## SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 315 KVA TRANSFORMER, 320 KVA GENERATOR & CONNECTED ELECTRICS ALONG WITH DECOMISSIONING AND DISPOSAL OF EXISTING 160 KVA TRANSFORMER AND 125 KVA GENERATOR AT KERALA GRAMIN BANK HEAD OFFICE, MALAPPURAM

### **TENDER NO: 16/2024**

#### Name of Work:

Supply, Installation, Testing and Commissioning of 315 KVA Transformer, 320 KVA Generator (DG Set) & Connected Electrics along with Decommissioning and Disposal of existing 160 KVA Transformer and 125 KVA Generator at Kerala Gramin Bank Head Office, Malappuram.

### Client:

#### **Consultant:**

Kerala Gramin Bank General Administration Wing Head Office KGB Towers, A K Road Malappuram, Kerala- 676505 Mail: gawing.kgb@keralagbank.com M/s Ananthapuri Consultants Sera-36, Second Floor, near Adhyapakabhavan Road, Statue, Trivandrum- 695001.

## **NOTICE INVITING TENDER**

Sealed Tenders for the Supply, Installation, Testing and Commissioning of 315 kVA Transformer, 320 kVA Generator (DG Set) & Connected Electrics along with Decommissioning and Disposal of existing 160 kVA Transformer and 125 kVA Generator at Kerala Gramin Bank Head Office, Malappuram are invited by Kerala Gramin Bank, Head Office, Malappuram from well reputed qualified A Class contractors for executing such works.

Interested Agencies are requested to visit Banks website <u>www.keralagbank.com</u> under the tender section & download the NIT/Bid document/corrigendum/clarifications under the tender section to participate in the tender process.

Bids made strictly as per provisions of the RFP/NIT document should be submitted to the following address not later than 02.01.2025 05:00 pm:

# Assistant General Manager, General Administration Wing, Kerala Gramin Bank, Head office, KGB Towers, A K Road, Uphill, Malappuram 676505.

## 1. Disclaimer:

- a) This Request for Proposal (RFP) is not an offer by the Kerala Gramin Bank, but an invitation to receive response from eligible interested bidders for printing & supply of bank's wall calendars. This document should be read in its entirety.
- b) Information provided in this RFP to the Bidders is on a wide range of matters, some of which depends upon interpretation of law. The information given is not an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law.
- c) KERALA GRAMIN BANK, its employees and advisers make no representation or warranty and shall have no liability to any person including any Bidder under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this RFP or otherwise, including the accuracy, adequacy, correctness, reliability or completeness of the RFP and any assessment, assumption, statement or information contained therein or deemed to form part of this RFP or arising in any way in this Selection Process.
- d) KERALA GRAMIN BANK also accepts no liability of any nature whether resulting from negligence or otherwise however caused arising from reliance of any Bidder upon the statements contained in this RFP.
- e) KERALA GRAMIN BANK may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumption contained in this RFP.
- f) Every effort is being made to keep Kerala Gramin Bank's Website up to date and running smoothly 24X7, However Kerala Gramin Bank takes no responsibility, and will not be liable for, the website being temporarily unavailable due to any technical issues at any point of time. In that event Kerala Gramin Bank will not be liable or responsible for any damages or expenses arising for any difficulty, or error, imperfection or inaccuracy with this website, it includes all associated service, or due to such unavailability of the website or any part there of any contents or any associated services.

g) The issue of this RFP does not imply that Kerala Gramin Bank is bound to select a Bidder or to appoint the selected Bidder, as the case may be, for the insurance policy and Kerala Gramin Bank reserves the right to reject all or any of the Proposals without assigning any reason whatsoever. No correspondence shall be entertained in this regard.

## 2. The proposed evaluation schedule is tabulated below. However, the bank, at its discretion can change the schedule without assigning any specific reason for the same.

SI No.	Event Description	Particulars	
1	Category of Tender	Open	
2	Mode of submission	Offline	
3	Date of publishing of Tender Notice	12.12.2024, on Bank's website	
5	Pre-bid meeting (will be conducted online)	21.12.2024	
6	Response to Pre-Bid queries	23.12.2024	
7	Issue of Addendum /Revised Tender document (If required)	23.12.2024	
8	Last date for submission of Bid /Bid due date	02.01.2025 till 05.00 PM	
11	Opening of Technical Bids	03.01.2025 at 3.00 PM at Bank's Head Office (subject to availability of Tender Committee members)	
12	Information regarding Financial Evaluation of Bids	Financial Bid of the technically qualified bidders shall be opened at a later date with prior intimation.	
14	Contact details	1-Harikrishnan K (9400999889)	
15	RFP related communication E-mails Ids	gawing.kgb@keralagbank.com	

a) Bids received later than the prescribed date and time i.e. by 02.01.2025 till 05.00 PM will not be considered for valuation.

- b) If the last day of submission of Bid is declared as a holiday by any circumstances beyond the control of Kerala Gramin Bank, the next working day will be deemed to be the last day for submission of the Bid.
- c) Further, in case Kerala Gramin Bank does not function on the aforesaid date due to unforeseen circumstances or holiday, then the Bid will be opened on the next working day subject to availability of all the Technical Committee members; unless otherwise such change may be notified to all bidders.

## 3. ELIGIBILITY CONDITIONS:

- The bidder should have satisfactorily completed at least one work of similar nature in a single contract in the last two years. (Attach certified copies of work order and satisfactory completion certificates in respect of quality, time and satisfaction of client as documentary proof.).
- **4** The Bidder should possess valid A class license.
- The bidder should possess adequate equipment and staff for completing the work. Joint venture or consortium bids will not be accepted.

# Tenderers will have to submit the following documents for evaluation as part of Technical Bid:

Pre-qualification documents for confirming the eligibility which includes:

- General Profile of the company.
- **4** Contact Person with their contact numbers and email addresses.
- Details of Proprietor / List of Partners and Directors.
- **4** Attested copies of Certificate of Registration & A Class License.
- ↓ Turnover during 2021-22, 2022-23 and 2023-24 and copy of audited balance sheet if applicable.
- Valid GST Registration and Income tax registration number (PAN). Bidder should submit valid documentary proof of details of GST and income tax registration number (PAN).
- The firm must not have been blacklisted by any bank, Financial Institution. (An affidavit is to be submitted by the participating firm to this effect in their letter head.)
- Copy of work Order(s) along with satisfactory completion certificate(s)/payment(s) received from client(s).
- Tender book with tender drawings.
- **4** Letter accompanying the tender with communication other than those stipulated in the tender.

## Please note that in case if any of the above listed documents are found not enclosed in the technical bid submitted by the bidders, their bid will be technical disqualified.

## Non submission of EMD on or before the last date will result in technical disqualification of the bidder.

The bid evaluation committee of Kerala Gramin Bank shall conduct the evaluation on the basis of the submitted Technical Bid. However, Kerala Gramin Bank may seek clarification on the information submitted by the bidder, if required.

## The duly completed tender proposals bids (as per the format given below) must be uploaded on online portal mentioned above on or before the last date of submission of tenders.

After the opening of the tenders, the information relating to the examination, clarification, evaluation and comparison of tenders and recommendations concerning the award of contract shall not be disclosed to the tenderer and other persons not officially concerned with such process.

Subject to <u>Kerala Gramin Bank, Head Office</u>, right to accept any tender, and to reject any or all tenders; <u>Kerala Gramin Bank, Head Office</u>, will award the contract to the tenderer whose bid has been determined to be substantially responsive to the tender documents and who has offered the lowest evaluated tender Price provided further that the tenderer has the capability and resources to carry out the Contract effectively

Prior to the expiry of the period of validity of the tender <u>Kerala Gramin Bank, Head Office</u>, will notify the successful tenderer in writing that his tender has been accepted. This letter herein after referred as letter of acceptance shall name the sum which <u>Kerala Gramin Bank, Head Office</u> will pay to the contractor in consideration of the execution, completion, operation, maintenance and guarantee of the works by the contractor as specified by the contract (herein after the called contract price). This letter of acceptance will constitute the formation of a contract.

Tenders not properly filled, mutilated with incorrect calculations or generally not complying with the conditions may be rejected.

In case of schedule of rate contract, the tenderer should quote their rates in figures. The schedule of quantities must be fully priced with the rates quoted for the unit rate specification and the total of each page along with carried over figures of the previous page shall be given in ink and signed by the tenderer. No blank space shall be left. Figures in words shall be deemed to be final figures in case of cuttings or overwriting.

If the tender is made by an individual, it shall be signed with his full name and his complete address shall be given. If it is made by a partnership firm, it shall be signed with the co-partnership name by a member of the firm who shall sign his own name and give the name and address of each partner of the firm and attach a copy of 'Power of Attorney' with the tender authorizing him to sign on behalf of the other partners. A certified copy of the 'Registered Partnership Deed' shall also be submitted along with the tender. In case the tender is made by or on behalf of a company incorporated under the Companies Act, 1956, it shall be signed by \_\_\_\_\_\_ or by one of the Partners duly authorized on this behalf and shall include a copy of the 'Power of Attorney' with the tender. A certified copy of the registered deed shall also be submitted along with the tender.

## 4. EMD/SECURITY DEPOSIT/RETENTION MONEY:

**E.M.D** – **Rs. 1,00,000/- (Rupees One Lac)** by way of Demand Draft issued by a Scheduled Commercial Bank in the name of General Manager, Kerala Gramin Bank payable at Malappuram. MSEs are exempted from EMD.

**SECURITY DEPOSIT** – of **5% of contract value** in the form of Performance Bank Guarantee issued by a Scheduled Commercial Bank. The Bank Guarantee should be valid for 12 months with an additional claim period of 3 months. Successful Bidder needs to provide the Bank Guarantee within 7 days of communicating the contract.

## **RETENTION AMOUNT:**

Retention Money at the rate of **5% of the value of work done** for each running bill will be deducted from first and following certificates until such time as the cumulative total of such deductions (herein referred to as the Retention money). The retention money will be released after the completion of defect liability period.

All the deposits of, RETENTION MONEY will not bear any interest whatsoever.

Retention Money will be returned to the contractor, after the defect liability period of 12 months from the date of commissioning of the project after deducting penalties, if any.

Income-tax at the rate prevailing at the time of payment will be deducted from each running bill and final bill.

All statutory payments in connection with the employment of the Workmen for this work will have to be borne by the Contractor.

The contractor is the employer of all the workers engaged for this work and should therefore take all required registrations and pay premiums correctly to labour welfare funds constituted by the union Government and Government of Kerala from time to time.

All prevailing tax rules like GST, TDS etc. at the time of effecting the payment will be applicable.

## 5. INSPECTION OF SITE:

Every tenderer is expected to inspect the site of the proposed work and acquaint himself with the site conditions approaches, availability of raw materials, geological and weather conditions etc. before quoting his rates. The work site is open for inspection on all Bank Working days. He must go through all the drawings, specifications and other tender documents. Any further clarifications in the drawings and documents can be had from the Consultants at the above-mentioned address.

## 6. QUANTUM OF WORK:

A schedule of approximate quantities for various items accompanies this tender. It shall be definitely understood that the Consultant/ M/s Ananthapuri Consultants does not accept any responsibility for the correctness or completeness of schedule in respect of items and quantities and this schedule is liable to alteration by deletions, deductions, or additions at the discretion of the Consultant/ Joint Managing Partner without affecting the terms of the contract.

## 7. <u>RATES:</u>

The contractor's rate must be firm and include all taxes and the cost of transportation of material to the site. The rates quoted by the Contractor shall be firm throughout the contract period and there shall be no upward revision of the rates quoted by the contractor for any reason whatsoever. In addition to the statutory deductions towards Income Tax, work contract tax and KCW WF shall be deducted on the state government at the current rates.

However, the rate of deduction towards work contract tax shall be changed if the government revises the rates. And also, deductions shall be made towards any other tax imposed by the government. It should be clearly understood that any claims for extra. Sales Tax, Excise duty, Construction tax, service tax or any additional tax etc. shall not be entertained in any case whatsoever once the tenders are opened.

## 8. INTERPRETING SPECIFICATIONS:

In interpreting the specifications, the following order of decreasing importance shall be followed:

- a) Schedule of Quantities
- b) Unit Rate Specifications & Technical Specifications.

- c) Drawings
- d) General specifications

Matters not covered by the specifications given in the contract as a whole shall be covered by the relevant Indian Standard Codes. If such codes on a particular subject have not been framed, the decision of the <u>KGB</u>, <u>Head Office/Consultant</u> shall be final.

No alterations shall be made by the tenderer in the Notice Inviting Tenders, Instructions to the contractors, Contract form, conditions of the contract, drawings and specifications and if any such alterations are made or any special conditions attached, the tender is liable to be rejected.

The acceptance of a tender shall rest with the authorized representative of the <u>"Kerala Gramin Bank,</u> <u>Head Office"</u>, who does not bind himself to accept the lowest tender and reserves to himself the authority to reject any or all the tenders received without assigning any reason(s) whatsoever.

The authorized representative of the <u>"Kerala Gramin Bank, Head Office"</u> reserves the right of accepting the whole or any part of the tenders received and the tenderer shall be bound to perform the same at the rate quoted.

The work shall be carried out under the direction and supervision of the Consultant <u>M/s Ananthapuri</u> <u>Consultants</u> or their representative at site. On acceptance of the tender, the contractor shall intimate the name of his accredited representative who would be supervising the construction and would be responsible for taking instructions for carrying out the work.

The Consultant/ M/s <u>Ananthapuri Consultants</u>, decision with regard to the quality of the material and workmanship will be final and binding, any material rejected by the Consultant/ <u>M/s</u> <u>Ananthapuri</u> <u>Consultants</u> shall be immediately removed by the contractor.

### 9. SUB-LETTING:

No part of the contract shall be sub-let without the written permission of the Consultant and <u>M/s</u> <u>Kerala Gramin Bank, Head</u> Office nor shall transfers be made by 'Power of Attorney' authorizing others to carry out the work or receive payment on behalf of the tenderer.

### **10.DEFECTS LIABILITY PERIOD:**

Any defect developed within 'Defect Liability Period' of Twelve months will have to be rectified by the contractor at their own cost and in case the defects are not rectified by the contractor, the respective amount corresponding to the defect will be deducted from the retention money.

### 11. DELAYS IN COMMENCEMENT:

The contractor shall not be entitled to any compensation for any loss suffered by him on account of delays in commencing or executing the work, whatever the cause for such delays may be including delays in procuring Government Controlled or other materials.

## 12. OCCUPATION IN PART:

If <u>Kerala Gramin Bank</u>, <u>Head Office</u> wants to occupy areas in part, the contractor shall complete the work of these areas in conjunction with <u>Kerala Gramin Bank</u>, <u>Head Office</u> and hand over the same to them\_without affecting any of the clause of contract agreement.

The contractor should inspect the source of material, their quality, quantity and availability. The material must strictly comply with the relevant I.S. specifications.

The contractor must co-operate and co-ordinate with other contractors involved in other works on the site. The outworker should also note that they shall have to clear the site of vegetation, debris etc. Before the commencement of the work and that no extra payment is permissible on this account.

## 13. PERIOD OF CONSTRUCTION:

Time is deemed to be the essence of this contract. The total time of completion can be considered as 60 days. Commencement of the work shall be considered from the 7th day on receipt of work order. The contractor shall issue a detailed schedule of program in Worksheet on the whole work, within one week of award of work and submit to the Consultant for his approval.

## 14.PENALTY:

<u>Kerala Gramin Bank, Head Office</u> shall levy a penalty for every week of delay at the rate of 0.5% of the total contract to a maximum of 10% of the total contract value after which the contract stands cancelled.

## 15. CONTRACTOR'S STORE AND SITE OFFICE:

Suitable area near the site of work shall be allowed to the contractor free of cost for storing his tools and plants, materials and for his site office and cement godown. However, the structure will be provided by him at his own expense and he will be solely responsible for guarding his property and shall cover his property with requisite insurance against theft, fire etc. The contractor however will have to dismantle the sheds and vacate the land of all debris etc. at his own expense after completion of work.

### 16. MEASUREMENT AND BILLING:

Wherever mode of measurement is specified, the measurement will be taken at site as per the latest IS code of practice for measurement.

The contractor or his representative shall accompany the Consultant/Client or their representative in taking measurements and shall agree to the measurements taken on spot. All necessary tapes shall be of steel and shall be supplied by the contractor. The contractor shall then present his bill based upon the agreed and recorded measurements and as per the directions of the Consultant. If the contractor fails to accompany the Consultant / Client for measurements, then he shall be bound by the measurements taken by the Consultant/Client.

Payments will be made in 3 stages – after completion of 50%, 80% and 100% of work subjected to approval by the consultant.

Period of final measurement shall be One month from the time of completion of the project.

## 17.EXTRA ITEMS:

Extra items may be classified as additional, substituted or altered items, depending on their relation or otherwise to the original item or items of work.

Rates for authorized extra items, additional, altered or substituted work as may be ordered shall be determined by the Consultant as follows:

- a) In the case of all extra items whether additional, altered or substituted, if accepted rates for identical items provided for in the contract, such rates shall be applicable.
- b) In the case of extra items whether altered or substituted, for which similar items exists in the contract, the rates shall be derived from the original item by appropriate adjustment of cost of affected components.
- c) In the case of extra item whether additional, altered, substituted, for which the rates cannot be derived either from similar item of work in the contract, the Contractor shall within 14 days of the receipt of order to carry out the said extra item of work, communicate to the Engineer the rate which he proposes to claim for the item, supported by analysis of the rate claimed and Joint Managing Partner /Consultant shall determine the rate on the basis of the market rate giving due consideration to the rate claimed by the Contractor.

### 18.WATER AND ELECTRICITY:

The Contractor shall make his own arrangement for water and electricity required for the works. <u>Kerala Gramin Bank, Head Office</u> takes no responsibility for the supply of either electricity or water. If the contractor uses electricity of bank for electrical work, the bank authorities will charge for it based on the consumption.

### 19.INSURANCE:

The contractor shall take Contractor's All Risk (CAR) insurance policy, jointly in the name of <u>Kerala</u> <u>Gramin Bank, Head Office</u> and the contractor, and the original policy shall be deposited with <u>Kerala</u> <u>Gramin Bank, Head Office</u>.

This Notice Inviting Tender will form part of the tender document and the agreement executed by the successful tenderer.

#### 20.DOWNTIME:

As the proposed work can hamper the normal functioning of the Bank, the contractor shall ensure minimum downtime of the system and schedule the downtime during the course of work on Bank holidays as far as possible.

## 21. ADVANCE PAYMENT:

No advance payment will be made by the Bank for the execution of the project.

I/We hereby declare that I/We have read and understood the above instructions and the terms and conditions mentioned above are binding on me/us.

SIGNATURE OF THE TENDERER:

Date:

## FORMS OF AGREEMENT

## A. FORM OF PRELIMINARY AGREEMENT

(To be executed in stamp paper at the time of submitting tender)

## NOW THERE FOR THESE PRESENTS WITNESS AND IT IS MUTUALLY, AGREED AS FOLLOWS

- 1 The terms and conditions for the said contract having been stipulated in the said tender form to which the contractor has agreed, a copy of which is hereto appended which forms part of this agreement, it is agreed that the terms and conditions stipulated therein shall bind the parties to this agreement except to the extent to which they are abrogated or altered by express terms and conditions herein agreed to and in which respect the express provisions herein shall supersede those of the said tender form.
- 2 The contractor hereby agrees and undertake to perform and fulfil all the operations and obligations connected with the execution of the said contract work viz. (H.E. the name of the work) if awarded in favour of the contractor.
- 3 If the contractor does not come forward to execute the original agreement after the said work is awarded and selection notice issued in his favour or commit breach of any of the conditions of the contract, M/s Kerala Gramin Bank, Head Office to rearrange the work.

# The decision taken by the Accepting Authority shall be final and conclusive and shall be binding on the contractor.

In witness whereof Shri ...... (the name of M/s\_\_\_\_\_) and Shri....., the contractor have set their hands on the day and year first above written.

Signed by \_\_\_\_\_, in the presence of witnesses

1
2
Signed and delivered by Shri
(The contractor) in the presence of witnesses

(The contractor) in the presence of 1

2.....

## **B. FORM OF AGREEMENT**

Agreement No: Between Assistant General Manager Kerala Gramin Bank General Administration Wing Head Office, Malappuram

And

## Name of the work: <u>Supply, Installation, Testing and Commissioning of 315 kVA</u> <u>Transformer, 320 kVA Generator (DG Set)</u> <u>& Connected Electrics along with</u> <u>decommissioning and disposal of existing 160 kVA Transformer and 125 kVA Generator</u> <u>at Kerala Gramin Bank Head Office, Malappuram.</u>

Amount of contract .....

Time of completion: 60 days from the date of work order

The agreement will be the contract

Date of agreement:

#### Notes:

- 1. The accepted tender with conditions of contract and all other tender documents annexed should be attached to this agreement and will form part of the contractor.
- 2. The agreement should be signed by the parties in the presence of two witnesses
- 3. In the event of the agreement being executed by a firm, it must be signed by a person or persons who are / are legally competent to execute agreement on behalf of the firm.

Receipts for payments made on account of a work when executed by a firm must be signed by the person or persons legally competent to accept payments on behalf of the firm.

## (To be typed in Kerala stamp paper worth Rs. 200/-)

ARTICLE OF AGREEMENT MADE THIS ......day of .....Two thousand and Twenty Four BETWEEN Kerala Gramin Bank, a body corporate constituted under the Regional Rural Bank Act 1976, is notified on 08/07/2013, having its head office at Malappuram (herein after referred to as Bank which expression shall where the context so admits or implies be deemed to include his successors in office and assignees) of the one part and

(herein after called the **Contractor** which expression shall where the context so admits or implies be deemed to include his heirs, executors, administrators, successors in interest legal representative and assignees as well) of the other part.

Whereas the Bank is desirous of executing the work of Supply, Installation, Testing and Commissioning of 315 kVA Transformer, 320 kVA Generator (DG Set) & Connected Electrics along with decommissioning and disposal of existing 160 kVA Transformer and 125 kVA Generator at its Head Office in Malappuram and have cost an estimate of probable quantities of items of work involved, detailed drawings, and specifications being prepared and have invited tenders from contractors for executing the said work in accordance with the estimate, drawings, and specifications, notice inviting tenders and general and special conditions of contract which together are termed tender documents, and whereas the contractor .....

Has tendered for the execution of the work in accordance with the tender documents.

1. In consideration of the payment by the Bank to the contractor the sum of

Rs.....) or such other sum as may be

arrived at under the terms of contract and method of payment detailed in the tender document, the contractor will upon and subject to the said conditions execute and complete the work shown in the said Tender documents with such variation as may be found necessary by way of alterations of , additions to, or deductions from the said work.

2. Time shall be considered as of the essence of contract and the contractor hereby agrees to commence the work after the execution of the agreement within such time as is specified in the tender documents, maintain such rate of progress as specified therein and complete the work in all respects within 2 Months from the date of commencement for the Supply, Installation, Testing and Commissioning of 315 kVA Transformer, 320 kVA Generator (DG Set) & Connected Electrics along with decommissioning and disposal of existing 160 kVA Transformer and 125 kVA Generator <u>at Kerala Gramin Bank Head Office, Malappuram.</u>

Signed by Sri. /Smt ..... Kerala Gramin Bank

In the presence of witnesses:-

- (1) .....(Full name, address and signature)
- (2) .....(Full name, address and signature)

Signed by Sri./Smt. Contractor

In the presence of witnesses

(1)..... (Full name, address and signature)

(2)..... (Full name, address and signature)

## CONDITIONS OF CONTRACT (DEFINITIONS AND INTERPRETATION)

## 1. DEFINITIONS

The following terms shall have the meaning hereby assigned to them except where the context otherwise requires:

## CLIENT/BANK:

Kerala Gramin Bank, Head Office, Malappuram

## \* CONSULTANT:

M/s Ananthapuri Consultants, Sera-36, Second Floor, Near Adhyapakabhavan Road, Statue, TVM – 695001. Engineer shall be the person representing M/s Ananthapuri Consultants which is the Consultant, supervising the work.

## \* CONTRACTOR:

Shall mean the successful tenderer to whom the contract has been awarded.

## \* SUB-CONTRACTOR:

Shall mean the person named in the contract for any part of the work or any person to whom any part of the contract has been sublet with the consent in writing by the Consultant and the legal representatives, successors and assignees of such person.

### \* CONTRACT:

Shall mean and include the following:-

Notice inviting tender, Tender form, General Conditions of Contract, General Specifications, Technical Specifications, Unit Specifications, Detailed Specifications, Schedule of Quantities, Drawings, Work Order and/or any other correspondences of negotiations.

## \* <u>SITE:</u>

Shall mean the actual place in, over or under which work is to be done, allotted by Kerala Gramin Bank, Head Office, Malappuram for Contractor's use.

### \* <u>WORK:</u>

Of the Contractor shall mean and include materials or labour or both.

### \* CONTRACT PRICE:

Shall mean the sums referred to in the formal agreement, if any or the work order.

## \* SCHEDULE OF QUANTITIES:

The schedule of approximate quantities of various items of work with specification for unit rate. **2. ASSIGNMENT AND SUB-CONTRACTING:** 

### **ASSIGNMENT:**

The Contractor shall not assign the contract or any part thereof or any benefit or interest therein or there under without the written permission of the Consultants.

## 3. DRAWING/STATUTORY APPROVALS AND SANCTIONS

### > SCHEME APPROVAL FROM THE ELECTRICAL INSPECTORATE:

The contractor shall be responsible for preparing detailed drawings based on the preliminary drawings provided by the Consultant, for the purpose of scheme submission to the Electrical Inspectorate and obtaining the necessary scheme approval. One copy of the Electrical Inspectorate Approved drawings shall be kept at the site and the same shall at all reasonable times be available for inspection. All the statutory charges should be remitted by client.

## > ENERGIZATION SANCTION FROM ELECTRICAL INSPECTORATE:

The contractor shall be responsible for obtaining the final energization sanction from the Electrical Inspectorate.

### > LIAISON WITH KSEB:

The contractor shall be responsible for managing all liaison activities with KSEB, from obtaining the power allocation sanction to securing the HT connection. All the statutory charges should be remitted by client.

### > EXECUTION AS PER DRAWINGS:

The Contractor must not vary or deviate from the drawings in any respect while executing the work or executing any extra work of any kind whatsoever unless authorized by the Bank

## > PLANS AND DRAWINGS TO BE SUBMITTED BY THE CONTRACTOR:

The Contractor shall submit the following information in triplicate to Consultant for approval within the time stipulated; each item below:-

A general tentative layout plan of construction plant and equipment for the execution of work within 7 days from the date of receipt of work order.

- Drawings or prints showing the location of major plants and other facilities which he proposes to put up at the site, including any changes in the general layout, at least 7 days prior to the commencement of the respective work.
- Layout and details of temporary works that the Contractor wants to carry out to fulfil his obligation under the contract Within 7 days the Consultant will give their approval/comments sufficient to proceed with the work or objections/instructions to the Contractor based on which the drawings shall be revised and submitted again for approval by the Contractor.
- All these plans and drawings submitted by the Contractor and approved by the Consultant shall become part of the contract.

## 4. ROYALTIES AND PATENT RIGHTS

All royalties or other sums payable in respect of the supply and use in carrying out the work as desired by or referred to in the schedule of quantities of any patented articles, process or inventions shall be deemed to have been included in the contract sum and the Contractor shall indemnify the Bank from and against all claims, proceedings, damages, costs and expenses which may be brought or made against the Bank or to which he may be put by reason of the Contractor infringing or being held to have infringed any patent rights in relation to any such articles, process and inventions.

### 5. GENERAL OBLIGATIONS

### > INSPECTION OF SITE ETC. BEFORE SUBMISSION OF TENDER:

The Contractor shall inspect and examine the site and its surroundings, and shall satisfy himself before submitting his tender, as to the nature of the ground, form and nature of the site, the quantities and nature of work and materials required for the completion of the works, the means of access to the site, the local labour conditions, the accommodation he may require and in general shall obtain all necessary information as to the risks, contingencies and other circumstances which may influence or affect his tender.

### > SUFFICIENCY OF TENDER:

The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates and prices stated in the priced bill of quantities and the schedule of rates and prices, if any, with tender rates and prices shall cover all his obligations under the contract and all matters and things necessary for the proper completion and maintenance of the work.

## > CLARIFICATION BEFORE SUBMITTING TENDERS:

Should the Contractor notice any discrepancy or error in the statement made, or quantities or units against items. he shall immediately bring shown to the notice of M/s ./Consultant and obtain the clarification before submitting the tender. The tender shall be based on such clarifications received and shall be recorded as such in the covering letter to the tender, failing which M/s .shall have the right to ask the Contractor to execute the work according to the statement made or quantities or units shown in the tender, without any compensation.

## > **RATES QUOTED FOR FINISHED WORK:**

The rates quoted in the tender by the Contractor must be for the finished work as per the drawings and specifications inclusive of all taxes.

## > LOCATION OF WORK:

Unless specifically mentioned in the item, the work described there-in may be at any location or elevation.

### > TENDERS OPEN FOR:

The tender shall remain open for acceptance for a period of 21 days from the date of submission of the tender.

### > COMMENCEMENT OF WORK:

The Contractor shall commence the work at site, within 7 days of issue of formal work order and handing over of the site or being advised by the Bank, unless otherwise specified, and shall proceed with the same with due expedition.

### > CONTRACTOR'S EMPLOYEES:

The Contractor shall provide and employ at site in connection with the execution and maintenance works.

- a) Only such technical assistants as are skilled and experienced in their respective fields and such sub-agents, foreman and leading hands as are competent to give proper supervision to the work they are required to supervise and,
- b) Such Skilled, semi-skilled and unskilled labour as is necessary for the proper and timely execution and maintenance of works.

### > REMOVAL OF WORKMEN:

The Bank shall be at liberty to object to and require the Contractor to remove forthwith from the works any person employed by the Contractor in or about the execution or maintenance of the works who in the opinion of the Consultant misconducts himself or is incompetent or negligent in the proper performance of his duties or whose employment is otherwise considered by the Consultant to be undesirable and such person shall be replaced by the Contractor without delay by a competent substitute approved by the Bank.

### > COMMUNICATIONS TO BE IN WRITING:

All references, communications, correspondences made by the Bank, the Consultant or the Contractor concerning the works shall be in writing and no reference, communication, or complaint which is not in writing, shall be recognized.

### > OCCUPATION AND USE OF LAND:

No land, building belonging to or in the possession of the Bank shall be occupied by the Contractor. The Contractor shall not use, or allow to be used, the site for any purpose other than that for executing the works.

### > CONSTRUCTION OF SITE-SHED:

Any site-shed, proposed to be temporarily constructed by the Contractor for his office work, storage of materials etc. shall conform to the standard sketch, or to the plan approved by the Consultant. Permission for the construction of such sheds shall be obtained in writing.

#### > MATERIALS, TOOLS AND PLANT:

All materials required for the execution of the works other than those mentioned in the Notice Inviting Tender shall be supplied by the Contractor. Materials so supplied shall have the approval of the Consultant before using on the works. All the rejected materials shall be removed at once from the site of work at the Contractor's own cost.

## > TOLLAGES ETC:

The Contractor shall pay all tollages and other royalties, rent and other payments or compensations, if any for getting stone, gravel, sand, clay and all other materials required for the works.

## > SETTING OUT:

The Contractor shall be responsible for the true and proper setting out of the works and for the correctness of the position, levels, dimensions and alignment of all parts of the works and for the provision of all necessary instruments, appliances and labour in connection therewith. If at any time during the progress of the works any error shall appear or arise in the position, level, dimensions or alignment of any part of the works, the Contractor on being required to do

so by the Consultant or Consultant's representative, shall at his own cost rectify such error to the satisfaction of the Consultant or his representative. The checking of any setting out or of any line or level by the Consultant or his representative shall not in any way relieve the Contractor of his responsibility for the correctness thereof. The Contractor shall provide all necessary instruments, appliances and labour required by the Consultant or his representative for checking, if any, of the setting out. The shall carefully protect and observe all bench marks, site levels, pegs and other things used in setting out the works. The rates quoted for the work shall also include the cost of reference and level pillars and their dismantling, when no longer required.

## > DAMAGE TO PERSONS AND PROPERTY:

The Contractor shall indemnify and keep indemnified the Bank against all losses and claims for injuries or damages to any person or property whatsoever which may arise out of or in consequence of the construction and maintenance of works and against all claims, demands, proceedings, damages, costs, charges, expenses, whatsoever in respect thereof in relation thereto.

### > CO-OPERATION WITH OTHER AGENCIES:

The Contractor shall co-operate with the work of other agencies or Contractors that may be employed or engaged by the Bank and as far as it relates to the Contractors' work. The sequence of work shall be so arranged that the works of other agencies are also in progress simultaneously.

## > BARRICADING AROUND EXCAVATED TRENCHES ETC:

The Contractor shall at his own cost provide around excavation, temporary barricading with bellies and bamboos with warning signals during day and night and shall maintain it so long as the trenches are not filled up. Similar barricades shall also be provided at all dismantling work, erection of structures, sheeting work etc. No extra claim shall be entertained for providing, maintaining and removing such barricades.

### **FABRICATION DRAWINGS:**

Contractor shall prepare at his own cost all fabrication drawings of all structural steel works and submit them to the Bank/Consultant for their approval at least before 15 days of commencing the fabrication. All the details like sizes, capacities, dimensions, arrangement of fabrication etc. should be clearly indicated on these drawings.

### > **PROTECTION OF UNDERGROUND SERVICES:**

The Contractor must take precautionary measures to protect the underground and other services lines viz. cables, water and sewer lines, etc. and observe any specific instructions which may be given in this regard by the Consultant.

## > DEWATERING TRENCHES AND PITS:

The tendered rates shall always be deemed to have taken into account the cost of removal of silt and materials that may slip in the trenches and pits and de-watering the trenches or pits of water accumulated or collected through seepage or subsoil water or rain water. The Contractor shall in no case be entitled to claim any extra amount for the above work. The Contractor shall remain prepared with necessary pumps and equipment for de-watering the trenches or pits so as to avoid unnecessary delay and possible damage to the property etc.

### > WORK IN OR AROUND OPERATING PLANT OR OFFICES ETC:

Where the work is being carried out in or around an operating plant where the plant must run uninterrupted, the Contractor shall work only at specified places and times as mutually arranged between the Contractor and the Consultant/ Bank. Similar arrangement must be made while executing works inside the offices, buildings etc. without causing disturbance to the office work. For this the work may be required to be done during off-hours and Sundays. No extra will be allowed beyond the rates quoted for doing work in the manner described above.

### > WORK IN SHIFTS AND ON OFF-DAYS:

The Contractor shall work in one or more shifts as also on Sundays and off days to complete the work on time, if so required by the Consultant for which Bank shall not be liable to pay any extra. If instructed by the Consultant, the Contractor should carry out the work in the night also.

#### **SITE ORDER BOOK:**

A site order book must be maintained and always be available at site to record the instructions by the Consultant or his representative. The Contractor must see that the instructions noted therein are properly carried out.

### > DELAYS IN OBTAINING MATERIALS SUPPLIED BY BANK

If Bank has undertaken to supply any material specified in the special conditions at rates and conditions cited therein, the Contractor shall keep himself in touch with day-to day position regarding the supply of materials from the Bank and so adjust the progress of the works that labour may not remain idle nor there by any other claim due to or arising from delay in obtaining the materials.

### > **RECORD OF MATERIALS SUPPLIED BY CLIENT:**

The Contractor shall maintain an account of different materials obtained from Bank for executing the works under the contract. The Consultant shall have the right to check the position of materials at all times.

### > SAFE STORAGE OF MATERIALS:

The Contractor shall be responsible for the safe storage of materials supplied by Bank for execution of the works. Surplus materials or materials lost or damaged or unaccounted for or made unserviceable by the Contractor shall be charged as specified in the special conditions.

#### > TRANSPORT OF MATERIALS:

Unless otherwise specified, all the materials supplied by the Bank shall be transported by the Contractor from the Bank's store/ yard, to the site of work at no extra cost.

### > SITE TO BE KEPT CLEAN:

The surplus spoil and dismantled debris shall be removed to a place as directed by the Consultant and stacked, levelled and dressed as directed.

## > CONFLICT IN MEANING BETWEEN SCHEDULE OF RATES AND SPECIFICATIONS:

The schedule of rates shall be read in conjunction with the specifications, and in the event of conflict in meaning between the two, the corresponding item in the unit rate specification shall always have precedence over the specifications.

## 6. LABOUR

#### > LABOUR RULES:

In respect of all labour directly or indirectly employed on the works by the Contractor, the Contractor shall comply with the provisions of the contract labour (Regulation and Abolition) Act 1970, Minimum Wages Act 1948, Payment of Wages Act 1936 and any amendments thereof and all legislation and rules of the State and/or Central Government or other local authorities, framed from time to time, governing the protection of health, sanitary arrangements, wages, welfare and safety for labour employed on building and construction works and for bonus, retirement benefits, retrenchment/lay off, compensation and all other matters liabilities of the Bank to employees. The rule and the other statutory obligations with regard to fair wages, welfare and safety measures, maintenance of register etc. will be deemed to be part of the Contract.

### > **REPORTING ACCIDENT OF LABOUR:**

The Contractor shall be responsible for the safety of all employees and/or workers employed or engaged by him on and in connection with the works and shall forthwith report all cases of accidents to any of them, however caused and whenever occurring, to the Consultant or his representative and shall make every arrangement to render all possible assistance and aid to the victims of the accident.

### > **PROVISION OF WORKMEN'S COMPENSATION ACT:**

The times indemnify Contractor shall at all and keep indemnified the Bank against all claims for compensation under the provisions of the Workmen's Compensation Act 1923 or any other law for the time being in force by or in respect of any workmen employed by the Contractor in carrying out the contract and against all cost and expenses or penalties incurred by the Bank in connection therewith. In any case in which, by virtue of the provision of the said Act, Bank is obliged to pay compensation to a workman employed by the Contractor in executing the works, Bank shall recover from the Contractor the amount of the compensation so paid and without prejudice to the rights of Bank under the said Act. Bank shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any amount due by the Bank to the Contractor, whether under this contract or otherwise without prejudice to any other remedies that may be available to the Bank. The Bank shall not be bound to contest any claim made against it under the said Act, except on the written request of the Contractor and upon his giving to the Bank full security for all cost for which the Bank might become liable in consequence of contesting such claim.

## > ACCIDENT OR INJURY TO WORKMEN:

Bank shall not be liable for, in respect, of any damages or compensation payable as per regulations or in consequence of any accident or injury to any workmen or other person in the employment of the Contractor or his sub-Contractors, and the Contractor shall indemnify and keep indemnified the Bank against all such damages and compensation and against all claims, demands, proceedings costs, charges and expenses whatsoever in respect thereof or in relation thereto.

## > **PRESERVATION OF PEACE:**

The Contractor shall take requisite precautions to prevent any riotous or unlawful behaviour by or amongst his workmen and/or others employed on the works by him, for the preservation of peace and protection of the inhabitants and security of property in the neighbourhood of the works.

### > AGE LIMIT OF LABOUR:

The age limit for employment of labour shall be in strict accordance with the existing labour legislation.

### > RETURN OF LABOUR EMPLOYED:

The Contractor, if required by the Consultant, shall submit return in detail in such form and at such interval as the Consultant may prescribe showing number of different classes of labour employed on the works from time to time by the Contractor.

### > OBSERVANCE BY SUB-CONTRACTOR:

The Contractor shall be responsible for the observance of the provisions of aforesaid clauses by the sub-Contractors employed by him in the execution of the contact.

## 7. MATERIAL TESTS AND WORKMANSHIP

## > QUALITY OF MATERIALS, WORKMANSHIP AND TESTS:

All materials and workmanship shall be of the respective kinds described in the contract and in accordance with the Bank or their representative's instructions and shall be subjected, from time to time, to such tests as the Consultant or his representative may direct at the place of manufacture or fabrication or on the site or at all or any of such places. The Contractor shall provide such assistance instruments, machines, labour and materials, as are normally required for examining, measuring and testing any work and the quality, weight or quantity of any material used and shall supply samples of materials before incorporation in the works for approval as may be required by the Bank.

## > CONSTRUCTION OF PROTOTYPES OR SAMPLES OF WORK:

The Contractor shall construct prototypes or samples of work as laid down in the contract or as instructed by the Consultant. Such prototypes or samples of work, after approval by the Bank shall serve as the standards to be achieved in the final construction.

## > COST OF SAMPLES:

All samples shall be supplied by the Contractor at his own cost.

## > COST OF TESTS:

The cost of making any test as per specifications shall be borne by the Contractor, and the Contractor should arrange for all facilities like meters, instruments as required for carrying out such tests.

### > INSPECTION OF OPERATION:

The Bank or their representative shall at all times have access to the works and to the site and to all workshops and places where materials, manufactured articles or machinery are being obtained for the works and the Contractor shall afford every facility for every assistance in obtaining the right to such access.

### **EXAMINATION OF WORK BEFORE COVERING UP:**

No work shall be covered up or put out of view without the approval of the Consultant or the Consultant's representative and the Contractor shall afford full opportunity to the Consultant or the Consultant's representative to examine and measure any work which is about to be covered up or put out of view and to examine foundations before permanent work is placed thereon. The Contractor shall give due notice to the Bank representative wherever any such work or foundations is or are ready or about to be ready for examination and the Consultant'/ Bank's representative shall without unreasonable delay, unless he considers it unnecessary and

advises the Contractor accordingly, attend for the purpose of examining and measuring such work or of examining such foundations.

#### > UNCOVERING AND MAKING OPENINGS:

The Contractor shall uncover any part or parts of the works or make openings in or through the same as the Consultant may, from time to time, direct and shall reinstate and make good such part or parts to the satisfaction of the Consultant /Managing Director. If any such part or parts have been covered up or put out of view after compliance with the requirements of clause 6.6 hereof and found to be executed in accordance with the contract, the expenses of uncovering, making in or through, reinstating and making good the same shall be borne by the Bank but in any other case all such expenses shall be borne by the

Contractor and shall be recoverable from him by the Bank and deducted by the Bank from any money due, which may become due to the Contractor, without prejudice to any other remedy that may be available to the Bank by law.

### > REMOVAL OF IMPROPER WORK AND MATERIALS:

The Consultant or his representative shall during the progress of the works have power to order in writing from time to time:

- a) The removal from the site and Bank's premises within such time or times as may be specified in the order of any materials which in the opinion of the Consultant or his representative are not in accordance with the contract.
- b) The substitution of proper and suitable materials.
- c) The removal and proper re-execution notwithstanding a previous test thereof or interim payment thereof of a work which in respect of materials or workmanship is not in the opinion of the Consultant or his representative in accordance with contract.

#### > SUSPENSION OF WORK:

The Contractor shall, on the written order by the Bank suspend the progress of the works or any part thereof for such time or times and in such manner as the Consultant may consider necessary and shall during such suspension, properly protect and secure the work, so far as is necessary in the opinion of the Consultant.

### 8. TIME OF COMPLETION AND TAKING OVER:

#### > POSSESSION OF SITE:

Save in so far the contract may prescribe, the extent of portions of the site of which the Bank is to give possession from time to time and the order in which such portions will be available to him

and subject to any requirement in the contract as to the order in which the work shall be executed, the Bank shall give to the Contractor possession of so much of the site as may be required to enable the Contractor to commence and proceed with the construction of the works in accordance with such reasonable proposals of the Contractor as he will make in writing to the Consultant and shall, from time to time as the work proceeds give the Contractor possession of such further portions of the site as may be required to enable the Contractor to proceed with the construction of such further portions of the site as may be required to enable the Contractor to proceed with the construction of the works in accordance with the said program or proposal.

## > TIME OF COMPLETION:

Time is deemed to be the essence of this contract and the whole of the works shall be completed within the time stipulated .

## > EXTENSION OF COMPLETION TIME DUE TO STRIKE, FIRE, ETC:

If in the opinion of the Consultant the progress of the work has at any time been delayed by strikes, fire, inclement weather, unavoidable casualties etc. beyond the control of the Contractor then the time of completion of the work may be extended for such reasonable time as the Consultant may decide and this will be indicated in writing.

## > WORK TREATED AS COMPLETE:

The works shall not be treated as complete until:

i) The site is clear from all materials, site shed, etc. and the Consultant is satisfied with the job done by the Contractor

- ii) The Contractor has submitted the reconciliation statement regarding the stores received from the Bank and all the surplus and salvaged materials are returned to the stores.
- iii) All equipment, tools, plant taken from the Bank has been returned by the Contractor.
- iv) Any other material, taken on loan/transfer from other agency has been returned by the Contractor.
- v) All power and water supply connections taken for the execution of the works have been disconnected by the Contractor.
- vi) Rectification of any damage done by the Contractor to the work executed has been satisfactorily done by the Contractor.
- vii)The works shall not be considered as completed until the Consultant has certified in writing that they have been virtually completed and the Defects Liability Period shall commence from the date of such certificate.

## > TAKING OVER:

After completion of works or any substantial part of the works before the completion of the whole of the works, the Contractor shall notify the Consultant writing, who within 15 days of receipt of the said notice shall give such certificate with respect to any substantial part of the works which has been both completed to the satisfaction of the Consultant and occupied or used by the Bank or refuse to issue the same stating the reasons thereof in writing. When any such certificate is given in respect of a part of the works, such part shall be considered as completed for the purpose of taking over and computation of the period of maintenance of such part, that is, such period shall commence from the date of completion of such part of the works as certified.

## > TERMINATION OF CONTRACT:

If the Contractor has abandoned the contract or has failed to proceed with the work due to negligence or the progress on any particular item or items is slow or has failed to execute the work in accordance with the terms and conditions of the contract, is persistently or frequently neglecting to carry out his obligation under the contract, then it shall be lawful for the Bank to terminate the contract forthwith under written notice and to proceed with the balance of the work through any other agencies.

### **BACK CHARGING THE CONTRACTOR:**

Extra cost and expenses incurred for completing the work or balance work or carrying out the rectification of any work as mentioned above through another agency or agencies including its own department, shall be debited to Contractor's account and shall be recovered from any money due or that may become due to the Contractor without prejudice to any other remedy that may be available to the Bank in law. If there is any savings in cost due to re-arrangement or supplementing through other agencies the original contractor will not have any claim on this.

## 9. ALTERATIONS, ADDITIONS AND OMISSIONS:

### > VARIATION:

The Consultant with the approval of the Bank shall be entitled to make any variation of the quality or quantity of the works or any part thereof that may in his opinion, be necessary and for that purpose, or if for any other reason it shall, in his opinion be desirable, he shall have power to order the Contractor to do and the Contractor shall do any of the following:

- a) Increase or decrease the quantity of any work included in the contract.
- b) Omit any portion of work.
- c) Change the character quality or kind of any such work.
- d) Change the levels, lines, position and dimensions of any part of works and,
- e) Execute additional work of any kind necessary for the completion of the works, and no such variation shall in any way initiate or invalidate the contract but the value, if any, of all such variations shall be taken into account in ascertaining the amount of the contract price.

## > ORDERS FOR VARIATIONS TO BE IN WRITING:

No such variation shall be made by the Contractor without an order in writing of the Bank provided that no order in writing shall be required for increase or decrease in the quantity of any item of work where such increase or decrease is the result of the actual quantities exceeding or being less than those stated in the bill of quantities which are estimates. In such cases, the Contractor shall be paid only for the actual quantity of work done as certified by the Consultant at the accepted unit item rates and no compensation shall be allowed. Provided also that if for any reason the consultant shall consider it desirable to give any such order verbally, the Contractor shall comply with such order but it must be followed by confirmation in writing of such verbal order given by the Consultant, which shall be deemed to be an order in writing within the meaning of this clause.

## > ITEMS OF AD-HOC NATURE:

The Contractor shall procure necessary materials and carry out miscellaneous work of ad-hoc nature specifically provided with necessary tools and tackles as may arise during execution of the contract. The actual quantum of work shall be certified and settled by the Consultant and payment for the same shall be fixed on the basis of actual cost plus overheads, profits and establishments taken at 10% of the cost.

#### > CLAIMS:

The Contractor shall send to the Consultant representative an account, giving full and detailed particulars with proper analysis of all claims for any additional expense to which the Contractor may consider himself entitled and of all extra items of work ordered by Consultant, which he has executed, within 7 days of execution of such work, and no claim for payment for any such work will be considered which has not been included in such particulars. Provided always that the Consultant shall be entitled to authorize payment to be made for any such work notwithstanding the Contractor's failure to comply with this condition, if the Contractor has at the earliest practicable opportunity notified the Consultant in writing, that he intends to make a claim for such work.

### 10. MEASUREMENTS

### > QUANTITIES:

The quantities set out in the bill of quantities are the estimated quantities of the work. They are not to be taken as the actual and correct quantities of the works, to be executed by the Contractor in fulfilment of his obligations under the contract.

#### > **PROVISIONAL SUMS**:

"Provisional sum" means a sum included in the contract and so designated in the bill of quantities for execution of works or the supply of goods, materials or services or for contingencies, which sum may be used, in whole, or in part, or not at all, at the direction or discretion of the Consultant. The contract price shall include only such amounts in respect of the work, supply or services to which provisional sums relate as the Consultant shall approve or determine.

The Contractor shall when required by the Consultant, produce all quotations, invoices, voucher, and accounts or receipts in connection with expenditure respect of provisional sums.

## **11. SAFETY DURING EXECUTION OF ELECTRICAL WORKS**

- **1.** All possible care and precautions shall be taken to prevent any injury or danger to persons Animals and property during the execution of the works.
- **2.** As far as electrical works are concerned all the safety practice as recommended in the following shall be strictly followed:
- a. The Indian Electricity Rules. 1956
- b. The National Electrical Code. 1985
- c. The Indian Standard Specifications
- d. The Indian Standard codes of Practice
- e. The Tariff Advisory Committee Regulations
- f. Practice meeting approval of the Electrical Inspector

All these publications shall be their latest versions including all the amendments and revisions made up to the date on which reference will be made to them. Where relevant Indian Standard specifications or codes of practice are not available, reference shall be made to the latest versions of relevant B.S. and I.E.C. standard specifications and Codes of Practice.

- **3.** During the time when work is going on at the site, there shall be available at site, persons well-trained in artificial resuscitation and other treatment to be given to any one suffering from electrical shock.
- **4.** All required first aid appliance and materials shall be readily available at the site and shall be quickly accessible for use during an emergency.
- **5.** Any person who requires to be hospitalized shall be taken to the nearest public hospital without any loss of time.
- **6.** Scaffolding provided for workmen shall be strong, stable and safe. They shall be tested for safety and shall be continuously inspected for any possibility of failure or danger.
- **7.** No portable single ladder shall be more than 5m long. The minimum clear width of the runs between the side rails shall be 300 mm and the distance between adjacent rungs shall not be more than 300 mm. Whenever a ladder is used an extra workmen shall be engaged to hold the ladder.
- **8.** All excavated trenches and pits shall be surrounded with temporary fencing.

## 12. SETTLEMENT OF DISPUTES:

### > MATTER TO BE SETTLED BY CLIENT:

All disputes and differences of any kind whatsoever arising out of or in connection with the contract, whether during the progress of the works or after their completion shall be referred by the Contractor to the Bank shall within a reasonable time after their presentation make and notify decisions thereon in writing.

The decisions, directions, clarifications, measurements, drawings and certificates with respect to any matter, the decision for which is specially provided for by these or other special conditions to be given and made by the Bank OR persons appointed on behalf of the Bank are matters which are referred to hereinafter as accepted matters and shall be final and binding upon the Contractor and shall not be set aside on account of non-observance of any formality, any omission, delay or error in proceeding in or about the same, or on any other grounds or for any reason and shall be without Appeal.

## 13.NOTICES

## > SERVICE OF NOTICE ON CONTRACTOR:

All certificates, notices or written orders to be given by the Bank or by the Consultant to the Contractor under terms of the contract shall be served by sending by post or delivering the same to the Contractor's place of business or such other address as the Contractor shall nominate for this purpose.

## > SERVICE OF NOTICE ON CLIENT:

All notices to be given to the Bank under the terms of the contract shall be served by sending by post or delivering the same to the Bank.

## 14.TERMS OF PAYMENT:

- a) No advance payment will be made by the Bank under the contract.
- b) Total Payment will be in 3 stages after completion of 50%, 80% and 100% work completion.
- c) 5% on each running bills as retention.
- d) Balance on testing, commissioning and handing over the installation
- e) It is the responsibility of the contractor to comply with all statutory requirements and obtain necessary permission from KSEI/KSEB for commissioning the installation & statutory fees shall be reimbursed by client.

## **TECHNICAL SPECIFICATION**

### **EARTHING**

Earthing of the unitised substation shall be carried out in accordance with the "Specifications for earthing" attached hereto.

After completing the assembly and erection all the non-current carrying metal parts of the unitised substation shall be connected to an earth bus of adequate size installed at the rear or bottom of the unitised substation. This earth bus will be connected at its ends to the main earth bus installed in the cable duct.

## PRE-COMMISSIONING CHECKS AND TESTS

The following pre-commissioning preparation, checks and tests shall be carried out by contractor in addition to the checks and tests which may be prescribed in the manufacturer's instructions:

a. Visual inspection of board for complete and correct assembly, internal wiring and connections and erection.

b. Checking of mechanical operations of the breakers such as closing, opening, drawing out, plugging in, etc.

c. Checking of the functioning of safety interlocks, safety shutters and others safety features

d. Operational and accuracy tests on the meters by injecting suitable voltage /current into the circuits.

- e. Setting of protective devices such as relays
- f. Setting of protective devices such as relays
- g. Insulation resistance measurements of power circuits
- h. Insulation resistance measurements of control circuits
- i. Earth resistance of the body of the switchboard.

All tests and commissioning procedures shall be carried out in the presence of Client/Consultant and the results of all the tests shall be recorded and furnished to them. **Installation:** 

- Transformer shall be fitted with cable for HT cable termination on HT side and LT Cable termination on LT side. HT and LT shall be terminated with suitable cable socket / lug and cable terminal lugs contact surface pressure is maintained permanently by suitable bolts and nuts.
  A suitable protective device to protect the transformer from over voltage, under voltage, and earth fault must be provided.
- Minimum 1.25 meter clearance shall be given to the transformer from all sides.
- Electrical and Performance Requirements
- Shall be operated at rated kVA at any voltage within + / 10% of the rated voltage of that particular tap position.
- Shall be designed for 110% continuous over fluxing withstanding capacity.
- The neutral terminals of the winding shall be designed for the highest current that can flow through the winding.

## **Connections and vector group:**

Delta on HT side and star connection on LT side with neutral terminal brought out for solid earthing.

## System of Supply:

3 phase, 50 cycle, 11kV supply as specified in the technical data.

## Rating:

Suitable for continuous rating.

## **Terminals:**

Shall be suitable for 3 core XLPE armoured aluminium conductor cable on HT side and cable entry from the top. L.T side shall be suitable for connecting aluminium bus ducting.

## **Testing Certificates:**

The following test certificates must be submitted

- No load loss test
- ✤ Load loss test
- Insulation resistance test
- Polarity test
- Load test from 25% to 125% of its full load in steps of 25%
- Turns ratio test on all tap positions on all the three phases.
- Winding resistance measurement test.
- High voltage Impulse withstand test

### **BUS BARS**

- The bus bars shall be arranged in horizontal and vertical formations as required. The bus bars shall be air insulated.
- More than one conductor shall not be from one connection point on the bus bar. At every point of connection, two bolts shall be used to prevent the conductor from rotating around one bolt. If two bolts cannot be used, alternative arrangement shall be provided to prevent rotation of the conductor around one bolt.
- Bus bars shall be so arranged and access provided from outside so that it will be possible to inspect and work easily on all the points of support and connections.
- The bus bars and bus bar chambers shall be extensible on both sides of the board so that the boards can be extended on both sides.
- For bus bars exceeding 2000mm length, allowance for expansion shall be provided by means of well-designed and installed flexible expansion joints.

- All bus bars shall be of high conductivity electrical grade copper/aluminium extrusions of reputed manufacture. The main horizontal bus bars shall be of the same section throughout the length of the board. Their current rating shall be equal to the full rated current of the incoming breaker/switch. The current rating of the neutral bar shall be 50% of that of the phase bus bar. The branch bus bars shall have current rating equal to the total of the full rated currents of all the outgoing breakers and switches connected to them provided that:-
- The current rating need not be higher than the main bus bars, and that The bus bars will have short circuit rating equal to that of the main bus bars.
- The size of the main and branch bus bars shall be got approved by the Electrical Inspector.
- The maximum current density allowable for aluminium bus bars is 0.8 Amps/Sq.mm and 1.2Amps/Sq.mm for copper. Any de-rating required by the Electrical Inspectorate shall be taken into consideration while fixing the sizes of the bus bars.
- The boards shall be provided triple pole and neutral bus bars as specified.
- The cross-sectional area of the bus bars and the supports provided for the bus bars shall be capable of withstanding without damage the electromagnetic and thermal effects of shortcircuit current. Moulded SMC/DMC/FRP supports shall be used for supporting the bus bars.
- Bus bar joints shall be of bolted type. Only cadmium or zinc passivated high-tensile steel bolts, nuts and spring washers shall be used. Lock washers shall be used in all bolted connections.

Bus bars shall be given colour coding. The bus bars shall be provided with heat shrinking PVC Sleeves throughout their length. Where it is not possible to provide PVC sleeving, moulded FRP shrouding shall be provided. No hylam is permitted. Where the bus bar of one phase or neutral consists of more than one conductor, the space provided between the parallel conductors shall be equal to the thickness of the single conductor. Spacers of the same thickness shall be provided between the parallel conductors at intervals not exceeding 600mm and bolted together with the bus bars. **CABLE ALLEYS** 

- The cable alley shall be spacious enough to accommodate all the cables to be installed inside it and also to facilitate their proper routing, clamping, shaping and termination without causing any strain to the cables and terminations.
- Cable alleys shall be provided with hinged doors. The cables alleys shall have detachable glanding plates at the top and bottom. The glanding plates shall have adequate space to comfortably accommodate all the cable glands that would be installed on it. The glands shall be so spaced that it will be possible to work on the different cable terminations without any difficulty.

- The terminals in the cable alley shall be shrouded so that it should be safely possible to work on any set of terminals after switching off the concerned feeder while the other terminals in the cable alley remain live. FRP sheets or moulded components shall be used for the shrouding. No hylam shall be used.
- The terminals in the cable alley shall be suitable to accept the maximum size of cable that may be used for the feeder. The terminals shall be adequately and conspicuously labelled for identification with its corresponding switch/control compartment.
- In the case of motor control centres, separate set of terminals shall be provided in the cable way for connecting motor power factor capacitor on the outgoing side of the starter. The cable way shall have facility for accommodating this cable and its termination.
- Wherever control wiring has to be taken from the board to external points, adequate number of suitably rated terminals shall be provided for terminating the control cables. Facility shall be provided for accommodating and termination of these cables in the cable ways.
- Facilities shall be available inside the cable alley for strapping the cable cores at regular intervals so that the cable connections at the terminals will be free of the weight of the Cables/cable cores and also to properly segregate the different cables/cable cores.
- All the terminals in the cable alley shall be numbered for identification. The terminals shall be colour coded based on the colour coding of the bus bars to which they are connected.
- Power and control cable termination facilities shall be well-segregated. Segregation facility shall be provided for all cables working at different voltage systems.
- The cable alley shall be effectively segregated from all the surrounding compartments housing live parts.
- Facility shall be provided for termination of the cables both at the top and bottom of the cable.
- The switchboards shall be supplied without cable glands and sockets unless otherwise specified.

### **CLEARANCES**

The minimum clearances between conductors and between conductors and earthed metal shall be as follows:

Between phase		-	20mm
Between phase and neutral	-		20mm
Between phase and earth	-		20mm
Between neutral and earth	-		20mm

## **MOULDED CASE CIRCUIT BREAKERS**

Moulded case circuit breakers shall be of draw-out type unless otherwise specified. The minimum breaking capacity shall be 25kA at 415 volts. The MCCB shall be provided with operating rotary handle and padlocking facility in open and closed positions. The MCCB shall be provided with adjustable over current setting, auxiliary switches, alarm switch, shunt trip facility and under-voltage trip. Indication of the handle positions shall be provided on the cover plate. The MCCB shall also be provided with ON and OFF LED type indicating lamps.

## **TECHNICAL DETAILS FOR DIESEL GENERATOR SET**

### <u>Scope</u>

This section covers the technical requirements for the generating set installation

### Extent of work

- The work of supply, installation, testing and commissioning of generator set shall cover the following subject to requirements specified vide bill of quantities.
- Diesel generator set of capacity as specified in BOQ mounted on common bed plate complete with all accessories.
- Piping required for lube oil system, fuel system, engine cooling system and exhaust piping.
- Flexible connections, if any, to be inserted in cooling system, lube oil, fuel oil and exhaust piping system.

### **Starting equipments**

- Control cubicle and isolating facility as per BOQ
- Necessary set of vibration, isolation mounting as per BOQ
- Necessary cable work between control panel and the alternator both power and control as per BOQ
- Minor building work including cutting and making good the same for all clamps supports, groutings etc.,
- Earthing comprising of electrode system and loop earthing etc. as per BOQ
- Integral type acoustic enclosure for DG set
- Any other work as specified in BOQ
- One day capacity fuel tank with necessary fuel for running the SDG set on full load for 24 hours