

**SECTION - 4.00 - SPECIAL CONDITIONS OF CONTRACT**

#### **4.1 General**

The following special conditions shall be read in conjunction with General terms and conditions of Contract (GCC) and amendments/corrections thereto. Where any portion of the GCC are repugnant to or at variance with any provisions of the SCC, then, unless a different intention appears, the provision of the SCC shall be deemed to override the provisions of the GCC.

#### **4.2 Works to be done by Contractor**

Unless and otherwise mentioned in the tender document, the following works shall be done by the contractor (whichever applicable), and therefore their cost shall be deemed to be included in their tendered cost.

- a) Foundation bolts, including grouting of the same, components etc wherever required or specified.
- b) Supports and brackets for suspending/supporting cables as required.
- c) Supports for cable trays for laying the cables, where required.
- d) Excavation and refilling of trenches in soil wherever the pipes/cables are to be laid directly in ground, including necessary base treatment and supports for pipes, bricks, etc, as specified.
- e) Sealing of all opening provided for pipes and cables, from fire safety point of view, after laying of the same.
- f) Painting of all exposed metal surfaces of equipment and components.
- g) Fixing of danger notice boards wherever required.
- h) Making good all damages caused to the structure, walls, floors, slabs, etc., during installation and restoring the same to their original finish.
- i) Consumables, fuels, cement, etc. required for the work, testing, trial runs and commissioning.
- j) Testing and commissioning of the completed installation.
- k) All related electrical works

#### **4.3 General Requirements and Arrangement of Materials**

All sundry fittings, assemblies, accessories, hardware items, foundation bolts, termination lugs for equipments as required, and all other sundry items which are useful and necessary for proper assembly and efficient working of the various components of the work shall be deemed to have been included in the tender, whether such items are specifically mentioned in the tender document or not.

#### **4.4 Quality of materials**

All the materials and equipment supplied by the contractor for this work shall be new and should conform to relevant BIS Specifications. They shall be of such design, size and material as to function satisfactorily under the rated conditions of operation and to withstand the environmental conditions at site. The copies of purchase vouchers & gate passes should be produced along with the materials.

#### **4.5 Inspection of material and Equipment**

The materials should be inspected/tested by Purchaser prior to the despatch from the manufacturer. The inspection call should be given at least fifteen days in advance so as to depute the officials of Purchaser for the inspection.

Such inspection will be of the following categories:

1. Inspection of materials/equipment to be witnessed at the manufacturers premises in accordance with relevant BIS/Agreement Inspection Procedure.
2. To receive materials at site with manufacturers Test Certificate(s).
3. To receive materials after physical inspection at site.

Similarly, for fabricated equipment, the contractor will first submit dimensional detailed drawings for approval before fabrication is taken up in the factory. Suitable stage inspection at factory also will be made to ensure proper use of materials, workmanship and quality control.

#### **4.6 Supply of Tools, Tackles and Materials**

The Supplier shall, at his own expense, provide all the necessary equipment, tools and tackles, haulage power, consumables, etc. necessary for effective execution and completion of the works during site fabrication, erection and commissioning.

#### **4.7 Protection of Plant**

All works completed or in progress as well as machinery and equipment that are liable to be damaged by the Supplier's work shall be protected by the Supplier and protection shall remain and be maintained until its removal is directed by the Purchaser.

The Supplier shall effectively protect from the effects of weather and from damages or defacement and shall cover appropriately, wherever required, all the works carried out by him.

Adequate lighting, guarding and watching at and near all the storage, handling, fabrication, pre-assembly and erection sites for properly carrying out the work and for safety and security shall be provided by the Supplier at Supplier's cost. The Supplier should adequately light the work area during night time also.

The Supplier shall take full responsibility for the care of the works or any section or portions thereof until taking over of the plant by the Purchaser and in case any damage or loss shall happen to any portion of the works not taken over as aforesaid, from any cause whatsoever, the same shall be made good by and at the sole cost of the Supplier and to the satisfaction of the Purchaser. The Supplier shall also be liable for any loss of or damage to the works including works carried out by others, caused by the Supplier or his sub-supplier in the course of any operations carried out by them for the purpose of completing any outstanding work or complying with his obligations.

#### **4.8 Training of Personnel**

The Supervisory and operating personnel of the Purchaser shall be provided with adequate training by the Supplier during the installation, testing, start-up and commissioning of the system free of cost and the training shall be continued during the entire guarantee run period

#### **4.9 Consumption of Materials**

Proper record of daily consumption of materials shall be maintained at the site of work for each item (if necessary) as directed by the Engineer-in-charge. This is required to be done even if the contractor arranges these materials.

#### **4.10 Testing and Measuring Equipment**

Equipment for measurement of work and testing the installation shall be procured by the Contractor for his use at his own cost. The same shall also be made available to the Engineer-in-charge without any charges for use of this work.

#### **4.11 Inspectorate Approval**

All the equipment to be supplied and works to be executed shall conform to the provision of statutory and other regulations in force such as the Indian Boiler Regulations, Indian Factories Act, Indian Explosives Regulations, Kerala State Electrical Inspectorate, Kerala State Pollution Control Board, etc. Approval of drawings if required shall be arranged by the successful contractor at no extra cost to the Purchaser.

All testing are to be carried out as per the requirements of statutory authorities concerned.

On completion of work, the contractor has to submit necessary completion certificate, drawings, equipment details, load details, test results etc. and arrange for approval from Kerala State electrical inspectorate.

All costs incurred in obtaining any approval/certificates are to be borne by the contractor.

#### **4.12 Structural Alterations to Building**

No structural member in the building shall be damaged/altered, without prior approval from the Engineer-in-charge.

Structural provisions like openings, if any, provided by Purchaser for the work, shall be used. Where these require modifications, such contingent works shall be carried out by the contractor, at his cost.

All cut out openings in floors provided by Purchaser shall be closed, after installation, in accordance with the schedule of work.

All cuttings made by the contractor in connection with the works shall be filled by him at his cost to the original finish.

#### **4.13 Detailed Working Drawings**

The detailed fabrication drawings are to be prepared by the contractor as per the relevant BIS specifications and the State / Central Electrical Inspectorate standards /specifications / guidelines and should obtain necessary statutory approvals/sanctions (if necessary) prior to execution. Drawings provided by the Purchaser, if any, shall at all times be properly correlated before execution. In case of any discrepancy, the same should be brought to the notice of Engineer-in-charge immediately. However, the discrepancy in the item given in the Schedule of Requirements appended with the tender drawings relating to the relevant item, the former shall prevail unless and otherwise given in writing by the Engineer-in-charge.

#### **4.14 Virtual Completion**

The work shall not be considered as completed until the Engineer-in-charge has certified in writing that the work has been virtually completed and the Defects Liability period shall commence from the date of such certificate.

Should it become necessary to occupy any portion of the building or to use any part of any equipment, before the contract is completed, the same shall **not constitute an acceptance** of any part of the work unless so stated in writing by the Engineer-in-charge.

#### **4.15 Completion Drawings and Certificate**

For all work completion report as given in the pro-forma for test results shall be submitted to the Engineer-in-charge, after completion of work.

On completion of work, the Contractor shall submit “As built drawings” drawn to a suitable scale in tracing sheet (whichever is applicable) in **three copies** and one set soft copy (CD) of the same to the Engineer-in-charge before the submission of the final bill.

1. G.A drawings
2. Drawings with dimensions of equipment
3. Equipment Layout Drawings with elevations
4. Equipment Specifications
5. Equipment Fabrication Drawings
6. Empty Weight
7. Foundation Drawings with load details.
8. Erection, Operation & Maintenance manual

PAC shall be issued only after receipt and acceptance of all the above documents/drawings.

#### **4.16 Handing over the site**

The site shall be handed over in Phases, if warranted. Contractor shall plan the work as per the phasing decided by the Purchaser and no claim will be entertained for not handing over the entire area in one stretch. In case there are small patches, which could not be handed over due to legal and technical reasons, this will not be considered as obstructions and no claim will be entertained for delays for such reasons.

The Contractor shall clear the site thoroughly of all shuttering materials and rubbish etc., left out of his work and dress the site around the area to the satisfaction of Engineer-in-charge upon completion of the work and before release of payment of the last running bill. He will remove the labour huts on completion of the work. The payment of final bill will be subject to the compliance of this condition by the contractor.

#### **4.17 Deviations from Purchaser’s Specification**

Deviations from the purchaser’s specification, if any, proposed by the bidder will be considered, provided they meet with the purchaser’s requirements and are necessary to improve utility, performance and efficiency. The deviations proposed by the bidder shall include the technical merits and the financial implications.

#### **4.18 Extra items**

If the Contractor has been asked to execute any such item/work in course of construction for which the tender rates have not been quoted by him, he must undertake such work. The rates for which additional work shall be determined by the Purchaser on the following lines, in the order of preference.

1. The rate to be derived from any one of the quoted rates for similar items of work in the tender.
2. In the case of extra items, whether altered or substituted, for which similar items do not exist in the contract, the rates shall be derived at on the basis of provisions of standard data book and latest schedule of rates of Kerala Public Works Department by adding profit and overhead of 15% and applying the Contractor's quoted percentage above or below.
3. Rates based on actual observation and/or analysis of labour and materials involved in such items. For this purpose the Contractor shall submit to the Engineer-in-charge detailed analysis of the rate proposed by the Contractor supported by relevant vouchers. While fixing rates for extra items an allowance of 15% of the cost will be provided towards contractors profit and overhead charges taken over.

The Contractor has to carry out the works in a functioning factory. Hence all necessary precautions such as proper barricading, material handling, etc. shall be taken by the Contractor. The works of the Contractor shall not affect the functioning of the factory and the same shall not make any issues such as pollution, contamination of the raw material, products, etc. The quoted rate shall inclusive of all the above and no claims on account of the above shall be permitted.