus, Hyderabad
Estimated value of the work	: 8.5 Lakhs
Time for completion of work	: As per enclosed bar chart - 10 weeks
Amount of EMD	: 17,000/-
In whose favour the DD's to be Drawn (Tender form & EMD)	: "ICAR Unit A/c., CRIDA, Hyderabad"
Date of publication of tender notification	: 11-10-2011
Names of Newspaper	: Andhra jyothi(Telugu), Siasat(Urdu), Deccan Chronicle(English)
Rate of Tender form	: Rs.200-00
Date of sale of Tender form	: 13-10-2011 to 21-10-2011
Date & Time of submission of Tenders	: 22-10-2011 upto 1500 hrs
Date & Time of opening of Tenders	: 22-10-2011 at 1530 hrs

NOTE

A. TERMS OF PAYMENT:

- (1) For Goods / materials portion: 50% of contracted rate on delivery of material at site subjected to fulfilling the following conditions: (a) That the Gross value of the goods supplied shall not be less than 50% of total contract value. (b) Submission of original Invoice in duplicate, (c) Submission of original Delivery challan in duplicate duly signed and confirmed by the CRIDA about receipt and correctness of goods as per the specifications of the contract, (d) Inspection & test certificates, as applicable.

- (2) For Work services portion: Up to 70% of completed portion of work will be paid after deducting previous advances, if any and subjected to fulfilling the following conditions;
 (a) That the gross value of the completed portion of work shall not be less than 25% of total contract value, (b) Submission of field measurements duly signed and confirmed by CRIDA about satisfactory completion, test and acceptance of the executed works / goods.
- B. PERMISSIBLE DEDUCTIONS FROM CONTRACTOR BILLS:** The following deductions will be made from the contractor's running / final bills: (a) 10% of Contract value towards Security deposit, (b) Income tax and Sales tax / VAT / Work contract Tax deductions at the rate as applicable, (c) Penalties, if any imposed as per the terms of the Contract.
- C. DEFECTS LIABILITY PERIOD:** 12 months to be reckoned from the certified date of completion of all works / passing date of final bill. The 10% security deposit will only be released after satisfactory completion of defects liability period as certified by the engineer-in-charge of the work.
- D. ELIGIBILITY CRITERIA OF THE BIDDER FOR AWARDING OF THE CONTRACT:** (A) Registered contractors of CPWD, State PWD/PSUs/Reputed private organizations and or manufacturers of electrical power distribution and control panels, (b) In possession of valid IT/PAN, ST/VAT, ESI and PF registration certificates, (c) Should be in possession of performance / experience Certificate issued by the competent authority as having satisfactorily carried out at least one work of similar nature and magnitude of value not less than Rupees Five lacs during last three years, (d) In possession of valid A or B grade electrical contractors licence, for executing electrical portion of the contract work. In case the Bidder is not in possession of Electrical contract licence, CRIDA allows for subcontracting of this work, provided that the sub contractor satisfactory fulfills all the above criteria.
- E. COMPLETION TIME:** Ten weeks from the date of award of contract and as per the enclosed Bar Chart.
- F. LIQUADATED DAMAGES / PENALTIES DUE TO DELAY IN COMPLETION OF WORK ON ACCOUNT OF REASONS FULLY ATTRIBUTABLE TO CONTRACTOR'S POOR PERFORMANCE:** At the rate of 2% per week subjected to maximum of 10% of total contract value.
- G. TERMINATION / DETERMINATION OF CONTRACT:** (a) Termination for default: The Institute may, without prejudice to any other remedy or right for breach of contract, by written notice of default sent to the contractor, terminate the contract in whole or in part: (i) if the Contractor fails to deliver any or all of the goods or works within the time period specified in the contract or any extension thereof granted by the Institute pursuant to clauses mentioned here of: or (ii) if the contractor fails to perform any other obligation/s under the contract: and (iii) if the contractor, in either of the above circumstances, does not take appropriate remedial steps within a period of ten calendar days (or such longer period as the institute may authorize in writing) after receipt of notice of default from the Institute specifying the nature of default/s. And in the event the Institute terminates the contract in whole or in part, pursuant to above sub clause, the Institute may procure, up on such terms and in such manner as it deems fit and appropriate, goods and services similar to those undelivered or not performed and the contractor shall be liable to the institute for any excess costs for such similar goods or services. Notwithstanding the above, the contractor shall continue performance of the contract to the extent not terminated.

(b) Termination for Insolvency: The Institute may at any time terminate the contract by giving written notice to the contractor, without compensation to the contractor, if the contractor becomes bankrupt or otherwise insolvent. Notwithstanding the above, such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the Institute. (c) Termination for Convenience: (i) The Institute may, by written notice sent to the contractor, in whole or in part, terminate the contract at any time for its convenience. The notice of termination shall specify that termination is for the Institute's convenience, to the extent to which performance of the work under the contract is terminated, and the date up on which such termination becomes effective. (ii) The goods that are complete and ready for transportation within ten days after the contractor's receipt of notice of termination shall be purchased by the institute at the contract price and on other contract terms. For the remaining goods the institute may elect: Either to have any portion thereof completed and delivered at the contract prices and on other contract terms: and / or to cancel the remainder and pay to the contractor an agreed amount for partially completed goods or services and for materials and parts previously procured by the contractor for the purpose of the contract, together with a reasonable allowance for overhead expenses and profit.

- H. **WATCH & WARD:** Safe custody of all materials, equipment , working tools & plants etc that are brought in to the institute by the Contractor for the purpose of carrying out works shall be the responsibility of the Contractor and the Institute in way held responsible for loss or theft of the same.
- I. **ELECTRICAL POWER & WATER SUPPLY:** The Contractor is allowed to use Electricity and water supply, where ever available for the purpose of execution of the work and as per the conditions of the Institute.
- J. **STATUTORY COMPLIANCES:** Taking of all required Permits, Licences, and Registrations including Insurance under workmen compensation act etc as deemed fit and necessary under the law, keeping them valid and updated and ensuring strict compliance of the same shall be the responsibility of the Contractor alone.
- K. **PRICE VARIATION:** The quoted prices shall be firm and no escalation of prices on any account is permitted.
- L. **ACCEPTANCE OF CONDITIONAL OFFERS:** The Institute will not accept any conditional offers.

(SIGNATURE OF TENDERER)

**TENDER FOR SUPPLY, INSTALLATION, TESTING & COMMISSIONING OF ELECTRICAL POWER
DISTRIBUTION PANELS & SUPPLY, LAYING AND TERMINATION OF POWER CABLES FOR
PHENOMICS LAB, CLIMATE CHANGE & GREEN HOUSE GASES LABS AND CONFERENCE HALL - II &
AUDITORIUM ETC AT CRIDA**

ANNEXURE - III (See foot note on pre-page)

NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	RATE	AMOUNT
1	Laying of additional PVC insulated PVC sheathed / XLPE power cable of 1.1 KV grade of size exceeding 25 sq.mm but not exceeding 400 sq.mm direct in the existing masonry open duct or open trench etc complete as required as per Specifications of Item no.1.10 of CPWD's Schedule of Rates (Electrical) part-II External - 2007	Metre	120		
2	Laying and fixing of PVC insulated PVC sheathed / XLPE power cable of 1.1 KV grade of size exceeding 25 sq.mm but not exceeding 120 sq.mm on surface including supply of necessary saddles, clamps, hardware etc complete as required as per Specifications of Item no.1.12 of CPWD's Schedule of Rates (Electrical) part-II External -2007	Metre	40		
3	Laying of PVC insulated PVC sheathed / XLPE power cable of 1.1 KV grade of size exceeding 25 sq.mm but not exceeding 120 sq.mm direct in ground including excavation in all kinds of soils, sand cushioning, protective covering and refilling the trench etc as per Specifications of Item no.1.2 of CPWD's Schedule of Rates (Electrical) part-II External -2007	Metre	0		
4	Laying of PVC insulated PVC sheathed / XLPE power cable of 1.1 KV grade of size exceeding 120 sq.mm but not exceeding 400 sq.mm direct in ground including excavation in all kinds of soils, sand cushioning, protective covering and refilling the trench etc as per Specifications of Item no.1.3 of CPWD's Schedule of Rates (Electrical) part-II External -2007	Metre	200		
5	Laying of additional one no. PVC insulated PVC sheathed / XLPE power cable of 1.1 KV grade of size exceeding 120 sq.mm but not exceeding 400 sq.mm direct in ground including excavation and refilling the trench etc complete as required but excluding sand cushioning and protective covering etc as per Specifications of Item no.1.23 of CPWD's Schedule of Rates (Electrical) part-II External - 2007	Metre	0		

6	Laying of additional one no. PVC insulated PVC sheathed / XLPE power cable of 1.1 KV grade of size exceeding 25 sq.mm but not exceeding 120 sq.mm direct in ground in the existing or same trench including excavation and refilling the trench etc but excluding sand cushioning and protective covering etc as per Specifications of Item no.1.26 of CPWD's Schedule of Rates (Electrical) part-II External -2007	Metre	0		
7	Laying of additional one no. PVC insulated PVC sheathed / XLPE power cable of 1.1 KV grade of size exceeding 120 sq.mm but not exceeding 400 sq.mm direct in ground in the existing or same trench including excavation and refilling the trench etc but excluding sand cushioning and protective covering etc as per Specifications of Item no.1.26 of CPWD's Schedule of Rates (Electrical) part-II External -2007	Metre	0		
8	Laying of PVC insulated PVC sheathed / XLPE power cable of 1.1 KV grade of size exceeding 25 sq.mm but not exceeding 400 sq.mm direct in the existing RCC/ HUME/ STONEWARE/ METAL/ PVC PIPE complete as required as per Specifications of Item no.1.8 of CPWD's Schedule of Rates (Electrical) part-II External -2007	Metre	40		
9	Laying of PVC insulated PVC sheathed / XLPE power cable of 1.1 KV grade of size exceeding 25 sq.mm but not exceeding 400 sq.mm direct in the existing masonry open duct or open trench etc complete as required as per Specifications of Item no.1.10 of CPWD's Schedule of Rates (Electrical) part-II External -2007	Metre	0		
10	Laying and fixing of PVC insulated PVC sheathed / XLPE power cable of 1.1 KV grade of size exceeding 120 sq.mm but not exceeding 400 sq.mm on surface including supply of necessary saddles, clamps, hardware etc complete as required as per Specifications of Item no.1.13 of CPWD's Schedule of Rates (Electrical) part-II External -2007	Metre	40		
11	Supplying and making end terminations of 3.5C x 70 sq.mm AYFY cable with Brass compression glands and Aluminium lugs as per Specifications of Item no.4.1.22 of CPWD's Schedule of Rates (Electrical) part-II External - 2007	Each	4		

12	Supplying and making end terminations of 3.5C x 150 sq.mm AYFY cable with Brass compression glands and Aluminium lugs as per Specifications of Item no.4.1.26 of CPWD's Schedule of Rates (Electrical) part-II External - 2007	Each	2		
13	Supplying and making end terminations of 3.5C x 240 sq.mm AYFY cable with Brass compression glands and Aluminium lugs as per Specifications of Item no.4.1.29 of CPWD's Schedule of Rates (Electrical) part-II External - 2007	Each	4		
14	Supplying and fixing cable route marker as per specification of item no.3.3 of CPWD's Schedule of Rates (Electrical) part-II External -2007	Each	8		
15	Providing and laying non-pressure NP-2 class(light duty) 150 mm dia RCC pipes with collars jointed with stiff mixture of cement mortar as per specification of CPWD DSR (Civil works) 2007, item no.19.6.2	metre	48		
16	Cutting and excavation of BT / CC Roads and other hard surfaces such as PCC or stoneware flooring as in pavements / platforms etc by chipping and chiseling and other manual means up to 1 metre depth and 0.5 metre width as required for laying of above RCC pipes including back filling and disposal of excess / surplus excavated material up to lead of 500 metre, complete as required as per specification of CPWD DSR (Civil works) 2007, item no.15.59	metre	30		
17	Providing and fixing MV Danger notice plate as per Specifications of Item no. 2.71	Each	6		
18	Providing Earthing pits in all kinds of soils with GI Earth Plate including Testing of Earth pits etc as per Specifications of Item no.3.5	Each	2		
19	Supplying and using extra salt and charcoal for copper plate earth electrode per Specifications of Item no.3.7	Each	2		
20	Supplying and laying 6 SWG GI wire as per Specifications of Item no.3.10	Meter	20		
21	Supplying and laying 25x5 mm GI earth strip at 0.5 mtr below ground as strip earth electrode and main earth connections from earth electrode up to MV Panels / Feeder Boxes etc including soldering etc complete as required as per Specifications of Item no.3.11	Meter	40		

22	Supplying and laying 25x5 mm GI earth strip on surface or in recesses for main earth connections from earth electrode up to MV Panel and DBs on roof top as per Specifications of Item no.3.18 and instructions of engineer in charge.	Meter	45		
23	Providing Earthing pits in all kinds of soils with Copper Earth Plate including Testing as per Specifications of Item no.3.6	Each	2		
24	Supplying and using extra salt and charcoal for copper plate earth electrode per Specifications of Item no.3.7	Each	2		
25	Supplying and laying 8 SWG Copper wire as per Specifications of Item no.3.9	Meter	20		
26	Supplying and laying 25x5 mm Copper earth strip on surface or in recesses for main earth connections from earth electrode up to main power DB as per Specifications of Item no.3.17	Meter	24		
27	Supplying and fixing 250 amps 35 KA TP MCCB in existing cubicle Panel Board including drilling necessary holes and making connection, testing & commissioning complete as required as per Specifications of Item no. 2.22.10.	Each	1		
28	Supplying and fixing 400 amps 35 KA TP MCCB in existing cubicle Panel Board and making connection, testing & commissioning complete as required as per Specifications of Item no. 2.22.10.	Each	2		
32	Supply and fixing of 300 amps rated TPN Aluminium busbar links including bending, drilling, HS color sleeving with all required hardware and accessories etc on both incoming and out going sides of 250 amps MCCB to be fixed in the existing Main MV Panel as cited above.	Set	1		
33	Supply and fixing of 500 amps rated TPN Aluminium busbar links including bending, drilling, HS color sleeving with all required hardware and accessories etc on both incoming and out going sides of 400 amps MCCB to be fixed in the existing Main MV Panel as cited above.	Set	2		
34	Design, Manufacture, Supply, Erection, Installation ,Testing & Commissioning of MV Distribution Panel for Main Incomer Panel of Conf. Hall - II & Auditorium on roof top of Conference Hall - II (above first floor) comprises of 400 amps MCCB as Incomer and 6 nos. 125 amps MCCBs as out going feeders and per the enclosed technical specifications and instructions of engineer in charge, complete as required.	Each	1		

35	Design, Manufacture, Supply, Erection, Installation ,Testing & Commissioning of MV Feeder Pillar Box for Phenomics Lab comprising of 400 amps MCCB as Incomer and as per the enclosed technical specifications and instructions of engineer in charge, complete as required.	Each	1		
36	Design, Manufacture, Supply, Erection, Installation ,Testing & Commissioning of MV Feeder Pillar Box for Climate Change & Green House Gases Analysis Labs comprising of 250 amps MCCB as incomer and 3 nos. 125 amps MCCBs as out going Feeders as per the enclosed technical specifications and instructions of engineer in charge, complete as required.	Each	1		
37	Design, Manufacture, Supply, Erection, Installation ,Testing & Commissioning of MV Feeder Pillar Box for Conference Hall - II Air Conditioners on roof top of Conference Hall - II (above first floor) comprising of 12 way TPN Vertical type MCB DB with 125 amps MCCB as Incomer and 8 nos. TP MCBs as Out going Feeders and as per the enclosed technical specifications and instructions of engineer in charge, complete as required.	Each	1		
38	Supply of 3.5 core x 70 sq.mm 1.1 kv grade AYFY cable. Approved makes: CCI/Universal/Gloster/Nicco/Havells/Finolex	Meter	60		
39	Supply of 3.5 core x150 sq.mm 1.1 kv grade AYFY cable. Approved makes: CCI/Universal/Gloster/Nicco/Havells/Finolex	Meter	40		
40	Supply of 3.5 core x240 sq.mm 1.1 kv grade AYFY cable. Approved makes: CCI/Universal/Gloster/Nicco/Havells/Finolex	Meter	352		

41	Supplying and fixing of 6 nos. x 0.5 mtr length x 150 mm dia NP-2 class RCC pipes by providing 0.6 mtr x 0.4 mtr opening in the basement of existing 0.6 mtr thick stone wall at a depth of not exceeding 1 mtr from finished floor level and closing back the opening after laying and fixing of RCC pipes with stiff cement mortar and also disposal of surplus earth up to 500 mtrs lead complete as required as per the direction of engineer in charge.	MR	Lumpsum Job		
42	Supply of pre-fabricated special purpose GI Brackets, Clamps, U Bolts, Anchor Fastners etc as required for fixing of power cables in vertical sections and on roof-top RCC flooring etc complete as required.	kg	30		
43	Total amount				
45	Total amount in words: Rupees				
46	Signature of Tenderer				

GENERAL TECHNICAL SPECIFICATIONS

1. MV FEEDER PILLAR BOXES

1.1 General technical Specification as applicable to all the Feeder boxes:

All the Feeder Pillar Boxes shall be designed, manufactured, factory inspected and tested, dispatching to CRIDA's work site premises, unloading, leading, erection, installation, testing & commissioning of cubicle double door, single and double front, compartmentalized, outdoor, dust and vermin-proof type MV Power Distribution Panels suitable for operation on 415 volts, TPN + E, 50 Hzs, AC supply system capable of withstanding 35 ka rms for 1 second. The spacing between phases and Phase & Neutral/Earth shall not be less than 50 mm and 30 mm, respectively. All the Feeder Boxes shall comply to IP-54 or better standards in accordance with IS-2147 for ensuring protection against dust and water. Copper flexible wires used for internal control and metering wiring shall be 1.5 or 2.5 sq.mm. Proper and sufficient arrangements shall be provided for ensuring accidental shock to working persons by means of appropriately insulating the bare parts and also providing suitable phase barriers. The cable termination and entry / exit of cables from bottom only. The Panel Box shall be fabricated with 10/14 SWG CRCA Steel Sheets of 10 swg for Base frame and Gland Plates and 14 swg for entire remaining portion of the Panel and painted (stoving enamel or powder coating) to shade No. 631 as per IS-5, after undertaking rigorous 7 tank metal treatment & finishing processes (solvent / alkaline degreasing, de-rusting, acid pickling, phosphating, passivation etc in automatic temperature controlled hot processing tanks and baking / curing in the automatic temp controlled ovens for ensuring adequate protection against scratch and corrosion etc. The removable type gland plates shall have sufficient no. of knock outs suiting to the sizes of cables as indicated in the SLD. Suitable provision ventilation shall be provided by means of ventilating cowls or louvers fitted with steel wire mesh for preventing entry of rodents, insects etc. and also for limiting the temperature rise inside the panel. All the Feeder Boxes shall have suitable locking and Pad locking arrangements and the Bidder shall supply 2 nos. of Panel Keys for each Feeder Box. The vertical dimension/ height of the feeder box shall be fixed such that the height of the operating knobs / handles of switchgear shall not be less than 600 mm and shall not be more than 1800 mm from the finished floor level. Steel Electrical danger Notice Boards / Sheets of not less than 250 x 200 mm multi lingual type shall be fixed to front and back side of each feeder box. There shall be suitable provision for conspicuously fixing the laminated Single Line Drawing on the inside of front door of each Feeder Box. The Feeder Boxes shall be manufactured as per the respective single line drawings, technical specifications, Bill of Materials and approved makes and instructions of engineer in charge. The Contractor shall submit General Arrangement Drawing and detailed Bill of materials along with the offer. All the Clamps, Fixture and Hardware etc shall be Hot Dip Galvanized/Nickel plated. All the main busbars including connecting Links shall be of Electrolytic Grade Solid Aluminum Flats confirming to E91 WP Grade as per IS-5082 and the individual sizes shall be computed as per Current Density of 0.8 amps per Sq.MM. The Feeder Boxes shall generally confirm to IS-8623-1993. The Bidders shall procure these Feeder Boxes only from the Govt Registered and reputed OEMs and the credentials of the OEM from whom the Bidder wishes to procure these feeder Boxes shall be submitted along with the offer.

1.1.1 Particular Technical Specification of Main Incomer Feeder Box for Conf. Hall - II & Auditorium vide Item No. 34 of Schedule of Quantities:

The Feeder Box shall have suitable base frame rigidly mounted and fixed on to a stand of 500mm height fabricated with ISMC 75x40 mm suitable for direct grouting in the floor using 6 nos. x 16 mm dia steel anchor fasteners as required to be installed on roof top of II nd Floor. The space available for erection of this Feeder Box shall be suitable for working from front and back. The Feeder Box shall be fitted with the following:

- (a) 1 no. 400 amps 36 KA TP MCCB for Incomer,
- (b) 6 nos. of 125 amps 16 KA TP MCCBs for outgoing Feeders,
- (c) 1 no. 440 volts, 32 amps TPN metal clad Plug & Socket wit Red cap controlled by 1 no. 32 amps 4 pole MCB,
- (d) 1 no. 240 volts, 20 amps SPN metal clad Plug & Socket with Red cap controlled by 1 no. 20 amps DP MCB,
- (e) 1 set of 500 amps TPN Al. bus bar fitted with HS type colored sleeves,
- (f) Removable type gland plates for termination of entry & exit cables and other accessories,
- (g) Standard metering set for incomer (outgoing side) comprising of 1 no.96 sq.mm 0-500 volts, Flush type Voltmeter with 3 pole, 6 amps RY-YB-BR-OFF Selector Switch, 3 nos. Control Fuse Fittings, 3 nos. R-Y-B Panel Indicators, 1 no. 96 sq.mm, 0-400 amps CT Operated Ammeter with 3 nos. current transformers of 400/5 amps ratio.
- (g) A GI Earth Flat of not less than 25x6 mm with holes of 8 mm dia drilled at suitable intervals fitted with steel fasteners shall be provided in the bottom of the panel box for continuous earth Bus.

Note: As this Feeder Box is required to be installed on roof top of First Floor, the Bidder is hereby advised to inspect the available free space to carry the panel box and accordingly fix the dimensions and shipment sections of the panel box.

1.1.2 Particular Technical Specification of Feeder Box for Phenomics Lab vide Item No.35 of Schedule of Quantities:

The Feeder Box shall have suitable base frame rigidly mounted and fixed on to a stand of 500mm height fabricated with ISA 50x5X6 mm. Two nos. PCC Pedestals of size (LXWXD) 750x300x600mm shall be constructed and 2 nos. Foundation Rag Bolts of 16 mm dia shall be suitably provided in each pedestal as required for rigidly fixing and bolting the Feeder Box on to these Pedestals. The space available for erection of this Feeder Box shall be suitable for working from front and back. The Feeder Box shall be fitted with the following:

- (a) 1 no. 400 amps 36 KA TP MCCB for Incomer,
- (b) 400 amps TPN Al. bus bar links or Terminal Spreaders shall be fitted with HS type colored sleeves, as required for termination of Incoming and outgoing cables.

- (c) Removable type gland plates for termination of entry & exit cables and other accessories, (d) Standard metering set (outgoing side) comprising of 1 no.96 sq.mm 0-500 volts, Flush type Voltmeter with 3 pole, 6 amps RY-YB-BR-OFF Selector Switch, 3 nos. Control Fuse Fittings, 3 nos. R-Y-B Panel Indicators, 1 no. 96 sq.mm, 0-400 amps CT Operated Ammeter with 3 nos. current transformers of 400/5 amps ratio.
- (d) A GI Earth Flat of not less than 25x6 mm with holes of 8 mm dia drilled at suitable intervals fitted with steel fasteners shall be provided in the bottom of the panel box for continuous earth Bus.

1.1.3 Particular Technical specification of Feeder Panel for Climate Change & Green House Gases Analysis Lab vide Item No.36 of Schedule of Quantities:

The Feeder Box shall have suitable base frame rigidly mounted and fixed on to a stand of 500mm height fabricated with ISA 50x5X6 mm. Two nos. PCC Pedestals of size (LXWXD) 750x300x600mm shall be constructed and 2 nos. Foundation Rag Bolts of 16 mm dia shall be suitably provided in each pedestal as required for rigidly fixing and bolting the Feeder Box on to these Pedestals. This Feeder Box shall be suitable for operation and working from front only. The Feeder Box shall be fitted with the following:

- (a) 1 no. 250 amps 36 KA TP MCCB for Incomer,
- (b) 3 nos. of 125 amps 16 KA TP MCCBs for outgoing Feeders,
- (c) 1 set of 300 amps TPN Al. bus bar fitted with HS type colored sleeves,
- (d) Removable type gland plates for termination of entry & exit cables and other accessories, (e) Standard metering set for incomer (outgoing side) comprising of 1 no.96 sq.mm 0-500 volts, Flush type Voltmeter with 3 pole, 6 amps RY-YB-BR-OFF Selector Switch, 3 nos. Control Fuse Fittings, 3 nos. R-Y-B Panel Indicators, 1 no. 96 sq.mm, 0-400 amps CT Operated Ammeter with 3 nos. current transformers of 400/5 amps ratio.
- (e) A GI Earth Flat of not less than 25x6 mm with holes of 8 mm dia drilled at suitable intervals fitted with steel fasteners shall be provided in the bottom of the panel box for continuous earth Bus.

1.1.4 Particular technical Specification of Power Distribution Feeder Box for Conference Hall – II Air Conditioners vide Item No.37 of Schedule of Quantities:

There are two options available to the Bidder. Hence the Bidder can supply item under any one option, as given below but the rate shall be same for both the items.

Option: I : The Feeder Box shall have suitable base frame rigidly mounted and fixed on to a stand of 500mm height fabricated with ISA 50x50x6 mm suitable for direct grouting in the floor using 4 nos. x 12 mm dia steel anchor fasteners as required to be installed on roof top of II nd Floor. The space available for erection of this Feeder Box shall be suitable for working from front and back. This fabricated empty Feeder Box shall be used as an outdoor enclosure or kiosk for housing Legrand make Ekinox type IP 20 model 12 way vertical MCB DB as per Cat. No.607781 and shall have suitable provision for external Earth connections on either side with ample space for cable termination and shall be fitted with the following:

- (a) 1 no. Legrand make, DPX Model 125 amps 16 ka 3 pole MCCB for incomer as per Cat No.625321,
- (b) 8 no. Legrand make, Lexic Model 32 amps, 10 ka, 3 pole MCBs as per Cat. No.603288,
- (c) 4 nos. Blanking Plates as per cat. No.601470G.
- (d) Removable type gland plates for termination of incoming & outgoing cables.

OR

Option: II: This option comprises of Legrand make Ekinox Model IP 54 type 12 way vertical MCB DB as per Cat. No.607802 fitted with the following:

- (a) 1 no. Legrand make, DPX Model 125 amps 16 KA, 3 pole MCCB for incomer as per Cat No.625321,
- (b) 8 no. Legrand make, Lexic Model 32 amps, 10 KA, 3 pole MCBs as per Cat. No.603288,
- (c) 4 nos. Blanking Plates as per cat. No.601470G.

Note: In this option there is no need to supply and house the DB in an additional separate enclosure or kiosk, as in Option I above. However, the scope of erection shall be same as in Option I above, which includes fabrication and supply of suitable Steel angular stand and all other materials, complete as required.

2. SUPPLY & FIXING OF MCCBs IN EXISTING MAIN MV PANEL IN SUB STATION

- 2.1.1 The scope of work for this work shall be same as furnished under item nos.27, 28, 32 & 33 and the work shall be carried out as per the relevant provisions of General Technical Specification as mentioned here in above under item no.1.1.

3. EXTERNAL ELECTRICAL WORKS

- 3.1.1 All the applicable external electrical works such as Excavation of cable trenches, Supply, Laying & Termination of aluminum armored underground power cables etc shall be carried out in accordance with the relevant provisions of CPWD's General Specifications for Electrical Works, Part – II, External, 1994, as revised and amended from time to time.

4. INTERNAL ELECTRICAL WORKS

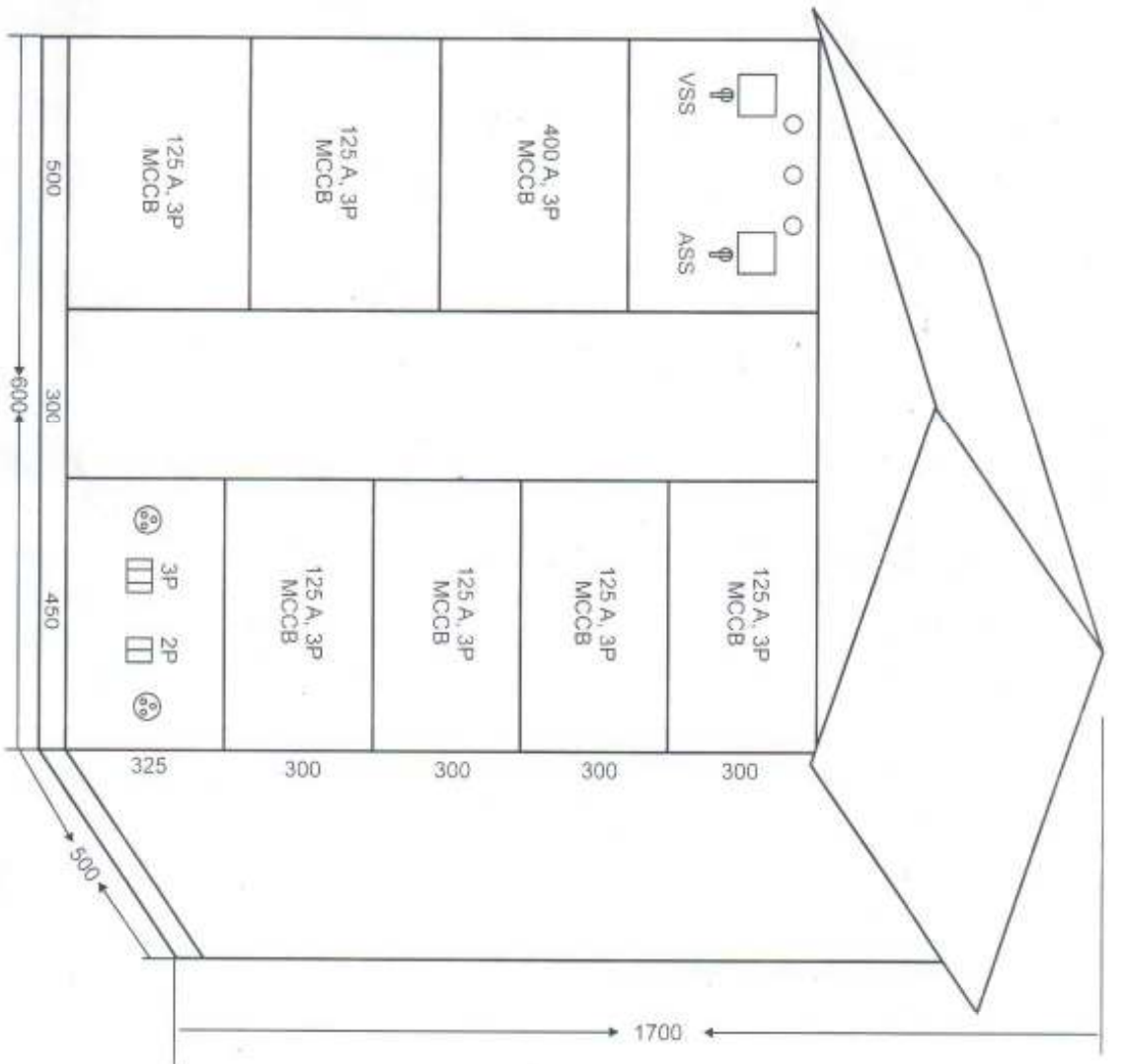
- 4.1.1 All the applicable internal electrical works such as Supply & Providing Earth Pits, Supply & Laying of Earth Flats etc shall be carried out in accordance with the relevant provisions of CPWD's General Specifications for Electrical Works, Part – I, Internal, 2005, as revised and amended from time to time.

5. LIST OF APPROVED MAKES OF SWITCHGEAR, CABLES & OTHER ACCESSORIES

No	NAME OF ITEM	MAKE /TYPE/SPECIFICATION OF DESIRED FIRST PREFERENCE MAKE	OTHER EQVALENT ALTERNATIVE MAKES
1	MCCB, 3 pole, 400 amps, 36 KA	L&T Type DN3-400D with Thermal Release Setting of 320-400 amps.	Schneider/GE/Siemens/ABB
2	MCCB, 3 pole, 250 amps, 35 KA	L&T Type DN2-250D with Thermal Release Setting of 200-250 amps.	Schneider/GE/Siemens/ABB
3	MCCB, 3 pole, 125 amps, 16 KA	L&T Type DU125 with Thermal Release Setting of 100-125 amps.	Legrand/Schneider/GE/Siemens/ABB
4	MCB DB 12 Way Vertical TPN	Legrand Type Ekinox	Hager/Havells
5	MCCB for above MCB DB	Legrand Type DPX 125 amps, 3 pole, 16 KA	L&T/Schneider/GE/Siemens/ABB
6	MCBs & MCB Isolators	Legrand Type Lexic 10 KA	Hager/Havells
7	SPN type Metal clad MCB Plug & Sockets	Legrand Type Metra 240V, 20 A, 2P + E	BCH/Hager/Havells/Standard
8	TPN type Metal clad MCB Plug & Sockets	Legrand Type Metra 440V, 32 A, 3P + E	BCH/Hager/Havells/Standard
9	Under Ground Cables 1.1 KV Grade, PVC Insulated and PVC Sheathed Armored Aluminum Conductors	Finolex or Polycab	Havells/CCI/Universal/Glister/Nicco
10	Flexible Copper Conductor Cables & Wires for Internal panel Control Wiring	Finolex or Polycab	Q-Flex/Empire/Payal
11	Voltmeters 96 sq.mm, Flush type, 0-500 Volts	AE/Meco/Rishabh/IMP	AE/Meco/Rishabh/IMP
12	Ammeters 96 sq.mm, Flush type CT Operated	AE/Meco/Rishabh/IMP	AE/Meco/Rishabh/IMP
13	Voltmeter Selector Switches, 3 pole, 6 amps, RY- YB- BR-OFF	Kaycee/Salzer/Tecnic	VKS
14	Ammeter Selector Switch, 3 pole, 6 amps, R-Y-B-OFF	Kaycee/Salzer/Tecnic	VKS
15	CTs, Tape wound type, -/5 amps Ratio	Kappa/AE/IMP/Rishabh	Altran/kalpa
16	Indicating lamps 22.5 mm dia, R,Y,B	ESBEE/Teknic/Raas Controls	Siemens/L&T/Vaishnov/Vecco
17	Control Fuse Fitting & Links, Molded type	GE	Standard/Havells
18	Busbar Insulators SMC/DMC/Epoxy type	Powewrmat	IML

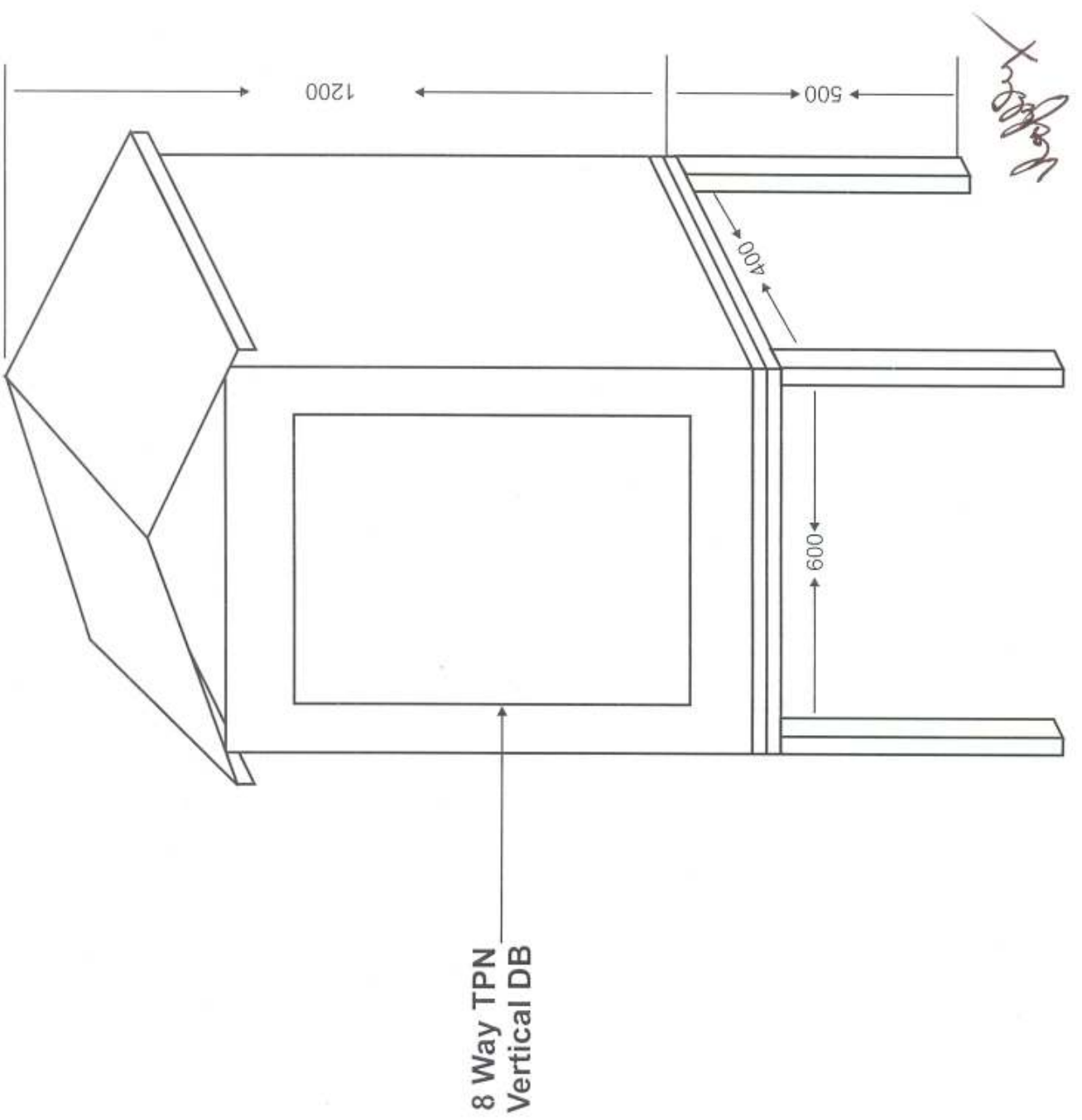
19	HS Sleeves, R,Y,Blue,Black,Green	Garware	Garware
20	Aluminum Busbars Electrolytic E91 WP Grade as per IS-5082	Indalco/Balco	
21	Cable Glands Double Compression Brass Type	HMI/BBI/VBI	
22	Cable Lugs Aluminum Crimping type	Dowells/Jainsoni	3D/Multi
23	Terminal Blocks Moulded type	IEC/Essen	Veeco/Balson
24	CR Streel sheets, 10/14 swg	Tata/Jindal/Sail	

Prepared by:
PVC Shekhar Reddy,VSM, Consultant(EE)

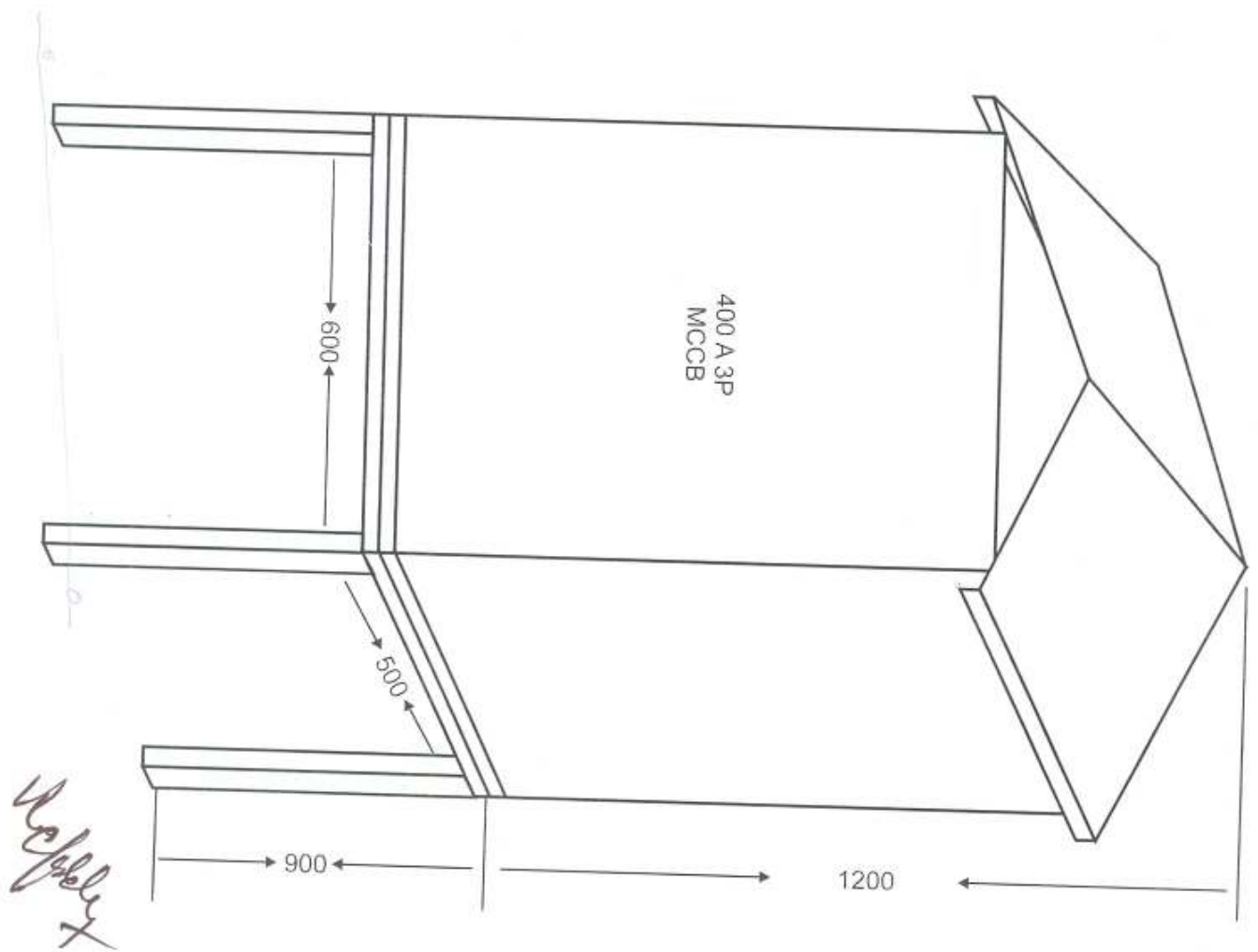


500mm Light
Stand Made with
75 x 40 mm C Channel

Signature



50 x 50 x 5 mm
Angle Stand



BAR CHART

NAME OF WORK: EXTENSION/MODIFICATIONS TO MV PANEL, SITC OF FEEDER BOXES, SLTT OF UG POWER CABLES, PROVIDING EARTHING ETC AT CRIDA											
NO	NAME OF ACTIVITY	ITEM WEIGHT AGE %	PROPOSED / ACTUAL	SCHEDULE FOR COMMENCEMENT AND COMPLETION IN WEEKS FROM THE DATE OF AWARD OF CONTRACT							
				1	2	3	4	5	6	7	8
1	Supply of all required RCC / Humre Pipes	1	PROPS ACTUAL								
2	Excavation of Cable Trench across roads and Laying of RCC Pipes	1	PROPS ACTUAL								
3	Supply of Cable for Phenonics Lab	10	PROPS ACTUAL								
4	Excavation of Cable Trench & Laying of Cable for Phenonics Lab	1	PROPS ACTUAL								
5	Supply & Fixing of 250 amps MCCB in existing Main MV Panel in SS	3	PROPS ACTUAL								
6	Supply & Installation of Feeder Box & Termination of Cable for Phenonics Lab	3	PROPS ACTUAL								
7	Supply of Earthing Material for Phenonics Lab	1	PROPS ACTUAL								
8	Providing of Earthing Pits and Earthing Interconnections for Phenonics Lab	1	PROPS ACTUAL								
9	Supply of all balance Cables	33	PROPS ACTUAL								
10	Supply & Fixing of 400 amps MCCBs in existing Main MV Panel in SS	10	PROPS ACTUAL								
11	Supply of all remaining Feeder Boxes excavator or vanator trench and laying	20	PROPS ACTUAL								
12	Installation, Testing & Commissioning of all Cables	5	PROPS ACTUAL								
13	Installation, Testing & Commissioning of all Feeder Boxes	3	PROPS ACTUAL								
14	Termination, Testing & Commissioning of all cables	3	PROPS ACTUAL								
15	Inspection & AT, Recording of all Field Measurements, MB Entry etc	5	PROPS ACTUAL								
16	Closing of Contract	1	PROPS ACTUAL								
17	TOTALS	100									

18 Prepared by: PVC Shekhar Reddy, VSM, Consultant(EE)

18/02/2024



TITLE : MODIFICATION
EXTENSION TO EXISTING
MAY PANEL & PROVIDING
DOOR SLOPELY AIRPORT
TO VARIOUS NEW LABS
ACS OF CONFERENCE IN
CARD, HYDROABD.

